Planning Application for Kinnegad Economic Enterprise Hub.

Planning & Design Statement

March 2024

CooneyArchitects

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Fig. 01
Existing Former Master's House - Front Elevation

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01 | Introduction / Outline

Introduction/Outline

01

Fig. 02
Existing Former Master's House - View from main street

Fig. 03
Existing Former Master's House - 3D View

Cooney Architects were appointed as architects by Westmeath County Council to prepare a planning application submission, for: Development of a new Kinnegad Economic Enterprise Hub at the site of the former Master's House, a Protected Structure, Mullingar Road, Kinnegad, Co. Westmeath.

The overall aim of the project is to establish an enterprise and co-working hub in Kinnegad, Westmeath as part of a wider multi-faceted regeneration project for the core area of Kinnegad that provides for the delivery of an Open Access Community Library and Education and Training Centre that are currently being delivered by Westmeath Co Council in collaboration with the Longford Westmeath Education & Training Board (LWETB) with the assistance of RRDF funding. The proposed Enterprise Hub will effectively complement the educational and employment uses and services on site creating a centre of excellence while providing for the revival of a vacant building (former Masters' House) that has been acquired by WCC.

The proposed development will include the following:

- Refurbishment of the original Master's House Building (Protected Structure ref. 027-008 as per the Westmeath County Development Plan Record of Protected Structures 2021 – 2027) including partial demolition works to facilitate a new rear extension.
- Construction of a new single storey extension to the rear of the Master's House (c284 m2) to be used as a reception, office space and meeting rooms.
- Site development works including improved pedestrian access and the upgrade of the existing ramp access with the provision of controlled vehicle access from the Mullingar Road.
- Hard and soft landscaping, including removal and replacement of the existing hedgerow along the western boundary.
- Provision of signage, lighting, bin storage, cycle stands and ancillary site works.

02 | Site Location Map & Survey Drawings

Site Location Map

02

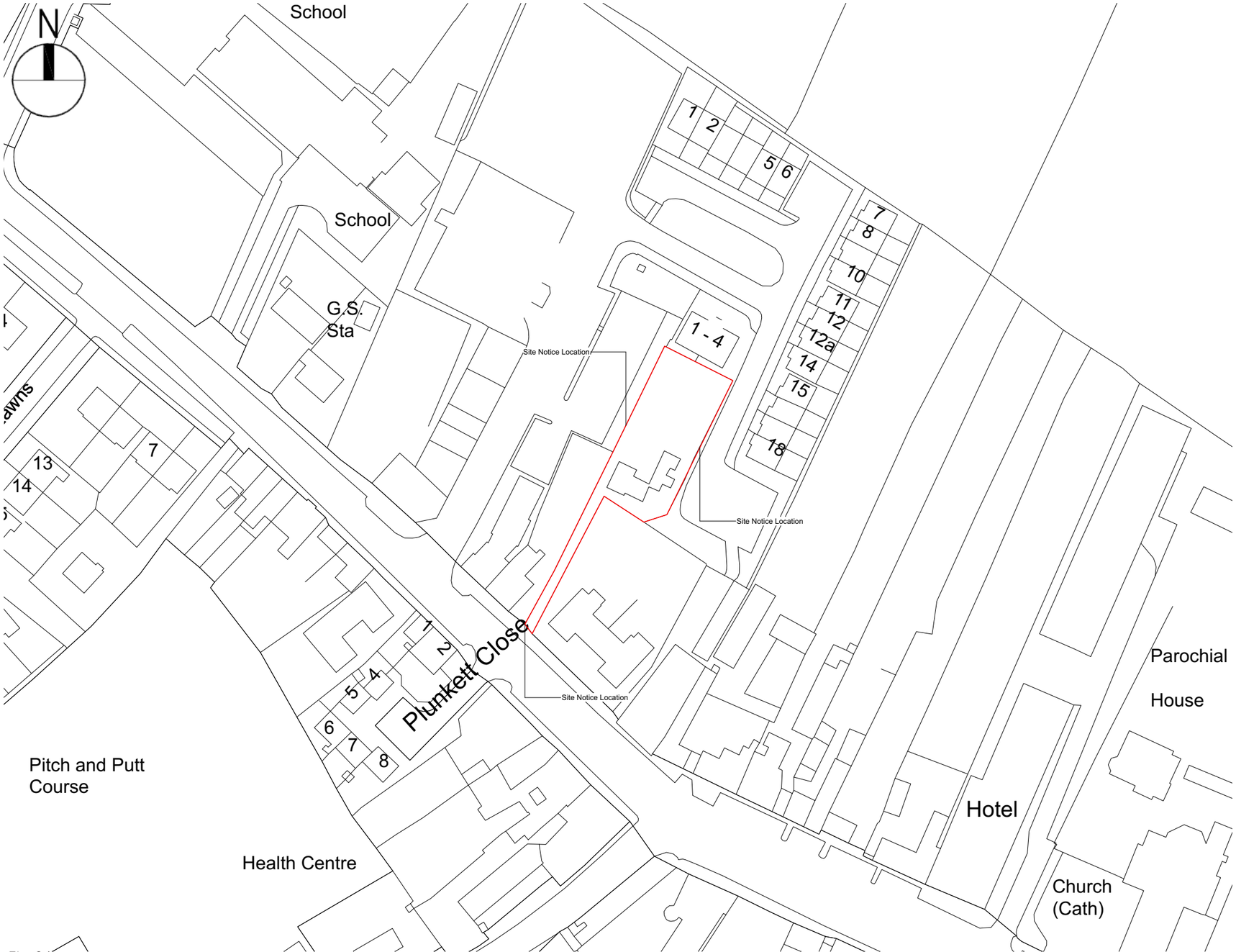


Fig. 04
Site Location Map 1:2500 A3

EXISTING SITE CONTEXT
Former Master's House, a Protected Structure, Mullingar Road, Kinnegad, Co. Westmeath.

The site is located in the heart of Kinnegad on the site of the former Master's House, to the rear of the Former School House and new Library Building (under construction).

The site boundary conditions are:

- Southern edge: New Library Building (under construction) (Former School), Mullingar Rd.
- Western edge: Adjacent car park with various shops
- Northern edge: Adjacent private housing estate - St Etchen's Ct
- Eastern edge: Adjacent private housing estate - St Etchen's Ct

Fig. 05
Kinnegad Location Map

Survey Drawings

02

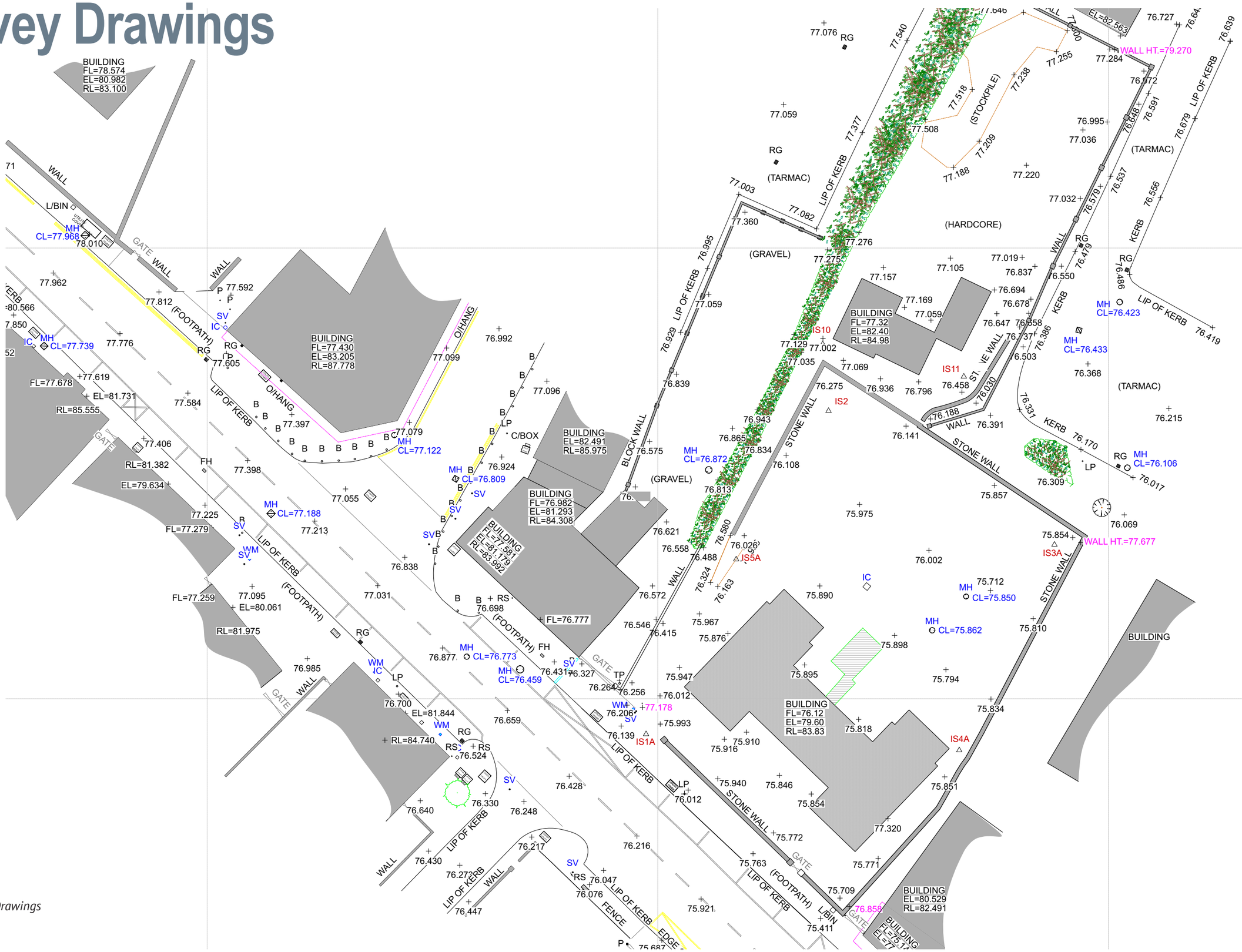
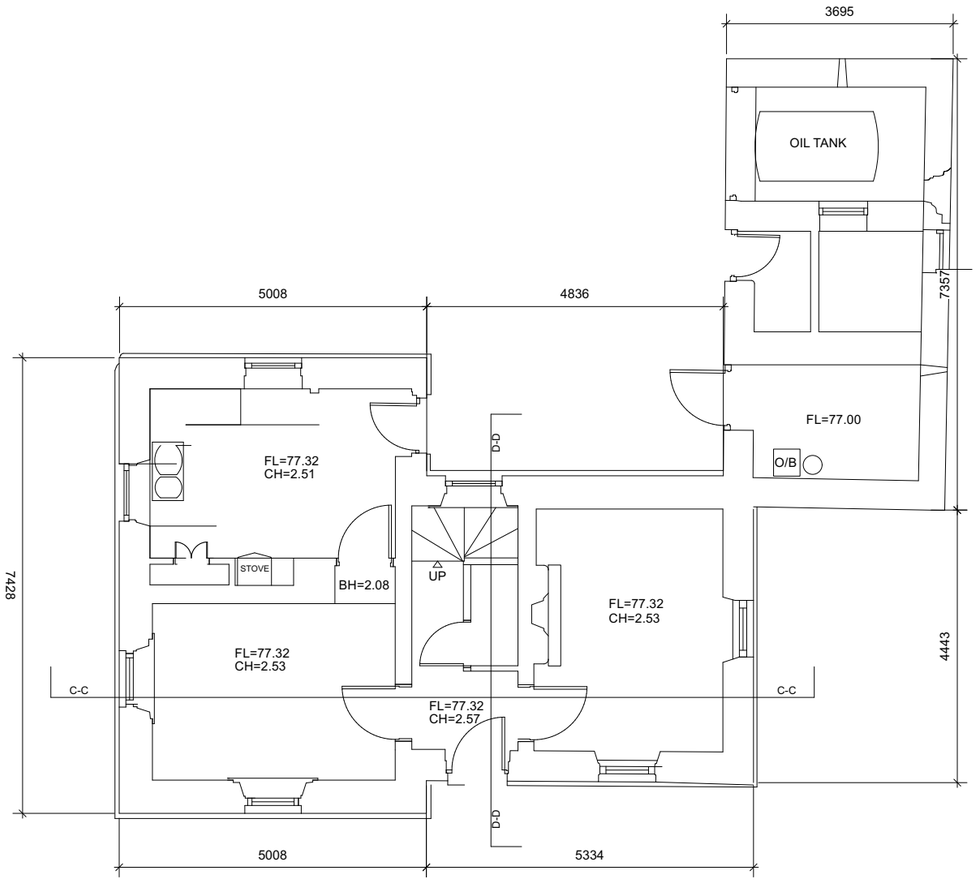


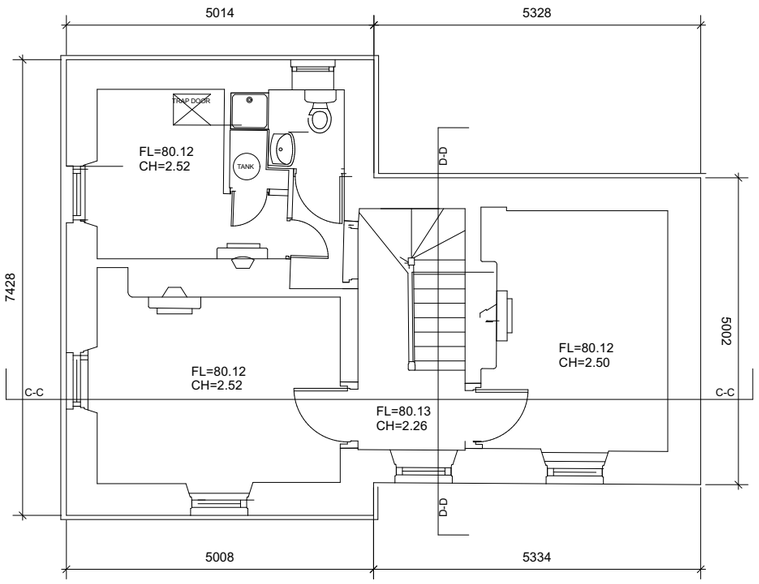
Fig. 06
Existing Survey Drawings

Survey Drawings

02



GROUND FLOOR LAYOUT
(Gross External Floor Area = 90.3 SQ.M. / 972 SQ.FT.)
SCALE 1/50



FIRST FLOOR LAYOUT
(Gross External Floor Area = 63.8 SQ.M. / 687 SQ.FT.)
SCALE 1/50

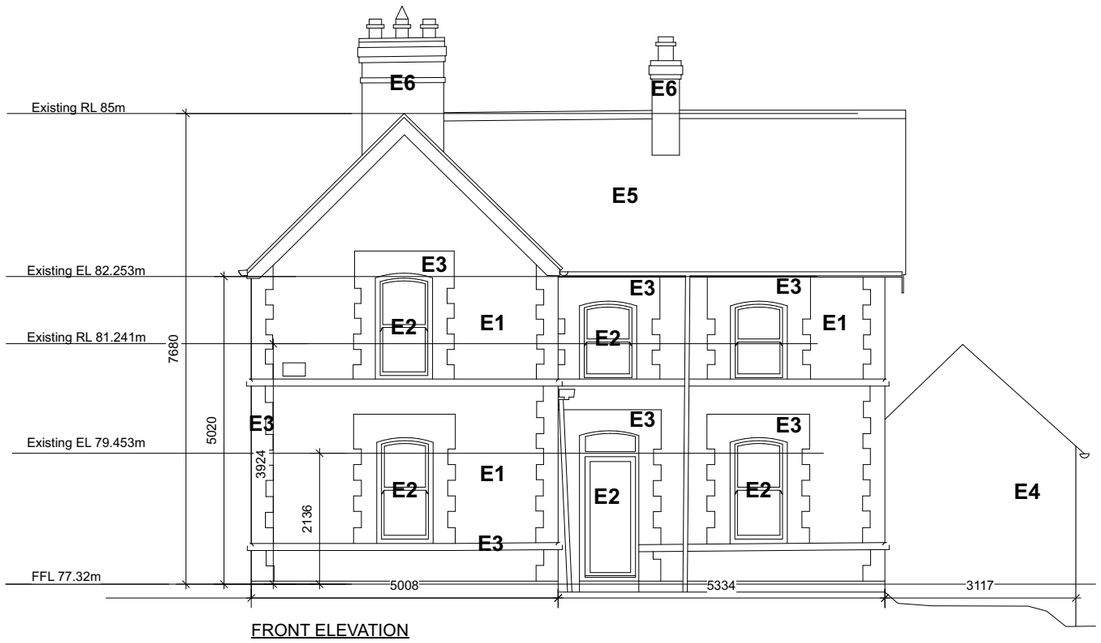
Fig. 07
Existing Survey Drawings

Survey Drawings

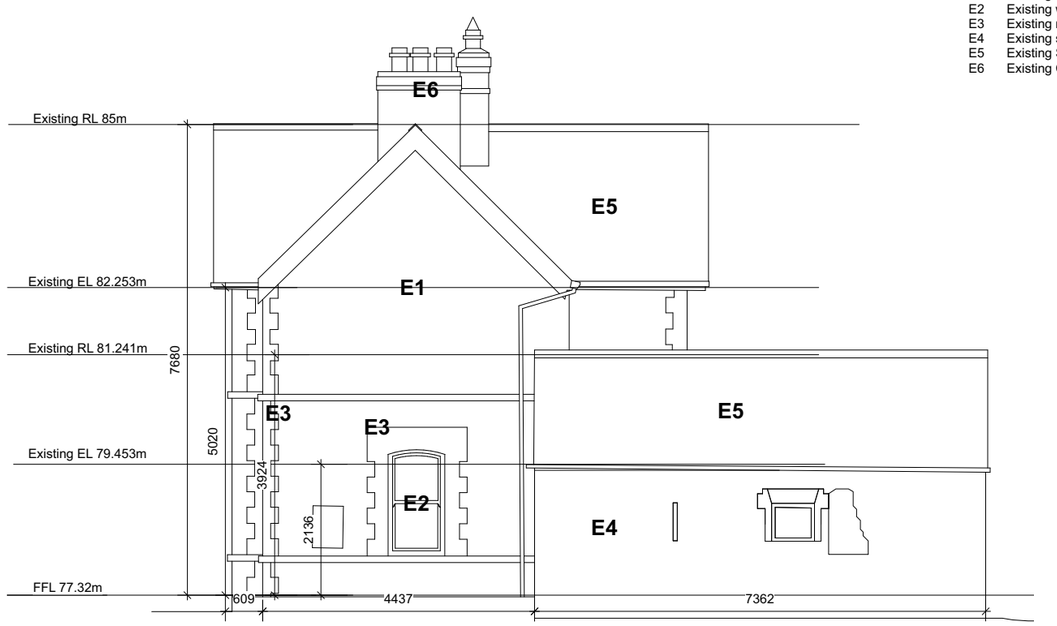
02

LEGEND

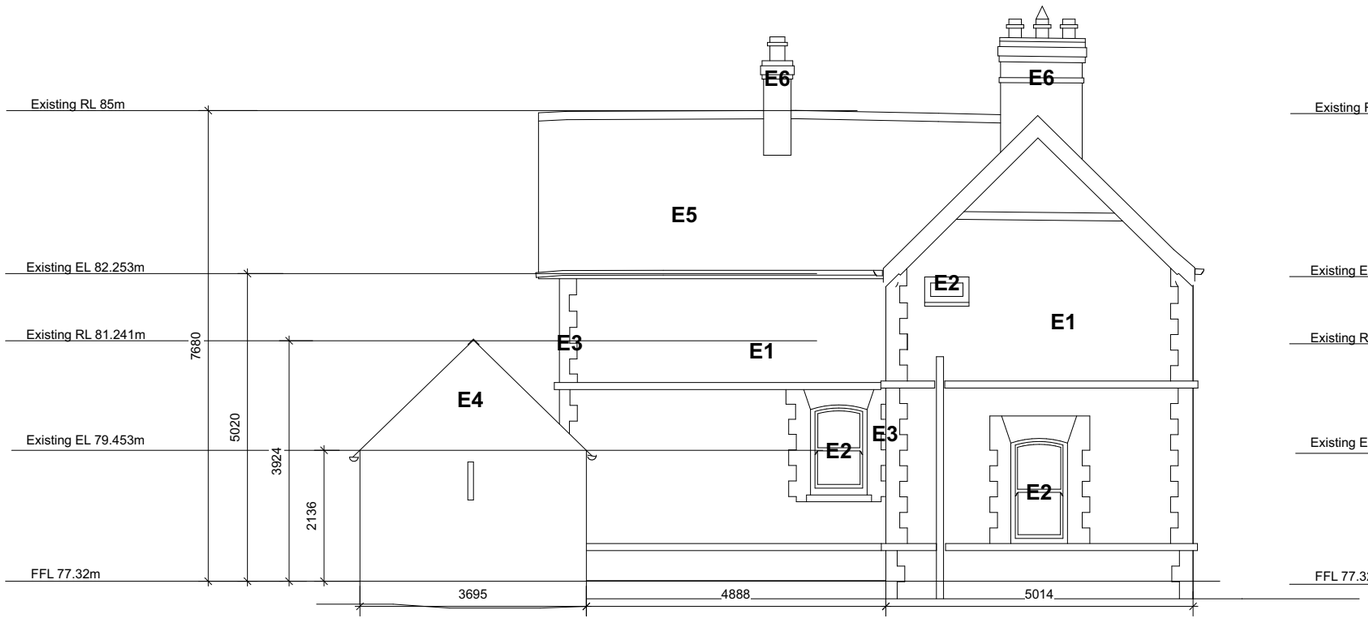
E1 Existing render finish
E2 Existing windows/doors
E3 Existing red brick
E4 Existing stone finish
E5 Existing Slate
E6 Existing Chimney



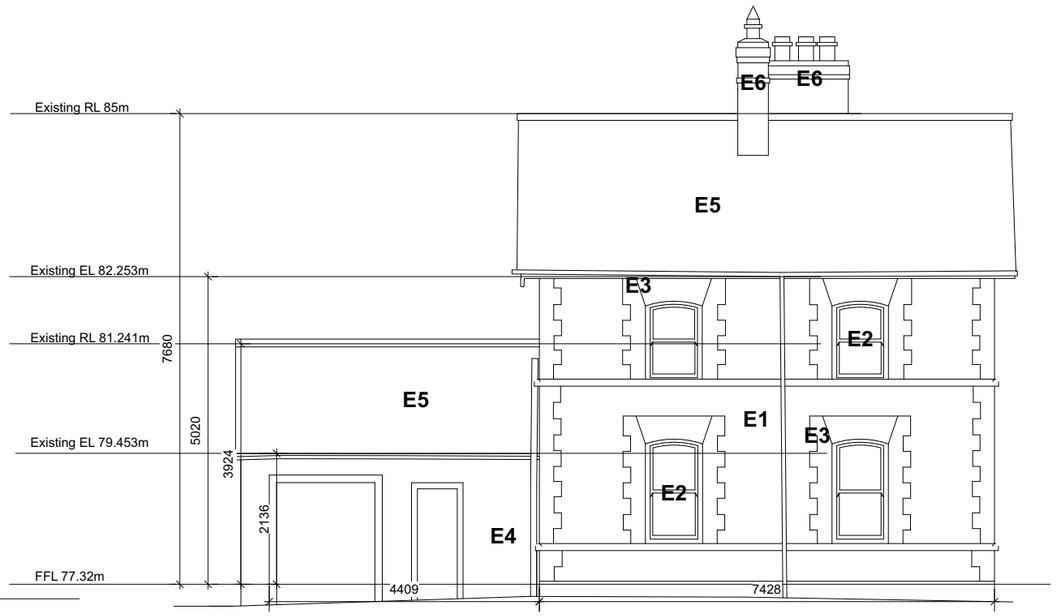
FRONT ELEVATION
SCALE 1/50



SIDE ELEVATION
SCALE 1/50



REAR ELEVATION
SCALE 1/50

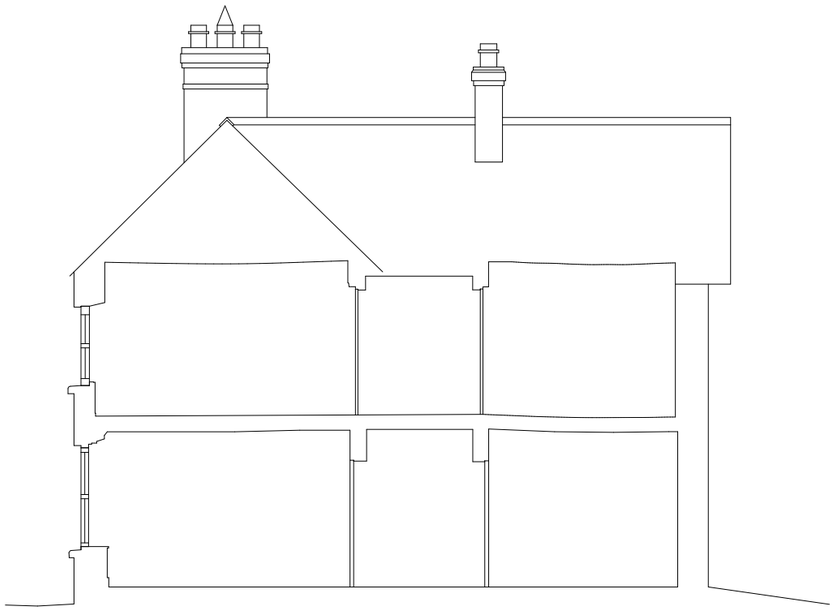


SIDE ELEVATION
SCALE 1/50

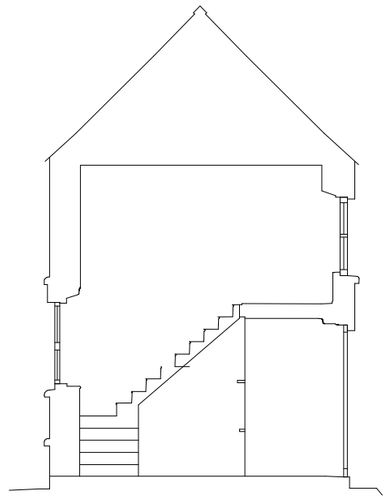
Fig. 08
Existing Survey Drawings

Survey Drawings

02



SECTION C-C
SCALE 1/50



SECTION D-D
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Fig. 09
Existing Survey Drawings

03 | Relevant Planning Policies & Planning History

Development Plan - Zoning

03

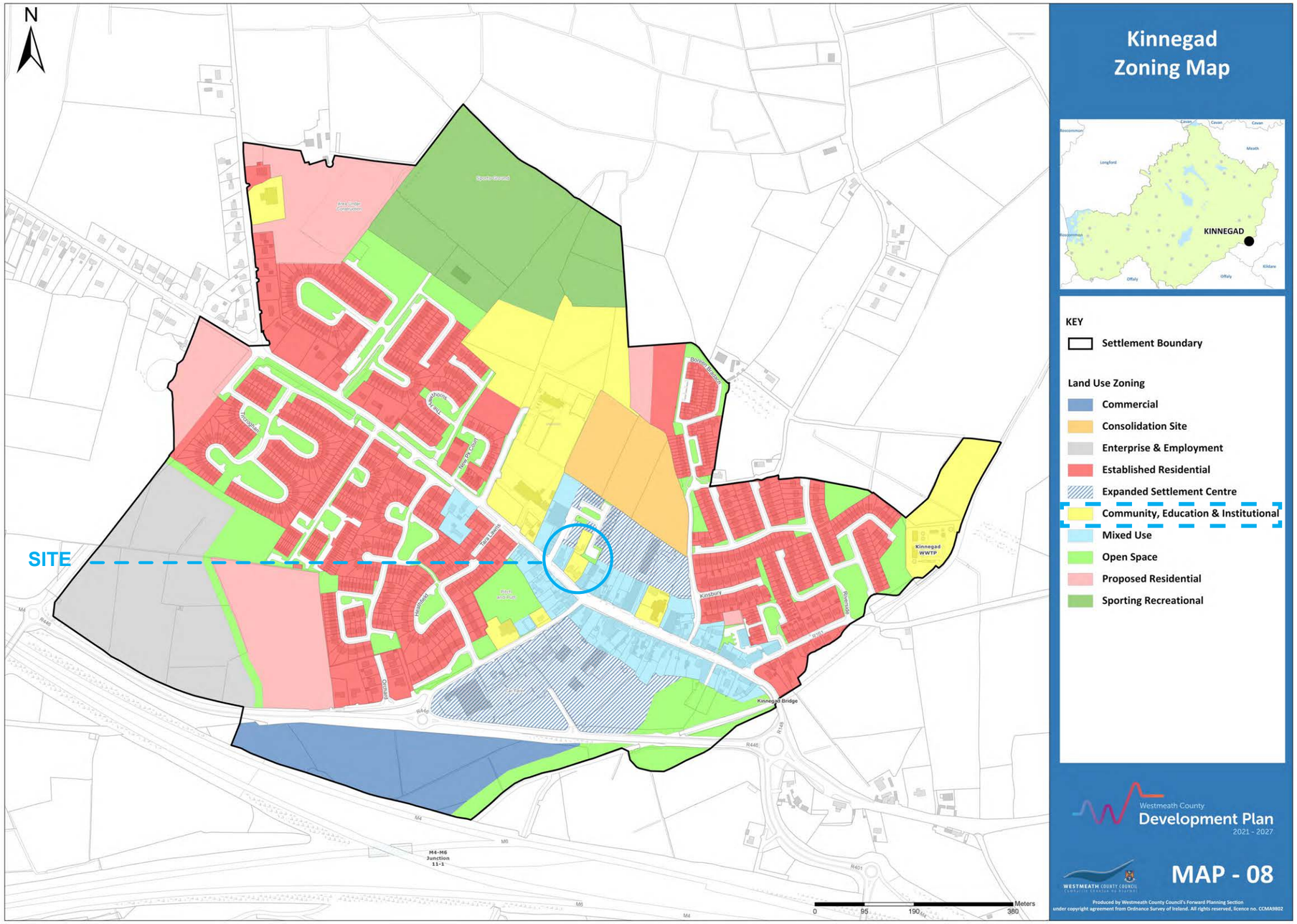


Fig. 10
Westmeath County Council County Development Plan 2021-2027

Land-Use Zoning

According to the Westmeath County Council County Development Plan 2021-2027 [Fig. 09], the application site is zoned 'Community, Educational & Institutional'. See text below for Westmeath County Council's objectives and vision for 'Community, Educational & Institutional'.

15.7 Community, Educational & Institutional

This 'Community, Educational & Institutional' zoning provides for the safeguarding and provision of facilities that serve and contribute to the creation of viable and stable communities. Such facilities include schools, churches, community centres, creches and childcare facilities, nursing homes, libraries, museums, health centres, fire stations, graveyards, arts/ entertainment facilities and infrastructure as well as sporting, recreational and cultural facilities.

In certain instances, the regeneration of institutional lands may be considered in terms of the provision of enterprise and employment, hotel, state services and tourism use subject to the protection of the character of the lands. Such development proposals associated with institutional complexes will be required to respect the architectural and cultural heritage value of the complex.

CPO 15.4

Protect, provide and improve community, civic and educational facilities and to preserve the open character of institutional lands and the setting of heritage buildings contained within such lands.

Development Plan - Objectives

03

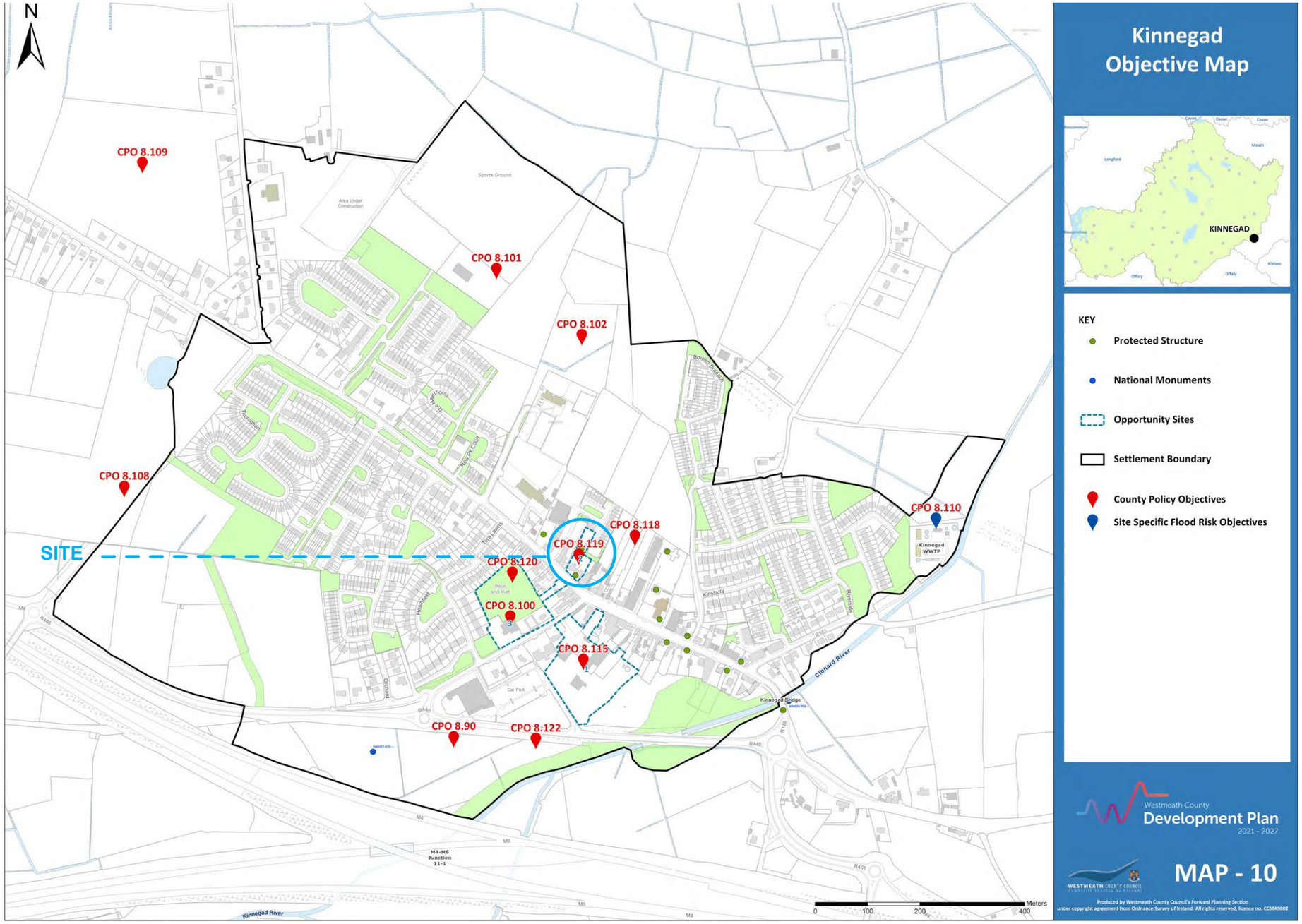


Fig. 11
Westmeath County Council County Development Plan 2021-2027

Westmeath County Development Plan 2021-2027

Secton 8.3.3.9 Regeneraton
Opportunity Site 2 –
Former National School Site, Main St.

Situated to the west of the town and north of the Main Street sits the former "Old National School" building and associated "Principal's House". These buildings have considerable architectural merit, contribute positively to the existing streetscape and accordingly are included on the Record of Protected Structures. This site presents an opportunity to address existing social infrastructure deficit in the town through the development of a library and educational campus to support the social and educational needs of the existing population and new communities. Given the existing protected structures on site, the redevelopment of this site should be carried out in accordance with best conservation practice. This will ensure the preservation and continued use of existing architecturally significant buildings at this location and increase pedestrian footfall along Main Street. Westmeath County Council in partnership with Longford Westmeath Education & Training Board (LWETB) have been successful in their initial application for Rural Regeneration and Development Funding (RRDF) to provide a state-of-the-art Library and Education Centre on these lands.

Development Plan - Planning History

03

Fig. 12
Artistic Impression of proposed Library & Education & Training Centre

Fig. 13
Construction of proposed library on site 13.12.23

Fig. 14
Construction of proposed library on site 16.02.24

Planning History

The proposed development will result in the holistic regeneration of the development site in accordance with the CPO as outlined in Opportunity site 2 above.

3-D artist images of the project that also shows the Masters house (see images fig. 13).
The works are currently under construction for the proposed library at the front of the site
(see images fig. 14/15)

Planning history:-

Local Authority Development Part 8 File Ref. LA(M)-122 approved December 2020 for the development of Kinnegad Community Library and Education and Training Centre.

Westmeath County Council (WCC), in collaboration with the Longford Westmeath Education &Training Board (LWETB) developed a strategic plan for the town of Kinnegad that is premised on strengthening the town's local economy and community. A key component of this strategic plan for Kinnegad is the proposed development of a community library and education and training centre within the core area of the town and the regeneration of the former school building and Master's House (Protected Structures) for educational, economic and community use.

Kinnegad – Regeneration Policy Objectives
It is a policy objective of Westmeath County Council to:

CPO 8.117
Support the redevelopment of identfied Regeneration/Opportunity Sites in the town.
CPO 8.118
Promote the consolidation of Kinnegad Town Centre through encouraging the re-use and regeneration of existing buildings and under-utilised brownfield and backlands for commercial development with the key priority of ensuring connectivity to the Main Street (See Map 10, Volume 2)

Development Plan - Objectives & Protected Structures

03

Fig. 15
1953 Aerial view of Kinnegad from the Morgan Collection
A248 Kinnegad. 04/12/53. Credit: Independent news and media
Applicants site highlighted in Red

CPO 8.119
Provide a new library and educaton centre on the site of the former "Old National School" and "Principal's House" building (See Map 10, Volume 2).

Kinnegad - Economic Policy Objectives
CPO 8.93
Promote and support the establishment of new enterprise and employment uses on lands identified for these purposes.
CPO 8.94
Support the town of Kinnegad as a suitable location for second site and relocation opportunities for enterprise development.
CPO 8.95
Require all new enterprise development to be located within a landscape network and demonstrate high quality architectural built form that contributes to a positive sense of place and local distinctiveness.

Kinnegad - Sustainable Communities Policy Objectives
CPO 8.99
Provide for the expansion and development of educational, social, community and recreational facilities in the settlement.

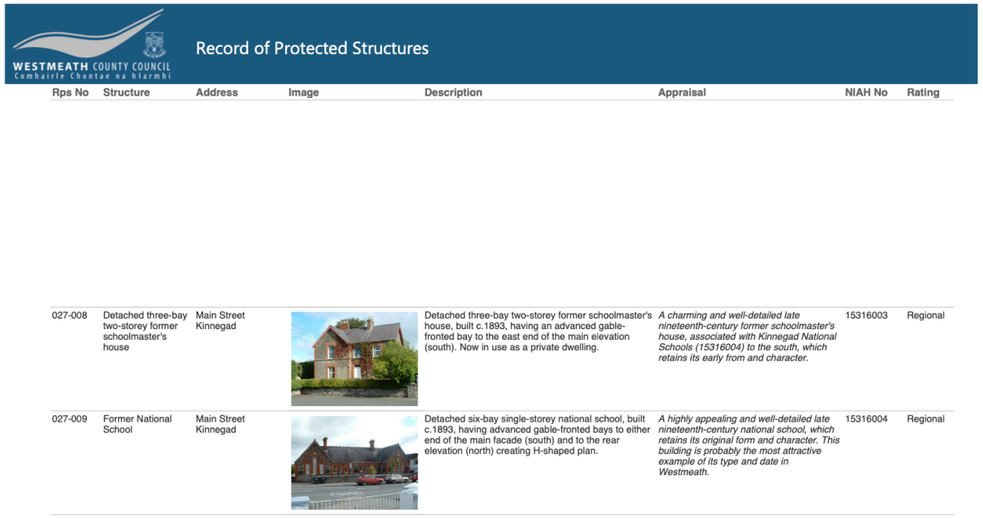
Our Proposal - Meeting Policy Objectives

The proposed project, in conjunction with the regeneration of the former school house serves to meet the site specific CDP objectives pertaining to the development site.

The potential benefits of this development are multi-faceted; this development together with the development of the neightbouring school house as a library and training facility will collectively serve to address a deficit in social infrastructure provision within Kinnegad whilst revitalising and regenerating a key site in a compact manner. The proposed the conservation, restoration and expansion of the former master's house, a Protected Structure, in accordance with best conservation principles, along with the redevelopment of the former school will result in the successful regeneration of key Protected Structures and will ensure the rejuvenation and longevity of these attractive historic buildings and contribute to the built form of Kinnegad'

Development Plan - Objectives & Protected Structures

03



WESTMEATH COUNTY COUNCIL
Comhairle Chontae na hIarmhi

Record of Protected Structures

Rps No	Structure	Address	Image	Description	Appraisal	NIAH No	Rating
027-008	Detached three-bay two-storey former schoolmaster's house	Main Street Kinnegad		Detached three-bay two-storey former schoolmaster's house, built c.1893, having an advanced gable-fronted bay to the east end of the main elevation (south). Now in use as a private dwelling.	*A charming and well-detailed late nineteenth-century former schoolmaster's house, associated with Kinnegad National Schools (15316004) to the south, which retains its early from and character.*	15316003	Regional
027-009	Former National School	Main Street Kinnegad		Detached six-bay single-storey national school, built c.1893, having advanced gable-fronted bays to either end of the main facade (south) and to the rear elevation (north) creating H-shaped plan.	*A highly appealing and well-detailed late nineteenth-century national school, which retains its original form and character. This building is probably the most attractive example of its type and date in Westmeath.*	15316004	Regional

Fig. 16
Westmeath County Council County Development Plan 2021-2027 - Record of Protected Structures

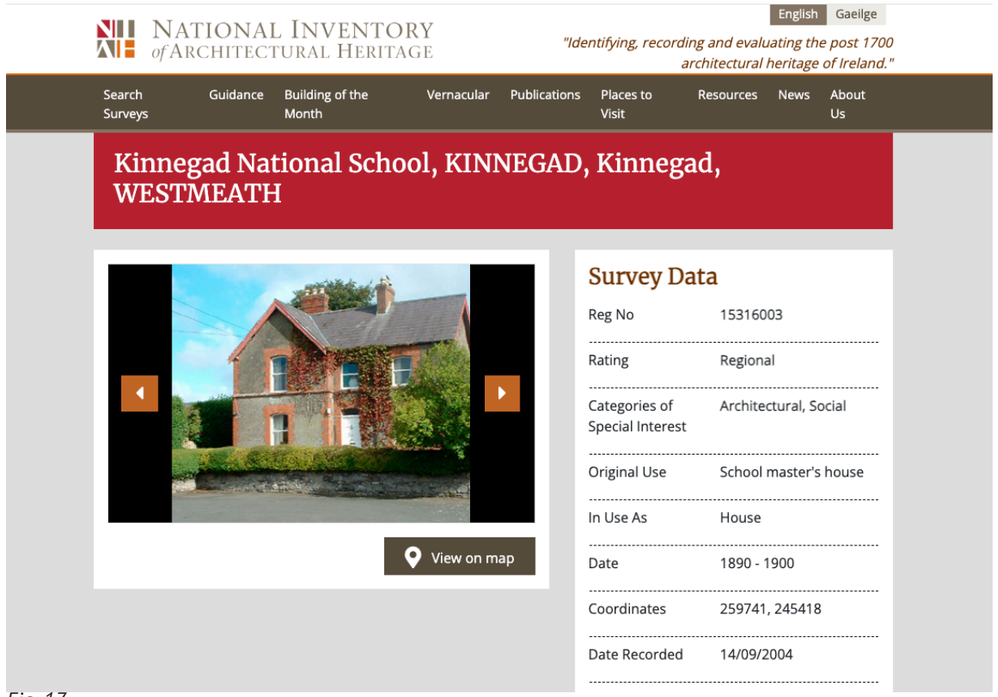


Fig. 17
National Inventory of Architectural Heritage

Westmeath County Development Plan 2021-2027
Record of Protected Structures

According the NIAH and the record of protected structures, the former masters house which this application relates is listed as a protected structure. The associated former school at the front of the applicants site is also listed as a protected structure.

Rps No. - 027-008 NIAH No. - 15316003

NIAH Description of Former Masters House:

Detached three-bay two-storey former schoolmaster's house, built c.1893, having an advanced gable-fronted bay to the east end of the main elevation (south). Pitched natural slate roofs with overhanging eaves and two red brick chimneystacks, one original the other rebuilt. Roughcast rendered walls with extensive red brick trim, including dressings to the openings, a projecting sill course at first floor level and flush quoins to the corners. Shallow segmental-headed window openings with one-over-one pane timber sliding sash windows. Central shallow segmental-headed doorway having brick dressings and a timber panelled door with plain overlight. Rubble limestone boundary wall to the south. Located to the north of the associated school (15416004) at end of a narrow lane running from the south and to the northeast end of Kinnegad.

NIAH Appraisal of Former Masters House:

A charming and well-detailed late nineteenth-century former schoolmaster's house, associated with Kinnegad National Schools (15316004) to the south, which retains its early from and character. This appealing building retains many original features and is pleasantly situated off Main Street. This house is very similarly detailed to the adjacent school and was probably built to designs by the same builder/architect, an A. Scott. The contrast between the roughcast rendered walls and the extensive red brick detailing creates a pleasant appearance. This building forms part of a good quality pair of related structures and is an important element of the architectural heritage of the local area.

Development Plan - Flooding

03

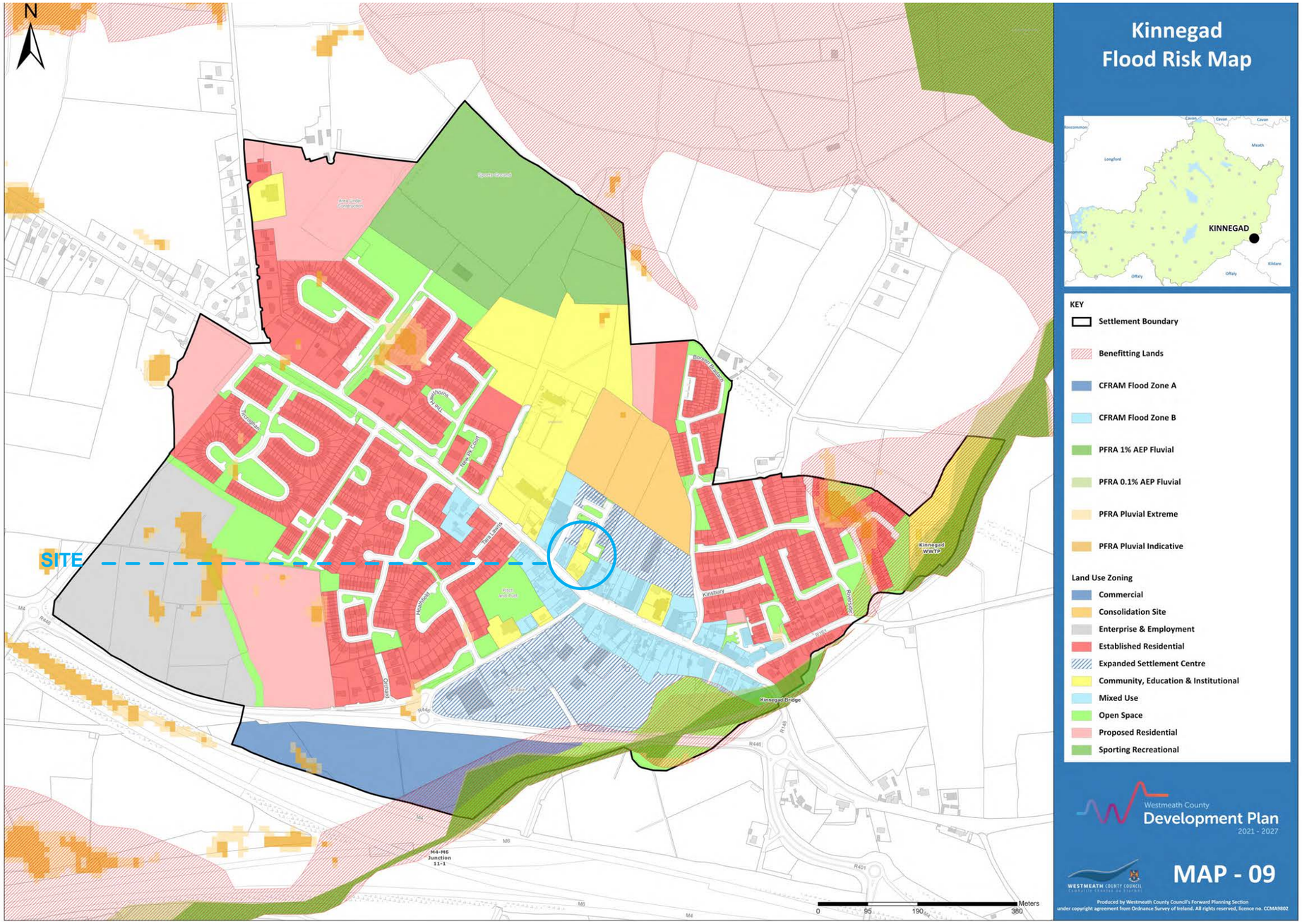


Fig. 18
Westmeath County Council County Development Plan 2021-2027

Flooding

The applicants site falls outside of lands deemed at risk of flooding as per the flood risk assessment published with the Westmeath County Development Plan 2021-2027.

04 | Site Context

Site Context | Record of Maps and Aerial Photographs

04

Historical Overview Kinnegad

The Irish place name for Kinnegad is Cionn Átha Gad, which has been translated as "the head of the Ford of withes". The Ford referred to is the present River Kinnegad, which since 1543 has marked the boundary between Westmeath and Meath.

The settlement form of Kinnegad is largely dictated by the River Kinnegad and the road network within the town in particular the former N4 Primary Road, now the R148 Regional route. This network comprises of six different routes converging on the town centre. In general, the road network acts as the boundaries for development in the town. The R148 route also acts as the Main Street for Kinnegad, with development patterns undoubtedly influenced by the previously large volumes of traffic that once flowed through the town with the former N4 National Primary route.

The centre of the town displays a fine urban grain but retains evidence of its previous role as a Market town through the wide Main Street. The National School and Masters House is located here at the very heart of Kinnegad.

Examination of the Cartographic Record

The extract of the OS map above, which was produced between 1888 and 1913, shows the footprint of the National School building. The advanced gable-fronted bays to either end of the main facade faces southeast, the rear elevation faces north west creating a H-shaped plan. A large open space which acts as the school playground lies between the National School and the former schoolmaster's house (NIAH Reg. Number 027-008). The subsequent 25 inch map shows a very similar footprint.

Fig. 19
Extract from OS map of Kinnegad, Sheet 7929-D, 6 inch Cassini (1830 -1930s)

Fig. 20
Extract from OS map of Kinnegad, Sheet 7929-D, Historic Map 25 inch (1888 -1913)

Fig. 21
Extract from OS map of Kinnegad, (1996)

Fig. 22
Extract from OS map of Kinnegad, (2013)

Site Context

04

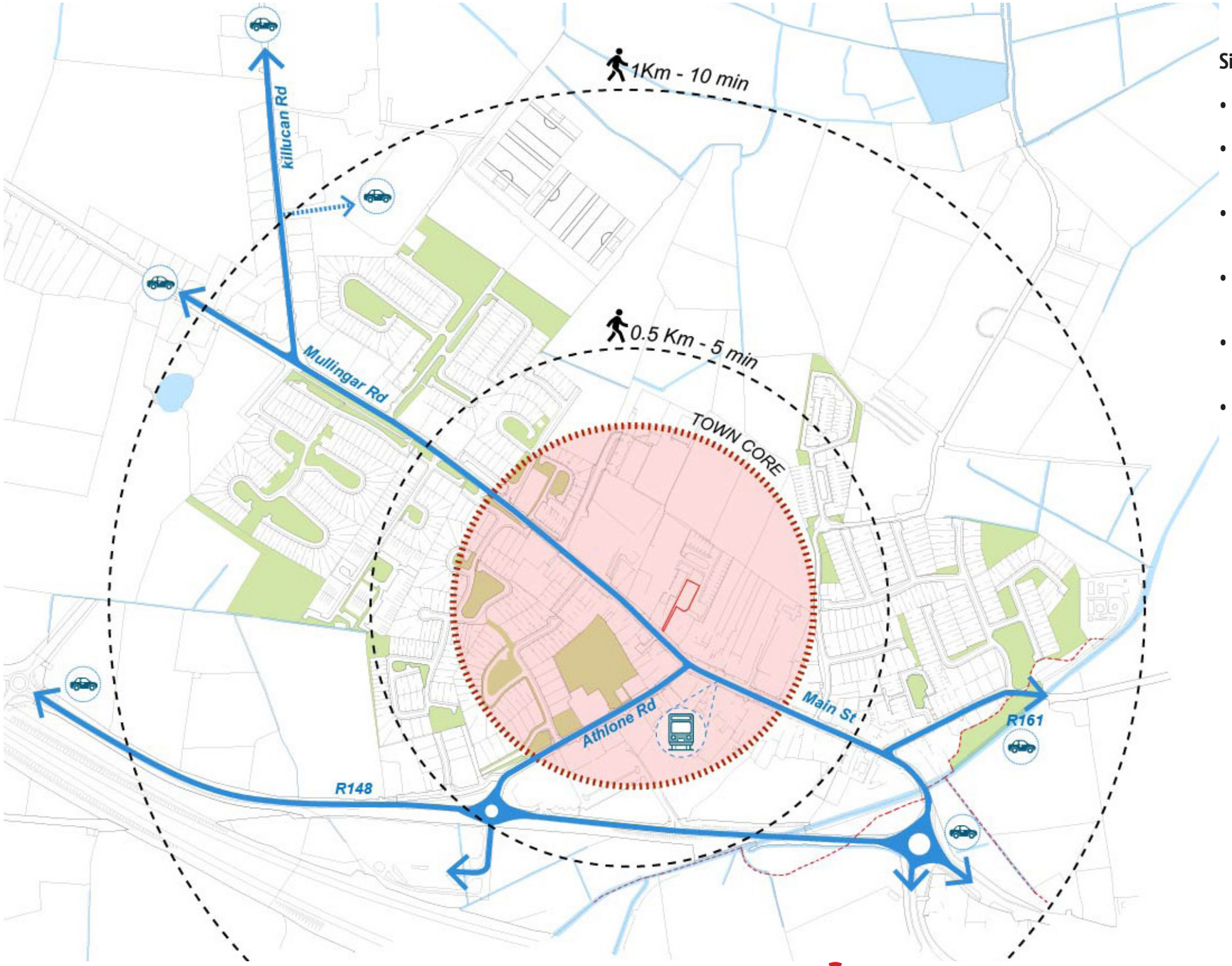


Fig. 23
Kinnegad Connections

Site Connections

- There are attractive routes in and out for pedestrians and cyclists
- The Economic Enterprise Hub is located in or close to a mixed-use centre
- The location of the Economic Enterprise Hub is easily accessible from existing bus services in the town core
- The layout provides opportunity for future links to existing movement routes and local retail
- The site location provides opportunity to utilise existing car parking facilities in the town core.
- The site sits adjacent to neighbouring Open Access Community Library and Education and Training Centre - on the site of the former School House. Our proposal is effectively complementing the educational and employment uses and services on site creating a centre of excellence.

Site Context

04

Fig. 24
Kinnegad Mobility

Mobility

• The proposed development is in the centre of Kinnegad and is easily accessible for town centre activities, public transport and there is ample parking nearby.

• The main entry to the building is through a pedestrian laneway on Main Street, clearly expressed as through paving and signage to provide direct and universal access entrance from the public footpath.

• Cars do not access the site; therefore, no parking will be available. However, the layout allows for access of all services vehicles. Emergency vehicles can directly access the site from the Main Road into the Library courtyard. Bicycle parking is provided on site.

• There is a public car park directly across from the building with sufficient parking spaces available. Furthermore, there are additional car park spaces available along the public roadways.

• There are bus stops nearby on Main St. with frequent local and national coach services available.

• Future access can be provided to the site through the adjacent carpark creating a link from the main street to the adjacent shops.

Site Context - Existing Site Photos

04

Front Elevation (South)

Rear Elevation (North)

Side Elevation (East)

Side Elevation (West)

Fig. 25
Site Location Map & Photos

Side Elevation (East)

Rear Elevation (North)

Site Context - Existing Internal Photos

04








05 | Architectural Statement

Architectural Statement - Guiding Principles

05

Guiding Principles

The guiding principles for the project have been developed in parallel with the feedback from the public consultation workshop and surveys and a review of the key elements of the national, regional and local policy.

The guiding principles are summarised as the '7 petals of the Living Building Challenge' (https://living-futures.org) promoting local action that will impact a sustainable future for Kinnegad as follows:

1 Place
Build on existing community assets and place-making, provide better access to public transport, facilitate Kinnegad as a walkable/cyclable neighbourhood, linked to walkable and cyclable towns

2 Water
Collect water from roofs, avoid pumps and chemicals where possible, provide healthy drinking water, provide drinking fountains locally, reuse grey water and brown water, use water efficient appliances

3 Energy
Reduce requirement for energy, optimise solar gain for buildings and public realm, optimise thermal mass and energy efficient characteristics of materials. Use insulating and breathable materials. Make buildings air tight and healthy. Use energy efficient appliances and fittings. Residual energy load from renewable sources

4 Health and Happiness
Encourage and facilitate local community projects that promote well-being and happiness

5 Materials
Reuse existing buildings. Retain as much fabric as possible. Repair rather than replace. Use local materials. Use low embodied carbon materials. Use materials from renewable sources and materials to express their time and craft

6 Equity
Community first, encourage and facilitate bottom up ideas, implementing meaningful consultation and communication to facilitate decisions being made locally and places managed and maintained locally

7 Beauty
Recognise that beauty is central to our well-being

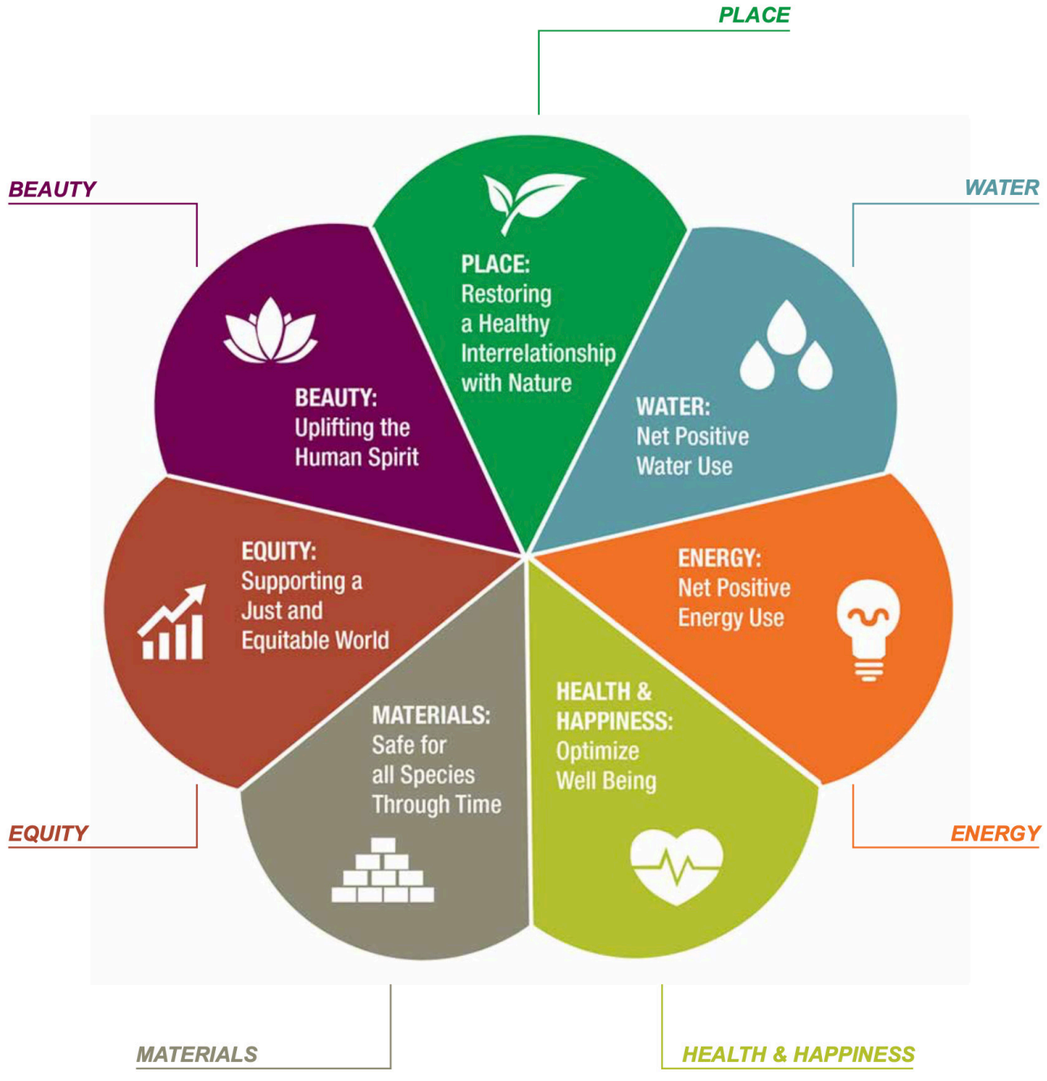


Fig. 26
Seven Petals of the Living Building Challenge Diagram

Architectural Statement - Site Strategy

05

Project Objectives:

The primary objective of the project is to provide Westmeath County Council an exemplar sustainable, town centre Economic Enterprise Hub at Main Street, Kinnegad, Co. Westmeath. Westmeath County Council, with the support of The Just Transition Fund 2020, administered by Department of Communications, Climate Action and Environment (DCCAE) is committed to the development of Kinnegad Economic Enterprise Hub.

Design Objectives:

- Adaptation to inevitable changes in society.
- Future work patterns.
- Accessible facilities.
- Inclusive facilities to all communities.
- Have visual impact.
- Functional excellence and efficiency.
- Sustainable
- BREEAM Excellent
- Water Recycling
- Modern, comfortable and a pleasant environment

Requirements:

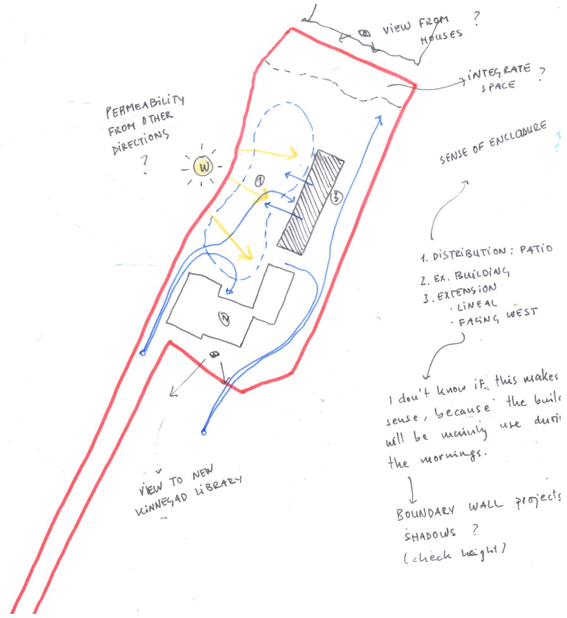
The buildings must be designed to adapt to inevitable changes in society, work patterns and leisure over the decades to come. Sustainability must be prioritised in the design process with BREEAM requirements guiding the design. Westmeath County Council is committed to the principle that all projects undertaken can be accessed, understood and appeal to all, regardless of age, size or ability. This is a requirement that will influence the design of every aspect of the facility. The hub must be highly accessible, welcoming to the widest range of people. The guidance provided by The Irish Centre for Excellence in Universal Design in their publication "Building for Everyone: A Universal Design Approach" should be applied over and above the compliance with requirements of the building regulations.

Fig. 27
Site Study carried out in 2020 by Cooney Architects

Architectural Statement - Design Evolution

05

Fig. 28
Site Plan sketches



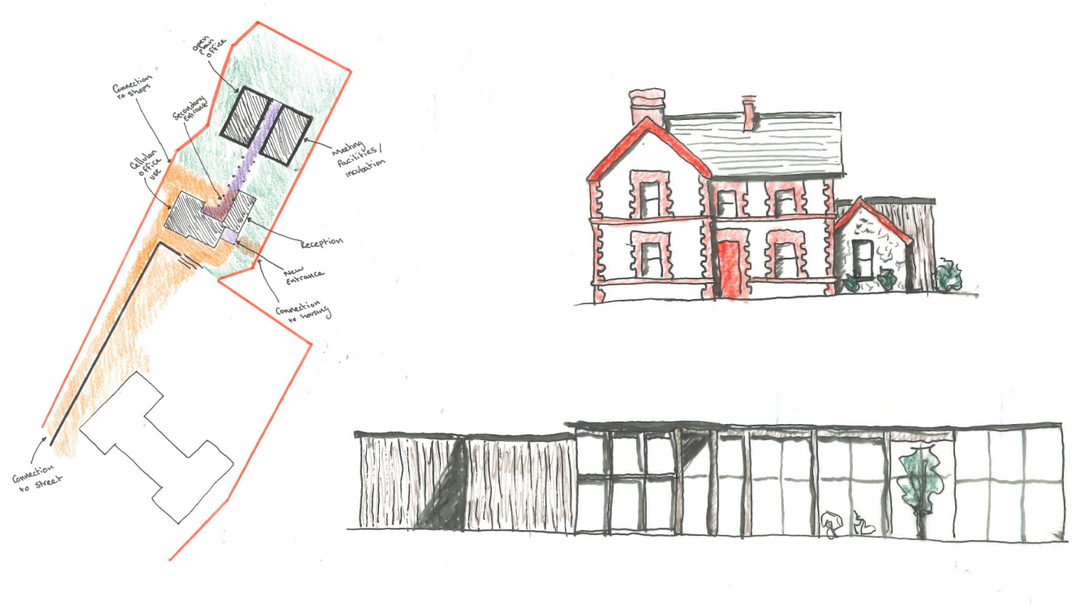


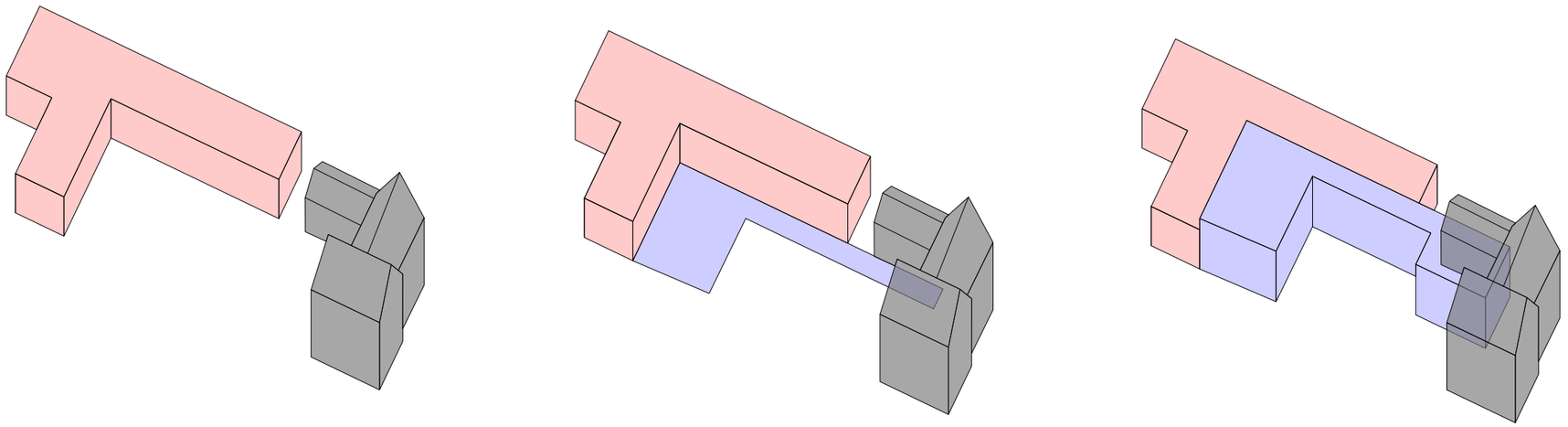
Fig. 29
Elevation sketches

Fig. 30
Site Plan hardline evolution

Architectural Statement - Design Evolution

05

Form



A new block is formed to the rear of the existing protected structure. The Form is pulled back to respect the existing.

The existing protected structure is connected to the new extension

The new link provides a formal cloister connecting old and new.

Fig. 31
Site Strategy

Architectural Statement - Design Evolution

05

Function

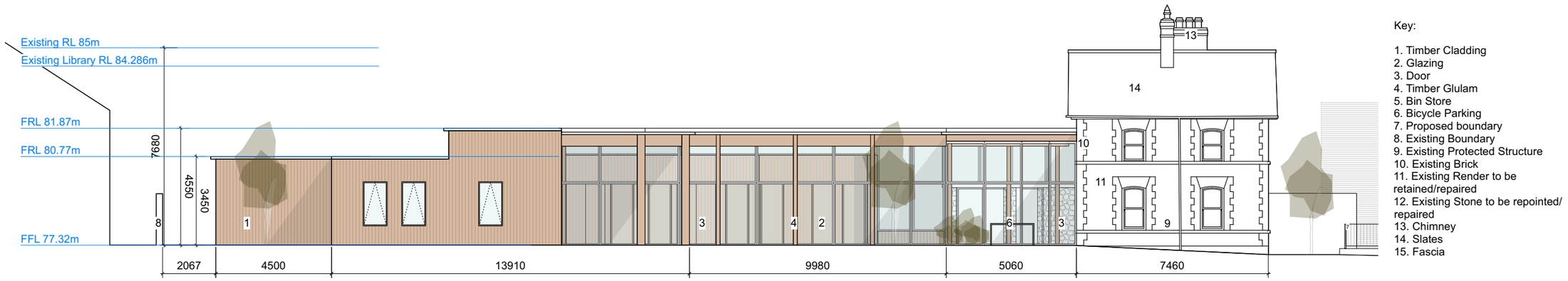


Fig. 32
Proposed Elevation

The solid timber clad elements represent the service/ functional areas of the building, the lower ceiling height are appropriate for the operational functions of these spaces. While the raised glazed corridor provides a connection, similar to that of a historical cloister.

The glazed link provides transparency through the site allowing both the historic protect structure and new extension be read together while maintaining the character of the existing building.

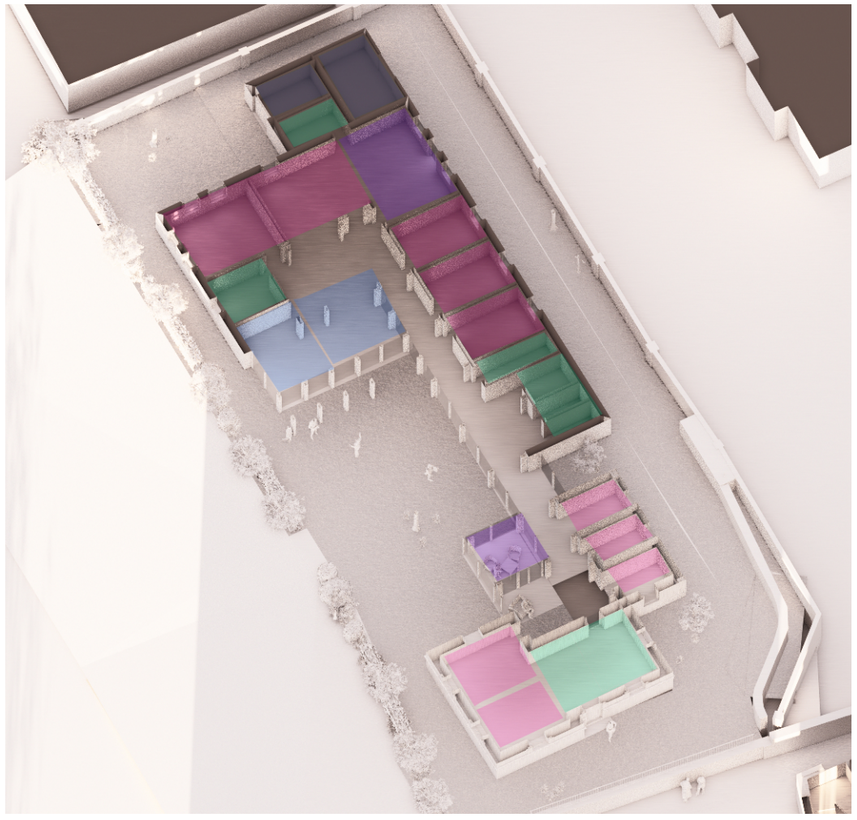


Fig. 33
Proposed Functions

Architectural Statement - Design Evolution

Hierarchy

The hierarchy of the built form was considered throughout the design stage. The existing protected structure of the Master's House was to take precedent over the new build extension. The new extension is designed to sit below the eaves level of the Masters House, only a glimpse of what lies behind can be visible from the street.

Fig. 34
Proposed hierarchy

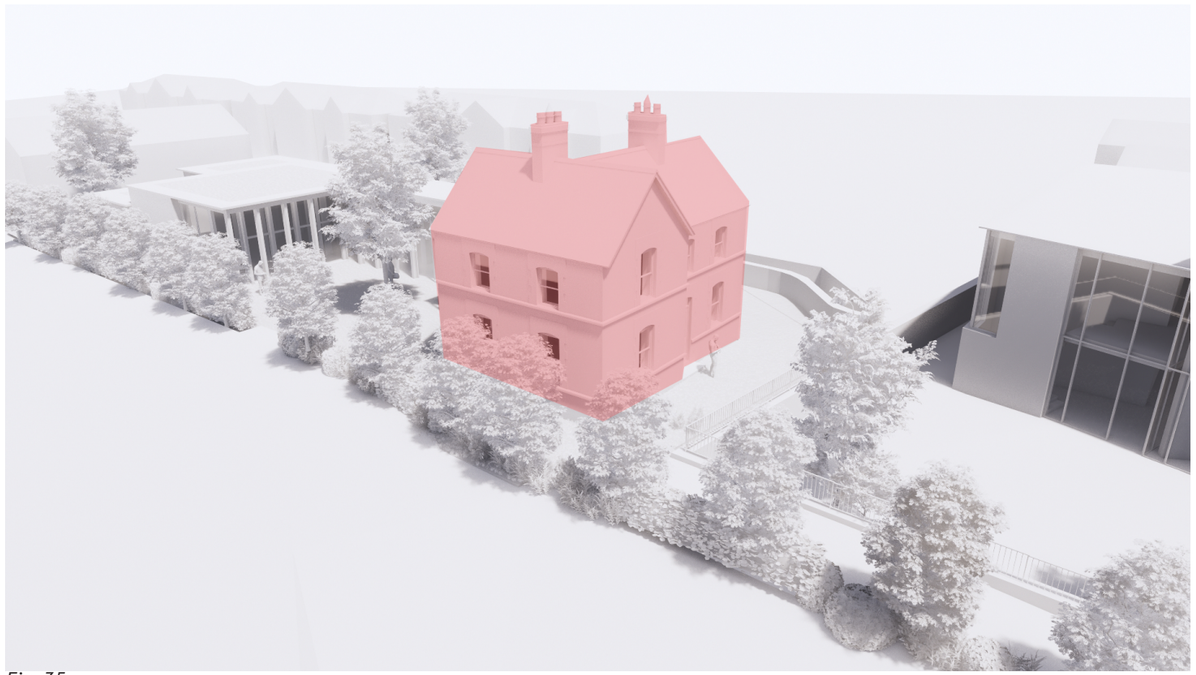


Fig. 35
Proposed hierarchy

Architectural Statement - Design Evolution

05

Nodes

Signage will define the main entrance from the street, guiding pedestrians towards the existing Master's house. The planting and paving draws the user towards the main entrance located in the new extension.

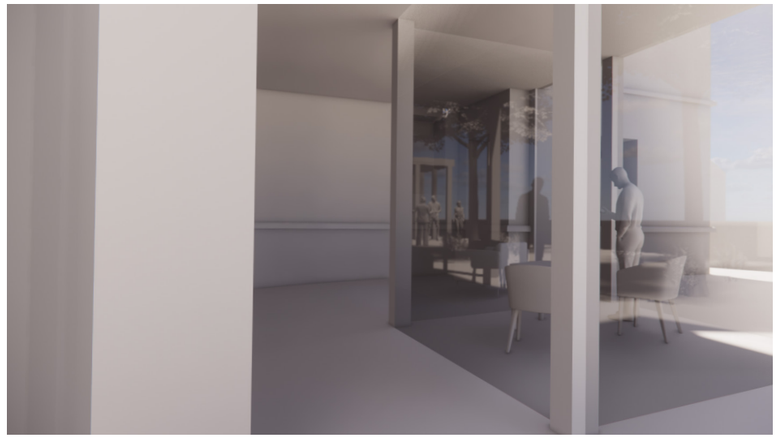
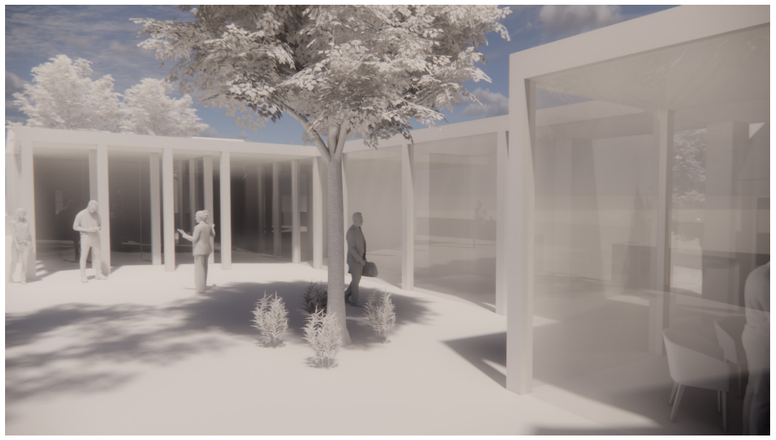
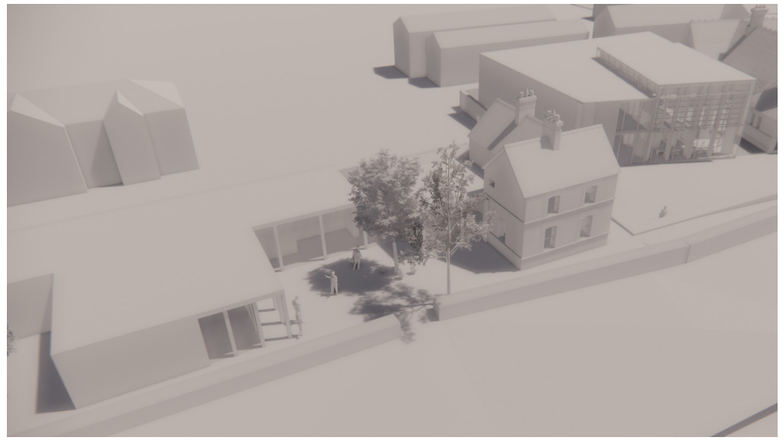
Additional node can be provided for the future pedestrian entrance leading from the neighbouring property.

Fig. 36
Proposed entrance nodes

Fig. 37
Proposed entrance nodes

Architectural Statement - Design Evolution

05

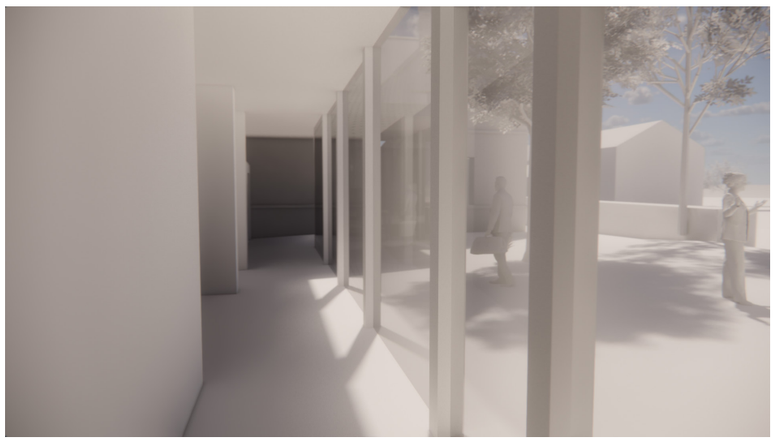
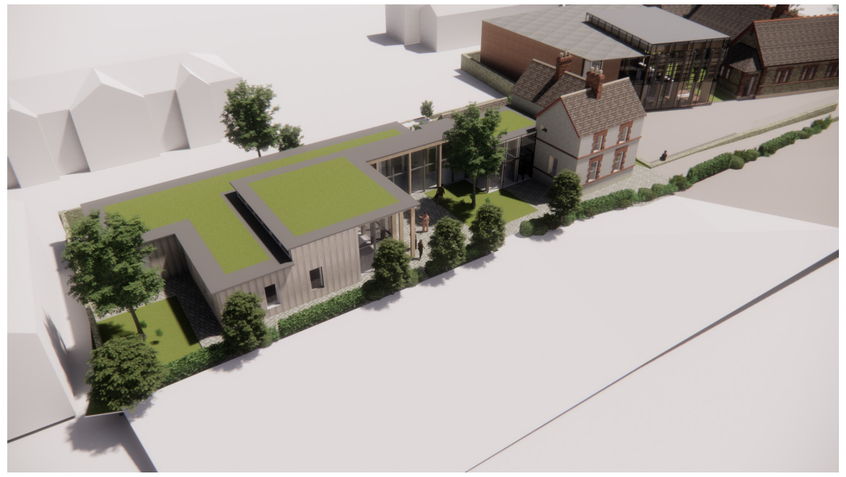
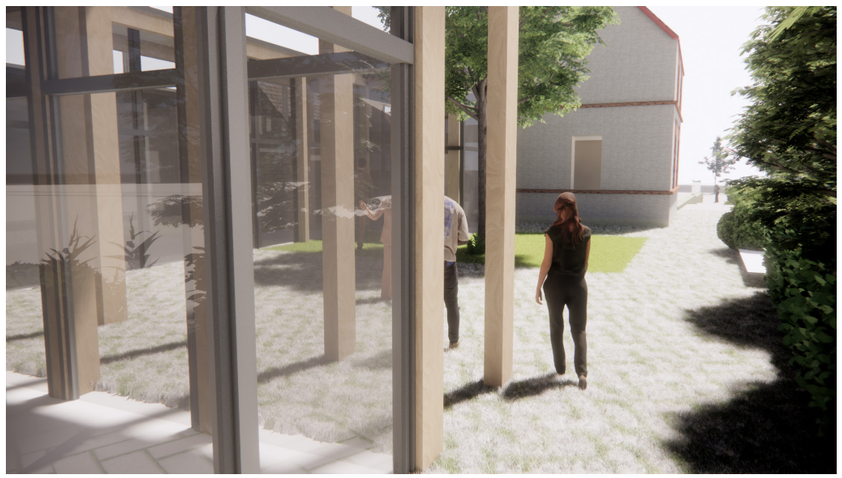



Fig. 38
Initial 3D's of Site

Architectural Statement - Site Strategy

05





Design Concept

The chosen concept follows a cloister typeology. The massing of the new build extension is pulled away from the existing masters house creating a defined line between the old and new. This concept includes a connection to the neighbouring carpark for access to the site while also utalising the existing lane for pedestrian use. All elements of the existing building are retained including the outhouses to the rear. A new opening is intoduced to increase the fuctionality of the space and flow within the building. An area at the rear of the site is designated to the future development of the enterprise hub.

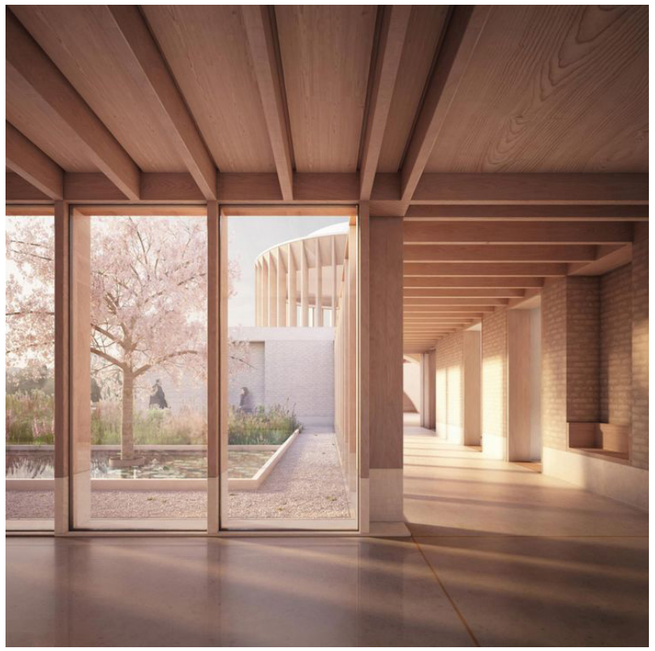
The overall development allows a sustainable new use for the building which has been vacant for many years and is not suitable for its previous function.
The approach to proper environmental, sustainable and energy consideration of the proposed refurbishment will result in a truly sustainable Economic Enterprise Hub.
The design of the new extension to the existing masters house building within the setting of the school and library forms a unified whole linked to the public realm on the main street and providing opportunities for permeability and linkages to the neighbouring uses and future developments, while respecting the urban grain of the town.

Fig. 39
Proposed 3D Site Model

06 | Materials

Material References

06



1.

2.

3.

4.

Materials:

A material study of existing precedents was prepared. Through this a pallet of materials was chosen including, glulam columns and beams, timber cladding and glazing.

1. James Gorst Architects temple complex in Hampshire creates a timber framed structure in a cloister like form.

2. Michael Green Architecture - Wood Innovation and Design Centre. The design incorporates a simple, 'dry' structure of systems integrated CLT floor panels, glulam columns and beams, and mass timber walls.

3. Peter Zumthor's new studio in Haldenstein - The new studio is basically detached from from the former barn outer wall which now acts as a retaining wall. The building envelope consists of a wooden structure, which carries all elements of the facade.

4. James Gorst Architects temple complex in Hampshire - a timber framed structure in a cloister like form - interior spaces.

Fig. 40
Material & Design References

Material References

06

5.

6.

5. ZAK Architecture Cloister house in Hawaii consists of a series of connected spaces surrounding a central garden or cloister

6. Exterior lanscaped space of Multiplex's Holland Park Villas - London

7. Westmeath County Council Civic Offices and Public Library, Mullingar - by Bucholz McEvoy architects

8. Samuel Beckett Civic Campus by Bucholz McEvoy architects - Facade Detail from Interior - Ballyogan, Dublin 18

7.

8.

Fig. 41
Material & Design References

Facade Finishes

06

A

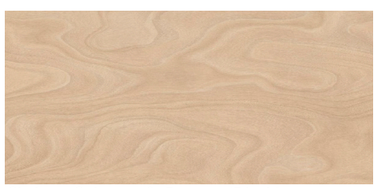
B

C

D

Fig. 42
Material finishes

1



Glulam Column & Beams (Birch)

2

Timber Cladding (Larch)

3

Roof - Metal

The proposed extension respects the context of the protected structures and the surrounding context. The new extension to the rear is separated from the historic structure by a minimal single-story link block which touches the protected structure lightly and can be removed with ease. Its overall height is below the level of the existing ridge, its mass and bulk is broken down in scale and its materiality respects the texture and grain of the local materials while presenting a contemporary expression.

Materials:

The proposed development is characterised by using the 'Living Building Challenge' design led approach for the design we are proposing the following:

The existing building consists of roughcast rendered walls with extensive red brick trim, including dressings to the openings, a projecting sill course at first floor level and flush quoins to the corners. Within and extending the existing structures, we have incorporated a grid structure of glulaminated primary frames with infill panels, and glazing.

Roof:

The proposed roof for the extension will be a green/ blue roof - this includes planted vegetation (green) and rain-water harvesting (blue).

Glazing/Fenestration

Natural Ventilation, Passive Solar Gain, and Thermal Control play an important part in the overall sustainable strategy for the community building. Specialist double or triple glazing is proposed for the building, with suitable glazing for each facade.

Internal Finishes

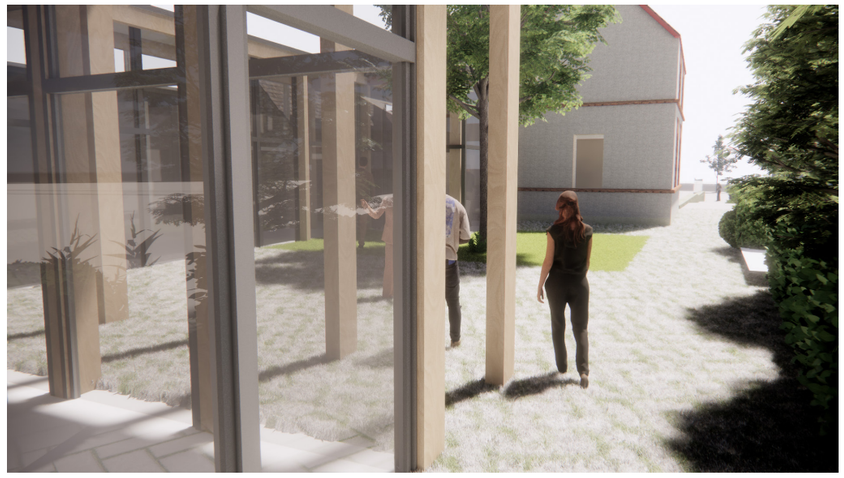


Fig. 43
Material finishes

Inernal Materials:

glulaminated primary frames with timber infill panels, and glazing.

Glazing/Fenestration

Natural Ventilation, Passive Solar Gain, and Thermal Control play an important part in the overall sustainable strategy for the community building. Specialist double or triple glazing is proposed for the building, with suitable glazing for each facade.

1

Glulam Column & Beams (Birch)

2

Timber Wall Cladding (Larch)

BREEAM

BREEAM is a core element of the design of the Kinnegad Economic Enterprise Hub. BREEAM (Building Research Establishment Environmental Assessment Method) is a sustainability assessment method that is used to masterplan projects, infrastructure and buildings. Launched in 1990, by the Building Research Establishment (BRE) it sets standards for the environmental performance of buildings through the design, specification, construction and operation phases and can be applied to new developments or refurbishment schemes.

Our Target for the design of the Kinnegad Economic Enterprise Hub and refurbishment of the existing protected structure of the Masters House is to achieve BREEAM Excellence (80.31%). Additional potential credits provide the opportunity to increase this to BREEAM Outstanding (88.46%).

BREEAM focuses on sustainable value across the following categories. Each category focuses on the most influential factors in relation to sustainability:

- Energy
- Land use and ecology
- Water
- Health and wellbeing
- Pollution
- Transport
- Materials
- Waste
- Management

Project Progress and Ratings

Design Target:	**Excellent - 80.31%**
Potential Rating:	**Outstanding - 88.46%** Based on the above and the Potential Credits being achieved

Indicative scores only

Fig. 44
BREEAM

Designing with each of the criteria out of above ensures a building/ development will have the least impact on our environment as possible. This includes, reduced carbon emissions by designing to an nZEB standard, adapting to climate change by designing for potential increased rainfall and flooding, adding to the ecological value of the site by planting native species, increasing and protecting bio-diversity.

Each BREEAM rating level broadly represents performance equivalent to:

1. Outstanding: Less than top 1% of UK new non-domestic buildings (innovator)
2. Excellent: Top 10% of UK new non-domestic buildings (best practice)
3. Very Good: Top 25% of UK new non-domestic buildings (advanced good practice)
4. Good: Top 50% of UK new non-domestic buildings (intermediate good practice)
5. Pass: Top 75% of UK new non-domestic buildings (standard good practice)

07 | Intervention to the Existing Structure

Intervention to the Existing Structure

07

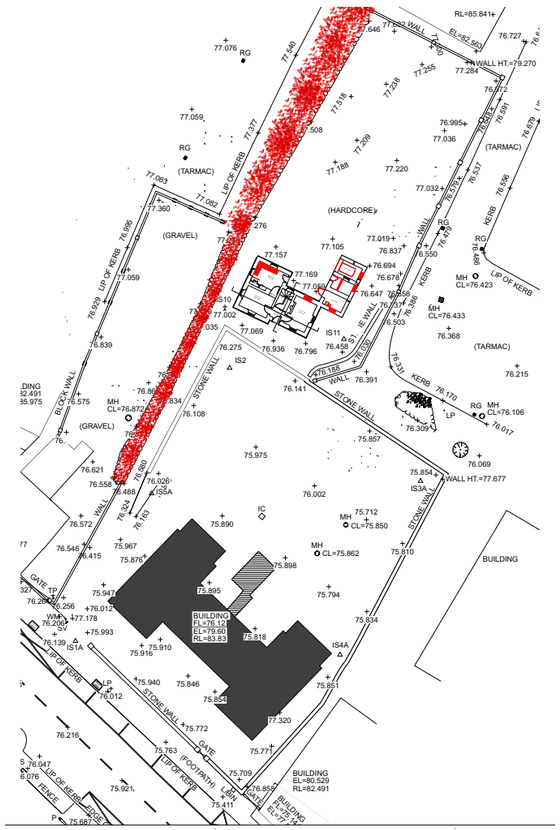
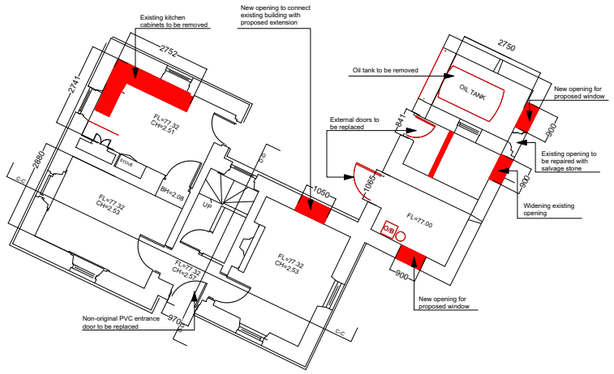
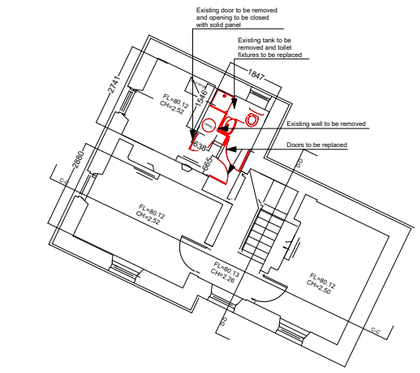


Fig. 45
Existing drawings with proposed alterations

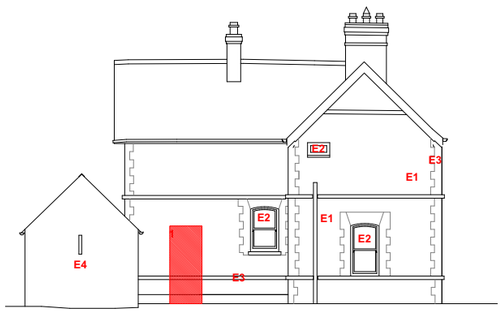


Ground Floor Demolition Plan
1:50 @ A1

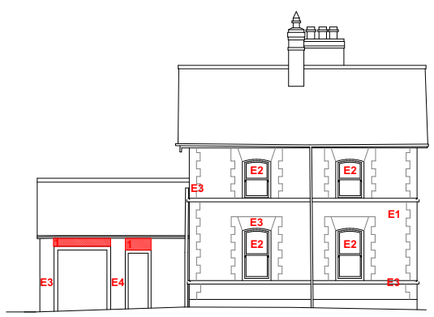


First Floor Demolition Plan
1:50 @ A1

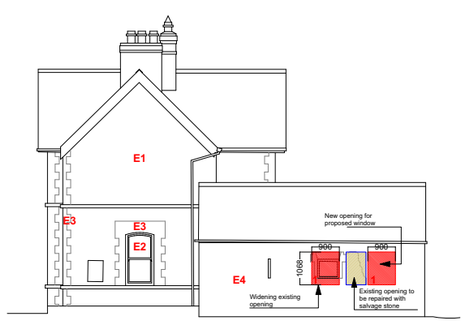
PROPOSED FRONT ELEVATION



PROPOSED REAR ELEVATION



PROPOSED SIDE ELEVATION



PROPOSED SIDE ELEVATION

Works to the Former Master's House – a protected structure

As referred to in the architectural impact assesment report the design team have evaluated the significance of the structure, have studied the history of
the building and site. The design team are using best practice conservation led approach, for the proposed
conservation and upgrade of the existing protected structure.

The proposed conservation plan for the repair of structural fabric abides by series of internationally recognised conservation principles. All existing finishes and fabric are recorded and conserved except where fabric is removed to facilitate the offices addressing and engaging with the public realm in its surroundings.

The proposed interventions take place where non-original elements have been added and do
not contribute to the historical value of the property. A proposed rear opening aims to connect the Master's House with the new extension. Additionally, minor openings are proposed in the stone building attached to the Master's House to enhance air and light quality in the new offices.

The opportunities to enhance the public realm, to allow the new economic enterprise hub to
engage with the neighbouring buildings and public realm

08 | Site Access and Circulation

Site Access and Circulation

Available Parking
Areas highlighted in yellow and labeled

1. Bicycle Parking
We are proposing a number of bicyle parking spaces in the external courtyard space.

2. Carpark across the road

3. Parking in adjacent car park

4. Parking on street future access

5. Pedestrian Entrance
Proposed pedestrian entrance to carpark, subject to landowner/ third party agreement

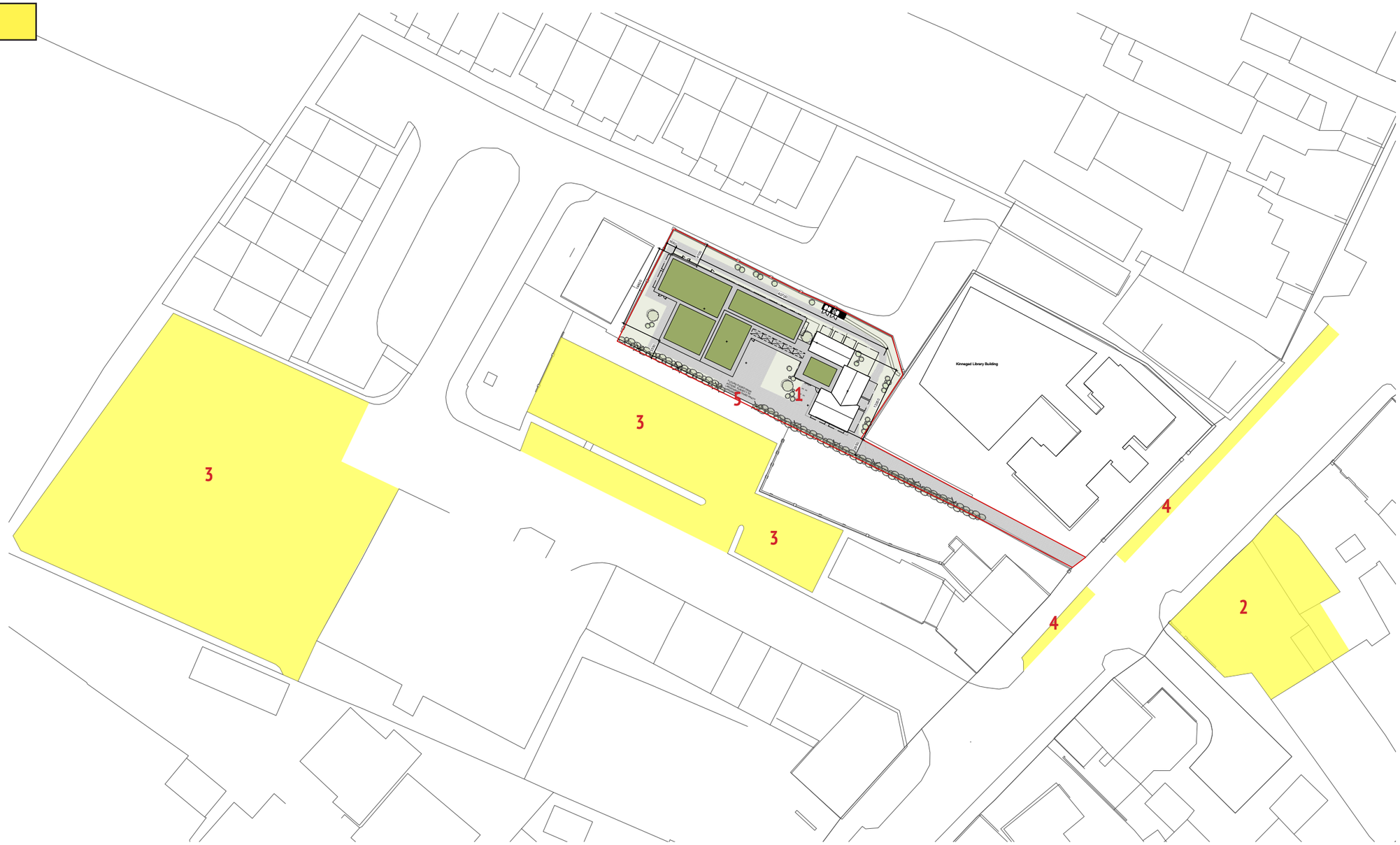


Fig. 46
Existing and available parking including access

09 | External Areas

External Areas - Landscaping

09

A. New square -

Entrance - Mix of soft and hard landscaping

The public realm - soft & hard landscaping works shall complement the approved landscaping proposals pertaining to the parent application on the adjoining site of the former school house to ensure a holistic and consistent landscape finish.

B. External Planting -

Rain Gardens

C. Boundary Planting

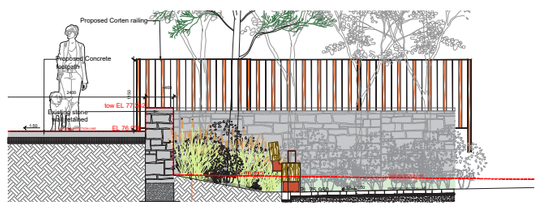
Removal of hedgerow of low ecological value (approx. 70m) and replace with high value species. See boundary treatment section below regarding species photographs and proposals to replace with native indigenous species.

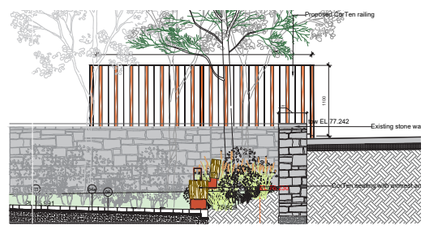
D. Blue/Green Roof

See section 11 - sustainability regarding the blue & green roof. This will not only have significant ecological value, but shall positively contribute to the visual aesthetics of the site.

Fig. 47
Landscaping

Fig. 48
Proposed Landscaping drawings for the library in construction - for reference





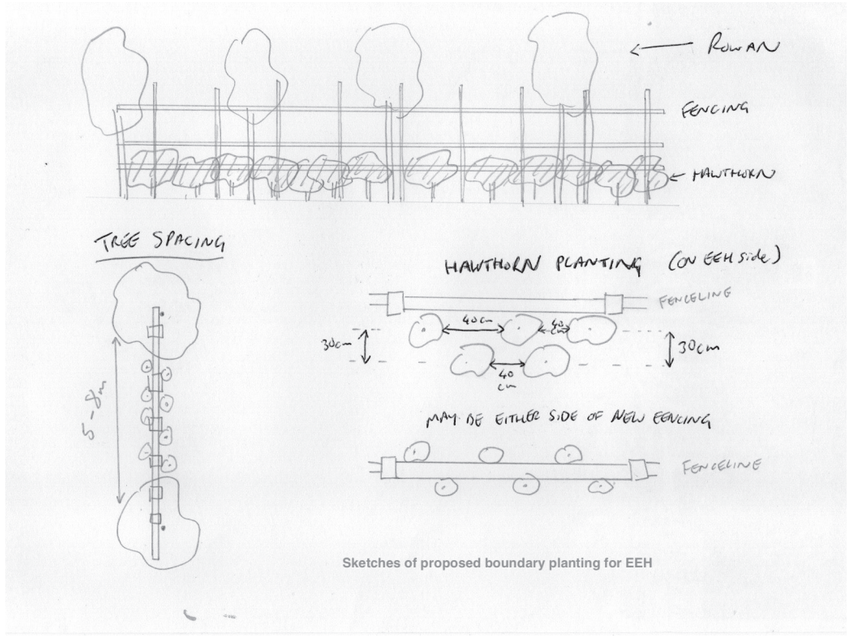
External Areas - Boundary Treatment

09

The boundary between the school / school master's house campus is currently composed of some semi-mature Ash trees which are widely spaced. Beneath this is a non-native Privet hedgerow which is gappy. It is suggested that this be replaced by a new boundary which is to incorporate a fenceline along which a hedgerow is to be established along with a taller tree species.

We would suggest that a medium-sized tree is chosen and this is widely spaced (5-8m) along the new boundary. Hornbeam would be a suitable tree for this situation. However, the native Rowan (also known as Mountain Ash) would also be suitable and is pollinator-friendly, supporting up to 30 insect species. It grows to a height of c. 10m and has white flowers in the spring and red berries in autumn.

We suggest that under-planting is carried out between the trees. Hawthorn (also known as Whitethorn) would be suitable. This is also very pollinator-friendly (supporting up to 150 species of insect). This may be densely planted in two staggered rows along the fenceline at 30cm between the rows and 40 common between the plants. Guelder Rose – another flowering pollinator-friendly species – may be used along with the Hawthorn as an understorey plant. This will add colour to the hedgerow.



Sketches of proposed boundary planting for EEH

Fig. 49
Boundary treatment and planting

Guelder Rose

Hawthorn

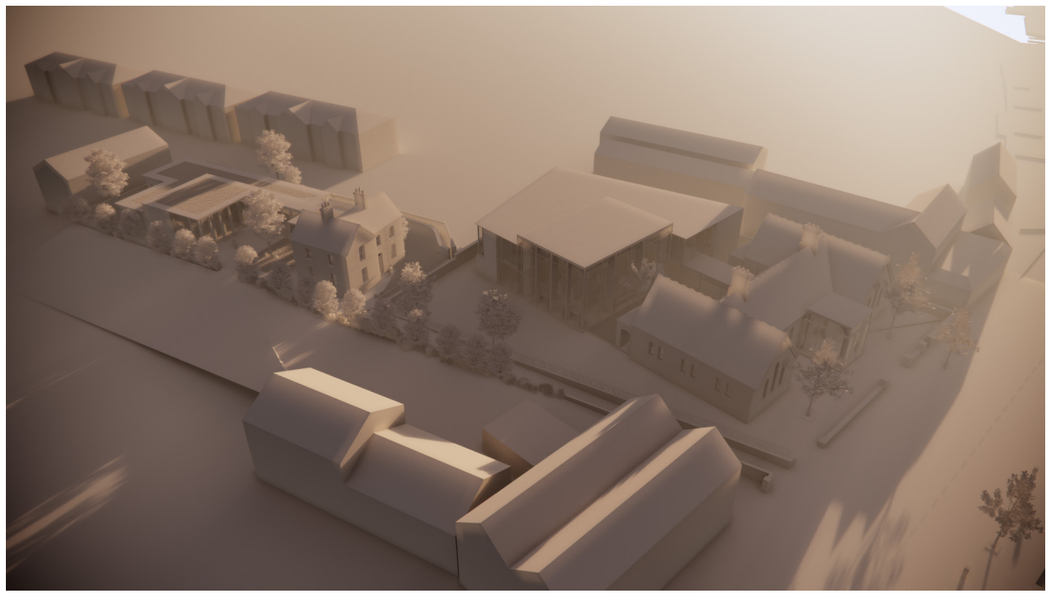
Hornbeam

Rowen

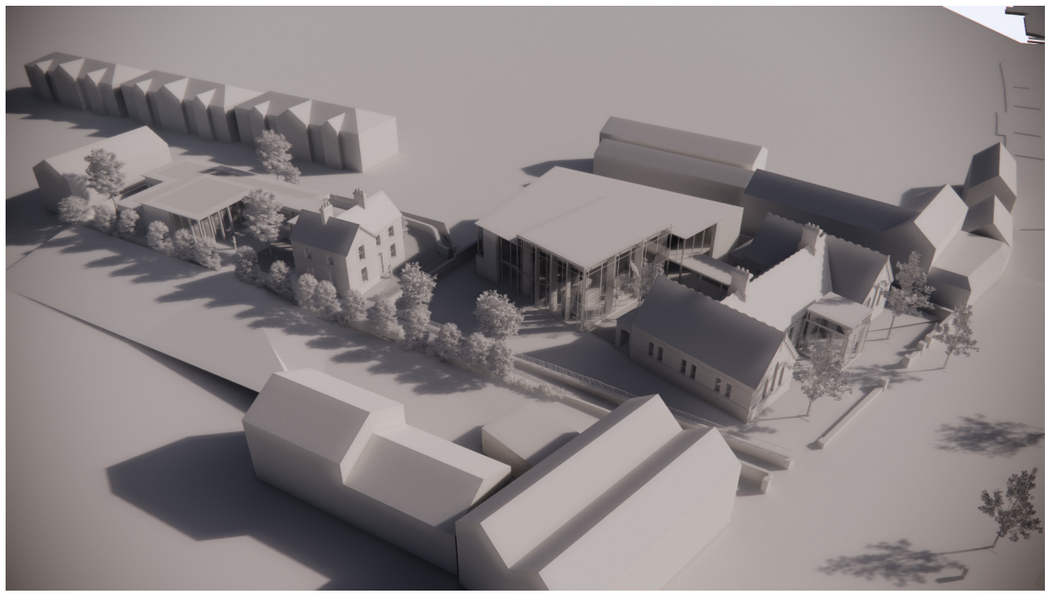
09 | Shadow Analysis

Shadow Analysis - January

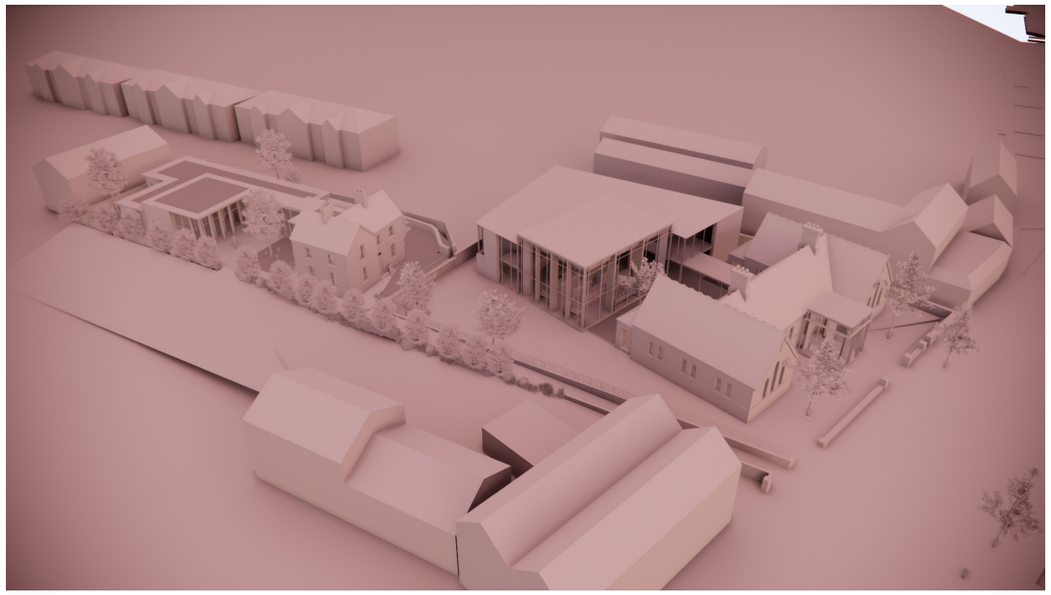
09



January 8am



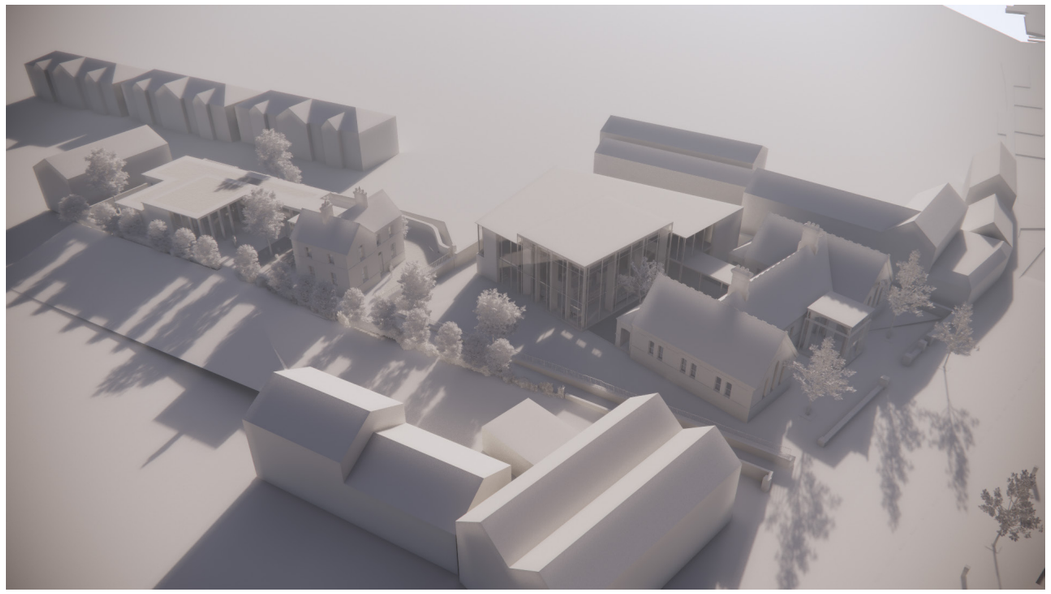
January 12pm



January 5pm

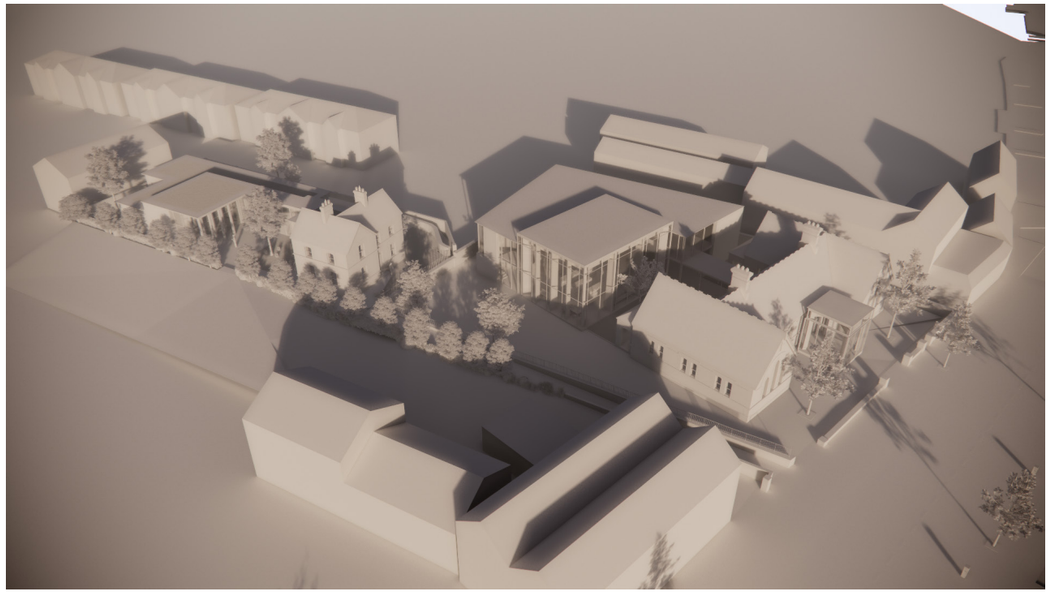
Shadow Analysis - March

09



March 8am

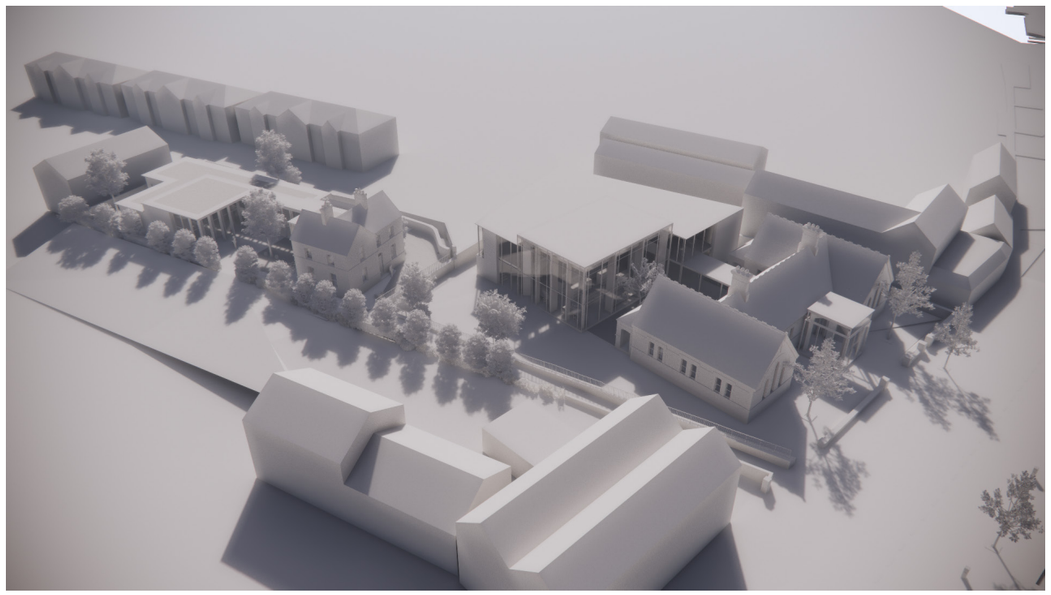
March 12pm



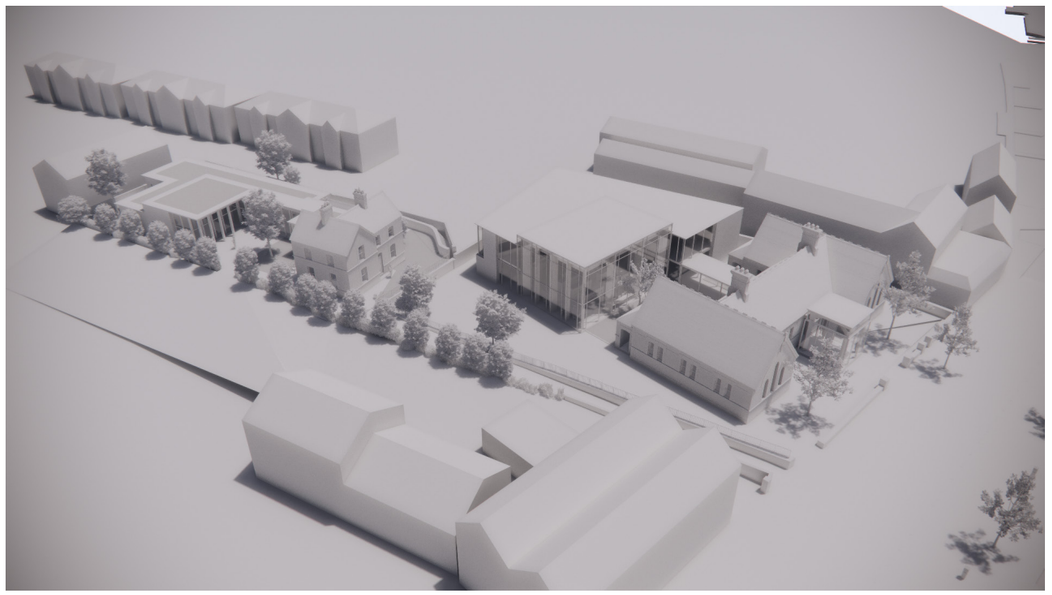
March 5pm

Shadow Analysis - June

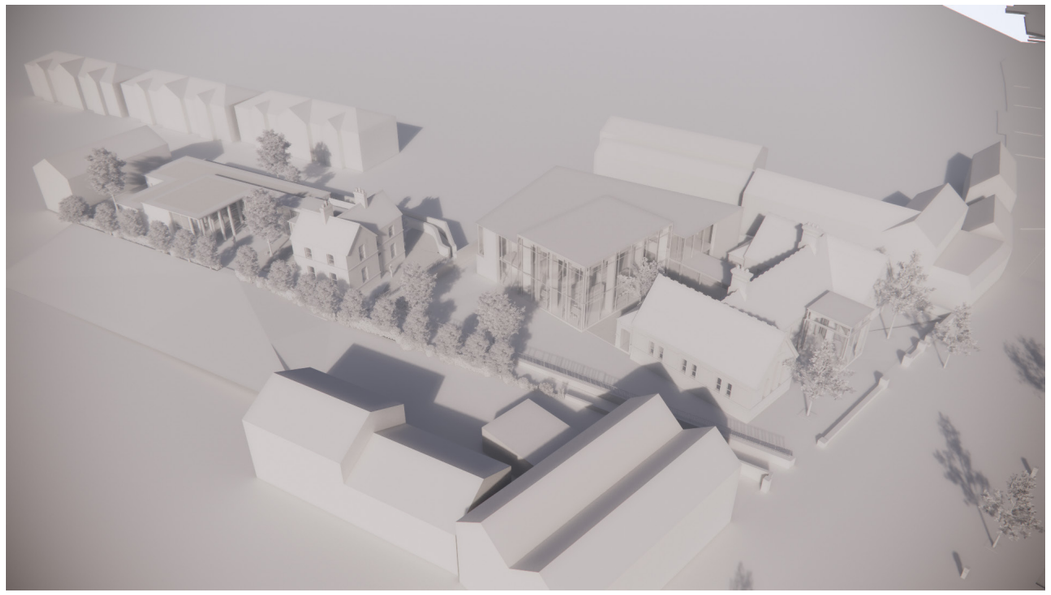
09



June 8am



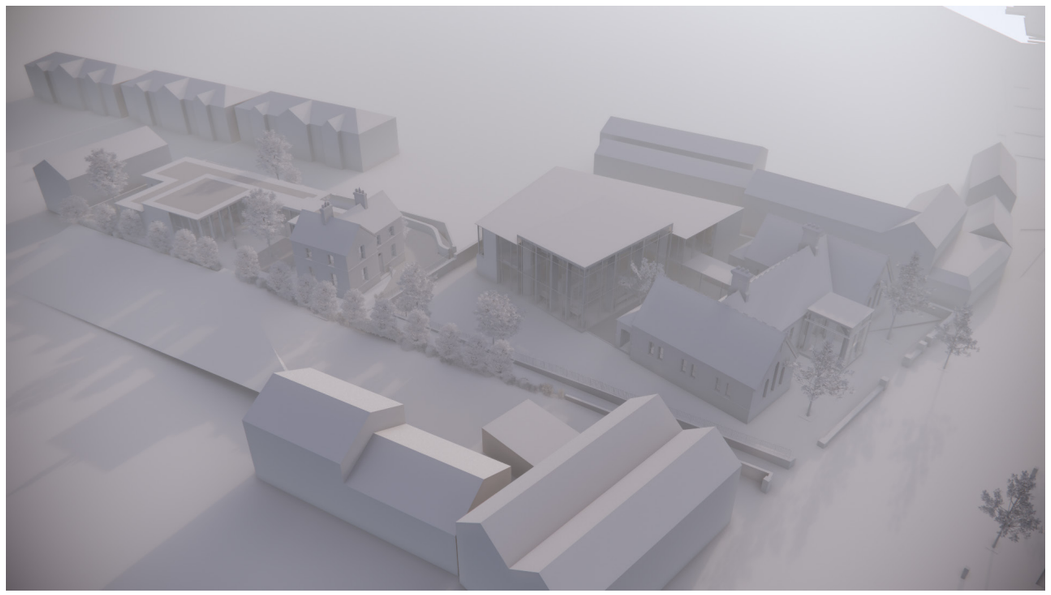
June 12pm



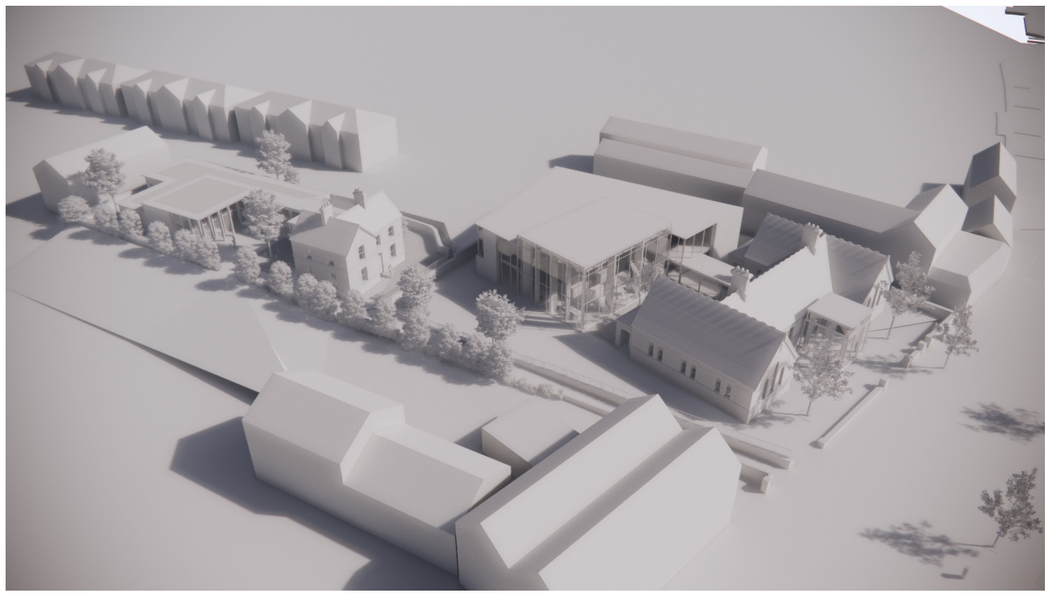
June 5pm

Shadow Analysis - October

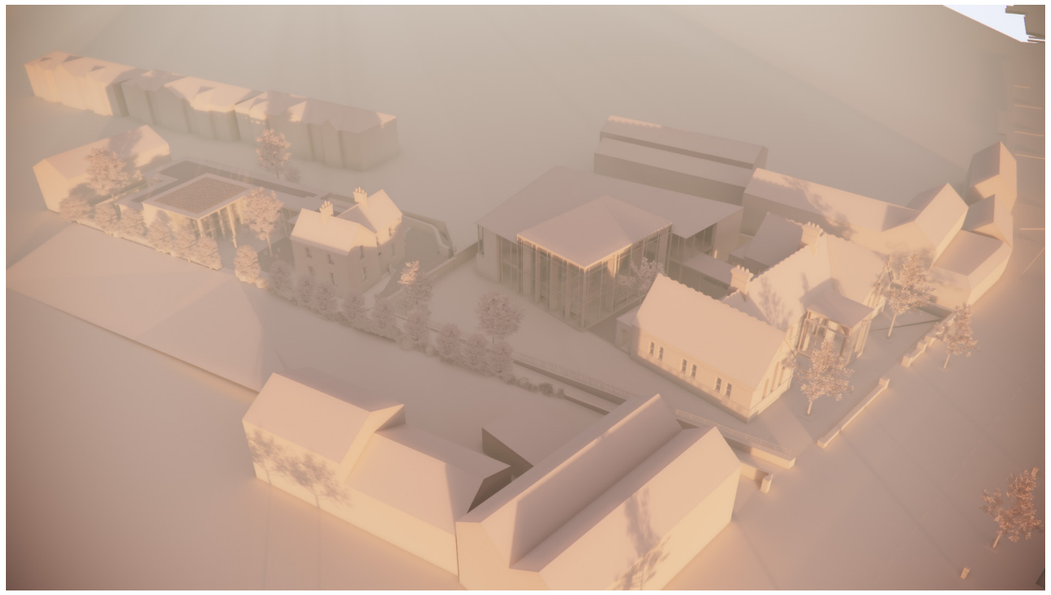
09



October 8am



October 12pm



October 5pm

Findings from Shadow Analysis

A detailed shadow analysis throughout the design process informed the locations of the building heights in proximity to the existing building.

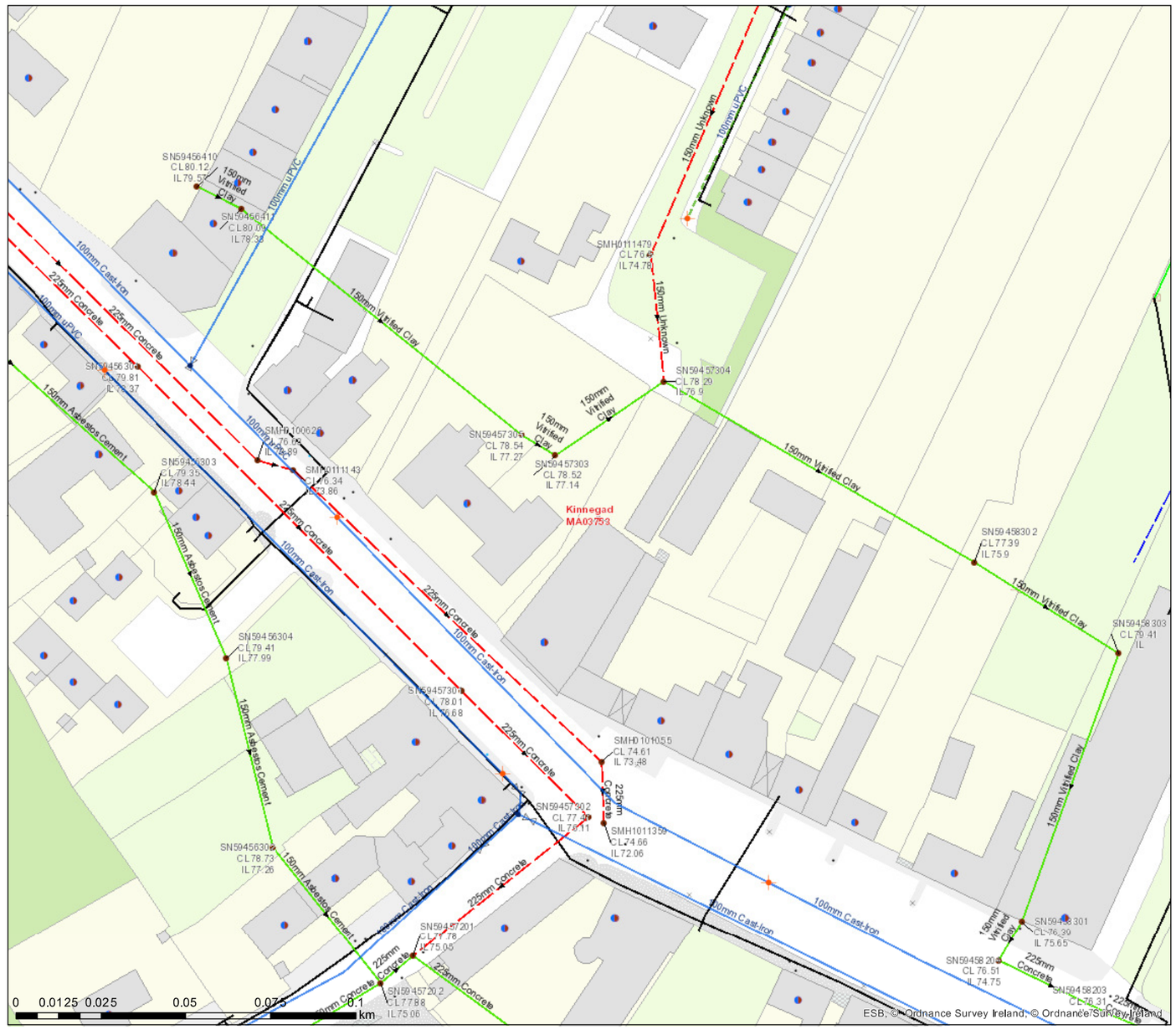
The plan is orientated to avoid excessive over shadowing of the adjoining spaces.

We note that the applicants site will have pleasant airy spaces allowing direct sunlight into these areas. The use of floor to ceiling glazing allows light to penetrate through the building, resulting in bright and radiant internal and external spaces.

10 | Site Services

Site Services - Existing

Irish Water Web Map



UISCE EIREANN : IRISH WATER

Print Date: 18/08/2020

Printed by:Irish Water

Water Distribution Network
- Water Treatment Plant
- Water Pump Station
- Storage Cell/Tower
- Dosing Point
- Meter Station
- Abstraction Point
- Telemetry Kiosk

Reservoir
- Potable
- Raw Water

Water Distribution Mains
- Irish Water
- Private

Trunk Water Mains
- Irish Water
- Private

Water Lateral Lines
- Irish Water
- Non IW
- Water Casings
- Water Abandoned Lines
- Boundary Meter
- Bulk/Check Meter
- Group Scheme
- Source Meter
- Waste Meter
- Unknown Meter ; Other Meter
- Non-Return
- PRV
- PSV
- Sluice Line Valve Open/Closed
- Butterfly Line Valve Open/Closed
- Sluice Boundary Valve Open/Closed
- Butterfly Boundary Valve Open/Closed
- Scour Valves
- Single Air Control Valve
- Double Air Control Valve
- Water Stop Valves
- Water Service Connections
- Water Distribution Chambers
- Water Network Junctions
- Pressure Monitoring Point
- Fire Hydrant
- Fire Hydrant/Washout

Water Fittings
- Cap
- Reducer
- Tap
- Other Fittings

Sewer Foul Combined Network
- Waste Water Treatment Plant
- Waste Water Pump station

Sewer Mains Irish Water
- Gravity - Combined
- Gravity - Foul
- Gravity - Unknown
- Pumping - Combined
- Pumping - Foul
- Pumping - Unknown
- Syphon - Combined
- Syphon - Foul
- Overflow

Sewer Mains Private
- Gravity - Combined
- Gravity - Foul
- Gravity - Unknown
- Pumping - Combined
- Pumping - Foul
- Pumping - Unknown
- Syphon - Combined
- Syphon - Foul
- Overflow
- Sewer Lateral Lines
- Sewer Casings

Sewer Manholes
- Standard
- Backdrop
- Cascade
- Catchpit
- Bifurcation
- Hatchbox
- Lamphole
- Hydrobrake
- Other; Unknown

Discharge Type
- Outfall
- Overflow
- Soakaway
- Standard Outlet
- Other; Unknown

Cleanout Type
- Rodding Eye
- Flushing Structure
- Other; Unknown

Sewer Inlets
- Catchpit
- Gully
- Standard
- Other; Unknown

Sewer Fittings
- Vent/Col
- Other; Unknown

Storm Water Network

Surface Water Mains
- Surface Gravity Mains
- Surface Gravity Mains Private
- Surface Water Pressurised Mains
- Surface Water Pressurised Mains Private

Inlet Type
- Gully
- Standard
- Other; Unknown

Storm Manholes
- Standard
- Backdrop
- Cascade
- Catchpit
- Bifurcation
- Hatchbox
- Lamphole
- Hydrobrake
- Other; Unknown
- Storm Culverts
- Storm Clean Outs
- Stormwater Chambers

Discharge Type
- Outfall
- Overflow
- Soakaway
- Other; Unknown

Gas Networks Ireland
- Transmission High Pressure Gasline
- Distribution Medium Pressure Gasline
- Distribution Low Pressure Gasline

ESB Networks

ESB HV Lines
- HV Underground
- HV Overhead
- HV Abandoned

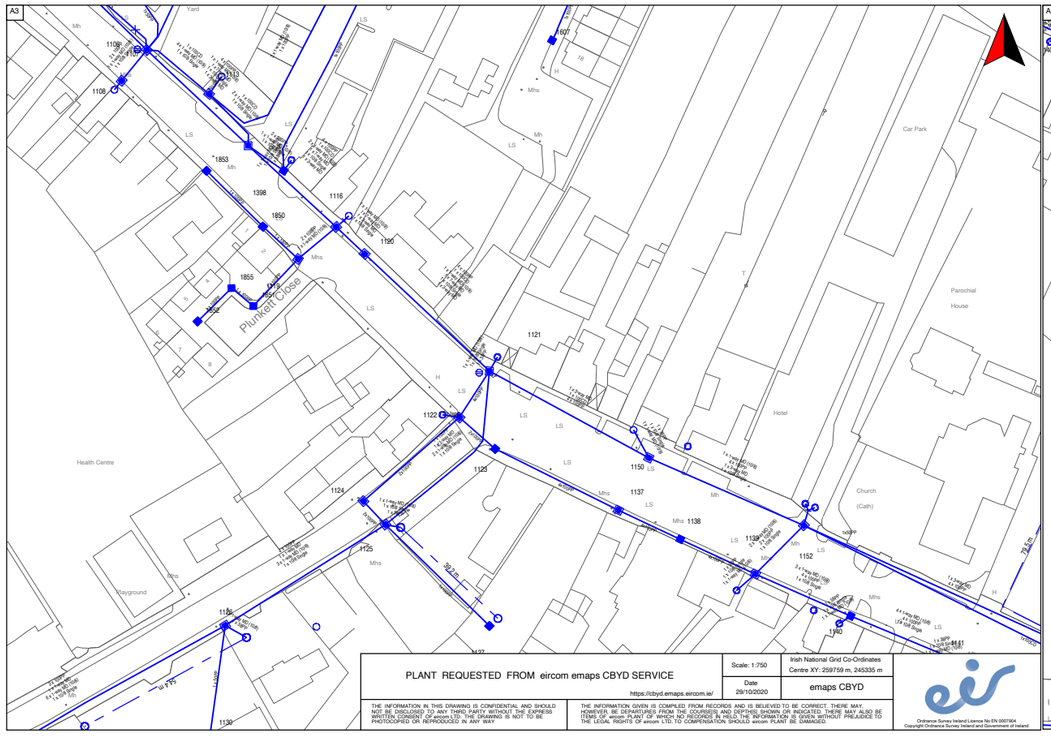
ESB MVLV Lines
- MV Overhead Three Phase
- MV Overhead Single Phase
- LV Overhead Three Phase
- LV Overhead Single Phase
- MVLV Underground
- Abandoned

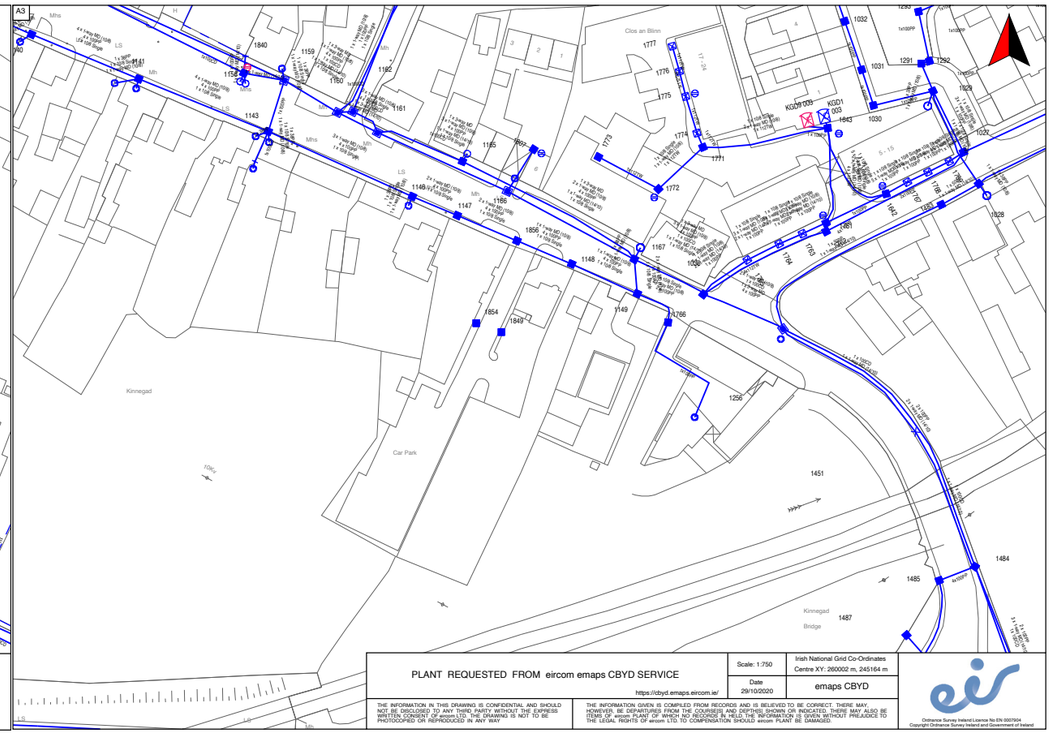
Non Service Categories
- Proposed
- Under Construction
- Out of Service
- Decommissioned

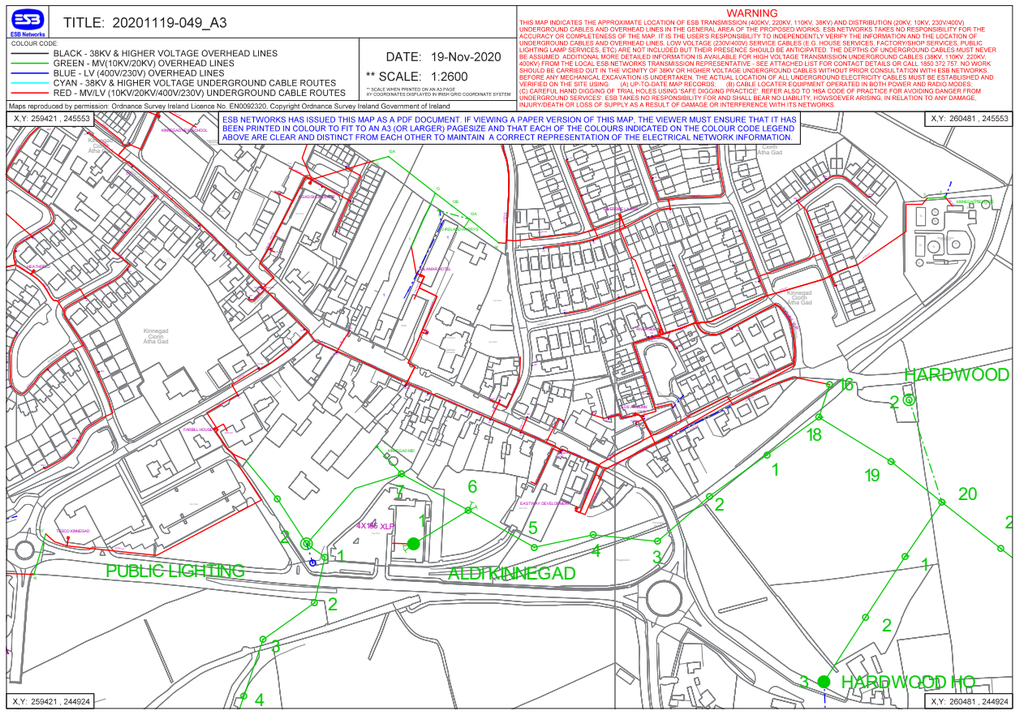
Water Non Service Assets
- Water Point Feature
- Water Pipe
- Water Structure

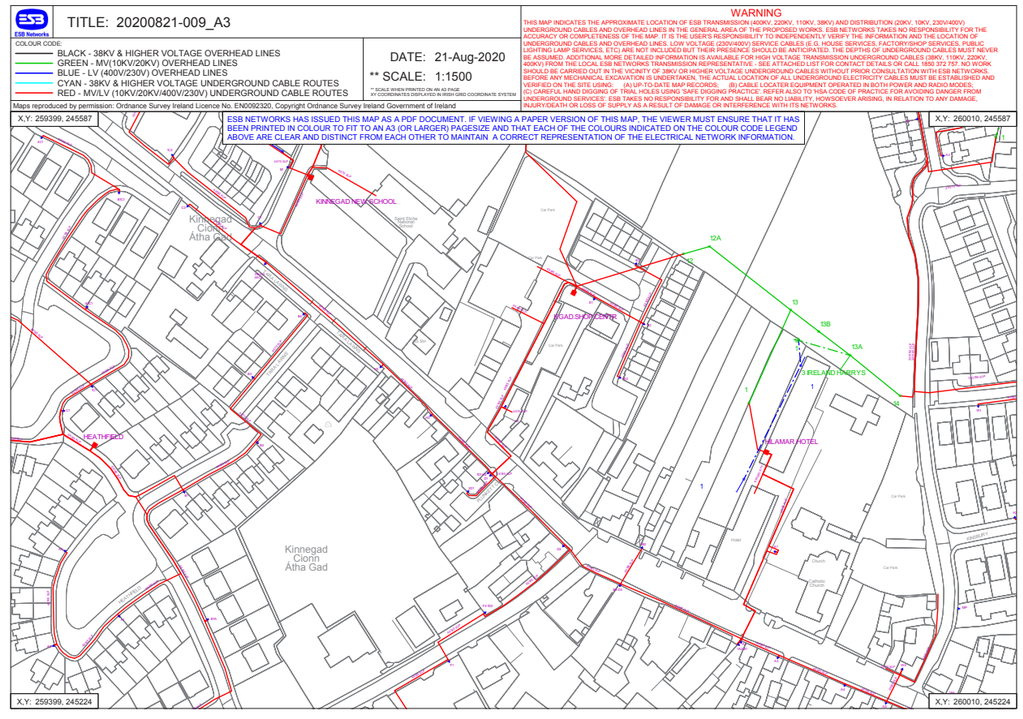
Waste Non Service Assets
- Waste Point Feature
- Sewer
- Waste Structure

Site Services - Existing









Site Services - Proposed

10 | Sustainability

Sustainability

The proposed new Economic Enterprise Hub facility at Kinnegad will be designed to exceed the Nearly Zero Energy Building Standard (NZEB), which will serve as a pinnacle of the principles of sustainable design and wellbeing for the community.

Passive Design:

The design incorporates the principles of the energy hierarchy whereby the intent is to minimize the energy demand as much as possible through a fabric first approach, before incorporating heating, ventilation, lighting and cooling. The last stage of the energy hierarchy is to offset a significant proportion of the remaining energy via renewable technologies. The proposed Economic Enterprise Hub will incorporate the following elements of passive design; excellent fabric performance, high levels of natural daylighting, thermal mass and natural ventilation. The space heating and domestic hot water will be provided via a highly efficient Air to Water Heat Pump, in order to future proof the design by moving away from fossil fuels. To minimize the space heating demand, the proposed fabric will exceed the NZEB targets with an emphasis on high thermal mass and good thermal bridging details. The Economic Enterprise Hub will carefully utilize and balance solar gains to further minimize the space heating demand in winter, but simultaneously ensure that these are limited to prevent summertime overheating. This is aided through high thermal mass and a carefully designed natural ventilation strategy. A thermal comfort assessment has been carried out at pre-planning stage to ensure the thermal comfort criteria of CIBSE TM52 is achieved.

Green & Blue roof

There are numerous benefits of blue & green roofs. These include water management, air quality, biodiversity, Urban cooling, Amenity, Food production See section below with reference to the 'Green & Blue Roof Guide' - which outlines the benefits, requirements and considerations.

Daylighting:

The design intent is to achieve levels of natural daylighting within each of the habitable spaces of the Economic Enterprise Hub. Achieving good levels of natural daylighting is proven to support building occupier health, mental wellbeing and productivity, whilst simultaneously minimizing energy associated with artificial lighting. A daylighting assessment has been carried out within the habitable rooms to achieve a minimum average daylight factor (ADF) of 3.00% is achieved across 50% of the floor area.

Fig. 50
Sustainability Diagram

Energy Strategy:

A feasibility study was carried out to determine the most appropriate energy strategy for the development, the study took into consideration; energy demand, spatial requirements, end user requirements, maintenance, operational energy costs and planning implications. The study concluded that an Air to Water Heat Pump will provide the space heating and domestic hot water within the Ecomonic Enterprise Hub. The proposed heat pump will emit low grade heat via underfloor heating and will have a COP of ⩾3.50.

Renewables:

In addition to the heat pump providing space heating and hot water an option is proposed to include a solar photovoltaic array generating 10,900 kWh. The inclusion of the solar photovoltaic array will offset a proportion of the carbon and energy of the Economic Enterprise Hub to improve the BER rating to the highest A1 rating.

Draft Climate Action Plan

Climate Action Policy Objectives

It is a policy objective of Westmeath County Council to:

CPO 11.1
Support the implementation and achievement of European, National, Regional and Local objectives for climate adaptation and mitigation as detailed in the following documents, taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the Climate mitigation and adaptation measures which have been outlined through the policy objectives in this Development Plan:
• National Mitigation Plan (2017 and any subsequent versions);
• National Climate Change Adaptation Framework (2018 and any subsequent versions);
• Climate Action Plan (2019 and any subsequent versions);
• Any Regional Decarbonisation Plan prepared on foot of commitments included in the emerging Regional Spatial and Economic Strategy for the Eastern and Midland Region;
• Relevant provisions of any Sectoral Adaptation Plans prepared to comply the requirements of the Climate Action and Low Carbon Development Act 2015, including those seeking to contribute towards the National Transition Objective, to pursue, and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of the year 2050; and
• Westmeath County Council Climate Change Adaptation Strategy 2019-2024.

CPO 11.2
Provide for a reduction in energy demand and greenhouse gas emissions by providing for consolidated future development which supports sustainable travel patterns in line with the County Core Strategy.

CPO 11.3
Promote the benefits to quality of life, public health and biodiversity arising from implementation of policies promoting climate change adaptation and mitigation.

CPO 11.4

Encourage innovation and facilitate the development of pilot schemes that support climate change mitigation and adaptation measures. Westmeath County Development Plan 2021-2027 communities throughout the County.

CPO 11.5
Provide training on climate mitigation measures.

CPO 11.6
Support collaboration between local authorities, the Bord na Móna Transition Team and relevant stakeholders and the development of partnership approaches to integrated peatland management for a just transition that incorporate any relevant policies and strategies such as the Bord na Móna Biodiversity Plan 2016-2021 and the national Climate Mitigation and Adaptation Plans. This shall include support for the rehabilitation and/or re-wetting of suitable peatland habitats.

CPO 11.7
Work in collaboration with the Sustainable Energy Authority Ireland and relevant stakeholders to deliver a number of sustainable energy communities throughout the County.

CPO 11.8
Consider the use of heat mapping to support developments which deliver energy efficiency and the recovery of energy that would otherwise be wasted. A feasibility assessment for district heating in Local Authority areas shall be carried out and statutory planning documents shall identify local waste heat sources.

CPO 11.9
Review the outcomes of the Development Plan Guidelines, as adopted, and to consider reasonable steps considered necessary, in consultation with the Council, to align with the approach to climate action recommended in the guidelines over the lifetime of the Plan.

CPO 11.10
Work with the National Transport Authority to undertake analysis in relation to modal shift between settlements and derive a realistic modal change target for the county.

CPO 11.11
Engage with, as necessary, with the Eastern & Midland Regional Assembly's EPSON EU research project (QGasSP) which seeks to identify a robust methodology for quantifying the relative GHG impacts of alternative spatial planning policies.

CPO 11.12
Support the development of both climate mitigation and climate adaptation initiatives and seek funding for the implementation of these initiatives from available sources including the Department of Communications, Climate Action & Environment's Climate Action Fund

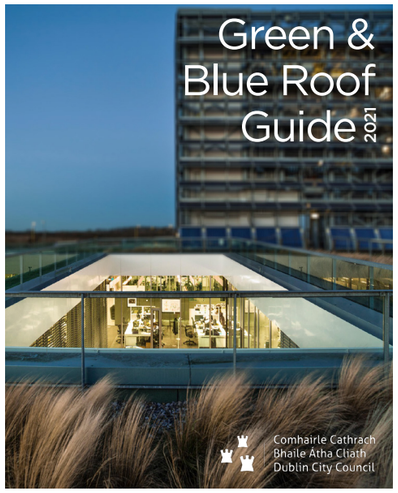
Sustainability

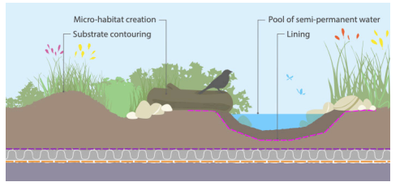
"Proposals should incorporate Sustainable Urban Drainage Systems (SuDS) and other measures that address adaptation to climate change including rainwater harvesting, the creation of integrated wetlands, the construction of green/ living roofs whereby opportunities for existing solar energy and wind energy are taken." - Westmeath County Development Plan 2021- 2027

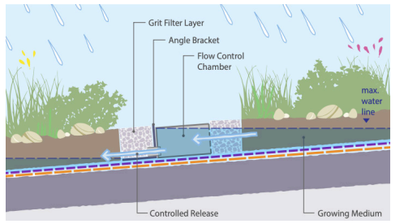
Blue/ Green Roof

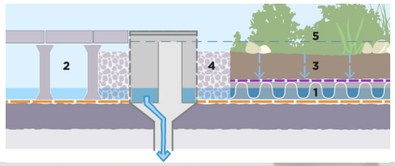
Green roofs are roofs or podium decks onto which vegetation is grown, or habitats for wildlife are established. There are various types of green roof including: extensive and intensive roofs, semi- intensive, roof gardens, biodiverse roofs and brown roofs. Green roofs can also be designed to serve an amenity function.

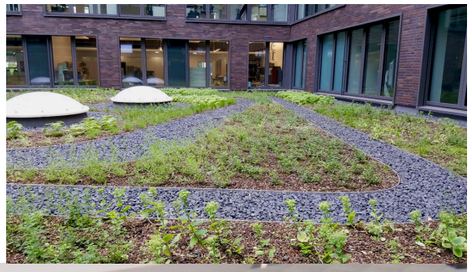
Blue roofs hold rainwater runoff on roofs and podium decks and release rainfall slowly through a 'flow control'. Green blue roofs are simply green roofs with this addition. Blue roofs do not have to be vegetated and rainfall runoff can be stored within open or closed hard landscape structures on roofs and podium decks. Storing rainwater that falls on the roof provides the potential to reduce or remove the requirement for attenuation storage elsewhere on a proposed development site.











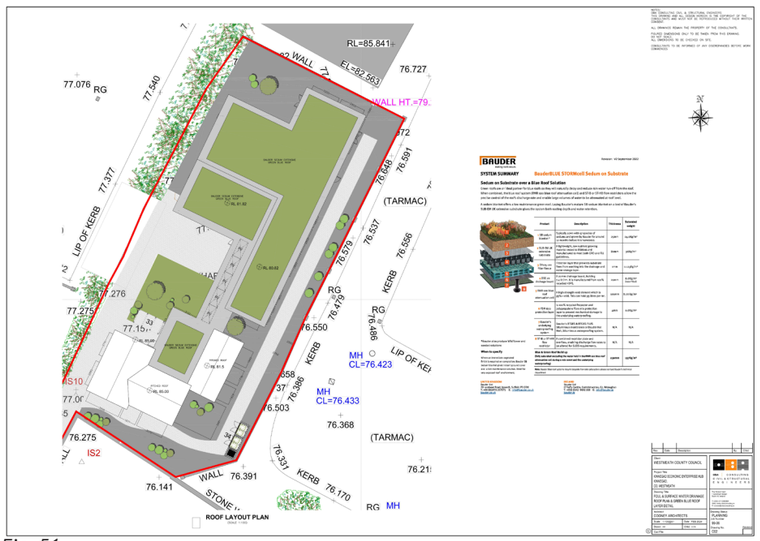


Fig. 51
Green & Blue Roof