RESIDENTIAL DEVELOPMENT AT COURTSTOWN, LITTLE ISLAND, CO. CORK

LANDSCAPE DEVELOPMENT REPORT

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CONTENTS AMENDMENT RECORD

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Prepared	Checked
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PAGE NO.

1. INTRODUCTION

This Landscape Design Report accompanies the large scale residential development application for the proposed scheme located at Courtstown, Little Island, Co. Cork. The report has been compiled by Brady Shipman Martin.

The report outlines the existing landscape context for the site, the proposed development strategy including connectivity, open space treatment and proposed detailed landscape design for the scheme in line with an appraisal of the existing landscape context, thereby informing appropriate design solutions which respond to the characteristics and constraints of the receiving environment.

The following Appendices accompany this report.

- Appendix 1 - Landscape proposal drawings

Drawing no	Title
6835-300	Overall Landscape Masterplan
6835-301	Landscape Plan 1/2
6835-302	Landscape Plan 2/2
6835-303	Local Play Area and Central Open Space
6835-304	Homezone Street
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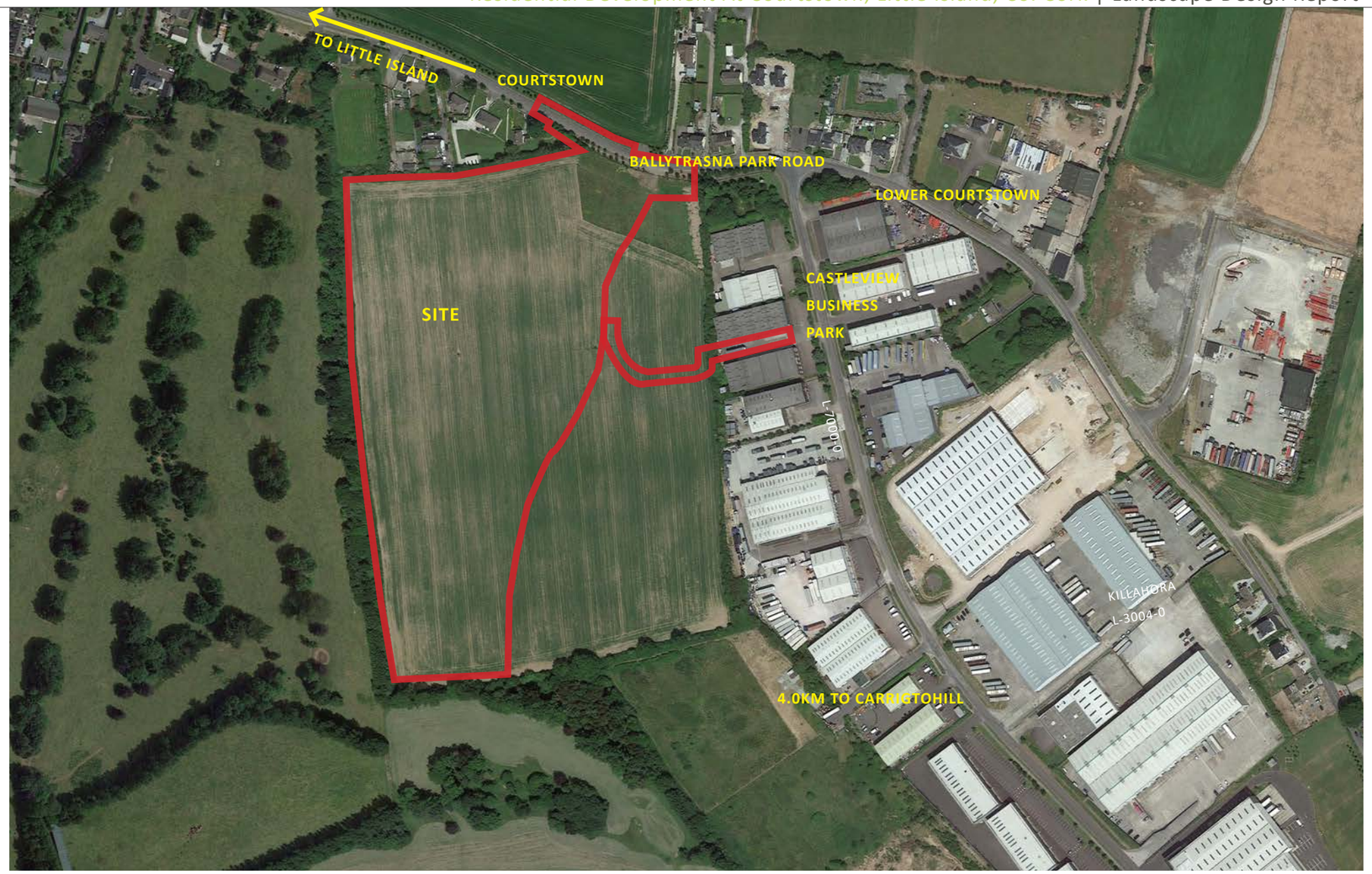
6835-310	Structural Soil Tree Pit & Topsoil Treatment Details
6835-311	Typical Planting Details

- Appendix 2 - Protection of Irish Water Services from Vegetation

Note: Refer to the drawings contained in the Landscape pack for details and scale.



2. EXISTING SITE

General Area

The proposed site is located at Courtstown on the outskirts of the village of Little Island, c.9.5km east of Cork City centre. Little Island is listed as a ‘Main Town’ and 'Strategic Employment Centre' within Metropolitan Cork in the Cork County Development Plan 2022-2028. The Ballytrasna Park Road runs along the Northern edge of the site, connecting to Little Island and it's numerous residential estates, business parks and industrial estates.

The N25 Little Island interchange is at approximately 1.6km distance to the site, with the Castleview/Little Island Railway station located just to the north of the interchange. Courtstown is dominated by agricultural lands, single housing mainly concentrated along the roads and a number of industrial and business estates.

Site Description and Boundaries

The c.6.55 ha. site is on a large, gently sloping rectangular field parcel currently under arable land. Overall the perimeters are defined by mature tree lines, embankments and fences.

The site varies from +54.5 OD (Malin) in the south east end to +52.5 OD (Malin) in the north east end of the site, giving a gradient of approximately 1:200 across the site. Currently access to the site is obtained via a gate in the north east corner of the site, from the Ballytrasna Park road that runs north of the site. There are a number of trees and hedgerows aligning both the north, west and south boundary. A detailed tree and hedgerow survey has been carried out and forms part of this submission (prepared by Arbor Care), which has an accompanying Tree protection plan drawing RH-TS-002.

To the north there is a Hawthorn hedge in good condition seperating the site from adjacent residential properties, with a number of Sitka spruce trees at it's eastern end. A series of recently planted Lime street trees are located east and west of the existing site entrance.

A mix of native and non-native trees in fair and good condition line the northern half of the western boundary, followed by a tall Lawson cypress hedge at the

southern part. Along the southern edge of the site an overgrown scrubland area can be found without any noteable trees.The remainder of the site is pasture land. At the north eastern corner the site edges the native hedgrow/tree line of the Harbourpoint Business Park, which continues running south at increasing distance to our site. The existing boundary treatment consists of a mix of low concrete post and rail and agricultural type fences.

Access

The proposed site is accessed from the Ballytrasna Park Road which links Courtstown and the Harbourpoint Business Park with Little Island.

Visibility

Views to and from the site are largely limited due to the mature tree lines and hedgerows surrounding it's parameter and the relatively minor level change in the area. There will likely be some partial views of the proposed development from the Ballytrasna Park Road, where it will appear as a continuation of the residential character in the nearby vicinity. Existing and proposed screen planting and trees will reduce the amount of proposed dwellings in view from existing residential developments.

There will be filtered views of the proposed development through trees along the eastern, western and southern boundary and from the neighbouring lands, which consist of the Business Park to the east, agricultural lands to the south and a disused golf course to the west.

Key Landscape Elements

There are a number of key landscape elements which give the site a distinctive character, including;

- Mature trees and hedgerows to site perimeter.
- Gently sloping with attractive glimpsed views through trees to surrounding landscape.
- Outward views from the north of the site towards the distant northern ridgelines and slopes.
- Patchwork fields with mature tree-lined boundaries in the surrounding area
- Attractive coastal landscape including amenity trails at Carrigrennan south of the site

Landscape Significance/Designations

There are a number of planning policies within the Cork County Development Plan 2022 relevant to site and surrounding landscape, including;

Landscape and visual

- Scenic route (S41) runs c.1.4km to the North of the site through Glounthaune from Priest's Hill to Caherlag, continuing to Glanmire. Views towards the site from this route are restricted due to topography, tree lines and housing.
- Scenic route (S42) runs c.2.1km north of the site provides a mixture of open panoramic views of the harbour (due to its elevation close to the ridgeline at Windsor Hill) and closed views due to high levels of vegetation screening in places. The nature of the topography means the site is not visible due to its position on the lower land beneath a relatively steep elevation.
- The site falls within a High Value Landscape designation
- The landscape character type of the area is described in the CDP as ‘City Harbour and Estuary’. It is identified as having ‘Very High’ landscape value and sensitivity, and as being of ‘National’ importance.

Natural Heritage

The site is surrounded by agricultural land. A number of protection areas can be found at nearby coastal landscapes. Further detail on this is provided in the accompanying report (Appropriate Assessment Screening Report).

Cork County Development Plan, Volume 4

The site lies within the settlement boundary of Little Island :

"Little Island is one of the key employment locations in Metropolitan Cork, designated as a Strategic Employment Area in the 2014 County Development Plan, and designated as a Strategic Employment Location in this plan. The main vision for the area is to promote a high quality work place environment for the existing and future workforce population along with an expansion of the residential offering and supporting facilities."

It has an objective to contribute to requirements outlined in the Cork Cycle Network Plan and has also been highlighted as a Strategic Employment Centre and a bus route to the east of Little Island has been recommended to be explored in the Cork Master Plan Transport Assessment.

3. PROPOSED DEVELOPMENT

The proposed development is a residential led scheme consisting of 172no. residential units to comprising a mix of 2, 3 & 4 bed, detached, semi-detached and terraced houses, two blocks of apartments and four commercial units.

As well as the residential element, the proposal will includes a community creche, recreational and amenity areas and the construction of a portion of a distributor road which was designated in the Cobh MDLAP as LI-U-05.

Also included are associated ancillary works including vehicular access,upgrade to public road, parking, footpaths, drainage, services, landscaping and site boundary works.

The proposed development follows the DoEHLG Urban Design Manual, Design Manual for Urban Roads and Streets (2013) and Cork County Council Making Places - Design Guide for Residential Estate Development (2011).

The site development strategy is outlined in the Architectual Design Statement prepared by BG Architecture.

The overriding design intention is to create an inclusive and coherent new community based on best practice urban planning principles, giving residents a sense of place, ownership and identity.

The design concept responds to the site’s character:

- retain good quality trees and hedgrows
- create a number of quality public open spaces to provide a strong neighbourhood identity
- form linear green linkages with boundary hedgerows and woodland areas.
- new housing to overlook open spaces to ensure passive surveillance of amenity areas
- reinforce existing hedgerows with new tree planting

The landscape strategy is to;


1. View at the north site boundary

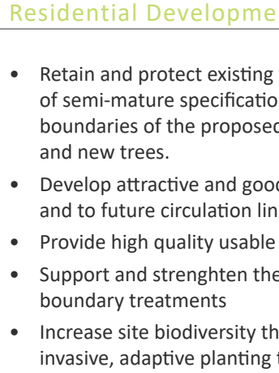

2.Amenity trail at Carrigrennan


3.Wetland pond at Carrigrennan

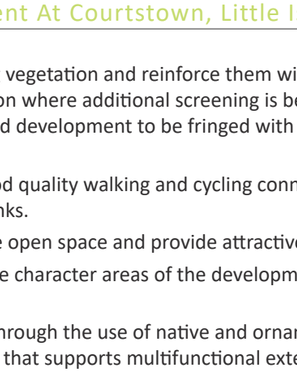
Existing Landscape Features |Site Analysis

4. View of existing planting along southern and western boundaries

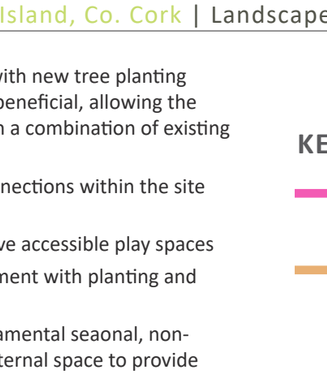
- Retain and protect existing vegetation and reinforce them with new tree planting of semi-mature specification where additional screening is beneficial, allowing the boundaries of the proposed development to be fringed with a combination of existing and new trees.
- Develop attractive and good quality walking and cycling connections within the site and to future circulation links.
- Provide high quality usable open space and provide attractive accessible play spaces
- Support and strenghten the character areas of the development with planting and boundary treatments
- Increase site biodiversity through the use of native and ornamental seaonal, non-invasive, adaptive planting that supports multifunctional external space to provide benefits to people. Measures include planting that combines protection and enhancement of the environment for pollinators as set out in the All Ireland National Pollinator Plan 2015, with green solutions for surface water drainage integrated int open spaces and streets.



Ornamental Shrub Planting



Tree Planting



Accessible direct and safe routes

Play Area

Muga

Access|Circulation

KEY:

- MAIN PEDESTRIAN ACCESS
- SECONDARY PEDESTRIAN ACCESS
- PEDESTRIAN ROUTES
- CYCLE ACCESS & ROUTES

4. LANDSCAPE MASTERPLAN

Public Open Space

There will be a number of public open spaces linked by pedestrian paths creating a green network with the scheme and connecting to the existing local access roads to the north (leading to Little Island and Courtstown).

Main Avenue

A formal main avenue lined with suitable street trees will create a sense of space when entering the proposed development. A grass verge on both sides of the road will soften the appearance of the main access road, whilst creating a safe environment for cyclists and pedestrians. A clipped hedge will create a soft boundary between the avenue and the rest of the proposed development, increasing the privacy of nearby public open spaces, whilst still allowing passive surveillance.

The eastern edge of the avenue will be bounded by a timber post and rail fence, stained black.

Northern open space (A)

An open space of circa 1,975 sq.m is situated centrally within the northern portion of the the proposed development. A regular shaped space, it incorporates a Neighbourhood Play Area (103 sq.m) opening onto an amenity grass area for informal recreation. The space is well overlooked and is characterised by proposed mixed native tree planting within the open green space. On the east side there will be a broad fringe of species rich grassland with shrub planting along the boundary of the proposed homes. The northern and western sides of the space are defined by trees and biofiltration beds planting and a compacted gravel path and seating linking the play area to the wider development.

Central open spaces (B)

Situated in the centre of proposed development it is proposed to locate a primary open space of circa 3,435 sq.m. Set in a highly accessible position this central open space will be framed by proposed tree planting, biofiltration beds features and gently sloped grassed mounding. A multi-use games area (M.U.G.A.) at circa 235 sq.m and 'Local Play Area' (615 sq.m) will be provided within the open space and overlooked by the proposed dwellings. The 'Local Play Area', will provide a range of natural play features and equipment within an enclosure bounded by a railing with clipped hedge and attractive seasonal planting around the perimeter. Low level planting and grassed mounds seeded with windflowers and shrub planting arrange the space into areas for passive and active recreation and natural play. Self-binding gravel paths pass through the open space providing direct access for all to the facilities within the space from all parts of the proposed development. Seating is provided along the paths, within the Local Play Area and adjacent to the M.U.G.A.

South west open space (C)

In the southwest portion of the proposed development, a open space of circa 1,805 sq.m is situated between the proposed build development and the western boundary. This space offers passive, informal recreation, including a balance beam and logs natural play feature. It will be characterised by the existing retained trees and hedgerow on the western boundary and the proposed naturalistic biofiltration beds features that will include tree and seasonal herbaceous and perennial planting in the south, east and northern edges.

Eastern Boundary

The eastern boundary of the application site with the existing commercial development will consist of a secure 2.4m high fence with a 2.5m landscape buffer of mixed native hedge planting.

Courtyards/Streets

There will be appropriate street tree, low level shrub and hedge planting provided to the streets and courtyard spaces, which together with suitable hard paving will seek to create attractive, naturally policing streets suitable for informal play.

Homezones

All homezones will be easily identifiable through traffic calming measures and change in surface materials.

Trees

It is proposed to retain and protect perimeter boundary trees and hedgerows, except where there is a requirement to remove trees currently in poor condition and at the vehicular and pedestrian entrances to the site. Native tree planting is proposed to follow the lines of the trees whilst preserving views at eye level. In addition native tree buffer planting is proposed along the northern boundary. These new planting will reinforcing the existing hedgerow habitats at the boundary.

Play

Grassed sculptural mounds seeded with wild flowers and shrubs will increase seasonal interest and biodiversity to create an informal play opportunity and setting for the location of play equipment within the open spaces, compliant with Cork County Council Recreation and Amenity Policy (2006). Play areas will be finished in rubber safety surface material.

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 and a base layer of low shrub/groundcover and hedge planting to create low level seasonal interest and colour softening the hard surfaced areas and car parking. Eye level between the two planting types is kept clear to maintain sight lines throughout the scheme.

Open Space Structure Trees

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.

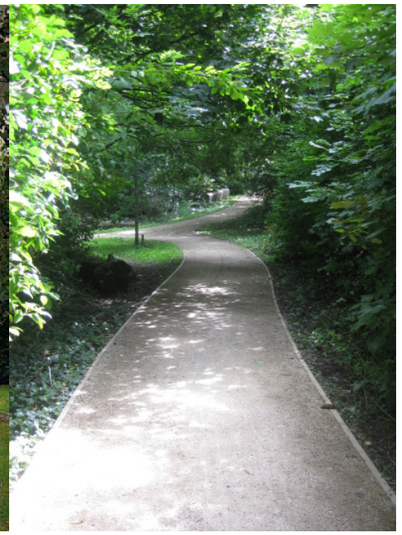
Street Trees

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. Street tree planting is located to avoid impacts with street lighting. 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.

Low shrub and groundcover planting

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

Reference images



Reference images

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 construction operations. 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 unsure ample opportunity for planting to establish properly and reduce casualties during the maintenance period.

Intensive landscape aftercare for each area will run for 12 months from the practical completion date using approved herbicides and hand weeding. There will be a period of 12 months defects liability on all planting with plant failures being replaced in the following planting season.

Responding to Climate Change

The Courtstown design will implement sustainable design strategies and celebrate green space. The proposed landscape will play a key role in helping the development to respond to the effects of climate change through the creation of an integrated multi-functional design response.

These measures will include a variety of sustainable drainage methods to combine technical drainage solutions with green infrastructure and placemaking.

Surface water runoff rates will be reduced across the scheme through the use of permeable construction of paved areas wherever practicable. This includes the use of porous concrete block paving in car parking areas, concrete sett paving to footpaths in the immediate surroundings of proposed buildings and self compacting gravel for paths through open green spaces.

In addition to the grass areas of open space and private gardens, a network of biofiltration beds will be incorporated into streets and open spaces across the scheme. Surface water will be diverted into these features where it will percolate at a reduced rate into the ground. The biofiltration beds will include planting that draws on the water at the same time as adding secondary enclosure to streets and spaces. The biofiltration features will include overflow pipes that will take excess water away to the surface water drains in extreme weather events. This will protect properties and ensure water is only released into local discharge points when conditions are appropriate.

Infiltration rates of ground in the proposed development site are low. Therefore the porous surfaces and biofiltration beds will play a secondary supporting roll in the surface water drainage strategy to the underground surface water attenuation and infiltration system design by the engineer. The primary benefit of these features is in visual and biodiversity enhancement of the proposed scheme. Biofiltration beds are favoured over bioswales to reduce the risk of standing water for extended periods in areas next to roads, streets and within green spaces.

The planting of the biofiltration beds features will comprise herbaceous and perennial species that support biodiversity, including insects and the birds and animals that they attract. The proposed biofiltration beds also provide opportunities for tree planting which improves air quality and the local micro-climate of the streets and spaces. The incorporation of biofiltration beds into the green spaces and streets will bring nature closer to people, encourage outdoor activity and the benefits derived from this.

The planting in biofiltration beds will add richness in the seasonality of the external space across the proposed development and support the creation of identity and character.

Where appropriate, herbaceous and street tree planting locations will be complimented by low level planting beds to include hedge planting, particularly between car parking bays. The proposed hedge planting includes evergreen, flowering and deciduous species, which maintained at a typical height of 0.9m will provide partial screening of parked cars, soften the appearance of the street, support the SUDs strategy and add identity to streets within the development.

Tree planting in paved areas will require tree pits, with root barriers and pavement construction that is supported without putting load onto the rootzone below. The construction specification for tree planting pits will incorporate these measures to ensure the best possible environment for street trees to be protected and flourish.

The tree species proposed for streets have been selected for their suitability in built environments. Their characteristics include the ability to tolerate a wider range of temperature, air pollutants, periods of drought as well as wet weather. The street trees also provide a range of beautiful vibrant autumn colours and some with attractive budding flowers in the spring.

KEY:

- BIOSWALE FEATURES INCORPORATED IN STREETS
- BIOSWALES WITH SEASONAL PLANTING AS PART OF OPEN SPACES
- NATURALISTIC BIOSWALES INCORPORATED INTO STREETS AND SPACES
- POROUS BLOCK PAVING IN CAR PARKING BAYS AS PART OF SUDs MEASURES

Reference images key:

1. Naturlaistic bioswale
2. Bioswale ajooning street and open space with crossing poiint incorporated
3. Bioswale incorporated into street with surface water directed into planting area

Tyical plant species included in bioswale planting:

4. Rudbeckia fulgida ‘Goldsturm’
5. Dryopteris filix-mas
6. Deschampsia cespitosa
7. Helleborus foetidus
8. Echinacea purpurea
9. Hemerocallis 'Burning Daylight'

Landscape SUDs measures diagram (NTS)

Reference images


1


4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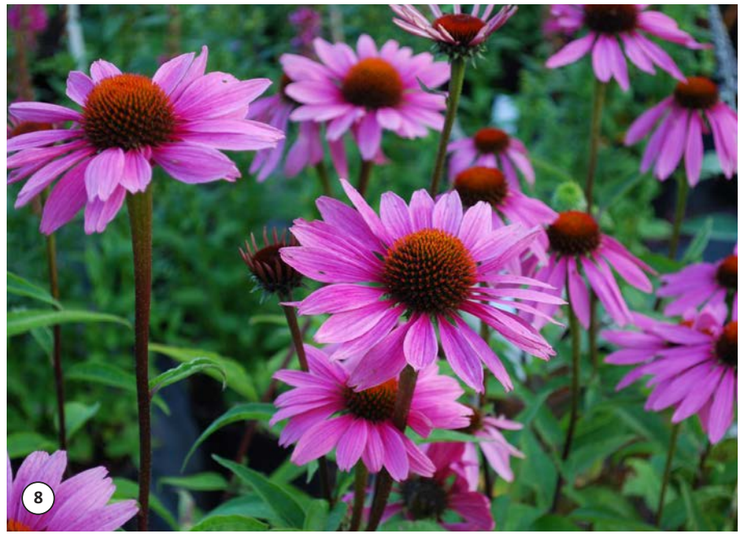
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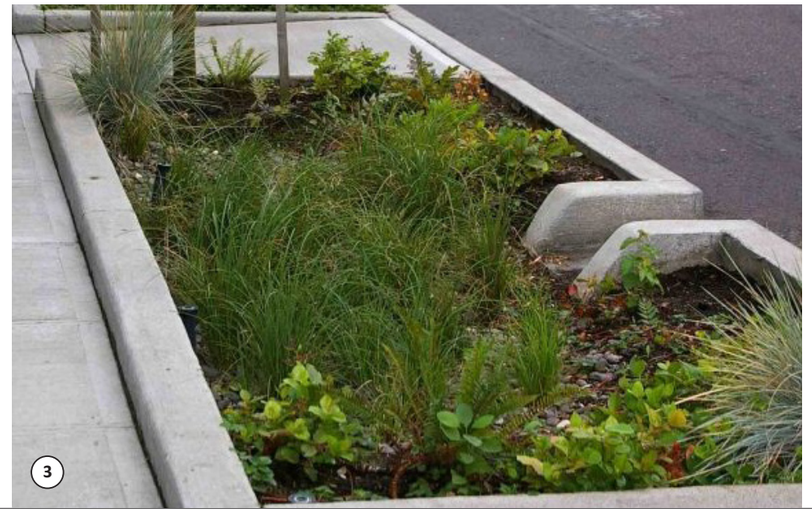
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Proposed street tree form is typically regular in shape and size and includes columnar trees for tighter spaces and to coordinate with lighting of public space. The approach to tree specifcation and lighting is set out in the Appendix 2.

PLANTING

The principle objectives of the landscape proposals is to;

- Provide a high quality public realm, which is accessible, safe and distinctive.
- Support delivery of multifunctional green infrastructure, including building climate change resilience, biodiversity enhancement and nature based solutions to surface water management.

All of the proposed plant species specified will be in accordnace with the All Ireland Pollinator Plan 2021-2025, "Pollinator Friendly Planting Code".

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.

Native hedge planting will be used on the earthen banks used to create distinctive boundaries and character areas within the scheme. Low level, low maintenance shrub planting will be used in planting beds containerised with a minimum size of 2 litre pots, with a 75mm well composted fine bark mulch.

Native Tree Planting

T1. Birch - Betula pendula

T2. Bird cherry - Prunus avium ‘Plena’

T3. Oak - Quercus robur

T4. Pine - Pinus sylvestris

Native Hedgerow Planting

H1. Hawthorn - Crataegus monogyna

H2. Blackthorn - Prunus spinosa

H3. Hazel - Corylus avellana

H4. Spindle - Euonymus europeus

H5. Holly - Ilex aquifolium

Street Tree Planting

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

ST1. Carpinus betulus ‘Frans Fontaine’

ST2. Carpinus betulus ‘Fastigiata’

ST3. Acer x freemanii ‘Autumn Blaze’

ST4. liquidambar styraciflua worplesdon

ST5. Tilia cordata ‘Greenspire’

ST6. Malus ‘Evereste’

T1

T2

T3

T4

H1

H2

H3

H4

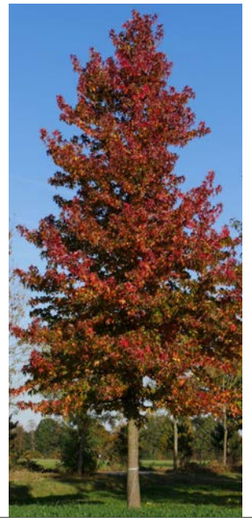
H5

ST1

ST2

ST3

ST4



ST5

ST6

Within parts of the open space and perimeter trees and hedgerows, suitable native meadow will be seeded to increasing site biodiversity and visual interest. This will consist of Type 1 (shade) and Type 2 (open) meadow.

Type 1 - Shade/semi-shade areas to boundaries

This mixture includes native species of grass and wildflowers that area associated with shade and semi-shade areas under trees and at woodland edges. This mix will be applied in limited locations under tree groups at the edge of the open spaces.

It requires light shade and will require occasional maintenance to rake the soil open for new seedlings to germinate. Additonal bluebell seed can be added when sowing this mixture for deep shade under overhanging trees.

Wildflower Specification -EC04

1	Lotus corniculatus	Birdsfoot Trefoil
2	Medicago lupulina	Black Meddick
3	Arctium minus	Burdock
4	Hyacinthoides non-scripta	Bluebell
5	Caltha palustris	Corn Marigold
6	Papaver rhoeas	Corn Poppy
7	Centaurea cyanus	Cornflower
8	Primula veris	Cowslip
9	Succisa pratensis	Devils Bit Scabious
10	Digitalis purpurea	Foxglove
11	Alliaria petiolate	Hedge Garlic Mustard
12	Eupatorium cannabinum	Hemp Agrimony
13	Centaurea nigra	Knapweed
14	Filipendula ulmaria	Meadowsweet
15	Verbascum Thapsus	Mullein
16	Leucanthemum vulgare	Ox-Eye Daisy
17	Lythrum salicaria	Purple Loosestrife
18	Primula vulgaris	Primrose
19	Silene flos-cuculi	Ragged Robin
20	Silene dioica	Red Campion
21	Plantago lanceolate	Ribwort Plantain
22	Rumex acetosa	Sorrel
23	Hypericum pulchrum	St. Johnswort
24	Torilis japonica	Upright Hedge Parsley
25	Angelica sylvestris	Wild Angelica
26	Geum urbanum	Wood Avens
27	Viola odorata	Sweet Violet
28	Viola riviniana	Dog Violet

Design Notes

Can be sown with grasses, but is unnecessary. This mixture will not require a nurse crop, as it contains annuals. EC04 if sown in any light or semi shade, tolerates moist or dry conditions. The woodland wildflowers will not flower in the first year. Some species are very slow to appear. You will have to wait for 3 years for the primula.

This seeding mix has been specified from Design by Nature, Monavea, Carlow, Ireland. Website: info@wildflowers.ie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Type 2 – Native Floral Grass to road and street verges

A native flowering lawn mix is specified for road and street verges, which will include common species of perennial grass and wildflower species typical of the local area. Typical species include Birdsfoot Trefoil, Meadow Buttercup, Mallow, Forget-me-not, Hoary Plantain, Kidney Vetch, Lady's Bedstraw, Ox-eye Daisy, Red Clover, Ribwort Plantain, Rough Hawksbit, St Johnswort, Wild Carrot, Sorrel, Yarrow, Quaking Grass, Lady's Smock, Selfheal, Corn Marigold, Cornflower and Corncockle. A typical sowing rate is 1.5g per sq.m and it is mixed with an appropriate grass seed as a base.

The mix is specially blended to allow it to maintained at different heights, which creates a diverse mosaic of flowering species within the verge. This approach is in keeping with All Ireland Pollinator Plan guidance on creation of pollinator friendly transport corridors. Once established the grass verges are easy to manage with reduced mowing at six times a season for short floral grass and once or twice a season for taller grassland areas.

Typical native flowering grassland managed on a short cut regime - about six cuts a season.

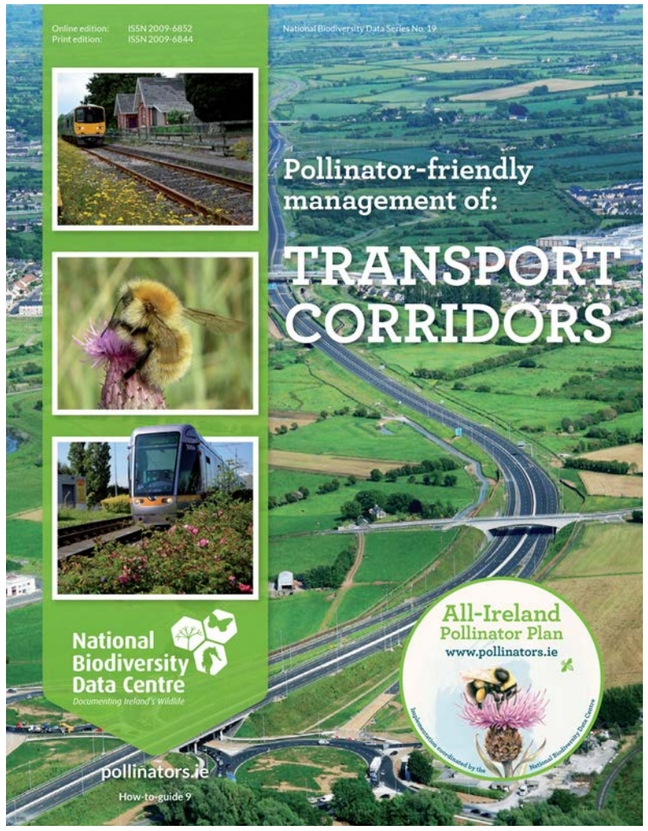
Typical native flowering grassland managed on a tall cut regime - once or twice a season

Approach to planting and grassland creation

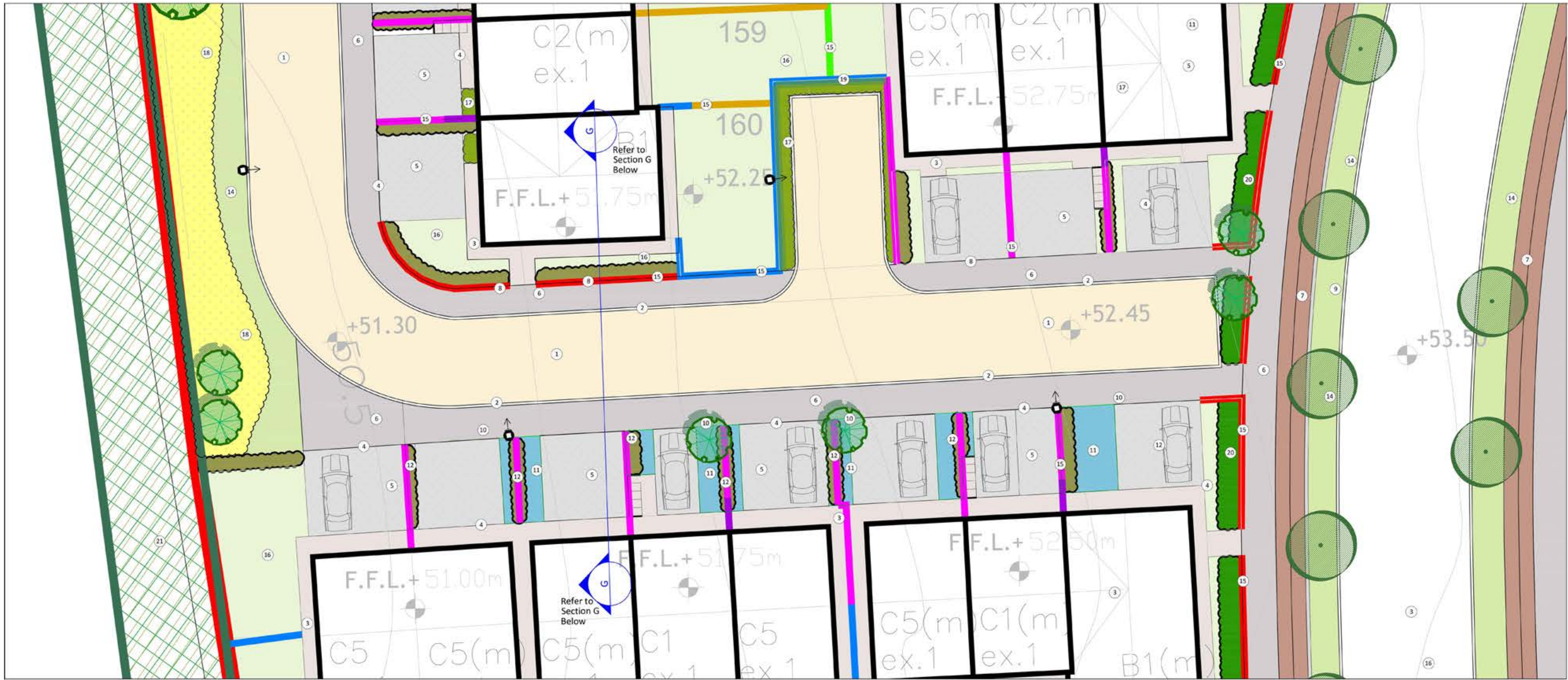
As the proposed development site will be entirely redeveloped and a construction site, a naturalized approach to regeneration of grassland or planting areas will not be possible or practical. The disturbance of topsoil through stripping, storage and respreading on site and leaving it to regenerate will most likely lead to proliferation of pernicious weed growth. This would outcompete natural regeneration of native grassland and wildflower species.

The tender and construction information will include detailed requirements on the handling, storage and spreading of subsoil and topsoil from the site. The appropriate depths of the soils appropriate to the different types of planting will be specified and their extents shown in a topsoil treatment plan that corresponds with the type of planting or seeding. For amenity grass areas in open spaces and gardens the topsoil depth is typically 150mm. Areas proposed for mixed native grasslands require soil with minimum nutrients to favour native flowering species establishment. Typically these areas will be specified as clean subsoil with a 50mm dressing of topsoil cultivated into the top layer to aid seed establishment.

Close up of typical native flowering grassland managed on a short cut regime with mix of native species wildflowers supporting pollinators present.



TYPICAL SHARED SURFACE TREATMENT/STREET TYPOLOGY - PLAN AND SECTION



HARDSCAPE LEGEND:

1. ACCESS CARRIAGEWAY - BUFF COLOURED BOUND AGGREGATE FINISH
2. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
3. FOOTPATH WITH PIN KERB EDGING- SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO, SLATE COLLOUR OR EQUIVALENT
4. PARKING SPACES BANDING - SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
5. PARKING SPACES - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
6. PUBLIC FOOTPATH - BRUSHED CONCRETE TO ENGINEER'S DETAILS
7. CYCLEPATH - TO ENGINEER'S DETAILS
8. RAILING, PAINTED BLACK, SET ON LOW WALL TO ARCHITECT'S DETAIL AS DEFINING EDGE TO PRIVATE FRONT GARDENS OF PROPERTIES AT SELECT CORNER AND JUNCTION LOCATIONS.
9. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 UPRIGHT, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
10. TREE IN BIOSWALE PLANTING BED IN SEPERATIONS BETWEEN PARKING BAYS
11. BIOSWALE PLANTING
12. CLIPPED HEDGE MAINTAINED AT 0.9M
13. BOUNDARY WALL TO ARCHITECT'S DETAILS
14. GRASS VERGE TO EDGE OF CARRIAGEWAY
15. Note: REFER TO ARCHITECT DETAILS FOR PROPOSED BOUNDARY TREATMENTS.

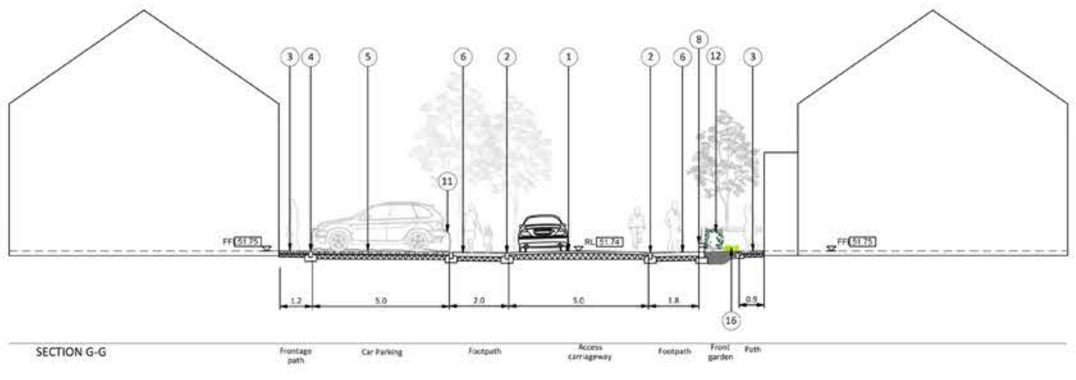
SOFT LEGEND:

16. GRASS IN PRIVATE GARDENS
17. SHRUB PLANTING
18. WILDFLOWER MEADOW PLANTING
19. CLIMBER PLANTING
20. CLIPPED HEDGE MAINTAINED AT 1.2M HIGH ALONG DEVELOPMENT EDGE TO MAIN ACCESS ROAD
21. EXISTING TREES AND HEDGE ON BOUNDARY TO BE PROTECTED AND RETAINED
22. PROPOSED STREET TREES WITHIN DISTRIBUTOR ROAD.

(00) LANDSCAPE DETAIL

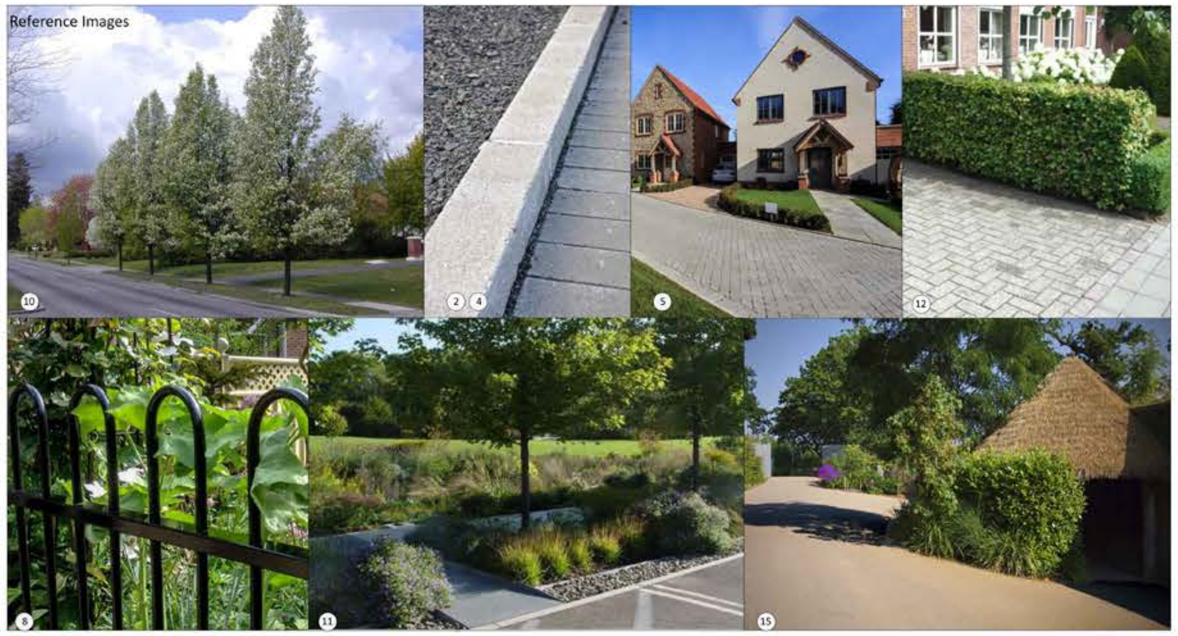
Scale 1:125

Refer to Section B Below



(1) TYPICAL LANDSCAPE SECTION

Scale 1:125



01	24/05/2024	AK	GD	Issue for LRD Planning
00	15/03/2022	GD	DB	Issue for Planning
Rev	Date	Drawn	Checked	Description

Notes

Project: PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK	Project No. 6835
Drg. Homezone Street	Drawing No. 304
Scales 1:125 @ A1	Status PLANNING
Date 20/05/24	Drn. GD / Chd. DB / Passed DB

Penrose Wharf Business Centre, Penrose Wharf, Cork
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mail@bradyshipmanmartin.com
www.bradyshipmanmartin.com

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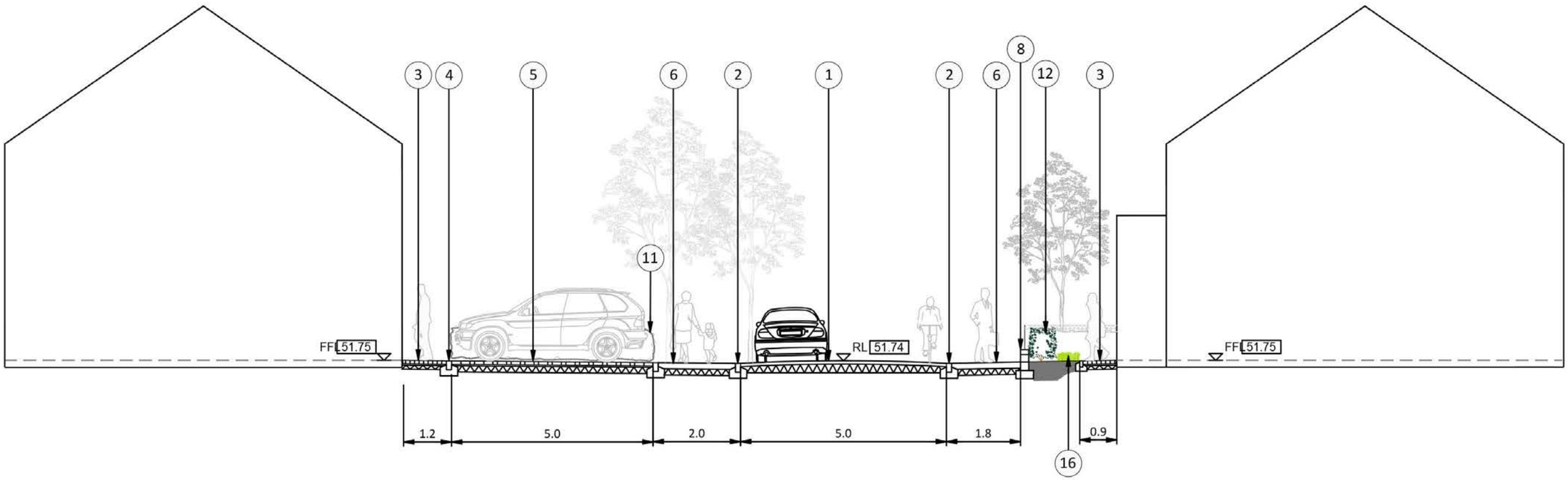
TYPICAL SHARED SURFACE TREATMENT/STREET TYPOLOGY - SECTION ENLARGED (NOT TO SCALE)



SECTION G-G

1. ACCESS CARRIAGEWAY - BUFF COLOURED BOUND AGGREGATE FINISH
2. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
3. FOOTPATH - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO, SLATE COLLOUR OR EQUIVALENT
4. PARKING SPACES BANDING - SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
5. PARKING SPACES - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
6. PUBLIC FOOTPATH - BRUSHED CONCRETE TO ENGINEER'S DETAILS
7. CYCLEPATH - TO ENGINEER'S DETAILS
8. RAILING, PAINTED BLACK, SET ON LOW WALL TO ARCHITECT'S DETAIL AS DEFINING EDGE TO PRIVATE FRONT GARDENS OF PROPERTIES AT SELECT CORNER AND JUNCTION LOCATIONS.
9. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 UPRIGHT, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
10. TREE IN BIOSWALE PLANTING BED IN SEPERATIONS BETWEEN PARKING BAYS
11. BIOSWALE PLANTING
12. CLIPPED HEDGE MAINTAINED AT 0.9M
13. BOUNDARY WALL TO ARCHITECT'S DETAILS
14. GRASS VERGE TO EDGE OF CARRIAGEWAY
15. Note: Boundary walls and railings to Architect's details.
16. GRASS IN PRIVATE GARDENS
17. SHRUB PLANTING
18. BIOSWALE PLANTING
19. CLIMBER PLANTING
20. CLIPPED HEDGE MAINTAINED AT 1.2M HIGH ALONG DEVELOPMENT EDGE TO MAIN ACCESS ROAD
21. EXISTING TREES AND HEDGE ON BOUNDARY TO BE PROTECTED AND RETAINED

BOUNDARY TREATMENT - NORTHERN BOUNDARY

EXISTING ELEMENTS:

1. EXISTING NATIVE HAWTHORN HEDGEROW 6M HIGH TO BE RETAINED AND PROTECTED - REFER TO TREE SURVEY REPORT AND DRAWINGS FOR DETAILS
2. EXISTING GARDEN OF PROPERTY TO NORTH OF THE SITE
3. EXISTING DWELLING NORTH OF THE SITE

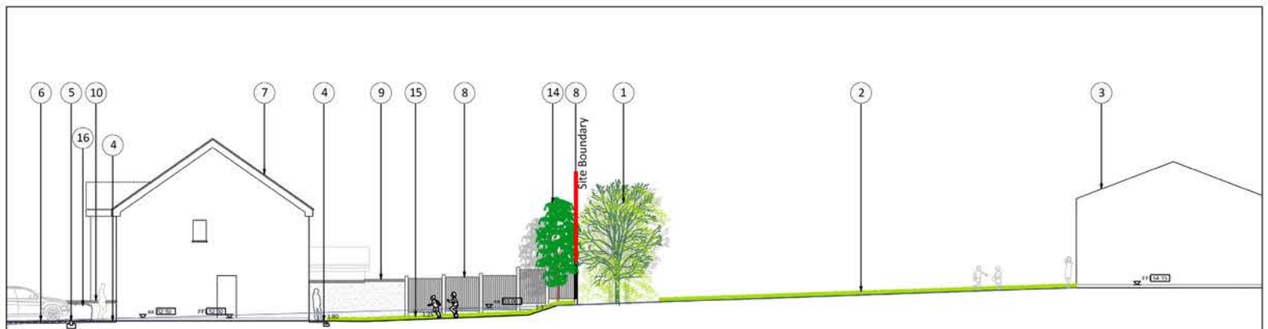
HARDSCAPE LEGEND:

4. PRIVATE FOOTPATH TO DWELLING - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO, SLATE COLLOUR OR EQUIVALENT
5. PARKING SPACES BANDING - SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
6. PARKING SPACES - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
7. DWELLING REFER TO ARCHITECT'S DRAWINGS FOR DETAILS
8. 2m CONCRETE POST AND TIMBER PANEL FENCE. POST FOUNDATIONS NEAR EXISTING BOUNDARY HEDGEROW TO BE HAND DUG TO AVOID LARGER ROOTS AND LIMIT IMPACT
9. 2m HIGH BOUNDARY WALL, BLOCK WALL CAPPED WITH BRICK
10. 1m LOW BOUNDARY WALL , BLOCK WALL CAPPED WITH BRICK
11. 2m HIGH REAR BOUNDARY WALL UN-RENDEDED, BLOCK WALL
12. 1m HIGH BOUNDARY WALL, 450mm BRICK PLINTH WITH RAILING ABOVE
13. SHARED SURFACE CARRIAGEWAY - BOUND AGGREGATE FINISH, BUFF COLOUR

Note: For Proposed boundary walls, fences and railings details refer to Architect's Boundary Treatment and Details drawings.

SOFT LEGEND:

14. COLUMNAR TREE PLANTING ALONG BOUNDARY
15. GRASS PLANTING TO PRIVATE GARDENS
16. CLIPPED HEDGE TO FRONT GARDENS
17. STREET TREE PLANTING
18. BIOSWALE PLANTING
19. SHRUB PLANTING
20. AMENITY GRASS TO PUBLIC SPACES



00 LANDSCAPE DETAIL
Scale 1:200

1 TYPICAL LANDSCAPE SECTION
Scale 1:200

Rev	Date	Drawn	Checked	Description
01	20/05/2024	AK	GD	Issue for LRD Planning
00	29/03/2022	GD	DB	Issue for Planning

Notes

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File Ref: Y:\6835_LITTLE_ISLAND_SHD\6835_WORKING\6835_CAD\6835_300_Planning\6835_Updated_2022_LRD\6835_LRD\6835-304-306_DETAILS_LRD_20230704
Modified By: George Dundon Modified Time: 5/24/2024 12:46:56 pm Plot Time: 5/24/2024 4:07:03 pm

Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK
Project No.	6835
Drg.	NORTHERN BOUNDARY
Drawing No.	305
Rev.	
Scales	1:200 @A2
Status	PLANNING
Date	20/05/24
Drn.	GD
Chd.	GD
Passed	DB

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APPENDIX - 1

PROPOSED LANDSCAPE DRAWINGS

APPENDIX 1 - LANDSCAPE DRAWINGS

00 LANDSCAPE PLAN
Scale 1:1000

Reference Images:

Notes

Rev	Date	Drawn	Checked	Description

Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CO. CORK
Project No.	6835
Drg.	Overall Landscape Plan
Drawing No.	300
Rev.	00
Scales	1:1000@A1
Status	Planning
Date	20/05/2024
Drn.	GD
Chd.	DB
Passed	DB

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mail@bradyshipmanmartin.com
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Existing Trees to be Retained / Protected
Walking, Cycling & Vehicular Connection to Town Centre
Entrance
BOUNDARY TO BE DEFINED BY FENCE TO REAR GARDENS REFER TO DRG. NO. 6835-305 AND ARCHITECT'S DETAILS
SHARED SURFACE STREET.
REFER TO TREE SURVEY DRAWING
Existing Hedgerow to be Retained / Protected
Existing trees to be Retained/ Protected
Neighbourhood Play Area (103 sq.m)
Open Space (A)
PROPOSED FENCE WITH MIXED NATIVE HEDGE PLANTING ALONG EASTERN BOUNDARY WITH BUSINESS PARKS (See Drg. No. 309)
SEATS ALONG SELF COMPACTING GRAVEL PATH
POROUS BLOCK PAVING IN PARKING BAYS AS PART OF SUDs
SHARED SURFACE TYPICAL DETAIL, REFER TO LANDSCAPE DESIGN REPORT RP02, POINT 5, PAGE 23-24.
Potential Future Access
RAISED TABLE AT JUNCTION AS TRAFFIC CALMING MEASURE
Open Space (B)
LEGEND:
EXISTING ELEMENTS:
EXISTING BUILDINGS
EXISTING TREES TO BE RETAINED AND PROTECTED
EXISTING TREES AND VEGETATION TO BE REMOVED AS PART OF DEVELOPMENT
PROPOSED ELEMENTS:
SOFTSCAPE:
PROPOSED COLUMNAR NON-INVASIVE TREE PLANTING ALONG ROADS
PROPOSED NATIVE TREE PLANTING IN PUBLIC OPEN SPACES
PROPOSED NATIVE HEDGEROW PLANTING TO BOUNDARIES
PROPOSED LOW HEDGE PLANTING TO FRONT GARDENS
PROPOSED SHRUB PLANTING
PROPOSED CLIMBER PLANTING
PROPOSED BIOSWALE PLANTING TYPE 1
PROPOSED BIOSWALE PLANTING TYPE 2
PROPOSED SPECIES RICH NATIVE GRASSLAND UNDER TREES
PROPOSED LIGHTING 10M RADIUS. (NO TREE PLANTING WITHIN TEN METERS LONGITUDINALLY OF PROPOSED LIGHTING SCHEME.)
PROPOSED SPECIES RICH NATIVE FLORAL LAWN TO ROAD VERGES
PROPOSED GRASS PLANTING TO PUBLIC OPEN SPACE
PROPOSED PRIVATE GARDENS
HARDSCAPE:
PROPOSED BRUSHED CONCRETE FOOTPATHS
PROPOSED SELF COMPACTING GRAVEL PATHS IN GREEN SPACE
PROPOSED CYCLE PATHS
PROPOSED SILVER GREY BLOCK PAVING PATHS AROUND DWELLINGS
PROPOSED PLAY AREA
PROPOSED HOMEZONE STREET CARRIAGEWAY IN BUFF COLOUR SURFACE FINISH
PROPOSED MOUNDING
PROPOSED STONE WALL AT NEW PEDESTRIAN AND VEHICULAR ENTRANCE
PROPOSED POROUS CONCRETE BLOCK PAVING IN PARKING BAYS
PROPOSED IMPRINTED RED CONCRETE RAISED TABLE AT JUNCTIONS
PROPOSED SILVER GREY CONCRETE SETT VERGE TO EDGE OF PARKING AREAS
RUMBLE STRIPS IN SILVER GREY GRANITE SETTS TO ENGINEER'S SPECIFICATIONS..
NOTE:
REFER TO DRAWING 6835-302 FOR FULL PLANTING SCHEDULE
PLEASE REFER TO ENGINEER'S DRAWINGS FOR SURFACE TREATMENT AND SHARED SURFACE LOCATION.
SHARED SURFACE TYPICAL DETAIL, REFER TO LANDSCAPE DESIGN REPORT
REFER TO ARCHITECT'S DOCUMENTS FOR BOUNDARY TREATMENTS
REFER TO ALONGSIDE THIS DRAWING;
LANDSCAPE DETAILS DRAWINGS 6835_304 & 6835-305
TREE PROTECTION DRAWING
LANDSCAPE APPRAISAL DESIGN REPORT 6835_RP02
PROPOSED RESIDENTIAL DEVELOPMENT
COURTSTOWN, LITTLE ISLAND, CO. CORK
Landscape Plan 1/2
6835
301 00
1:250@A0
Planning
20/05/2024
BSM
Est. 1968

PLANTING SCHEDULE:

Tree Planting Schedule

Trees to Public Open Space - Native irish species and/ or cultivars of native species

Trees along roads & streets - Columnar form with a narrow crown, cultivars of native species and/or non invasive introducted species

Abbr.	Species	Height	Size	Stem	Type
Street Trees					
Ac	Acer campestre 'Elsrijk'	3-5.5m	20-25cm	1Clear 2m	Rb
Ad	Acer x freemanii 'Autumn Blaze'	5-5.5m	20-25cm	1Clear 2m	Bb
Ch	Carpinus betulus 'Fastigiata'	5-5.5m	20-25cm	1Clear 2m	Bb
Cc	Corylus colurna	5-5.5m	20-25cm	1Clear 2m	Bb
Cb	Betula eucycaria 'Jacquemontii Doubling'	5-5.5m	20-25cm	1Clear 2m	Bb
Ls	Liquidambar styraciflua	5-5.5m	20-25cm	1Clear 2m	Bb
Upl	Ulmus hollandica 'Dodoens'	5-5.5m	20-25cm	1Clear 2m	Bb
Parkland Trees					
Bpe	Betula 'Fastigiata'	3-3.5m	16-18cm	1Clear 2m	Bb
Pa	Prunus avium 'Plena'	3.5-4m	16-18cm	1Clear 2m	Bb
Ca	Betula eucycaria 'Jacquemontii Doubling'	3-3.5m	16-18cm	1Clear 2m	Bb
Bp	Betula pendula	3.5-4m	14-16cm	1Clear 2m	Bb
Cc	Carpinus betulus	3.5-4m	14-16cm	1Clear 2m	Bb
Pa	Prunus avium	12-14m			Bb

Native Hedgerow Planting Schedule

Planted double staggered rows

Name	Botanical name	Mix (single, wider row etc. as a common guide)	Percentage of planting mix	Spacing
Hawthorn	Crataegus monogyna	Min 50cm, 3+	35	0.4m
Blackthorn	Prunus spinosa	Min 50cm, 3+	20	0.4m
Hazel	Corylus avellana	70-120cm, 3+	20	0.4m
Holly	Ilex aquifolium	70-120cm, 3+	10	0.4m
Dogwood	Cornus sanguinea	50-70cm, 3+	10	0.4m
Bird cherry	Prunus padus	50-70cm, 3+	5	0.4m
Guelder rose	Viburnum opulus	50-70cm, 3+	5	0.4m
Spindle tree	Euonymus europaeus	50-70cm, 3+	5	0.4m

Hedge Planting Schedule

Planted double staggered rows

Abbrv.	Botanical name	Form/Size	Height	Spacing	Type
Cm	Carpinus betulus 'Fastigiata'	3L	80-100cm	5/1m lin	CG
Ca	Corylus avellana	Bare root	80-100cm	5/1m lin	HW
Ilx	Ilex aquifolium	Bare root	80-100cm	5/1m lin	HW
Pa	Prunus lusitanica 'Angustifolia'	3L	80-100cm	5/1m lin	CG

Shrub Planting Schedule

Abbrv	Species	Height	Spec	Size	Density
SHRUBS					
	Thymus serpyllum 'Coccineus'	10-20cm	Bushy	2l	12/m2
	Euonymus fortunei 'Emerald Gaiety'	30-50cm	Bushy	2l	5/m2
	Hydrangea arborea 'Blaubird'	30-40cm	Branched	2l	4/m2
	Hypericum x hidcoteense 'Hidcote'	20-30cm	Bushy	2l	5/m2
	Physocarpus x 'Lemon Red Robin'	30-50cm	Branched	2l	2/m2
	Spiraea japonica 'Goldflame'	30-40cm	Bushy	2l	5/m2
	Spiraea japonica 'Little Princess'	20-30cm	Bushy	2l	5/m2
	Viburnum tinus 'Eve Price'	30-40cm	Bushy	2l	4/m2
	Viburnum opulus 'Compactum'	20-30cm	Bushy	2l	4/m2
HERBACEOUS					
Abbrv	Species	Height	Spec	Size	Density
	Geranium x cantabrigiense 'Cambridge Blue'		Full pot	2l	12/m2
	Salvia nemorosa		Full pot	2l	12/m2
	Scabiosa columbaria var. ochroleuca		Full pot	2l	12/m2
	Verbena bonariensis		Full pot	2l	12/m2
	Veronica spicata 'Blauteppich'		Full pot	2l	12/m2
ORNAMENTAL GRASSES					
Abbrv	Species	Height	Spec	Size	Density
	Festuca amethystina		Full pot	2l	12/m2
	Pennisetum alopecuroides 'Hameln'		Full pot	2l	12/m2
	Stipa tenuissima		Full pot	2l	12/m2
BULBS					
Key	Species	Note	Size		Spacing
	'Miram Hollandicum' Purple Sensation'		10/12		100/150mm spart
	'Narcissus 'Cather'		14/16		100/150mm spart
	'Narcissus 'Actaea'		12/14		100/150mm spart

Climber Planting Schedule

Abbrv.	Name	Botanical name	Size and Form	Spacing
Cl	Hed	Hedera helix 'Hibernica'	3/4 Stems, 5	1m o/c
Cp	Parthe Qui	Parthenocissus tricuspidata	#1.5m, 4	2m o/c

Floral Lawn Mixed Native Grassland

Product Ref. 20402 - Vanified Irish Seed provenance only

Sowing rate: 3.5grams per sq. m

Species list: R.riSchaft Trefoil, Black Medick, Burnet Saxifrage, Century, Oil'd Chamomile, Cowslip, Eyebright, Meadow Buttercup, Marjoram, Red Bartsia, Silene, Pirgrim-me-not, Musky Mallow, Kidney Vetch, Lady's Bedstraw, Ox-eye Daisy, Red Clover, Ribwort Plantain, Rough Hawkbit, St Johnswort, Wild Carrot, Sorrel, Yarrow, Quaking Grass, Lady's Smock, White Bedstraw, Selfheal, Smooth Hawsbit, Corn Marigold, Corn Poppy, Cornflower, Corncockle, Scented Mayweed

Shade Tollerant Native Wildflower and Grass Mix

Product Ref. 3536 - Vanified Irish Seed provenance only

Sowing rate: 3.5grams per sq. m

Species list: Lotus corniculatus, Medicago lupulina, Anthum minus, Hyacinthoides non-scripta, Cattha palustris, Papaver rhoeas, Centaurea cyanus, Primula veris, Succisa pratensis, Digitalis purpurea, Alliaria petiolata, Eucalyptus camaldulensis, Centaurea nigra, F. Cardoda Linaria, Verbascum Thapsus, Leucanthemum vulgare, Lythrum salicaria, Primula vulgaris, Silene flos-cuculi, Silene dioica, Plantago lanceolata, Rumex acetosa, Hypericum pulchrum, Tanlo japonica Upright, Angelica sylvestris, Geum urbanum, Viola odorata, Viola riviniana

Seed Mixture Specifications:
Native Irish Origin Wildflower Seed Mixture EG34
Suitable for soil type: All types of soil, Clay, Loam, Sand, Light Soil, Heavy Soil, and cultivated Peat.
Moisture Level: Dry, Normal, Moist, but not Waterlogged Wet
pH range: Best between 5 - 7.5
Aspect: Semi Shade and Shaded. The performance will be limited under very heavy tree canopies

SUPPLIER: Design By Nature, Sand House, Maryvale, Carrow, Ireland. 4935 7180.
info@wildflowerseeds.ie, or equivalent.

Grass Seeding Planting Schedule

Low Maintenance Grass Mix

Mix %	Species
	25%Perennial Ryegrass Sod Former
	25%Creeping Fescue
	40%Perennial Ryegrass
	5%Creeping Fescue
	5%Smooth Meadgrass

SUPPLIER: Material Agronomique Environnement, Mains Cross, Lusk, Co Dublin
Email: sales@maelv.com Tel: 01 8417800 or equivalent

Woodland Planting Schedule

Native Irish species

%	Species	Height	Size	Form	Type
20	Quercus robur	2.5-3.5m	9-12cm		Std
10	Prunus avium	2.5-3.5m	9-12cm		Std
10	Betula pubescens	2.5-3.5m	9-12cm		Std
10	Pinus sylvestris	1.5-2.5m			RB
10	Corylus avellana	90-120cm		3+stemed	Ml
10	Crataegus monogyna	90-120cm		3+stemed	Ml
10	Sorbus aucuparia	90-120cm		3+stemed	Ml
10	Euonymus europaeus	90-120cm		3+stemed	Ml
10	Ilex aquifolium	90-120cm		3+stemed	Ml

Biofiltration Beds Planting Schedule

Key	Botanical name	Form/Size	Height	Density
A1	Type 1			
	Brachypodium sylvaticum	2l	20-30cm	6/m2
	Calamagrostis acutiflora	1l	15-25cm	5/m2
	Euphorbia amygdaloides	1L	25-35cm	5/m2
	Geranium sylvaticum 'Album'	2l	15-25cm	4/m2
	Hemerocallis 'Burning Daylight'	1l	15-25cm	5/m2
	Iris sibirica 'Perry's Blue'	Bulb 12		9/m2
	Narcissus 'Actaea'	Bulb 12		9/m2
	Rudbeckia fulgida 'Goldsturm'	1l	25-35cm	5/m2
	Salvia nemorosa 'Caradonna'	1l	25-35cm	5/m2
A2	Type 2			
	Acorus gramineus	2l-30cm	2L	6/m2
	Carex muskingumensis	1L-20cm	1L	5/m2
	Carex pendula	2l-30cm	1L	6/m2
	Equisetum hyemale	1L-20cm	1L	5/m2
	Hakonechloa macra 'Aureola'	2l-30cm	2L	6/m2
	Helleborus foetidus	2l-30cm	2l	6/m2
	Iris pseudacorus	1L-20cm	1L	5/m2
	Iris pseudacorus		Bare rtd	1/m2
	Juncus effusus	1L-20cm	1L	5/m2

PROPOSED RESIDENTIAL DEVELOPMENT
COURTSTOWN, LITTLE ISLAND, CO. CORK
Landscape Plan 2/2
Project No. 6835
Drawing No. 302
Rev. 00
Scale: 1:250@A0
Date: Planning 26/09/19
BSM Est. 1968

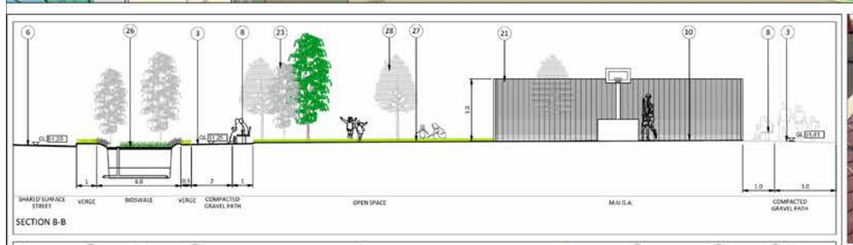
00 LANDSCAPE DETAIL
Scale 1:125

HARDSCAPE LEGEND:

1. BITUMEN MACADAM ROAD
2. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH; E.G 'TOBERMORE COUNTRY KERB' OR EQUIVALENT
3. FOOTPATH - COMPACTED GRAVEL, E.G. 'BALLYLUSK' OR EQUIVALENT
4. PARKING SPACES BANDING SELECT CONCRETE KERB UNITS SET FLUSH, E.G 'TOBERMORE' CONSERVATION OR EQUIVALENT
5. PARKING SPACES SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
6. SHARED SURFACE CARRIAGEWAY - BOUND AGGREGATE FINISH, BUFF COLOUR
7. IMPRINTED ASPHALT TO RAISED TABLE AT JUNCTIONS , COLOUR MAROON
8. SEATING
9. SAFETY SURFACE TO LOCAL PLAY AREA
10. MUGA SURFACE
11. FOOTPATH - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO OR EQUIVALENT
12. BOULDER STONES
13. ROBINIA TIMBER BALANCING LOGS
14. ROBINIA TOTTER BRIDGE, BY KOMPAN OR SIMILAR
15. ROBINIA TIMBER SWING FRAME WITH ROPE NEST (BY KOMPAN OR SIMILAR)
16. EMBANKMENT SLIDE EXTRA WIDE BY KOMPAN OR SIMILAR)
17. TIMBER PLAYHOUSE (THE WIZARD'S HOUSE BY KOMPAN OR SIMILAR)
18. CLIMBING TOWER WITH SLIDE (TWO TOWERS WITH OVERHEAD HANDHOLD BY KOMPAN OR SIMILAR)
19. PLAY LOGS SET ON SAFETY SURFACE
20. 1.2M HIGH BOWTOP FENCE AND GATE AROUND LOCAL PLAY AREA
21. 3.0M HIGH BLACK PALADIN FENCE TO BOTH ENDS OF MUGA, 1.2M HIGH FENCE TO SIDES
22. DECK CROSSING - RECYCLED PLASTIC, (BY ECOPLASTIC OR SIMILAR)

SOFT LEGEND:

23. NATIVE TREE PLANTING TO OPEN SPACE AREA
24. CLIPPPED HEDGE PLANTING
25. SHRUB PLANTING
26. BIOSWALE PLANTING
27. AMENITY GRASS
28. STREET TREE PLANTING
29. MOUNDING
30. WILDFLOWER MEADOW



1 LANDSCAPE SECTIONS
Scale 1:125

Rev	Date	Drawn	Checked	Description
01	15/05/2024	AK	GD	Issue for LRD Planning
00	15/03/2022	GD	DB	Issue for Planning

Notes

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Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK
Project No.	6835
Dwg.	Local Play Area & Central Open Space
Drawing No.	303
Rev.	
Scales	1:125 @ A1
Status	PLANNING
Date	15/03/22
Penrose Wharf Business Centre, Penrose Wharf, Cork Tel: +353(0) 21 242 5620	mail@bradyshipmanmartin.com www.bradyshipmanmartin.com
Drn.	GD
Chd.	DB
Passed	DB

BSM Est. 1968

00 LANDSCAPE DETAIL

Scale 1:200

EXISTING ELEMENTS:

1. EXISTING NATIVE HAWTHORN HEDGEROW 6M HIGH TO BE RETAINED AND PROTECTED - REFER TO TREE SURVEY REPORT AND DRAWINGS FOR DETAILS
2. EXISTING GARDEN OF PROPERTY TO NORTH OF THE SITE
3. EXISTING DWELLING NORTH OF THE SITE

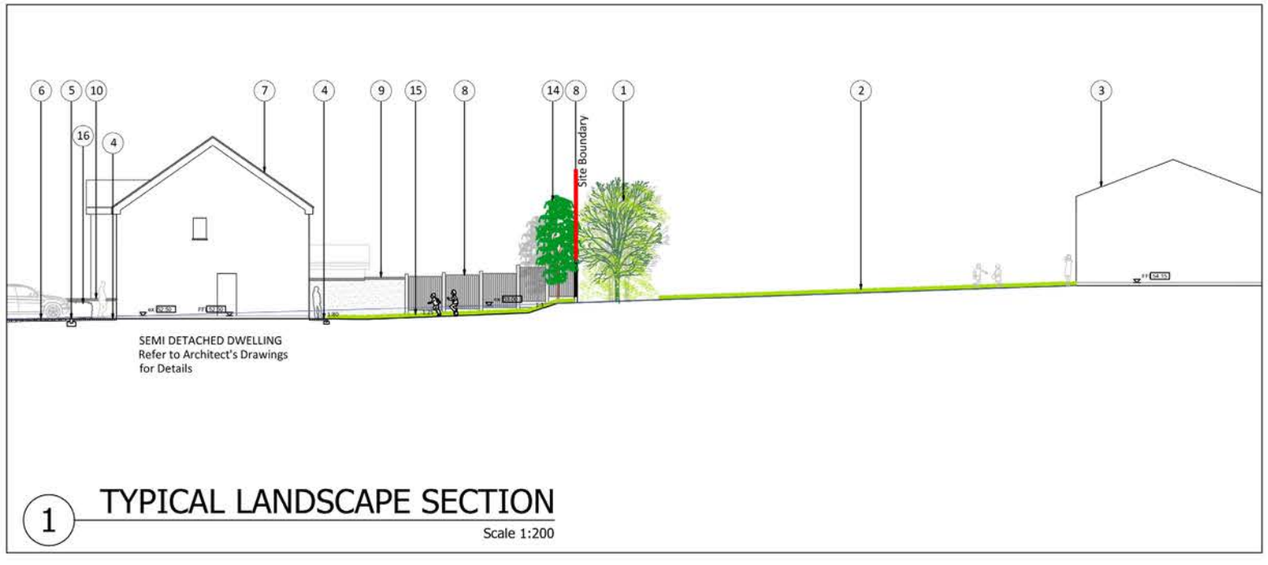
HARDSCAPE LEGEND:

4. PRIVATE FOOTPATH TO DWELLING - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO, SLATE COLLOUR OR EQUIVALENT
5. PARKING SPACES BANDING - SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
6. PARKING SPACES - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
7. DWELLING REFER TO ARCHITECT'S DRAWINGS FOR DETAILS
8. 2m CONCRETE POST AND TIMBER PANEL FENCE. POST FOUNDATIONS NEAR EXISTING BOUNDARY HEDGEROW TO BE HAND DUG TO AVOID LARGER ROOTS AND LIMIT IMPACT
9. 2m HIGH BOUNDARY WALL, BLOCK WALL CAPPED WITH BRICK
10. 1m LOW BOUNDARY WALL , BLOCK WALL CAPPED WITH BRICK
11. 2m HIGH REAR BOUNDARY WALL UN-RENDEDED, BLOCK WALL
12. 1m HIGH BOUNDARY WALL, 450mm BRICK PLINTH WITH RAILING ABOVE
13. SHARED SURFACE CARRIAGEWAY - BOUND AGGREGATE FINISH, BUFF COLOUR

Note: For Proposed boundary walls, fences and railings details refer to Architect's Boundary Treatment and Details drawings.

SOFT LEGEND:

14. COLUMNAR TREE PLANTING ALONG BOUNDARY
15. GRASS PLANTING TO PRIVATE GARDENS
16. CLIPPED HEDGE TO FRONT GARDENS
17. STREET TREE PLANTING
18. BIOSWALE PLANTING
19. SHRUB PLANTING
20. AMENITY GRASS TO PUBLIC SPACES



1 TYPICAL LANDSCAPE SECTION

Scale 1:200

Rev	Date	Drawn	Checked	Description
01	20/05/2024	AK	GD	Issue for LRD Planning
00	29/03/2022	GD	DB	Issue for Planning

Notes

File Ref: Y:\6835_LITTLE_ISLAND_SHD\6835_WORKING\6835_CAD\6835_300_Planning\6835_Updated_2022_LRD\6835_LRD\6835-304-308_DETAILS_LRD_20230704
Modified By: George Dundon Modified Time: 5/24/2024 12:46:56 pm Plot Time: 5/24/2024 4:07:03 pm

Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK
Project No.	6835
Drg.	NORTHERN BOUNDARY
Drawing No.	305
Rev.	
Scales	1:200 @A2
Status	PLANNING
Date	20/05/24

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Drn.	Chd.	Passed
GD	GD	DB

BSM Est. 1968


N
LEGEND:
PROPOSED PLANNING APPLICATION BOUNDARY (65,454 sq.m)
PROPOSED ACTIVE OPEN SPACE (353 sq.m) EQUIVALENT TO 1.45% OF REDLINE APPLICATION AREA
PROPOSED PASSIVE OPEN SPACE (7,535 sq.m), EQUIVALENT TO 11.5% OF REDLINE APPLICATION AREA
BALLYTRASNA PARK ROAD
320m.sq
103sq.m
1,975m.sq
GOLF COURSE
235sq.m
615sq.m
3,435m.sq
FUTURE DEVELOPMENT SITE
1,805m.sq
Golf Course
Notes
Rev Date Drawn Checked Description
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Project PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CO. CORK
Project No. 6835
Dg. Open Space Plan
Drawing No. 306 Rev. 00
Scales 1:1000@A1
Status PLANNING
Date 20/05/2024
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Tel: +353(0) 21 242 5620
mail@bradyshipmanmartin.com
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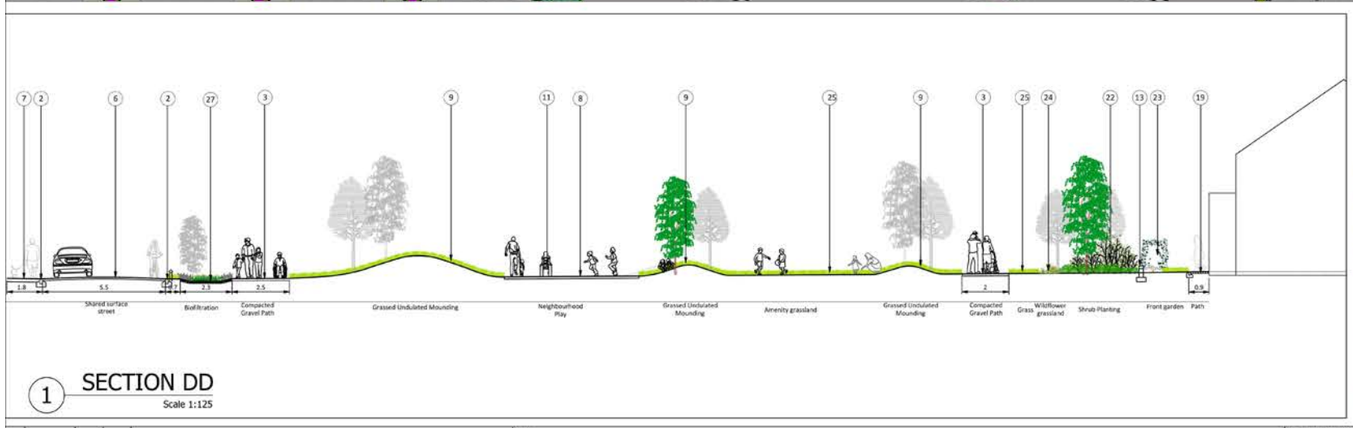
Drn. GO Chd. DB Passed DB
BSM
Est. 1968

00 LANDSCAPE DETAIL
Scale 1:125



1 SECTION DD
Scale 1:125

HARDSCAPE LEGEND:

1. IMPRINTED ASPHALT TO RAISED TABLE AT JUNCTIONS , COLOUR MAROON
2. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
3. FOOTPATH - COMPACTED GRAVEL, E.G.'BALLYLUSK' OR EQUIVALENT
4. PARKING SPACES BANDING SELECT CONCRETE KERB UNITS SET FLUSH, E.G 'TOBERMORE' CONSERVATION OR EQUIVALENT
5. PARKING SPACES SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
6. SHARED SURFACE CARRIAGEWAY - BOUND AGGREGATE FINISH, BUFF COLOUR
7. PUBLIC FOOTPATH - BRUSHED CONCRETE PATH TO ENGINEER'S DETAILS
8. SAFETY SURFACE TO NEIGHBOURHOOD PLAY AREA
9. MOUNDING - GENTLE SLOPED LANDFORM UP TO 1.0M ABOVE SURROUNDING GROUND LEVELS
10. ROBINIA TIMBER SPINNER PLATE (BY KOMPAN OR SIMILAR)
11. ROBINIA TIMBER DOUBLE SEESAW
12. TIMBER SPRINGER (BY KOMPAN OR SIMILAR)
13. RAILING, PAINTED BLACK, SET ON LOW WALL TO ARCHITECT'S DETAIL AS DEFINING EDGE TO PRIVATE FRONT GARDENS OF PROPERTIES AT SELECT CORNER AND JUNCTION LOCATIONS.
14. DECK CROSSING - RECYCLED PLASTIC, (BY ECOPLASTIC OR SIMILAR)
15. SEATING
16. WALL TO REAR GARDENS TO ARCHITECT'S DETAILS
17. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 UPRIGHT, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
18. ASPHALT ROAD TO ENGINEER'S DETAILS
19. FOOTPATH WITH PIN KERB EDGING- SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO, SLATE COLOR OR EQUIVALENT
20. RUMBLE STRIPS IN SILVER GREY GRANITE SETTS TO ENGINEER'S SPECIFICATIONS.

Note: For Proposed boundary walls, fences and railings details refer to Architect's Boundary Treatment and Details drawings.

SOFT LEGEND:

21. NATIVE TREE PLANTING TO OPEN SPACE AREA
22. SHRUB PLANTING
23. CLIPPED HEDGE PLANTING
24. SPECIES RICH GRASSLAND SEEDING
25. AMENITY GRASS
26. STREET TREE PLANTING
27. BIOFILTRATION BED PLANTING
28. GRASS IN PRIVATE GARDENS

Reference Images

01	20/05/2024	AK	GD	Issue for LRD Planning
00	25/03/2022	GD	DB	Issue for Planning
Rev.	Date	Drawn	Checked	Description

Notes

Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK	Project No.	6835
Drg.	Open Space A	Drawing No.	307 Rev.
Scales	1:125 @ A1	Status	PLANNING
Date	20/05/24		
Drn.	GD	Chd.	DB
Passed	DB		

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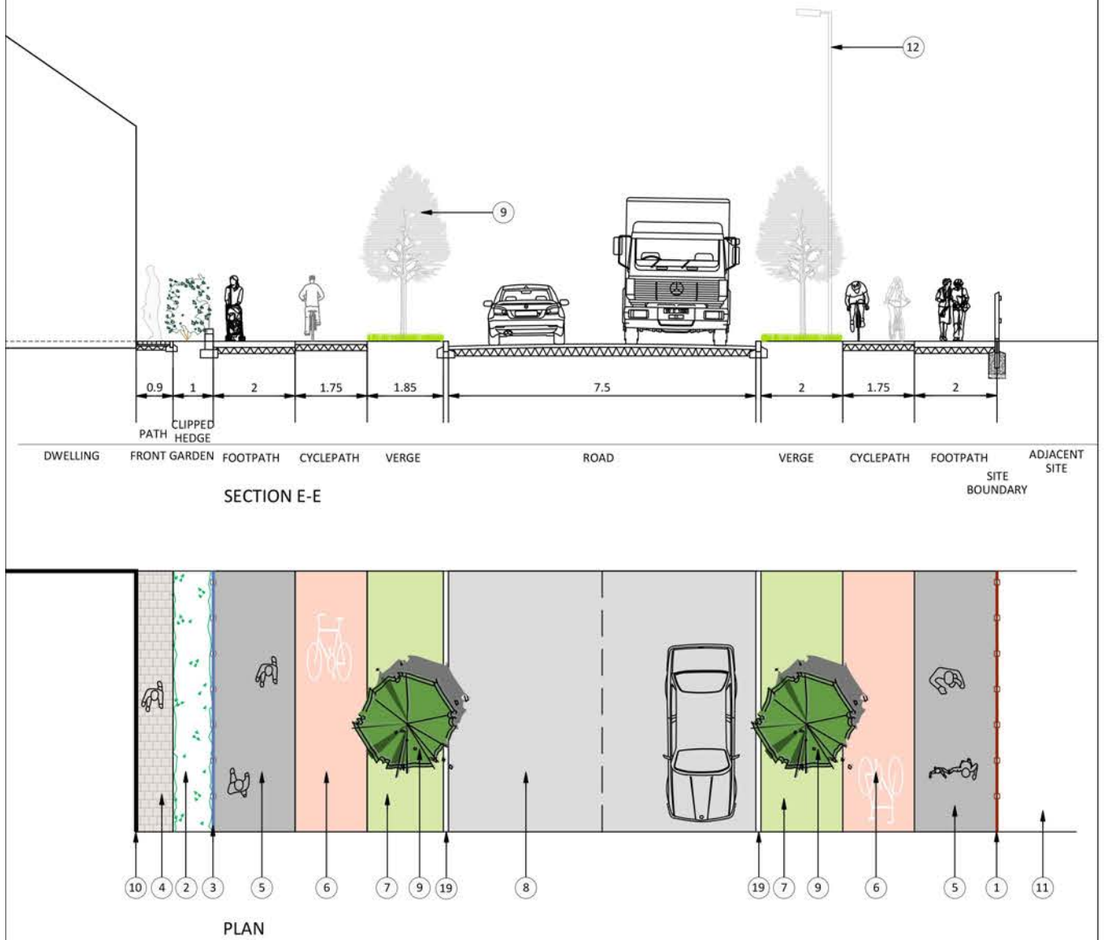
HARDSCAPE LEGEND:

1. TIMBER POST AND RAIL FENCE, 1.2M HIGH, WATER BASED BLACK STAINED FINISH.
2. CLIPPED HEDGE
3. RAILING, PAINTED BLACK, SET ON LOW WALL TO ARCHITECT'S DETAIL AS DEFINING EDGE TO PRIVATE FRONT GARDENS OF PROPERTIES AT SELECT CORNER AND JUNCTION LOCATIONS.
4. PRIVATE FOOTPATH - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G. 'TOBERMORE SHANNON DUO, SLATE COLLOUR OR EQUIVALENT
5. PUBLIC FOOTPATH - BRUSHED CONCRETE TO ENGINEER'S DETAILS
6. CYCLEPATH - TO ENGINEER'S DETAILS
7. AMENITY GRASS VERGE
8. DISTRIBUTOR ROAD - CARRIAGEWAY TO ENGINEER'S DETAILS
9. STREET TREE PLANTING
10. DWELLING TO ARCHITECT'S DETAILS
11. ADJACENT SITE
12. LIGHTING TO ENGINEER'S DETAILS
13. AMENITY GRASS IN OPEN SPACE
14. BIOSWALE PLANTING
15. TREE PLANTING AT OPEN SPACE EDGE TO STREET
16. ACCESS STREET CARRIAGEWAY TO ENGINEER'S DETAILS
17. PARKING SPACES BANDING - SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 LAID FLUSH, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
18. PARKING SPACES - SELECT CONCRETE BLOCK PAVING 80MM DEEP, E.G 'TOBERMORE' HYDROPAVE COLOUR: CHARCOAL, OR EQUIVALENT
19. SELECT, NATURAL COLOURED EXPOSED AGGREGATE KERB 125X915X255 UPRIGHT, E.G 'TOBERMORE COUNTRY KERB OR EQUIVALENT
20. GRASS IN PRIVATE GARDENS
21. WILDFLOWER MEADOW PLANTING

KEY
NTS



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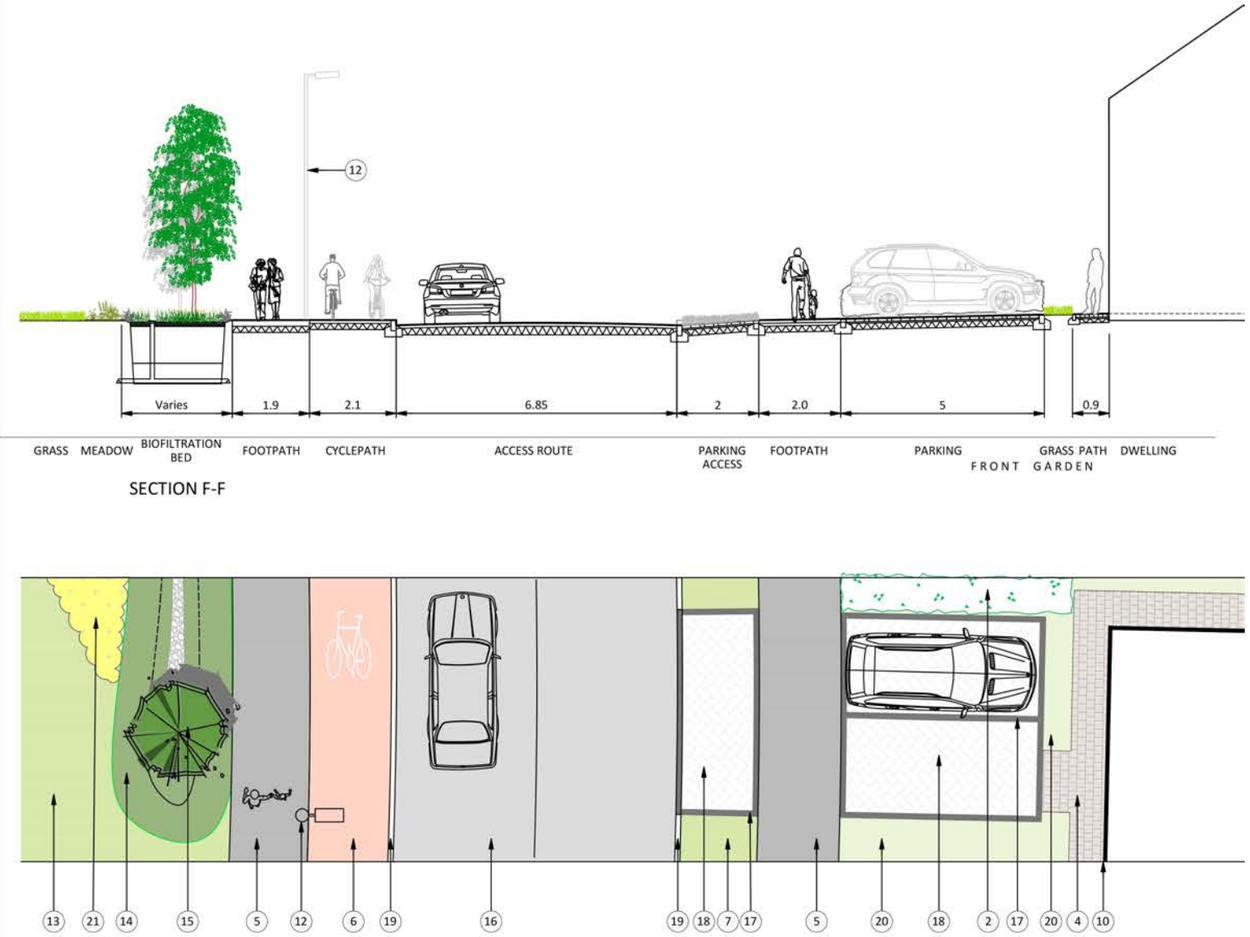

2 MAIN ACCESS STREET
Scale 1:100

Rev	Date	Drawn	Checked	Description
01	20/05/2024	AK	GD	Issue for LRD Planning
00	15/03/2022	GD	DB	Issue for Planning

Notes

File Ref: Y:\6835_LITTLE_ISLAND_SHD\6835_WORKING\6835_CAD\6835_300_Planning\6835_Updated_2022_LRD\6835_LRD\6835-304-308_DETAILS_LRD_20230704

Modified By: Agata Kostecka Modified Time: 5/24/2024 12:21:41 pm Plot Time: 5/24/2024 12:30:29 pm

Project	COURTSTOWN, LITTLE ISLAND, CORK
Project No.	6835
Drg.	TYPICAL ROUTE SECTIONS
Drawing No.	308
Rev.	
Scales	1:100 @ A2
Status	PLANNING
Date	20/05/24
Drn.	GD
Chd.	GD
Passed	DB

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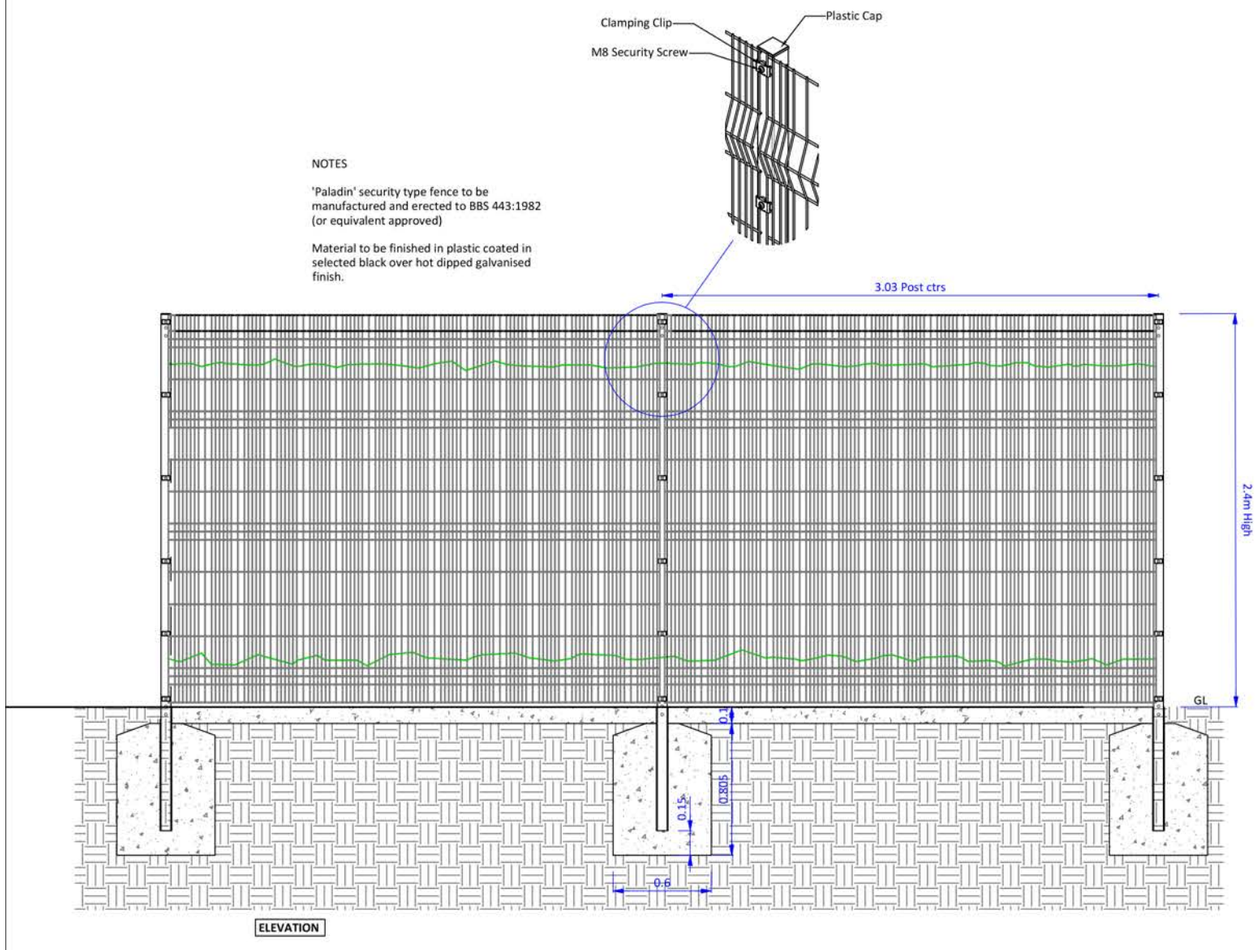

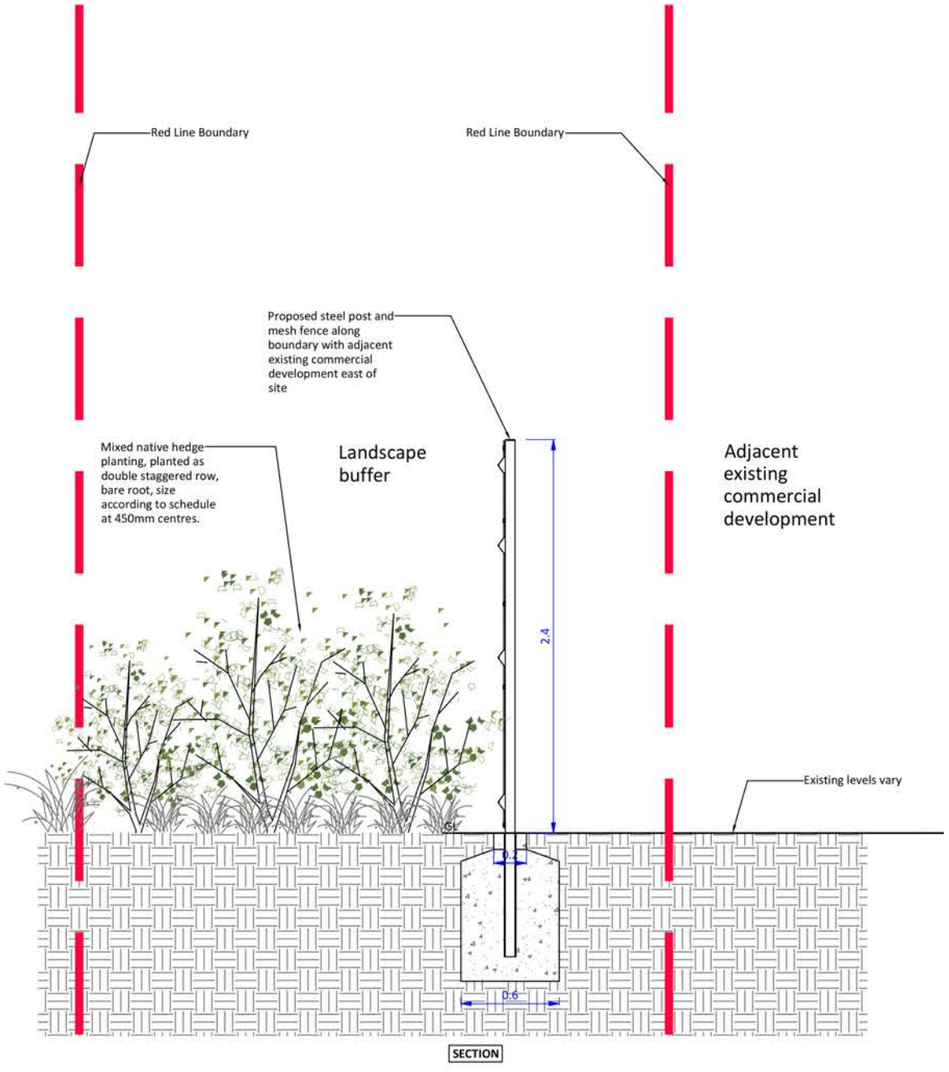

00 2.4m High Paladin Fence and Mixed Native Hedge to Landscape Buffer

Scale 1:25

Rev	Date	Drawn	Checked	Description
00	YYYY/MM/DD	XX	XX	XXXXXXXXX

Notes

File Ref: Y:\6835_LITTLE_ISLAND_SHD\6835_WORKING\6835_CAD\6835_300_Planning\6835_Updated_2022_LRD\6835_LRD\6835-304-308_DETAILS_LRD_20230704

Modified By: George Dundon | Modified Time: 5/21/2024 11:47:05 am | Plot Time: 5/21/2024 11:50:45 am

Project	COURTSTOWN, LITTLE ISLAND, CORK
Project No.	6835
Drg.	TYPICAL LANDSCAPE BUFFER BOUNDARY
Drawing No.	309
Rev.	
Scales	1:100 @ A2
Status	PLANNING
Date	18/05/23

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Drn.	Chd.	Passed
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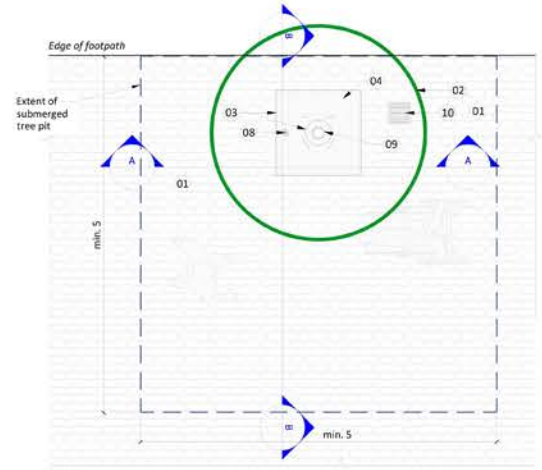
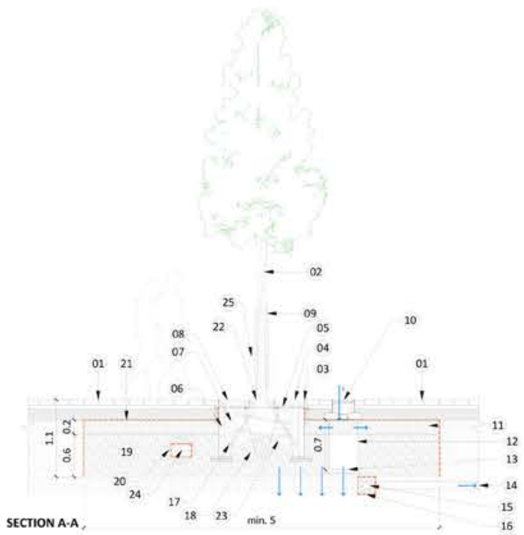
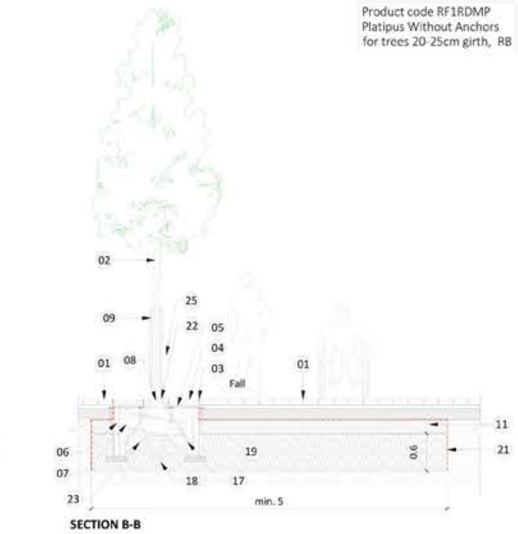


PLAN


SECTION A-A


SECTION B-B

KEY:

1. Adjacent footpath surface and build-up to Engineer's drawings
2. Proposed semi-mature tree planting 20-25cm girth, RB
3. Aluminium edge 120mm high, used also as Protective tree collar installed 75-100mm from the base of trunk to allow for growth (e.g. Kinley AluExcel or equivalent)
4. Gold colour stone, UV Porous Resin surface (Addastone TP or equivalent approved) with translucent epoxy/polyurethane binder (0.5mm dia. grit cast onto uncured surface). Select aggregates must be washed, clean and dry, grading 6-10mm for greater perlocation
5. Clean loose aggregate infill
6. Concrete planting frame 1.2x1.2m, 0.7m deep (available from stockholmtreepits.co.uk, or equivalent) adjusted 2-4mm on crushed coarse stone.
7. Tree soil type A to fill the planting hole (See Soil Notes)
8. Rootball irrigation/aeration system for establishment period, with a fixed non-removable grid inlet complete with a vandal resistant powder-coated aluminium cap on a retainer chain, placed around rootball for watering and liquid fertiliser, Greenleaf RootRain CIVIC or equivalent
9. Tree trunk protected with securely fixed flexible bamboo cane mat
10. Heelsafe, 316L stainless steel B125 gully, 300x300mm with slip resistant finish and Heelsafe 316L stainless steel gully grate with slip resistant finish, certified to EN 1253-1, load class L15, size 268x 268mm
11. 200mm aeration layer (20/40mm clean stone) compressed with a 400 kg soil vibrator.
12. Aeration well (one per tree) adjusted to 2-4mm on 6mm coarse crushed stone.
13. Silt trap at base of aeration well emptied using standard gully sucker
14. Outfall to stormwater management system (only required if there is inadequate ground infiltration)
15. Perforated pipe underdrain
16. Filtration geotextile
17. Underground guying system (Platipus Deadman system RF2RDMP or eq.) with 3no. kerbstones/sleepers, 3 x wire chokes, 5m galv. wire, 1no. ratchet tensioner, 3no. plati-mat.
18. Compacted structural soil platform to support the rootball. Adjust for appropriate planting height (root flare at ground level).
19. Structural soil with 100-150 angular stone (preferably not limestone) laid down in 250-300mm layers). The soil needs to be fully washed down into the voids of the angular stone. Slow release fertiliser (8 mo. leaching time 100g/m2) laid in layers with planting soil
20. Root barrier material of ducting positioned around sewage and surface water pipes only and not around the tree pit. Pipe bed aggregate (4/10mm) installed as protection around pipes and ducting.
21. Separation geotextile 100-300g/m²
22. Do not cover root collar/root flare. Tree root collar shall be placed at the same level as in the nursery. Tree root ball rests on structural soil.
23. Base of tree pit 1% slope for drainage. Loosen subsoil 200mm deep to base.
24. Utility ducting to engineer's details, backfilled with 20mm crushed stone and wrapped in geotextile.
25. Slow release 55L capacity watering bag. Made of green polyethylene with scrim reinforcement, black polypro straps and nylon zippers. For larger trees zip allows multiple bags to be fitted together. Two water release points per bag. Remove watering bags after one full growing season or when the tree is firmly established.

Product code RF1RDMP Platipus Without Anchors for trees 20-25cm girth, RB


1. Sample photo of tree anchoring system Platipus without Anchors - Deadman


2. Structural Soil Tree Pit 3D view


3. Sample photo of irrigation / aeration system, with a vandal resistant cap, e.g. Greenleaf RootRain CIVIC or equivalent

Structured Tree Soil Mix Notes:
Structured Tree Soil Mix for street trees, min 600mm deep to provide CBR min. 15. under paved areas. Soil medium comprises:

- 70% clean crushed stone (stone size 100-150mm) laid in 250-300mm layers compressed by at least four passes with a vibroplate.
- 30% imported Sandy Clay Loam/Sandy Loam (Type D soil to Q28 of specification) conforming to BS3882 (TII Standard SPW-600) unscreened, comprising:
  - 8%wt-% peat free, organic compost produced to QAS 441 Irish Standard
  - Sandy Clay Loam/Sandy Loam will have the following particle size distribution:

Sieve	Percent passing
6mm	100
4.5mm	95-100
2mm	80-100
1mm	50-85
0.60mm	25-80
0.30mm	40-70
0.15mm	30-60
0.01mm	4-12

Soil to be laid in-situ on the crushed rock and flushed down between the layers of crushed rock with high pressure/low volume water. In order to infiltrate the right amount of soil into the crushed rock, each layer of planting soil must not exceed 20 mm thickness. The planting soil is applied in several layers so that the entire volume of crushed rock is saturated. There should be no surplus soil lying around after application.

Tree Pit Soil (immediately adjoining rootball - Type A)
Imported Sandy Clay topsoil (Type A to Q28 of specification) to be added to planting hole within tree frame, with tree planted at correct depth, guyed and watered.

Extract from "Planting beds in the City of Stockholm, A Handbook, 2009.02.23 GH100322"

The pictures above illustrate the procedure for structural soil construction, from laying and compressing the crushed rock layers for the structural volume, through protection of existing pipelines, placement of air inlets hosing in planting soil, fertilisation, laying aerated bearing layer, laying material-separating geotextile and gravel, placement of drain covers for water gutters to final placement of the tree grid and paving.

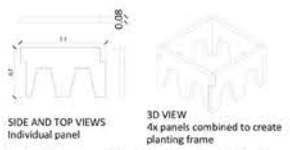
Note:
Recommended volume of stone based structural soil is based on the mature tree size.

Minimum requirements for tree pit specifications when using structural soils are:

Mature Size of Tree**

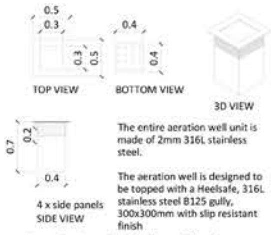
	Very Small (<5m)	Small (5-10m)	Medium (10-15m)	Large (15-25m)	Massive (>25m)
Recommended minimum volume of stone-based structural soil	8m³ (6m³ if shared)	15m³ (12m³ if shared)	26m³ (20m³ if shared)	36m³ (28m³ if shared)	45m³ (35m³ if shared)
Recommended number of air/water inlets	1 (0.5 if shared)	1 (0.5 if shared)	1	2 (1.5 if shared)	2

Typical detail is based on a small size tree which will require 15 cu.m. of structural soil.



Panel weight approx. 105kg. Unit reinforced with 5 Ø rebar. 25mm minimum concrete cover.

Concrete planting frame 1.2x1.2m
Scale 1:50

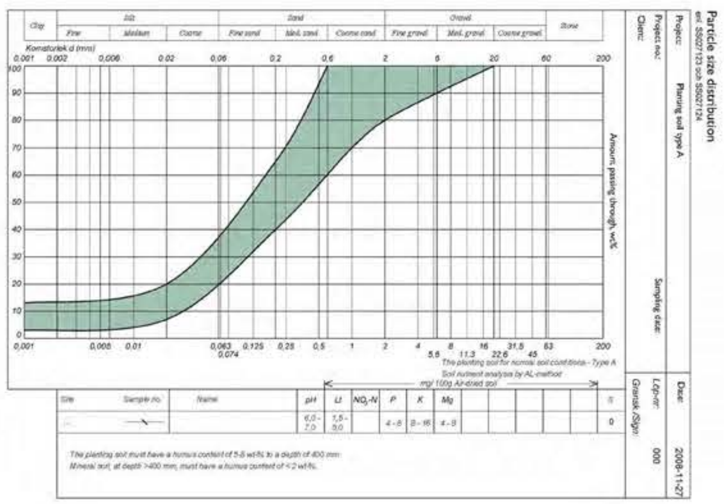


The entire aeration well unit is made of 2mm 316L stainless steel.

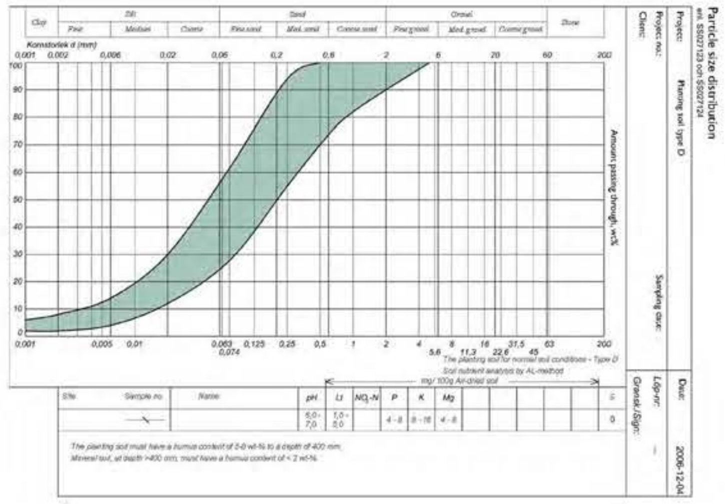
The aeration well is designed to be topped with a Heelsafe, 316L stainless steel B125 gully, 300x300mm with slip resistant finish

Tree pit Aeration Well specification
Scale 1:50

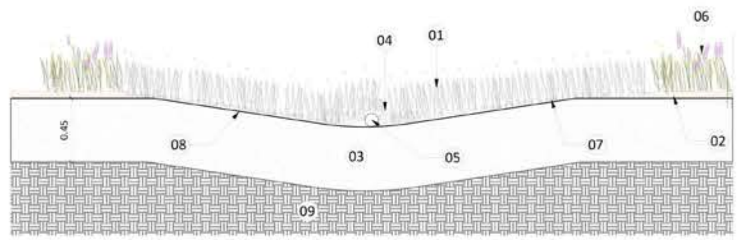
D1 Structural Soil Tree Pit System Typical Detail
Scale 1:50



Particle size distribution graph for planting soil Type A,
"Planting beds in the City of Stockholm, A Handbook, 2009.02.23 GH100322"



Particle size distribution graph for planting soil Type D,
"Planting beds in the City of Stockholm, A Handbook, 2009.02.23 GH100322"



KEY - BIORETENTION SECTION

1. Planting to Bioretention area
2. 50mm deep bark mulch to ornamental planting
3. 450mm deep Biortention Soil filter material - sandy loam SuDS soil to specification
4. Select 80-100mm layer of 20-55mm river washed glaciated cobble, to cover drainage
5. Drainage to engineer specification
6. Ornamental planting
7. Pea gravel much 16/20mm to bioretention planter, white and grey colour to approval to bioretention area
8. Existing ground
9. Subgrade to Engineers Detail

Horticultural assessment
Potential bioretention soils and test results shall generally be reviewed by the landscape consultant to ensure that they are capable of supporting a healthy vegetation community. Any component or soil found to contain high levels of salt (as determined by EC measurements), high levels of clay or silt particles (exceeding the particle size limits set above), or any other extremes which may be considered retardant to plant growth shall be rejected.

TREATMENT 1 - 450mm deep Bio-retention Planting

Bioretention Filter Medium /Soil Specification

Saturated hydraulic conductivity (permeability)
The saturated hydraulic conductivity shall be between 100 mm/h and 300 mm/h. This should be checked in situ, using the single ring infiltration test method as described in BS EN ISO 22282-5:2012.

Porosity
The total porosity shall be > 30% when tested in accordance with BS 1377-2:1990).

Particle size distribution
The filter medium shall be well-graded and well-mixed with min. following parameters:-

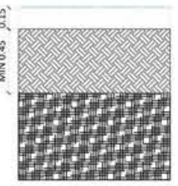
Sieve size (mm)	% Passing	Soil element
6	100	fine gravel
2.0	90-100	coarse sand
0.6	40-70	medium sand
0.2	5-20	fine sand
0.063	<5	clay and silt

Organic matter content
Organic matter content should be 3–5% (w/w)

pH
pH should be 5.5–8.5 (1:2.5 soil/water extract)

Electrical conductivity (salinity)
Electrical conductivity (EC) shall be < 3300 µS/cm (1:2.5 soil/CaSO₄ extract)

Major plant nutrients
Total nitrogen should be 0.10–0.30%
Extractable phosphorus shall be 16–100 mg/l
Extractable potassium shall be 120–900 mg/l
(Methods of analysis in accordance with BS 3882:2015, unless otherwise stated.)


TREATMENT 2 - Grass areas

TOPSOIL (Class 5A Material)
- Topsoiled, fertilized with enrich compost or organic equivalent and farmyard manure & seeded to specification

SUBSOIL TO TII EARTHWORKS SERIES 600 SPECIFICATION (Class 4 Material)
- Clean subsoil, free draining, free form rubbish building contamination, large stones rocks >150mm
- Laid in layers max 250-300mm
- Depth varies to make up site levels to allow 150mm Class 5A material to stand 30mm proud of all kerbs, paths edgings, manhole covers etc.

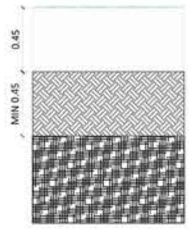
SUB-FORMATION TO TII EARTHWORKS SERIES 600 SPECIFICATION
- Remove all debris, building contamination, stones/rocks >150mm from formation surface.
- Decompact during dry weather by:
  (i) back-actor of 'Hymac' to 450mm depth; or,
  (ii) 3-5 tyne ripper mounted on crawler tractor @1200mm ctrs
- Ascertain location of all service runs prior to decompaction. Where affected, they shall be sealed off and protected.


TREATMENT 3 - Shrubs

TOPSOIL (Class 5A Material)
- Topsoiled, fertilized with enrich compost or organic equivalent and farmyard manure.

SUBSOIL TO TO TII EARTHWORKS SERIES 600 SPECIFICATION (Class 4 Material)
- Clean subsoil, free draining, free form rubbish building contamination, large stones rocks >150mm
- Laid in layers max 250-300mm
- Depth varies to make up site levels to allow 150mm Class 5A material to stand 30mm proud of all kerbs, paths edgings, manhole covers etc.

SUB-FORMATION TO TII EARTHWORKS SERIES 600 SPECIFICATION
- Remove all debris, building contamination, stones/rocks >150mm from formation surface.
- Decompact during dry weather by:
  (i) back-actor of 'Hymac' to 450mm depth; or,
  (ii) 3-5 tyne ripper mounted on crawler tractor @1200mm ctrs
- Ascertain location of all service runs prior to decompaction. Where affected, they shall be sealed off and protected.


TREATMENT 4 - Hedgerows

TOPSOIL (Class 5A Material)
- Topsoiled, fertilized with enrich compost or organic equivalent and farmyard manure.

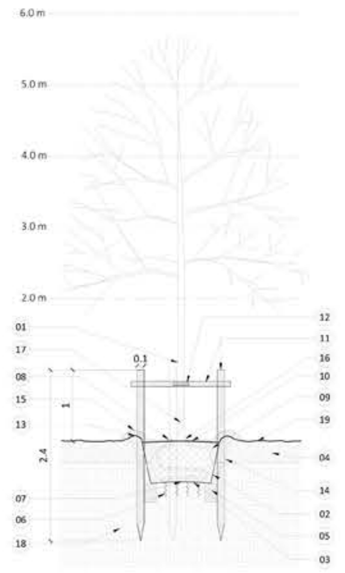
SUBSOIL TO TII EARTHWORKS SERIES 600 SPECIFICATION (Class 4 Material)
- Clean subsoil, free draining, free form rubbish building contamination, large stones rocks >150mm
- Laid in layers max 250-300mm
- Depth varies to make up site levels to allow 150mm Class 5A material to stand 30mm proud of all kerbs, paths edgings, manhole covers etc.

SUB-FORMATION TO TII EARTHWORKS SERIES 600 SPECIFICATION
- Remove all debris, building contamination, stones/rocks >150mm from formation surface.
- Decompact during dry weather by:
  (i) back-actor of 'Hymac' to 450mm depth; or,
  (ii) 3-5 tyne ripper mounted on crawler tractor @1200mm ctrs
- Ascertain location of all service runs prior to decompaction. Where affected, they shall be sealed off and protected.

D2 Topsoil Treatment
Scale 1:25

Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK		Project No.	6835
Drg.	Structural Soil Tree Pit & Topsoil Treatment Details	Drawing No. 310	Rev.	00
Scales	1:25 & 1:50 @ A1	Status PLANNING	Date	23/05/22
Unit 43, Penrose Wharf, Cork T23 A8PT Tel: +353(0) 21 242 5620	mail@bradyshipmanmartin.com www.bradyshipmanmartin.com	Drn. AK	Chd. GD	Passed

BSM Est. 1968

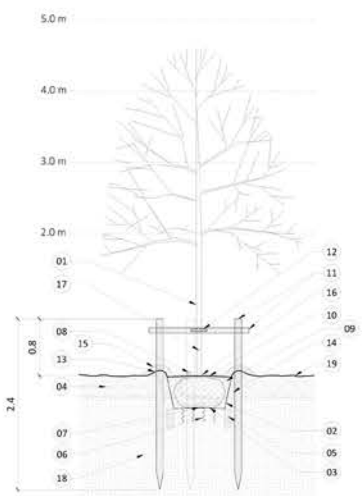


NOTES (MODIFIED SOIL):

1. Semi Mature trees shall be to BS 8545 *Trees: from nursery to independence in the landscape*, with a total height of 5.0 to 5.5 metres and a girth of 20-25 cm at 1m above ground level and shall be planted at locations indicated.
2. Larger tree pits should be excavated to minimize the destruction of soils structure. Excavate tree pits to the depth of tree rootball. Base of pit should remain undisturbed. Separate excavated material into modified topsoil and subsoil and stockpile for backfilling If excavated subsoil is particularly heavy-textured soils (silty or clayey), import a high sand content subsoil or a quarried sand to sit the rootball on.
3. Mound the pit slightly to help shed water away from the upper rootball.
4. Modified Topsoil, depth varies.
5. Incorporate a mini soakaway in the base of the pit, or connecting the pit to a positive drainage outfall.
6. Fork the bottom of the pit to break up the sub grade (200mm depth).
7. Bottom of rootball rests on existing or recompacted soil.
8. Irrigation/aeration system facilitated by 60mm dia. perforated polypropylene pipe around root ball with a fixed non-removable 80mm dia HDPE grid inlet complete with a vandal resistant powder-coated aluminium cap on a retainer chain, placed around rootball for watering and liquid fertiliser, e.g. Greenleaf RootRain CIVIC or equivalent.
9. Backfilled modified topsoil with Rootgrow Professional Mycorrhizal powder to manufacturer's recommendations. Backfilled material installed to original soil profiles in accordance to BS 8545.
10. Trees are to be planted at the same depth as in nursery (as indicated by the soil mark on the stem of trees) and the soil is carefully firmed back up to existing ground level. Top of rootball shall be flush with finished grade.
11. Drive 4no. 2.4m x 100mm dia. stakes away from rootball, minimum of 300mm below the bottom of the pit and 1000mm above ground level, with 2no. 50x75mm cross brace rails, all pressure treated. Paint stakes and rail in a primer and apply minimum 2 coats black opaque paint, Bondex Ebony or equivalent. The stakes and rail are to be softwood, pointed at one end, pressure treated, and strong enough to take nail without splitting. The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (at the start of the second growing season after planting).
12. Fit tree tie. Tree ties shall be biodegradable fabric composition. Tie wrapped twice in an eight, twisted to give distance
13. Form round-topped soil berm 100mm high and 200mm wide around the rootball. Berm shall begin at root ball periphery.
14. Prior to mulching, lightly tamp soil around the rootball in 150mm lifts to brace tree. Do not over compact. When the planting hole has been backfilled, pour water around the rootball to settle the soil. The soil ball should not move independently of the central stem.
15. Mulch the base of the tree to a depth of 75-100mm at a radius of excavated soil around each tree. No more than 25mm of mulch on top of rootball. Maintain until spring following the first growing season.
16. Do not cover root collar/root flare when planting or with mulch. The root flare should be clearly visible at the surface of the rootball.
17. Protect the tree base from rabbit/hare damage using brown, biodegradable spiral tree guard.
18. Existing / imported Subsoil.
19. Finished grade.

D3 Semi Mature (20-25cm girth) Modified soil

Scale 1:50

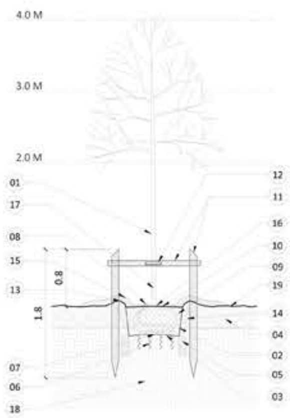


NOTES (MODIFIED SOIL):

1. Advanced Nursery Stock trees shall be to BS 8545 *Trees: from nursery to independence in the landscape*, with a total height of 4.0 to 4.5 metres and a girth of 16-18 cm at 1m above ground level and shall be planted at locations indicated.
2. Larger tree pits should be excavated to minimize the destruction of soils structure. Excavate tree pits to the depth of tree rootball. Base of pit should remain undisturbed. Separate excavated material into modified topsoil and subsoil and stockpile for backfilling If excavated subsoil is particularly heavy-textured soils (silty or clayey), import a high sand content subsoil or a quarried sand to sit the rootball on.
3. Mound the pit slightly to help shed water away from the upper rootball.
4. Modified Topsoil, depth varies.
5. Incorporate a mini soakaway in the base of the pit, or connecting the pit to a positive drainage outfall.
6. Fork the bottom of the pit to break up the sub grade (200mm depth).
7. Bottom of rootball rests on existing or recompacted soil.
8. Irrigation/aeration system facilitated by 60mm dia. perforated polypropylene pipe around root ball with a fixed non-removable 80mm dia HDPE grid inlet complete with a vandal resistant powder-coated aluminium cap on a retainer chain, placed around rootball for watering and liquid fertiliser, e.g. Greenleaf RootRain CIVIC or equivalent.
9. Backfilled modified topsoil with Rootgrow Professional Mycorrhizal powder to manufacturer's recommendations. Backfilled material installed to original soil profiles in accordance to BS 8545.
10. Trees are to be planted at the same depth as in nursery (as indicated by the soil mark on the stem of trees) and the soil is carefully firmed back up to existing ground level. Top of rootball shall be flush with finished grade.
11. Drive 4no. 2.4m x 100mm dia. stakes away from rootball, minimum of 300mm below the bottom of the pit and 800mm above ground level, with 2no. 50x75mm cross brace rails, all pressure treated. Paint stakes and rail in a primer and apply minimum 2 coats black opaque paint, Bondex Ebony or equivalent. The stakes and rail are to be softwood, pointed at one end, pressure treated, and strong enough to take nail without splitting. The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (at the start of the second growing season after planting).
12. Fit tree tie. Tree ties shall be biodegradable fabric composition. Tie wrapped twice in an eight, twisted to give distance
13. Form round-topped soil berm 100mm high and 200mm wide around the rootball. Berm shall begin at root ball periphery.
14. Prior to mulching, lightly tamp soil around the rootball in 150mm lifts to brace tree. Do not over compact. When the planting hole has been backfilled, pour water around the rootball to settle the soil. The soil ball should not move independently of the central stem.
15. Mulch the base of the tree to a depth of 75-100mm at a radius of excavated soil around each tree. No more than 25mm of mulch on top of rootball. Maintain until spring following the first growing season.
16. Do not cover root collar/root flare when planting or with mulch. The root flare should be clearly visible at the surface of the rootball.
17. Protect the tree base from rabbit/hare damage using brown, biodegradable spiral tree guard.
18. Existing / imported Subsoil.
19. Finished grade.

D4 Advance Nursery Stock (16-18cm girth) Modified soil

Scale 1:50

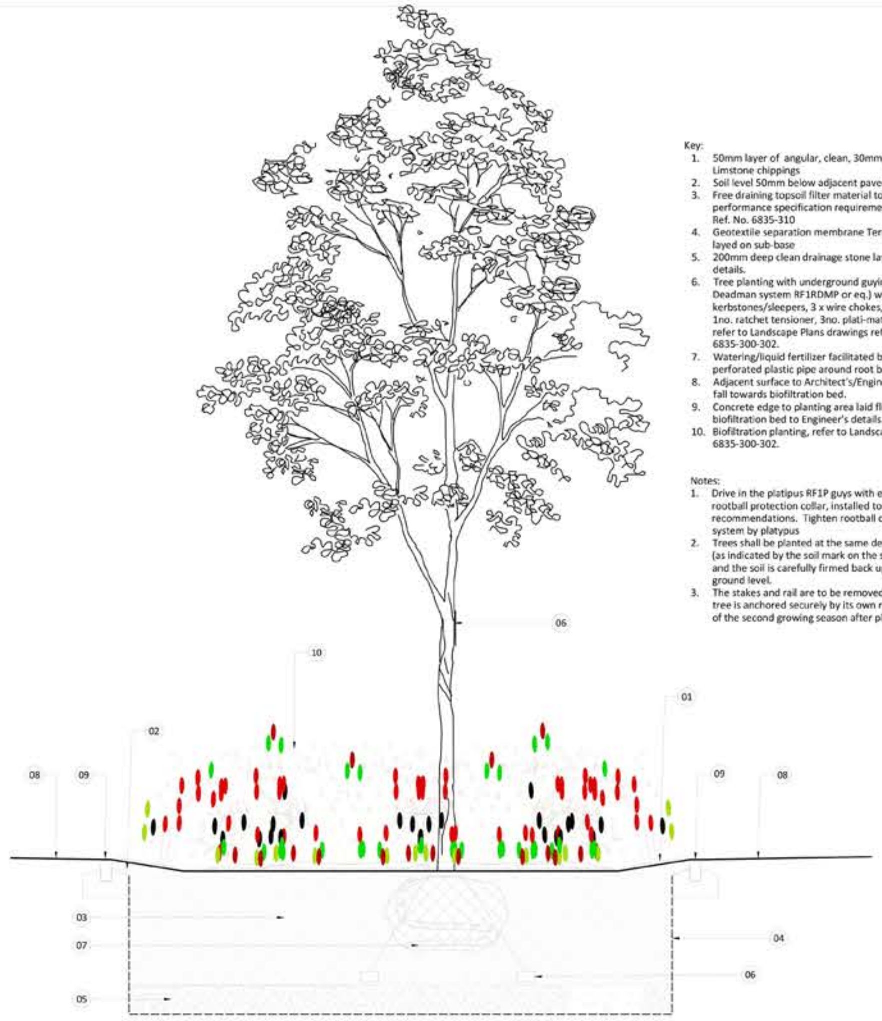


NOTES (MODIFIED SOIL):

1. Extra Heavy Standard trees shall be to BS 8545 *Trees: from nursery to independence in the landscape*, with a total height of 3.5 to 4.0 metres and a girth of 14-16 cm at 1m above ground level and shall be planted at locations indicated.
2. Larger tree pits should be excavated to minimize the destruction of soils structure. Excavate tree pits to the depth of tree rootball. Base of pit should remain undisturbed. Separate excavated material into topsoil and subsoil and stockpile for backfilling If excavated subsoil is particularly heavy-textured soils (silty or clayey), import a high sand content subsoil or a quarried sand to sit the rootball on.
3. Mound the pit slightly to help shed water away from the upper rootball.
4. Modified Topsoil, depth varies.
5. Incorporate a mini soakaway in the base of the pit, or connecting the pit to a positive drainage outfall.
6. Fork the bottom of the pit to break up the sub grade (200mm depth).
7. Bottom of rootball rests on existing or recompacted soil.
8. Irrigation/aeration system facilitated by 60mm dia. perforated polypropylene pipe around root ball with a fixed non-removable 80mm dia HDPE grid inlet complete with a vandal resistant powder-coated aluminium cap on a retainer chain, placed around rootball for watering and liquid fertiliser, e.g. Greenleaf RootRain CIVIC or equivalent.
9. Backfilled modified topsoil with Rootgrow Professional Mycorrhizal powder to manufacturer's recommendations. Backfilled material installed to original soil profiles in accordance to BS 8545.
10. Trees are to be planted at the same depth as in nursery (as indicated by the soil mark on the stem of trees) and the soil is carefully firmed back up to existing ground level. Top of rootball shall be flush with finished grade.
11. Drive 2no. 1.8m x 100mm dia. stakes away from rootball, minimum of 300mm below the bottom of the pit and 800mm above ground level, with 1no. 50x75mm cross brace rail, all pressure treated. Paint stakes and rail in a primer and apply minimum 2 coats black opaque paint, Bondex Ebony or equivalent. The stakes and rail are to be softwood, pointed at one end, pressure treated, and strong enough to take nail without splitting. The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (at the start of the second growing season after planting).
12. Fit tree tie. Tree ties shall be biodegradable fabric composition. Tie wrapped twice in an eight, twisted to give distance.
13. Form round-topped soil berm 100mm high and 200mm wide around the rootball. Berm shall begin at root ball periphery.
14. Prior to mulching, lightly tamp soil around the rootball in 150mm lifts to brace tree. Do not over compact. When the planting hole has been backfilled, pour water around the rootball to settle the soil. The soil ball should not move independently of the central stem.
15. Mulch the base of the tree to a depth of 75-100mm at a radius of excavated soil around each tree. No more than 25mm of mulch on top of rootball. Maintain until spring following the first growing season.
16. Do not cover root collar/root flare with soil/mulch. The root flare should be clearly visible at the surface of the rootball.
17. Protect the tree base from rabbit/hare damage using brown, biodegradable spiral tree guard.
18. Existing / imported Subsoil.
19. Finished grade.

D5 Extra Heavy Standard Tree (14-16cm girth, RB) Modified soil

Scale 1:50



Key:

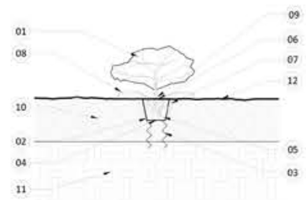
1. 50mm layer of angular, clean, 30mm, no fines, Kilkenny Limstone chippings
2. Soil level 50mm below adjacent paved surface level
3. Free draining topsoil filter material to meet performance specification requirements shown on Drg. Ref. No. 6835-310
4. Geotextile separation membrane Terram 1000 layer layed on sub-base
5. 200mm deep clean drainage stone layer to engineers details.
6. Tree planting with underground guying system (Platipus Deadman system RF1RDMP or eq.) with 3no. kerbstones/sleepers, 3 x wire chokes, 4m galv. wire, 1no. ratchet tensioner, 3no. plati-mat. For tree type refer to Landscape Plans drawings ref. no. 6835-300-302.
7. Watering/liquid fertilizer facilitated by 75mm dia. perforated plastic pipe around root ball.
8. Adjacent surface to Architect's/Engineer's details laid to fall towards biofiltration bed.
9. Concrete edge to planting area laid flush to top of biofiltration bed to Engineer's details.
10. Biofiltration planting, refer to Landscape Plan drawings 6835-300-302.

Notes:

1. Drive in the platipus RF1P guys with extensions and rootball protection collar, installed to manufacturer's recommendations. Tighten rootball collar and ratchet system by platypus
2. Trees shall be planted at the same depth as in nursery (as indicated by the soil mark on the stem of the trees) and the soil is carefully firmed back up to the existing ground level.
3. The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (at the start of the second growing season after planting).

D8 Typical Biofiltration Bed with Tree Planting

Scale 1:25

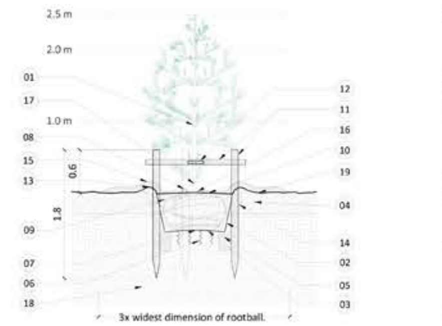


NOTES:

1. Shrubs shall be of quality prescribed in the root observations detail and specifications. Ornamental shrubs shall be a minimum size of 300-400mm and shall be planted at the spacing indicated on the drawings. Shrubs shall not generally be planted closer to a kerb or to the edge of a planting area than a distance equal to half the spacing indicated.
2. Excavate planting pits to a sufficient size so as to easily accommodate the spread roots of the plant.
3. Fork the bottom of the pit to break up the sub grade.
4. Bottom of root system rests on existing or recompacted soil.
5. Incorporate sterilised bonemeal into base of planting pit. Backfill using excavated material incorporating sanitised and stabilised compost to CQAS 441 (Enrich Compost or equivalent) and Rootgrow Professional Mycorrhizal granules to manufacturer's recommendations.
6. Shrubs are to be planted at the same depth as in nursery (as indicated by the soil mark on the stem of plants) and the soil is carefully firmed back up to existing ground level to ensure that there is good contact between the plant roots and soil substrate.
7. Prior to mulching, lightly tamp soil around the root system in 150mm lifts to brace shrub. Do not over compact. When the planting hole has been backfilled, pour water around the root system to settle the soil.
8. Mulch the base of the shrub to a depth of 50mm. No more than 25mm of mulch on top of root system. Maintain until spring following the first growing season.
9. Do not cover root collar/root flare when planting or with mulch
10. Modified /Imported Topsoil
11. Existing / Imported Subsoil
12. Finished grade

D6 Shrub Planting Modified Soil

Scale 1:25

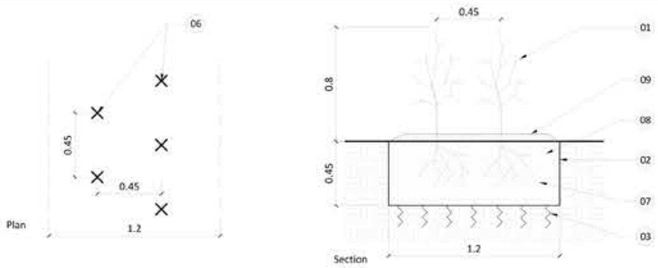


Pine tree planting notes:

1. Feathered pine trees shall have a total height of 2.0 to 2.5 metres and shall be planted at locations indicated.
2. Larger tree pits should be excavated to minimize the destruction of soils structure. Excavate tree pits to the depth of tree rootball. Base of pit should remain undisturbed. Separate excavated material into topsoil and subsoil and stockpile for backfilling If excavated subsoil is particularly heavy-textured soils (silty or clayey), import a high sand content subsoil or a quarried sand to sit the rootball on.
3. Mound the pit slightly to help shed water away from the upper rootball.
4. Modified Topsoil, depth varies.
5. Incorporate a mini soakaway in the base of the pit, or connecting the pit to a positive drainage outfall.
6. Fork the bottom of the pit to break up the sub grade (200mm depth).
7. Bottom of rootball rests on existing or recompacted soil.
8. Irrigation/aeration system facilitated by 60mm dia. perforated polypropylene pipe around root ball with a fixed non-removable 80mm dia HDPE grid inlet complete with a vandal resistant powder-coated aluminium cap on a retainer chain, placed around rootball for watering and liquid fertiliser, e.g. Greenleaf RootRain CIVIC or equivalent
9. Backfilled modified topsoil with Rootgrow Professional Mycorrhizal powder to manufacturer's recommendations. Backfilled material installed to original soil profiles in accordance to BS 8545.
10. Trees are to be planted at the same depth as in nursery (as indicated by the soil mark on the stem of trees) and the soil is carefully firmed back up to existing ground level. Top of rootball shall be flush with finished grade.
11. Drive 4no. 1.8m x 100mm dia. stakes away from rootball, minimum of 300mm below the bottom of the pit and 600mm above ground level, with 2no. 50x75mm cross brace rails, all pressure treated. Paint stakes and rail in a primer and apply minimum 2 coats black opaque paint, Bondex Ebony or equivalent. The stakes and rail are to be softwood, pointed at one end, pressure treated, and strong enough to take nail without splitting. The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (at the start of the second growing season after planting).
12. Fit tree tie. Tree ties shall be biodegradable fabric composition. Tie wrapped twice in an eight, twisted to give distance
13. Form round-topped soil berm 100mm high and 200mm wide around the rootball. Berm shall begin at root ball periphery.
14. Prior to mulching, lightly tamp soil around the rootball in 150mm lifts to brace tree. Do not over compact. When the planting hole has been backfilled, pour water around the rootball to settle the soil. The soil ball should not move independently of the central stem.
15. Mulch the base of the tree to a depth of 75-100mm at a radius of excavated soil around each tree. No more than 25mm of mulch on top of rootball. Maintain until spring following the first growing season.
16. Do not cover root collar/root flare with soil/mulch. The root flare should be clearly visible at the surface of the rootball.
17. Protect the tree base from rabbit/hare damage using brown, biodegradable spiral tree guard.
18. Existing/ imported Subsoil.
19. Finished grade.

D7 Pine Tree Planting, RB, Modified soil

Scale 1:50



NOTES:

1. Hedgerow transplants sizes shall range from 600-800mm and plantes at 450mm ctrs in double staggered rows.
2. Excavate a single trench dug 1200 wide x 450mm deep and to the required length.
3. Fork the bottom of the trench to break up the sub grade to 150mm depth.
4. Mix the excavated soil with PAS 100 compost
5. Prepare the plants by: pruning back any damaged roots to healthy growth; placing roots of waiting plants in water whilst planting; applying an approved mycorrhizal root-dip.
6. Place the plants in the trench in a double staggered row, 450mm between the rows, 450mm between the plants in each row, as shown.
7. Backfill the trench to half its depth and firm by treading. continue planting the trench.
8. Once planted, backfill with the remaining soil and firm as before.
9. Topdress the planting area with Weedproof Membrane and 50mm depth of bark mulch.
10. In march cut the plants hard back to within 250mm of the ground to encourage bushy growth from the base.

D9 Hedge Planting

Scale 1:25

General Planting Notes:

All planting works should be carried out during the period between November and April.

At the time of planting, all planting areas shall be weed free. The soil shall be moist and friable and not frozen, excessively dry, or water-logged. Allow 300-450mm depth of good quality topsoil for shrub planting areas.

All excavated planting holes shall be of sufficient size to accommodate the spread roots and the stock shall be planted so that after any settlement it is the same depth as it was grown in the nursery. The sides and base of the planting pit shall broke up before planting.

The planting hole shall be backfilled around the plant, the soil shall be lightly firmed to ensure that there is good contact between the plant roots and soil substrate.

Project	PROPOSED RESIDENTIAL DEVELOPMENT COURTSTOWN, LITTLE ISLAND, CORK		Project No.	6835
Drg.	Typical Planting Details	Drawing No. 311	Rev.	00
Scales	1:25 & 1:50 @ A1	Status PLANNING	Date	24/05/22
Unit 43, Penrose Wharf, Cork T23 A8PT Tel: +353(0) 21 242 5620		mail@bradyshipmanmartin.com www.bradyshipmanmartin.com	Drn. AK	Chd. GD / Passed

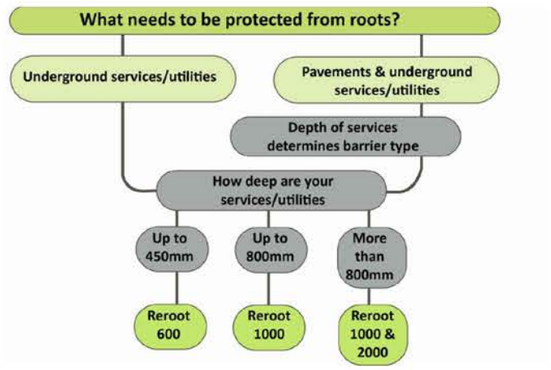
BSM Est. 1968

APPENDIX 2 -

PLANTING NEAR IRISH WATER INFRASTRUCTURE

Greenleaf- Urban Blue

Which Root Barrier to use?



(Greenleaf/GreenBlue Urban Product references. O.S.E.A)

Root Barrier Images

(Images from Greenleaf/GreenBlue Urban July 2016)

Reroot Barriers

(Greenleaf July 2016):

CODE REF: RER600 & RER1000
ReRoot 600 AND ReRoot 1000 products are ribbed root barriers designed for the protection of paved surfaces, shallow service duct & utilities. Available in roll form in two different depths. The number 600 and 1000 denote the depth in mm. 1mm Thick. Benefits:

- Easy to install, no specialist equipment needed.
- Available in 600mm & 1000mm depth
- Supplied in roll form to any 10lin.m increment
- Ribbed construction prevents root swirl and directs the root downward and outward.
- Flexible design allows the barrier to curve around obstacles but is rigid enough to hold its form when backfilling.
- Reroot jointing tape will ensure root proof joints when joining roll ends.

CODE REF: RER220x2.0
ReRoot 2000 root barrier is a high strength barrier for deeper applications. 2mm Thick. Benefits:

- Resistant to puncture by sharp objects or tearing as a result of soil movement
- Durable, resistant to biodegradation and photodegradation.
- East to install, no specialist equipment needed
- Available in standard 0.3m, 0.6m, 1.0m, 1.5m and 2.0m depth rolls, up to 6m deep rolls to special order.
- Available in 1.0mm and 2.0mm thickness.
- Effective in control of Japanese Knotweed and other invasive plants.
- Manufactured from 100% recycled material

Terram

(Greenleaf/GreenBlue Urban Product references. O.S.E.A)

Root Barrier Images

(Images from TERRAM August 2016)

Terram Rootguard

(Terram & PGI Company):

TERRAM ROOTGUARD: **Permeable solution**-Non-woven geotextile

Mechanical properties
Tensile Strength kN/m 18.00, Elongation 30%, CBR Puncture Resistance N 3250.

Physical properties
Mass per unit area g/m2 260

Roll dimensions
Width 2.25m, Length 25m

Terram Rootguard Plus

(Terram & PGI Company):

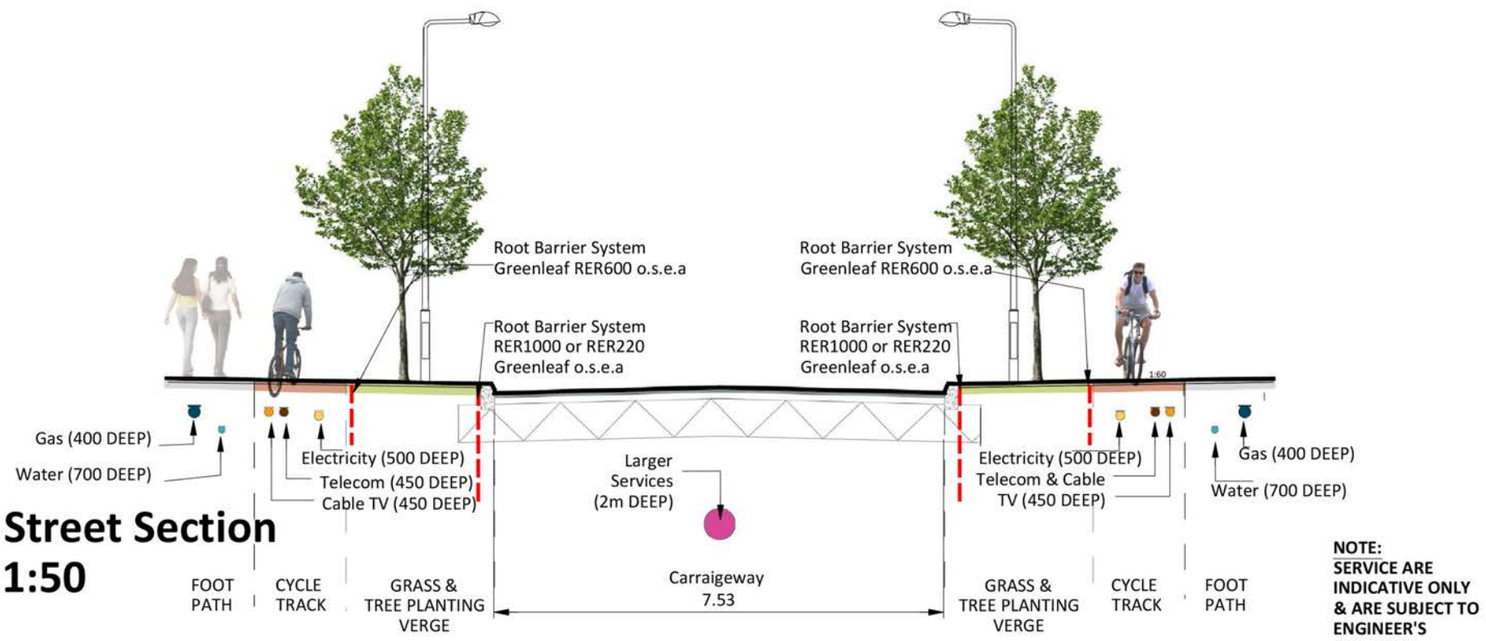
TERRAM ROOTGUARD PLUS: **Impermeable Solution**-Non-woven extrusion coated with high density polyethylene

Mechanical properties
Tensile Strength kN/m 14.00, Elongation 25%, CBR Puncture Resistance N 2550.

Physical properties
Mass per unit area g/m2 275

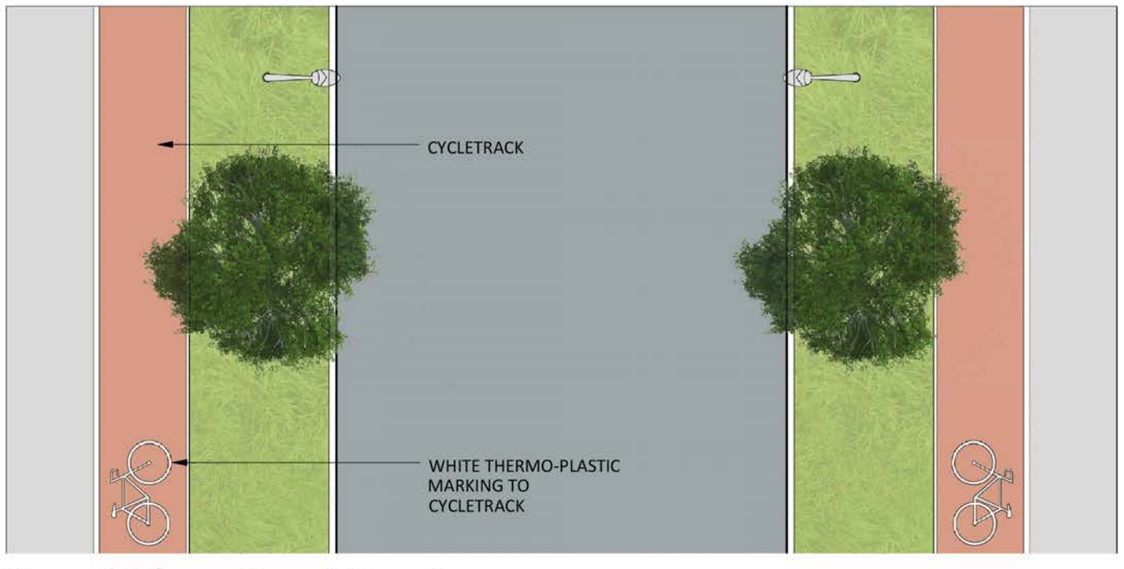
Rill dimensions
Width 2.00m, Length 25m

Reference Note: Irish Water Code of Conduct: Section 3.26.
Tree planting will not normally be allowed directly over the Works or within the distances referred to in Table A1 of BS 5837, but this may be relaxed where it can be shown that appropriate species selection and protection measures can be provided to prevent root ingress damage to the satisfaction of Irish Water. Such protection measures may include root barriers, root directors and by avoiding planting next to joint s, valves or other sensitive parts of the pipe system.



Street Section
1:50

NOTE:
SERVICE ARE INDICATIVE ONLY & ARE SUBJECT TO ENGINEER'S APPROVAL.



Typical Street Plan- Road Services
Scale 1:50

NOTE:

THE SECTION AND PLAN SHOWN ON THIS PAGE IS FOR INDICATION OF APPROPRIATE LOCATIONS FOR INSTALLING UNDERGROUND SERVICES THAT AVOID IMPACT ON PROPOSED TREE PLANTING LOCATIONS. REFER TO ENGINEER'S DETAILS FOR DESIGN OF PROPOSED STREETS AND ROADS SPECIFIC TO THE PROPOSED DEVELOPMENT.

LIGHTING AND STREET TREE PLANTING;

The specified street tree planting on this residential scheme complies with national and international best practice;

Cork County Council Public Lighting Manual and Product Specification 2018.

British Standard 54891:2013 (paragraph 4.3.3.2) Code of practice for lighting of roads and public amenity areas provides an integrated approach to both lighting and tree planting.

British Standard 5837: 2012 Paragraph 5.6.3 New Planting Adjacent to Roads. Highlights the benefits of tress and the need for appropriate selection of tree species regarding future canopy size.

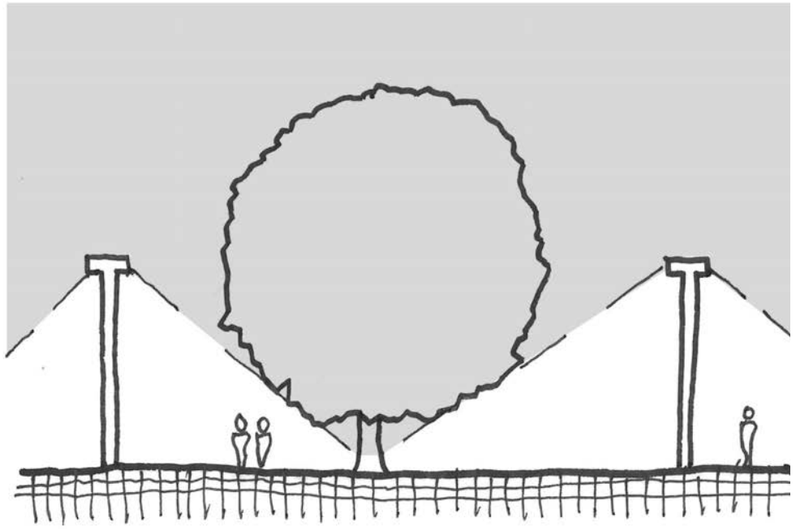
Trees and Design Action Group (TDAG) 2014 publication 'Trees in a Hardscape-A Guide for Delivery' state the importance of trees and the specified trees must be based on a sound understanding of the future canopy size, growth habits.

South Dublin County Council publication 'Living with Trees. South Dublin County Council's Tree Management Policy 2015-2020, Appendix 2' Provides recommended street tree species on a planting list. The Courtstown development has specified species on this list and species/cultivars that adhere to the habit of these trees.

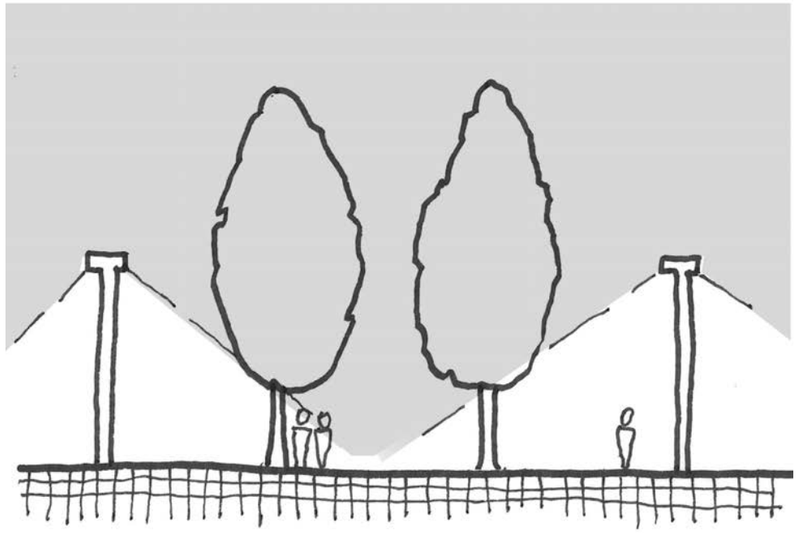
The street trees specified in the Courtstown development are all columnar in form and appropriate canopy size for urban street tree planting. Future canopy size does not exceed 2-3 meters. All of the street tree planting will have a 2m clear stem height and need low maintenance. The tree form adds permeability to the proposed lighting scheme.

The street trees specified are;

- Acer campestre 'Elsrijk'
- Corylus colurna
- Sorbus aucuparia 'Sheerwater Seedling'
- Pyrus Calleryana 'Chanticleer'
- Ulmus hollandica 'Dodnens'



Non Desirable



Desirable