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PROJECT: KISHOGE PART 10 APPLICATION

FEASIBILITY AND CONCEPT DESIGN: STAGE 01B

LANDSCAPE DESIGN STATEMENT

PLANNING STRATEGY

01A - Clonburris strategic development

01B - Planning scheme

01

CLONBURRIS STRATEGIC DEVELOPMENT: Primary objectives and Policies

Development Strategy for South Dublin 2023-2028
The developmental blueprint for South Dublin County Council (SDCC) from 2023 to 2028 encapsulates a diverse array of policies and objectives. These directives mirror the county's robust standing as it endeavors to enhance its footprint in both residential and economic spheres, particularly within the Clonburris region. A comprehensive examination of the development requisites outlined in the SDCC Development Plan is intricately detailed in the landscape architectural report. This report forms an integral part of the Metropolitan Workshops report focused on the Clonburris Strategic Development Zone. Presented below are the primary objectives and policies pertinent to the inaugural phase of landscape development.d

CHAPTER 3 NATURAL, CULTURAL AND BUILT HERITAGE
Protects and enhances the key natural, cultural and built heritage assets which have shaped South Dublin County and continue to create a sense of place and local distinctiveness, including our diverse landscapes, our varied flora and fauna, our historic buildings and streetscapes, and our rich archaeological history, for current and future generations to appreciate and enjoy.

CHAPTER 4 GREEN INFRASTRUCTURE
Promotes the development of an integrated GI network for South Dublin working with and enhancing existing biodiversity and natural heritage, improving our resilience to climate change and enabling the role of GI in delivering sustainable communities to provide environmental, economic and social benefits.

POLICY GI1: OVERARCHING
GI1 Objective 1: To establish a coherent, integrated and evolving GI Network across South Dublin County with parks, open spaces, hedgerows, trees including public street trees and native mini woodlands (Miyawaki-Style), grasslands, protected areas and rivers and streams and other green and blue assets forming strategic links and to integrate and incorporate the objectives of the GI Strategy throughout all relevant land use plans and development in the County.

POLICY GI2: BIODIVERSITY
GI2 Objective 1: To reduce fragmentation and enhance South Dublin County's GI network by strengthening ecological links between urban areas, Natura 2000 sites, proposed Natural Heritage Areas, parks and open spaces and the wider regional network by connecting all new developments into the wider GI Network.

GI2 Objective 2: To protect and enhance the biodiversity and ecological value of the existing GI network by protecting where feasible (and mitigating where removal is unavoidable) existing ecological features including tree stands, woodlands, hedgerows and watercourses in all new developments as an essential part of the design and construction process, such proactive approach to include provision to inspect development sites post construction to ensure hedgerow coverage has been protected as per the plan.

GI2 Objective 3: To retrospectively repair habitat fragmentation and provide for regeneration of flora and fauna where weaknesses are identified in the network through the implementation of new GI interventions.

GI2 Objective 5: To protect and enhance the County's hedgerow network, in particular hedgerows that form townland, parish and barony boundaries recognising their historic and cultural importance in addition to their ecological importance and increase hedgerow coverage using locally native species including a commitment for no net loss of hedgerows on any development site and to take a proactive approach to protection and enforcement.

I2 Objective 9: To examine where appropriate the full potential of landfill sites and quarries as well as existing underutilised perimeter and border park spaces through the augmentation of wild grasses and other naturally occurring vegetation that enhance local area biodiversity and habitats in support of the National Pollinator Plan and to consider wildflower meadows where beneficial to biodiversity.

POLICY GI4: SUSTAINABLE DRAINAGE SYSTEMS
GI4 Objective 1: To limit surface water run-off from new developments through the use of Sustainable Drainage Systems (SuDS) using surface water and nature-based solutions.

GI4 Objective 3: To require multifunctional open space provision within new developments to include provision for ecology and sustainable water management.

GI4 Objective 5: To promote SuDS features as part of the greening of urban and rural streets to restrict or delay runoff from streets entering the storm drainage network.

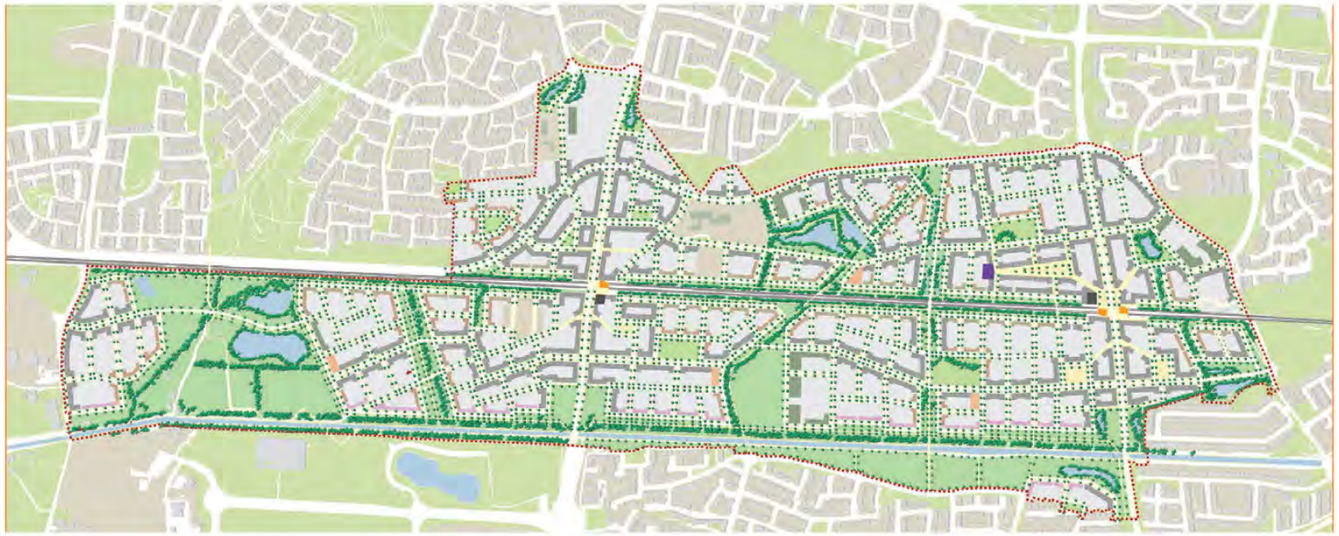
POLICY GI7: LANDSCAPE, NATURAL, CULTURAL AND BUILT HERITAGE
GI7 Objective 1: To protect, conserve and enhance natural, built and cultural heritage features and restrict development that would have a negative impact on these assets.

CHAPTER 6 HOUSING
H8 Objective 2: To ensure that there is a clear definition between public, semi-private and private open space at a local and district level and that all such open spaces benefit from passive surveillance from nearby residential development.

CHAPTER 7 SUSTAINABLE MOVEMENT
Increases the number of people walking, cycling and using public transport and reduces the need for car journeys, resulting in a more active and healthy community, a more attractive public realm, safer streets, less congestion, reduced carbon emissions, better air quality, and a positive climate impact.

POLICY SM2: WALKING AND CYCLING
SM2 Objective 3: To ensure that connectivity for pedestrians and cyclists is maximised and walking and cycling distances are reduced by promoting compact growth and permeability in the design and layout of new development areas.

SM2 Objective 16: To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the National Disability Inclusion Strategy (NDIS) 2017-2022.



01B - PLANNING SCHEME for Clonburris SDZ.

CLONBURRIS STRATEGIC DEVELOPMENT
Primary objectives

CHAPTER 7 SUSTAINABLE MOVEMENT

POLICY SM5: STREET AND ROAD DESIGN
SM5 Objective 1: To ensure that all streets and street networks are designed to passively calm traffic through the creation of a self-regulating street environment that promotes active travel modes and public transport.

SM5 Objective 5: To design new roads and streets to incorporate green infrastructure elements such as planting of native trees, hedgerows and pollinator species in medians and on roadside verges, as appropriate to the location.

CHAPTER 8 COMMUNITY INFRASTRUCTURE AND OPEN SPACE
Creates healthy, inclusive and sustainable communities where all generations have local access to social, community and recreational facilities, and parks and green spaces, to suit their needs.

QUALITY OF PUBLIC OPEN SPACE
Recreation Facilities
Public open space should be designed to offer a variety of both active and passive recreation which is accessible to all, irrespective of age or ability.

Green Infrastructure, Biodiversity and Sustainable Water Management
Parks and open spaces should be located to connect with each other so as to create green corridors and optimise their green infrastructure function. Existing trees, hedgerows and watercourses should be retained to maximise the natural setting of parks and open spaces. Planting should comprise native and pollinator-friendly species. Sustainable water management in the form of features such as integrated constructed wetlands, ponds, swales and basins should be incorporated within public open spaces and add to the amenity and biodiversity value of the spaces (appropriate to level within the public open space hierarchy).

Safety
Public open space should feel safe to the user and have adequate supervision by way of passive surveillance (for example, windows overlooking the space; footpaths, cycleways and streets running through or beside the space). Smaller parks and open spaces should be visible from and accessible to the maximum number of residential units. Boundary treatment, public lighting and planting should be designed carefully to create a sense of security and to avoid opportunities for anti-social behaviour. Access points to parks should be maximised to increase use and thereby improve safety. Inhospitable and inaccessible open space comprising narrow tracts, backlands, incidental or 'left-over' strips of land should be designed out of all schemes.

Clonburris Strategic Development Zone (SDZ) earned its designation due to its vital role in advancing residential development within South Dublin County Council. Positioned strategically, the lands boast exceptional connectivity and have garnered recognition as a Major Urban Housing Development Site. This recognition positions them as a significant contributor to housing initiatives within the Dublin Region for the ensuing decade and beyond.
The Planning Scheme for Clonburris SDZ was crafted by South Dublin County Council and received approval from An Bord Pleanála. This comprehensive scheme delineates precise landscape objectives, which are further detailed in the Landscape Architectural Design Report. A condensed overview of these objectives is presented below:

DEVELOPMENT
Developments within the SDZ lands are tasked with recognizing and preserving, to the extent feasible, the current green infrastructure components present on the grounds. This includes but is not limited to green open spaces, hedgerows, mature trees, watercourses, and other inherent natural features. These elements not only hold historical significance for the lands but also play a pivotal role in shaping the character of specific areas, contributing to the creation of aesthetically pleasing neighborhoods.

GREEN INFRASTRUCTURE
A central component of the Planning Scheme Framework revolves around the integration of green infrastructure through various elements such as:

- Tree-lined avenues and streets.
- Local streets featuring traffic-calming measures to enhance pedestrian safety and promote a subdued traffic environment.
- The preservation of existing hedgerows as an integral part of the landscape.
- Implementation of sustainable urban drainage.

SUSTAINABLE URBAN DRAINAGE

Sustainable Urban Drainage Systems (SUDs) are envisioned as ecological resources seamlessly integrated into the fabric of streets, public squares, and open space networks. The imperative lies in the meticulous design of open spaces that house SUDs features, such as attenuation ponds, ensuring a harmonious equilibrium between surface water management and the creation of superior open environments.

SuDS should transcend their functional role and aspire to be multifunctional spaces, serving purposes of biodiversity, and surface water management.

BIODIVERSITY AND HERITAGE

Beyond the primary ecological corridors, the Clonburris SDZ boasts an extensive hedgerow and treeline habitat spanning over 30km. The preservation of the hedgerow/treeline habitat that connects the Grand Canal Corridor and the Rail corridor is deemed crucial to safeguard ecological integrity.

In instances where preservation is not feasible, a proactive approach involves the establishment of a new hedgerow network. Comprising the same species as the existing hedgerows, this network will be strategically planted along roadways within the development. This measure aims to replicate and uphold the ecological functions of the original habitat, ensuring the continuity of vital ecological processes.

CONTEXT

02A-Site and Opportunities

02B-Site overview

02C-Opportunities and existing trees

02

02A - SITE AND OPPORTUNITIES

North. **Ecological Corridor**

Mature tree planting alongside the railway is to be protected and utilised in the proposal. Creating an enriched biodiversity on the site by establishing a northern ecological corridor featuring native vegetation. Introducing native meadows along the route and incorporating bird nesting boxes throughout the open space.

South. **Existing Ecological Corridor along the canal**

A south Ecological corridor spreading along the grand canal way which is rich in aquatic biodiversity can raise environmental value off the place. The existing habitats have to be retained and extended. Pedestrian bridges can be proposed to increase accessibility.

West. **Griffeen Valley Park**

The current Griffeen Valley Park situated on the northern side of the railway line boasts a well-established open parkland ambiance, featuring attenuation areas and the biodiverse-rich Griffeen River. It is suggested that the extension of this park to the southern side of the railway line adheres to the principles already established in the existing park to the north of the railway line.

East. **Linear Park within adjacent development site 03**

The linear park constitutes the central open space within the envisioned development and serves as a key strategic parkland and local park within the SDZ scheme. It is considered crucial to provide numerous access points for local residents and visitors. Futrhermore connections via tree lines and visual connections will be established.

Biodiversity within the open space and proposed streetscapes

The landscape proposal will seek to compensate for the loss of ecologically significant habitats from removing trees. Also to enhance green or blue infrastructure within the lands and restore ecological connectivity.

SUDS within the open space and proposed streetscapes

Sustainable Urban Drainage Systems will be spread across the site and will integrate seamlessly into the new open space, incorporating landscape elements like walkways, plantings and habitats. The sustainable handling of surface water will eliminate risk of flooding on the site.

02B - SITE OVERVIEW

EXISITING LANDSCAPE

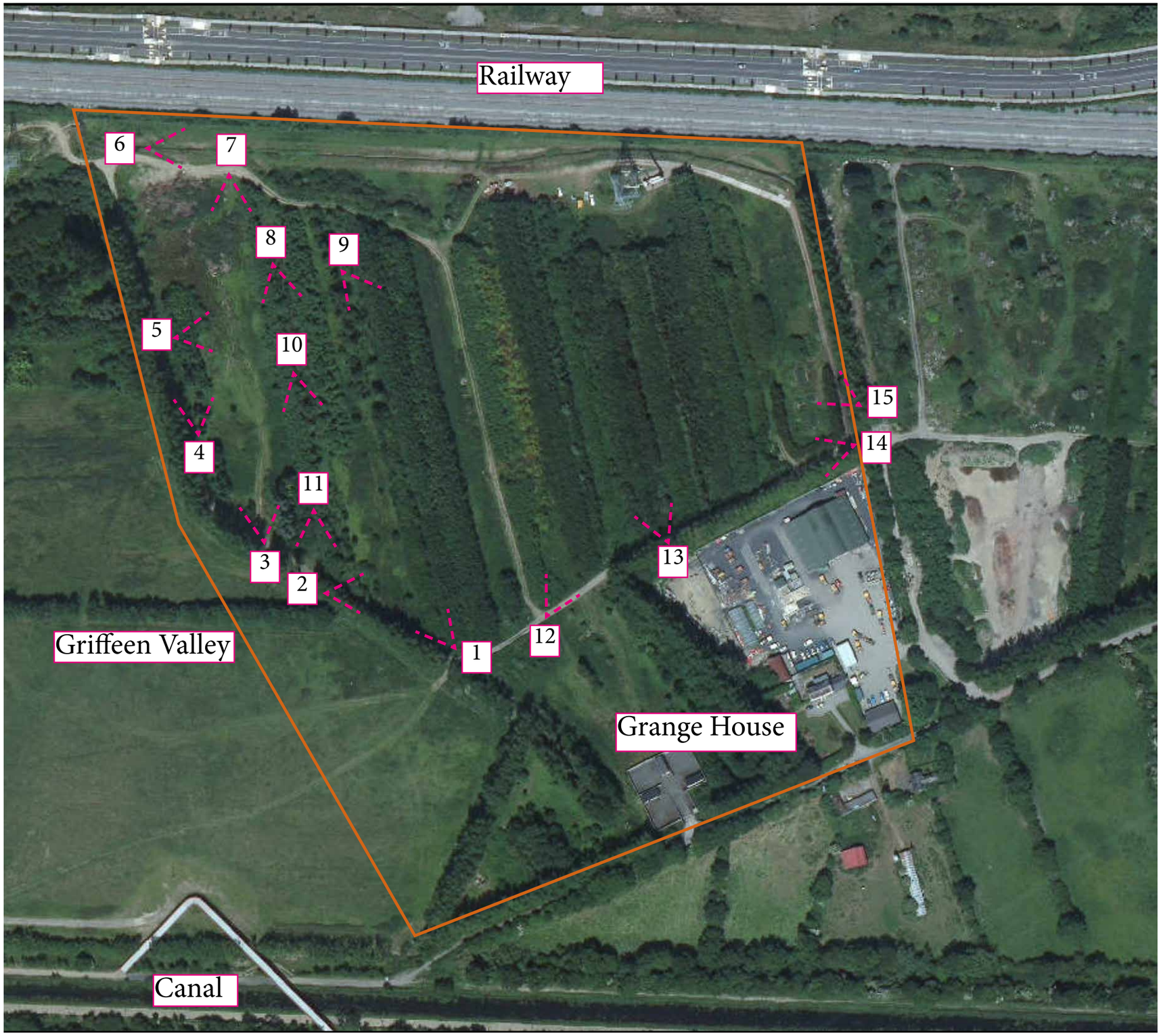
The site is located south west in the overall SDZ development zone. It is situated north of the Grand Canal, east of Griffeen park south and immediately south of the Clondalkin/Fonthill rail line.

The site consits of linear planting throughout as it was an old tree nursery. The majority of the trees are of poor quality, see arborist report for reference.

The Clondalkin/Fonthill railway line to the north of the site is elevated approximately 1.5m above the field ground level. A palisade fence delineates the boundary between both lands.

A linear body of water lies just south of the railway line and partially runs through the site. A ditch travels parallel to this with scrub occurring. This is highlighted a town-land boundary in the SDZ Planning Scheme

A local road, south of the site, facilitates the entrance to a SDCC parks nursery and existing travellers' accommodation.



Boundary
SDCC - LOT 2 -
KSG SITE 04

SITE PHOTOS (REFER TO KEY PLAN ON PREVIOUS PAGE)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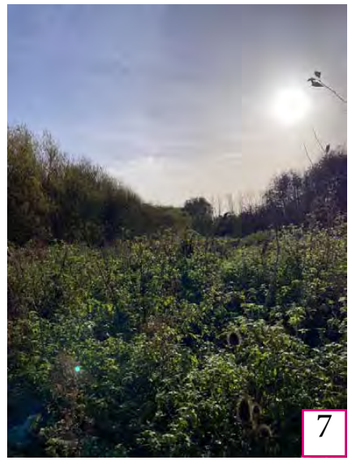
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02C - OPPORTUNITIES AND EXISTING TREES

EXISTING TREE CONDITIONS

TREE SURVEY OBSERVATIONS (JOHN MORRIS ARBORICULTURAL CONSULTANCY)

John Morris Arboricultural Consultancy undertook an assessment of trees on the site during several occasions from March 2024 to May 2024

The following landscape observations have been made from the tree survey in conjuction with the proposed masterplan

Tree Removal due to low quality

- Tree group G454 and G449 are to be removed due to low quality.

Removal due to development

- Tree group G393, G394, G407- G413, G424, G428-G431, G441-G453and tree no. 63-115, 125-137, 147-339, 415-426, 462-539 are to be removed due to development

- Removal of mature/early mature individual trees through the site due to development. Please refer to the Arborist schedule for these details.

Retention of existing trees

- Tree number 1-32, 35-62, 116, 120-124, 455-461 and a portion of tree group G450 to be potentially retained/ transplanted.

Conclusion

- The extent of existing mature trees on the site and the implicit contradiction/ incompatibility of development of the site and retention of trees. It is proposed that impact is mitigated through an extensive landscape strategy with significant tree planting.

02C - OPPORTUNITIES AND EXISTING TREES

REUSE SOME OF THE EXISTING MATURE TREES IN THE STRATEGIC LOCATIONS?

REUSE SOME OF THE EXISTING MATURE TREES IN THE STRATEGIC LOCATIONS?

From the arborist report we identified a number of trees that could be reused and postioned in strategic locations through out the site.
The procees of transplanting mature trees can take a long time but would be beneficial to the development. The transplantation can take 2 years in total. Year 1 the tree and the roots are trimmed on one side and then year 2 the other side of the tree is completed. After this, the tree is lifted and relocacted for storage.

Pros

- Value: Healthy mature trees are exponentially more valuable than newly planted trees
- Air quality: Mature trees are also far more effective at improving air quality and thus slowing down climate change.
- Community effect: Shady urban area, whether streetscapes or parks, provide residents with places to gather for events or exercise, increasing the mental and physical well being of the community. Mature trees also serve as suitable homes for area wildlife, increasing the community's biodiversity.

Cons

- Cost: Can be an expensive process
- Time: The transplanting procees takes 2 years. During the development on site, the chosen trees must be protected during construction.

Conclusion

- As noted in the arboricultural assessment & impact report, the impact in terms of tree removal numbers is significant, however there is potential to transplant some of the mature trees that are exisiting on site in strategic locations. This will benefit the development and also the environment.

Roots being trimmed for transplanting

Moving tree to new location

Tree secured and transplanted

Another method of transporting trees for transplanting

03

LANDSCAPE STRATEGY

03A - Strategic plan

03B - Landscape masterplan

03C - Green & Blue Infrastructure - Definition

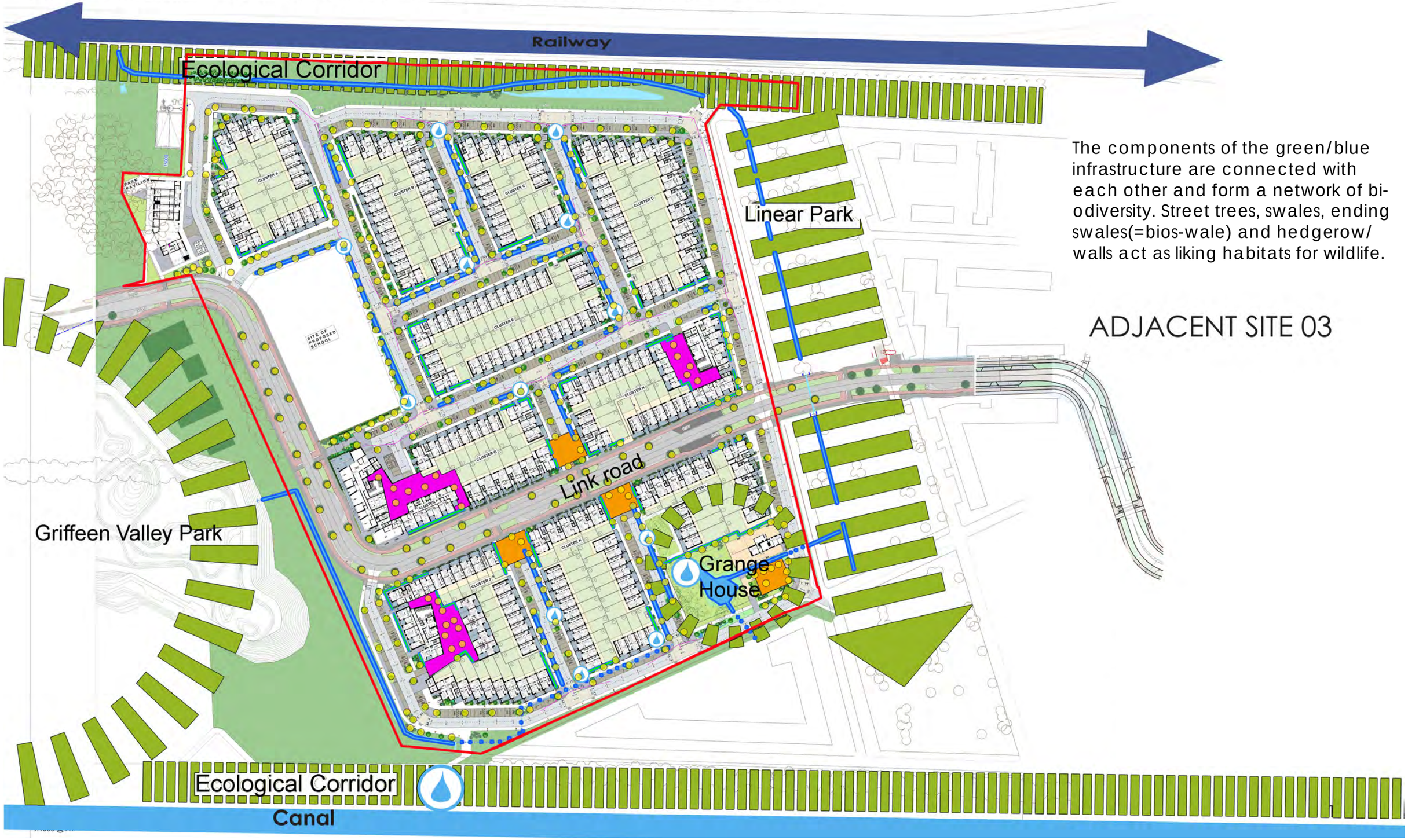
03D - Proposed streetscape and hierarchy

03E - Public & Communal Open Space (Courtyards)

03A - STRATEGIC PLAN

street trees | pocket garden | courtyard | swale
Corridor & Parks | private garden | bio-swale ending of swale | hedgerow & walls

The components of the green blue infrastructure are connected with each other and form a network of biodiversity.
Street trees, swales, Ending swales (=Bio-swale) and Hedgerow&Wall act as liking habitats for wildlife.



The components of the green/blue infrastructure are connected with each other and form a network of bi-odiversity. Street trees, swales, ending swales(=bios-wale) and hedgerow/ walls act as liking habitats for wildlife.

ADJACENT SITE 03

03B - LANDSCAPE MASTERPLAN

‘STEPPING STONE’ HABITAT IN URBAN AREAS

HARDSCAPE

PUBLIC FOOTPATH
in-situ brushed concrete panels with expansion joints

PRIVATE TERRACE REAR GARDEN
in-situ concrete / resin bound gravel / Permeable paving - TBC
COMMUNAL COURTYARD
in-situ concrete / resin bound gravel

GRANGE HOUSE
Resin bound gravel / Compacted sand

PEDESTRIAN JUNCTION, PLAZA & COURTYARDS
Large slabs 600x450x63mm

FRONT TERRACE & THRESHOLD HOUSE
Concrete block paving 300x200x80mm or 200x100x60mm
Permeable - TBC

CAR PARKING SPACE & SHARED STREET
Permeable Concrete Block Paving 200x100x80mm

ROAD
Proposed Hot rolled asphalt surface
as per Engineer's specification

ROAD & RAISED TABLE
Buff coloured macadam as per Engineer's specification

PLAY AREA
Rubber mulch including H150 metal edges

STEPPING STONE
Concrete stepping stone 200x100x1000mm
Polished, grade silver, to exposed stone aggregate

DRAINAGE

+53.750 EXISTING LEVELS

+ 52.25 PROPOSED LEVELS AND FALL

PLANTING

TREE Existing + RPA

TREE
Group

TREE
Proposed

TREE small & Multistem
Proposed

STREET TREE
GRILL

PINE TREE

BUSHES

SHRUBS

EVERGREEN HEDGES

PROPOSED DOUBLE STAGGERED NATIVE HEDGEROW

ACCENTUATION PLANTING
SHRUBS & GROUND COVERS

MOWED GRASS

MEADOW GRASS

PRIVATE BACK GARDEN

GRASSY HABITAT
In accordance with Ecologist recommendations
non accessible area, mix of proposed wild grasses
+Cow parsley + crocus Barr's Purple + Grape Hyacinth.

FURNITURE

PUBLIC BENCH
with back and arm rest
L1800mm

PICNIC TABLE
table 2000x785mm
2x bench

JUNCTION BARRIER
2000x1100mm
Galvanized steel

CYCLE STAND SHEFFIELD
316 grade stainless steel
with a brushed polish finish
H825 x W850mm

BOLLARD
316 grade stainless steel
1000mm above ground

TREE GRILL
Galvanized mild steel tree grille
with polyester powder coated finish.
W1200 x D600mm

ESTATE RAILING & GATE
Galvanized steel with powder coated finish
W2000 x H1100mm - Anchor 600mm TBC

TACTILE PAVING
as per SDCC standard

BOULDER 1M3
1.1 x 1.1 x 0.8

BOULDER 0.5M3
1.0 x 0.8x 0.6

BOULDER 0.25M3
0.5 x 0.8x 0.6

PLAY EQUIPMENT

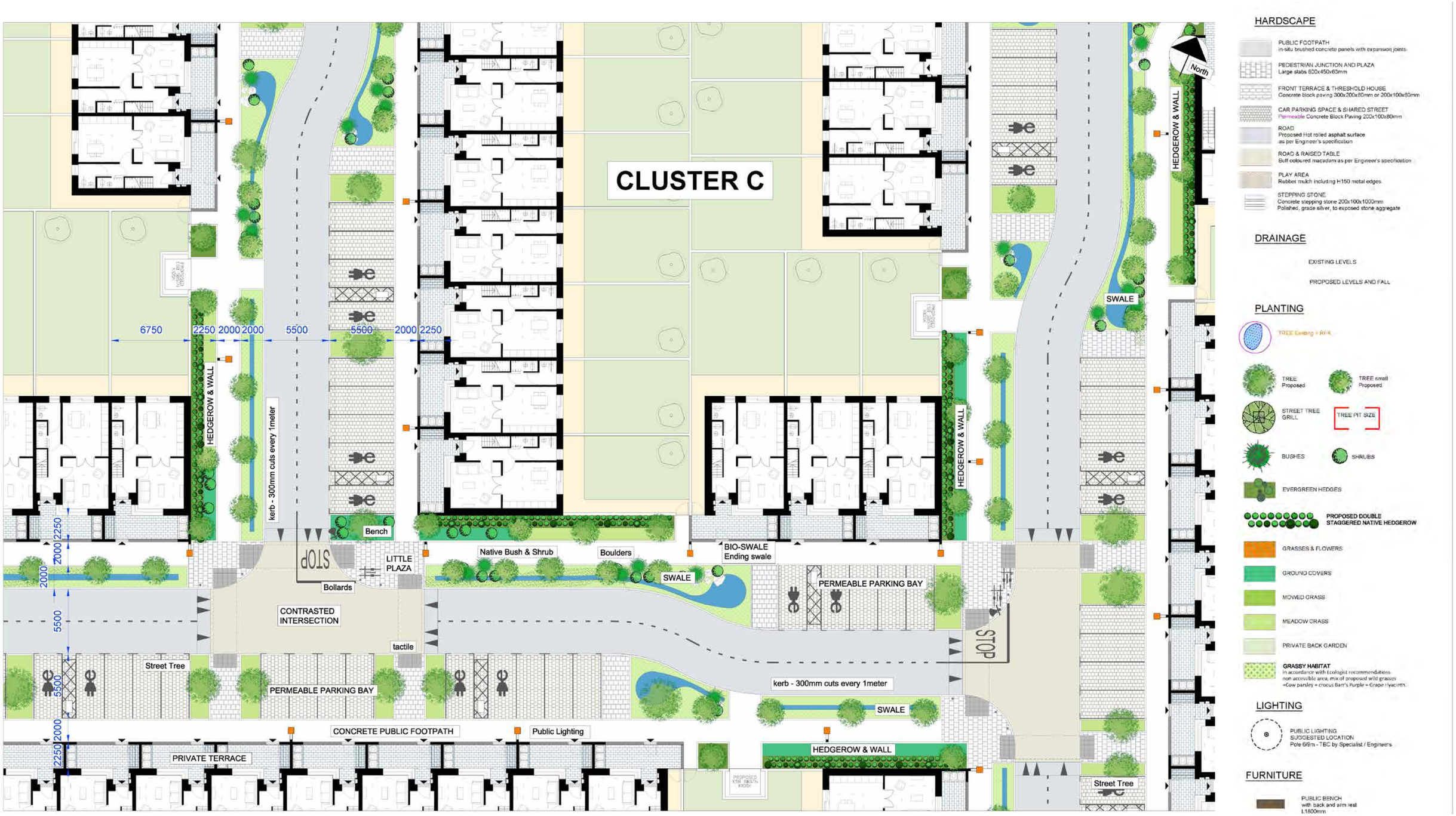
LOG & STEPPING STUMPS
5x stumps de-barked and sanded
diam 300 x H600mm
2x logs de-barked and sanded
L 2000mm

PLAY EQUIPMENT

03B - LANDSCAPE MASTERPLAN

The Landscape proposal:

- Forms an important streetscape to the new Clonburris identity, engages proactively with public realm and exploits the opportunity for links with the adjoining amenity space to provide opportunities for amenity as well as active and passive surveillance.
- Develops creative principles regarding *Accesibility* and *Movement* strategy to underpin universal design approaches: the pedestrian crossing implemented with the change of material (coloured asphalt) works in tandem with the " Little Plaza" to create an attractive nodal point.



03B - LANDSCAPE MASTERPLAN

The landscape proposal:

- Clearly defines and delineates new site boundaries, existing site features and public/private thresholds. Considering active and passive surveillance on all sides to ensure safety of building: all the private terrace alongside the public footpath are closed with a 1.1m railing following by a diverse evergreen hedge offering interesting flowering and fructification. Ex. Escallonia, Cotoneaster lacteus, Ilex, Viburnum, Ligustrum, etc.
- The swale, bio-swale, hedgerow and wall form a linked node of interest around the little plaza and sort of localised and active pocket public spaces to encourage social inclusion/ interaction, create a sense of place and prevent relentless streetscape appearance.

Habitat value for wildlife.

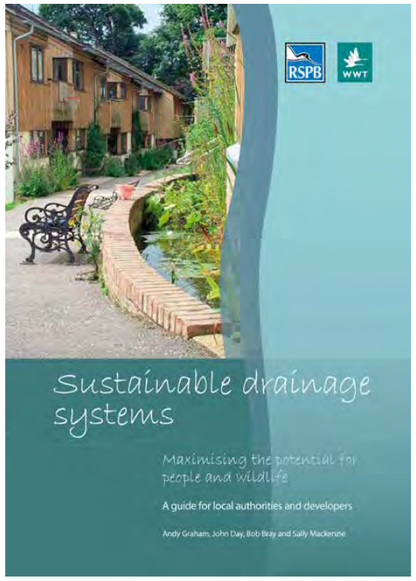
Native species with blooms and nectar

Wildlife hedges to form pyramids of vegetation with meadow like vegetation at the base. This provides dense cover with plenty of plant species diversity.

Note: In the illustration the blue colours represent a marginal wetland (not a watercourse). Using higher level outflows or damns, rock or boulders, if technically possible, will allow some temporary and localized retention of water to improve the stratum of biodiversity

03C - GREEN & BLUE INFRASTRUCTURE - DEFINITION

‘STEPPING STONE’ HABITAT IN URBAN AREAS



Ecological Corridor with the proposed Swales, Ending swales (Bio-swale) and Hedgerow & Wall form a network of biodiversity in accordance with the All-Ireland Pollinator and act as liking habitats for wildlife.

SUDS (Sustainable Drainage Systems) have a central role to play in delivering multiple benefits: **Wildlife** (They can act as linking habitats, stepping stones or as part of a corridor), **Recreation**, (using the landscape to manage rainfall and harness water in a creative way), **Mitigation of Flood Risk**, **Carbon Storage.**

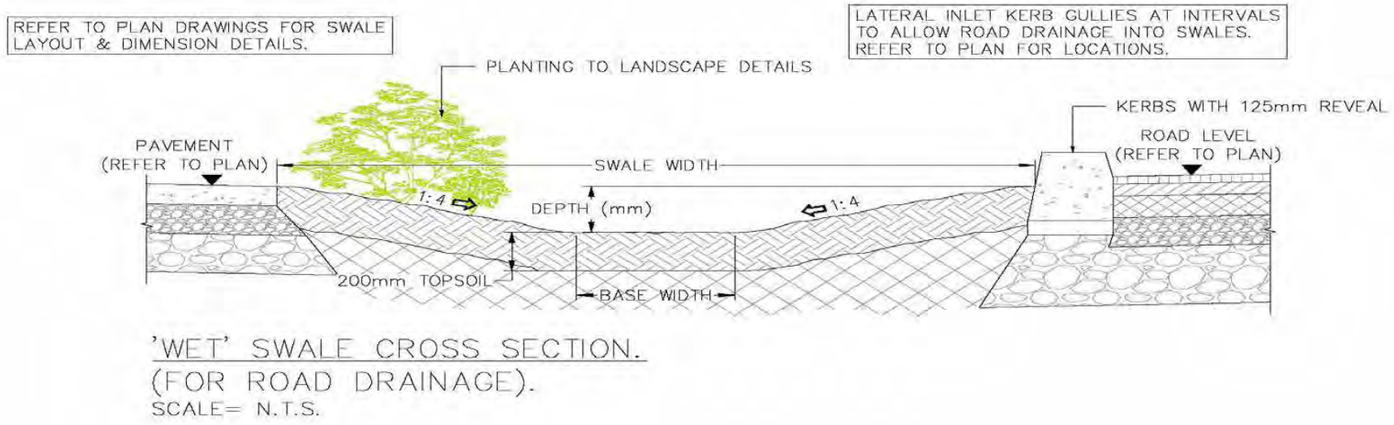
In the detailed zoom Masterplan, the components of the green blue infrastructure are connected with each other and form a network of biodiversity. Street trees, swales, Ending swales (=Bio-swale) and Hedgerow&Wall act as liking habitats for wildlife.

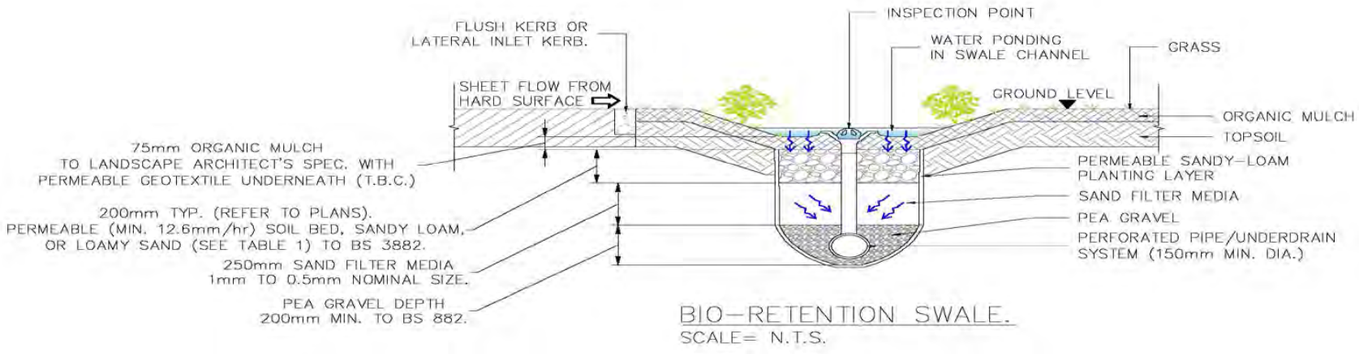
There are several benefits from the promotion of the SuDS elements within the development:
Habitats are created and linked to support existing and new wildlife. This increases biodiversity and improves the quality of ecosystems in urban environments. (Bioretention system)

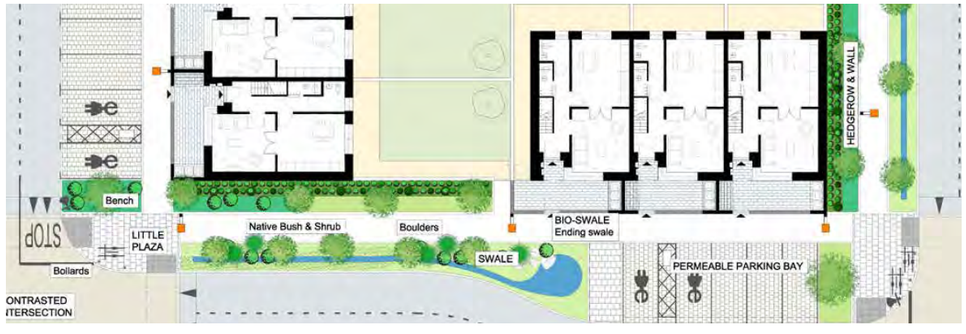
SWALES

Structure

· Total Width 3.5meters / depth 0.5m
· Adjacent kerb cut 0.3meters every meter or flush with road
· 1.0m sloped strip along road planted with turf
· 0.5m filter strips planted with turf & marginal wetland vegetation laid over 150mm of topsoil with a gravel under-drain
· 2.0m sloped strip planted with native Tree-Bush-Shrubs over 50/50 turf & amenity grade turf
· if enough water / provide opportunities for wetland plants, possibility to install small dams (river rock) or create a more biodiverse planted area (bio-swale) at the ending of the swale
· Native species : Betula pubescens (birch) , Prunus padus (bird cherry), Sorbus aucuparia (rowan), Crataegus monogyna (whitethorn), Frangula alnus, Salix cinerea, Corylus, etc.
· Undercover in ditch = native wetland (if enough water) or turf
· Along ditch = amenity grade turf and wildflower enhancement
· Along footpath = native mix small tree and bush / shrubs
· Maintain short grass adjacent to paths and in the formal areas of the SuDS
· Leave other areas with long grass over winter







Refer to DN2315-02-Clonburris-Site04- Detailed Masterplan

Refer to CSC drawing and details KSG4-CSC-XX-XX-DR-C-0006_Drainage Details-Sheet 2 of 4.pdf

KSG4-CSC-XX-XX-DR-C-0027_Proposed SUDs Layout.pdf.

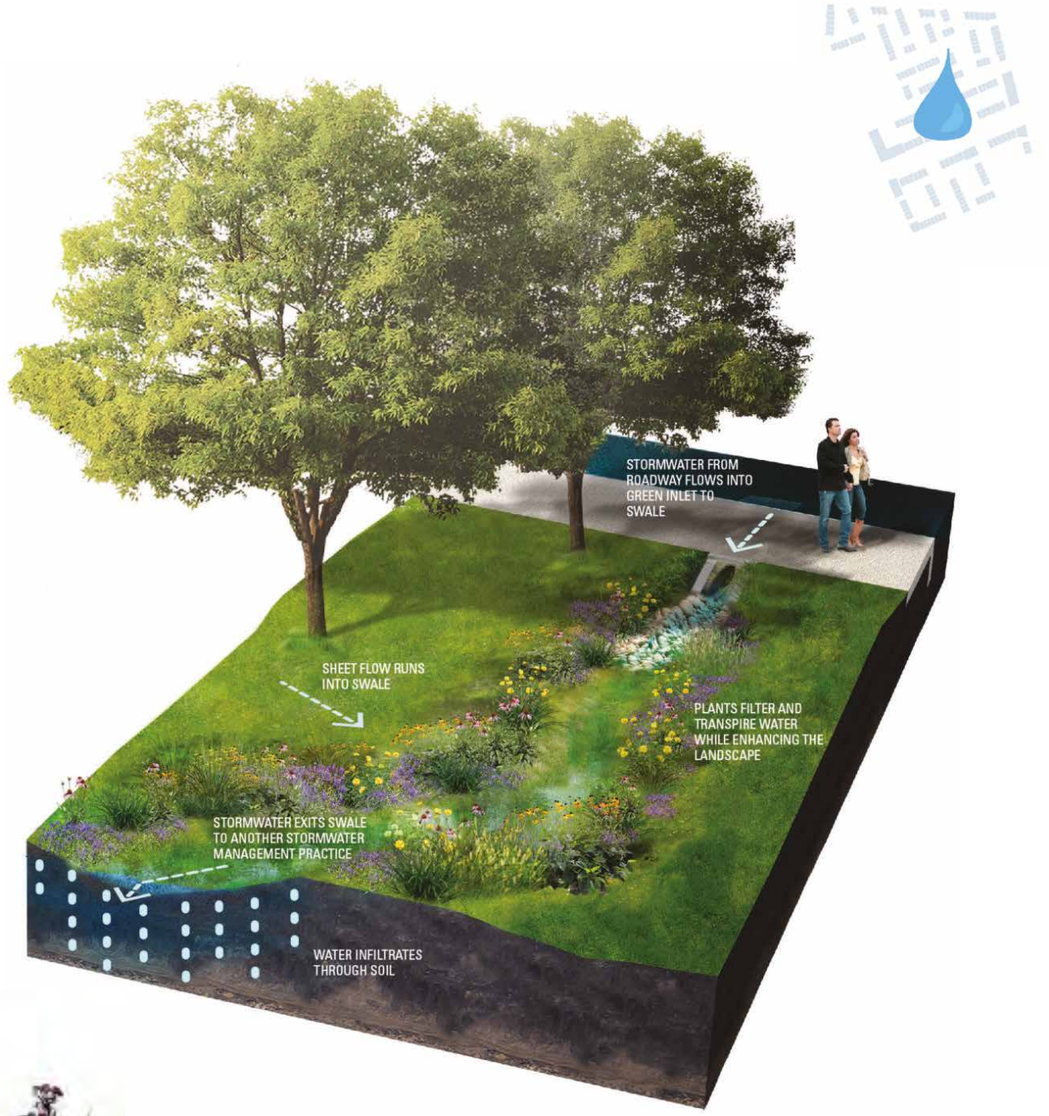
BIO SWALES
(ending of the swale)

Structure

· Using higher level outflows or dams, rock or boulders to allow some temporary and localized retention of water and improve the stratum of biodiversity...
· The proposed Bio-swale are not to be placed everywhere in the scheme. Technical development in conjunction with the Ecologist and Engineers, will be necessary to confirm the strategic location at further stage.
· Bio-swales are aesthetically planted with native flora to help filter water through soil and plants before it enters a storm drain.
· Plants can consist of both perennials and woody shrubs and can be designed to work in both sunny and shady locations. Plant selection is key to the performance of these swales and the light requirements that exist on a particular site. Plants can be utilized that attract butterflies and birds or just to enhance an otherwise utilitarian space.

Maintenance of the Swale

- Remove any debris or garbage
- Clear the inlet(s) and outlet(s)
- Water plants as needed until established
- Remove sediment build-up
- Inspect and replace diseased or dead plants
- Prune other vegetation as needed



PROPOSED SUDS MANAGEMENT TRAIN

- Permeable paving installed at all car parking spaces across the development site. Permeable paving shall provide interception and primary treatment for rainwater runoff at these locations. The permeable paving build up shall be unlined, to permit direct infiltration of rainwater to the greatest extent possible. It shall however include a perforated overflow pipe that shall drain to the development's surface water drainage pipe network and subsequently to the attenuation storage system.
- Some hardstanding areas shall direct surface water runoff into adjacent tree pits areas to allow for local infiltration; the system shall include an overflow pipe that shall drain to the development's main surface water drainage pipe network and subsequently to the attenuation storage system.

1. Permeable Paving
2. Raingardens/Bio-Retention
3. Swales
4. Drainage connected to tree pit along the road

03D - PROPOSED STREETSCAPE AND HIERARCHY

A prescribed street network has been developed for the Clonburris SDZ lands to form an integral part of the Planning Scheme's movement framework. In accordance with this framework, the adjacent diagram illustrates the proposed street network and hierarchy within the site.
In accordance with the SDZ,
- **The Link road** will act as a principal corridor for pedestrians, cyclists, public transport(local buses) and vehicles within the site. To enhance the character of this main infastructure, trees with large development are proposed.

- **Local Streets** will serve as quieter traffic(traffic calming measures to be considered). Street trees will be incorporated to provide green links and vistas to the adjacent open spaces. They will contribute to the sense of enclosure, act as a buffer to traffic pollution and enhance the quality of the space.

- **Intimate local street** or **Shared street** will prioritize for pedestrian and cycle through access. Individual species will be allocated per street giving a sense of identity to the locations.

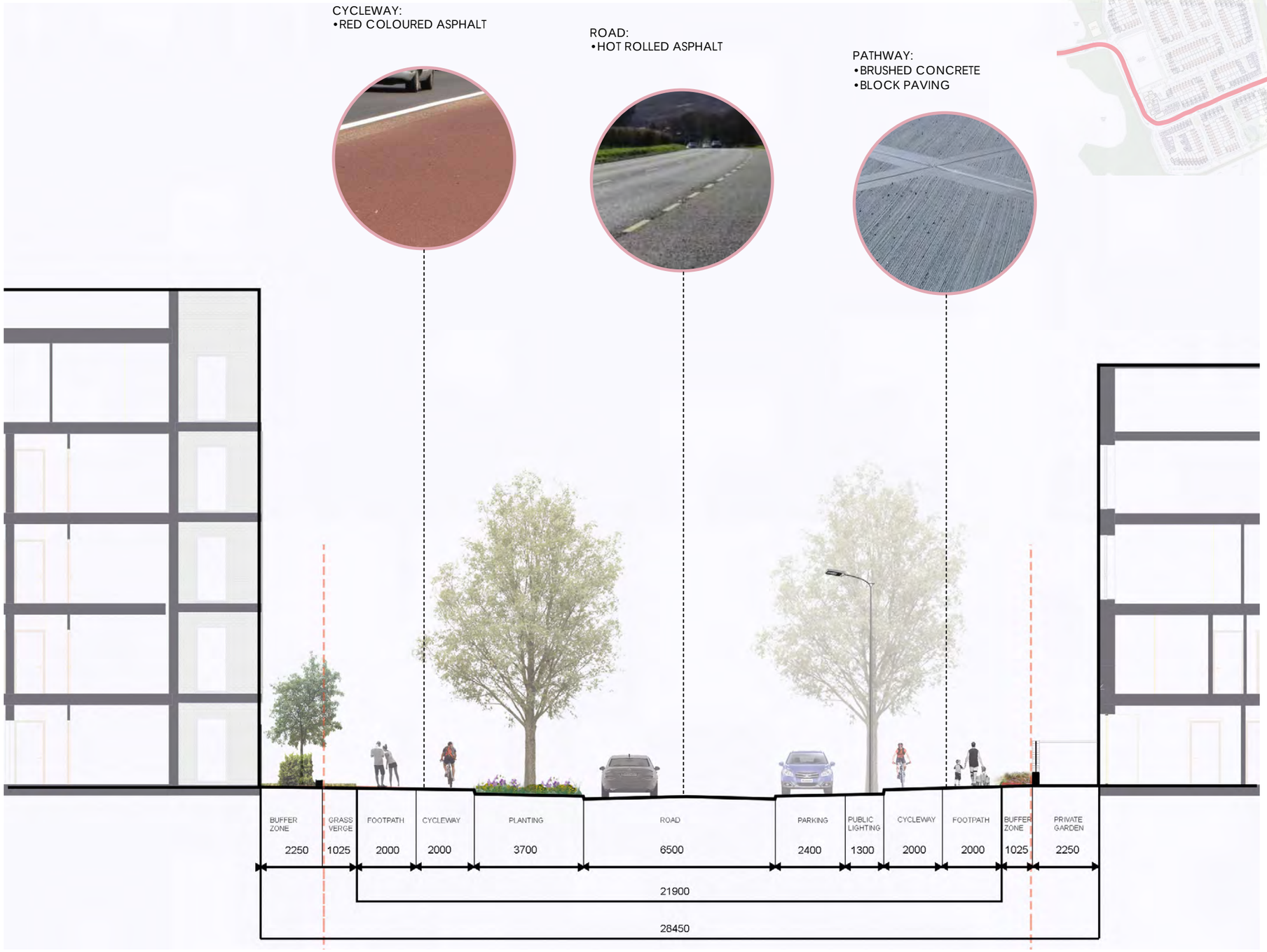
All streets will have developed layering with defined pocket spaces as nodal points/ punctuations, defining junctions and including safe children's play areas

LINK ROAD

LOCAL STREET

INTIMATE - LOCAL STREET

LINK ROAD



The Link road will act as a principal corridor for pedestrians, cyclists, public transport(local buses) and vehicles within the site. To enhance the character of this main infastructure, trees with large development are proposed.

LOCAL STREET

1. WALLS & PROPOSED NATIVE HEDGEROWS
2. LINEAR SWALES
3. PARKING & PERMEABLE PAVING
4. SMALL PLAZA & NODES OF INTEREST

The local streets are the most common road network of the plan. Street trees of light and coloured foliage will define linear routes and openings for parking spaces. SUDS are located along the street and planting areas. Pinch points will be used to slow down traffic.

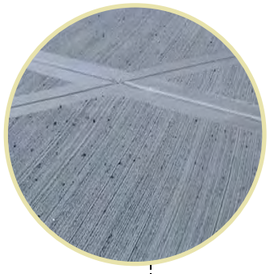
Vegetation mitigates the presence of cars

Proposed trees and Swales

Permeable parking space

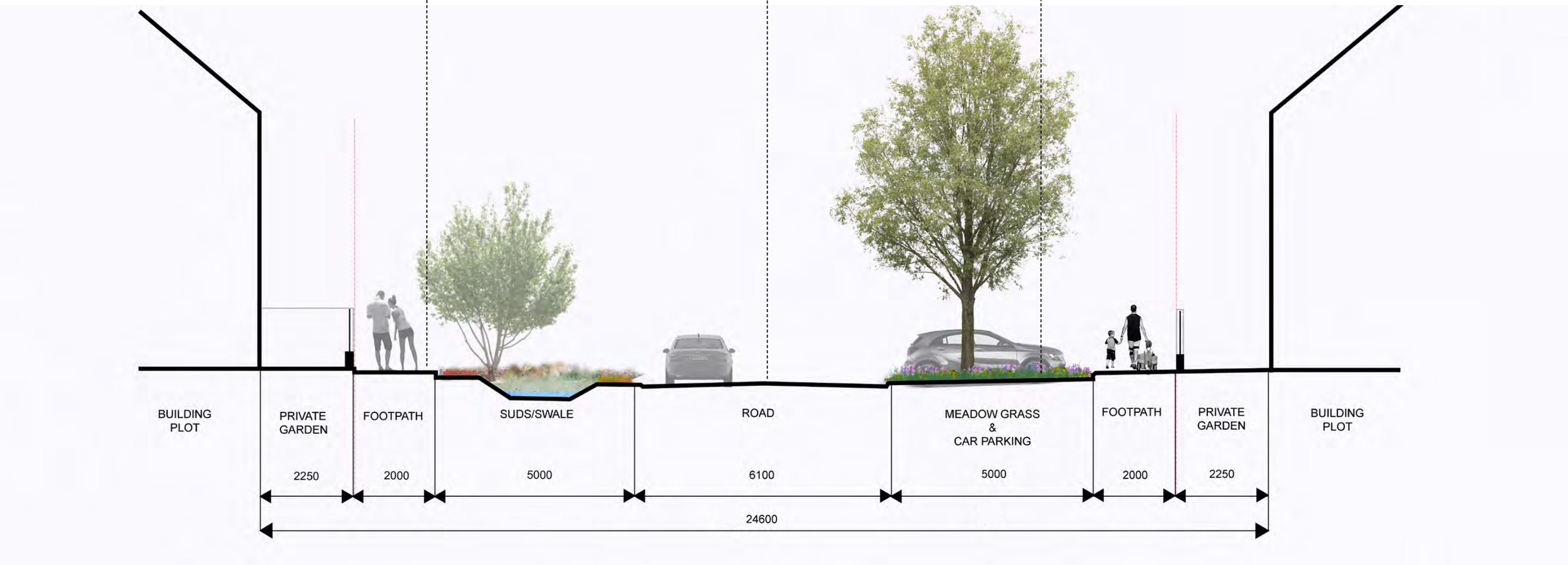
LOCAL STREET

PATHWAY:
- BRUSHED CONCRETE
- BLOCK PAVING



ROAD:
- HOT ROLLED ASPHALT

PARKING:
- PERMEABLE BRACKET TBC
- PRECAST CONCRETE PAVERS



Local Streets will serve as quieter traffic(traffic calming measures to be considered). Street trees will be incorporated to provide green links and vistas to the adjacent open spaces. They will contribute to the sense of enclosure, act as a buffer to traffic pollution and enhance the quality of the space.

INTIMATE LOCAL STREET / SHARED STREET

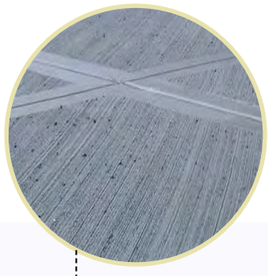
1. SHARED SURFACE WITH BASKETBALL AREA
2. HOME ZONE AREA
3. PERMEABLE CAR PARKING SPACE
4. BICYCLE PARKING AND PROPOSED CYCLE LANE JUNCTION

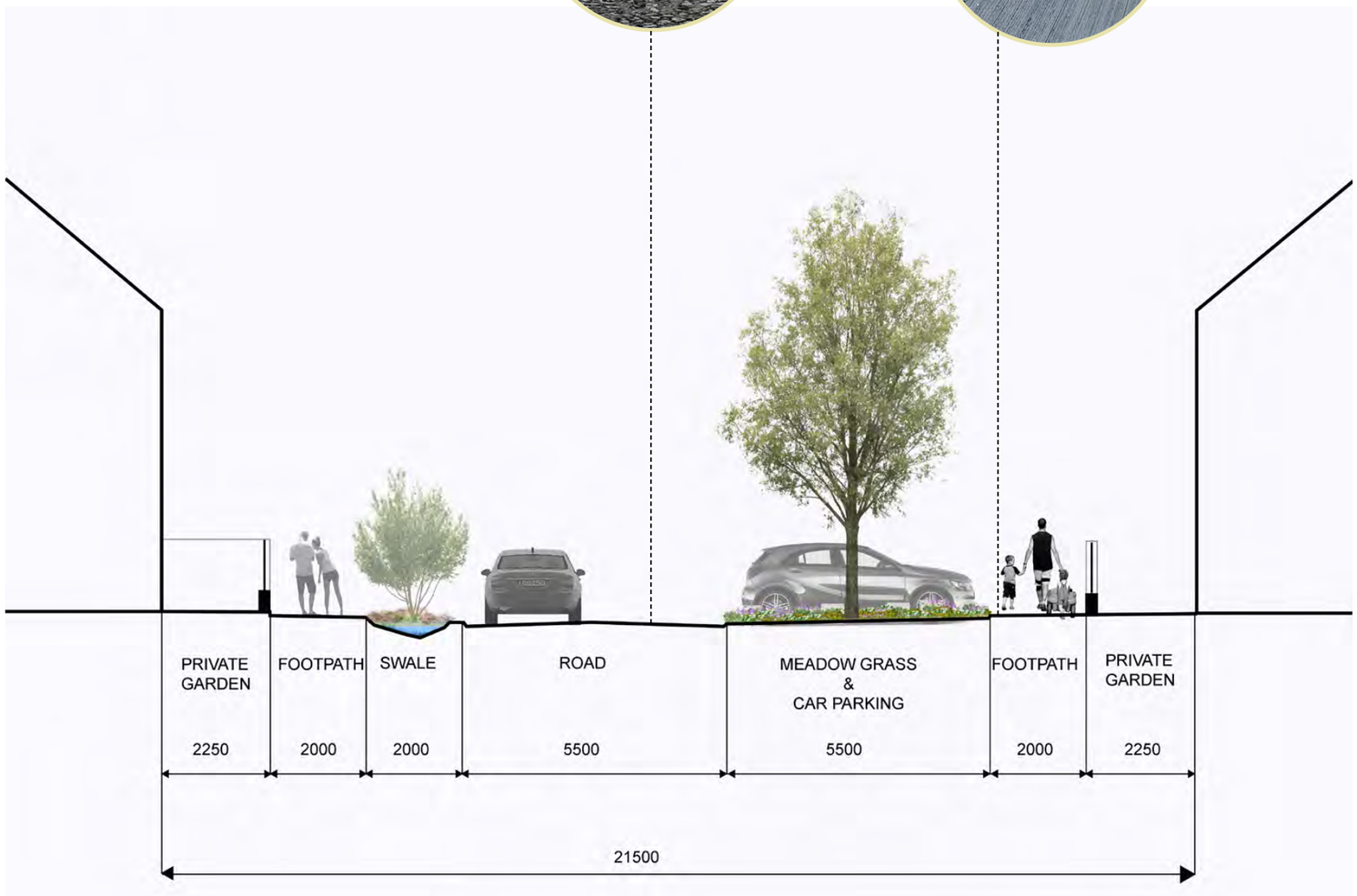
Intimate local streets will be established at places were homezones are one across to the other . Main characteristics will be the smaller widths of road and flush kerbs enhancing pedestrians priority. Small Trees with coloured foliage will occur at certain points providing a strong identity and character to the streets. The permeable parking and areas of tree planting will be the primary SuDS features for these streets.

INTIMATE ROAD

ROAD:
•HOT ROLLED ASPHALT

PATHWAY:
•BRUSHED CONCRETE
•BLOCK PAVING





Intimate local street or Shared street will prioritize for pedestrian and cycle through access. Individual species will be allocated per street giving a sense of identity to the locations.

03E - PUBLIC & COMMUNAL OPEN SPACE (COURTYARDS)

Semi-private courtyards are envisaged as versatile spaces offering an array of amenities for residents. These include inviting seating areas enveloped by lush planting, natural surfaces, expanses of grass, and communal growing zones. To enhance the distinctive character of each location, designated tree planting within each courtyard is planned, contributing to a unique sense of place.

Wooden poles as a balance game in a courtyard

Bike sheds in courtyards

Courtyard as multiple meeting places

Vegetation as an edge cover

Communal Courtyard - meeting & seating

COMMUNAL COURTYARD CLUSTER F

1. INFORMAL PLAY
2. MAIN ENTRANCE
3. FORMAL PLAY & PICNIC TABLES
4. WALLS & NATIVE HEDGEROW
5. BIKE AND CARGO BIKE PARKING

COMMUNAL COURTYARD CLUSTER H

1. FORMAL PLAY
2. WALLS & NATIVE HEDGEROW
3. OWN DOOR ACCESS & BUFFER (HEDGE)
4. BIKE AND CARGO BIKE PARKING

COMMUNAL COURTYARD CLUSTER J

1. FORMAL PLAY
2. PICNIC TABLES
3. PRIVATE TERRACE & BUFFER (HEDGE)
4. WALLS & NATIVE HEDGEROW
5.

ECOLOGICAL AREA & PUBLIC POCKET PARK - THE GRANGE HOUSE

ECOLOGICAL AREA - PRESERVATION AND ENHANCEMENT. Project coordinated with the ecologist - ALTEMAR
PUBLIC POCKET PARK AND ASSOCIATED ACTIVITIES TO THE GRANGE HOUSE.

ECOLOGICAL AREA

1. New pond linked up the existing ditches (phycial connection under road). As per original survey: JBA Ecologists recorded two Common Frog Rana temporaria alongside spawn during the amphibian survey.
2. Front terrace & footpath distant from existing trees and roots protection
3. Walls & Native hedgerow + proposed trained 'climbers' (honeysuckles). Residents biodiversity packaging – native apple tree/ crab apple, climbers, bird boxes.
4. Bat boxes to dark areas (Grange House area) – build into new build construction or within existing roof spaces.
5. Fencing & Protection Area - Area to be high grass/ meadow with access to cut once per year?

POCKET PARK & GRANGE HOUSE

6. Grange House – Council propose 'Employment' use – café ?
7. Pocket Park& biodiversity, seating and play areas.

Common Frog and spawn within drainage ditch

ECOLOGICAL AREA & PUBLIC POCKET PARK - THE GRANGE HOUSE DETAIL

ECOLOGICAL AREA - PRESERVATION AND ENHANCEMENT. Project coordinated with the ecologist - ALTEMAR
PUBLIC POCKET PARK AND ASSOCIATED ACTIVITIES TO THE GRANGE HOUSE.

ECOLOGICAL AREA DETAILS

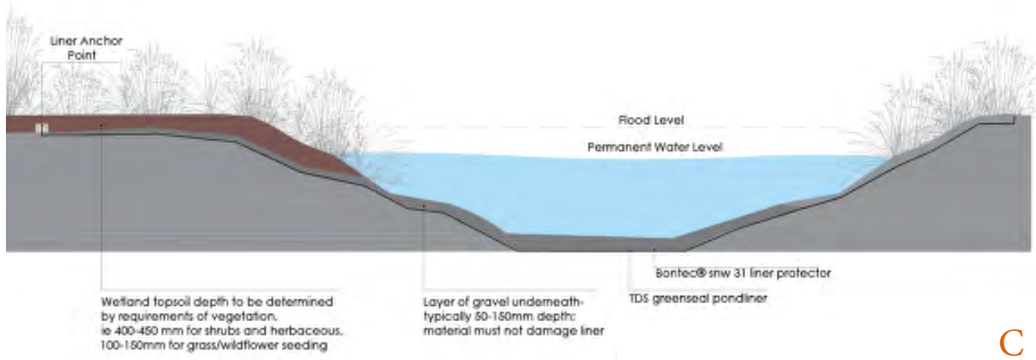
A. The image here shows a recent project that BSLA constructed, it shows how the pond area maintains a certain level of water all year round.

B. The planting completley transforms this space and creates a hive of biodiversity in tandem with the pond.

C. The section shows the way a pond liner is used to keep a pernament water level throughout the year

A

B



C

04

PROPOSED MATERIAL

04A - Planting Strategy

04B - Hardsurface

04A - PLANTING STRATEGY

The general planting strategy throughout the scheme is for significant structure tree planting with 2 metre clear stems to provide a leafy canopy layer, softening the proposed buildings. A base layer of perennial and grass planting in the form of rain gardens will create a seasonal interest and provide a strong sense of identity to the scheme. Eye level between proposed trees and planting is kept clear to maintain sight lines throughout the scheme.

- The extent of existing mature trees on the site and the implicit contradiction/ incompatibility of development of the site and retention of trees. It is proposed that impact is mitigated through an extensive landscape strategy with significant tree planting.
- Ensuring that tree plantings in roads are long term in terms of rooting zones, with close co-ordination with underground services to ensure trees will have multi-generational longevity.
- Establishing a hierarchy of tree species that are scaled appropriately in relation to the road network but are strongly identifiable to "home" in respect of seasonal effect, leaf texture, blossom, and berries.
- The planting strategy will be developed to provide food and shelter for insects, birds, and butterflies in particular and strike a balance between wilder areas to boost the green infrastructure and a more garden like regime closer to front doors.

Planting

Native and naturalised tree species are to be planted within the public open space to increase opportunities for native wildlife. These will ultimately be large scale trees to designate a parkland character. Mixed native hedgerow is proposed in the open spaces to mitigate the removal of hedgerow during site construction. This is to be maintained at 1.1m in height unless otherwise stipulated. Biodiverse whip planting with a copse of standard and semi mature trees along the northern boundary will form a 'Ecological corridor' for wildlife along the site.

Trees

Street tree planting will consist of species with fastigiate or neat forms suitable to the scale of the streetscape and those which will thrive in a streetscape environment. Street tree planting is designed together with the street lighting to avoid shading. Street trees will be planted into a minimum of 7cu.m. topsoil, with the use of urban tree soils, root barriers to protect water utilities and topsoil loaded rootcells to increase rooting areas outside the main tree pit area as necessary.

Bioretention planting /Rain gardens

A mix of structure grasses and perennial planting form the overall planting palette for the raingardens throughout the scheme. Proposed species will respond to the existing location of beds with a maximum of 7 species

Shrub & Groundcover (Node of Interest & Residential Courtyards)

Low level shrub and groundcover planting will be in single species blocks taken from an overall palette of species throughout the scheme with flowers and fruits attractive to wildlife such as bees and butterflies. Species will be of maximum 1m height at maturity to maintain clear sight lines.

Landscape Implementation Programme

Planting on the site will commence with the completion of each stage of the works and as a result the programme is closely tied to building works.
Ground preparation will precede planting and will include weed clearance and amelioration where necessary. Planting of species will be carried out in the dormant period from November – March, with grass seeding carried out from April – September, this will ensure ample opportunity for planting to establish properly, omit and reduce casualties during the maintenance period.

Maintenance

The objective of the landscape proposals is to provide a high-quality public realm, which is accessible, safe and distinctive. Planting and landscape works will be carried out in accordance with BS4428. Trees will be advanced/semi-mature rootballed stock, in accordance with BS 8545. Low level, low maintenance shrub planting will be used in planting beds. 75mm well composted fine bark mulch to be considered in the areas of shrubs.

Residential Hedgerow

Raingarden a.

Tree rows as a border

04A - PLANTING STRATEGY

Tree species

Selected species suitable for physical characteristics (scale, form) and adaptive/ compatible to site conditions, microclimate and whole of life impacts and costs.

ECOLOGICAL CORRIDOR

Native Hedgerows

- Mixed- Crataegus monogyna, Prunus spinosa, Rosa canina and Ilex aquifolium
- Residential- Ligustrum vulgar

STRUCTURE OF HEDGEROW & WALL = Habitat for wildlife

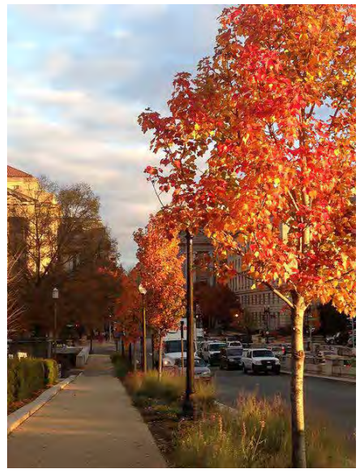
Native shrub species which produce blooms, rich with nectar, fruit and nuts.
non accessible area, mix of proposed wild grasses /meadow grass and / or wild bird cover seeding in place of meadow climbers 'trained' on wires or trellis for Honeysucle or not for Ivy.
the hedgerow includes a higher proportion of woodland edge species. Hawthorn (Principal species) + Blackthorn + Holly + Occasional specimen trees of light canopy (Silver birch and Alder) + Crab apple + occasional shrubs.

Northern 'Ecological Corridor'

- Whip Planting of; Crataegus monogyna, Prunus spinosa, Rosa canina and Ilex aquifolium, Cornus sanhuineas and Corylus avellanaPrunus padus
- Tree Planting of; Quercus robur, Alnus glutinosa, Betula pubescens and Euonymus europaeus


Prunus Tai Haku


Prunus Chanticleer


Liquidembar


Quercus palustris


Rowan


Habitat value for wildlife.


Native species with blooms, rich with nectar, fruits and nuts.



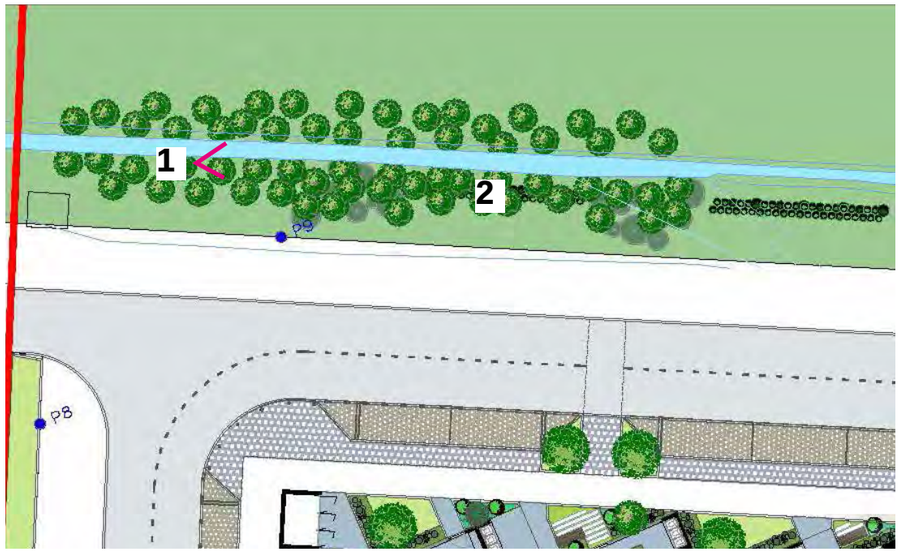
Wildlife hedges to form pyramids of vegetation with meadow like vegetation at the base. This provides dense cover with plenty of plant species diversity.

EXISTING TREES

Refer to chapter Opportunities and Constraints- pages 9-10

From the arborist report we identified a number of trees that could be reused and postioned in strategic locations through out the site. The process of transpalnting mature trees can take a long but would be beneficial of the dvelopment. The transplantation can take 2 years in total. Year 1 the tree roots are trimmed on one side and then year 2 the other is competed. After this , the trees are relocated for storage.

Below Proposed Masterplan- where existing tees can be retained



Northern Boundary: Native hedgerow mix

Grange House: A mix of mature conifer and deciduos trees

PROPOSED TREES

1. URBAN STREET TREES

Street tree planting will consist of species with fastigiate or neat forms suitable to the scale of the streetscape and those which will thrive in a streetscape environment. They will be located between the car parking spaces.

2. STREET TREE GRILL

The trees chosen for these locations will give an intrest throughout the seasons. The are postioned in key locations creating nodes of interest.


Gleditsia


Quercus palustris


Tilia


Acer rubrum


Quercus robur


Acer campestre

TREE Existing + MPA

PINE TREE
Height 4m - Rootball 1m

STREET TREES
between car parking space
Height 5m - Girth 20-25

TREE small & Multistem
in courtyards and front houses
Height 5m - Girth 18-20

(ACE)	Acer campestre 'Elsrijk'	(PSC)	Prunus sargentii "Charles Sargent"
(APE)	Acer platanoides 'Emerald Queen'	(PSD)	Prunus serrulata "Tai Haku"
(ARR)	Acer rubrum 'Red Sunset'	(PCC)	Pyrus calleryana "Chanticleer"
(TCG)	Tilia cordata 'Greenspire'	(PAP)	Prunus avium "Plena"
(TPP)	Tilia platyphyllos 'Prince's Street'	(CR)	Crataegus monogyna
(QR)	Quercus robur	(KP)	Koelreuteria paniculata
		(MA)	Malus
		(SI)	Sorbus intermedia

NATIVE TREES IN SUDS
Birch, Bird Cherry, Rowan, Whitethorn, Willow, etc.
Height 1.5m - Girth n/a - Large feathered tree

STREET TREE GRILL
in the little plaza
Height 6m - Girth 25-30

TREE GROUP
in large green space
Height 2.0m

(GT)	Gleditsia triacanthos inermis	(BP)	Belutal pendula
(QP)	Quercus palustris	(BU)	Betula utilis

HEDGEROW AND WALL
proposed double staggered native hedgerow
Height 1m 0/1/1 Transplant, branched, 4 brks
20% Blackthorn + 30% Hawthorn + 10 Silver birch + 10 Wild Cherry + 5% Crab Apple + 5% Spindle + 10% Guelder Rose + 5% Holy + 5% Azel

EVERGREEN HEDGES - GREEN BUFFER ALONG TERRACES
Height 1m / 10L pot
Cotoneaster lacteus / Euonymus fortunei 'Emerald Gaiety' / Ligustrum japonicum / Viburnum tinus 'Eve Price'

ACCENTUATION PLANTING - SHRUBS & GROUND COVERS
IN COURTYARDS AND NODES OF INTEREST

BUSHES / SHRUBS
Blackcurrant / Corylus avellana / Euvonymus europaeus / Ilex
Ribes aureum & sanguineum / Kolkwitzia amabilis / Euonymus alatus
Deutzia gracilis / Forsythia intermedia "Spectabilis" / Spirea arguta
Physocarpus "Dart's Gold" / Viburnum opulus 'Roseum'

ORNAMENTAL GRASSES & FLOWERS
Thalictrum "Black Stockings" / Salvia involucrata / Crocosmia aurea
Nepeta faassenii / Agapanthus / Gaura / Hesperantha coccinea
Panicum virgatum / Perowskia / Salvia involucrata / Campanula
Cerastium / Crocosmia aurea / Echinacea / Fennel / Iris "Tol Long"
Lavandula stoechas / Arabis caucasica "Bakkely"

GROUND COVERS
Fragaria vesca / Fern / Genanium maccrorrhizum / Hedera helix
Geranium psilostermon "Patricia" / Helexine / Galium odoratum

MEADOW GRASS - WET CONDITION
WILDFLOWER MEADOW TYPE2 / for pictorial meadow, wet soil:
2000g of wetands Native Wildflower Seed Mix by Connecting to Nature

PLUG PLANT MIX, 1plug / 2m²:
Digitalis purprurea alba / Succisa pratensis / Eupatorium cannabinum
Valeriana officinalis / Sanguisorba canadensis / Thalictrum white
Iris sibirica + Iris ToLong / Filipendula rubra venusta

BULB MIX: (5 bulbs/m2)
Nectaroscordum siculum / Narcissus pseudonarcissus
Leucojum aestivum / Camassia leichtlinii blue and white
Fritillaria meleagris

MEADOW GRASS - DRY CONDITION
WILDFLOWER MEADOW TYPE1 / for pictorial meadow normal soil:
500g of Year after Year Colour Impact seed mix by Connecting to Nature

PLUG PLANT MIX, 1plug / 2m²:
Salvia sylvestris ¸ May Night¸ / Echinacea purpurea ¸ White Swan¸
Echinacea purpurea / Helenium autumnale salsa / Sanguisorba tanna
Verbascum phoeniceum / Achillea millefolium / Achillea terracota

BULB MIX: (5bulbs/m2)
Galtonia candicans / Gladiolus italicus / Camassia leichtlinii blue
Camassia leichtlinii white / Muscari latifolium / Tulip darwin hybrid Apricot Impression / Leucojum aestivum

MOWED GRASS

PRIVATE BACK GARDEN

PROPOSED TREES

SMALL TREES/MULTISTEM AND TREE GROUPS

Street tree planting will consist of species with fastigiate or neat forms suitable to the scale of the streetscape and those which will thrive in a streetscape environment. They will be located between the car parking spaces.

These groups of trees will be planted in group form in large green spaces. The areas will offer cover for wildlife thus creating biodiversity in these locations.

Betula-pendula-Silver-Birch

Salix caprea

1. SMALLER TREES AND MULTISTEM

Cornus kousa 'Chinensis'

Frangula alnus

Cornus mas

Laburnum anagyroides

Corylus avellana

Sambucus nigra

TREE Existing = NPA

PINE TREE
Height 4m - Rootball 1m

STREET TREES
between car parking space
Height 5m - Girth 20-25

TREE small & Multistem
in courtyards and front houses
Height 5m - Girth 18-20

(ACE)	Acer campestre 'Elsrijk'	(PSC)	Prunus sargentii "Charles Sargent"
(APE)	Acer platanoides 'Emerald Queen'	(PSD)	Prunus serrulata "Tai Haku"
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(TCG)	Tilia cordata 'Greenspire'	(PAP)	Prunus avium "Plena"
(TPP)	Tilia platyphyllos 'Prince's Street'	(CR)	Crataegus monogyna
(QR)	Quercus robur	(KP)	Koetreuteria paniculata
		(MA)	Malus
		(SI)	Sorbus intermedia

NATIVE TREES IN SUDS
Birch, Bird Cherry, Rowan, Whitethorn, Willow, etc.
Height 1.5m - Girth n/a - Large feathered tree

STREET TREE GRILL
in the little plaza
Height 6m - Girth 25-30

TREE GROUP
in large green space
Height 2.0m

(GTI) Gleditsia triacanthos Inermis
(QP) Quercus palustris

(BP) Belutal pendula
(BU) Betula utilis

HEDGEROW AND WALL
proposed double staggered native hedgerow
Height 1m 0/1/1 Transplant, branched, 4 brks
20% Blackthorn + 30% Hawthorn + 10 Silver birch + 10 Wild Cherry + 5% Crab Apple + 5% Spindle + 10% Guelder Rose + 5% Holy + 5% Azel

EVERGREEN HEDGES - GREEN BUFFER ALONG TERRACES
Height 1m / 10L pot
Cotoneaster lacteus / Euonymus fortunei 'Emerald Gaiety' / Ligustrum japonicum / Viburnum tinus 'Eve Price'

ACCENTUATION PLANTING - SHRUBS & GROUND COVERS
IN COURTYARDS AND NODES OF INTEREST

BUSHES / SHRUBS
Blackcurrant / Corylus avellana / Euvonymus europaeus / Ilex
Ribes aureum & sanguineum / Kolkwitzia amabilis / Euonymus alatus
Deutzia gracilis / Forsythia intermedia "Spectabilis" / Spirea arguta
Physocarpus "Dart's Gold" / Viburnum opulus 'Roseum'

ORNAMENTAL GRASSES & FLOWERS
Thalictrum "Black Stockings" / Salvia involucrata / Crocosmia aurea
Nepeta faassenii / Agapanthus / Gaura / Hesperantha coccinea
Panicum virgatum / Perowskia / Salvia involucrata / Campanula
Cerastium / Crocosmia aurea / Echinacea / Fennel / Iris "Tol Long"
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Fragaria vesca / Fern / Genanium maccrorrhizum / Hedera helix
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Iris sibirica + Iris ToLong / Filipendula rubra venusta

BULB MIX: (5 bulbs/m2)
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MOWED GRASS

PRIVATE BACK GARDEN

NATIVE TREES AND SUDS

Having these native trees in the SUDS gives a strong structure and offers food for the wildlife from the fruit produced by the trees chosen. The trees also offer a visual intrest to the people passing through this space.

1. NATIVE TREES IN SUDS

Crataegus monogyna-Hawthorn

Prunus avium-WildCherry

Sorbus aucuparia-MountainAsh

Prunus padus-BirdCherry

TREE Existing = RPA

PINE TREE
Height 4m - Rootball 1m

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between car parking space
Height 5m - Girth 20-25

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Valeriana officinalis / Sanguisorba canadensis / Thalictrum white
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Salvia sylvestris „ May Night„ / Echinacea purpurea „ White Swan„
Echinacea purpurea / Helenium autumnale salsa / Sanguisorba tanna
Verbascum phoeniceum / Achillea millefolium / Achillea terracota

BULB MIX: (5bulbs/m2)
Galtonia candicans / Gladiolus italicus / Camassia leichtlinii blue
Camassia leichtlinii white / Muscari latifolium / Tulip darwin hybrid Apricot Impression / Leucojum aestivum

MOWED GRASS

PRIVATE BACK GARDEN

BIORETENTION PLANTING /RAIN GARDENS

ATTENUATION PLANTING

A mix of structure grasses and perennial planting form the overall planting palette for the raingardens throughout the scheme. These will be postioned in areas of high volume of pedestrian traffic and crossings. Low level shrub and groundcover planting will be in single species blocks taken from an overall palette of species throughout the scheme with flowers and fruits attractive to wildlife such as bees and butterflies. Species will be of maximum 1m height at maturity to maintain clear sight lines.

1. BUSHES/SHRUBS

Viburnum Opulus

Corylus avellana

1. ORNAMENTAL GRASSES & FLOWERS

Echinacea purpurea

Thalictrum 'Black Stockings'

1. GROUND COVERS

Hedera helix-Ivy

Fragaria vesca

WALLS & NATIVE HEDGEROW / EVERGREEN HEDGE

Hedgerow & Wall form a network of biodiversity in accordance with the All-Ireland Pollinator and act as liking habitats for wildlife. We are proposing a native species to link and to act as a corrodor for wildlife to move through. The hedgerows will a mix of ever-green and decidous, giving intrest all year round.

1. EVERGREEN HEDGES

Green buffer along the private front terrace.

Cotoneaster lacteus

Ligustrum japonicum

Viburnum tinus

Escallonia rubra

2. HEDGEROW AND WALL

Native shrub species which produce blooms, rich with nectar, fruit and nuts.
non accessible area, mix of proposed wild grasses /meadow grass and / or wild bird cover seeding in place of meadow climbers 'trained' on wires or trellis for Honeysucle or not for Ivy.
the hedgerow includes a higher proportion of woodland edge species. Hawthorn (Principal species) + Blackthorn + Holly + Occasional specimen trees of light canopy (Silver birch and Alder) + Crab apple + occasional shrubs.

Crataegus monogyna-Hawthorn

Ilex aquifolium-Holly

Rosa canina-DogRose

TREE Existing + /MA

PINE TREE
Height 4m - Rootball 1m

STREET TREES
between car parking space
Height 5m - Girth 20-25

TREE small & Multistem
in courtyards and front houses
Height 5m - Girth 18-20

(ACE)	Acer campeatre 'Elsrijk'	(PSC)	Prunus sargentii "Charles Sargent"
(APE)	Acer platanoides 'Emerald Queen'	(PSD)	Prunus serrulata "Tai Haku"
(ARR)	Acer rubrum 'Red Sunset'	(PCC)	Pyrus calleryana "Chanticleer"
(TCG)	Tilia cordata 'Greenspire'	(PAP)	Prunus avium "Plena"
(TPP)	Tilia platyphyllos 'Prince's Street'	(CR)	Crataegus monogyna
(QR)	Quercus robur	(KP)	Koelreuteria paniculata
		(MA)	Malus
		(SI)	Sorbus intermedia

NATIVE TREES IN SUDS
Birch, Bird Cherry, Rowan, Whitethorn, Willow, etc.
Height 1.5m - Girth n/a - Large feathered tree

STREET TREE GRILL
in the little plaza
Height 6m - Girth 25-30

TREE GROUP
in large green space
Height 2.0m

(GTI)	Gleditsia triacanthos Inermis	(BP)	Belutal pendula
(QP)	Quercus palustris	(BU)	Betula utilis

HEDGEROW AND WALL
proposed double staggered native hedgerow
Height 1m 0/1/1 Transplant, branched, 4 brks
20% Blackthorn + 30% Hawthorn + 10 Silver birch + 10 Wild Cherry + 5% Crab Apple + 5% Spindle + 10% Guelder Rose + 5% Holy + 5% Azel

EVERGREEN HEDGES - GREEN BUFFER ALONG TERRACES
Height 1m / 10L pot
Cotoneaster lacteus / Euonymus fortunei 'Emerald Gaiety' / Ligustrum japonicum / Viburnum tinus 'Eve Price'

ACCENTUATION PLANTING - SHRUBS & GROUND COVERS
IN COURTYARDS AND NODES OF INTEREST

BUSHES / SHRUBS
Blackcurrant / Corylus avellana / Euvonymus europaeus / Ilex
Ribes aureum & sanguineum / Kolkwitzia amabilis / Euonymus alatus
Deutzia gracilis / Forsythia intermedia "Spectabilis" / Spirea arguta
Physocarpus "Dart's Gold" / Viburnum opulus 'Roseum'

ORNAMENTAL GRASSES & FLOWERS
Thalictrum "Black Stockings" / Salvia involucrata / Crocosmia aurea
Nepeta faassenii / Agapanthus / Gaura / Hesperantha coccinea
Panicum virgatum / Perowskia / Salvia involucrata / Campanula
Cerastium / Crocosmia aurea / Echinacea / Fennel / Iris "Tol Long"
Lavandula stoechas / Arabis caucasica "Bakkely"

GROUND COVERS
Fragaria vesca / Fern / Genanium maccrorrhizum / Hedera helix
Geranium psilostermon "Patricia" / Helexine / Galium odoratum

MEADOW GRASS - WET CONDITION
WILDFLOWER MEADOW TYPE2 / for pictorial meadow, wet soil:
2000g of wetands Native Wildflower Seed Mix by Connecting to Nature

PLUG PLANT MIX, 1plug / 2m²:
Digitalis purprurea alba / Succisa pratensis / Eupatorium cannabinum
Valeriana officinalis / Sanguisorba canadensis / Thalictrum white
Iris sibirica + Iris ToLong / Filipendula rubra venusta

BULB MIX: (5 bulbs/m2)
Nectaroscordum siculum / Narcissus pseudonarcissus
Leucojum aestivum / Camassia leichtlinii blue and white
Fritillaria meleagris

MEADOW GRASS - DRY CONDITION
WILDFLOWER MEADOW TYPE1 / for pictorial meadow normal soil:
500g of Year after Year Colour Impact seed mix by Connecting to Nature

PLUG PLANT MIX, 1plug / 2m²:
Salvia sylvestris ¸ May Night¸ / Echinacea purpurea ¸ White Swan¸
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MOWED GRASS

PRIVATE BACK GARDEN

ACCENTUATION PLANTING

Additional Planting is proposed in the residential courtyards, the pocket Parks and the Node of Interest (= around the pedestrian crossing within the Streetscape) to re-inforce the biodiversity: shrubs, ornamental grasses and ground covers, evergreen and decidous, giving intrest all year round.

(Aa) Aronia arbutifolia

(Cp) Callicarpa bod

(Cs) Cornus sanguinea

(Ee) Euonymus europaeus

(Fi) Forsythia intermedia

(Rc) Rosa canina

(Ri) Ribes aureum

(Sn) Spiraea nipponica

(Vo) Viburnum opulus

(Vp) Viburnum plicatum

Anthericum ramosum

Aquilegia

Chrysanthemum

Geranium psilostemon

Hesperantha

Liatris spicata

Libertia grandiflora

Molinia caerulea

Nemesia denticulata

Panicum virgatum

Salvia nemerosa

TREE Existing + RPA

PINE TREE
Height 4m - Rootball 1m

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Height 5m - Girth 20-25

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MOWED GRASS

PRIVATE BACK GARDEN

ECOLOGICAL AREA & PUBLIC POCKET PARK - THE GRANGE HOUSE

ECOLOGICAL AREA - PRESERVATION AND ENHANCEMENT. Project coordinated with the ecologist - ALTEMAR
PUBLIC POCKET PARK AND ASSOCIATED ACTIVITIES TO THE GRANGE HOUSE.

MEADOW GRASS DRY AND WET CONDITIONS

MEADOW GRASS WET CONDITIONS (EXAMPLES)

Digitalis purpurea alba

Valeriana officinalis

Camassia leichtlinii blue

MEADOW GRASS DRY CONDITIONS (EXAMPLES)

Salvia sylvestris 'May Night'

Echinacea purpurea 'White Swan'

Gladiolus italicus

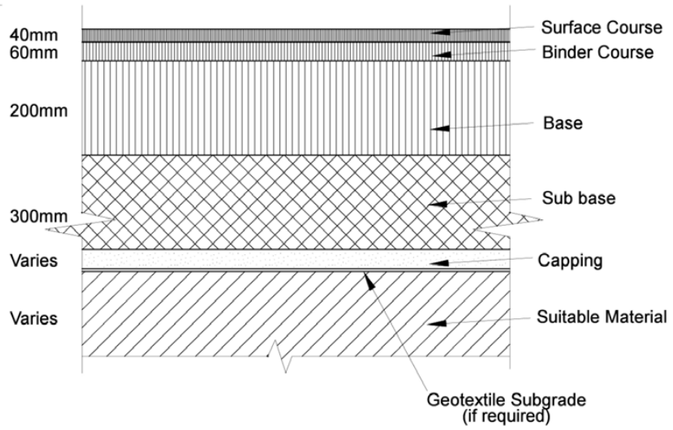
04B - LANDSCAPE MATERIAL - HARDSURFACE

ROAD

Asphalt

Work Element:	Asphalt material.
Use:	Residential Development (> 40 houses).
Description:	In accordance with typical details.
Dimensions:	To suit location.
Laying:	In accordance with the NRA SRW.
Bedding:	Not applicable.
Subbase:	Type B material in accordance with NRA SRW Clause 808 and compacted in compliance with Clause 802.
Other Layers:	Capping layer thickness depends on CBR.
Joints:	In accordance with the NRA SRW.

Typical Details



Standards:	(A) Surface course: The surface course employed may be either of the following:
	1. Hot Rolled Asphalt surface course: Shall comply with the requirement of NRA SRW Clauses 911, 910 and 943. It shall be laid and compacted to Clause 903.
	2. Polymer Modified Stone Mastic Asphalt surface course: Shall comply with the requirements of NRA SRW Clause 942. It shall be laid and compacted to Clause 903.
	(B) Binder Course: Binder Course shall comply with the requirements of NRA SRW Clauses 929, 930, 937 and 943. It shall be laid and compacted to Clause 903.
	(C) Base Course: Roadway base material shall comply with the requirements of NRA SRW Clauses 906, 907, 929 and 930. It shall be laid and compacted to Clause 903.
	(D) Subbase: Subbase material should comprise Type B granular material, in accordance with NRA SRW Clause 808 and compacted in compliance with Clause 802.
	(E) Capping Layer: If the CBR is less than 5% then a capping layer is required. Refer to Table 3 for details. Capping material should comprise of Class 6F2 material, in accordance with NRA SRW Clause 613 and compacted in compliance with Clause 612.
Finish:	Not applicable.
Miscellaneous:	The thickness of the material described shall meet the finished or compacted thickness. The dimensions on the 'Typical Details' represent the minimum requirements. The designer is still responsible for providing appropriate depths for projected traffic requirements, ground conditions and any additional design requirements that may exist, e.g. greater depths of construction material may be required. Capping, if required, should be composed of Class 6F1 or 6F2 material, in accordance with NRA SRW Clause 613 and compacted in compliance with Clause 612.

ROAD - RAISED TABLE

Tarmac and Gravel: refer to engineer spec

CAR PARKING

Permeable concrete block paving

TOBERMORE RANGE : HYDROPAVE FUSION
Permeable paving with natural granite aggregates.
Hydropave Fusion is a popular permeable block paving product, manufactured with a natural granite appearance creating a striking, contemporary look.

Size: 200x100x80
Pattern: car space (100% silver) / delineation (100% graphite)

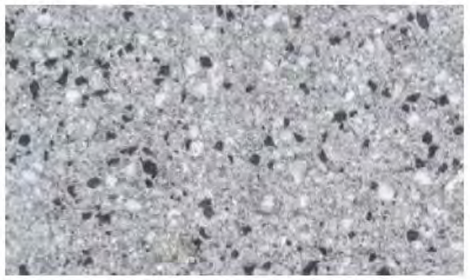
200 x 100mm

Sizes

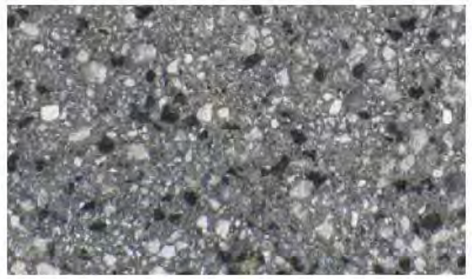
80mm

Depths

Silver



Graphite

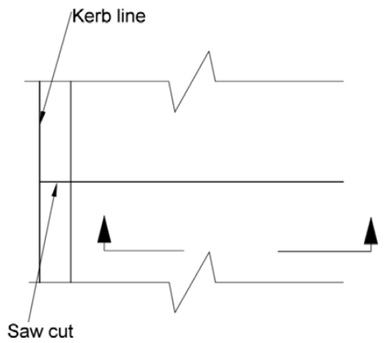


PUBLIC FOOTWAY

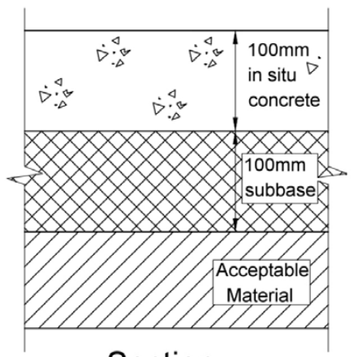
In-situ brushed concrete

Work Element:	In situ concrete.
Use:	Pedestrian use only.
Description:	100mm concrete Grade C30 to NRA SRW Clause 1106.
Dimensions:	To suit location.
Laying:	In one layer.
Bedding:	Not applicable.
Subbase:	100mm NRA SRW Clause 808.
Other Layers:	Acceptable material is material that meets the requirements of Table 6 / 1 in the NRA SRW.
Joints:	Maximum spacing of 3 metres (should be arranged to coincide with joints in the kerb).
Standards:	· Curing of the footway: NRA SRW Clause 1027
	· Cement: Normal Portland Cement I.S. EN 191-1
	· Aggregates for concrete to be in compliance with S.R. 16:2004 'Guidance on the use of I.S. EN 12620:2002 - Aggregates for Concrete'
	· Granular material Type B: NRA SRW Clause 808
	· Mix designation: 0/31.5
	· Overall grading: GA
	· Oversize category: OC80
Finish:	While still 'green', float with a trowel and brush lightly to produce slight roughness.
Miscellaneous:	· Sustainable cement (GGBS) is an acceptable alternative to OPC with written approval of Road Maintenance Services.
	· Material to NRA SRW Clause 808 shall comply with minimum CBR requirement in accordance with the NRA SRW.
RM25450	

Typical Details



Plan



Section

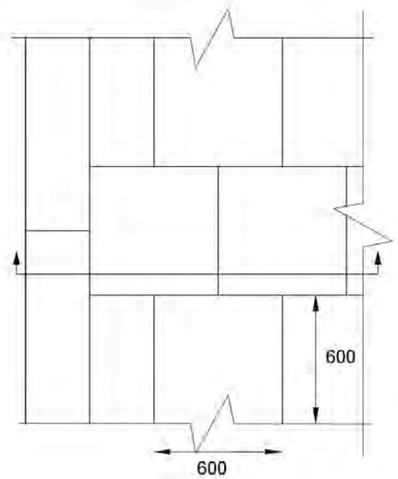
LIGHT GREY CAST INSITU CONCRETE (BRUSHED)

PEDESTRIAN JUNCTION AND PUBLIC PLAZA

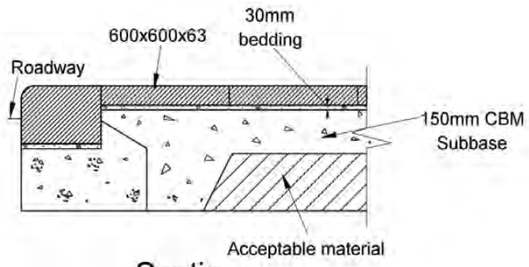
600x600 or 600x450 concrete paving slab - option granite slab TBC

Work Element:	Granite flagstones.
Use:	Pedestrian use only.
Description:	Silver grey or beige granite only.
Dimensions:	600 x 600 x 63mm.
Laying:	Not applicable.
Bedding:	3:1 sand:cement (30mm thick).
Subbase:	Semi-dry concrete 150mm Cement Bound Material (CBM) Category 3 to NRA SRW Clause 1038. The ratio by mass of cement to aggregate shall be sufficient to produce a 7-day Strength of 10 N/mm^2.
Other Layers:	Acceptable material is material that meets the requirements of Table 6 / 1 in the NRA SRW.
Joints:	6mm wide joints, grouted with 3:1 sand:cement wet slurry mix and finished slightly rounded. Jointing sand shall conform to BS 7533-4:2006 clause 5.4.6.4.
Standards:	· Natural stone kerbs shall comply with requirements of EN 1343:2012 'Kerbs of Natural Stone for External Paving'.
	· Flexural strength not less than 8.6 N/mm^2.
	· Skid / Slip Resistance USRV not less than 45.
	· Polished Stone Value not less than 50.
	· Water absorption not more than 0.3% bulk density.
Finish:	Bush hammered or flame finished.
Miscellaneous:	· Granite samples are to be provided to Road Maintenance Services before commencement of all work.
	· Name and address of the provider or supplier shall be indicated on the sample, as well as identification of the material, indicating trade name; petrographic description; country of origin; and extraction area. The plan, diagonal and thickness dimensions shall comply with requirements for Class 2 in Tables 1, 2 & 3 of EN 1341:2012.
	· Bollards shall be installed at intervals along the pavement to protect the footway.
	· In certain locations, Dublin City Council requires high-strength mortar bedding, etc. Please refer to Section 5.
RM25455	

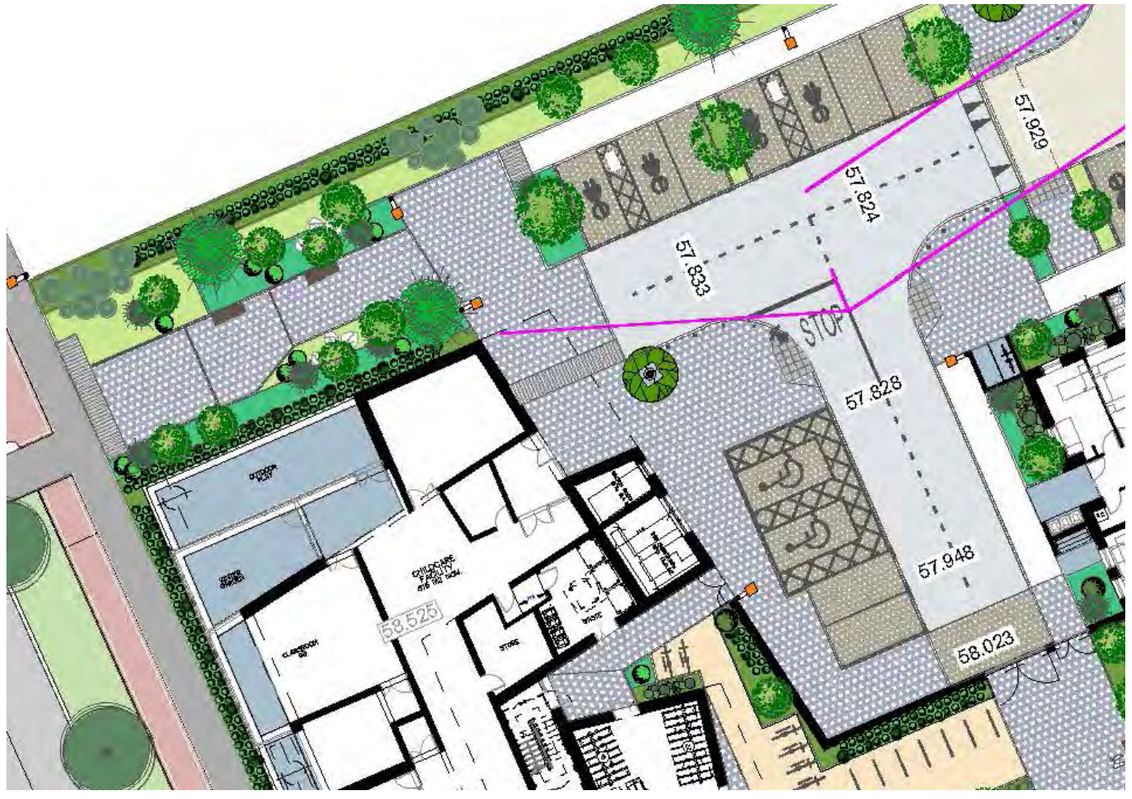
Typical Details



Plan



Section

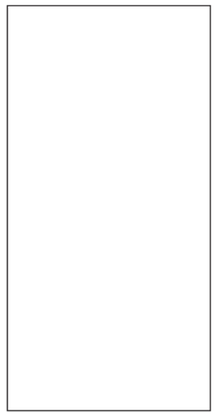


PLAZA AND NODES OF INTEREST IN COMMUNAL SPACES

Textured concrete paving

TOBERMORE RANGE : BRAEMAR GROUND TEXTURE FINISH

Premium concrete paving with the aesthetic appeal of natural granite.
Size: 600x300x80
Pattern: mix colours (70% Alto Silver + 30% Jura Grey or Islay rose)



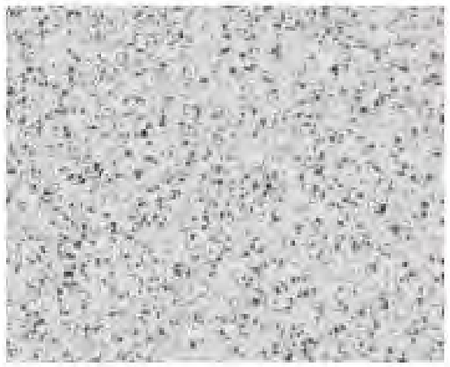
600 x 300mm

Sizes

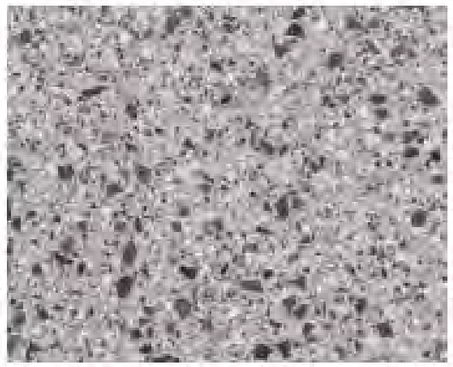
80mm

Depths

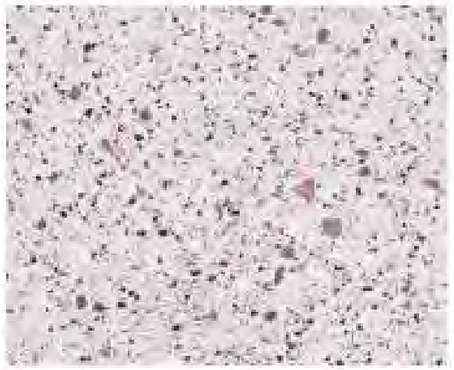
Alto Silver



Jura Grey

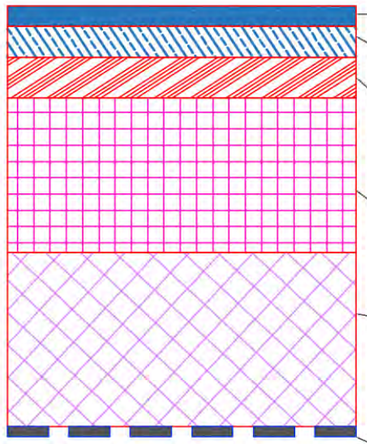


Islay Rose



FOOTPATH IN COMMUNAL SPACES

Resin bound gravel



SURFACE COURSE: 16mm-20mm RESIN BOUND AGGREGATE TO LANDSCAPE ARCHITECTS SPECIFICATION

SURFACE COURSE 30mm THICK OF AC10 CLOSE SUR 70/100 IN ACCORDANCE WITH SERIES 900 OF TII SPW-CLAUSE 3.1.9

BINDER COURSE: 50mm THICK OF AC20 DENSE BIN 70/100 IN ACCORDANCE WITH SERIES 900 OF TII SPW-CLAUSE 3.1.5

150mm - CLAUSE 808 MATERIAL IN ACCORDANCE WITH TII SPECIFICATION FOR WORKS

CAPPING LAYER VARIES - REFER TO TABLE 1 FOR DETAILS.
CAPPING MATERIAL SHOULD COMPRISE OF CLASS 6F MATERIAL, IN ACCORDANCE WITH TII-CC-SPW-00600 CL.613 AND COMPACTED IN COMPLIANCE WITH CL.612

PERMEABLE GEOTEXTILE, 1000 TERRAM OR SIMILAR APPROVED WHEN REQUIRED ON EXAMINATION OF SUBFORMATION

Resin coulour Silver

PRIVATE TERRACE

Textured concrete paving - Permeable TBC

TOBERMORE RANGE : FUSION

Modern granite aggregate paving.
Fusion's granite appearance creates a striking contemporary look.

Size: 100x100x60 or 100x200x60
Pattern: uniform silver or mix colours (50% Silver + 50% Mid Grey)

100 x 100mm

Sizes

60mm
80mm

Depths

Silver

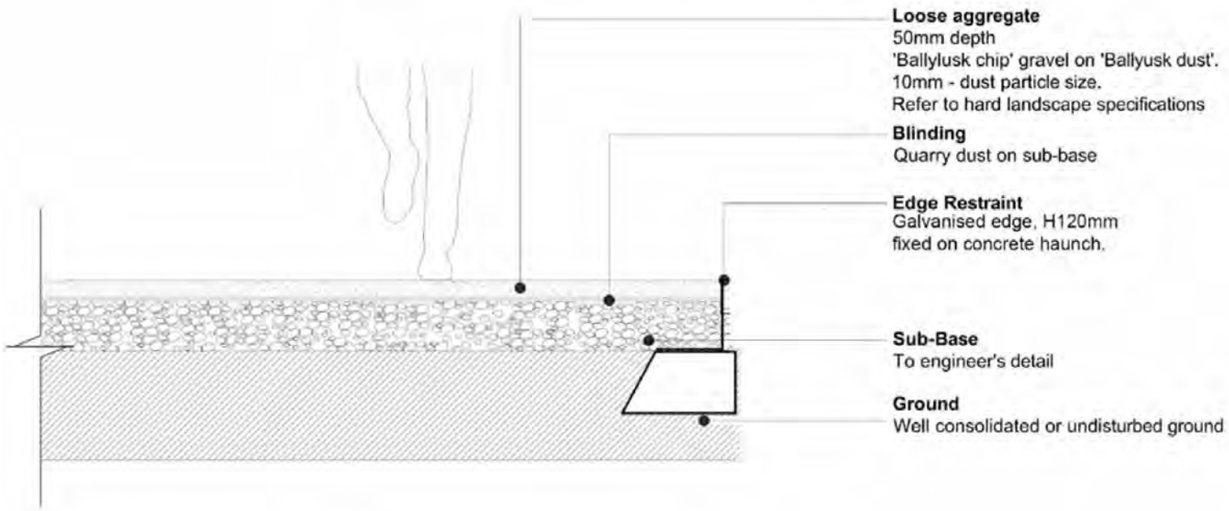
Mid Grey

FOOTPATH AROUND GRANGE HOUSE

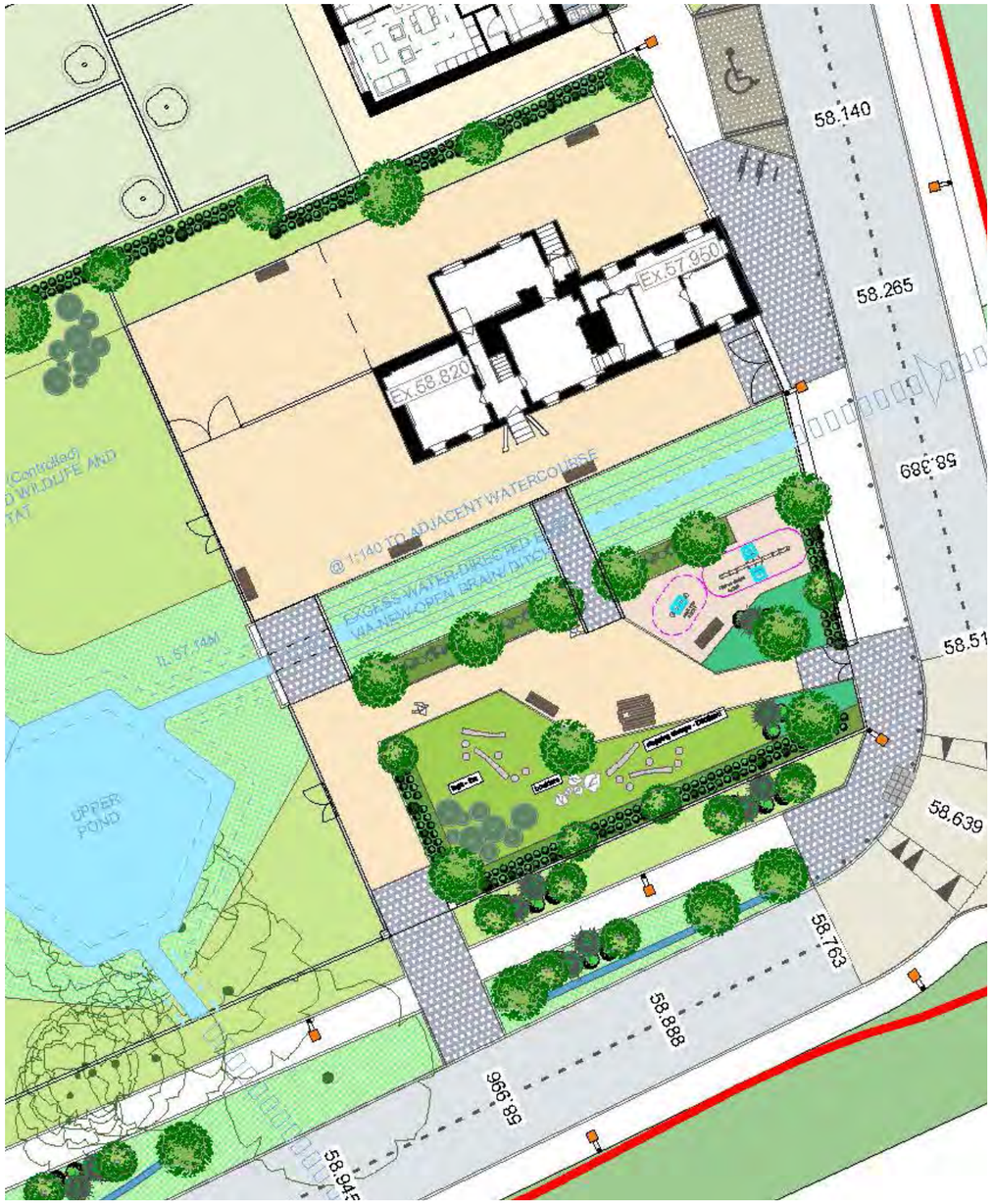
Compacted Sand type Hoggin (or Resin bound gravel)

NOTE: Further site investigation works on the tree roots within the protected hedgerow. Refer to John Morris report

NOTE: PUBLIC FOOTPATH AND EXISTING ROOT SYSTEM.
This path is within a tree root protected zone. Therefore, on the advice of the Arborist, the unbound material is proposed as the build-up above the tree root zone needs to be highly permeable and allow for transpiration.
Periodic maintenance will be carried out in this area approx. every 6 months to ensure that this unbound surface does not deteriorate and present a hazard. The ramp gradient is not excessively steep limited at 1:21. Given the relatively flat nature of the ramp and regular maintenance, we don't consider there to be a significant risk of this unbound material deteriorating over time.

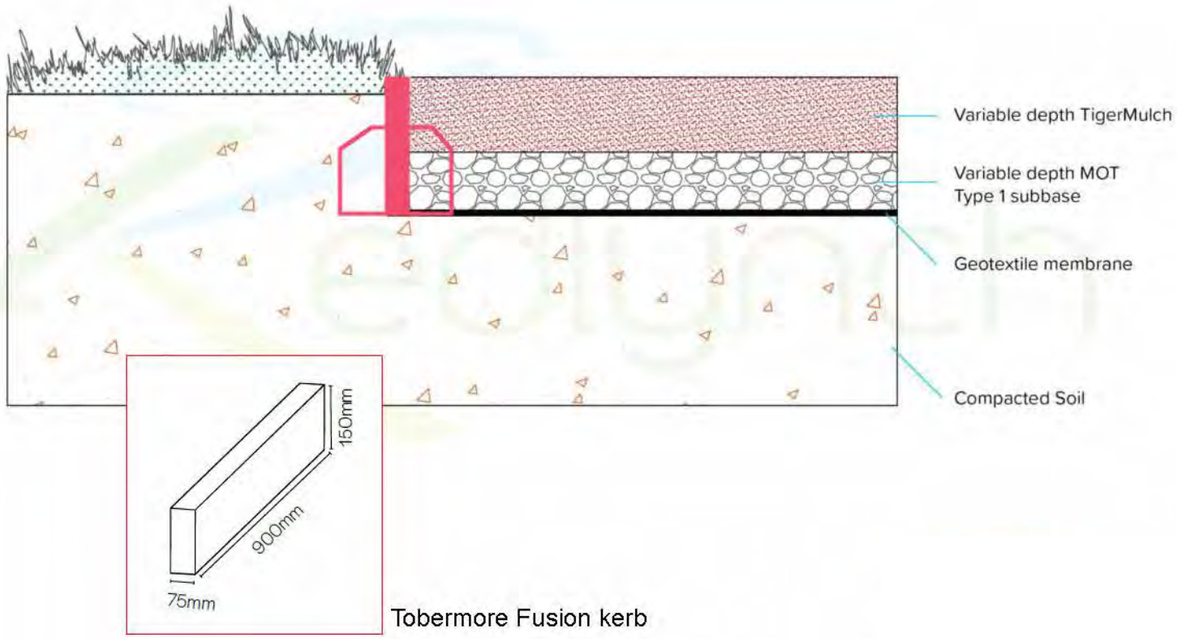


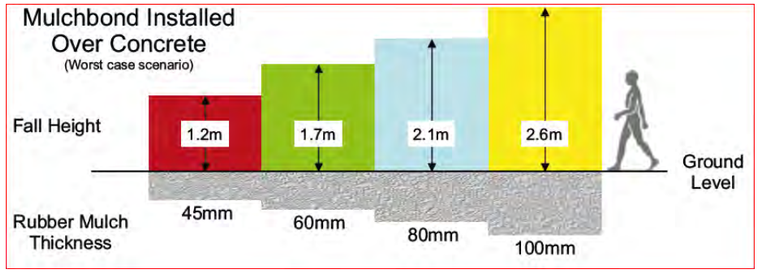
SELF-BINDING GRAVEL PATH
WITH EDGE RESTRAINT



PLAY AREA IN COMMUNAL COURTYARDS

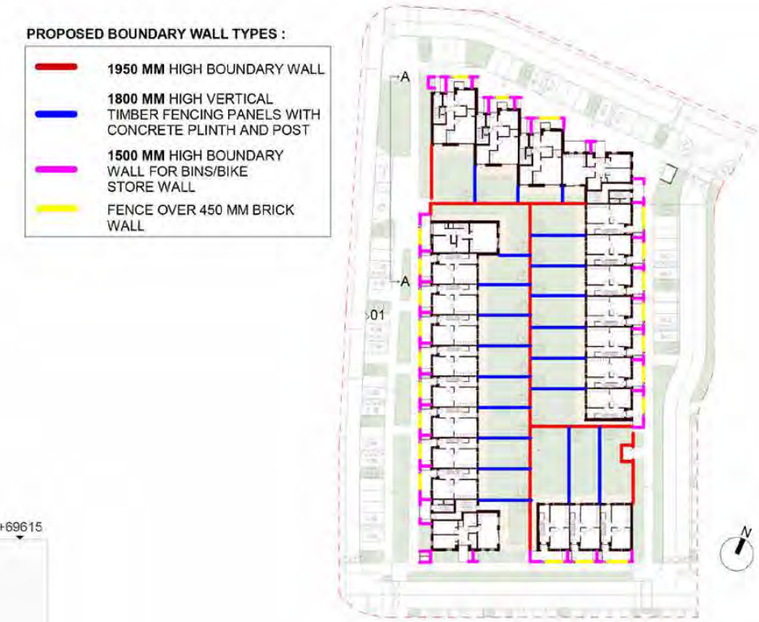
Rubber mulch including 150mm metal edge or concrete edge

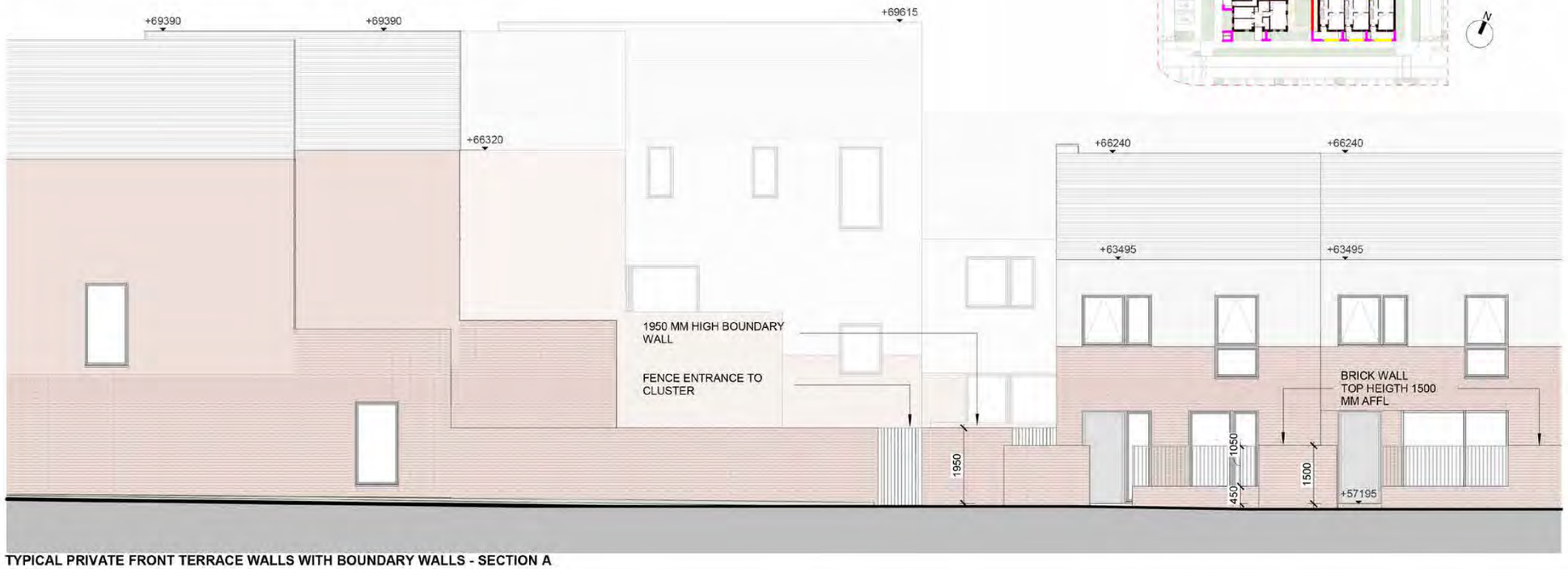




BOUNDARY TREATMENT (REFER TO ARCHITECT DETAILS)

TYPICAL PRIVATE FRONT TERRACE WALLS WITH BIN STORES - 3D VIEW 01





TYPICAL PRIVATE FRONT TERRACE WALLS WITH BOUNDARY WALLS - SECTION A
1 : 100

DRG NO:	KSG4	DTA	CA	ZZ	DR	A	S001
PROJECT:	KISHOGE PART 10 APPLICATION						
DRAWING:	SKETCH - BOUNDARY WALL TYPES						

DTA ARCHITECTS

MAINTENANCE

• Herbicide: Apply a suitable foliar acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
• Hard surfaces: Remove litter, leaves and other debris.
• Surface gutters and channels: Remove mud, silt and debris.
• Drainage gullies: Empty traps and flush clean.
• Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
• Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
• Stain removal: In accordance with BS 7370-2, table 4.

GENERAL CLEANING AND MAINTENANCE ADVICE FOR THE PERMEABLE PAVING - TOBERMORE

Simply washing your paving can ensure it always looks great.
To keep your newly installed paving looking at its best at all times and to ensure you getmany years of use from your investment, some regular basic cleaning will be required.
Regular brushing is recommended to remove dirt, leaves and detritus. If the colour ofthe paving is being masked by dirt and detritus we suggest using hot soapy water anda stiff brush. By doing this you can significantly improve the appearance of the paving.
Certain types and colours of paving may require a bit more care and attention thanothers to ensure they always look great. For example, light coloured paving blocks andflags may emphasize tyre marks, oil spills and dirt more than darker colours. It is likely that these colours will require slightly more maintenance if the overall appearance is to be maintained.
A pressure washer can also be used if required.
A light pressure washer set at medium pressure is generally all that is required to clean general dirt and grime. High pressure should not be used. A trial area should be tested before large scale pressure washing takes place.
Any jointing sand which is removed during pressure washing must be replaced (jointing sand is available from Tobermore and Builders Merchants in 25kg bags).

SNOWCLEAR SALT SPECIFICATION

MATERIAL SAFETY DATA SHEET ECOGRIT CONCENTRATE
1. IDENTIIFICATION, SUPPLIER & CONTACT NUMBERS
Product Name: EcoGrit Concentrate
Product Type: De-icer/Anti-icer/Anti-Corrosion
Supplier: EcoGrit.
Contact Number for technical information: 0800 193 6466

SUSTAINABLE URBAN DRAINAGE MAINTENANCE:
During the first few months after installation, the system should be visually inspected after rainfall events and the amount of deposition measured to give the operator an ideaGranite