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EXECUTIVE SUMMARY

Liffey Vale House is located on the northern banks of the River Liffey at Longmeadows along the Chapelizod Road. The house (a Protected Structure) and gardens, which are derelict, are owned by Dublin City Council. The Parks, Landscape & Biodiversity Department of Dublin City Council have developed proposals for Part 8 approval for the regeneration of this important site as a biodiversity education centre.

Concept

Dublin City Council appointed a conservation architect led integrated design team, (led by Blackwood Associates) to develop proposals for the sustainable development of this site which has been derelict for over 20 years. Following the completion of extensive surveys and inspections, the completion of detailed consultation and the examination of best practice exemplar projects, we are now proposing that Liffey Vale is developed as a site for biodiversity and education, Cois Abhann. The site will offer the opportunity for all to spend time in nature, and learn about the animals, plants, and ecological systems that thrive in close proximity to the city and along the river's edge. The house and gardens will intertwine to form one unique experience of nature with learning opportunities throughout.

Cois Abhann will include interpretation on biodiversity and the history of the Liffey, a learning space (large enough for school groups) a small café and associated public toilets. The building will tell stories as well as provide the setting for stories to be told. It will celebrate the richness of the natural history of the site and encourage curiosity in visitors of all ages and abilities.

Biodiversity affords us our own circle of life by providing clean air to breathe, water to drink, food to eat - a sensitive, interdependent ecosystem that we must understand and protect. Cois Abhann will demonstrate how human hands can considerately manage the once manicured area of Liffey Vale, guiding nature to follow its natural course to establish and welcome diverse habitats and species.

Cois Abhann will embed itself within the locality, becoming an eye-opening and culturally relevant stop on a daily walk or weekend cycles. It will seek to reawaken us all to the interconnectedness of the Liffey corridor and natural surroundings, renewing lost understanding of and connectedness to the world around us while re-enforcing wellbeing and calm. Greater awareness can impact on homelife, bringing green issues to the dinner table, influencing decisions and changing behaviours into the future.

With biodiversity being lost at a dramatic rate, there is a need to educate and empower people to take action for the protection of nature. Environmental education, experiential and hands on learning are powerful tools for building awareness of the natural environment and for developing a connection and care towards nature and biodiversity. The outdoor learning space is a living classroom providing an opportunity to learn first-hand about our flora and fauna, promoting a sense of well-being both physical and mental.

The Cois Abhann Biodiversity Centre will provide dynamic multi-purpose interactive spaces, both internal and external, to build awareness and interest in our natural environment, develop the capacity and capabilities of people to protect nature. It will offer a range of educational activities, children, youth

and community programmes and events, workshops, training, and exhibitions focused on building awareness of nature and biodiversity and ways we can protect it in our everyday lives. It will provide a range of experiential learning opportunities; this will be achieved through the outdoor spaces. The Centre occupies an accessible location in the capital which will reach out to a wide variety of target groups while offering a superb facility to highlight the importance of biodiversity and get a first-hand opportunity to learn about nature through being in nature.

Cois Abhann can host a range of programmes to visitors focused on biodiversity e.g. Biodiversity workshops, Training courses, the Young Environmentalist Awards (with a particular focus on biodiversity) which promotes action projects in young people. It will run a range of initiatives aimed at encouraging young people to come together to meet like-minded young people and develop their interest and enthusiasm for nature.

For schools, the centre will include a range of learning opportunities including tours, trails, workshops, and courses linked to the curriculum for example around ecology field studies within biology and geography. For the community it will provide a new space to experience and learn of the history of the Liffey Valley and to relax and enjoy the natural surroundings, a place to meet with family and friends.

Cois Abhann will be equipped to provide a programme of accredited courses, non-formal and informal education as well as the use of new methodologies in learning including transformational learning. The Centres offerings would align with the DCC Biodiversity Plan.

Cois Abhann aims

- to provide an inspiring and appealing space that makes all ages feel welcome and builds interest and awareness of the Liffey Vale area.
- to provide a cohesive programme of events, training, workshops, education, information, and exhibitions.
- to increase awareness, knowledge and understanding in a wide range of target groups of the environment, biodiversity, ecology, and our role in nurturing and caring for nature.
- to promote citizen science and run a range of citizen science programmes.
- to support government policy and strategy e.g., the biodiversity action plan, the DCC Biodiversity plan, the Climate Action plan, the National Strategy on Education for Sustainable Development.
- to provide an exemplar for the conservation, reuse and extension of a derelict historic building, using sustainable construction and minimising energy in use.
- to provide an exemplar of sustainable management of the garden and orchard areas, providing an informative example for both private and community gardeners.
- to embed the site of Liffey Vale House and gardens into the network of accessible pedestrian and cycle routes in this part of the city, encouraging car free leisure pursuits.
- to link the site to the extended and enhanced natural environment of Liffey Valley Park.
- to embed the site in the lives and environment of the local community and the of the wider city of Dublin.

Main Actions

The site is divided, on the basis of historic and natural divisions into areas of orchard, garden and wilderness. Liffey Vale House will include interpretation on biodiversity, a multi-purpose learning space, large enough for school groups, a small café and associated public toilets. Our approach to the design has been to respect the existing scale of the house and its relationship to the site, with new additions being complementary in scale and form. In the interior of the house, we will retain traces of the historic features; floors and fireplaces that have been lost over the years. The building will tell stories as well as provide the setting for stories to be told.

Once out in the open a series of paths will be provided to allow access for all, through a range of natural features, including woodland, wetland, the river edge etc. A range of interpretative methods will be used to inform and guide while a significant area of the site will be left inaccessible and wild.

It is intended to provide best practice in relation to drainage, the reuse of materials, solar energy and waste management. A bus pull in area will be provided on Chapelizod Road in association with accessible parking bays and bicycle parking infrastructure. The emphasis is on sustainable transport with adjacent public transport available. Cois Abhainn and Liffey Valley Park will be linked through a new entrance to the west of the site, which is being facilitated through the Department of Defence.

Should Part 8 permission be forthcoming it is the intention to begin site works at Liffey Vale in late 2022 and open to the public in late 2023.

PART ONE

INTRODUCTION

1.1 The Project

Liffey Vale House and Gardens is a 1.15 Ha site on the north bank of the River Liffey, lying between Islandbridge and Chapelizod. The house, which is a Protected Structure, has been unoccupied for many years, is derelict, and has suffered more than one fire, such that only the shell of the house, and a few internal walls remain intact. It is protected by a temporary, modern, metal roof. The site includes the former garden and orchard, that relate to the historic structure, plus the land between this area and the River Liffey, which was formerly meadowland but like the house and gardens has been abandoned for many years.

Dublin City Council want to restore the house and gardens, to serve the community for the purposes of leisure and education, including interpretation, and a small café. It is hoped that the site will provide a focal point for the development of new and existing pedestrian routes and parklands in the vicinity. It was agreed that the precise nature of the development should arise out of a thorough analysis and testing of the nature and capacity of the site, and its relationship to its context, and the interests of the local community.

To this end, Dublin City Council appointed a multi-disciplinary design team, led by Blackwood Associates, Conservation Architects.

Design Team	
Client	Dublin City Council Parks & Landscape Services
Architect / Conservation Architect	Blackwood Associates Architects
Landscape Architect	Mitchell Associates
Structural / Civil Engineers	David Kelly Partnership
Building Services & Fire Safety Engineers	FLN Consulting Engineers
Quantity Surveyors	D L Martin & Partners
Ecologist	Mary Tubridy
Interpretative Consultants	Tandem Ltd.
Marketing / Business Advisor	Tourism Development International
PSDP	Safetydot.com
Design and Assigned Certifier	Blackwood Associates

This report records the stages of investigation, research, consultation debate and design development that informed the proposal as submitted for Part VIII approval.

1.2 Process

Stage One of the project was about developing a comprehensive understanding of the buildings and the site, and refining, and defining, the specifics of the brief. This process facilitated the development of the design of the conservation and extension of the historic building, a strategy for the management of the important biodiversity of the site, and the design of the landscape. The approach has been holistic, the different disciplines within the design team collaborating, and informing each other, to ensure a comprehensive response to *the place*.

A programme of detailed consultation was central to the development of both brief and design for the site.

The attached appendices provide a record of the extensive survey, research and design development processes and the assessments and strategies provided by the various disciplines within the design team. In Chapter 1.3 we provide a summary of all the processes involved at Stage one of this project and that form the backbone of the proposal as it has emerged.



Fig. 1.01 Liffey Vale House, as viewed from the Phoenix Park.

1.3 Record of Stage One

Stage One of the project involved the following processes on the part of the design team. On-going dialogue and discussion between all design team members was of crucial importance to the refinement of the brief and the subsequent design.

Site Familiarisation & Assessment

- Site visits: walking the site, photographing and recording
- Ecological assessment and survey; recording and interpreting (See **Appendices F, G & H**)
- Architectural conservation assessment and survey of house and boundary walls: measured surveys and checking levels (see **Appendix A**)
- Survey drawings: including record of surviving historic features (see **Appendix A**)
- Structural Assessment (see **Appendix B**)

Site History and Conservation Assessment

- Study of available historic maps and records of the site and immediate environs.
- Researching history of the Phoenix Park and urban, industrial and rural occupation of this part of the the Liffey Valley.
- Researching the history of the Tramway.
- Assessment of significance of the building and site, informed by the research.
- A detailed conservation assessment is given in Part Two of this report.

Site Analysis and Development Context

- Desktop study of previous initiatives and studies of the site and environs. The potential impact of a number of other projects and initiatives which are either currently underway, or likely to proceed during the next decade. (See **Appendix P**).
- Familiarisation with the planning context of the site: Local Area Plan and City Development Plan.
- Familiarisation with OPW plans for the Phoenix Park
- Analysis of the current form and location of the site, in particular in relationship to access and connectivity: pedestrian, cycle and public transport routes. (See **Appendix Q**).
- Context of other cultural, leisure facilities and public green open spaces in the locality. (**Appendix Q**).

Other Surveys & Investigations

- Tree Survey (see **Appendix J**)
- Archaeological Assessment of the site (see **Appendix K**)
- Invasive Species: eradication proposal (see **Appendix I**)
- Ground Investigations (See Structural Engineers' Report **Appendix B**)
- Water quality testing (See Structural Engineers' Report **Appendix B**)

Consultations

In order to ensure the viability of the proposal, and draw on existing experience of the site and locality, extensive consultation has been carried out, both within the Dublin City Council, and with stakeholders, including community groups, sports clubs, State bodies and businesses.

A comprehensive programme of consultation of external stakeholders was led by Tourism Development International, and is recorded in their Situation Analysis in **Appendix M**.

Initial Consultations

- Dublin City Council: Area Office, Drainage, regular meetings with Parks Department.
- OPW: Discussion of the possibility of re-opening the gate in the Phoenix Park to public access
- Background Consultations by Tourism Development International with Failte Ireland, Dublin Zoo, OPW, Irish Tourist Industry Federation, Rowing Ireland, Fisheries Ireland and other stakeholders. (see **Appendix M**).

Consultation Workshops

Two workshops, facilitated by Tourism Development International were held:

- Dublin City Council Executives Workshop to ascertain:
 - Perception/Observation of the Site at present
 - Travel/transport observations in relation to the Site
 - What is needed at the site
 - Residents' viewpoint
 - Visitors' viewpoint
 - Successful outcome measurements
 - Concerns
- Community / Local Stakeholders' Workshop to ascertain
 - Perceptions / observations of the present condition of the site
 - Travel / transport observations
 - Priority needs at the site in the context of the immediate locality and wider area
 - Successful outcome measurements
 - Concerns about the development of the site

Details of the workshops are provided in the Situation Analysis (**Appendix M**).

Brief Development

- Informed by the collective assessments and consultations the Working Brief was debated, developed and adopted by the design team, in consultation with Dublin City Council.

Visits to other relevant projects

- The Design Team and representatives of the Dublin City Council visited Sonairte, an interactive visitor centre promoting ecological awareness and sustainable living at Inch, near Laytown County Dublin, met staff there and gained insights into the running and potential of the centre.
- The architects visited cafés at Harold's Cross, Herbert Park, and Happy Out, Dollymount, to investigate spatial and operative requirements for small cafés, in locations owned by Dublin City Council.

Design Development

Alternative designs were prepared, exploring approaches to using and extending Liffey Vale House, development and use of the site, and the adaptation of a part of the adjacent site, belonging to the Department of Defence to permit a direct connection to the Liffey Valley Park.

Proposals for the building and the landscape were presented to Dublin City Council over a number of meetings, and feedback taken on board in order to develop the proposal as presented in this report. The design alternatives considered, and the process followed are described in **Appendix R**.

Building Services, Fire Safety and Structural Design

Development of the design of the building services and structural strategies were developed in parallel with the design layout. The fire strategy was reviewed by the Dublin City council Fire Officer during Stage One.

Interpretative Strategy

The interpretative consultants were involved from the outset of the brief and design development process, and the interpretative strategy developed in parallel with the design. The Interpretative Designers' Audience Engagement Strategy is provided in **Appendix N** and their detailed Interpretative strategy is provided in **Appendix O**.

Biodiversity Strategy

This was developed in collaboration between the architects, the ecologist and landscape architects.

Cost Control

The Quantity Surveyors prepared cost estimates as the design developed. This has been reviewed, with Dublin City Council at key stages, and informed the final scale of the proposal. It has also been reviewed to allow for current construction costs.

Stage One Circulation

The Stage One Report was circulated to all relevant Dublin City Council departments in Spring 2021. Feedback was given and a number of on-site meetings were held with representatives of Dublin City Council and the design team to discuss site design, ecological impacts and future site management options.

This Part VIII Design Report reflects all the feedback received from the relevant Dublin City Council departments following circulation of the Stage One Report and drawings.



Fig. 2.01 Rocque's Map of 1756 Building shown in similar location to the current house



Fig. 2.02 Ordnance Survey Map of 1843. The historic boundary of the site is marked. The house represented is similar to the current footprint, the orchard is clearly indicated and the diagonal ditch is in-situ.

PART TWO

HISTORY OF THE SITE & CONSERVATION ASSESSMENT

2.1 The Site

Location

The historic site of Liffey Vale is situated on gently rising ground, between the River Liffey, and the road that links the city of Dublin to Chapelizod, the west and northwest of the country beyond. At this point this road follows the boundary wall of the Phoenix Park, which dates from 1680. The house is located close to the road, but at a much lower level, so it has only a limited presence. The level of the site, on the garden side of the boundary wall is up to 2.2 m below that of the adjacent road and footpath, the average level difference being 1.6m . Between the garden edge and the river is a wide level area of land.

The River Liffey runs in the same location it has for 2 million years: both prior to, and subsequent to, the last ice age. At this point the river valley is narrow and flanked to the north and south by steep escarpments, with narrow level flood plains beside the river banks. However, the control of the flow of the Liffey, through the weir at Islandbridge and further dams and controls upstream, mean there has been no recorded flooding at the site in recent memory (Source OPW Floodinfo.ie).

This stretch of the Liffey has been the location of human settlement and trade for thousands of years, with extensive Viking settlements and associated burials recorded in the vicinity. Lying upstream of the highest reach of the tides at Islandbridge, and regulated by the weir there, the level of the river is predictable and the flow steady, leading to the location of a number of boatclubs downstream from Liffey Vale.



Fig. 2.03 View of this site I, in its context, looking towards Chapelizod. Steep bank to the left (south bank) and the former floodplain recolonised by trees on the right (north bank). The Liffey Valley Park in the background is still open land. The regulated level of the river Liffey is currently about 800mm - 1m below the level of the former flood plains.

The area of land, to the west of Islandbridge between the boundary wall of the Phoenix Park and the River Liffey is the townland of Longmeadows. Historically this land has been used as pasture, browsing crops such as hay, and for allotments. Liffey Vale has always been in an isolated location, within this townland, being the only house, in the townland, between the east end of Chapelizod village and the houses adjacent to the weir at Islandbridge. It has been isolated from the land to the north, since 1680, by the enclosing wall of the Phoenix Park. (**Fig. 2.04**).

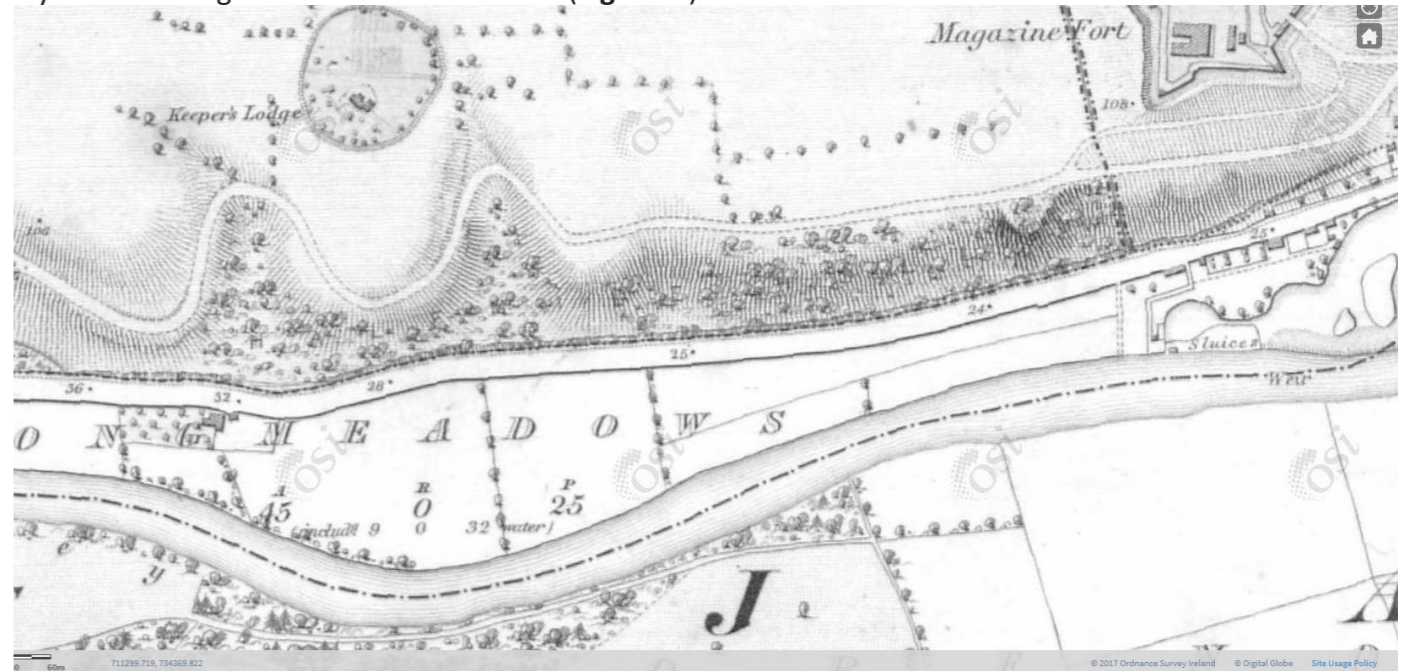


Fig. 2.04 Ordnance Survey map from 1843, showing the townland of Longmeadows in the context of the Phoenix Park, and the weir to the east.

The Site

Record of a house in this location first appears on John Rocque's 1756 map of Dublin. (**Fig. 2.01**). On the Ordnance Survey Map of 1843, the current extents of the orchard and garden, and the 18th and 19th century wings of the house, and the line of the western boundary wall can all be clearly seen, in what appears to be their current location. (**Fig. 2.02**). There also appears to be a ditch running from the boundary of the land to the river, in approximately the location of one of the current ditches.

The 1863 edition shows a ditch along the southern boundary of the site, extending eastward for half a kilometre, managing the drainage of the entire area. (**Fig. 2.05**). By the 1911 edition of the map, the tramway is shown running along the line of the Chapelizod Road, (**Fig. 2.06**). Both maps show building between the earlier house and the boundary in the location of the now demolished annexe. (Refer Building Condition Report). These later maps also show the current driveway and entrance, and the garden wall extending south to the ditch boundary, but it cannot be ascertained, for certain, if there was any form of pedestrian entrance (and steps) between the house itself and the road. Valuation records from the 19th century show that the land holding was of 1 acre 1 rood and 18 perches, analogous with the area of the orchard and garden, and indicating that the surrounding meadows were in other ownership.

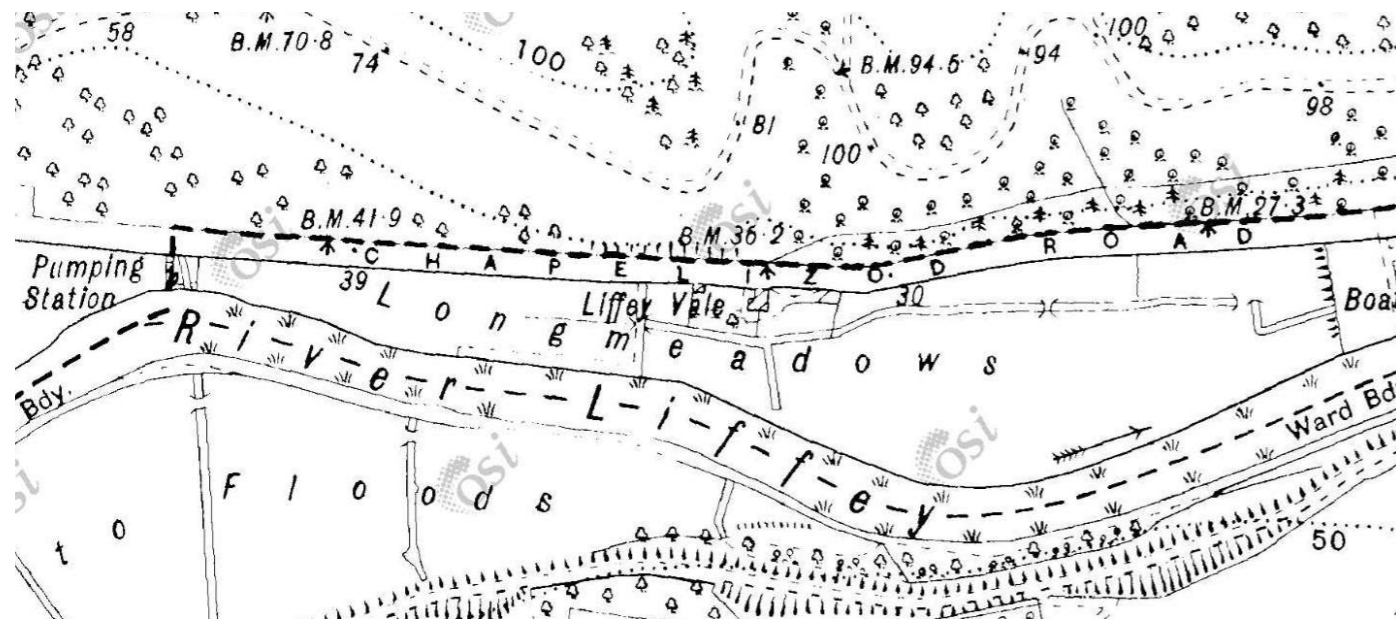


Fig. 2.05 Cassini map from 1860s, showing the diagonal ditch toward the river, and the longitudinal ditch leading into the fields to the east.

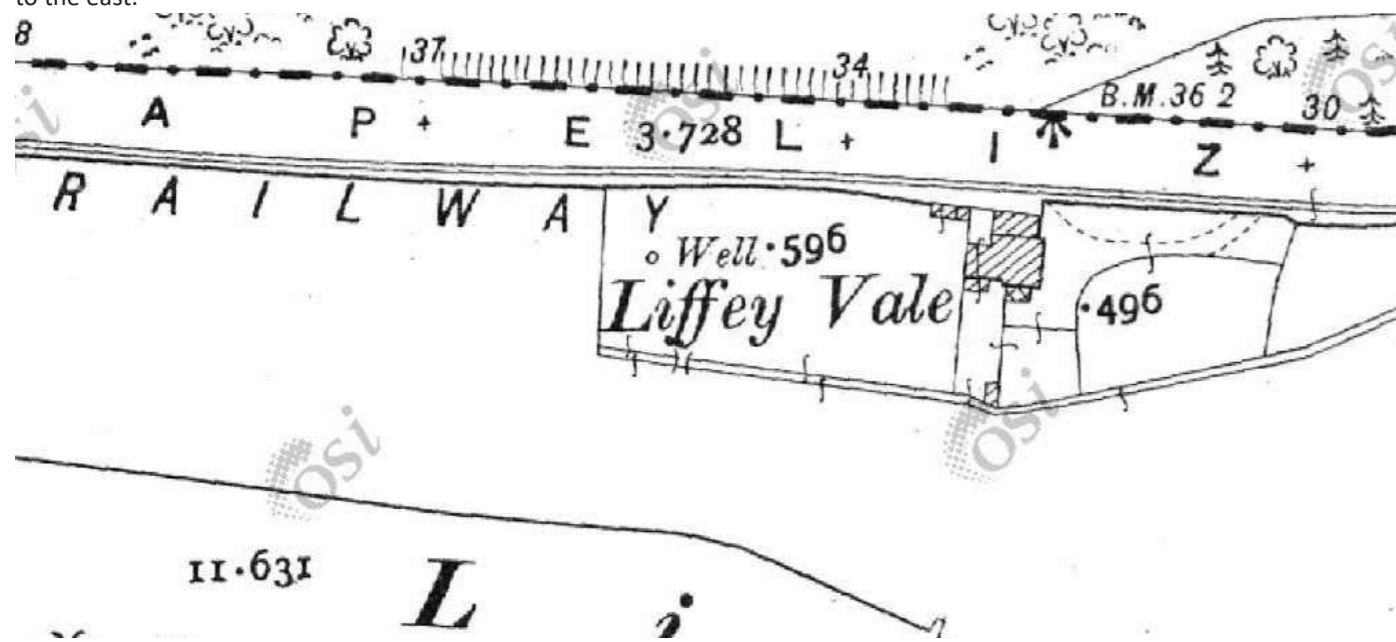


Fig. 2.06 Ordnance Survey map from 1911, showing the ditch flowing to the east, the annexe in place, and the current layout of driveway gardens, and orchard. The well is also marked, and the Tramway is in place.

The historic form of the site can still be read, with orchard trees surviving to the west of the house, and more formal space to the south of the entrance drive. There are a number of specimen trees. The Lombardy Poplars, are likely a fairly late addition, being fast growing and short lived, and while maybe not the most attractive of trees act as a prominent marker of the site, from a distance, both along the length of the Chapelizod Road, and from within the Phoenix Park. There are two copper beeches, and a group of handsome sycamores, at the west end of the site, which may be self-seeded but have matured into fine specimens. These trees make a substantial contribution to the surrounding area, when seen from the path on the south bank, when moving along the Chapelizod Road, and from within the Phoenix Park.

The current site also includes the land between the historic garden and the river. This mostly level area, consists of scrub, with many native trees, notably a large willow and many self-seeded alder. Along the

river margin is a narrow strip of wetland, with rushes and other plants of the river margin. At the east end of this area the level of the ground has been modified by the deposition of soil, creating a small "hill", the top of which is approximately level with the road, and adjacent playing fields. This modification presumably dates from the construction of the playing fields, in the mid to late 20th century, it represents a significant change to the historic form of the land.

Roadside Location

The roadside location has a major influence on the nature of the site. Prior to the opening of the Chapelizod bypass in 1989, the Chapelizod Road was one of the principle routes into Dublin, carrying traffic from Chapelizod, the Liffeside towns of Lucan and Celbridge and the more distant towns of Kildare, Mullingar and the north west of the country. Although this traffic now largely avoids the road that passes along the boundary of the site, it still has a big impact in the form of traffic noise from the busy dual carriageway on the south side of the river. When this road was built there was substantial remodelling of the topography of the escarpment on the south side of the river.



Fig. 2.07 The orchard in its current form



Fig. 2.08 Roadside location: the house and its site largely concealed from the road, behind the wall

Tramway History

For over half a century the Chapelizod Tramway ran along the northern boundary of the site. Initially opened as a steam tramway in June 1881, it was extended to Lucan in 1883, was later electrified, and the final tram ran in April 1940. The gantries that carried the electricity wires are still in-situ, now used for street lighting, and are an interesting feature and link to a sometimes overlooked piece of Dublin history. The trams were important in bringing travel, and excursions, within the budgets of ordinary Dubliners.

The original steam trams would have been exceptionally heavy, and the retaining wall that forms the northern boundary of the site would have fulfilled a considerable structural function in bearing the applied loads of the moving engines and carriages. It is possible that the calp wall to the north side of the house may have been associated with the construction of the tramway. Modern Dublin bus routes and stops often replicate the earlier stops and routes of the trams. It would be interesting to research if there was once a tram stop here serving both Liffey Vale and the gate into the park opposite, and the keeper's house at the top of the hill. With the gantries still extant and prominent this is an interesting aspect of the history of the site that could be explored further.

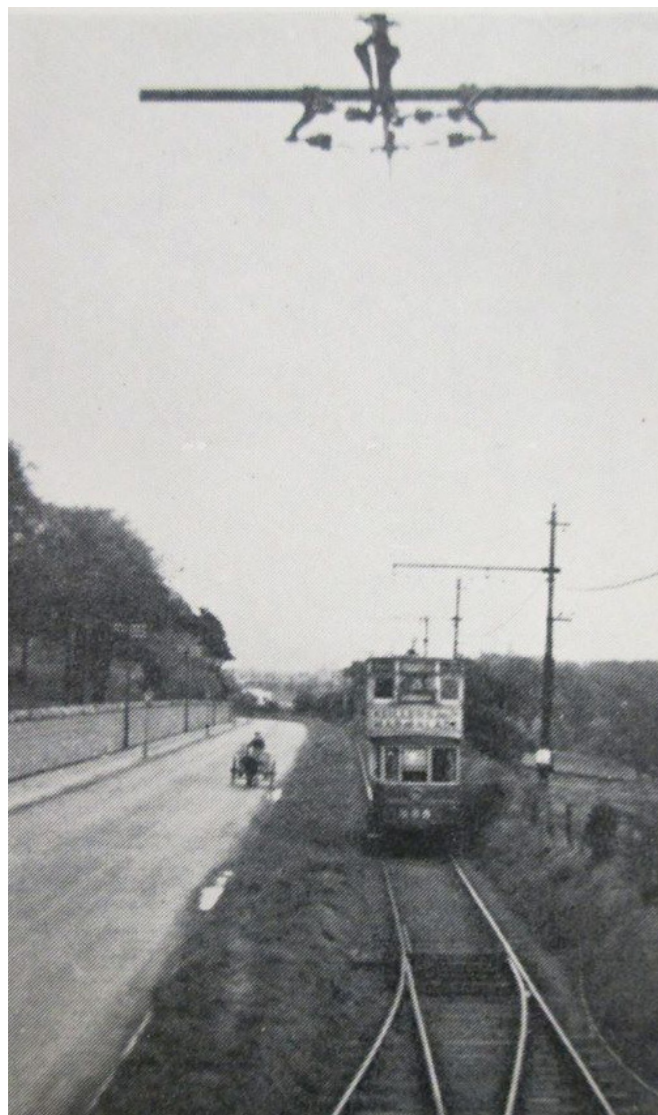


Fig. 2.09 The Dublin & Lucan Electric Tram to the east of Chapelizod. Wall of Phoenix Park to the left. The gantries are still extant, including those adjacent to Liffey Vale.

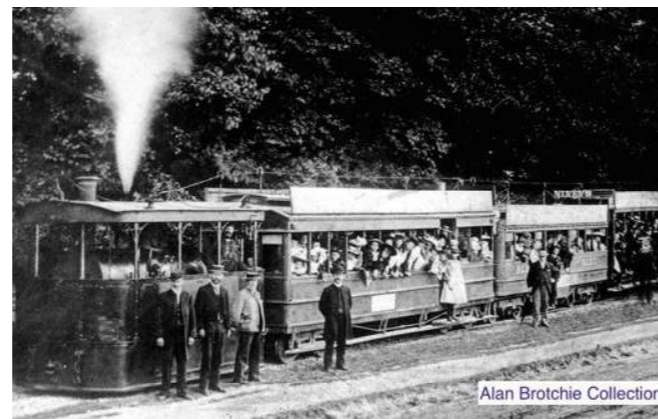


Fig. 2.10 The Steam Tram, on a school excursion

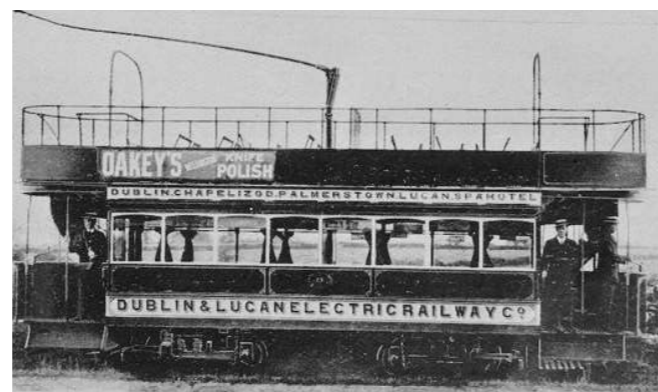


Fig. 2.11 The electric tram

2.2 The House

A detailed record, in the form of photographs and drawings of the interior and exterior of the house, the boundary wall, and other features within the curtilage of the house is provided in the Building Condition Report (**Appendix A**).

Liffey Vale house is a domestic structure of three wings. The western and central wings formed an L-shaped building and date from the 18th century, although this part of the building may have been constructed in more than one phase, and has certainly been subject to a number of alterations subsequently. The gables of the westernmost wing, with their applied cementitious half-timbered details give the appearance of a 1920s-30 suburban house. Most of the external render is cementitious.

The eastern wing dates from the early to mid-19th century, and takes the form of a three bay villa typical of Dublin of that period. The symmetrical front elevation, raised ground floor level, and generous rooms to either side of the front door display the expression of a genteel residence. **Figure 2.12** provides a summary of the ages of the building.

The entirety of the roof, and the majority of the interiors of the house, including the staircase and upper floor, were destroyed by fire subsequent to the preparation of the earlier Masterplan by Shaffrey Associates in 2008. Their building report of 2006 provides a record of the building prior to the fire.

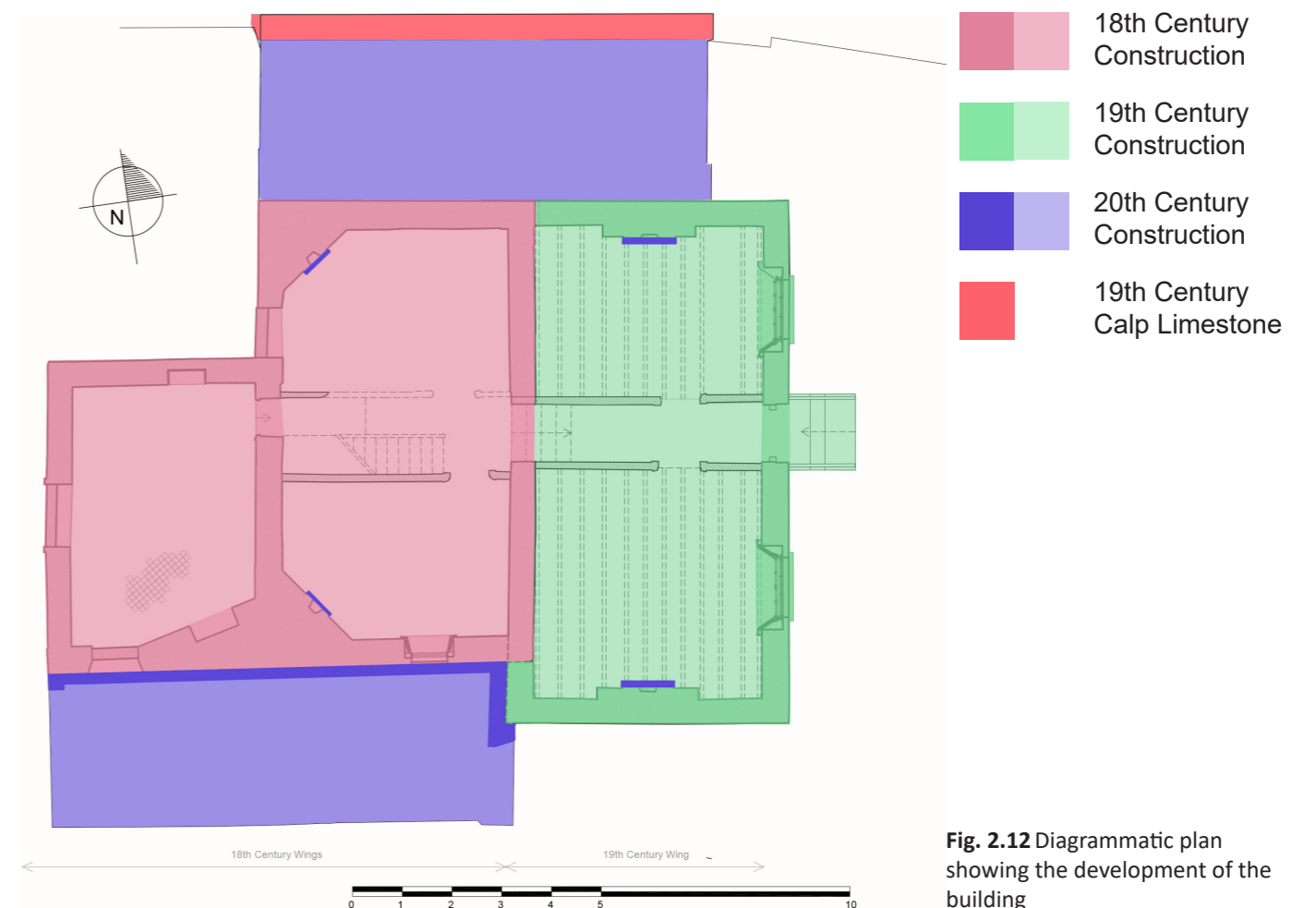


Fig. 2.12 Diagrammatic plan showing the development of the building

Subsequent to the fire a 20th century single storey extension, and a 19th / 20th century two storey “annexe” between the house and the calp wall to the north were also demolished.

The rooms within the 18th century two-storey part of the building were small in scale and modest in detail. Most of the fireplaces were from the early 20th century but a couple of earlier ones remain. Where the internal plaster has failed it is possible to read the location of former window openings in the eastern wall of the 18th century central wing. All window and door openings, with the exception of the front door have been blocked up, but historic sash windows survive at the east elevation of the 19th century wing and at the upper level of the west elevation of the west wing.

Liffey Vale House is considerably older than its external appearance suggests. It has been much altered over the years, and much of its interest lies in its evolving form and exoression.

Liffey Vale House is recorded in Dublin Cty Council’s Record of Protected Streuctures, Reference 1346



Fig. 2.13 The symmetrical entrance elevation of th 19th century east wing viewed from the garden.



Fig. 2.14 The house from the south west: 18th century wings, with 19th century wing behind. Scars of demolished single storey 20th century extension in foreground.



Fig. 2.15 The interior of the central, 18th century wing. All the upper floor structure has been lost, but fireplaces and a two storey partition survive.



Fig. 2.16 The 18th century wings of the house, viewed from the northwest.

2.3 Assessment of the significance of Liffey Vale

The cultural significance of Liffey Vale may be considered through a number of aspects of its form and history.

Historic Significance

Liffey Vale is a rare example, in such close proximity to the centre of the city, of a semi rural house, in its original site and setting. A mixture of the flood risk associated with the river, and the fixed historic boundary of the Phoenix Park, mean the townland of Longmeadows was never significantly developed for either housing or industry, and the river valley in this location survives as a rare thread of open semi-natural environment, within a mile or two of the heart of the city. A number of topographical views of Dublin City survive from the 18th century, with the viewpoint in the Phoenix Park, close to Liffey Vale House. These views depict an arcadian foreground to the view of the distant spires, domes and chimneys of the city. (See **Figure 2.17**). Whereas the earliest part of the building may have been constructed to house those working on the land, the later 19th century wing establishes that the residents had more genteel considerations, and probably means. The building in the context of its setting therefore embodies an interesting link to the evolution of this part of the city of Dublin. It is a rare example of a dwelling in this context.

The site is also interesting in relationship to the history of the tramway, briefly outlined above.

Architectural Significance

The house has been subject to extensive alterations, extensions and modifications over the years, followed by a serious fire, and as such the building displays no features of outstanding architectural quality, or completeness, in either its external form or its interiors. Always a relatively humble building in scale and detail, the ravages of time and fire have also destroyed most of the subtle patina of age in the interior, that once embodied in its fabric, aspects of the human stories of the inhabitants.

The architectural significance of the building, as it survives, lies primarily in the relationship of its scale and form to the adjacent garden and orchard. That being said, enough of its historic details survive that these may be retained and conserved, and used as the basis to renew lost windows and interior joinery, such that the presentation of the essence of the building could be considerably enhanced. There are also traces that can be read in the derelict building that help understand the evolution of its form. The building is of local architectural significance.

The form of the house embodies the changes and evolution from a functional, essentially rural function to a more genteel, albeit modest, home on the fringes of the city. The boundary walls of the site are integral to the curtilage of the Protected Structure and they are also of local significance.

Social Significance

No records have been found of the former owners or inhabitants of the house. As there is no street number associated with the house it is not possible to accurately associate available census records with the house. It is possible information in this regard may yet be uncovered. The house is, however, significant in that it embodies the social standing of the place, in the context of the meadows that would once have been used for agricultural or horticultural purposes.

The River Liffey is the defining feature of the site, and its place in the local and national consciousness is significant. This length of the river, between Chapelizod and Islandbridge, is notable for the rowing clubs that use its predictable flow. It is also (on the south bank) an important walking route for residents and visitors to the area.

Landscape Significance

The River Liffey as a feature of the landscape has flowed in this location for 2million years. The flow of the river, following the end of the last Ice Age 12,000 years ago, created the steep sided valley that is seen today.

The landscape of the current site of Liffey Vale House has significance in relation to to both its human and natural history and the symbiosis of the two. As noted above the site of the house, including orchard and gardens, embodies a rare example of a dwelling house of this nature and its associated setting surviving in such close proximity to the city. A number of mature specimen trees and orchard trees survive, and remain important features of the site. The taller trees of the garden artea, in combinatio with the self-seeded native trees in the southern section of the site contribute to views along the course of the river, and from within the Phoenix Park and the War Memorial Gardens

The level land between the grounds of Liffey Vale House and the river is the flood plain of the Liffey. Until the early 20th century it was subject to regular seasonal flooding, which enriched the soil for the growing of crops such as hay, and probably the grazing of livestock also. The surviving ditches in this area (some silted up others still containing water) are a historic landscape feature from this period. Since the damning of the river upstream for water supply and power generation, the flow of water has been controlled and the last time the level area of the site was flooded was in the 1950s during extreme rainfall. (Source OPW flooding records). As such, the land is no longer valuable for horticulture or agriculture, and elsewhere along this length of the Liffey has largely been taken over for leisure purposes: boat clubs and the GAA pitches to the east of Liffey Vale, and Liffey Valley Park to the west.

It is only at this location, as well as the narrow margin of the river bank elsewhere, that the land has been left unmanaged, and native trees and plants have been allowed to "rewild" the area, in a manner unplanned or tended by people. This has resulted in a notable richness of biodiversity within the site, a significant haven for a rich mixture of plants and animals, vertebrates and invertebrates. This is of considerable local significance.

Overall Significance

It is in the combination and symbiosis of all three aspects of the significance of the site that the overall significance of the site should be acknowledged, and for its rarity within the city, as an open space and haven for nature.



Fig. 2.17 *A Prospect of the City of Dublin from the Magazine Hill in his Majesties Phoenix Park*. Engraving by James MacArdall, after a painting by Joseph Tudor. c 1750s. This illustrates the context of Liffey Vale House in the mid 18th century. This ideal of a bucolic rural setting, close to the city of Dublin informs the spirit of Liffey Vale House. Although the city has changed, and grown, the valley of the River Liffey and the Phoenix Park survive as green spaces, representing a continuation of this ideal.



Fig. 2.18 The site viewed from the footpath on the south side of the River Liffey

PART THREE

DESIGN PROPOSALS

3.1 Conservation Approach

As stated in Chapter 2.3 of this report, the significance of the house of Liffey Vale lies as much in its location, scale and its relationship to its site and setting, as in the fabric and design of the building itself. As such, in approaching the use, conservation, and presentation of the Protected Structure the Design Team have prioritised the need to ensure the scale, and the domestic external character and form of the building is retained in relationship to the site, while ensuring the building has a sustainable new use.

The domestic nature of the building, the multiple floor levels, and the small scale of the original rooms, meant it was challenging to identify a viable public use that could be provided within its historic envelope. It was agreed with the client that in finding use for the building that would serve the public, and relate to the proposed use of the site for the promotion and interpretation of biodiversity, that the building would require to be extended. The challenge was to provide the useful space required for the public function of the building, while not swamping the scale of the historic building, or cutting it off from its relationship with the garden, orchard, and approach drive. Part of our brief was to provide universal access for visitors. The ramps are a response to this. These new spaces offer the opportunity for exhibition as well as movement through the spaces in an inclusive manner for all, and enable the envelope of the historic building to remain free of obtrusive platform lifts.

Proposed Extension

Refer to drawings **539-P-12, 539-P-13, 539-P-14, 539-P-15.**

The new building has been designed to follow the line of, and to integrate, the boundary wall that lies between the site and the Chapelizod Road. (See **Building Condition Report, Figures A3.58, A3.69**). The proposed extension thus serves as a built backdrop to Liffey Vale House. It also serves to protect the orchard area, from the noise and proximity to the busy road. The new pitched roofs (which are clad in zinc to differentiate them from the slate roofs of the Protected Structure) are never wider in span than those of the house, thereby always being secondary to, and complementing the scale of the three roofs of the historic structure. The extensions contain ramps, facilitating universal access within the entire building, an education room, staff and public toilet facilities, (avoiding the installation of wet services within the historic building), storage, plus a small café serving drinks and snacks.

Where the new building, enclosing the main ramp, runs between the north wall of the house and the boundary wall, the new roof is designed to be supported on new steel columns, minimising the impact on both the calp wall to the north, and the wall structure of the house. See **Sections C-C'** and **D-D'**. The valley gutter is constructed below the historic eaves level, retaining the integrity of the historic roof form. Roof lights in this area give the character of an external space, and emphasise the separate nature of the boundary wall and house. The eastern gable to this part of the building is set back from the eastern elevation of the 19th wing, so this important symmetrical entrance front can still be read in its historic form. (See **Proposed East Elevation Fig. 3.09**).

A single story “hinge” building encloses the final ramped link between the lowest two levels within the historic building. This flat roofed building slips between the main roof of the new building and walls of the historic house, ensuring the form of the house can still be easily read. (See **Section E-E'**)

The texture of the modern lime insulating plaster on the extension will subtly contrast with the proposed lime harling of the 18th century wings and the lined and ruled lime plaster of the 19th century wing.

Conservation and treatment of the Protected Structure

Refer to As existing / demolition drawings **539-P-02, 539-P-03, 539-P-04, 539-P-05 and**

Proposal drawings **539-P-12, 539-P-13, 539-P-14, 539-P-15 and**

Appendix A Building Condition Report

Exterior

Externally, we propose to present the house, largely in its late 19th century form.

Surviving sash windows, at the east and west elevations, will be repaired, and new sash windows, replicating the details of the surviving historic windows, will be installed in the reopened window openings elsewhere.

Hard cement based plaster, and applied details will be removed, and replaced by lime based insulating plasters, with a thrown harled finish on the 18th century wings, and a lined and ruled float finish on the 19th century wing. These contrasting finishes will help to subtly differentiate, and tell the story of the evolution of the house. The front door and fanlight will be reinstated. The chimneys to the 19th century wing will be rebuilt based on the photographic record from before the fire (See **Building Condition Report Figure A2.10**).

The modern metal roof and temporary timber roof structure will be removed and replaced by a natural slate roof to the original profiles, on a new timber roof structure. The photographic record of 2006 will be used as an important resource in replicating the roof as far as possible.

New features externally will be the extension (described above), and the modification of a previously modified opening to form a doorway on the south elevation. A new veranda will also be constructed to provide a sheltered external area. These two new features are located in the area previously much modified by the now demolished single storey room (See **Building Condition Report Figures A2.01, A2.08**).

Interior

The historic interior of the house has been almost entirely lost through a series of destructive fires, as well as being subject to multiple alterations and modifications prior to the fire. The interior prior to the fire was neither especially rare, nor of especially high quality. What had been the interesting patina of age, use and modification to suit the needs of the occupants was another victim of the fire.

The loss of interior plaster and floors, does however reveal scars of previous manifestations of the building, which would otherwise have been concealed. (i.e. **See Building Condition Report Figures A2.15, A2.42, A2.52, A2.53**, where evidence of former openings in a formerly external wall can be seen). A full photographic and drawn survey of the current interior of the building is provided in the Building Condition Report.

The proposed works allow that the former domestic layout of the building could be reinstated in the future, if a different function were found for the building.

18th Century Wings

The first decision to be made, with regards the treatment of the interior was the extent to which the interior could, or should, be recreated. Given that so little of the interior survives, and that the scale of the lost rooms within the two storey 18th century wing was so small, it was decided not to propose full reinstatement of floors, stairs and partitions, but to retain the building as a shell, albeit with repaired and / or reinstated joinery features, and the good quality fireplaces left in-situ. It has been decided to reinstate the lime plaster to the walls, and the ceilings of the upper floor rooms in their former location and to reinstate the skirting boards at both floor levels. This approach will allow the former layout of the house to be read, while providing viable lofty exhibition spaces. (See **Sections A-A'; B-B'; D-D', Fig.s 3. 14, 3.08, 3.13**).

In the central wing it is proposed to demolish the surviving brick noggin partition wall. Whereas this is an interesting feature, it is in a dangerous structural condition, the timber base plate having rotted. Retention would require demolition and rebuilding. Prior to demolition it will be fully recorded and the surviving doorways and architraves carefully removed. If in fair condition, tie beams within the wall at first floor and wall plate level will be retained, or if not, they will be replaced to provide structural stability and indicate the former plan form. At the upper floor the architraves and frame of the doorway will be reinstated, connected to these members to act as a "ghost door". (See Proposed Plan drawing **539-P-13, Fig. 3.07**). Thus it is hoped this space will provide both a useful space for exhibition, and an understanding of the history of the building. The floor of the central wing is a mixture of concrete slab, and suspended timber floor. It is proposed to replace this in its entirety with a heated polished concrete slab.

A new opening will be formed in the north wall of Room 18-04 to provide access to the ramp area. The opening will be formed with new hardwood timber beams over the opening. The opening will be lined in natural hardwood planks to differentiate it from historic openings in the building. (See **Section D-D' Fig.3.13**).

In order to give access to the lower ramp, an existing window in the west wall of 18-04 will be extended to ground level. The historic architrave will be repaired and / reinstated to indicate this is a historic opening. (See **Section D-D'**).

In the smaller space of the west wing, Room 18-01, a tiled ground floor survives. Subject to investigation this will be retained, if feasible. Experience shows that it is rarely possible to lift a tiled floor without destruction of the tiles. An entirely new opening is required to give access to the ramp. This will be formed similarly to those in the north wall.

19th Century Wing

In contrast to the 18th century wing, the two rooms, and corridor of this wing have survived in form, and with a number of historic features intact, or repairable. Therefore it has been decided to reinstate these rooms in their intended form, with timber suspended floors, lime plastered walls, with picture rail and dado rail, and ceilings at the original level. (**Sections B-B', C-C' Fig. 3.08**)

A new opening will be formed in the north wall of Room 19-07 to provide access to the ramp area. The west side of this opening will be at the building joint between 18th and 18th century wings, and the new beams over the opening will be of hardwood timber. The opening will be lined in natural hardwood planks to differentiate it from historic openings in the building.

Methodology

Prior to any demolition, or temporary removal of any elements of the building they will be recorded. Elements removed for repair or replication will be clearly labelled with their purpose and original location. Following removal of modern and unsound plasters the building will be inspected and any previously concealed features (such as evidence of previous alterations) recorded and interpreted.

Throughout the conservation works, appropriate materials and methodologies will be used to ensure new and replacement work is compatible with the nature and materiality of the construction of the building. Where the thermal performance of the building is being upgraded, natural breathable materials will be used, compatible with the performance of the fabric of the building. A lime based insulating external render has been identified which is compatible with traditional finishing techniques.

Where new openings are being formed in the historic masonry, existing rubble stones will be removed and the reveals rebuilt using clay bricks, laid in lime render. New hardwood beams will be used and temporary support provided as specified by the structural engineers.

Fire damaged joinery will be repaired and reused wherever possible and practical. Elsewhere reproduction joinery will be based on the historic profiles. 5 of the surviving fire places will be retained, where the chimney pieces are in fair condition. This includes 20th century tiled features, which are a part of the building's story. Where the fire places are very badly damaged they will be removed but the hearth recess plastered and retained as part of the story. Similarly sockets for joists and beams, within the masonry walls will be kept, so the former floor levels can be read. Generally new lime plasters and renders will be used throughout, both internally and externally. However when removing the cement based renders and failed lime plasters, if any areas of sound lime plaster are found these may be kept. It is foreseen that this may be possible on the north elevation facing into the ramped area.

The replacement roofs will be timber structures, insulated at ceiling level, with natural slates selected.

3.2 Site & Biodiversity Management Strategy

Liffey Vale house, its former gardens, and associated lands are to be redeveloped and made publically accessible as a centre for biodiversity. The ambition is that the site will offer the public the opportunity to expand their understanding of the natural world and their relationship with it, while enjoying a walk around or through the site. To these ends the site will provide exemplars for low ecological impact building, and for land management methodologies that support and enhance the biodiversity of the ecosystems present on the site.

The proposal applies subtly variant methodologies for the design and management of the various zones of the site, based on analysis and understanding of the history, and evolution of the site, its current condition and the habitats present. See Site Zones Map.

Site history

At this point in its course, the River Liffey flows in the same location, between bluffs of higher land, as it did prior to the last Ice Age. There is archaeological evidence of human occupation of the area during the Bronze Age, Viking and Mediaeval periods, and important settlements, mills and crossing points of the river developed at Islandbridge and Chapelizod. The wall to the Phoenix Park was constructed in the late 17th century, with the main road connecting the city of Dublin to the midlands and west of the country passing along its perimeter. The site lies between this road and the Liffey.

A record of a building at the site first appears on Roque's map of 1760. The house and associated of lands have remained in quasi rural isolation, but within easy reach of the City of Dublin ever since. There is a well located in the orchard area. This hasn't been dated, but it is possible that it predates the house.

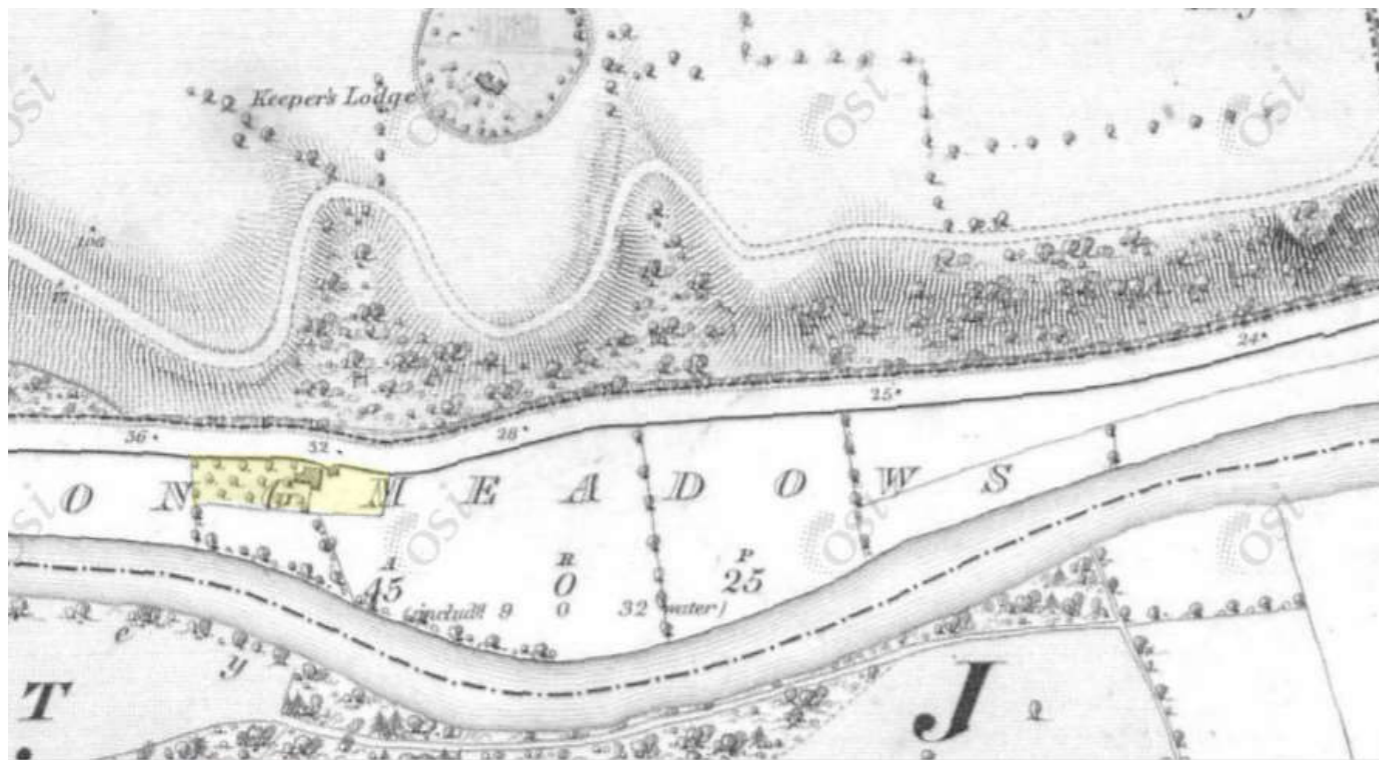


Fig. 3.01 Map showing historic site of Liffey Vale, corresponding to the current orchard and garden (OSI)

The lands associated with the house consist of a long strip of rising ground, varying in width between 25m to 35m and running parallel to the Chapelizod Road. It is separated from the road by a retaining wall, the site being up to 1.8m below the level of the adjacent road. While the elevation of this area of land may have protected it from flooding, it is further protected by a boundary ditch. Between the boundary ditch and the river lies level land; part of the original flood plain of the Liffey. This would have been either cultivated or grazed. Two further historic ditches cross this land connecting the boundary ditch to the river, but these are currently partially silted up and dry. The last record of this land flooding is 1954. The weirs on the river control its flow, keeping the level fairly consistent and ensuring that the highest penetration of tidal waters is Islandbridge.

The most recent modification of the site is the raised area at the eastern end, consisting of imported spoil, deposited there when the GAA playing fields in the adjacent OPW owned site were drained and levelled in the mid-20th century.

Proposed management for enhanced biodiversity

The approach to the management of the site at Cois Abhainn is informed and inspired by the principal of "rewilding", with that concept adapted to the particularity and potential of this site. Rewilding is a term that has come into frequent use, since the beginning of the 21st Century. However, not unlike the ubiquitous term sustainability, it can be used in different contexts, and may be misunderstood, or misplaced. Rewilding refers to the process of allowing formerly cultivated land to be left to its own devices, such that plants and animals, from the microscopic through to the larger trees and mammals recolonise it through "self-willed ecological processes".¹ Rewilding is a dynamic process; the outcomes are neither finite nor certain. The resulting form and environment of the site will continue to change over coming decades. In order to be an effective exemplar it is proposed that the observation and recording of these changes be part of the raison d'être of Cois Abhainn.

A widely read account of rewilding, in the English language, is "Wilding" by Isabella Tree, documenting the transformation of the Knepp Estate, formerly an intensive farm, in West Sussex, England. In contrast to Knepp, and further examples in the Highlands of Scotland, and the Netherlands, the site at Liffey Vale, at only 1.2 Hectares is diminutive in size, and urban in location, and this will have an impact on the way that nature responds to the site. The principals applied in areas of the site are inspired by the same approach, and the outcomes can be just as valuable and interesting, illustrating the potential of nature to regenerate in a small semi-urban site.

To a significant degree the site of Liffey Vale House, abandoned and derelict for decades, has been allowed to rewild naturally. This is particularly the case in the former flood plain area, less so in the orchard and garden areas. It is over 20 years since the house was occupied and its orchard and gardens tended, and longer since the land between the garden and the River Liffey was managed in any way. Most results of this "rewilding" have been good but some were bad (i.e. the invasive Japanese knotweed). If other plants had come in, the results would have been better for the biodiversity of the site. This project will replace invasive species with more environmentally appropriate plants and ensure appropriate management and monitoring of change.

¹ Tree, I. Wilding p.8 (2018)



Zone 1: Orchard

Zone 2: Former flood plain

Zone 3: Raised reclaimed land



Site Zones Map

Zone 1: Orchard & Garden: the historic site of Liffey Vale House

Zone 2: Riverside margin and formerly flooded fields and ditches

Zone 3: Reclaimed land: formed of fill deposited when sports pitches were made

Current condition of the site

Alder, ash and elder saplings have self-seeded and bramble thickets are spreading in the orchard and gardens. In the former water meadows, larger alders have established themselves along the ditches, and the mature willows have split, fallen and regrown. Trees are also colonising the raised area at the east end of the site. A number of species of bats have been recorded at the site, common bird species nest and frogs, are also resident. It is not however, only native “wild” species who are claiming space for themselves. The laurel, buddleia and snowberry have spread from their original planned locations within the garden, and two stands of Japanese knotweed have established themselves in the reclaimed part of the site. Himalayan Balsam, an invasive annual, is brought into the site by natural processes.

Proposal

In order to maximise the potential within the site, for the development of increased biodiversity, and for learning opportunities for both the public, and the Dublin City Council, it is proposed to not simply stand back and let nature take its course throughout the site. By a series of carefully considered interventions, and responses, to the contrasting existing conditions at the site we hope to facilitate the evolution of a variety of different habitats through the “self-willed” processes of nature.

In proposing management regimes for the site, and in order to inform the landscape design of the site we have identified three distinct zones:

1. The gardens and orchard, lying on the gently rising ground between the boundary ditch and the Chapelizod Road.
2. The level area, bounded and divided by historic ditches, that was formerly the flood plain of the River Liffey.
3. The raised area, at the eastern side of the site that is formed of spoil, dumped there when the GAA Sports Grounds were created.

These zones are shown on the Site Zones Map. (Fig. 3.02)

The proposal subdivides each of these zones into sub zones, with different levels of intervention and subsequent management regimes. These are identified on Management Zones Map. (Fig. 3.03).

Fig. 3.02 The three zones of the site of Liffey Vale House

1 Gardens and Orchard

Within the bounds of the historic garden and orchard it is proposed to take a composite approach, illustrating how wild species can flourish in a garden / cultivated area in combination with wildlife friendly ornamental planting. The management regime will be low maintenance and organic, and the buildings and paved areas and drainage designed to minimise negative environmental impacts. Existing garden plants of limited value for biodiversity i.e. cherry laurel, buddleia, snowberry and privet will be removed and replaced with more wildlife friendly species.

1A. Boundary Shrubbery / Hedge to Chapelizod Road

This area will demonstrate how an effective and attractive biodiverse barrier can be created using a mixture of native and non-native species. This hedge is required to provide a dense secure visual and sound barrier to the Chapelizod Road.

Proposal: Remove much of the vegetation, including bramble thickets. Retain the native trees, and prune to ensure safety adjacent to the road. Retain and prune the lilac. Retain the ground flora, including bluebells. Replant with a dense mixture of native and ornamental species.

1B. Front Lawn / Garden

This area will provide an attractive area for sitting, walking and small events. It will demonstrate wildlife friendly management of a garden space, while retaining the historic form and essence of the place.

Proposal: Retain the large ash, the large cherry and two of the poplars. Retain old established shaded grassland, enhanced with reseeding. Remove self-seeded cherries, alders and hawthorn. Some of these may be replanted elsewhere on the site. Create new terraces between the driveway and lawn with ornamental planting. The eastern end of this area will be regraded, and planted with trees as a continuation of zone 3A.

1C. House: setting, access and environs

The access to and the setting of the house has to provide universal access for visitors and a transition zone between the information, education and exhibition areas within the building, and the landscape around. The building and new landscape features are intended to be an exemplar of wildlife friendly construction and landscape design.

Proposal: Paving to be permeable, and use natural materials. Water will be collected from roofs of buildings. Ornamental planting selected to be non-invasive and pollinator friendly. Lawns planted with native grasses, and managed using a planned mowing regime to maximise species diversity. Self-seeded alders to be removed and replanted elsewhere on the site.

1D. Orchard

This historic area is to be retained as an orchard, and used to demonstrate managed meadow grassland as well as the benefits, for both human consumption and wildlife of fruit trees. The mature sycamore and beech trees at the west end demonstrate large trees in a garden / parkland setting.

Proposal: Fell poplars, retaining timber for seats and bridges. Prune and retain fruit trees, plant additional trees using Irish Heritage varieties. Retain sycamore and beech. Establish grassland paths but avoid suburbanising the area. Establish mowing regime that encourages wild flowers. Seed areas of wild flowers and

bulbs. Remove most of the self-seeded alder, elder, hawthorn and willow, but relocate them elsewhere, where possible. Planting along the wall: pear trees and wildlife friendly climbers. Enclose the well for safety, and retain as a habitat for frogs, and invertebrates.

1E. New Hedgerow

This historic hedgeline forms the boundary between the orchard and the former fields. It is largely formed of laurel which is of limited value to wildlife and creates dense shade. The new hedge will demonstrate the potential of a native hedge which is, in effect, a miniature woodland

Proposal: Remove laurel and other non-native species. Use a number of specimen trees such as rowan to provide structure, and plant a rich mix of flowering and fruiting native species, which will be cut and laid, over the ensuing years, to establish a dense and wildlife friendly hedge. A number of framed views will be left through into the wilderness, creating natural cover for observers.

2 The Wilderness

From the perspective of its current and potential ecological importance this is the most significant zone of the site. It is also the area where fewest interventions will be made prior to, and during, the rewilding process. The wilderness area is bounded by ditches and the river. From a visitor management perspective this is important in that the visitor must cross a bridge in order to enter this area, highlighting its autonomy and specialness.

2A. The Ditches

The ditch that forms the boundary with the orchard is currently full of water and this extends along a part of the central ditch, but the water does not, in normal circumstances meet the river. The historic diagonal ditch that forms the eastern boundary of this zone is silted up and dry. Wetland habitats are particularly biodiverse, so it proposed to reinstate and enhance the ditches to enhance the extent and variety of wetland habitats within the site.

Proposal: It is proposed to dig out, and rewet all the ditches. At normal river levels the ditches will not meet the river, but if that river level rises in time of very heavy rain the river water may penetrate the ditches. In a number of places the profile of the ditches will be altered to create zones of different depths of water in order to provide a wider variety of wetland habitats. Some wetland species such as kingcup, water mint and wild angelica (sourced from within the Liffey River catchment area) may be planted in order to decrease the opportunity for Himalayan Balsam to self-seed. If and when it does appear it will be removed prior to setting seed.

2B. The Wilderness West

This area has been “rewilding” for many years. It consists of abandoned wet grassland and is dominated by native species.

Proposal: This area to the west of the central ditch will be subject to the fewest interventions, and largely left to its own devices. Willows will be left to fall and regrow: the dead timber providing an important habitat. A few alders from the garden and orchard area may be relocated here. A circular path will lead into the area, so the public can observe the area, but most of the area will be the preserve of wildlife.



Fig. 3.03 Map showing the location of the management zones of the site

2C. The Wilderness East

This area lies between the ditches, and has a large group of semi-mature alders on the line of the diagonal ditch. The large, partly fallen, and regenerating willow is a particularly interesting feature of this area, illustrating the value of rotting wood, and the capacity of trees to regenerate.

Proposal: In this area a number of the self-seeded alders and willows from the garden will be relocated to create an alder dominated woodland. This area will be more accessible to the public with the circular route and a secondary grassed route.

2D. Riverbank margin

This area is particularly sensitive, as any intervention here could impact negatively on protected and high profile species i.e. salmonids. It is not proposed to modify it.

Proposal: The riverside path will be constructed such that the river margin remains undisturbed.

3 The Reclaimed Land

Although both environmentally, and historically the least significant area of the site, this zone is also important as an example of how nature colonises disturbed land (of which inevitably there is much in any city). It is also valuable, in that its raised elevation provides the opportunity to look out into the canopies of the trees and to look down onto the River. It is in this area that the stands of Japanese knotweed are located, and the first intervention will be the removal of this invasive species using approved methodologies.

3A. New woodland habitat: on steep banks

This zone is located on both existing steep banks and on the new banked areas arising from formation of the new universally accessible paths and parking area. It is an opportunity to demonstrate 'pioneer' woodland; trees that naturally colonise disturbed ground, paving the way for other species to follow.

Proposal: Remove non-native species, but leave some bramble, and other native shrubs. Take care to leave ivy leaved broomrape and bluebells. Plant Leinster sourced hazel (for coppicing), oak, spindle, birch and crab apple. Retain the semi-mature sycamores near to the river. Manage the woodland to enhance biodiversity: coppicing of the hazel illustrating regeneration and how bluebells and other woodland species respond to changes in available light through the woodland canopy.

3B. Event meadow: grassland habitat

The level area at the top of the banks will be used as an opportunity to demonstrate biodiverse grassland habitats which can thrive on disturbed ground. The open area may be used in the future for occasional events.

Proposal: Use appropriate wildflower and native grassland mix in any bare patches. Execute selective mowing to encourage wild flowers. Plant small copse (pocket forest) of native trees.

3C. Boundary Hedge and Trees

This area enhances with natural vegetation the fence that forms the boundary with the sports pitches.

Proposal: Plant the boundary fence to the east, with native hedge and specimen trees, similar to 1E.

3D. Viewing terraces

In this area overlooking the river it is intended to create an area where the public can sit and enjoy the outlook of the river and into the wilderness area of the site.

Proposal: The steep bank will be remodelled to form grassed terraces. Grass, native shrubs and small trees will be planted to provide stability to the slopes.

Opportunities for monitoring and community engagement

The project at Cois Abhann offers the opportunity to illustrate the potential and processes of managed rewilding, in the specific context of Dublin and the River Liffey. The project is a further chapter in the story of the site: the symbiosis between humans and non-human life forms over thousands of years. The new paths and infrastructure will enable the public to explore and enjoy the environment and learn about the natural world. Highlights will be the river and the abandoned fields, now a “wilderness”.

This project will bring in better plants and ensure appropriate management. The public is being invited in to see what happens when only limited maintenance is applied, and a site is taken over by a management body which ensures biodiversity enhancement is the objective. It will demonstrate good management for biodiversity to the people who visit the site who can learn about mowing regimes for grasslands which will enhance grassland biodiversity, the establishment of native hedgerows, habitats which will encourage bird nesting and the selection of pollinator friendly shrubs and herbs.

As the new, modified and existing woodlands and grasslands establish themselves, other species and life forms will follow: insects and birds, fungi, mosses, algae, microscopic life forms. Exactly what and when cannot be foretold, but this project offers the opportunity to observe, monitor and learn from this process. Bird diversity and numbers of nesting birds is an excellent indicator. Other forms of monitoring may also be undertaken; there is a wealth of opportunity for community engagement and dissemination of understanding through educational initiatives.



Fig. 3.04, 3.05 Cois Abhann offers multiple opportunities for monitoring, citizen science and community engagement

3.3 Design Proposal: The Building

The brief evolved in a number of ways over the process of developing the final design. The appropriate size for both the cafe and education room has been trialed and tested to make the best match between capacity and a building that is in keeping with the scale and character of the site and of the Protected Structure.

All principal spaces have been conceived with a view to durability and flexibility; acknowledging that exhibitions and use of spaces may evolve over time.

The final schedule of accommodation is as follows:-

Historic Building

• Staff Room	20.3 m ²
• Corridor	5.8 m ²
• Reception / Introduction	15.8 m ²
• Exhibition Room One	35.5 m ²
• Exhibition Room Two	18.2 m ²

Building Extension

• Circulation Areas (including interpretation)	78.0 m ²
• Staff WC	4.6 m ²
• Education Room	48.1 m ²
• Store	8.8 m ²
• Café Seating Area & Circulation	30.0 m ²
• Kitchen & Servery	17.3 m ²
• Kitchen Store	8.9 m ²
• Staff WC	4.4 m ²
• Universally accessible WC	4.7 m ²
• Unisex Cubicle	3.1 m ²
• Unisex Cubicle	3.1 m ²

External Covered Areas

• Veranda	24.3 m ²
• Café	16.4 m ²
• Veranda circulation to WCs	20.3 m ²



Fig. 3.06 The proposed new buildings follow the boundary wall, shielding the site from the road, and preserving the relationship between the house and its historic setting



Fig. 3.13 Section DD'



Fig. 3.14 Section AA'

The eastern gable to the extension building is set back from the eastern elevation of the 19th wing, so this important symmetrical entrance front can still be read in its historic form.

A single story “hinge” building encloses the final ramped link between the lowest two levels within the historic building. This flat roofed building slips between the main roof of the new building and walls of the historic house, ensuring the form of the house can still be easily read.

(See Section EE).

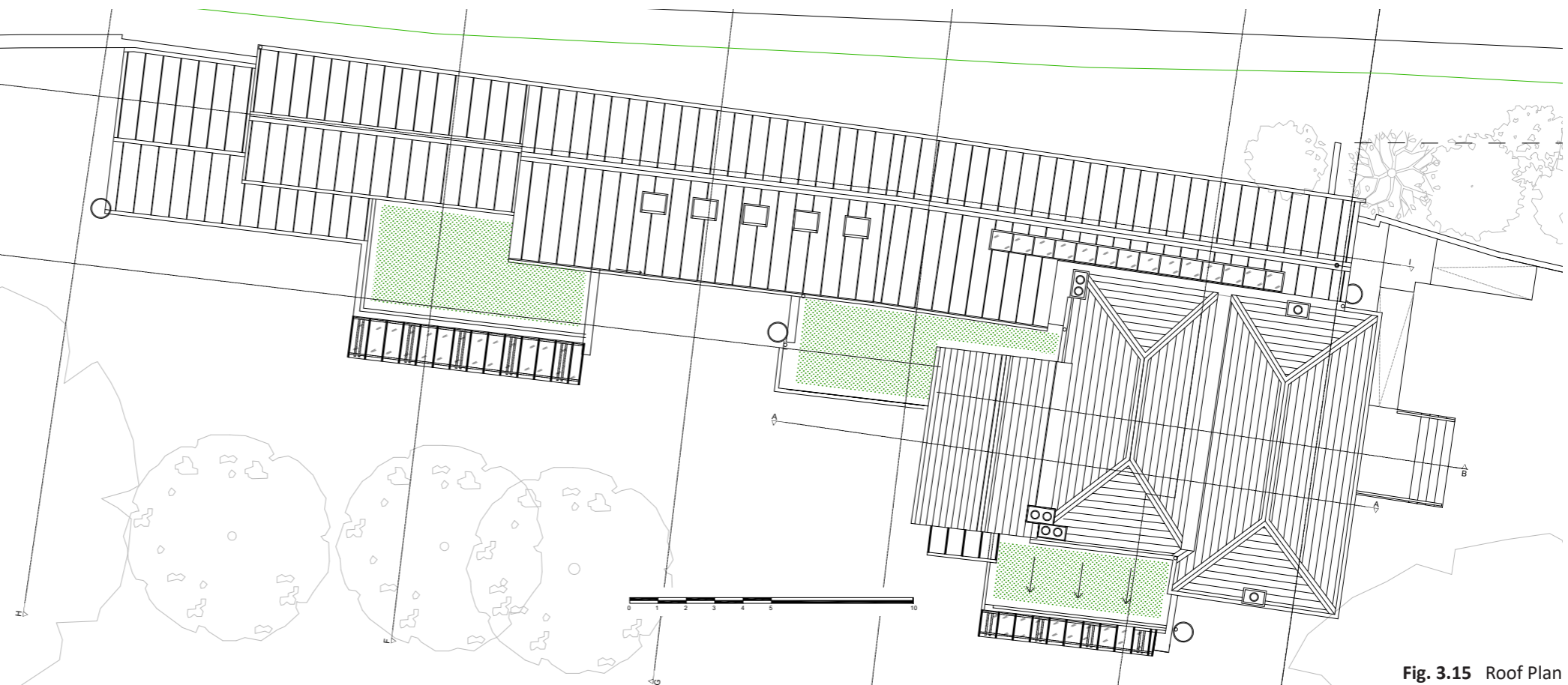


Fig. 3.15 Roof Plan

Interiors of the Protected Structure

The entire volume of each of the central and west wings will be used for the exhibition, with the traces of the former domestic rooms; fireplaces, skirtings and joist sockets retained in-situ, so the form of the original house can be understood. Upper floor ceilings will be reinstated in their original location. In the east wing the two reception rooms will be reinstated in their historic form, with the southern room used by staff, and the northern room becoming the reception / introduction to the exhibition.

Where the new building, enclosing the main ramp, runs between the north wall of the house and the boundary wall, the new roof is designed to be supported centrally on new steel columns, minimising the impact on both the calp wall to the north, and the wall structure of the house. The valley gutter is constructed below the historic eaves level, retaining the integrity of the historic roof form. Roof lights give the character of an external space, and emphasise the separate nature of the calpstone boundary wall and house.

Boundary Wall

The boundary wall that encloses the western and northern sides of the historic orchard and gardens includes both modern and historic sections, some in good condition, others with cracks and even holes penetrating the rubble stonework. Minimum repairs will be made to make the wall safe and secure. In the future a full programme of repointing is recommended.

New vehicular and pedestrian gates have been designed for the principal access to the site from the Chapelizod Road, which has been moved eastward from the historic gate piers to allow for universal access for pedestrians, and access for emergency vehicles. A new fence to similar design is located here, and the boundary hedge replanted and densified to form an attractive boundary protecting the site from the road.

Refer **Appendix B** Structural & Civil Engineering Services Report, Chapter 8

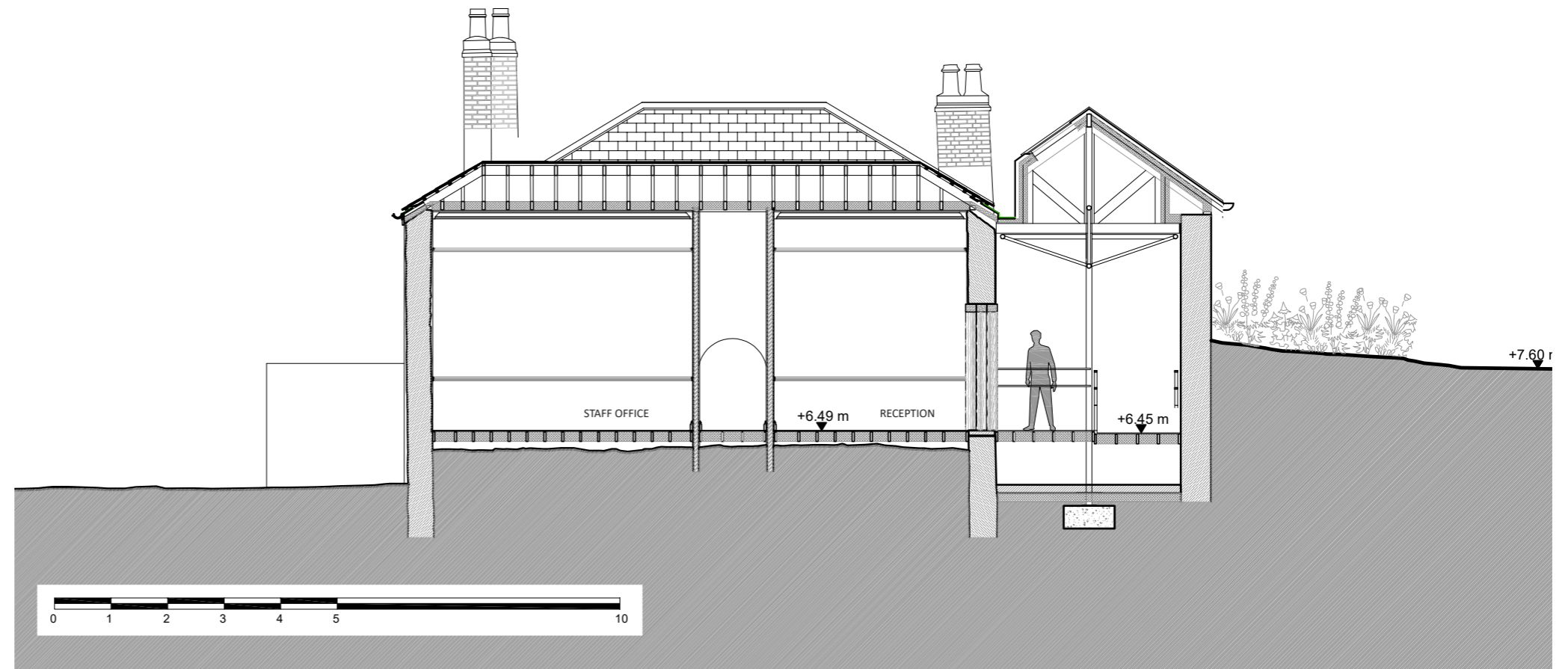


Fig. 3.16 Section CC

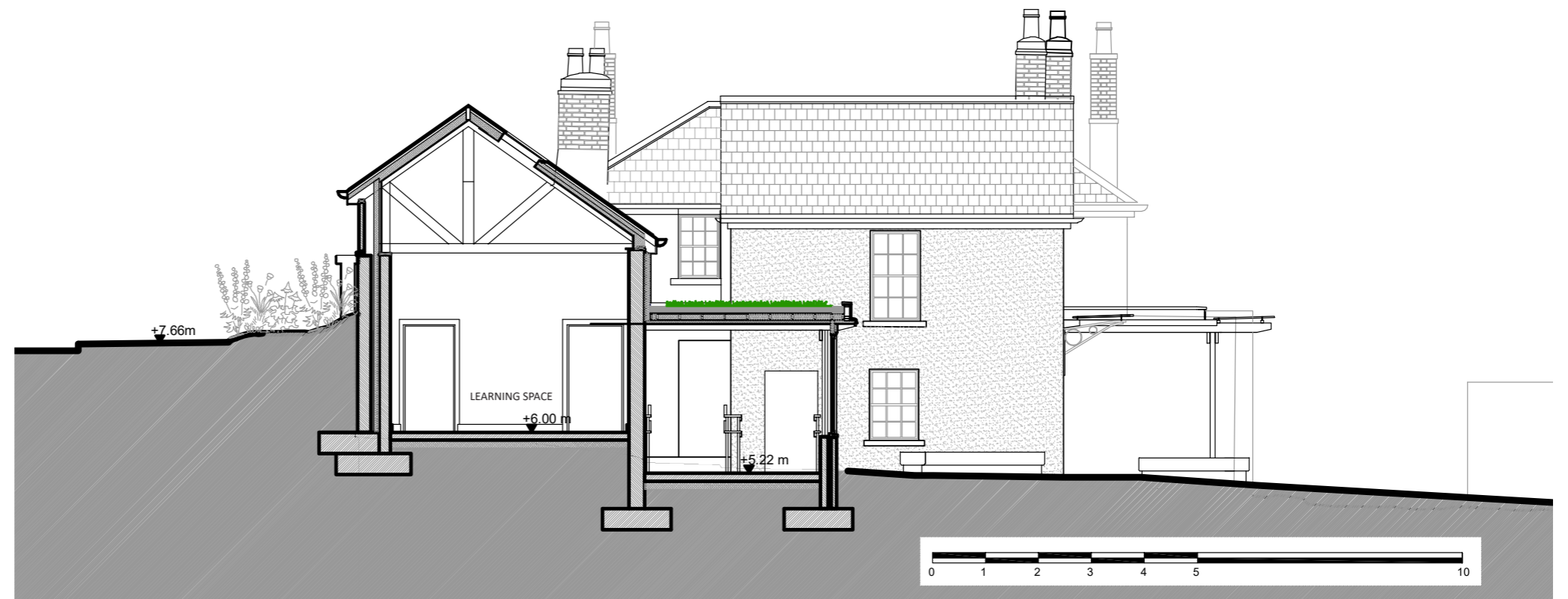


Fig. 3.17 Section EE

Sustainability

The retention and reuse of the existing building is inherently sustainable and throughout both the adaptation of the existing building, and the construction of the extension, the design prioritises the use of natural materials and those with low embedded energy, working in harmony with the materials of the historic structure, to reduce the energy required to run and heat the building.

Roofs are insulated with natural hemp insulation. Where the historic masonry walls are being replastered, cement based render is being removed and replaced by an insulating lime render which improves the energy performance, while reinstating the historic appearance of the building, and being compatible with the traditional construction.

The design of the new building minimises quantities of concrete required and the need for extensive excavation and removal of ground material, through the use of pile foundations rather than conventional strip foundations, and through designing in harmony with the natural contours of the site.

It is envisaged that the building will provide an exemplar of good practice for the sustainable reuse, upgrading and extension of a historic building of this scale and typology.

Building Structure: Historic Building

The intention is to work with the existing materiality of the structure, in the repair and adaptation of the historic building, avoiding the introduction of modern materials as far as possible.

The timber floor and partition structures in the 19th century eastern wing of the house will be carefully repaired, retaining as much original fabric as possible. Where the lost upper floor is not being reinstated in the 18th century central wing, timber beams will be inserted to act as ties and indicate the location of the lost stair hall partition walls. New timber roof structures are designed to reflect as far as possible the form, pitch and location of the original, which was largely lost in the fire.

Where there are cracks in the rubble masonry these will be stitched together with stainless steel bars, bedded in lime mortar. New openings in masonry walls will be formed where required and the masonry above supported using timber lintels. The removal of the reinforced concrete attached structures, on the south side of the historic building will require great care to avoid damage to the rubble masonry structure to which it has been attached.

The Engineer's approach to designing the structure of the historic building is provided in **Appendix B**, Structural & Civil Engineer's Report, part 3.

Building Structure: New Building

In designing the extension to the building the philosophy has been to minimise potential disturbance to the structure of the historic building and boundary wall and to minimise the quantity of concrete used and the requirement to excavate and remove ground material. The foundations have therefore been designed as pile foundations, with a suspended ground floor slab.

The Engineer's approach to designing the structure of the new building is provided in **Appendix B**, Structural & Civil Engineer's Report, part 4.

Building Services and Energy Efficiency

Building services have been designed to minimise the impact on the historic structure, and the need for new and intrusive service routes. For this reason all sanitary and kitchen services are located outside the footprint of the historic building.

The heat for the internal spaces is provided by an air source heat pump, designed and located to minimise acoustic impacts and visual impact on the historic building and its setting.

Electricity supply for the building is supplemented by photovoltaic panels located on the south facing slope of the roof to the extension. Whereas the new building has been designed to comply with Building Regulations, the historic building has had its thermal performance upgraded as far as possible, compatible with the materiality and presentation of the historic structure. The thermal mass of the solid masonry will store heat and moderate changes in temperature within the building. As the site is primarily an outdoor one, with visitors arriving dressed for an outdoor experience, the exhibition spaces providing do not require heating to the same level as the sedentary spaces in the staff office, lecture room or cafe.

Details of building services and energy performance are provided in **Appendix D**, Building Services Engineers' Report.

Universal Access

The provision of universal access is inherent to the design, with the ramped routes through the building forming part of the interpretative story. An induction loop will be installed to serve the entire building, and the Interpretative Strategy has been developed to be accessible to those whose aural or visual senses or mobility may be restricted. (See also **Part 3.5**, and **Appendix O**).

Fire Safety

The building has been designed to comply with all fire safety regulations and ensure the safety of building users in the event of fire or other emergency. Being a single storey universally accessible building, albeit at a number of floor levels there is no vertical means of escape within the building. There is however a disabled refuge provided at the top of the front entrance steps, as the access ramp in this location passes close to windows at the front of the building. The design of the site allows for access by and turning of emergency vehicles, adjacent to the building.

Full details of fire safety design are provided in **Appendix C**.

3.4 Design Proposal: The Site

A detailed account of the landscape design is given Appendix E

The site has been designed with accessibility, and flexibility, in mind, with many alternative routes around and through the site, encouraging the curious visitor to wander and explore rather than follow a single fixed route.

Cois Abhann will be a place on the way to elsewhere, as well as a destination in its own right.

There is a relaxed and informal relationship to the historic building, and we have worked, as far as possible, with the natural levels of the land, avoiding disturbance of the land and soil structure in large areas of the site. The area of the site where most disturbance of the ground is necessary, is located in the least sensitive area: in the reclaimed land where there will be gentle sloping paths and the viewing terraces overlooking the river. Excavation and intervention is also required here in order to dispose of the Japanese knotweed.

Access from Liffey Valley Park

The Department of Defence site, lying between the site of Liffey Vale and the Liffey Valley Park is of key importance in relation to access to the site. Following an initial visit by design team members in December 2019, outline proposals were made on the basis of which negotiations commenced regarding the transfer of lands to Dublin City Council to enable a direct pedestrian connection between Liffey Valley Park and the site of Liffey Vale.



Fig. 3.16 Site Plan

Department of Defence Site

The strip of steeply sloping land, along the Chapelizod Road is to be transferred from the Department of Defence to Dublin City Council. This land will in effect become an extension of the Liffey Valley Park. A path, following the contours, parallel to the Chapelizod Road, links the existing path in Liffey Valley Park to the reopened doorway in the western boundary wall of the orchard.

Two new universally accessible parking spaces and a new bus pull-in layby has been created to facilitate bus and coach groups visiting the site. Two new pedestrian links from the footpath on the Chapelizod Road, one stepped, and one gently sloping, connect the layby into the new path linking Cois Abhann and Liffey Valley Park. These will replace the current exit from the park. A dense low hedge will be planted to protect the edge of the Chapelizod Road footpath, as the slope will be made steeper by the creation of the layby. The new length of park will be planted with meadow grass and wild flowers, and native trees, and mini wet lands created at the bottom of the slop to deal with run-off.

A new, more gently inclined access route is created for the Department of Defence, with security bollard provision to prevent unauthorised access down this driveway.

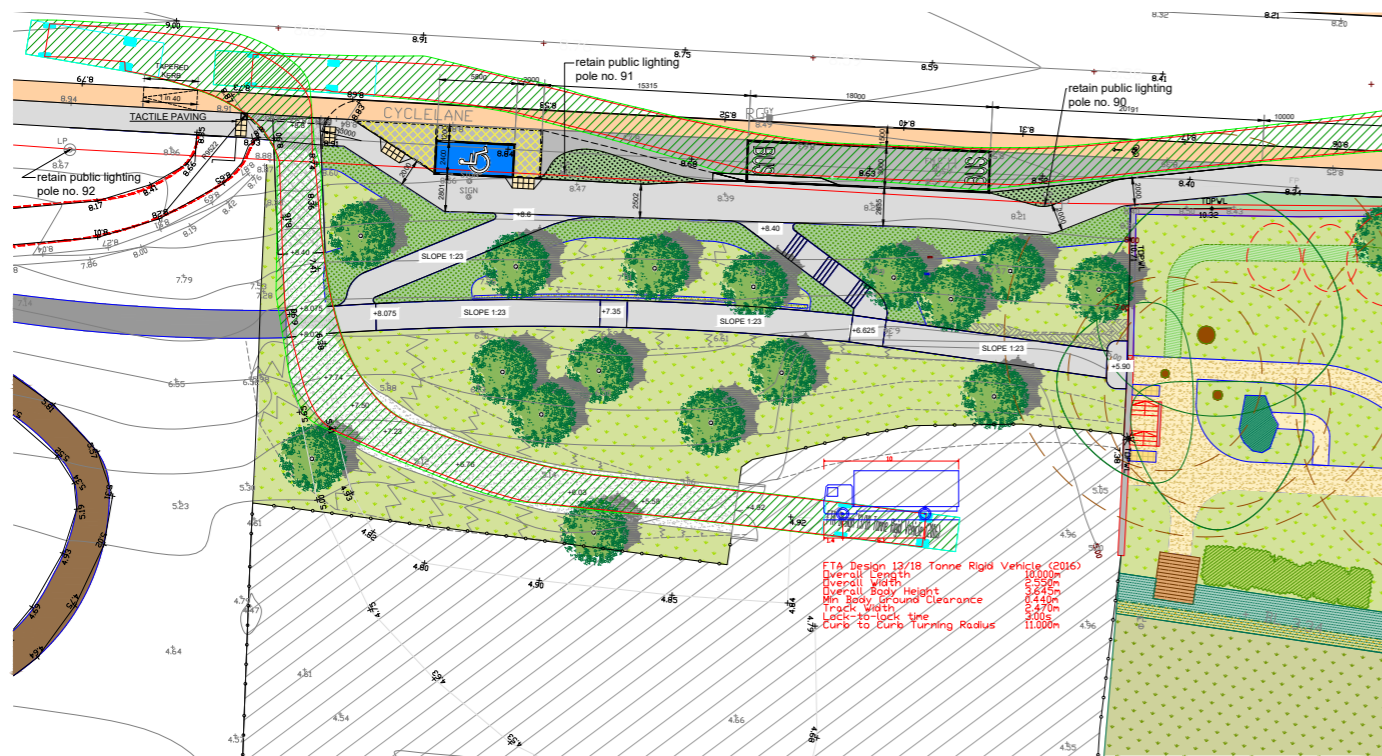


Fig. 3.17 Plan of extension to Liffey Valley Park



Fig. 3.18 Aerial view of Cois Abhann, in context

Site Access Design & Parking

The site is well served by public transport and is close to the Phoenix Park. It is hoped it will become, in time, a welcome stopping off point for pedestrians using the Liffey walkway on the south side of the river, facilitated by the proposed new bridges at the War Memorial Gardens and Longmeadows. It is not proposed to provide visitor car parking. There will be two accessible parking spaces, within the site, and limited parking spaces for occasional use by staff. Both cafe and educational facilities are small in scale. Deliveries will be facilitated as required, on a managed basis, vehicle size being limited and turning facilitated adjacent to the house. The proposed new bus pull-in to the west will facilitate group access by bus. Additional accessible car parking space will be provided here.

Existing access to the site is via a gate onto the R109 at the north-east corner of the site. Vehicular access to the site will, be strictly limited to emergency vehicles, occasional Dublin City Council staff, and to the accessible parking. It is proposed to relocate the existing site entrance a short distance to the east and to widen it slightly to allow emergency vehicle access, and improve sight lines. The proposed entrance shall incorporate 3m curve radii, dropped pedestrian crossing and dropped cycle track. This will facilitate universal pedestrian access between the footpath and the house. See Structural Engineers' report and drawings.

It is hoped that the Phoenix Park gate immediately to the north across the R109 will be reopened to the public in the near future. Combined with a new pedestrian crossing this would provide a pedestrian connection to the Phoenix Park. This would create a link via Liffey Vale and the upper part of the Department of Defence lands to the adjoining Liffey Valley Park, and make possible a number of circular walks in the area.

Refer to Structural & Civil Engineering Services Report, **Appendix B** Chapter 7 and Structural & Civil Engineers' Drawing **19097-103-P2** Proposed Entrances, **Appendix S** Transport Statement, **Appendix T** Mobility Management Plan

Below Ground Site Utilities

It is proposed to connect to the existing watermain that runs below the adjacent Chapelizod Road. Irish water have confirmed feasibility of the proposed connection.

Refer to Structural & Civil Engineering Services Report, **Appendix B** Chapter 6 & Appendix C, Irish Water confirmation of feasibility, and Structural & Civil Engineers' Drawing **19097-101-P2** Existing Utilities.

Surface Water Drainage & Rainwater Harvesting

There is an existing 600mm diameter land drain originating from the Phoenix Park that runs below the site to the west of the historic building. It discharges into the drainage ditch (swale) that follows the southern boundary of the historic orchard and garden. Investigation has revealed this drain to be almost completely blocked. As it lies below the location of the proposed extension to the building it is proposed to reroute this drain to the east of the house, discharging, as existing provision, into the swale.

Within the the site the majority of proposed pathways are to be made of absorbant surfaces, with impermeable paving only at the entrance drive. Stormwater runoff will be managed using a number of SUDS measures including shallow filter drains (French drains) and swales. Stormwater from the roofs will be collected in water butts for use in the garden, with overflow into the filter drains. See architects' drawing 539-P-12, 13, Landscape Architects' drawings LLIF018-100, 101 and Civil Engineers' drawings 19097 - 102.

Surface water run-off from the new paths at the former Department of Defence lands will be collected in shallow filter drains discharging to small new wetland areas at the bottom of the sloped area.

Refer to Structural & Civil Engineering Services Report, **Appendix B** Chapter 5 and Structural & Civil Engineers' Drawing **19097-102-P2** Drainage Scheme.

Flood Risk

The site being beside the river Liffey has been assessed for flood risk. All floor levels within the building are located above both the 1 in 200 year tidal flood level and the 1 in 100 year fluvial flood level. However, the two lowest floor levels within the historic house are slightly below the highest ever recorded flood level upstream. Therefore the floor finishes in the western and central wings of the historic building have been designed using resilient surfaces. The historic tiled floor in the west wing, which it is hoped it will be possible to retain, predates the 1954 floods. All floors in the newbuild extension and the east wing are higher than recorded and potential flood levels.

Refer Structural & Civil Engineering Services Report, **Appendix B** Chapter 2 & Site Specific Flood Risk Assessment Appendix D.

Foul Drainage

A 300mm foul sewer runs through the site to the south of the boundary of the orchard and garden. There is an existing connection to this from the house, but this is damaged. It is proposed to replace these, and lay a new 100mm sewerage pipe to the south and east of the building carrying all waste from the public toilets and the building, and connecting to the 300mm foul drain at the existing connection. Irish water have confirmed feasibility of the proposed connection.

Refer to Structural & Civil Engineering Services Report, **Appendix B** Chapter 6 & Appendix C, Irish Water confirmation of feasibility, and Structural & Civil Engineers' Drawing **19097-102-P2** Drainage Scheme.

Environmental Impact

The site and design proposal have been assessed, and it is not envisaged that there will be any significant negative environmental impacts arising from the proposal.

Refer to EIA and AA Screening Reports in **Appendix L**.

Invasive Species

Both Himalayan balsam and Japanese knotweed are present on the site. Himalayan balsam can be managed by annually monitoring and pulling prior to the plant setting seed, but there is always risk of new seed arriving down the river, so this is an on-going management requirement. It is proposed to eradicate the Japanese knotweed using the deep burial method; excavating the clumps of knotweed and burying them deep within the area of raised reclaimed land at the east end of the site.

See Invasive Species Report **Appendix H**, and Invasive Species Proposal **Appendix I**.

Archaeology

The site has been assessed by an archaeologist. The report is included in **Appendix K**.

3.5 Development of the Interpretative Approach

Interpretative concepts for Cois Abhann were developed in parallel with the development of the brief, and the design and in consultation with the other members of the Design Team and representatives of Dublin City Council.

Tandem Ltd., the interpretative designers commenced by producing an Audience Engagement Strategy, (see **Appendix N**). This in turn was informed by the research undertaken by Tourism Development International for the Situation Analysis document, **Appendix M**.

The interpretative strategy promotes Cois Abhann as the first step in a renewed understanding of our local environment and our place within it. It sees the potential of the place to be a hub for best practice and to develop as a project that will instil pride in the local community.

As the visitor arrives and explores Cois Abhann, a world they did not realise existed, given the hidden nature of the site, will slowly unfold as they explore the outdoor zones and diverse habitats. A visit to the exhibition in the centre can supplement and support the main, outdoor experience. When a visitor leaves Cois Abhann, interpretation should fill them with a new understanding about how the locality around them works from the microscopic to the mega. It will be a unique experience for those who happen upon it during a walk, or visitors who are intentionally drawn to it to investigate what the site has to offer.

Fig. 3.19 illustrates the interpretative themes and topics to be explored at the site.

Appendix O presents the detailed Interpretative Strategy for the site and the building.

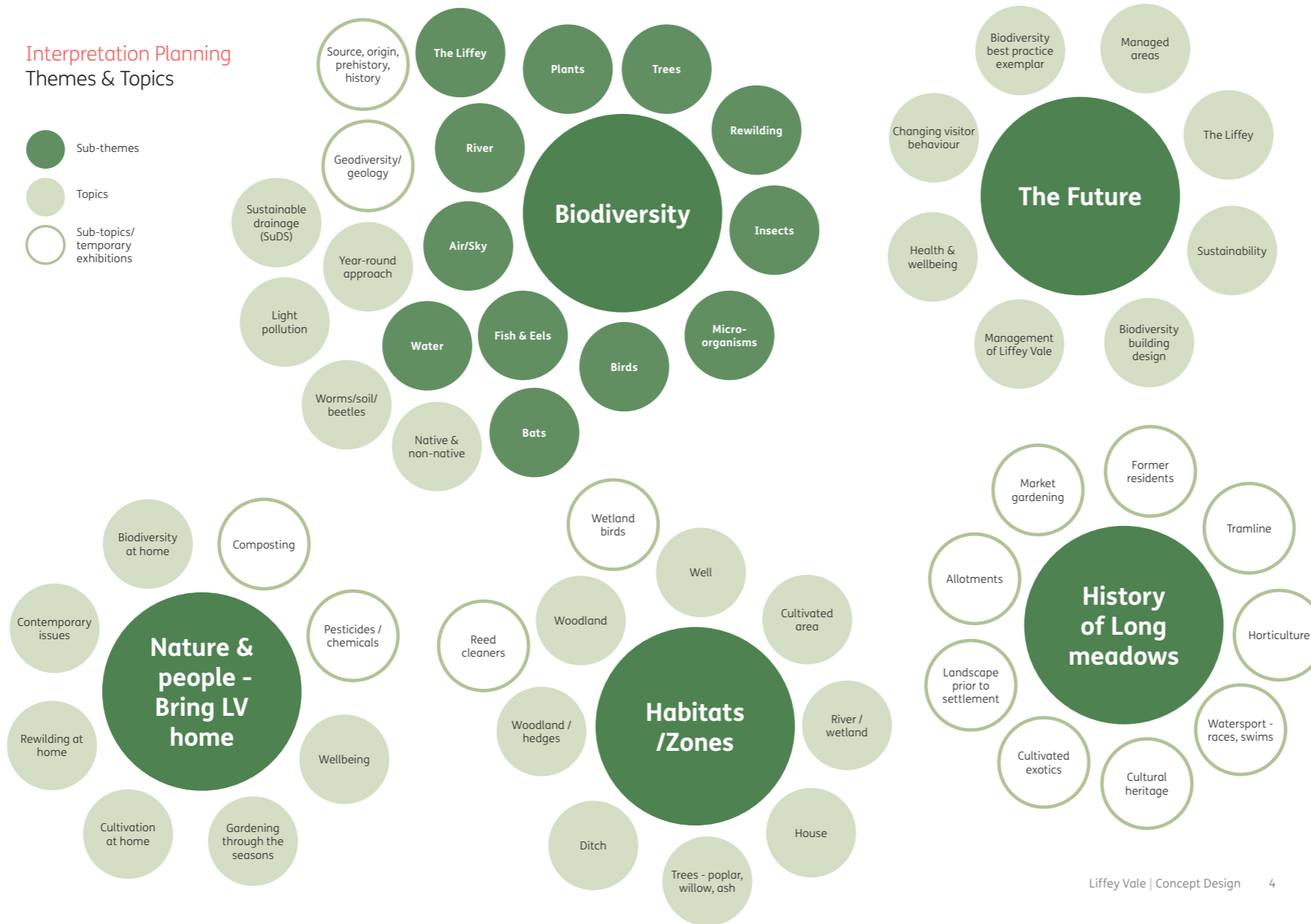


Fig.3.19 Interpretative Topics

