Project Report



The Enterprise Hub Wicklow County Campus Rathnew



BLUETT & O'DONOGHUE

PROJECT MANAGEMENT ARCHITECTURE PLANNING CONSERVATION (GRADE 1) FIRE ENGINEERING Project Ref. 19-057 NO. 1 CHANCERY STREET, www.boda.ie NO. 2 JOHN STREET, DUBLIN 7. KILKENNY.

T + 353 (0)1 865 62 65

EMAIL: mail@boda.ie

T +353 (0) 56 77 62907

PROJECT REPORT

NEW ENTERPRISE HUB AT WICKLOW COUNTY CAMPUS,

RATHNEW

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Appendices;

- NIAH Survey Ref. 16315007, Clermont House
- NIAH Survey Ref. 16315008, Courtyard, West Range

SCHEDULE OF PART 8 CONSULTATION DOCUMENTS

- 1. Public Notice dated 27th. November 2019
- 2. Project Report with Architectural Heritage Impact Assessment
- 3. Screening for Appropriate Assessment Report
- 4. Architectural Drawings;
 - 1; Site Location Map (1:2500) & Site Layout Plan (1:500)
 - 2; Offices; Ground Floor Plan & West Elevation (1:100)
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 - 10; 3D Renderings

1. Introduction

This Report, incorporating an architectural heritage impact assessment of the proposed works, together with the material listed in the Schedule of Documents, comprises the documentation for public consultation in relation to 'The Enterprise Hub' project at Wicklow County Campus, Rathnew in accordance with Part XI, Section 179 of the Planning and Development Act 2000.

The Design Team engaged by Wicklow County Council for the Enterprise Hub project comprises;

- Bluett & O'Donoghue Architects
- Fearon, O'Neill Rooney, Civil & Structural Engineers
- RMCE, Mechanical & Electrical Engineers
- MGM Partnership, Chartered Quantity Surveyors

The proposed Enterprise Hub at Wicklow County Campus is located within the grounds of Clermont House, a protected structure. The new Hub facilities will comprise a new 2-storey building linked to the refurbished courtyard cottages, conference facilities in the former school chapel and administrative offices in a section of former dormitory at second floor level in the school block.

The Enterprise Hub is intended to cater both to new start-up businesses and to service existing providers to the established screen creation sector in the Region. In other sectors, investment in Hubs has generated networking and agglomeration benefits, thus magnifying support for such projects.

Wicklow County Campus is adequately served by a number of under-utilised car parks. It is considered that the demand for parking generated by the Enterprise Hub can be catered for by the existing capacity and that the additional traffic loading on the road network will be negligible.

The development of the Enterprise Hub will entail;

- Demolition of redundant farm outbuildings to the north of the courtyard to facilitate construction of new 2 storey office building with main entrance to the Enterprise Hub, roof mounted PV solar array and link element to the refurbished courtyard offices.
- Alteration and refurbishment of the courtyard cottages and conversion to office use. Alterations include formation of additional window openings and enclosing the carriage arch to create a new stairwell.

- Upgrading of the courtyard storage outbuildings including re-slating and improvements to the roof structure.
- Alterations and refurbishment of former school chapel and conversion to conference centre.
- Refurbishment of section of former dormitory 2nd- floor level of the school block and conversion to office use.
- Associated services, set-down bay, accessible car parking, e-car charging posts, hard and soft landscaping.
- New foul effluent pumping station to serve Wicklow County Campus with rising main to the public sewer.

2. Water Services

Foul Effluent Disposal

Existing domestic wastewater disposal. The campus is served by two known traditional septic tank systems with percolation areas. The efficiency of the system is not known. Having considered the alternatives, the proposal is to intercept the existing foul effluent lines and divert them to a new primary treatment septic tank system coupled to a macerator & pumping station and to pump the domestic waste water via a 63mm MDPE rising main along the route illustrated with the emphatic red dotted line to the Rathnew Irish Water Foul Effluent Pumping Station located to the south of the Campus in the village of Rathnew as shown.

Proposed new domestic wastewater disposal system: The existing sewers will be intercepted, as noted and brought to a collection chamber ahead of a new 40PE twin tank septic tank proprietary system sized in accordance with EN12566 as shown on the Site Services Plan. The new sewers will be brought to the collection chamber to be treated in the same manner as the existing demand.

In sizing the tank we have taken into consideration potential future developments in addition to that which is proposed – effectively doubling the capacity at the facility. It is important to note that the system can be augmented again in the future should the demand exceed twice that of the existing and currently proposed development. The macerating and pumping station proposed would be adequate to cover a quadrupling of demand at the campus. The outlet of the septic tank system will discharge by gravity to a new foul sewage maceration and pumping station.

The approximate sizes of the tanks and plant are illustrated. The elements consist of:-

- Twin tank septic tank system with inlet chamber and outlet of precast concrete construction with precast cover slabs, manholes and outlets discharging to precast concrete proprietary holding tank (sized to cater for additional capacity in the event of an electrical power cut);
- Duty / standby macerator,
- Duty / standby progressive cavity pumps,
- Odour control dosing system.

The above ground plant to be accommodated in a proprietary green coloured GRP walk – in Plant Cabin to the size shown. The foul sewage is then pumped via the rising main; cross country to the edge of the planned new road network, along the verge of the road, then crossing the road, running southwards and proceeding along parallel with the existing watercourse and then turning south east under the water course and into the Rathnew Irish Water Sewage Works. The pumping capacity is designed to maintain a velocity of approximately 0.75 metres per second in the rising main. The specification for the macerators and pumps are specially designed for the duty and typical details are;

- 2 no. Duty / Standby macerators; Duty 5.5 cubic metres per hour, rating 4 kilowatts,
- 2 no. Duty / Standby progressive cavity pumps; Duty 5.5 cubic metres pre hour, static head 15 metres, max pressure 12 bar, rating 4 kilowatts. The pumping station to be provided with three phase power and service water.

Rising Main:

The design is for a 63mm ODSDR 11 MDPE with a maximum design pressure of 16 bar. The length of the rising main is approximately 670 metres.

Subject to detail design the rising main may have an overall detention in excess of 24 hours on start up. This detention may lead to anaerobic conditions and the generation of odour due to the production of hydrogen sulphate and mercaptans. To counter this the design will provide for an automatic small dosing system to add a nitrate solution to provide oxygen in the rising main. This will assist in preventing the formation of hydrogen sulphate and mercaptans to curtail foul odours at the discharge manhole. The nitrogen associated with the oxygen in the nitrate will vent via air release valves on the rising main.

Surface Water Disposal from the Courtyard and Extension Area:

A new surface water collection system is designed to discharge to a new surface water attenuation area at the north east of the courtyard at the north eastern side of the avenue. The new gravity system runs to an attenuation area of approximately 15 metres length x 3.5 metres wide shaped and placed so as to avoid the root bowls of mature trees to be retained. The system will comprise proprietary geo-cellular units of reformulated recycled polypropylene construction (approximate size of each unit 1M x 1M x 600M depth) – placed below ground at an invert with due provision for the capacity – designed in accordance with the principles of SUDS.

3. Historical Background

Clermont House dates from c. 1730 and is attributed to the Architect / Artist Francis Bindon (1698 to 1765). The semi-octagonal side wings date from c. 1890 and the Neo-Georgian school and assembly hall / chapel were constructed c.1960. The outbuildings to the north of the House also date in part from c. 1730 and in part from c. 1890.

Originally home to the Yarner Family, Clermont passed to the Honourable William Leeson in 1814.

Clermont functioned as a small boarding school for girls (roll of 160) from 1956 to 2005, it was operated by a French order of nuns, the Religious of Christian Education and they constructed new school facilities in 1960.

Today the residual site of about 55 acres accommodates the Wicklow Local Enterprise Office and the outreach campus of Carlow Institute of Technology.

4. Description of Clermont House and Planning Context

Clermont is included in the National Inventory of Architectural Heritage (NIAH) Survey of Gardens and Designed Landscapes, Survey 4367 refers. The Garden Survey notes the survival of original features, the House, the avenue and an orchard.

Clermont House is included in the NIAH Survey of Buildings as are the historic outbuildings. Surveys 16315007 and 16315008 refer.

Clermont is a three storey Palladian country house, built in brick on a roughly square plan and embellished with granite quoins, stringcourse and parapets. There are slated hipped roofs, tall brick chimneystacks and cast-iron rainwater goods. The main entrance is via a large timber panelled door set within a stone surround with Doric columns and entablature with decorative mouldings. The window above the entrance also has a stone surround with lonic columns and pediment. Above this is a small eyebrow window with stone surround. Otherwise the windows are mostly six-over-six or nine-over-six timber sliding sash units. The 1960 chapel and school block are linked to Clermont by a single storey flat roofed corridor with pilasters and a frieze. The chapel has a hipped roof and the school block is flat roofed.

The one and a half-storey outbuildings to the north (on the west side of the courtyard) are contemporary with the House and were also extended at right-angles at the north end of the courtyard c. 1890. The original section is constructed in uncoursed rubble stone with brick dressings to the openings facing into the courtyard and the later block is constructed in brick and has granite cills and keystones.

There are slated pitched roofs, some dormers and brick chimneystacks. A carriage arch provides access to the courtyard from the avenue. The windows and window openings have been variously replaced and altered over the years and are in generally poor condition. An external steel staircase on the courtyard façade provides an additional fire escape from the upper floor.

Clermont House is included in the Record of Protected Structures (RPS) contained in the Wicklow Town/Rathnew Development Plan RPS Ref. 25 -13.

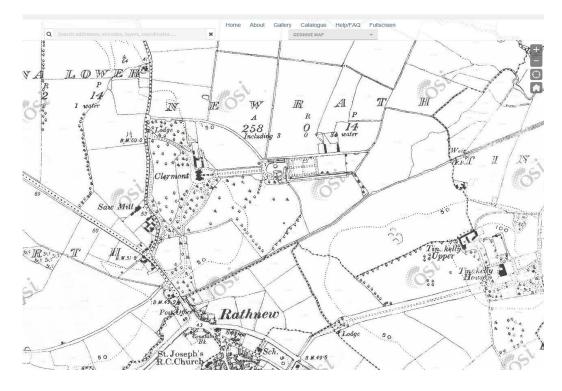
The entry in the RPS states;

"Country House/School. Important early-18th. Century house thought to be by David Bindon and the twin of Furness House, Naas. Of brick, the three-bay, three-storey façade has a tetrastyle, Doric doorcase over which is an ionic aedicule, windows with original thick-bar sashes, original panelled door, parapet and heavy slates on the roof. Half-octagon wings were added circa 1900 and a chapel and school block circa 1950.

In the interest of clarity, only this core group of connected buildings is included in this entry structures / features of the curtilage are excluded"

5. Heritage significance of Clermont House:

Clermont is of special architectural interest as an example of an 18th Century country house and demesne which had such typical features as: parkland, tree-lined avenue, gate lodge, out-offices and yards, walled garden, a boating pond, orchards and paddocks, a formal promenade on axis with the house and informal woodland walks, much of which remains discernible today.



Extract from Ordnance Survey 25" Edition 1888-1913

Clermont House is of special architectural interest as an elegant Palladian style country house although the original symmetry is diluted by 1890 extensions. The NIAH recognises the modern school as "a fine example of Neo-Georgianism in its own right".

Clermont House is also of special historical Interest due to association with the prominent 18^{th} Century architect Francis Bindon. Bindon (1690 – 1765) was "a gentleman amateur" architect and artist and latterly MP for Ennis, Co. Clare.

As an artist, his most famous painting is the portrait of Turlough Carolan, the blind harpist, which hangs in the National Gallery of Ireland and is the only known portrait of Carolan to survive.

As an architect, Bindon designed several Country Houses including Woodstock, Co. Kilkenny, Drewstown, Co. Meath and Newhall, Co. Clare. He designed John's Square in Limerick, the Market House in Mountrath and completed Russborough House after the death of Richard Cassels in 1751.

Clermont is of social interest due to its evolution through different periods since the 18th century. From initial creation as a country house and demesne of the landed gentry, it has adapted as a boarding school and convent of a religious order and latterly to provide facilities for the Local Authority and Carlow Institute of Technology. Each owner and occupier of Clermont has made its own contribution to the site as it exists today and the next phase of development as Enterprise Hub for the region has the potential to further enrich the social history of Clermont.

6. Architectural Heritage Impact Assessment of the proposed development

 Demolition of redundant farm outbuildings (c.350 sq.m) to the north of the courtyard to facilitate construction of new 2 storey office building (c.750 sq.m) with main entrance to the Enterprise Hub, roof mounted PV solar array and link element to the refurbished courtyard offices. Ref. Photos No's 1,2 & 3.

The area to the north of the courtyard, historically an outer yard and paddock, is unsightly with a number of derelict buildings, ruinous structures and miscellaneous redundant plant and waste materials. A new building will promote the rehabilitation of the entire area, to the benefit of the setting of Clermont House.

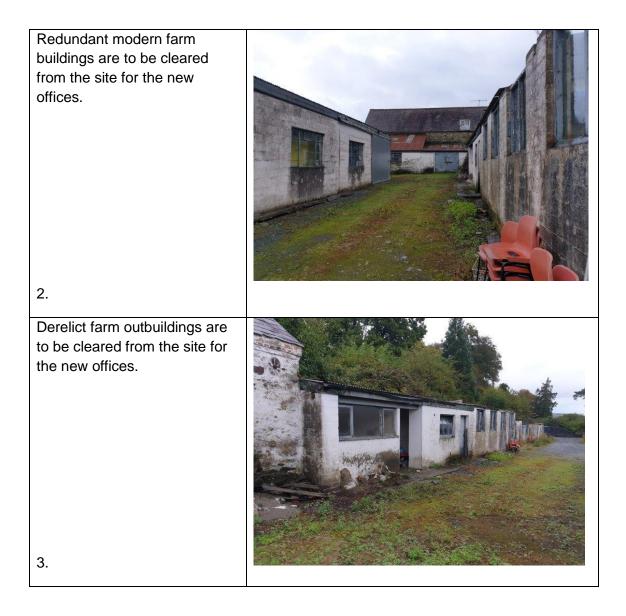
The proposed new building complements the courtyard cottages in its general form, proportions and finishing materials. The front elevation also includes a contemporary interpretation of the courtyard carriage arch at a larger scale as the main entrance to the Hub. Although approximately 1 metre higher than the courtyard outbuildings, the front building line of the new block is set back so that the existing views along the avenue upon approach to Clermont are not impeded and the House remains the dominant element.

This design approach is appropriate, and it is considered that the setting of Clermont House will be enhanced by the proposed development.

Lean-to stores to the rear of the courtyard cottages are to be removed to facilitate construction of the link element to the new offices.



1.



2. Alteration and refurbishment of the west courtyard outbuildings (c.400 sq.m) and conversion to office and ancillary uses. Alterations include formation of additional window openings and enclosing the carriage arch to create a new stairwell.

Ref. Photos No's 4 – 10

In the RPS, the courtyard outbuilding are excluded from the curtilage of Clermont House and are not protected structures. Nonetheless, the west range of former cottages is described in the NIAH and due regard has been taken of the historic character of the structures in the design of the alterations.

The alterations to the courtyard buildings include the formation of additional window openings and glazing-in of the carriage arch but the historic plan form remains largely unchanged. The interior spaces are plain, and the proposed alterations do not impact on architectural features.

Fire safety considerations at first floor level are resolved by fitting glazed screens to create a corridor which do not subdivide the original spaces visually and by provision of a second staircase within the carriage arch which is enclosed by full height glazing in a simple manner.

View of the west range of the courtyard from the avenue. It is proposed to glaze-in the carriage arch to enclose a new staircase. It is proposed to form additional window openings in the front façade. The new office building is of similar form to the courtyard range and is set back from the existing building line in order not to impede views to Clermont House from the avenue.

The new staircase within the carriage arch will allow removal of the existing steel fire escape and restoration of the original window opening at upper level.Double doors, right, from new canteen will provide access onto a terrace and lawn facing Clermont House.

5.

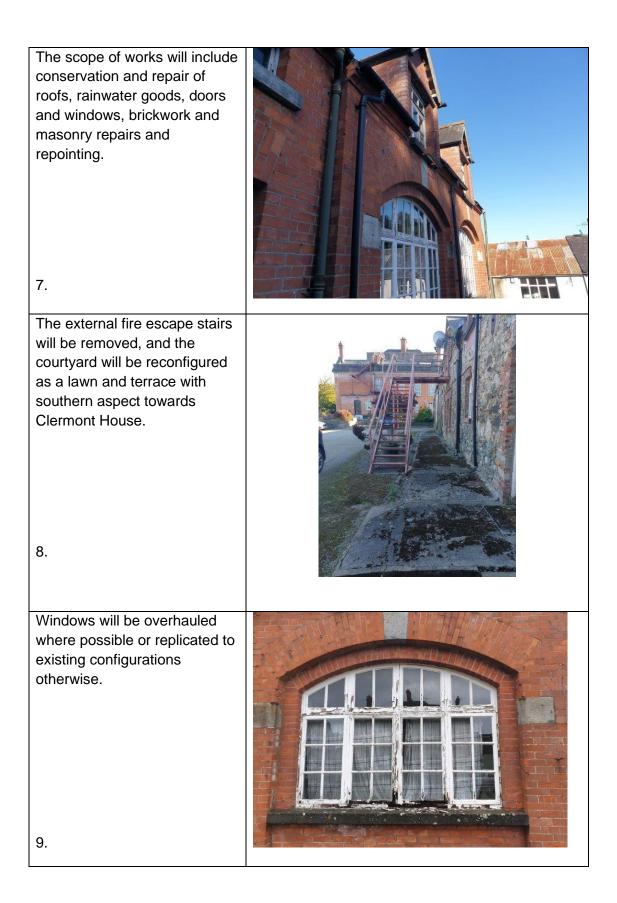
4.

The west range of the courtyard will be converted to offices and a comprehensive programme of conservation works will be undertaken.



6.

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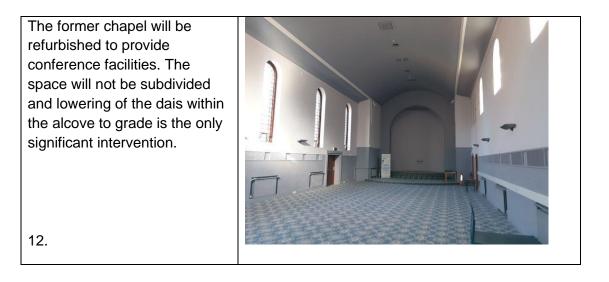
Upgrading of the east courtyard storage outbuildings (c.150 sq.m) including construction of new roof structure. **Ref. Photo No. 11**

On the east side of the courtyard the modest single storey range of outbuildings will be retained, repaired and maintained in their historic role as stores, boiler room, utility and plant rooms, etc.



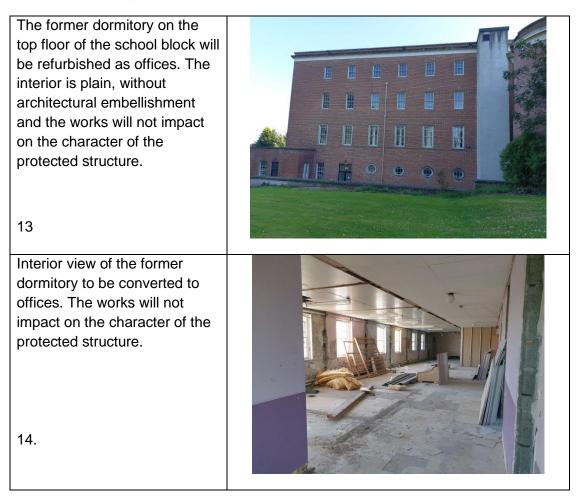
3. Refurbishment of former school chapel (c.205 sq.m) and conversion to conference centre. **Ref. Photo No. 12**

The former chapel is an ideal location for conference facilities and the equipping of the room for such use will not adversely impact on the character of the space. The vaulted ceiling and window openings at high level will not be obscured by conference activities below and the nun's gallery will remain as testament to the original religious use. The apse for the altar at the east end of the room is a further reminder of the convent school period. It will be retained although it is proposed to lower the concrete dais to main floor level for practical reasons. It is considered that use for conference activities is a suitable new use for the former chapel. It is appropriate that the space will function again as a place of assembly for educational and entrepreneurial purposes and will be used in a manner respectful of its original purpose.



4. Alterations and refurbishment of former dormitory at 2nd. floor level of the school block (c.271 sq.m) and conversion to office use. **Ref. Photos No's 13 & 14**

The interior of the former dormitory is plain and unadorned. It is considered that the realignment of internal partition walls to meet current fire safety regulations will not affect the character of the protected structure.

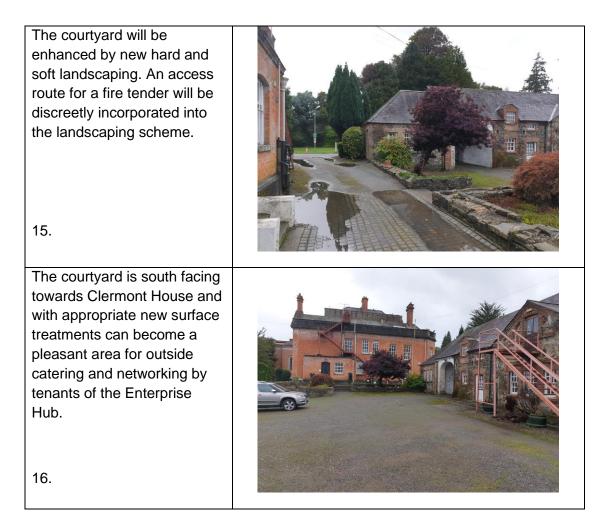


 Associated services, set-down bay, accessible car parking, e-car charging posts,, hard and soft landscaping.
Ref. Photos No's 15 & 16

The courtyard will be resurfaced as a lawn and terrace, without car parking, and an emergency route for a fire tender will be discreetly demarcated. The courtyard has a southerly aspect towards Clermont House and the terrace is ideally located for sitting out and for outside catering.

The design approach of creating a simple uncluttered setting for the historic structures is considered appropriate and will serve to highlight the wealth of detail and craftsmanship evident in the cottages.

Outside the courtyard, a set down bay and 2 parking spaces for the disabled can be accommodated off the sweep of the avenue and will be screened by existing established planting.



7. Conclusion

This Report describes the proposed Enterprise Hub at Wicklow County Campus which will comprise a new 2-storey building linked to the refurbished courtyard cottages, conference facilities in the former school chapel and administrative offices in a section of former dormitory at second floor level in the school block.

The Report outlines the history of Clermont House, a protected structure and the life of its architect, Francis Bindon.

It assesses the heritage significance of Clermont House and outlines why it is of special Architectural, Historical and Social interest. The impact of the proposed development on the character and setting of Clermont House is assessed.

Although not included in the RPS in the Wicklow / Rathnew Development Plan, the architectural heritage impact on the courtyard cottages is also considered.

The outcome of the heritage impact assessment is positive. The "loose fit" nature of office use is considered appropriate. The provision of new services, including the toilets, within the new building ensures that the works to the historic structures are generally non-invasive. The repair of the courtyard outbuildings as part of the project will rescue them from dereliction and secure their future in the long term.

The new building is appropriately located to marry with the courtyard ranges and is adequately set back from the avenue to avoid impinging on views to Clermont House. The clearing of the extensive derelict area to the north of the courtyard, in order to facilitate the new building, will be to the benefit of the setting of Clermont House and to the appearance of the demesne lands.

As part of the Enterprise Hub project, the opportunity will be taken to decommission septic tanks within the site and discharge all wastewater via a new rising main to the nearby public pumping station to the town effluent treatment plant.

SIGNED

DATE:

CORMAC O'SULLIVAN, B.Arch, M.Phil, MRIAI, MIPI, IHBC. Bluett & O'Donoghue Architects

Encl. Appendices;

- NIAH Survey Ref. 16315007, Clermont House
- NIAH Survey Ref. 16315008, Courtyard, West Range

NII NATIONAL INVENTORY of Architectural Heritage

Clermont House, Newrath, County Wicklow



Survey Data

Reg No	16315007
Date	1725 - 1735
Townland	NEWRATH
County	County Wicklow
Coordinates	328836, 196001

Description

Detached multiple-bay three-storey Palladian country house, built 1730 possibly to designs by Francis Bindon, with asymmetrical two and single-storey projecting side wings of the 1890s, now in use as a school with a large Neo-Georgian school and assembly hall / chapel extension of 1950 to the south. The original section of the building is three-storey and roughly square in plan. To north is the two-storey projecting wing of c.1890, whose west front consists of a canted bay, with similarly styled contemporary largely single-storey wing to south. To the south again is the large three to four-storey L-shaped school and single-storey double-height assembly hall extension of 1950. The school extensions are linked to the former house by means of a single-storey flat-roofed corridor section. The façade is in brick with different tones of brick clearly defining the extent of the original house and the extent of each of the later additions. The original section also has granite quoins, decorative granite balustrade-like parapet and granite string course, whilst the 1890s wings have a similar parapet and a rendered base course, with similar rendered base course, stringcourse, eaves course and window surrounds to the school section. The linking corridor has a series of pilasters between its windows as well and as a frieze. The original house has a slated hipped roof with a slated part hipped part gabled-ended roofs to the wings, a slated hipped roof to the assembly hall / chapel, and a flat roof to the large school section. Tall brick chimneystacks to original house and wings, and flat-roofed dormers to wing to north. The main entrance consists of the original panelled timber door set within a large painted stone surround with pairs of three-quarter Doric columns supporting an entablature with decorative mouldings of cattle skulls with garlands, and projecting cornice above. The windows to all the sections are mainly flat-headed with https://www.buildingsofireland.ie/buildings-search/building/16315007/clermont-house-newrath-co-wicklow

Clermont House, Newrath, County Wicklow - Buildings of Ireland

timber sash frames, mostly six over six or nine over six, with some tripartite sash windows and roundels to the school section, and tall semi-circular leaded pane windows to the assembly hall and semi-circular headed windows / doors to the link corridor. The window above main entrance has a painted stone surround with three-quarter Ionic columns and pediment. Above this, to the second floor, is a small eye brow window with a plain painted stone surround. Cast-iron rainwater goods. Tarmac-covered carpark to front of building with large lawn beyond and extensive grounds to all sides. Detached part c.1730, part 1890s outbuildings to north. Internally much original detailing has survived including panelled walls, architraves, main staircase and fireplaces

Appraisal

Whilst historically and socially this building is of considerable local importance, in architectural terms the original Palladian style house has been somewhat compromised by the later additions in the form of ill-conceived asymmetrical additions of the 1890s, and the imposing school extension of 1950. The last addition is however a fine example of mid 20th-century Neo-Georgianism in its own right and whilst one might conceivably doubt the value of the whole ensemble, one cannot fail to be impressed by at least the eldest and most recent of its component parts.

https://www.buildingsofireland.ie/buildings-search/building/16315007/clermont-house-newrath-co-wicklow

Clermont House, Newrath, County Wicklow



Survey Data

Reg No	16315008
Date	1720 - 1740
Townland	NEWRATH
County	County Wicklow
Coordinates	328825, 196052

Description

Detached multiple-bay one and a half-storey former outbuilding, built c.1730, with extension of c.1890, now in use as living quarters and offices for staff of the neighbouring school. The building is L-shaped with the original c.1730 portion lying on a north-south axis, and the 1890s extension at a right angle to the north-east corner. The façade of the original section is in uncoursed rubble stone with brick dressings to many of the openings to the east elevation. The façade of the extension is in brick with granite keystones and sills. The pitched roof has gable ends, however to the south the roof culminates in a slightly lower hipped portion. The entire roof is slated, has brick chimneystacks and dormers to the original wing. The original wing has a large carriage archway, with several doorways with replacement partly glazed timber doors to the east elevation. The windows to the original wing are of various sizes with flat and segmental heads and have a mixture of timber sash and replacement timber and uPVC frames, with many of those to the upper floor of the east elevation set within gabled half dormers. The windows to the west elevation have either been created new, or enlarged, c.1980. Those to the extension are also of various sizes and also have flat and segmental-arched heads, with replacement timber frames to all. Fire escape doorway and stair to east elevation of original wing.

Appraisal

As part of the Clermont estate this building has local historical importance, however in architectural terms (and in contrast to Clermont house itself) the 1890s extension is perhaps of greater value than the, somewhat altered, original section. https://www.buildingsofireland.ie/buildings-search/building/16315008/clermont-house-newrath-co-wicklow