

Landscape Design Report

Proposed Strategic Housing Development 'Kenelm', Deer Park, Howth Road, Co. Dublin

Applicant: GLL PRS Holdco



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1.0 Overview

1.1 Site Description

The site sits on the southern side of Howth Road, west of the intersection between Howth Road and the entrance driveway to Howth castle and Deer Park Hotel and Golf Club. The site offers views towards the profile of Ireland's Eye and the Port of Howth.

The subject site, which has a stated overall area of c. 1.7483 hectares is located on the southern side of the Howth Road and to west of the entrance to Howth Castle. The site is bound to the north by a stone demesne wall and to the east by a mixture of stone and concrete walls with significant tree stands. The southern edge of the site adjoins Deer Park Golf Club and there are no defining physical boundaries. The lands to the south of the site are occupied with Howth Castle Demesne which is a protected structure. The lands to the west of the site are in residential use while the lands to the east of the entrance of Howth Castle comprise of St. Marys Church of Ireland (a protected structure). The subject site opposes the 'Techrete' site and is c. 500m from the village. The area along Howth Road can be characterised as being established residential. Howth Village itself is a fishing/tourist village and adjoining the urban core are three piers with the west pier being the 'working' pier and provides the majority of the marine related industry.

The site is bound by a stone wall to the north comprised of local stone (possibly constructed in two stages, second stage to increase height). The wall segregates the site from Howth Road. See Architectural Heritage Assessment included with this application for further details

Woodland belts lie to the east of the site associated with the greater demesne. There is also an additional belt of woodland to the south of the site, more recently planted (approximately 20 years old) traversing the lands in a east west direction associated with the development of the golf-course. A screening belt of trees is located to south that mark the transition to Deer Park Golf Club.

The proposed site offers an opportunity to create a high quality residential scheme within walking distance of local amenities.

1.2 Proposed Development

The design rationale is to create and deliver a high quality, sustainable, strategic housing development which respects its setting and maximises the site's natural attributes while achieving maximum efficiency of existing infrastructure. The Proposed Site Layout is illustrated on Drawing No. 1101 contained within the architectural suite of drawings.

The development will consist of;

- 1. 162 no. residential units distributed across 3 no. blocks (A, B & C) ranging in height from 5-6 storeys, with a cumulative gross floor area (GFA) of 13,337.10 sq.m comprising;
 - a. 29 no. 1-bedroom units, 17.9%
 - b. 104 no. 2-bedroom units and 64.2%
 - c. 29 no. 3-bedroom units 17.9%
- 2. 3 no. resident services and amenity rooms (1 no. in each block A-C) to accommodate coworking space, a community room and a meeting room (combined GFA 108 sq.m).
- 3. 132 no. car parking spaces at basement level (underlying Blocks A & B) including 6 no. accessible spaces, 13 no. electric vehicle spaces and 4 no. car sharing spaces;
- 4. 325 no. residents bicycle parking spaces (long-stay) at basement level, and 30 no. visitor bicycle parking spaces (short-stay) at surface level;
- 5. communal amenity space in the form of courtyards and roof gardens (combined 2,192 sq.m)
- 6. public open space of 1,161 sq.m including a botanic garden and pocket park;
- 7. a single storey ESB sub-station and switch room (45.5 sq.m);

- 8. demolition of 2 no. sections of the existing demesne northern boundary wall to provide, a primary access (vehicular/pedestrian/cyclist) to the northwest and a separate pedestrian/cyclist access at the centre;
- 9. restoration and refurbishment of the remaining extant northern and eastern demesne boundary wall;
- 10. change of use and regrading of part of the Deer Park Golf Course from active recreation use to passive amenity parkland and planting of a woodland belt on the southern boundary;
- 11. undergrounding of existing ESB overhead lines, and, relocation of the existing gas main; and,
- all ancillary site development works including waste storage and plant rooms at basement level, drainage, landscaping/boundary treatment and lighting.

1.3 Record of Pre-Planning Meetings

There have been a number of pre-planning meetings in relation to the subject development. The most recent pre-planning consultation meeting under Section 247 of the Planning and Development Act 2000 as amended, was held between the applicant and Fingal County Council in Fingal County Council, Blanchardstown, Dublin 15 on the 27th january 2020.

A summary of issued raised by Parks and Green Infrastucture Division at the pre-planning meetings held are set out below.

Parks and Green Infrastructure Department Meeting 1

FCC: The historic landscape context make the site different to other sites in Howth. Tree survey undertaken after proposal and this shows in the design.

Response:

A tree survey was undertaken prior to design and a subsequently more detailed survey including on site RPA assessment of trees to the west of the site. Care has been taken to ensure the retention of the majority of the trees in this area and building C has been set back further again to facilitate the majority of self-seeded trees that have reached maturity within site boundary on the eastern side for retention as part of proposed design. A mitigation and replanting strategy is also proposed for the section of shelterbelt to be removed to the south of the scheme. Additional tree planting is proposed to reinforce existing remnants of hedgerow south of the substation to the west of the site. Please refer to Arborists Report and Layouts submitted with this application.

FCC: Tree belt in southern boundary, likely removal?

Response:

A portion of this belt will need to be removed due to level requirements on site. We propose to relocate lifted trees where technically feasible from this stand. The new proposal includes new planting to replace the necessary removal of the portion of young shelter belt planted in association with the golf course, thus re-establishing the green infra-structure link. The proposal includes for the replanting of same trees where possible as well as an extensive replanting strategy of a wider range of native species, both hedgerow and tree species. The end result will be a reorientation of this section and connection eastern boundary. This will form enhanced linage in terms of ecology to the north, west and eastern green infrastructure links. The client, GLL PRS Holdco Limited has agreed to a pre- planting strategy to start this process as soon as possible.

FCC: Block C considered a show stopper for Parks and Green Infrastructure Department, context of these trees being retained unlikely.

Response:

The tree survey was undertaken prior to design and a subsequent more detailed survey and on site RPA assessment of trees under taken to the east of the site. Care has been taken to ensure the retention of the majority of the trees in this area and the foorprint Building C has been set back further again to facilitate the



1.3 Record of Pre-Planning Meetings (Continued)

majority of self-seeded trees that have reached maturity within the site boundary on the eastern side for retention as part of proposed scheme. There is no basement associated with building C. Please refer to Arborists Report and Layouts submitted with this application.

FCC: Raises issues regarding proximity of blocks to trees and lack of sunlight and occupier nuisance. Landscape Architect advised that an evolving tree retention policy would be submitted.

Response:

Following the tree survey, the project arborist conducted an on site inverstigation of RPAs relating to trees at this side of the development site. Building C has been set back as a result of the findings of the on site investigations. Please refer to reports and layouts from John Morris which form part of this submission.

FCC: No public open space, public open space would be required.

Response:

The public open space design has been revised to further improve the quality of the scheme. Revised proposals Include:

- 1. Retention and incorporation of historic features such as the wall into the scheme.
- 2. Proposed planting of large specimen trees to the fore of the scheme.
- 3. Increased pedestrian links to the Howth Road and local walking routes.
- 4. Increased setbacks of building from the eastern boundary respecting Howth Castle avenue and associated tree stands.
- 5. Widening of public open space and increased lawn and planting areas.

FCC: Noise nuisance in courtyards where play space proposed

Response:

Each fitness play area within the communal areas is placed to the centre of the communal space and is screened locally by large raised planters. This is addition to a privacy planting buffer, raised planter and walls minimum width 1.1m which form the outside edge to the private terraces at ground level.

FCC: Locations of substations, allow for cabling? What would be external boundary treatment

Response:

Additional tree planting is proposed to reinforce existing remnants of hedgerow south of the substation to the west of the site. To the north of the substation we propose a min. hgt. 1.6m mature beech hedgerow to the boundary combined with mature specimen tree planting of Gleditsia triacanthos planted at large sizes min. 5m high.



1.3 Record of Pre-Planning Meetings (Continued) Tri-partite meeting with ABP

FCC Opinion to ABP
The proposed development does not
meet the requirements of Objective
DMS57, DMS57A and Objective DMS57B of
the Fingal Development Plan which seek to
provide a minimum of 10% of a proposed
development site area to be designated as
public open space. There are no open spaces
within the red line of the application site that
meet this requirement. A revised site layout
plan in this regard is required and the
remaining open space provision can be
calculated.

In addressing the above, cognisance of the requirements of Objective DMS67 should be considered to ensure open space provision is suitably proportioned and inappropriate narrow tracts are not provided.

Additional details are required to be submitted in relation to the provision of suitable play areas which should include provision of 100m2 of play provision for children up to the age of six and separately 400m2 of play provision on a public open space for older children and young teenager's . A combination of natural and formal play will be accepted.

A revised landscaping plan is required which would ensure that the proposed development responds to the context of the site and as a consequence respects and reinforces the distinctiveness and sense of place of the High Amenity areas, in accordance with Objective DMS52 of the Fingal Development Plan.

Response

As part of the design with consideration of context and ease of accessibility to the public a high quality open space 1161sqm2 has been provided to the fore of the scheme to ensure maximum permeability within and without the scheme. This area is publically accessible off the Howth Road via 2no pedestrian gates to the scheme which are inset into the historic wall which bounds the north of the project. Included within the space are open grass lawn, a botanical garden and a play space. This is provided in addition to shrub planting area, large specimen tree planting and numerous seating benches for those wishing to take respite from the busy Howth Road.

A children's play area and space for informal kick-about for older children is accommodated in the proposed pocket park. This is supplemented with more casual children's play spaces in the proposed communal amenity areas. The focus of the proposed design is on providing high quality and safe play areas that benefit from high levels of passive surveillance. The quantity of play space provided has regard to the significant public play areas permitted in the Claremont scheme, opposite the proposed development. That scheme includes in the 'Western Parkland', substantial play areas with dedicated areas for different age groups from toddlers through to teenager. It is submitted that having regard to the location of the 'Western Parkland' adjacent to the coast, it is likely that this would be the more heavily use area locally for children's play. The central thrust of the open space in this proposed development is to offer the public a different experience that is primarily centred on enjoyment of the site's ability to host a botanic

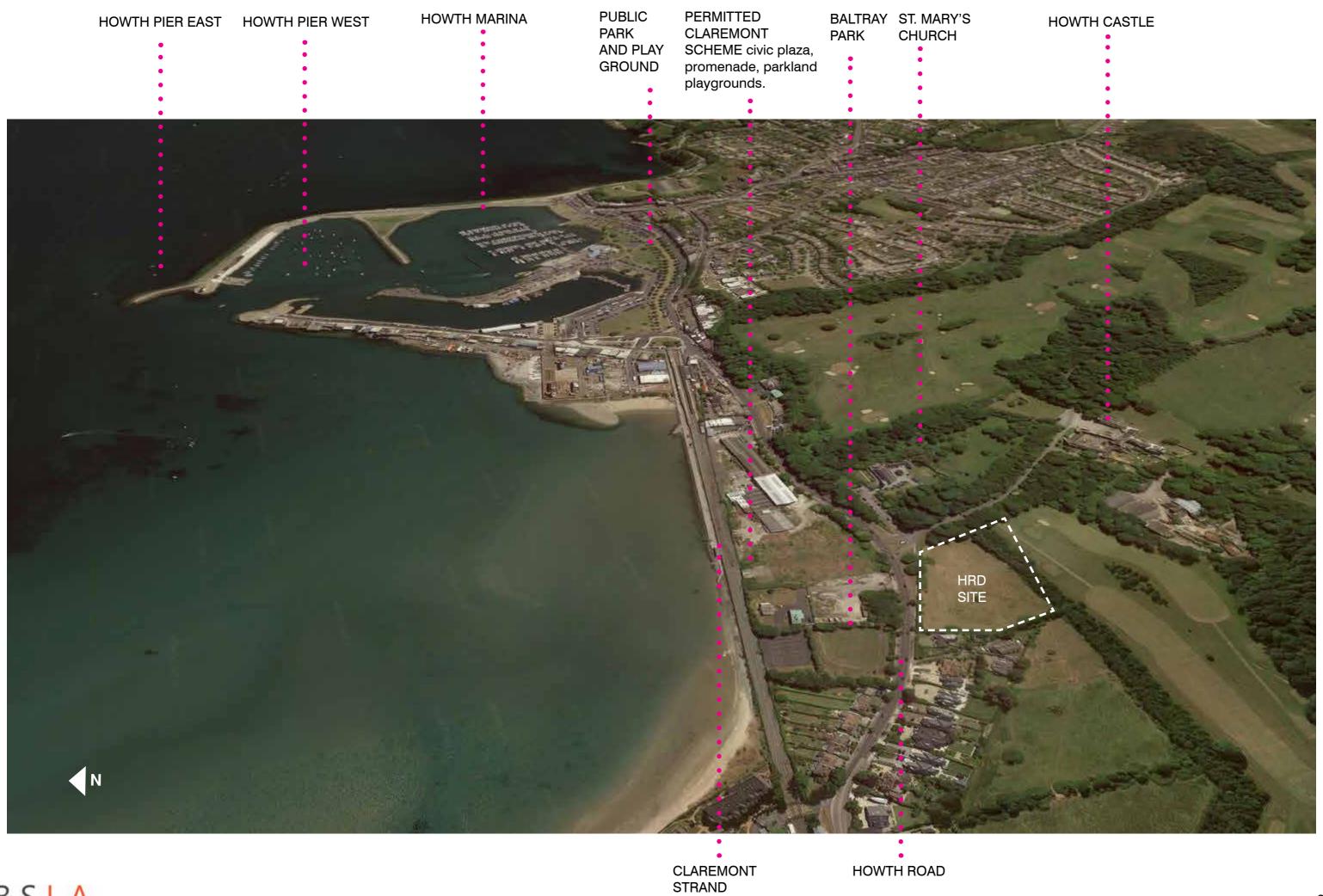
The public open space design has been revised to further improve the quality of the scheme. Revised proposals

garden.

 Retention of trees to the eastern boundary. An onsite investigation of root spread of existing trees by arborist not within scheme but associated with Howth Castle confirmed proposals would have no impact. Majority of selfseeded tress that have reached

	Beanana
FCC Opinion to ABP	Response
The proposed layout will require the removal of a main arboricultural feature of the site, the ecological function and value of this piece of green infrastructure has not been appropriately considered. The removal of this hedgerow would be contrary to a number of Development Plan policies and objectives including the Principles of Development for Highly Sensitive Landscapes as set out in Chapter 9 of the Plan, Objective NH27 in addition to the requirements set out on Green Infrastructure Sheet No. 14, states: 'Field and roadside hedgerows should be retained. Proposals necessitating the removal of extensive field and roadside hedgerows should not be permitted'.	maturity within site boundary on eastern side are also retained as part of proposed scheme. Retention and incorporation of historic features such as the wall into the scheme. Proposed planting of large specimen trees to the fore of the scheme. Pedestrian link to the Howth Road and local walking routes. Increased setbacks of buildings from the eastern boundary respecting Howth Castle Avenue and associated tree stands. A Botanic Garden space linking into the historic traditions of Howth Castle. Increased planting to reinforce retained tree groups on site, increasing diversity and age profile and therefore longevity of these elements. Inclusion of a play area close to pedestrian entrance from Howth Road. Increased planting to replace necessary removal of the portion of young shelter belt planted in association with golf course re-establishing green infrastructure link The stand in question is a section of a shelter belt planted in association with the golf course. The proposal necessitate the removal of a portion of this belt due to site level constraints. The proposal includes of the replanting of same trees where possible as well as an extensive replanting strategy of a wider range of native species, both hedgerow and tree species. The end result will be a reorientation of this section and connection eastern boundary. This will form enhanced linage in terms of ecology to the north, west and eastern green infrastructure links. The client, GLL PRS Holdco Limited has agreed to a pre- planting strategy to start this process as soon as possible.
The Tree Report is deficient in information provided and would require further consideration, to ensure the development would accord with Objective DMS77 of the Fingal Development Plan which seeks to	As part of this application an updated Tree Report has been provided which outlines the management of all trees within the redline boundary of the subject site.







2.1 Amenities



- The site is within 5 minutes' walk of Howth Village.
- The site is bounded to the north by the railway line, which terminates at Howth DART Station. The DART station lies to the east of the site and facilitates direct links to the City Centre, surrounding suburbs, South Dublin and Wicklow.
- Claremont beach and Permitted Claremont Scheme inc. civic plaza, promenade, parkland and playgrounds lie to the north of the site
- Howth Road runs along the northern edge of the site. The 31/31A Dublin Bus route is 1 minute from the site, on the Howth Road.
- Baltray Park and Courts are to the west of the site.
- Public Park and Playground to the east of the site
- St Mary's Church is to the east of the site
- Howth Castle with associated gardens and walking trails is to the south of the subject site.

- Howth Village and Marina
- **Dart Station**
- 3 4 5 6 Claremont Scheme
- Howth Road
- Public Park and Playground
- St Mary's Church
- Howth Castle
- Claremont Strand



2.2 Howth Walking Trails

Howth Head, a peninsula 15km northeast of Dublin City, it is a thriving fishing harbour and village that offers locals and visitors plenty to do with many attractions. It also has well known cliff walks and extensive walking trails with stunning views of Dublin bay and city, the surrounding countryside, the Wicklow Mountains to the South, to the Mourne Mountains in Northern Ireland.



OVERVIEW OF HOWTH WALKS AND TRAILS

Main Four Walks in Howth
Mainly east of Howth Peninsula

- 1. The Black Linn loop (red route)
- 2. The Bog of Frogs loop (purple route)
- 3. The Howth Cliff Path loop (green route)
- 4. The Tramline Loop (blue route)

Other trails and walks Howth

1. The longest loop 16.1km

2. Linear informal jogging route

- 10Km Gaelforce Howth Summit run (orange route) (starts at Howth Castle finishes at DeerPark GC)
- 4. Muck Rock/Ben of Howth trail -mountaineering



2.3 Local Walking Trails







Claremont development

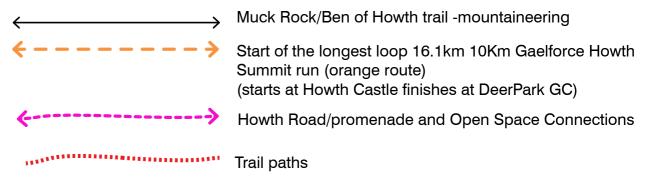


Muck Rock Crag

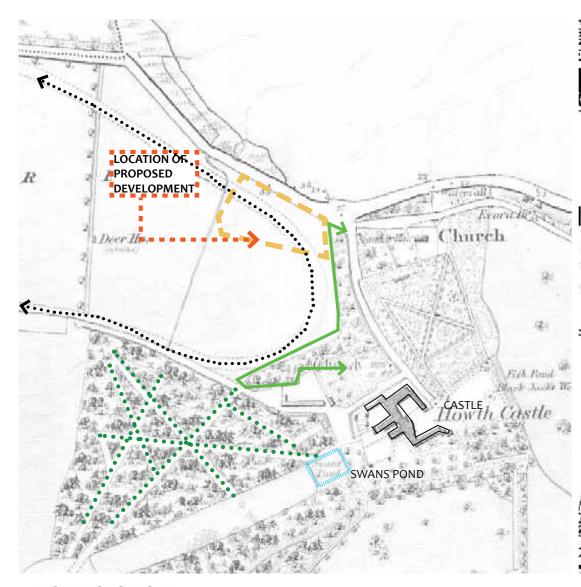


Howth Dart Station

- Most walks start and finish at Howth Dart Station
- Less known trails are the Muck Rock walk and Howth Ben walks
- Public open space east of Howth
- Popular running route is from Sutton to Howth on the R105, it is relatively flat terrain, approximately 5km round trip.
- Deerpark montessori school (located at St Mary's Church) and other local schools, would have the opportunity to learn first hand about plants and wider environmental issues through a public botanical garden
- The sheltered public botanical garden at Kenelm SHD site would draw users from Claremont development, which is exposed to northerly coastal condition.

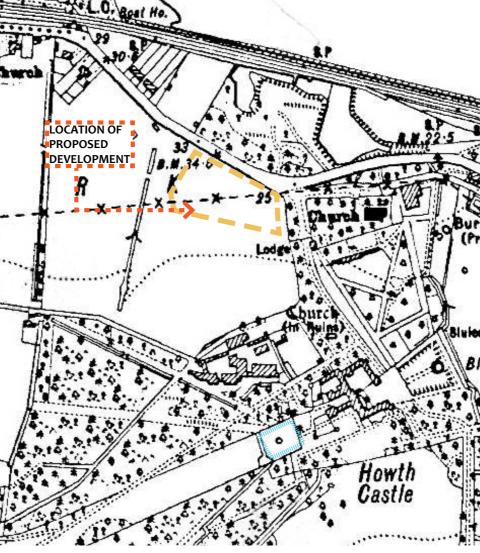






6 INCH HISTORICAL 1837-1842

Racecourse partially within site Strengthening of woodland boundary to east and south east Designed Landscape: Grid network within woodland to south, connections to - Landscape Design - Formal Pond Swans Pond.



6 INCH CASSINI MAP 1830-1930

- Land infill north of Howth Road
- Rail line
- Extension to outbuildings (now Transport Museum)



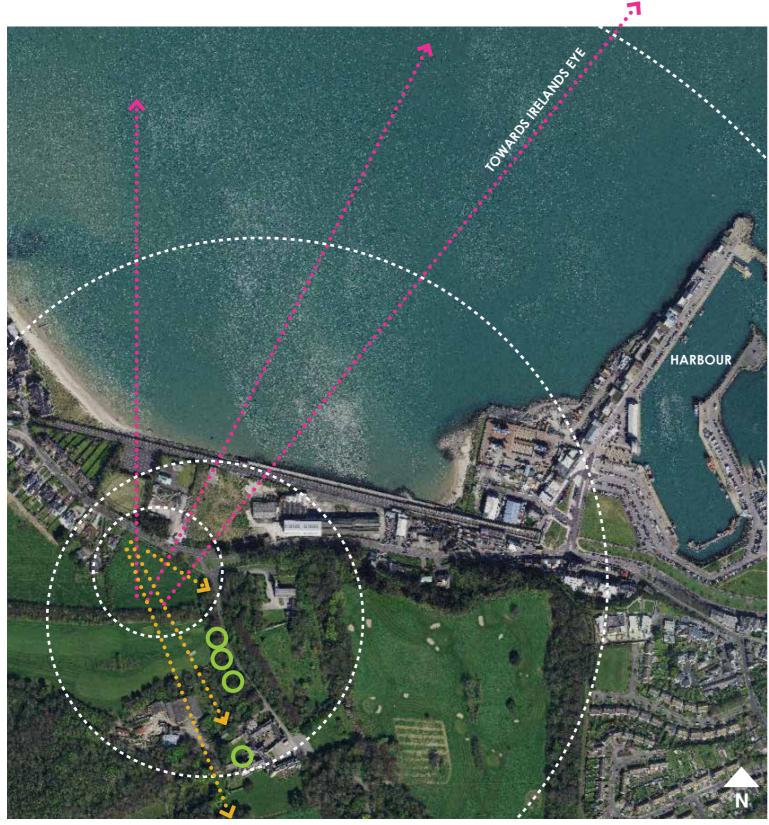
LOCATION OF PROPOSED DEVELOPMENT



- Transport Museum



Howth Rd



PRIMARY VIEWS FROM WITHIN TO WITHOUT SITE TOWARDS COAST AND IRELANDS EYE



POTENTIAL TO CREATE FRAMING VIEWS AND MAINTAIN OR CREATE VISUAL CONNECTIONS FROM WITHIN DEVELOPMENT TO GREATER LANDSCAPE



- MID VIEWS TOWARD SPECIMEN TREES LINING CASTLE AVENUE
- MACROCARPA DOMINANT IN VIEW TOWARDS CASTLE COURTYARD
- VIEW TOWARDS TREE-LINES AND MOUNTAINS BEYOND
- DOMINANCE OF POWER LINE INTERRUPTS MID VIEWS

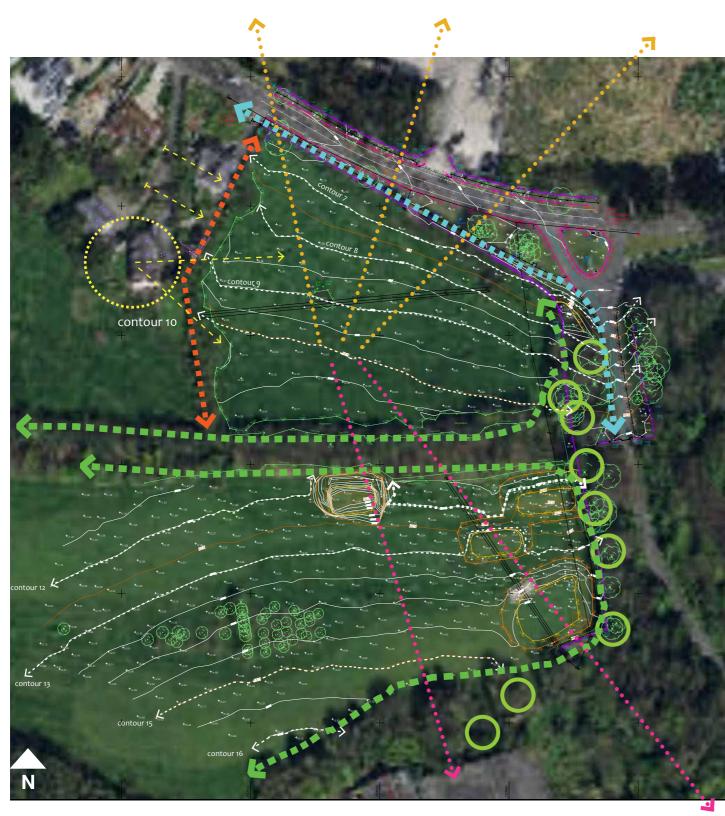




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- 1. View from mountains, over site towards coast and Ireland's Eye.
- 2. View from Howth Road, over Castle Avenue towards mountains.





BOUNDARY AND SCREENING ANAYSIS

ANALYSIS FROM CONTOUR HIGHEST POINT 14m O.D (WITHIN DEVELOPMENT SITE)

POOR BOUNDARIES - ADEQUATE SPACE WOULD BE REQUIRED FOR LOW TO MEDIUM HEIGHT SCREENING TO EXISTING DWELLINGS.

STRONG BOUNDARIES - EXISTING SCREENING IN PLACE.

STRONG BOUNDARY - ESTATE/DEMESNE WALL.

SPECIMEN TREES WHICH STAND DOMINANT WITHIN VIEWS.

OPEN VIEWS TO NATURAL LANDFORMS.

HIGH AMENITY VIEWS.

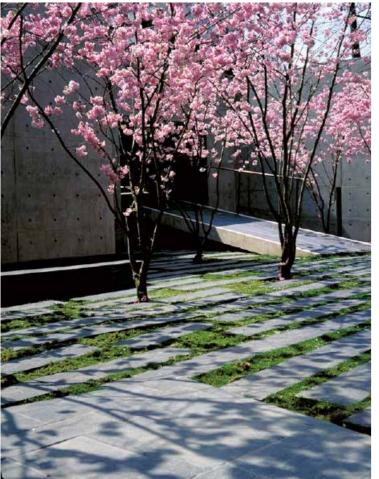


4.0 LANDSCAPE RESEARCH

The landscape scheme will take cognisance of the unique landscape setting of Howth and the project arborist analysis of existing woodland planting which frames the demesne. For further details refer to the Arborist report and plan included with the application.

Following the production of tree assessment report the arborist conducted a further more detailed assessment of the root zones relating to the trees on the eastern boundary. This was achieved through trial pit digs allowing us as a design team to carefully preserve all trees along the avenue boundary. The positioning of Building C has also been set back significantly from initial proposals to allow for almost all trees of good health to be preserved at their current location and incorporated into the proposed landscape design. Refer to Arborist report for a more detailed analysis of tree retention submitted as part of this application.









The existing palette of woodland outside of the site area can would be 'incorporated' into the proposed design, indeed improving green connections through the immediate development site which historically has seen little tree cover. From map analysis we understand that it was formally partially under a race track and then given over to agricultural use, probably grazing.

The background planting media would be closely specified in coordination with the project ecologist for a mix of native species that are indicative of the coastal location and suitable to the geological profile of the area.

The planting will be adaptive and being capable of withstanding periodic drought and onshore winds. In addition, cues from historical design more benign seasons would be highlighted with flower, autumn colour, fruit or other decorative effects.

The landscape shall have to work by providing continuous habitat linkage, appropriate porosity of surface treatment, potential flood attenuation as well as catering for people's enjoyment in the open space linking inside and outside living, where the simple pleasures of a high quality open space will be an immediate resource.

The Landscape Design Approach has regard to the DsFNA, the Development Plan and the SRDUA

- 1. The priority of the landscape design is to provide high quality usable open spaces.
- Retain and enhance the natural setting and, where appropriate, retain parts of the built environment such as the demesne wall that will enhance the proposed development. The retention and use of the demesne wall to frame the botanical garden features will give a sense of maturity and of individual place.
- 3. The landscape concept and planting palette have been derived from the need to respect the special historic and architectural character of the area.
- 4. A hierarchy of spaces is created that have regard to existing resources in the wider area and meet a range of user needs, including both active and passive recreation. Public open space to the fore of the development forms a immediate connection to local walking routes and the existing amenity resources in Howth. The public open space is set off the public road behind the demesne wall with pedestrian access at either end.
- 5. The open spaces have been located to ensure adequate supervision, passive surveillance, boundary treatment and public lighting contribute to creating a sense of security. The playground is alo loacted to provide adequate supervision, passive surveillance, boundary treatment and public lighting contribute to creating a sense of security
- 6. The scheme also provides for provide for a range of natural habitats and can facilitate the preservation of flora and fauna
- 7. Cycle parking has been provided within the development
- 8. Sustainable Urban Drainage Systems have been incorporated into the design including roof gardens.



4.1 Initial Concepts







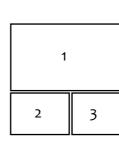
Perimeter planting threading though the scheme

The landscape proposal seeks to enhance a sense of association with the Howth Demesne and environs through the incorporation of existing boundaries where viable and key references to the demesne landscape design.

The introduction of young plantings of native species in the form of copses/under-storey layers will frame the development and create a mid layer that is absent within the existing boundaries associated historically with the demesne.

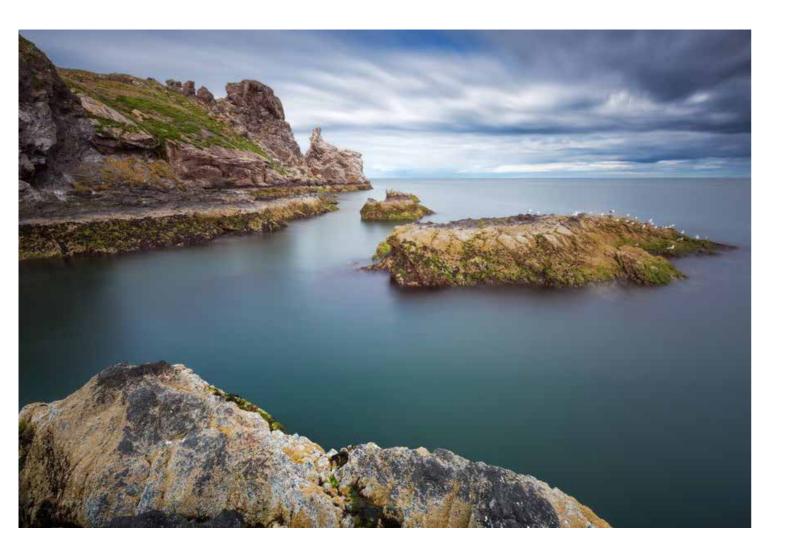
Shade tolerant planting would be introduced to increase privacy and add seasonality to existing boundaries.

- Draw demesne plantign palette into the new development
- Reuse of timber on site and incorporation into new development.
- Extension of age profile range in relation to woodland species.
- Growing of trees from seed collected on site, to be commenced as soon as viable.
- Collection of shrub cuttings and herbaceous seeds or plugs from main demesne and incorporation into new scheme
- Increase species range through wild grass and wild-flower sowing



- 1. Aerial Image shows the woodland belts to the east and south of site, drawing an element of woodland though the new development allows maximum integration into the landscape fabric.
- 2. Perimeter copses Denser clumps of suitable tree species creating a volume of foliage along certain site borders
- 3. Tree stumps remain and incorporated into proposed open space areas. This keeps material quintessentially local and related to the wider demesne







Heritage materiality reflecting the demesne past

Within open and shared space areas sourcing materials which stand the test of time and indeed frequently improve in appearance with age could solidify the development in to the landscape. A review of some of the commonly used materials and techniques within the Howth Castle demesne proper could form a palette of appropriate materials and hues, allowing the scheme to merge with existing.

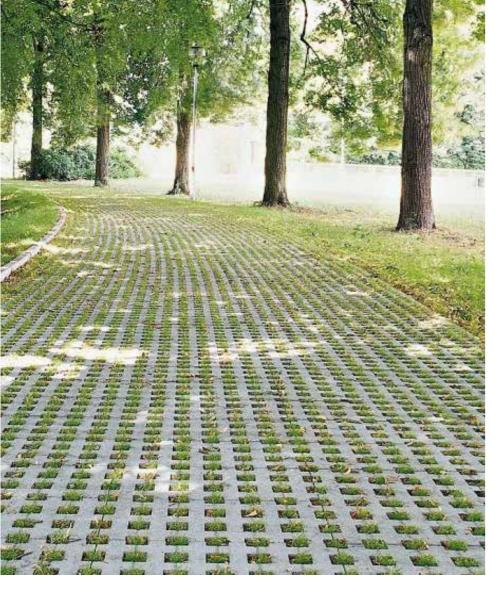
- Permeable surfaces and planting to create a softer foreground.
- Grass reinforcement allows unavoidable surfaces to blend successfully into overall scheme.
- Irish granite/Limestone and brick as traditional building elements for walls, paths and features.

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- 1. Stone sandstone or granite reflects a permanency of design.
- 2. Reinforced grass surfaces to soften unavoidable infrastructure such as visitor car-parking or seating areas.
- 3. Concrete units laid in traditional patterns and unit sizes reflect the heritage behind a design concept.



4.3 Materials









In general the paved components of the proposed landscape sequence will be characterised by durable materials and bespoke detailing sprinkled throughout such as wooden benches situated in planted enclaves.

The quality of finish and clean transitions may also include exposed aggregate concrete, ridged surface finishings to signal transitions in terms of proportion, together with joint treatments and degree of smooth or roughness as one moves from external entrances, lobby areas and thresholds through the spaces.

Functional routes could be paved in a reinforced grass or 'green paving', such as service areas or visitor parking spaces.



5.0 LANDSCAPE DESIGN

LANDSCAPE LAYOUTS

LANDSCAPE PLANS

DETAIL AREAS AND PRECEDENTS

PLANTING PROPOSALS

ROOF TERRACES

MOODBOARDS



5.1 Landscape Plan

The site plan has been set out by the team to align with key Objectives in the FCC Development Plan, such as:

Objective PM60: Ensure public open space is accessible, and designed so that passive surveillance is provided.

Objective PM61: Ensure permeability and connections between public open spaces including connections between new and existing spaces, in consultation to include residents.

Objective PM62: Provide multi functional open spaces at locations deemed appropriate providing for both passive and active uses.

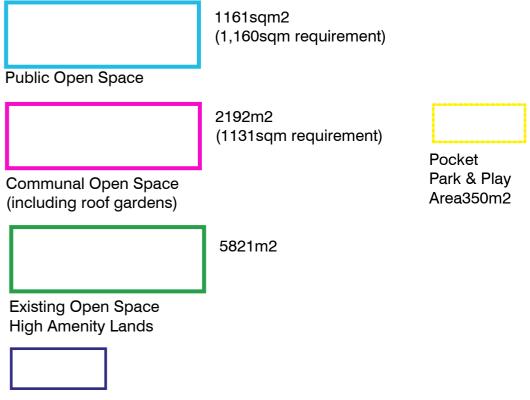
Objective PM63: Facilitate the provision of appropriately scaled children's playground facilities within new and existing residential development



- Pedestrian and Cycle Connections
- Play area with natural play equipment
- 3 Sheltered seating opportunities
- (4) Existing Trees to be retained
- 5 Botanic Gardens
- 6 Pocket Park
- 7 Open lawn

5.2 Open Space Hierarchy







Refer to drawing HOW-MCA-00-00-DR-A-1134 submitted as part of this application for Taking in Charge Areas

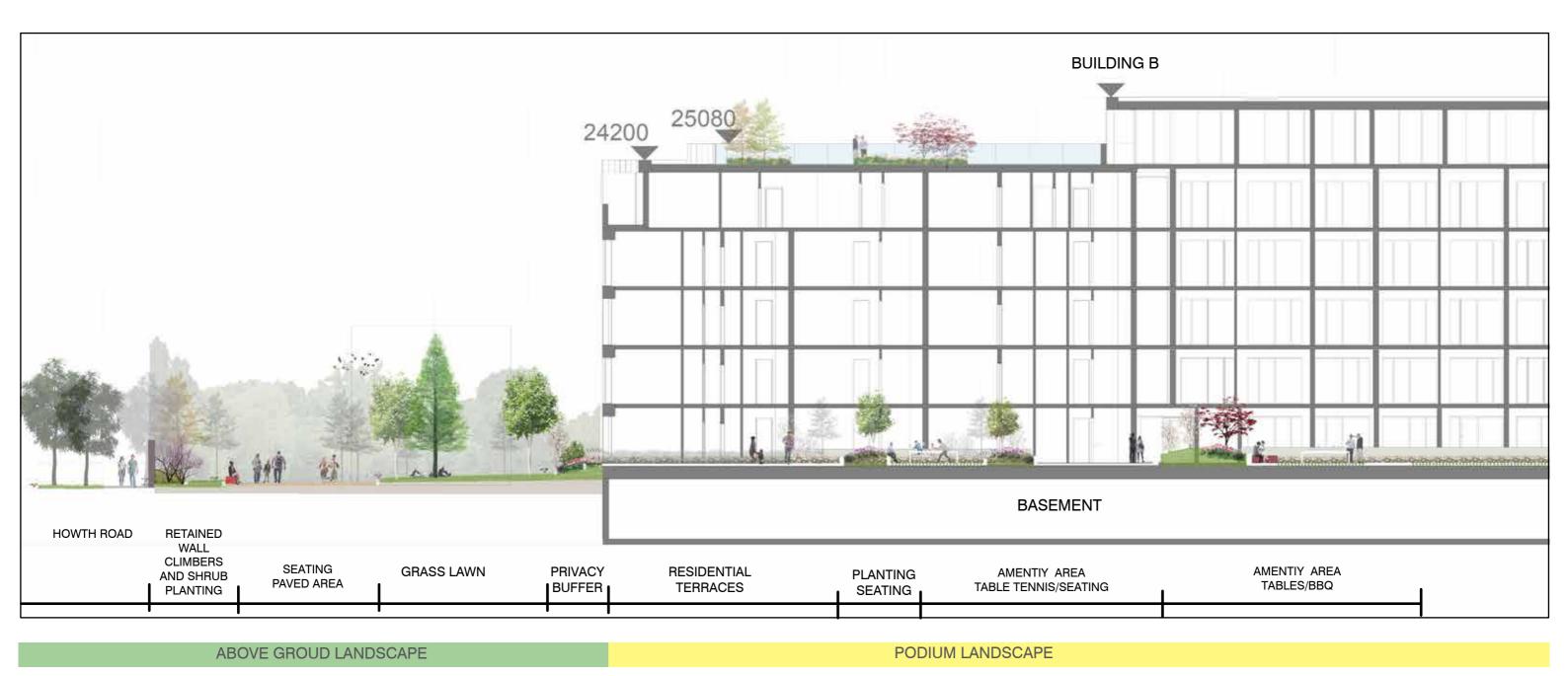
Landscape plan with overlay of Open Space Areas

Note:

The proposed public open space will be accessible to the residents and the wider general public. A Taking in Charge plan is submitted in the Architectural Suite of drawings. In the event, that Fingal County Council do not take the proposed public open space in charge, the Applicant would be satisfied to include this area under the remit of the Management Company responsible for the wider scheme and access to the general public would be maintained.

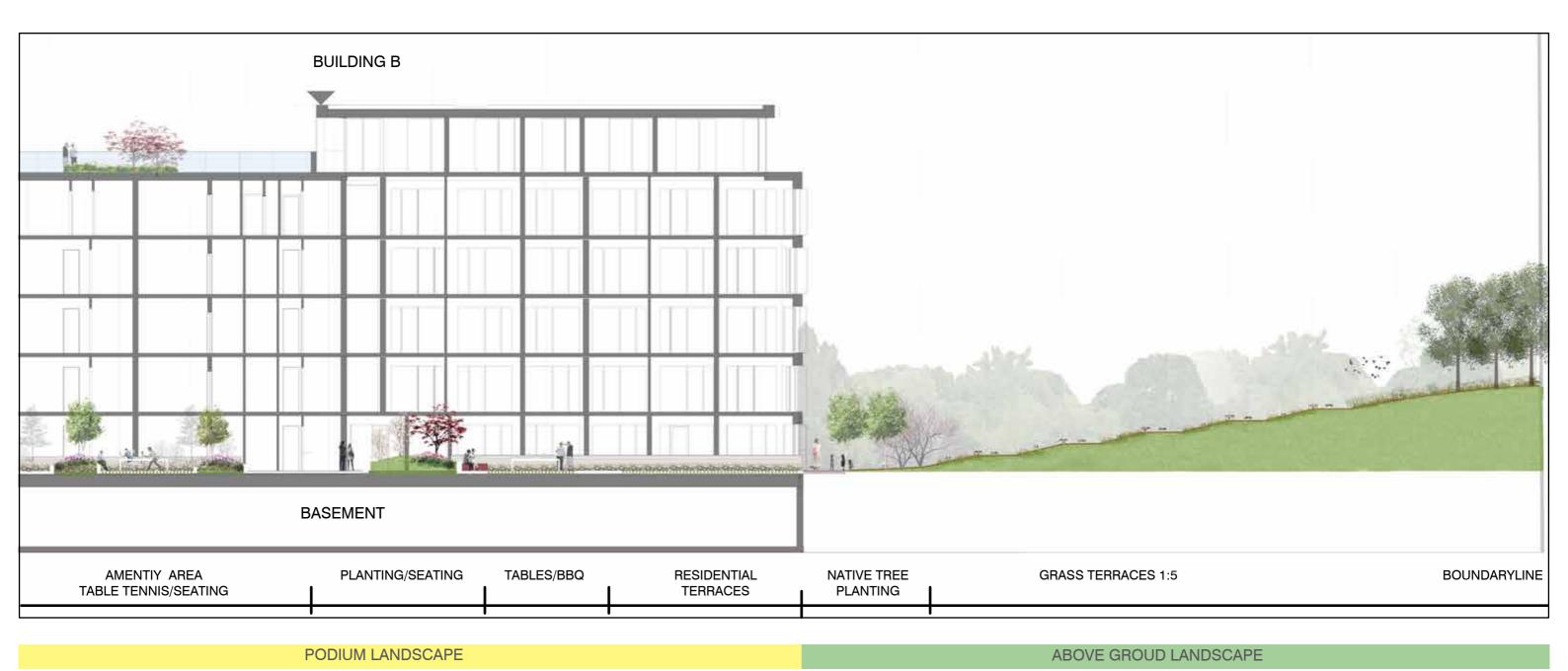


5.3 Landscape Sections





5.3 Landscape Sections





5.3 Botanic Garden

Public Open Space

The area of Howth has an unusually favourable micro-climate and is demonstrated by the existence of several private gardens noted for the planting of unusual species, including Howth Castle. With the advantage of the warm current from the Gulf of Mexico almost encircling Howth, it seems that the peninsula can grow a wider range of plants than any other place of similar latitude.

The open space is sheltered to the north by the historic demesne wall and presents an immediate canvas to display unusual climbing species fronted by larger shrub species which will thrive in the south facing aspect. The open space is designed as a public garden without any hard boundaries to allow free movement throughout the space allowing the visitor to take their own journey towards a planting area of particular interest. The verdant atmosphere will provide a welcome refuge from the busier environment of the Howth road or a stopping point on a walk or cycle along the coast.



5.4 Pocket Park Play Area

Public Open Space

Objective PM63 of the Development Plan seeks to "Facilitate the provision of appropriately scaled children's playground facilities within new and existing residential development'.

Upon entering eastern pedestrian gate from Howth Boad we immediately are introduced to the verdant atmosphere of the open space. Mature tree planting form the backdrop to

Upon entering eastern pedestrian gate from Howth Road we immediately are introduced to the verdant atmosphere of the open space. Mature tree planting form the backdrop to a sequence of spaces screened off from the main thoroughfare. A pocket park and play area (350m2) is further screened to the south by shrubs and ground-cover providing an additional layer of screening to the residential areas (which themselves have extensive privacy buffers of planting to ground floor level). The play space has a grass area for informal activities such as playing with a ball and more formal activities with the provision of play equipment. The equipment will be aimed at the +2-10 years age group and composed of timber materials to further assimilate the area into the surrounding garden landscape. The surface will be of bark mulch. Sheltered seating benches are dotted around the play area for those supervising children at play. Circulation through the space connects east to west bringing the user further through the garden for a variety of experiences.







Timber activity units and combinations - Aimed at age groups (3-10 years) climbing poles, rope structures, swings and slides. All set on bark chipping/mulch surface.





Natural materials enable the play elements to be integrated into the garden atmosphere of the landscape design.



5.5 Residential Courtyards

Communal Open Space



LANDSCAPE PROPOSAL - COURTYARDS

The courtyards can be experienced either as glimpses, as destinations of repose off the main thoroughfares, places where occasional play and recreational structures (exercise stations, play areas, slides, and seating) encourage a variety of active users of all age groups. Passive enjoyment by less physically inclined park users is facilitated by plentiful sheltered seating.

The two main courtyards at ground level are accommodating large areas of planting with the paving material pixelating in planting. In order to create deeper planting zones, we are proposing a tilted arrangement where a raised and modulated edge can be used as a seat, with capacity for soil depths and grading within these areas.

As part of the design coordination between our site and the southern parkland areas there is a new proposed grass paving system to allow for a gradual transition by users into the greater landscape context.



Play and Excercise 'nodes' dispersed throughout scheme



Transition between paving, low planting and raised planters



Soil mounding for planting and bespoke furniture on podium



5.5 Residential Courtyards

Communal Open Space

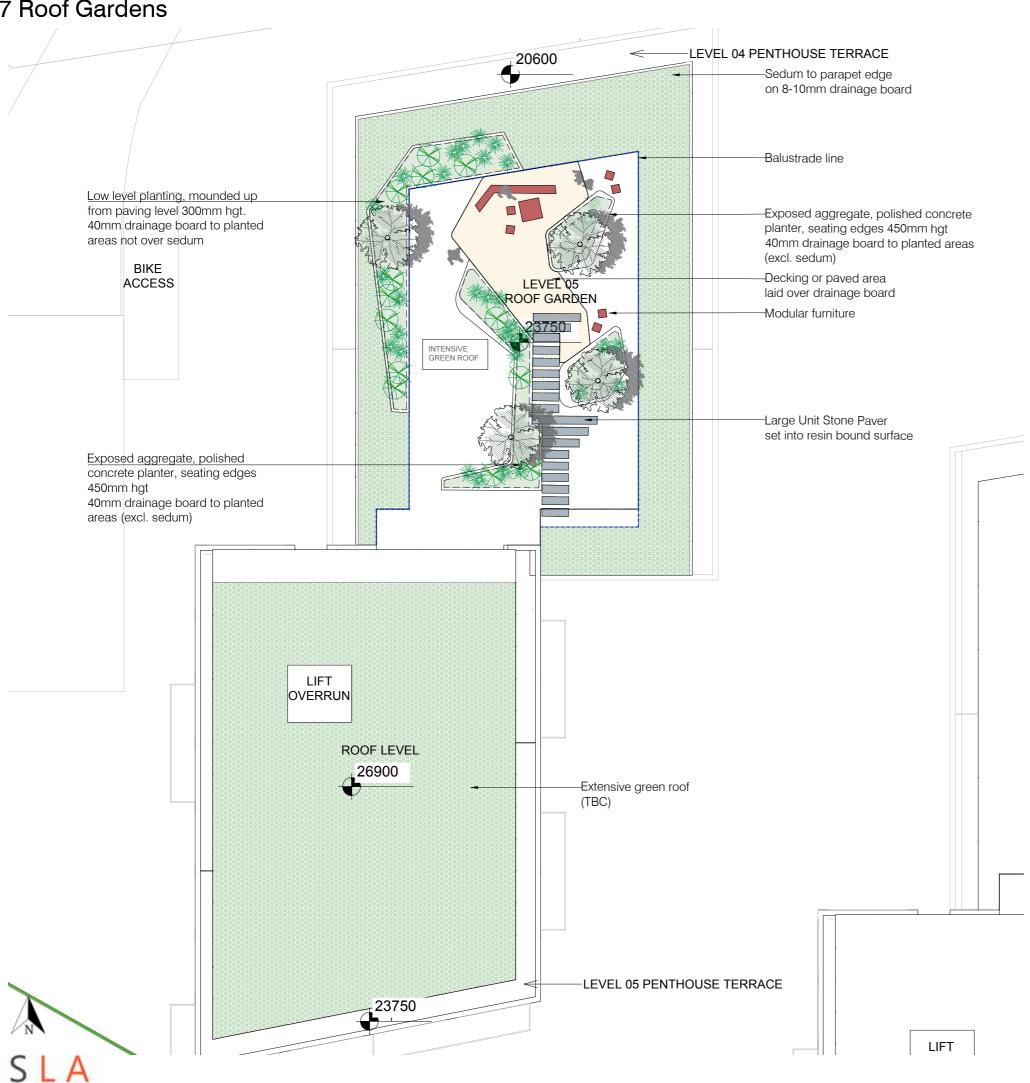


5.6 Roof Plan

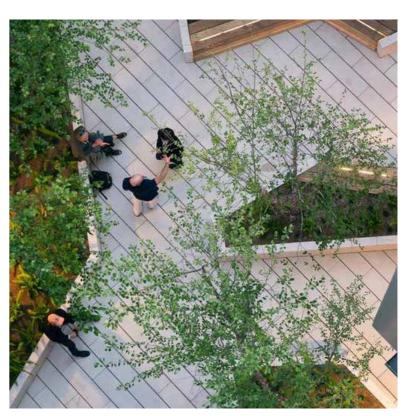




5.7 Roof Gardens

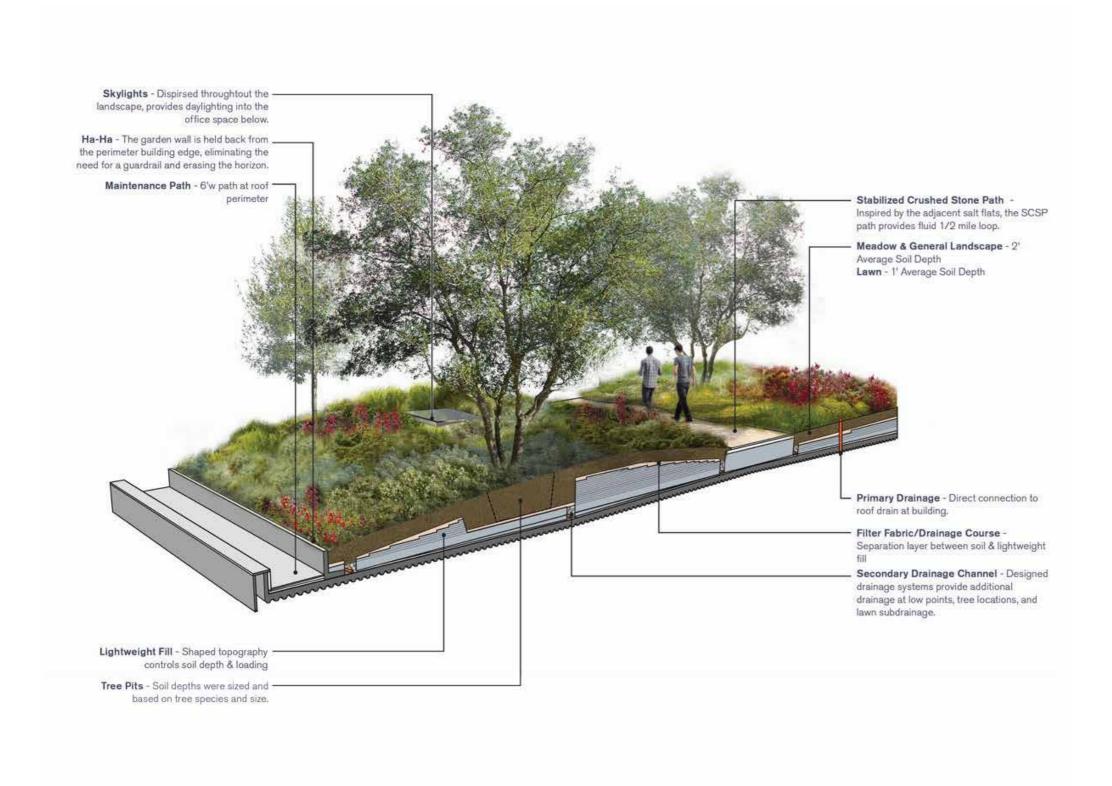


LANDSCAPE PROPOSAL **ROOF GARDEN**













5.4 Sunlight in Proposed Outdoor Amenity Areas

5.4.1 Proposed Amenity Areas

Table No. 5.5: Sunlight in Proposed Outdoor Amenity Areas Results				
Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines	
Amenity Area 1	89.6%	50.0%	BRE Compliant	
Amenity Area 2	92.1%	50.0%	BRE Compliant	
Roof Garden A	100.0%	50.0%	BRE Compliant	
Roof Garden B	100.0%	50.0%	BRE Compliant	
Roof Garden C	100.0%	50.0%	BRE Compliant	
Public Amenity Area	84.5%	50.0%	BRE Compliant	

* The BRE Guidelines recommend that for a garden or amenity appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on March 21st.





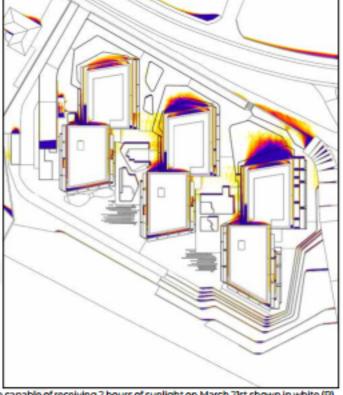


Figure 5.10: Indication of the amenity areas that have been analysed (L) Area capable of receiving 2 hours of sunlight on March 21st shown in white (R).

Extract from Daylight and Sunlight Assessment Report 5.4 Sunlight in Proposed Outdoor Amenity Areas

B S L A

Sunlighting in Proposed Outdoor Amenity Areas

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half of it should receive at least two hours of sunlight on March 21st.

March 21st, also known as the spring equinox, is chosen as the assessment date as daytime and night-time are of approximately equal duration on this date.

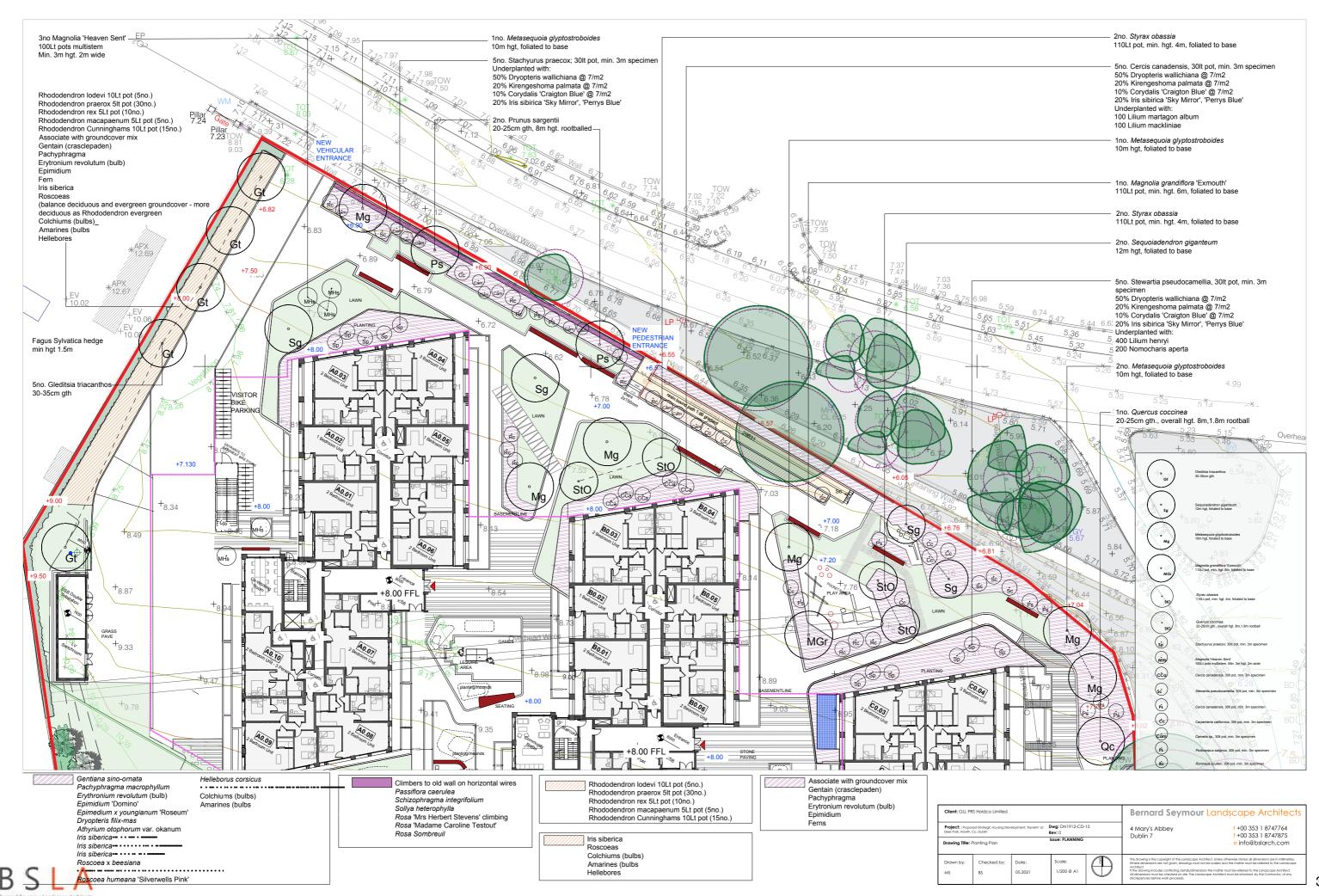
For the purpose of this report the external amenity areas of the proposed development have been separated into 7 sections, as definded by the architect. These spaces comprise of the public amenity area at the north of the proposed development, the area between the proposed blocks, the area to the east of block C and the roof gardens on each block.

An assessment has been carried out on each external amenity area to determine what portion of it is capable of receiving at least 2 hours of direct sunlight on March 21st.

The results for the study on sunlighting in the proposed outdoor amenity areas (including a visual representation in the form of 2-hour false colour plans) can be found in section 5.4 on page 23. An extract of that report is included here.

6.0 PLANTING PROPOSALS

DN1912-CD-14 - PLANTING PLAN



6.1 Rhododendrons

In Victorian times, when plant hunters returned from China with these exotic, brightly flowering plants, they were very fashionable. Those who had the right soil planted them with en mass, and many such plantations thrive and give pleasure to this day. Howth Castle is famous for its Rhododendron Gardens for example. Rhododendrons require a particular type of acidic soil but this did not prevent some landowners, wishing to impress the neighbours, would employing teams of gardeners to excavate tonnes of soil which was then replaced with imported acid soil in which to plant their rhododendrons.

The Howth Castle gardens were founded in the nineteenth century. The rich, turf soil was brought up to the cliffs and thrown into the gaps between rocks. Around two thousand plant species were planted on the site, including quite exotic specimens like palm trees and tree ferns.

Within the proposed Open Space provision we have designed for a collection of the more unusual varieties of the species. The area south of the high wall creates shelter against the coastal winds and the aspect of this area of the landscape design, partialy shaded by large speciman trees lends appropriately to the creation of a unique experience to the walker taking a break from the direct Howth Roads routes.



Rhododendron lodevi (evergreen. lilac-pink flowers)

Late spring and early summer



Rhododendron praecox

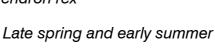
Late winter and early spring



Rhododendron rex



Rhododendron macabeanum



Spring



Rhododendron 'Cunninghams White'



31

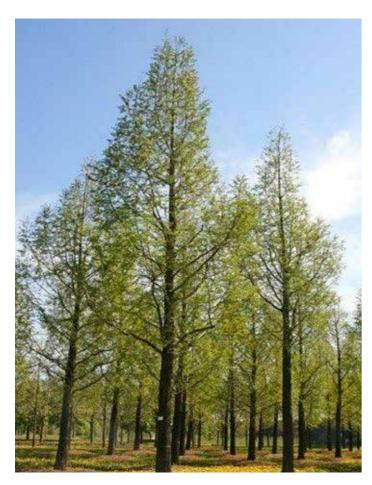


6.2 Specimen Trees

Group 1

Within the proposed design immediate maturity is cloaked over the scheme through the specification of 8no large specimen trees. These are located in ground (ouside of podium areas) and will form a dramatic backdrop to the proposed Botanic Garden to the north of the scheme.

A combination of evergreen and decidious trees when associated with the proposed planting collections will create an open space and character settling the proposed development into the surrounding landscape.



Metasequoia glyptostroboides

A beautiful deciduous conifer and a tree worth growing for its many ornamental features. Thought to be extinct and only known from fossil records dating back 100 million years, until the 1940's when a small number of living specimens were found in the in Sichuan province of China.

The Dawn Redwood is a vigorous grower attaining heights up to 30 metres. The soft green feathery foliage turns from a soft light green to a mid green during Summer. In the Autumn, the foliage takes on tawny pink to gold Autumn colour before dropping and covering the ground in a pleasing carpet of leaves. In later years the conical crown turns more rounded. Long pendulous cones and the textured cinnamon-coloured fibrous bark adds further interest.



Giant Redwood

A vigorous and long-living evergreen conifer tree, Sequoiadendron giganteum eventually reaches a huge size, with a heavy trunk and thick reddish brown bark. When young, the Giant Redwood or 'Wellingtonia' has a conical habit but as it matures, the branches become more widely spaced and downswept while the lower stem becomes free of branches.

In its native area of California and Oregon, the Giant Redwood can reach great heights and wide girths. The famous "General Sherman" tree reached 84m (275ft) with a girth of 25m (82ft) after 3,200 years.



Quercus coccinea

Occurs in mixed deciduous woodland in the eastern part of North America. Forms a broad crown with branches growing horizontally. The bark is dark grey to almost black and is moderately rough.

In the autumn the leaves turn a deep scarlet red. Once they have become brown they remain on the tree until halfway through the winter. The single acorns are ovoid to almost spherical.

Hardy in all of UK and northern Europe. Plant can possibly withstand temperatures down to -20°C.



Prunus sargentii

Prunus sargentii is a very beautiful tree with a broad vase-shaped crown. It sometimes also occurs as a large shrub.

The bark is glossy dark brown. When they emerge the leaves are bronze coloured, later green and finally take on a beautiful orange-red autumnal colour.

The flowers are in bundles of 2 to 4 together, single and light pink. They appear in April, before the leaves. They are followed by a few dark red fruits that are eaten by birds.

In the spring Prunus sargentii is attractive because of its flowers and its leaves that emerge a brownish-red. The tree steals the show in the autumn with its flaming autumnal colours.



The layering of the proposed planting scheme is enhanced but he selection of smaller specimen trees, grown in pots at the nursery for year round transplantation into the scheme at Howth Road.





Sturdy shrub to medium-high tree with a broad, pyramidal crown that eventually becomes oval. The smooth bark flakes off in thin, grey, orange to purplish brown plates revealing the cinnamon-brown bark. The twigs are bare; the dark green leaves are slightly hairy when they emerge. The edge of the leaves are very finely serrated.

The tree turns especially lovely colours in the autumn: yellow-red to red-purple tints. The singular flowers, similar to those of Camellia, emerge at the leaf axils. Flowering often lasts into August. The woody fruit capsules, appear following flowering. These burst open at the top in 5 segments containing black seeds.



Cercis canadensis

From a wide, spreading shrub *C. canadensis* grows into a nice, often multiple-stemmed tree of average height.

The bark is grey and shallowly grooved, when mature the bark can flake in small plates.

The leaf is wide heart-shaped with a pointed tip. The flowers appear before the leaf in compact clusters on the old twigs, branches and trunk. The flat pods persist all winter.

Thrives best in a sheltered, sunny and fertile locations and is very hardy.



Magnolia 'Heaven Scent'

A fragrant, compact specimen tree or large shrub that fills its surroundings with a honey aroma when the flowers appear in late spring to early summer. The goblet-shaped blooms are a rich, soft pink colour with a distinctive darker stripe. The slow-growing tree continues to flourish throughout the summer, producing green foliage and it is easy to care for as it requires minimal maintenance. The young flowers, once separated, can be pickled and then used either on their own as a treat or in salads.



Stachyurus praecox

A native of Japan and into the Himalayas and was discovered in Japan by the great German explorer and physician Philippine Von Siebold. The name comes from Greek words Stachys meaning an ear of corn and oura meaning a tail, praecox means early for the early flowering. In a normal year, it flowers from February to April, The tiny flowers are borne on large racemes and in Japan, they are pollinated by bees.

The shrub itself can grow up to 3m in height over 5 years or so. The mid green coloured leaves, turn in the autumn to a blaze of oranges and yellows and it is valuable for the autumn colour as well.



6.3 Ferns and Shrubs



6.4 Groundcover

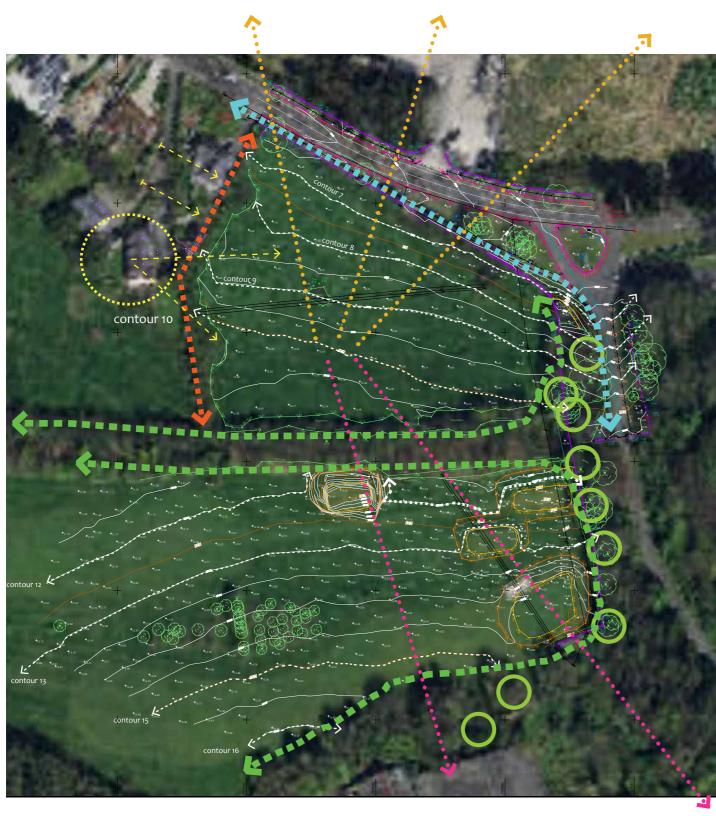








7.0 PROPOSED GREEN INFRASTRUCTURE



BOUNDARY AND SCREENING ANAYSIS

ANALYSIS FROM CONTOUR HIGHEST POINT

(WITHIN DEVELOPMENT SITE)



POOR BOUNDARIES - ADEQUATE SPACE WOULD BE REQUIRED FOR LOW TO MEDIUM HEIGHT SCREENING TO EXISTING DWELLINGS.



STRONG BOUNDARIES - EXISTING SCREENING IN PLACE.



STRONG BOUNDARY - ESTATE/DEMESNE WALL.



SPECIMEN TREES WHICH STAND DOMINANT WITHIN VIEWS.



OPEN VIEWS TO NATURAL LANDFORMS.



HIGH AMENITY VIEWS.



7.1 Green infrastructure Themes

The Development Plan sets out 5 GI themes (Biodiversity, Parks, Open Space and Recreation, Sustainable Water Management, Archaeological and Architectural Heritage, and Landscape).

Objective GI24 Ensure biodiversity conservation and/or enhancement measures, as appropriate, are included in all proposals for large scale development such as road or drainage schemes, wind farms, housing estates, industrial parks or shopping centres.

(With reference to Kenelm Biodiversity Chapter 11 Biodiversity 11.8 Mitigation submitted as part of this application).

The northern part of the proposed development site is dominated by dry meadow grassland. The grass is largely unmanaged, with either no mowing or a very low mowing regime (e.g., grass being cut once or twice per-annum). The landscape proposals include for a wide range of new tree planting and associated shrubs, herbaceous plants and grasses. The species have been chosen not just for visual amenity value but as a food source for birds and insects.

The tree lined avenue along the entranceway to the Deerpark demesne has developed into a woodland community. This is largely outside of the proposed development site, although individual trees overhang the proposed development site at its eastern edge. All tree associated with this boundary have had RPAs assessment onsite. The trees are retained with the landscape proposals. Age diversity and species diversity will be improved through new tree planting within the red line to reinforce existing.

A wide (approximately 20m width) hedgerow cuts the proposed development site in two, running east-west across the site (see Page 38). The hedgerow is of recent origin, approx 25 years old as evidenced by aerial photography on heritagemaps.ie. The species are a mix of native and non-native species. The landscape proposals include increased planting to replace the necessary removal of the portion of young shelter belt planted in association with the golf course - re-establishing the green infra-structure link. The species proposed include Larix spp., Silver Birch (Betula pendula), Scot's pine (Pinus sylvestris), Italian alder (Alnus cordata) and hawthorn (Crataegus monogyna). A narrower band of remnant hedgerow forms the western boundary of the proposed development site and consists largely of elder Sambucus nigra and hawthorn with a bramble understorey. This hedgerow will be retained south of the proposed esb sub station and managed/ reinforced by the project arborist if required. North of the substation a new beech hedgerow is proposed retaining a green link along the western boundary.

Objective GI25 Integrate provision for biodiversity with public open space provision and sustainable water management measures (including SuDS) where possible and appropriate.

The proposed development will be situated within an urban environment and therefore the available applicable SuDS measures are limited within the proposed development site. Below are the applicable SuDS measures which have been chosen for the site. The proposed development will comprise of podium areas between the blocks of apartments which have a significant amount of proposed tree and shrub planting. A significant portion of the podium area comprises of pathways which allows for permeable paving to be incorporated into the hard surfaces design, green pavers also ised within the scheme. Other measures such as green roofs & tree pits work with the attenuation tank (outside of public open space provision) and been incorporated as part of SuDs measures within the deign proposal.

Objective GI27 Provide a range of accessible new parks, open spaces and recreational facilities accommodating a wide variety of uses (both passive and active), use intensities and interests.



The proposed scheme takes into account its existing setting and has also provided for many elements and amenity uses:

- Clearer link to the Howth Road and local walking routes.
- Provision of bike parking within the scheme.
- A Botanic Garden space linking into the historic traditions of Howth Castle. Retention and incorporation
 of historic features such as the eastern and northern boundary walls into the scheme forming part of the
 planting scheme.
- Inclusion of a play area close to pedestrian entrance from Howth Road for ease of accessibility. Aimed at age groups +2-10 years.
- Fitness and recreation areas dotted throughout the communal areas, screening planting and offset seating areas.
- Open lawn areas for informal recreation opportunities.
- Increased planting to reinforce retained tree groups on site, increasing diversity and age profile and therefore longevity of these elements for future generations.

Objective GI28 Provide attractive and safe routes linking key green space sites, parks and open spaces and other foci such as cultural sites and heritage assets

The public open space within the scheme has been located to the fore of the development in order to ensure strong connections to wide range of local amenities and walking routes which are very close to the site. Please refer to page 9 for an analysis of popular local walking routes and pages 6-7 for an analysis of amenities and green spaces close to the development. Within the development itself the public open space includes for seating areas, botanic garden walk, and a formal pocket park and play area (350m2) framed by tree and shrub planting. Communal Open spaces offer open lawn areas to the south and seating and screened exercise, games. bbq and play areas. These are well set back and screened from private spaces which incorporated walled terraces and planting buffers.

Objective GI33 Seek the provision of green roofs and green walls as an integrated part of Sustainable Drainage Systems (SuDS) and which provide benefits for biodiversity, wherever possible.

With reference to the green roof design strategy on page 34 of this report. Green roof and garden spaces are provided to all blocks. Raised planting areas are incorporated into the roof garden design. The planters will act to slow down water run off onto the roof system. The base of the planters will have a separation layer and then a connection to the roof drainage system.

Objective GI34 Ensure, wherever possible and appropriate, that elements of the archaeological and architectural heritage are fully integrated into proposals for new developments at the project design stage.

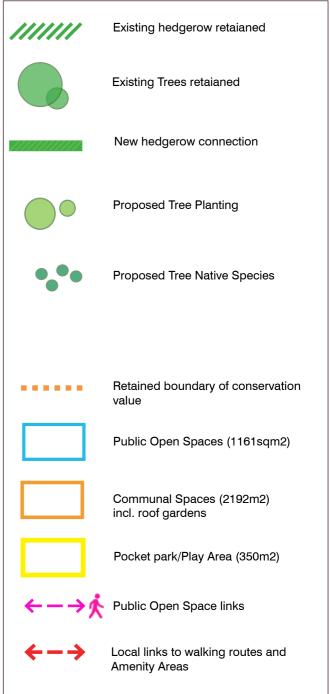
The wall associated with Howth Castle/ Deerpark demesne is retained within the proposed design. It is proposed to make two openings in the existing boundary wall to the north of the proposed site, one to the north- west and one to the north-east. The wall is suffering from decay and the ivy growth is contributing to this. The development of the access points offers an opportunity to rehabilitate the wider wall during the construction phase.

Objective GI36 Ensure green infrastructure provision responds to and reflects landscape character including historic landscape character, conserving, enhancing and augmenting the existing landscapes and townscapes of Fingal which contribute to a distinctive sense of place.

The proposed design has taken note and been influenced by historic planting practices associated with Howth and Howth Castle/Deerpark demesne to enable the landscape proposal to be read as part of the overall landscape character. The public open space is sheltered to the north by the historic demesne wall and presents an immediate canvas to display unusual climbing species fronted by larger shrub species which will thrive in the south facing aspect. Significant tree stands are retained within the proposed design and reinforced for future generations. The open space is designed as a public garden without any hard boundaries to allow free movement throughout the space allowing the visitor to take their own journey towards a planting area of particular interest. The verdant atmosphere will provide a welcome refuge from the busier environment of the Howth road or a stopping point on a walk or cycle along the coast.

7.2 Green Infrastructure Plan





7.3 Buffer to SAO

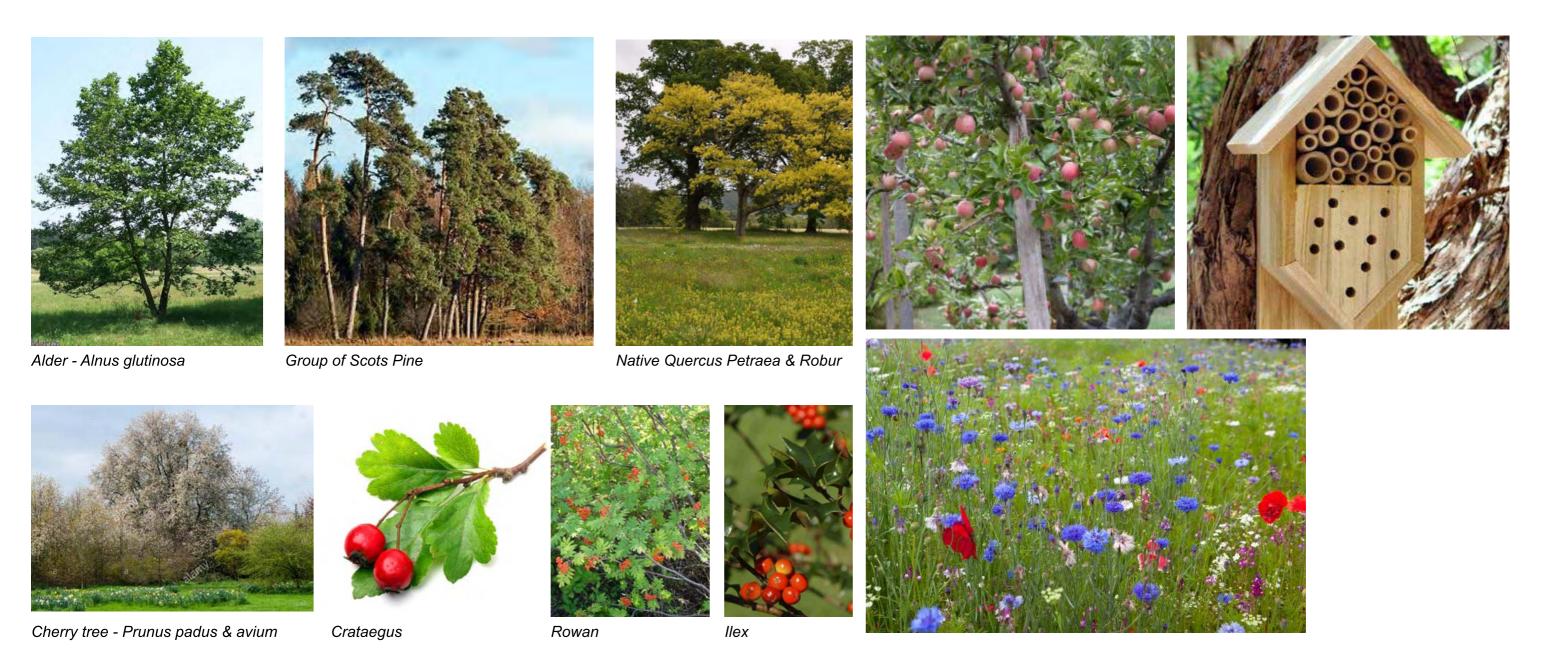
To the south of the scheme the land zoned High Amenity lands within the redline will be re-profiled and its use will be changed from active recreational to passive amenity.

A portion of an existing tree belt associated with the former golf course will have to be removed in order to realign to the new site boundary. A strong woodland edge is proposed connecting to existing retained portion. Creating a new green link of biodiversity in accordance with the All-Ireland Pollinator Plan which promotes the use of native species in order to enhance wildlife. It is proposed that this element of the scheme and the belt of woodland to the east of the development site replanting will occur prior to building works so that maximum time is allowed for the re-establishment of the broken link from west to east of the site high density planting around the wet zones will consist of species such as Ilex, Birch, Beech, Hazelnut, Rowan, Cherry, Oak, and Alder which provide food and habitats to a wide range of wildlife. All of the species come in varieties, and therefore sourcing the native strains would be important for maximising wildlife value.

An important layer for the 50 years landscape restoration strategy is using any existing scrub for the underplanting, particularly on the west and eastern boundaries of this area. The scrub will act as a nursery for variety of trees, such as the native Quercus (Q.robur and Q. petraea) and Scots pine, and will protect the young trees from grazing.

This will enhance a new woodland type which will be characterised by an early establishment of diverse composition eventually maturing into an oakwood over the passage of time.

Other elements are proposed on smaller scales, for the fauna, forming shallow ditches to retain humidity and wild bird cover seeding in place of meadow seeding in patches throughout the scheme.



Low maintenance native trees and wildflower meadows encouraging residents to interact with the landscape. Nesting boxes and Insect hotels offer an opportunity to encourage birds and insects into the area increasing the overall biodiversity structure.



8.0 CONCEPT IMAGERY

PLANTING/MATERIALS:

Hard Landscape



Terracing to western edges of development to retain existing parkland trees



Soil mounting and rocks to screen private terraces in salvaged paving and exposed aggregate concrete



Precast concrete elements for soil mounding & seating

Paving



Paving transition



Long span bespoke concrete paving with light colour pigments



Composition of paving and low scrub type planting to create routes



8.0 CONCEPT IMAGERY

PLANTING/MATERIALS:

Soft Landscape



Boulevard flowering trees in a simplistic setting



Courtyards with texture and volume



Mix of multistem and single stem trees and herbaceous perennials



Naturalistic planting in raised concrete planters







December 31

Planting Palette: proposed mix of native and non native drought tolerant and nectar rich plants through the seasons for visual interest and biodiversity





Seed Collection:

The collection of seeds is a very common task and easily carried out.

Seed collectin would take place at the appropriate time of year. The collected seed could be used at the Glenveagh site to create wildflower meadows of local providence. They which need very little maintenance but create a great visual treat for walkers etc.

The meadows in turn attract bees, insects, birds and butterflies which could be worked into an overall education/ information strategy about the site/demesne and incorporating the local community.

Re-establishment and re-connection to Demesne Designed Landscape:

Howth Castle still retains much of its designed gardens which would have been particularly en vogue in the 18th and 19th century. Mostly implemented by Anglo Saxons, ideal landscapes were designed and planted out with standard trees common to our climate and interspersed with newly introduced exotics from the Americas.

In respect to the sites heritage this we suggest Interventions at a more macro level, identification of the patterns remaining of the designed landscape and reinforcing that design through new planting. Whip planting could be sourced from ethical sources where Irish providence is guaranteed. This could then be supplemented by the stock sourced from the demesne itself.

