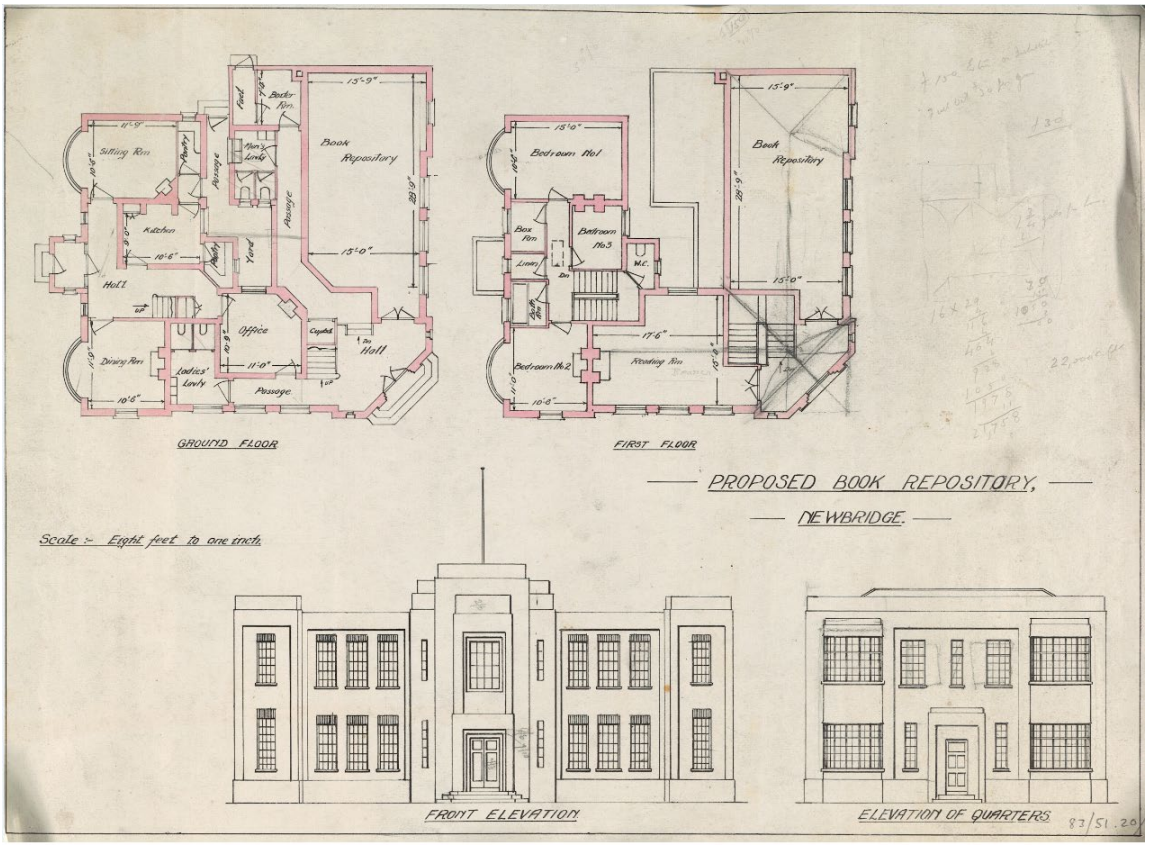


Kildare County Library, Archives & Cultural Centre

Conservation & Architectural Heritage Impact Assessment Report

JCA Architects

Courthouse Chambers, 27-29 Washington Street, Cork, Ireland, T12 WN8F

TEL 353 021 4393800
FAX 353 021 4854145
Email: architects@jca.ie
Website: www.jca.ie

G1 CONSERVATION PRACTICE RIAI

October 2022

JCA Architects

REV.	DESCRIPTION	DATE	PREPARED	CHECKED
R0	DRAFT	11.03.2022	KMc/ G O'C	G O'C
R1	FINAL REVISION	07.10.2022	KMc/ G O'C	G O'C

Kildare County Library, Archives & Cultural Centre

Stage 1 Report: Architectural Heritage

1. **Introduction & Legislative Protection Status**
2. **Historical background to site**
3. **Current Description & Photographic Record of the 1934 Library Building**
4. **Architectural Heritage Impact Assessment**

Appendix 1: Preliminary Schedule of Works / Method Statement

1.0 Introduction

This report provides an assessment of the likely architectural heritage impacts of a proposed development in Newbridge, Co. Kildare.

The following report has been prepared by JCA Architects, RIAI Conservation Grade 1 Architects, on behalf of Metropolitan Workshop to support a Part VIII Planning Application.

JCA Architects were appointed as Conservation Architects to the design team at the outset of this project. The site includes a Protected Structure of historical, architectural and social interest to the town, and respect for the wider historic character of the surroundings has been integral to the development of the proposed design scheme.

Designations & Protection Status of Existing Historic Building

The map below, from the current Newbridge Local Area Plan, identifies the Protected Structures in Newbridge, including the existing Local Studies building on the site and in the immediate context of the site. The Local Studies building, originally built as Newbridge Library, is Protected Structure no. B23-41 in the Kildare Development Plan 2017-2023. The Protected Structure is described in Section 2: Historical Background to site. The map below is focused on the historic town centre, with the intent to protect the existing grain and scale indicated to the northern side of Main Street (and a small defined area around the existing Local Studies Building). There are no other Protected Structures in the immediate vicinity of the site. The site is not located within an Architectural Conservation Area.

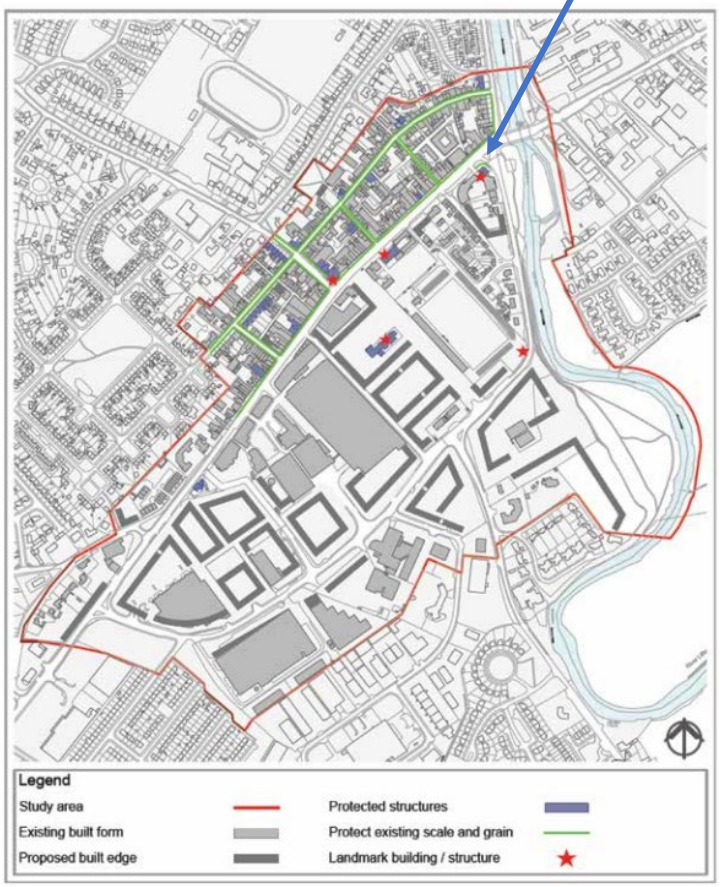


Figure 1: Map from Newbridge Local Area Plan 2013-2019

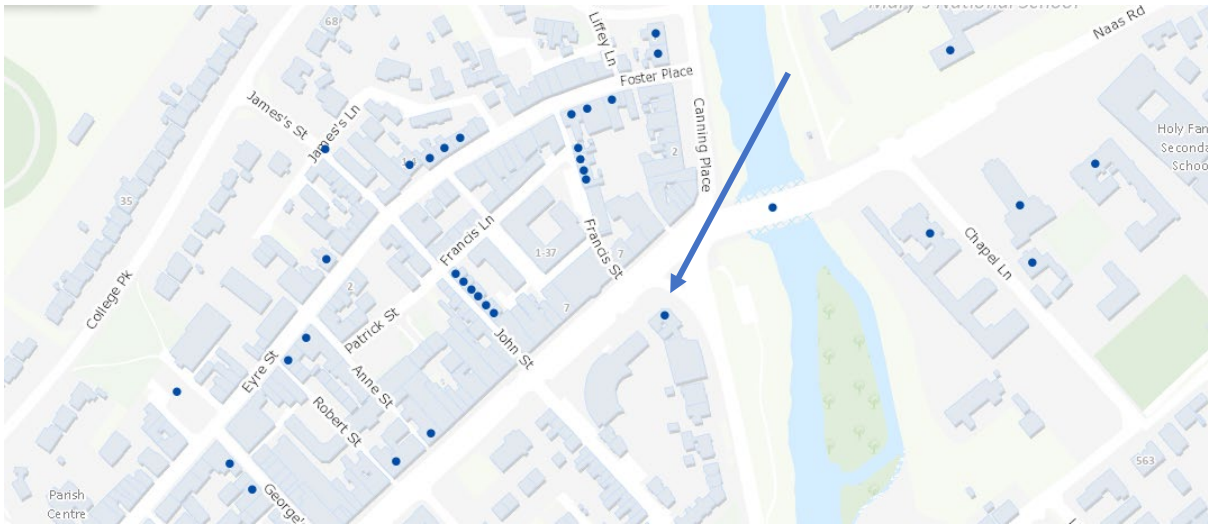


Figure 2: Heritage Map extract indicating buildings included on the NIAH in Newbridge (blue dots)

The Local Studies Building of Newbridge County Library is also included on the National Inventory of Architectural Heritage (NIAH ref. no. 11818036). It is rated as being of Regional Significance, with Architectural, Cultural, Historical and Social categories of Special Interest noted. In its appraisal, the NIAH entry notes that the building is an imposing landmark in the centre of Newbridge.

The 1930's Bridge over the River Liffey, to the east of the site, is also included on the NIAH (reg. no. 11818035). There are no other NIAH structures in the immediate context of the site.

The status of the existing original library building as a Protected Structure included on the NIAH, and noted as a Landmark building in the Newbridge Local Area plan means that the retention and sensitive reuse of the building must be considered central to any new proposal for the site. This has been recognised in the current Project Brief, in which it is stated that *'its conservation and incorporation into the overall design will need to be considered carefully'*.

1.2 Scope of Assessment

The following study examines the possible impacts of the proposed development on the historical architectural character of the setting of the proposed development, with particular reference to the existing Local Studies building.

The following assessment includes an outline history and description of the Local Studies building (originally Newbridge Library) with reference to the setting in which the building is to be located.

1.3 Assessment Methodology

The site was visited and the existing building on the site were examined.

Once information resulting from the historical analysis and physical inspection of the buildings and site was compiled, the character of the historic setting and potential risks to its character were determined.

This impact assessment entails six stages:

1. A desk-top review of relevant documents relating to the site's history.
2. A field survey of the proposed development area.
3. An evaluation of the architectural heritage significance of the setting.
4. An assessment of the impact of the proposed development on the setting's special heritage significance.
5. The mitigation of any potential negative impacts upon that heritage
6. A prediction of the residual impacts of the proposed development after the mitigation measures have been enacted.

2.0 Historical Background to site

Nineteenth Century

Figure 3: Early stone bridge over River Liffey at Newbridge (1861[1])

The town of Newbridge takes its name from the bridge crossing the Liffey to the east of the present town. The first bridge was destroyed by floods in 1789 and William Chapman, engineer on the Grand Canal extension to Naas, was employed to rebuild it the following year: likely to be the high, narrow bridge illustrated above. The present three-arched road bridge was built c. 1930.

The town grew up around the Cavalry Barracks established here c. 1815. It was a substantial barracks, housing some 1,800 horses, and formed part of an extensive programme of military expansion in Ireland following the 1798 rebellion and Napoleonic wars. The Barracks occupied the entire southern side of Main Street in the town, with its entrance midway along the street.

Figure 4: First edition OS map, published 1839 (OSI)

[1] Illustration from the Illustrated Dublin Journal, Vol. 1, no. 13, Nov. 30th 1861.

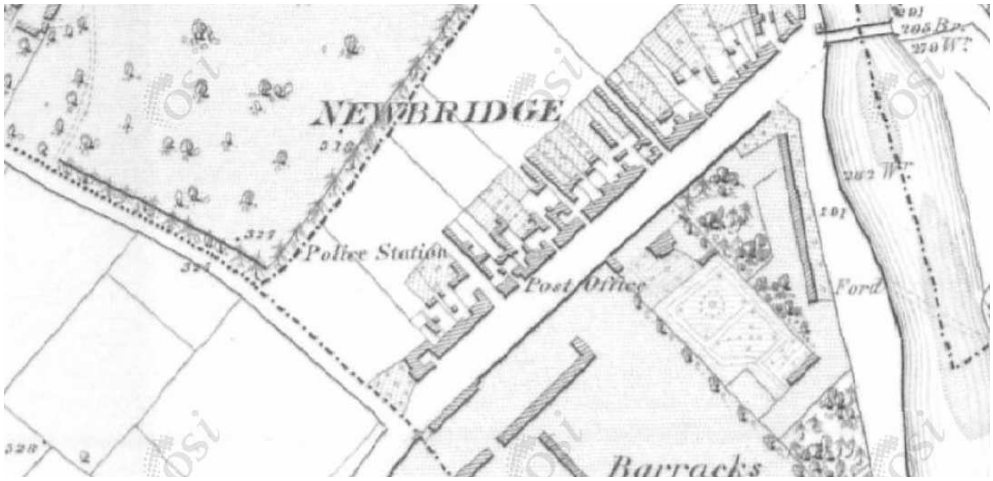


Figure 5: First edition OS map, enlarged detail, published 1839 (OSI)

The distinctive form of the corner site now occupied by the Newbridge Library building is clear on the early maps shown here, with a very long, narrow structure shown running south from the site along the line of Athgarvan Road. The building is identified on the 1872 map as an Infirmary Stables: this was a 'horse hospital', a building type found in Cavalry Barracks such as this which housed many hundreds of horses. Although no images of the building have been found, it is likely to have been a single-storey stone or brick structure and appears to have been built at the same time as the initial construction of the Barracks, 1815-19, to a design by Cork architect and builder, Abraham Hargrave[2].

Figure 6: OS map, large-scale, published 1872

[2] Source: *Archiseek*

Figure 7: Cavalry Barracks, Newbridge, National Library of Ireland Collection, c. 1910

The photograph above, taken elsewhere within the barracks in Newbridge, indicates the likely scale of the Infirmary Stables.

The street elevation of the barracks around the present site of the library would have been a rubble stone wall on both Main Street and on Athgarvan Road. In the late 19th century photograph below, the boundary wall occupying present site of the library is just visible.

Figure 8: An early photograph of Main St., Newbridge, NLI Eblana Collection, 1870-1890, taken from SE of the present corner site

To the north of the Main Street, the town expanded significantly during the latter part of the 19th century, following the establishment of the Curragh Military Camp in 1855 and its associated population increase in the wider area. The railway station in Newbridge was opened in 1846.

Figure 9: Photograph by Robert French, Lawrence Collection, NLI, 1865-1914

The photographs above and below show the site's context from the Main Street and the River Liffey at Newbridge in the late 19th and early 20th centuries. The site's character was during the 19th and early 20th century defined by the rubble stone boundary wall to the Barracks.

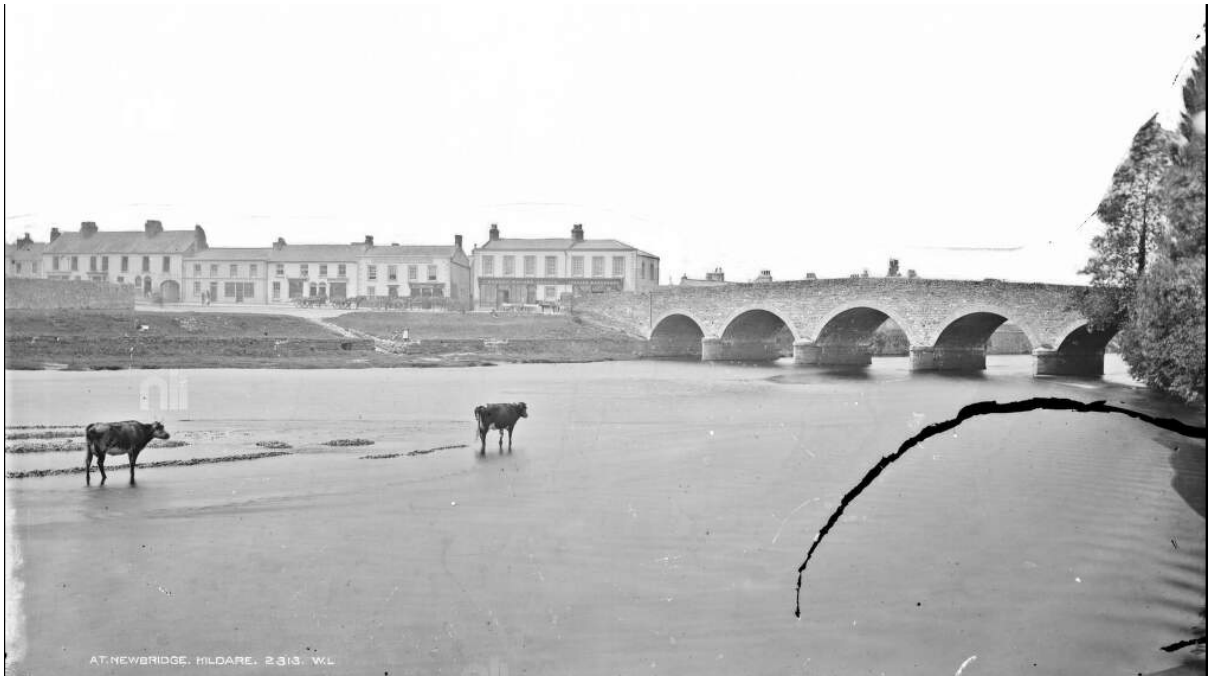


Figure 10: Photograph from Liffey at Newbridge, Lawrence Collection, NLI (undated)

Historical Background to site: Twentieth Century

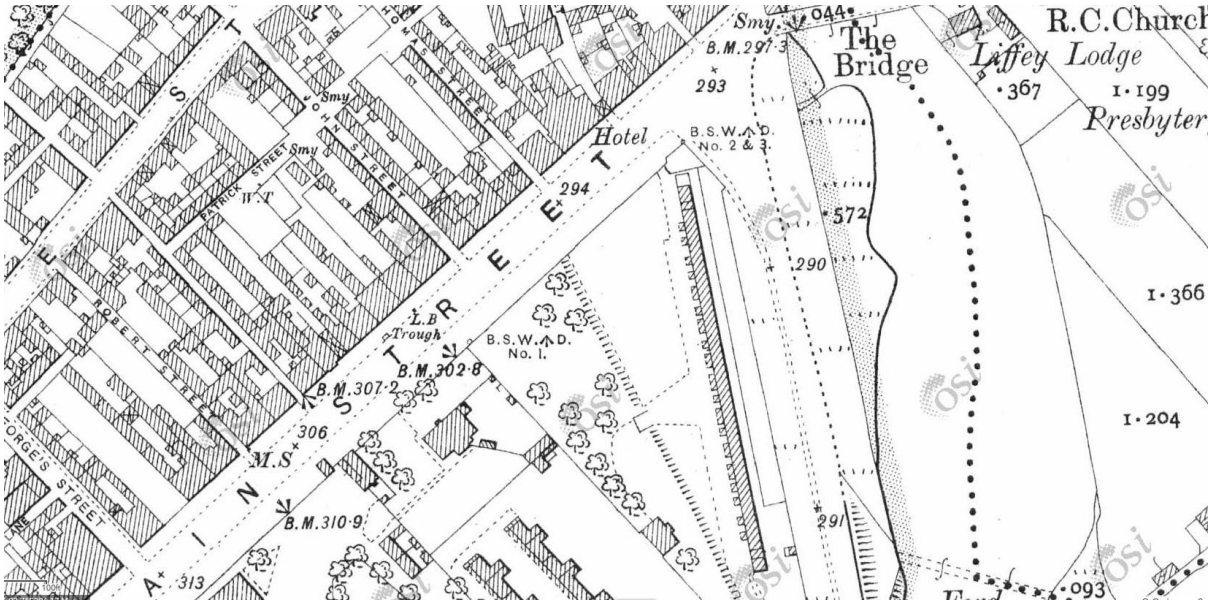


Figure 11: OS Map of site, published 1910

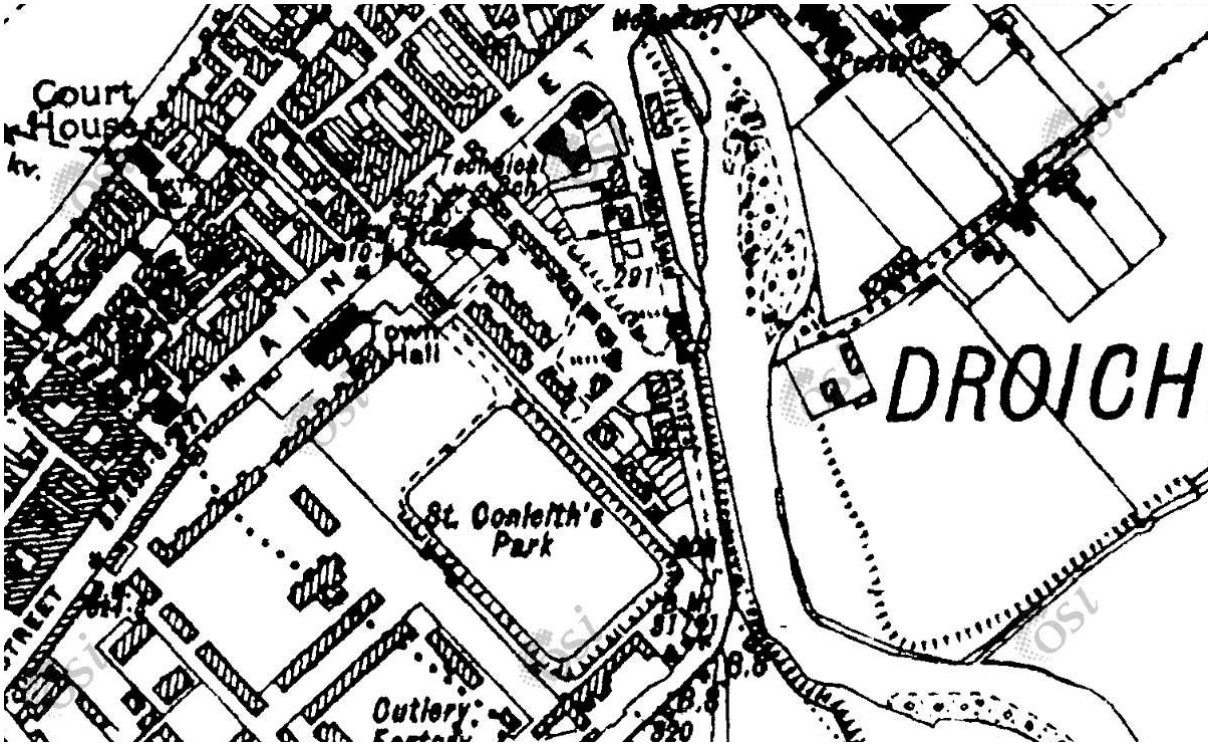


Figure 12: OS Map of site, published 1942

The twentieth century saw significant changes to the town of Newbridge. Following a period of steady growth during the latter half of the 19th century, the withdrawal in 1922 of the British Army from the Barracks, which had dominated the town to that point, led to a period of decline.

The site of the Barracks, however, shortly became the focus of some of the new industries in the town in the 1930s and 40s: Irish Ropes and Curragh Tintawn in 1933, Newbridge Cutlery in 1934 and Bord Na Mona in 1946. Irish Ropes initially leased part of the disused Barracks from the Board of Works, who at that point had assumed responsibility for it. Newbridge Cutlery also set up initially in

part of the old Barracks. Over time, some other buildings that had been part of the Barracks were demolished, including the Infirmary Stables.

Newbridge Libraries

The Carnegie Trust had provided a grant towards the provision of Libraries to Kildare County Council in 1925, and in 1926 the Kildare County Library Service was established, with its headquarters in the Town Hall in Newbridge, itself the former chapel for the Barracks, just inside the main gate to the Barracks on Main Street.

Figure 13: Photograph of Main Gate to Barracks, showing Chapel by Robert French, Lawrence Collection, NLI, 1865-1914

In 1927, the first branch libraries were established at Newbridge and Kildare, with others following shortly after. However, by the early 1930s it became apparent that the existing premises in Newbridge were inadequate, and various options in relation to new premises were considered. These culminated in a decision to build a new County Library Headquarters at the corner of Main Street and Athgarvan Road, Newbridge[3].

The new County Library Headquarters was designed in 1934 and opened in August 1936; at the time it was one of a very small number of purpose-built Library Headquarters buildings in the country.

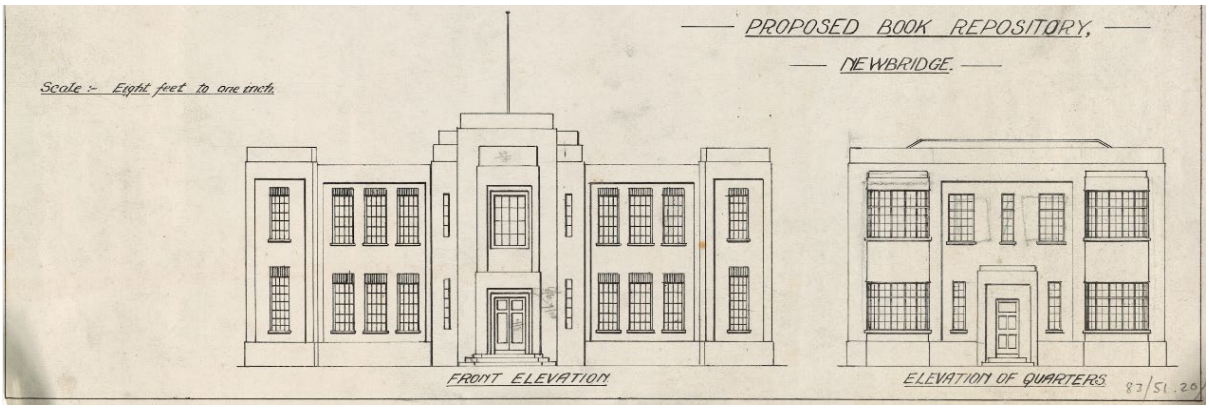


Figure 14: Tender Drawing by Alma Kingsley Sargent, 1934, for New Library at Newbridge (Irish Architectural Archive)

[3] Lonergan, Pat, *Kildare County Library Services: A brief History*, www.kildare.ie/history (2014)

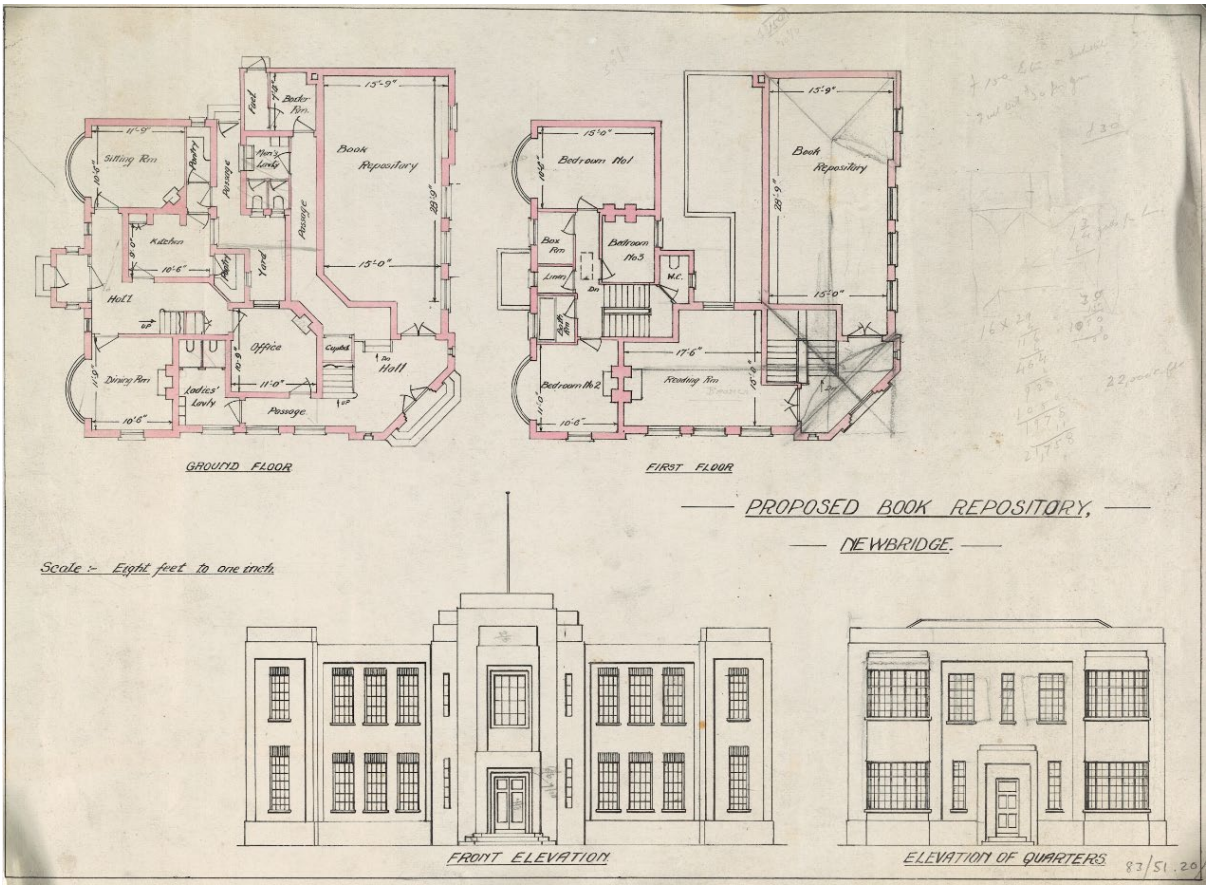


Figure 15: Tender Drawing by Alma Kingsley Sargent, 1934, for New Library at Newbridge (Irish Architectural Archive)

The new Library was designed by a Kildare-born engineer to Newbridge Town Commissioners, Alma Kingsley Sargent[4]. The design responded to the prominent corner site at the Liffey entrance to the town by placing the building's entrance in a projecting canted bay at the corner of the site, utilising Modernist detailing such as profiled parapet walls, raised rendered panels and iron casement windows. The design of the building reflected the ambition of the County Library to provide a modern educational facility for the citizens of the expanding town.

Drawings from Alma Kingsley Sargent's office, now in the Irish Architectural Archive, indicate that he was responsible for a good deal of public and private housing, principally around Naas and Newbridge, but the Library appears to have been one of his more prominent commissions.

One of Sargent's sketches, shown on next page (Fig. 16), is a rough site plan drawing, apparently setting out the initial form and orientation of the library on its site. The library form is overlaid on a hatched outline of another structure. When this drawing is viewed alongside the large scale 1872 OS map (Fig. 17) depicting the Infirmary Stables, it suggests that the stables may still have been in place when the library was being planned. The canted entrance bay of the proposed library broadly aligns with the northern end of the Infirmary Stables building on the sketch.

[4] Irish Architectural Archive's *Dictionary of Irish Architects*. The Archive holds a collection of drawings from Sargent's office, including the tender drawings shown here – IAA A.K. Sargent Drawings, ACC. 85/51.20/1-12

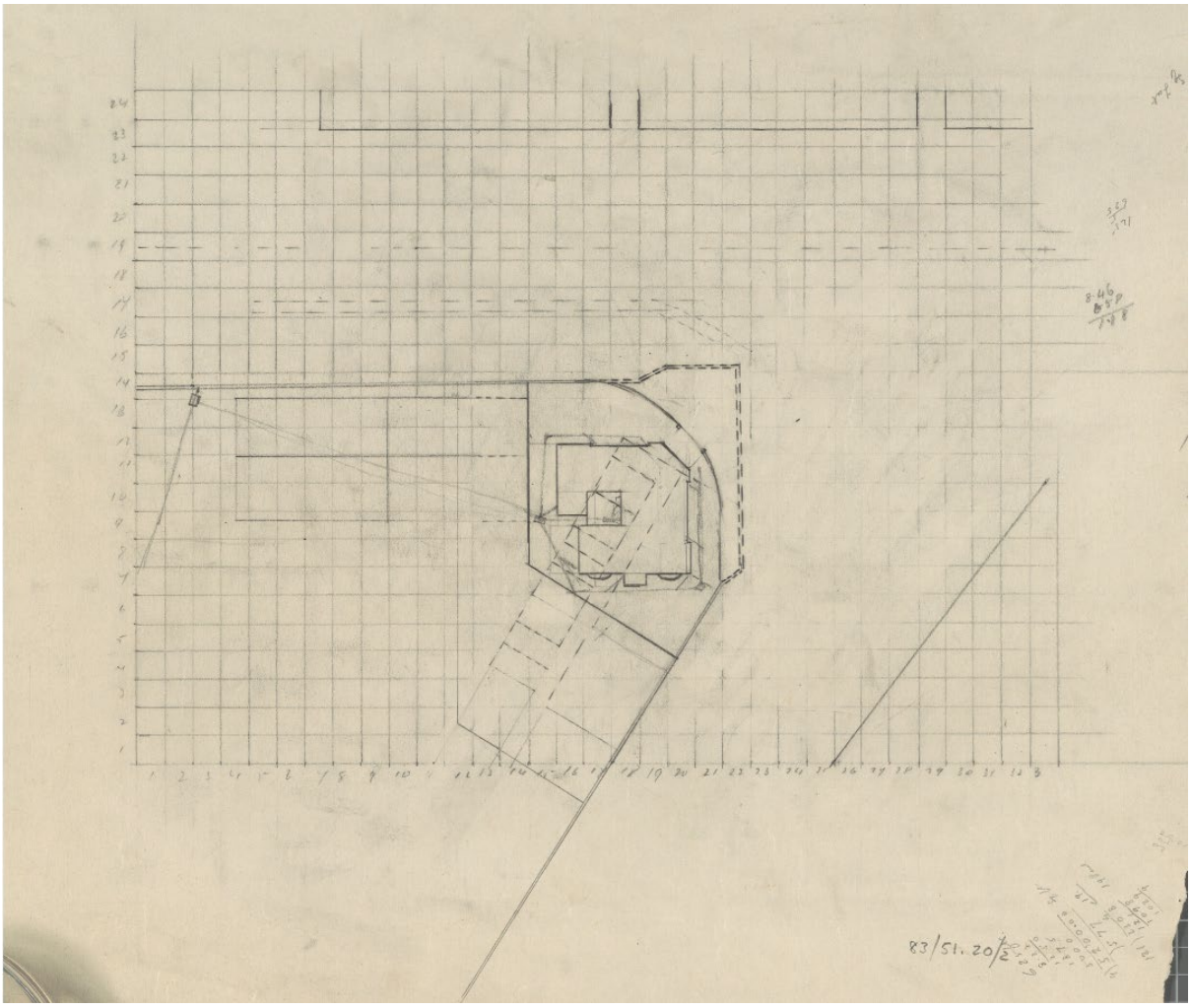


Figure 16: Site plan sketch by Alma Kingsley Sargent, 1934, for New Library at Newbridge (Irish Architectural Archive)

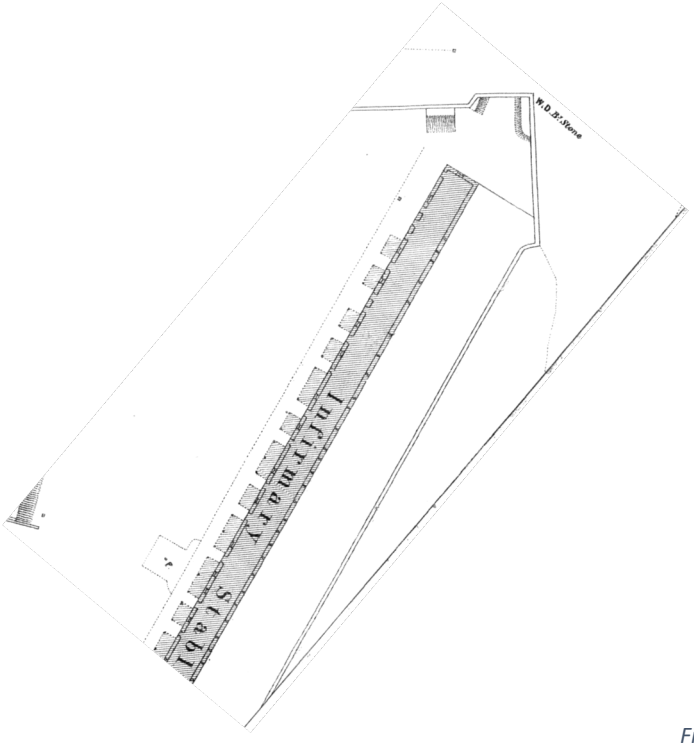


Figure 17: OS map, large-scale, published 1872

As shown in the proposal drawings, the library was designed originally to provide book repositories on two floors, an office and toilets to ground floor and a Reading Room to the first floor. A substantial part of the building was occupied by an apartment, spread over two floors to the rear of the building, for the librarian. The apartment, which had a separate entrance, had sitting and dining rooms and a kitchen at the ground floor and two bedrooms and associated accommodation at first floor level.

The decorative fittings and finishes inside the original library and librarian's quarters, such as joinery, plasterwork and floor tiles, generally do not reflect the Modernist design character of the building's exterior, utilising more standard details common in domestic settings from the late 19th into the earlier decades of the 20th century. There is, however, one simple timber chimneypiece with an Art Deco expression more reflective of the building's overall external character.

The 1934 building survives largely intact today, although its use has changed, and it now serves as the Local Studies building for Newbridge Library. A new Community Library was added to the site in 1978

3.0 Current Description & Photographic Record of the 1934 Library

The 1934 Library building is a detached, eleven-bay, two-storey building, built on a corner site adjoining the River Liffey. It has a north-facing, single-bay, two-storey canted entrance bay , with single-bay, two-storey flanking entrance bays and three-bay, two-storey flanking elevations facing north-east and north-west, with single-bay, two-storey advanced end bays.

The buildings has hipped roofs behind parapet walls, with a slate covering and terracotta ridge tiles. It has red brick chimney stacks, timber eaves and cast-iron rainwater goods.

Painted, rendered walls to entrance bay, with rendered, profiled stepped parapet above entrance. Painted roughcast walls to flanking elevations with rendered dressings marking bays and parapets.

Square-headed window openings with stone cills and painted red brick dressings. Original iron multipane casement windows, apart from rear elevation, where there are replacement uPVC casement windows in curved projecting bays. Entrance bay has square-headed openings in recessed panels with rendered advanced surrounds. The main entrance doors are recent replacement glazed timber doors.

The building is set back from the road on a corner site. There is a roughcast boundary wall to the front with sections of iron railings above. The boundary has rendered piers and iron folding gates.

Figure 18: View towards library from north-east

Newbridge Library: Existing Building Photographic Record

Figure 19: Library Context, viewed from Main St. with Riverbank centre to West

Figure 20: NW corner of Library, showing lane between Riverbank centre and library

Figure 21: Detail of northern façade

Figure 22: Detail of cracking above first floor windows on north façade

Figure 23: View of Library from NE

Figure 24: Details of entrance on canted bay at North-Eastern corner of building

Figure 25: Eastern facade of Library building

Figure 26: Cracks above windows on Eastern façade

Figure 27: single-storey rear extension to south of building

Figure 28: South-eastern corner of building

Figure 29: Library, viewed from south-east

Figure 30: Context of library: view north towards Main Street

Figure 31: View towards St. Conleth's Bridge from library entrance

Figure 32: View towards Library and context from Main Street/ St. Conleth's Bridge junction

Figure 33: View towards Library and context from Main Street

Figure 34: View towards Library and context from St. Conleth's Bridge

Figure 35:Former librarian's sitting room, retaining domestic decorative detailing to cornice & picture rail

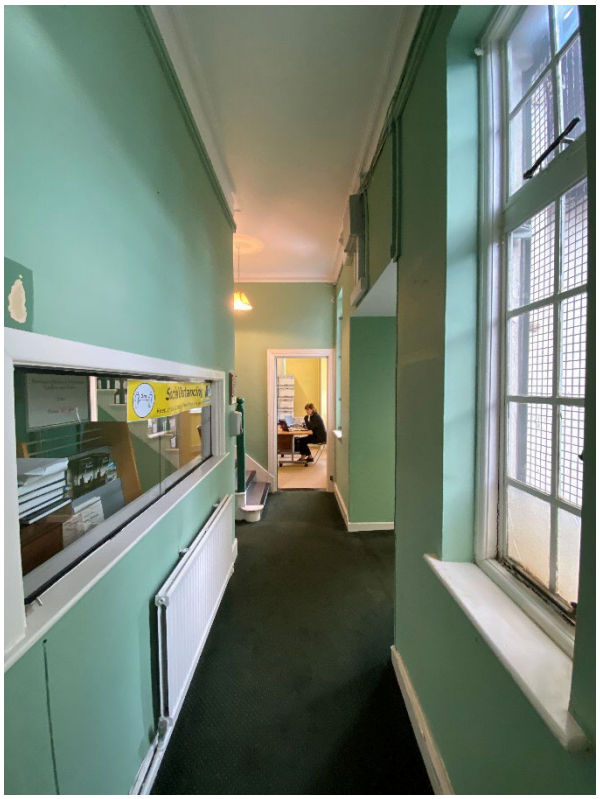


Figure 36: Link to 1970's extension

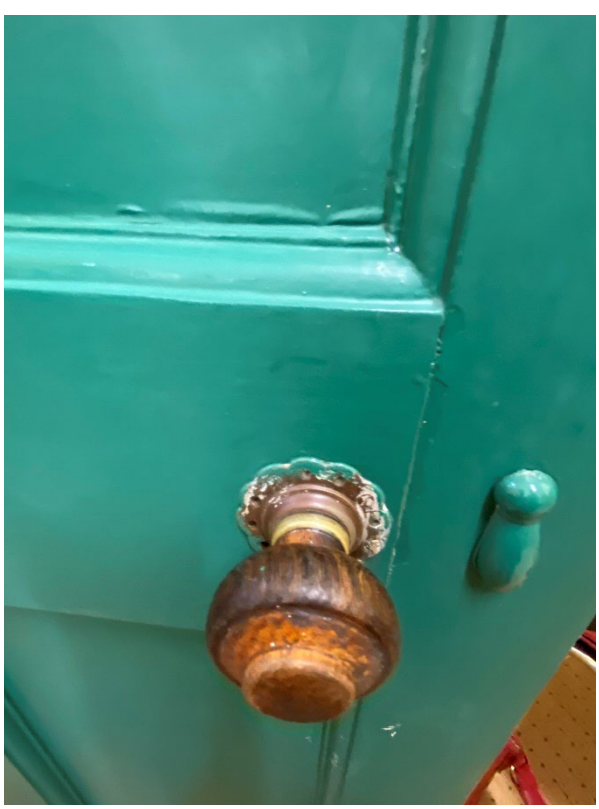
Figure 37:Link between extension & library

Figure 38: Secondary stair to library accommodation

Figure 39:'Crittall'-type steel windows

Figure 40: Oak timber floors

Figure 41:Original library reading room, with simple coved cornice, panelled doors, moulded architraves, cat-iron radiators with surface-run pipework. Smooth plaster walls with paint finish.



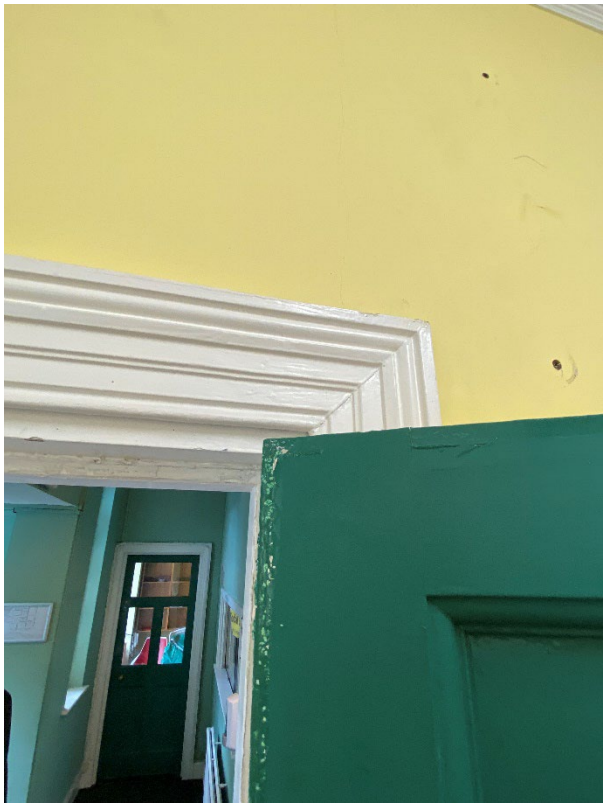


Figure 42:Original ironmongery, likely to have come from a catalogue rather than a bespoke design for the building
Figure 43: Typical moulded architrave and panel door details

Figure 44:Hardwood chimneypiece with Art Deco form

Figure 45: Main staircase, with open string, square timber newel posts and turned timber balusters

Figure 46: Detail of steel windows which are housed in timber moulded sub-frames with timber window boards

Figure 47: First floor landing, displaying evidence of significant water ingress through parapets and concrete façade, leading to staining of ceilings

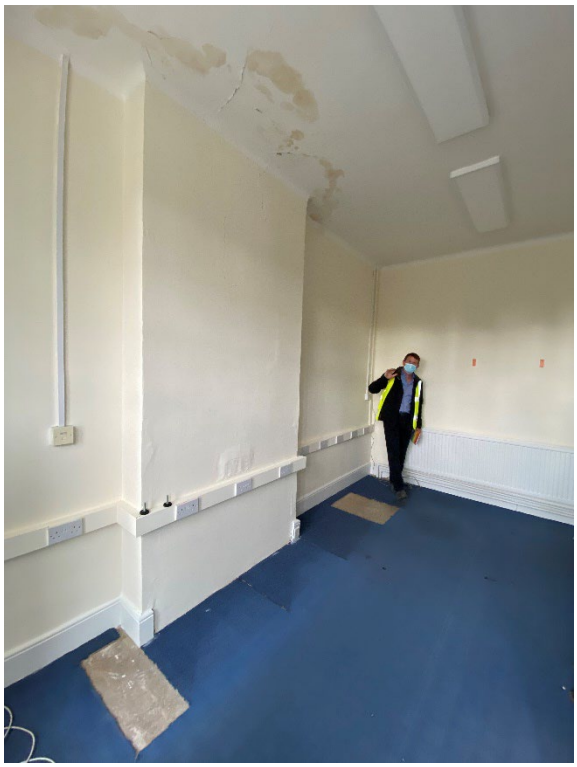
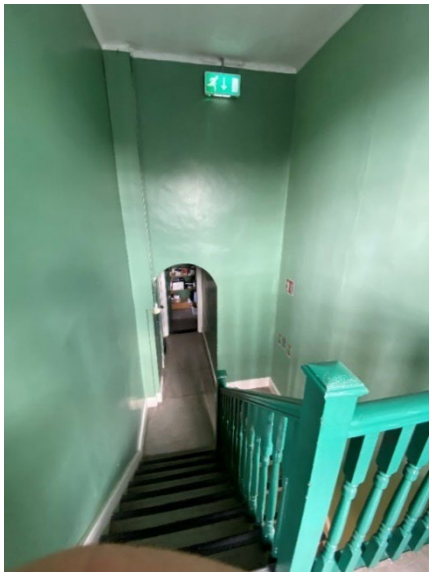


Figure 47: Evidence of significant water ingress around chimney breast at first floor level.

Figure 48: Original timber door adapted with vision panels

Figure 49: Detail of steel window sitting in timber sub frame Figure 50: Detail of pin stay mechanism

Figure 51:Windows have T-bar sections; all astragals overlap rather than a splice joint.
Figure 52: Detail of pin stay mechanism for top light



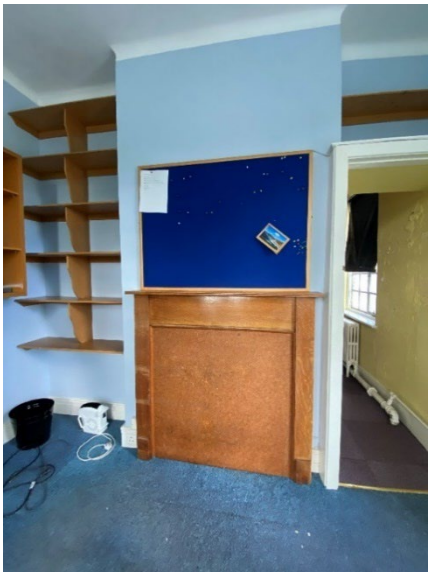


Figure 53: Stair down from first floor
Figure 54: Hardwood fire surround and coved ceiling to first floor

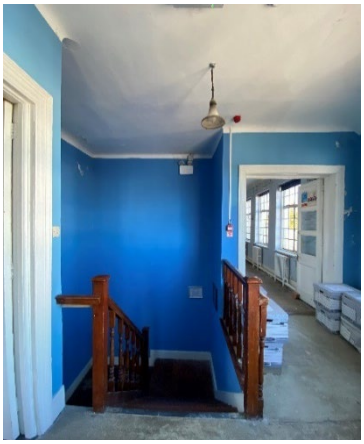


Figure 55: Replacement plasterboard ceiling at first floor level with folding attic stair access
Figure 56:First floor landing with simple coved ceilings and early light fittings still in place

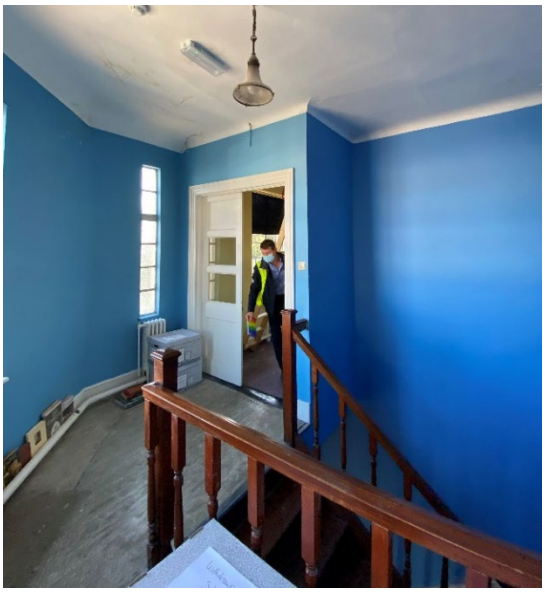


Figure 57: Plaster damage due to water ingress to ceilings at first floor level and above window heads. Note oak floor
Figure 58: Main staircase with unusually widely spaced spindles

Figure 59: Roof configuration of evenly spaced cut rafters supporting closely spaced slating battens with mortar parging between them, most of which has fallen to the attic floor

Figure 60:Water staining on lower rafters ad valley boarding due to leaks in parapet linings

Figure 61: Each cut rafter retains a collar at high level

Figure 62: Detail of parapet upstand beneath gutters in attic space

Figure 63: Water staining at wall plate level beneath parapet gutter boarding

Figure 64: Detail of nail fixings connecting slate to battens

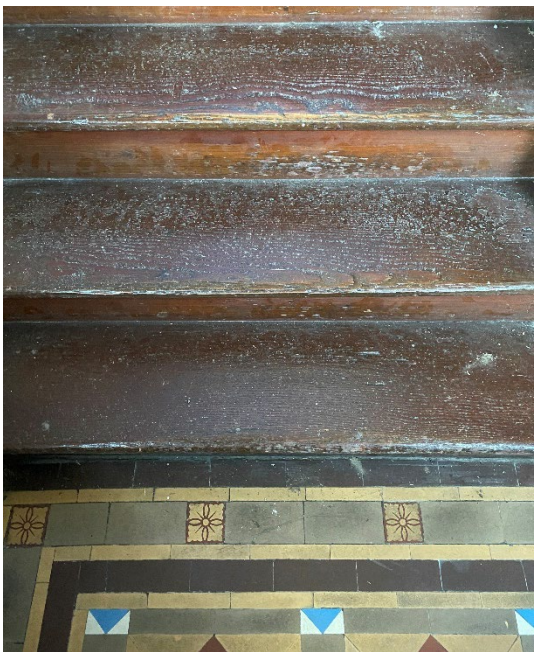


Figure 65: Pine timber treads and risers to main staircase

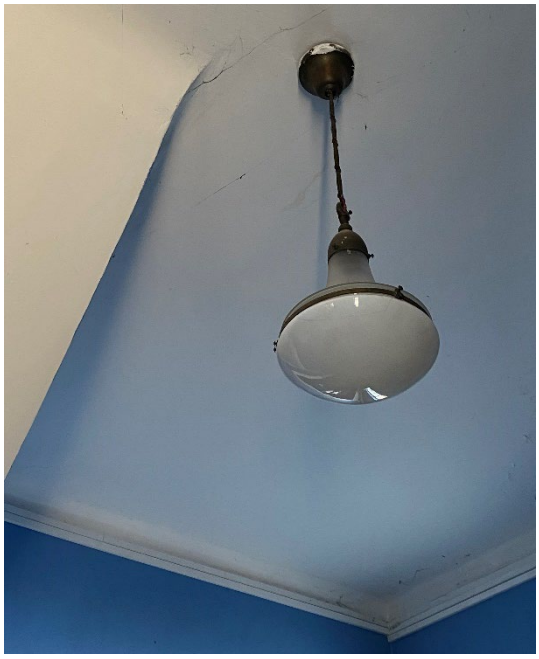


Figure 66: Original mid-20th century light fitting to entrance hall

Figure 67: Encaustic patterned floor tiles with sunken mat well at main entrance

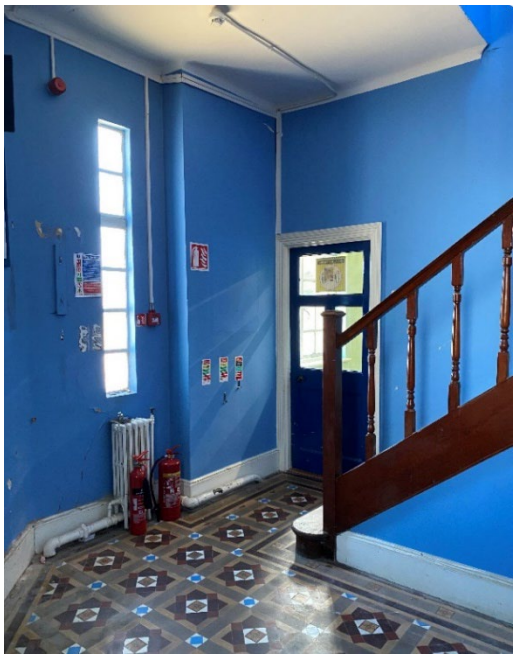


Figure 68: Entrance hall arrangement

Figure 69: Considerable dampness causing spalling of wall plasters at skirting level on ground floor

Figure 70: Internal door off main entrance hall

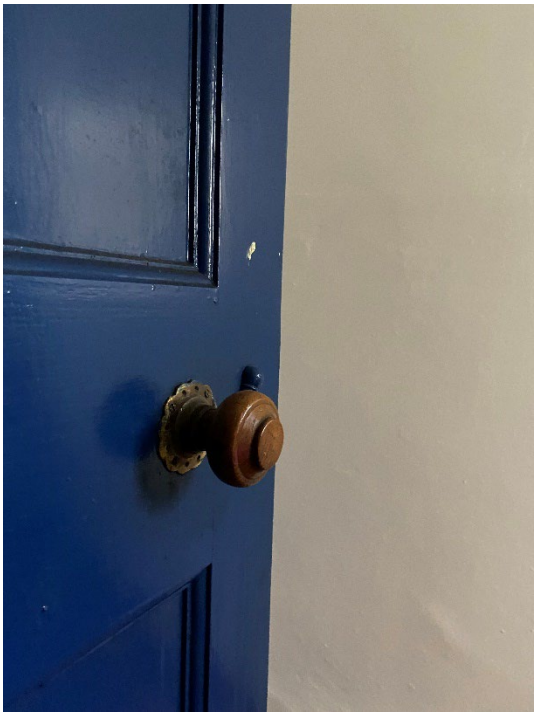


Figure 71: Typical door handle detail

Figure 72: Roughcast plaster harling and brick chimney stacks to rear elevation

Figure 73: Decayed timber fascia & soffits to rear

4.0 Architectural Heritage Impact Assessment

4.1 Assessment of Impact Methodology

An evaluation was made of the likely impacts of the proposed development upon the heritage chracteristics of the existing site. Changes to the building's physical attributes could potentially arise from:

- Indirect disturbance to upstanding buildings, e.g. vibrations from construction traffic, stockpiling of earth, and overshadowing by new buildings.
- Direct physical interventions to upstanding buildings, e.g. piecemeal demolitions, new extensions, and the replacement of existing fabric, fixtures and fittings

.

The magnitude of these impacts can range from 'major' in the case of drastic alterations or demolitions, to 'negligible' or 'none' where little no or change will ensue as a result of the impact. Such impacts can either be 'beneficial' or 'adverse' depending on whether the heritage character of the feature being impacted upon is enhanced or degraded as a result. A 'neutral' impact will be neither beneficial nor adverse.

- Major: *Beneficial* - Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality. *Adverse* - Loss of resource and/or quality and integrity of resource; severe damage to key attributes.
- Moderate: *Beneficial* - Benefit to, or addition of, key attributes; improvement of attribute quality. *Adverse* - Loss of resource, but not adversely affecting integrity; partial loss of/damage to key attributes.
- Minor: *Beneficial* - Minor benefit to, or addition of, one or several key attributes; some beneficial impact on attribute or a reduced risk of negative impact occurring. *Adverse* - Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one or several key attributes.
- Negligible: *Beneficial* -Very minor benefit to or positive addition of one or more attributes. *Adverse* -Very minor loss or detrimental alteration to one or more attributes.
- None: No loss or alteration of attributes; no observable impact, ie neither beneficial nor adverse.

The *significance* of an impact will depend on its magnitude and the heritage value of the feature being impact upon. It can range from 'neutral', through 'moderate' to 'very large'. Thus, a major negative impact on a feature of very high heritage value will have a significantly large adverse effect, whereas the same impact on a feature of negligible value will be releatively insignificant. For the purposes of this analysis, the levels of impact significance are defined as follows:

- Very large: Only very adverse effects are normally assigned this level of significance. They are generally, but not exclusively, associated with sites of international, national or regional importance that are likely to suffer a most damaging impact and loss of integrity. However, a major change in a site or feature of local importance is not precluded from this category.
- Large: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the planning process.

- Moderate: These beneficial or adverse effects may be important, but are not likely to be key factors in the planning process. Their cumulative effects may, however, be relevant if they lead to an increase in the overall adverse effect on a particular feature.
- Slight: These beneficial or adverse effects may be raised as local factors but are unlikely to be critical issue in the planning process.
- Neutral: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

The various permutations of 'magnitude of impact' and 'heritage value' will result in the following impact significances:

Heritage Value	Magnitude of Impact				
	None	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate/ Large	Large/Very Large	Very Large
High	Neutral	Slight	Slight/Moderate	Moderate/Large	Large/Very Large
Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/Large
Low	Neutral	Neutral/Slight	Neutral/ Slight	Slight	Slight/Moderate
Negligible	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight

The duration of the impact is also of relevance. Short-term impacts upon a site's built heritage may arise during the construction phase of a development. There is likely to be long-term residual impacts as well once the development is completed and the site operational.

4.2 Likely Significant Effects

Potential Demolition and Construction Phase Impacts

The potential construction phase impact on surrounding historic buildings is limited to those in the immediate context of the site. It will be necessary before tender and commencement of works on site for the building contractors to agree measures to avoid any damage to the existing Local Studies building.

4.2.1 Construction Phase Impacts on Local Studies Building

The site of the proposed development is a local landmark, with the existing 1934 Library of historical, architectural, cultural and social interest to Newbridge and of Regional significance to the wider county.

Respect for the distinctive architectural form of the 1934 Library and its Modernist character has been integral to the development of the proposed scheme. From the outset of the design process, the team has benefited from the clear designation by Kildare County Council of the Library as a Protected Structure. This clarity has guided the present approach of putting the retention and careful presentation of the building at the heart of the new scheme.

Maintaining the original use of the building permits an ongoing retention of its social and cultural significance. The changing nature of modern libraries towards flexible community spaces rather than solely book repositories has meant some migration of the public spaces towards the proposed new areas of the building, but this has permitted the existing plan form and character of the 1934 Library to dictate the new uses of the existing building, rather than the other way around. This has enabled a proposed scheme which requires a minimal loss of existing fabric.

Current building and fire safety regulations relating to the use of the building have been met by seeking flexible solutions, such as reversing door swings and adding elements to door to meet fire safety requirements, rather than replacing original doors. Minor interventions such as the introduction of new openings between the head librarian's office and the staff canteen have meant that the existing plan form can be retained for the new uses of the building's rooms while meeting modern building regulation requirements.

The proposed main library consists of the existing two storey mass of the 1934 library plus two new masonry buildings of a similar footprint. The new buildings are predominantly three stories with the third floor stepping back in places from the protected structure, with the intention of softening the relationship between the new and existing. This upper floor is expressed as a lightweight element as it wraps around the rear of the protected structure. An internal street provides space between the Protected Structure and the proposed new elements.

To the rear yard, the removal of some service or later elements and insertion of a roof utilises a design opportunity to use this secondary space as a double height volume adding a new dimension to this building and integrating it more comfortably with the new structure. It is proposed to remove one original brick chimney, to the rear of the building, as part of the proposed new development. It

may be noted that the chimney was intended to be hidden behind the parapet, and is of a modest brick construction, without the modernist details of the principal facades of the original building.

Collectively, the physical changes proposed to the existing library building may be regarded as having a negligible adverse impact, with significant mitigation provided by the halting of deterioration to the existing building fabric through sensitive repair using appropriate materials.

From a wider site and townscape perspective, the existing 1934 Library building retains its visual primacy in the proposed scheme, continuing to occupy its prominent corner site, with a generous space to the rear allowing its form to remain clearly legible. The original entrance doorway to the Library is to be retained, with an additional access point provided to the west. The original Library boundary wall and entrance gates are to be retained. The entrance through the new building permits a more accessible point of entry, with a large lobby, neither of which could be provided through the existing entrance without a significant loss of historic fabric and character.

The design and materials of the proposed new building are, appropriately, contemporary, and distinctly legible as new interventions, rather than attempting to respond to the existing library with recourse to pastiche. When originally built, the Library represented a cultural ambition for Newbridge expressed in the form of a then innovative Modernism. The architectural expression of the proposed new building continues that tradition of reflecting the ambition of a modern cultural offering for Newbridge fully reflective of its period of construction.

The visual impact of the new building elements on the character and setting of the Protected Structure may be regarded as being of a negligible adverse nature. The impact of the height, materials and architectural expression of the new elements of the building on the Protected Structure is mitigated by the modesty of the increase in height and the deference shown to the existing building in the provision of open space to the rear of the old Library. The new entrance on Main Street represents a more immediate visual impact on this elevation of the existing Library, but the modest increase in height and clear distinction in architectural expression between the existing and proposed structures provide mitigation against this impact.

4.2.2 Construction Phase Impacts on Historic context of site

While the historic character of the northern side of Newbridge's Main Street is largely 19th century, comprising small to medium plot sizes and commercial uses, the southern side is characterised by more recent development, having been occupied by the Military Barracks until the early decades of the 20th century. The present plot sizes on this side are larger, uses more mixed and architectural expression more varied. In this context, the visual impact of the proposed scheme on the wider historic streetscape character may be regarded as negligible.

The *Context Study* prepared by Metropolitan Workshop in December 2021 examined the historic architectural character of the surrounding context in detail, informing the design development and the details of the proposed new elements.

It is proposed that a high quality new design for the public realm on the site's Main Street frontage form part of the present project, and this has the potential to enhance the recognition of the formal architectural qualities of the existing and proposed elements of the scheme.

Cumulative Heritage Impact

Following completion of the proposed building, the potential impact of most significance is that of the new building on the existing setting of the 1934 Library. In addition to the factors of scale and height, materials used on the exterior of the proposed building have the potential to impact on the character of the area.

All effects are permanent and long-term (with the exception of the construction phase). The predicted impacts of the proposed development have been discussed above and can be summarised as follows:

The site of the proposed development is visible in a number of views of the existing buildings in the immediate vicinity, and the increase in height proposed for the new building will increase the visual impact of the development on the surrounding historic setting.

Mitigation Measures

The mitigation of visual and physical impacts to the 1934 Library has been integral to the design of the development.

Mitigation against the impact of the scale of the new development is provided by the use of setbacks and changes in parapet line and materials of construction in the new building elements, which visually subdivide the elevations into a series of separate elements more appropriate to the setting of the 1934 Library and surrounding streetscapes.

All new elements have been designed in a contemporary manner and will allow the existing historic building to be easily read within the new development.

While the proposed materials for the new building do not attempt to reproduce any architectural details of the historic buildings, allowing the historic Library to retain its own character and significance, the main Athgarvan Road elevation and chamfered side entrance of the new building references the Art Deco character of the Library to allow the two to read comfortably next to one another.

Construction Mitigation

The proposed scheme has been developed in consultation with JCA Architects, who are acting as conservation architects. The following mitigation measures are attainable outcomes of the scheme.

The historic building elements immediately adjoining the site should be protected during demolition works.

Protection or Conservation repair work to historic fabric to be retained should be carried out by specialist contractors with relevant experience of working with historic buildings.

Appendix 1:

Preliminary Schedule of Works to Protected Structure

Method Statement

Conservation repair works to the existing buildings are required to maintain the character, setting and material quality of the buildings;

- To repair and retain all historic fabric of importance.
- A principle of minimum intervention should be followed with regard to the existing building fabric. The emphasis will be on the repair of existing fabric rather than replacement.
- To protect the buildings character as a living building by maintaining a use compatible with the building.
- To adapt the building with minimum intervention and a maximum of conservation over restoration, under the guidance of the ICOMOS Venice Charter.
- To preserve the constructional efficiency of the building. More structures and details may be preserved and retained using historic techniques combined with simple, modern, informed repair, allowing the building to breathe and perform as intended.
- Every effort should be made to match existing building technologies. This should extend to the use of traditional, breathable materials such as lime mortars and renders, which will contribute to the long-term preservation of the structures.
- Where original finishes have been lost to the building and now modern finishes exist it may be allowed to make new interventions and finishes in a contemporary style.
- New insertions will take on a distinct character from the existing fabric and bear a contemporary identity while respecting the existing fabric.
- The insertion of services will follow existing lines and voids to avoid the unnecessary drilling of existing fabric ie. heating, insulation, electricity etc.

Roofs

- The principal roof structure is generally in good condition and repairs can be carried out insitu.
- Allow for scaffolding to eaves level
- Carefully remove all existing slates and store vertically on timber bearers for reuse
- Remove remnants of mortar parging from between slating battens and from attic floor where the majority has fallen
- Remove slating battens and discard off site
- Stripped areas of roof are to have temporary weathering applied to prevent water entering the building.

- Retain all collar rafter roof trusses and allow for repairs of any decayed bearing ends at wall plate level. This will entail cutting back of decayed ends to areas of sound timber and making splice repairs with new treated timber of similar size forming connections with galvanised steel bolts and toothed washers. A detailed roof investigation report has been prepared by *PJ Barrett & Co.* and it is recommended that an allowance is made for repair to 20% of rafter ends.
- Allow for the replacement of any decayed wall plates with new similar treated wall plates of dimensions 125 x 50mm scarfe joined to areas of sound wall plate. New sections to be wrapped in DPC where in contact with masonry. Allow for any replacement members to be bolted to wall tops and strapped at eaves. A detailed roof investigation report has been prepared by *PJ Barrett & Co.* and it is recommended that an allowance is made for repair to 20% of wall plates using scarfe repairs .
- Install new sw and tanalised slating battens (50mm x 35mm) to match existing gauge spacing over breathable roofing felt membrane such as Tyvek Supra or similar approved
- Assume 50% salvage slate from the building. These slates to be used on roadside elevations and fixed to battens with copper clout nails. Allow for new natural slate of similar dimension, colour and texture to remaining 50% of roof pitches. Allow for double course slate at eaves
- Salvage existing v-profile concrete ridge and hip tiles for reuse. Tiles to cleaned of mortar prior to rebedding
- Contractor to engage timber decay specialist to advise on remedial repair works to roof timbers
- Engage timber decay specialist to advise on strategy for treatment of all timbers with approved insecticide and fungicide
- Allow for new hardwood timber soffit and fascia with half round drip mould, primed for paint finish. New rainwater gutters to be bracketed to same

Parapets

- Remove existing pressed metal capping from all parapets
- It is assumed that the original coping has been lost. Allow for new concrete slender copings with maximum 45mm leading edge forming a drip both sides of parapet to prevent wall staining. New copings to be laid on Code 6 lead
- Assume all parapet valley boards and valley support timbers are decayed and allow for replacement in marine grade 23mm plywood. Allow for steps to existing outlets welted in direction of fall. New leadwork to be applied over geotextile to repaired substructure all to Lead Association manual details. Allow for coved upstand at parapet wall
- All existing parapet gutters to be reinstated in Code 6 lead on inodorous laid to falls
- Replace render to inside face of parapet wall: hack off existing render

Rainwater Goods

- Half round rainwater goods are extant on all exposed eaves (areas of roof without parapet) and are a combination of cast metal and later additions and all are in poor condition
- Allow for replacement rainwater goods.
- Provide 125mm (5'') half round gutters with 100mm (4") downpipes cast-iron by Heargreaves Foundry or similar approved.
- Gutters to be placed on metal rise and fall brackets fixed to timber facias
- Caulk joints, prime and paint.

Chimneys

- Allow for raking out all pointing to 3 no. brick chimneys
- Allow for the replacement of spalled bricks with similar matching bricks with new mortar bedding
- Allow for minor surface damage to be repaired with proprietary repair mortars such as Remmers with similar colour match and texture guided by existing brickwork
- Allow for new lead flashings to all chimneys; Code 4 soakers and Code 5 cover flashing. Soakers to be tucked into brickwork joints and cover flashing to be held in minimum 25mm saw cut in brickwork parallel to the rake of the roof. Cover flashing to be held in place with lead wedges and pointed with lime mortars
- Allow for brick masonry to be treated with a breathable water repellent such as Remmers Funcosil or similar approved
- Remove existing damaged flaunching and replace with new limecrete to similar dimensions forming frip at underside. Existing flue pots to be reused and rebedded. Allow missing or damaged pots to be replaced with similar circular clay pots.

- *Provisional allowance to reuse flues for ventilation:* Trace line of flues to hearth and un-block fallen debris by making holes at 1m intervals along line of flue. Allow for twinned wall stainless steel flexible flue liners for solid fuel open fires connected to a precast conc. Throating lintol at room level.

External wall repairs

- There is extensive cracking present in the external render. This will require filling with appropriate proprietary conservation products such as *Remmers concrete façade repair system* to prevent water penetration.
- Previous crack stitching was undertaken as recommended by consultants *Carroll & Browne*. This will be reviewed by Aecom engineers who will specify any further work necessary. This previous work is outlined in PJ Barrett & Co. Investigative Report and consists of vertical stitches embedded approx.. 50mm deep.
- All internal lintols are concrete and are determined to be in good condition.
- Eternal lintols are steel Catnic type lintols supporting a brick soldier course. Much of the brick surface has spalled and will be repaired with repair mortars to match the brick colour and texture using 'Plastic Repair' techniques. The steel lintols are exhibiting some rusting to their undersides and this will be addressed insitu using rust inhibitors

- We would recommend painting the restored facades with silicate masonry paint, a high performance paint that is moisture permeable.

Windows

- All metal windows will be repaired on a minimum intervention basis in accordance with specialist report prepared by *Lambstongue Joinery*.
- The timber subframes will be repaired on a minimum intervention basis allowing for scarfe repairs to decayed sections with similar profile timber.
- All metal windows will be reglazed using thin double glazed units allowing for putty beaded rebates as per specialist report
- It is recommended that reglazing is with thin DG units such as Slimlite (3mm x 4mm cavity gas x 4mm Low E) U Value 1.9 Wm2k
- Standard routed draught excluders and brush seals will be used on all opening parts.
- It is intended that new curved metal windows will be fabricated to replace existing UPVC windows to the two bays

Ground Floor

- All extant oak floor boarding will be retained and relaid following any necessary splice repairs to decayed joist ends.
- Open up and check selected joist ends embedded in walls for investigation. Cut out defective joist ends and splice with new vacum impregnated timber using bolts with toothed washers.
- The timber decay report prepared by PJ Barrett & Co. has indicated the presence of a bitumen DPC in walls and underfloor voids and sleeper walls are generally dry. This DPC appears to be performing and will be retained.
- It is envisaged that rigs insulation may be placed between joists to improve the buildings thermal efficiency.
- Areas with encaustic tile finishes will be retained

First Floor

- Take up existing oak floor boards for reuse.
- Open up and check selected joist ends embedded in walls for investigation. Cut out defective joist ends and splice with new vacum impregnated timber using bolts with toothed washers.
- Allow for opening up of floor to investigate extent of water damage. Work to floors not to commence until after roof and external walls have been repaired and building allowed to dry out.

Integration of services

- The retention of the ground and first floors may allow the integration of new services within the depth of floor voids.
- Generally new services will be encouraged to follow existing service runs to avoid unnecessary penetrations and the boxing out of services within spaces

Timber Decay

- The timber / damp survey carried out by *PJ Barret & Co.* indicates that timber structural elements are generally in good condition with only localised decay present where moisture penetration has come through the parapets and façade cracks at high level.
- Weevil attack and common furniture beetle infestations are minimal and can be treated locally.

New Internal Linings to External Walls

Three options were considered by the design team:

Option 1 – MINERAL SILICATE BOARD

- Eg. Calsitherm Climate Board. U Value after application of 50mm Calsitherm system 0.8W/m2K

Option 2- INSULATED LIME PLASTER (HEMP/CORK ADDITIVES)

- Eg. Diathonite System by Ecological Building Systems. U Value after application of 50mm Diathonite Evolution 0.66W/m2K

Option 3 – DRY LINING

- Eg. Isover Optima which is moisture permeable. The isover product will achieve a better u-value than 1 and 2 but we would be very concerned about interstitial condensation / dew point. We would also be concerned that drylining will make walls considerably thicker affecting room proportions and present a very uniform feel to the wall surface.

Having examined the above options, **Option 2** has been recommended by JCA Architects as the best option to be used where existing plasters have decayed, offering the optimum balance between energy efficiency and minimising impact on the historic character of the building interior.