

CUMMINS + VOORTMAN LTD.
Sustainable Architecture & Urban Design

Landscape Design Statement

Project:

Relocation of the existing Clondalkin RFC grounds at Gordon Park to new lands at Kingswood Farm, Moneenalion Commons Lower, Clondalkin, Dublin 22

Client:

Clondalkin RFC

Date: 20 / 12 / 2022

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1. Introduction

1.1. Cummins & Voortman Ltd have been appointed by the applicant, Clondalkin RFC, to prepare a Landscape Design for the proposed relocation of the existing Clondalkin RFC grounds at Gordon Park to new lands at Kingswood Farm, Moneenalion Commons Lower, Clondalkin, Dublin 22. This document is a landscape report to support this planning application in the stage of clarification of further information.

1.2. This report is to be considered in conjunction with the submitted Landscape Plan enclosed with this submission.

2. Site Assessment

2.1. Site Location:

The site is located between the N7, the R136, and a local access road to the south. It comprises a number of agricultural sheds, concrete hardstanding, hedgerows and a number of mature trees. The Cammoc river traverses the site diagonally towards Corkagh Park.

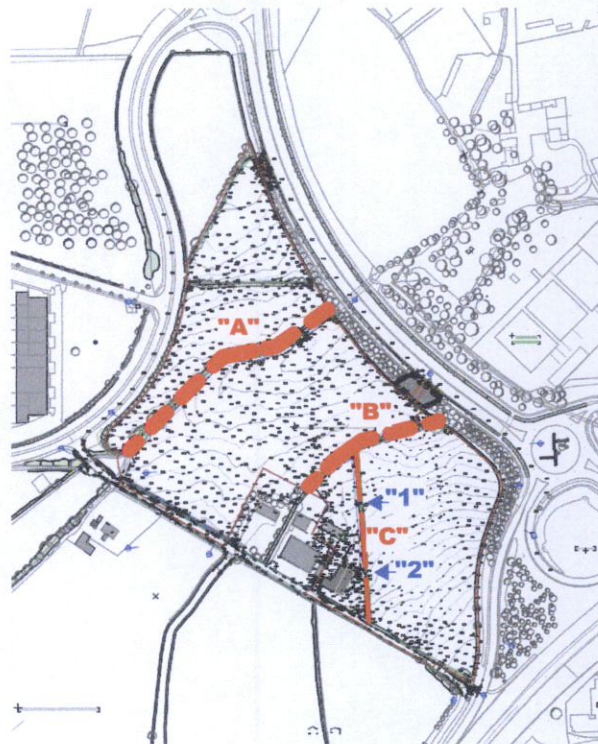


2.2 Site Survey

A topographic site survey has been carried out to capture contours at 0.25m interval, all site features and buildings within the landholding.

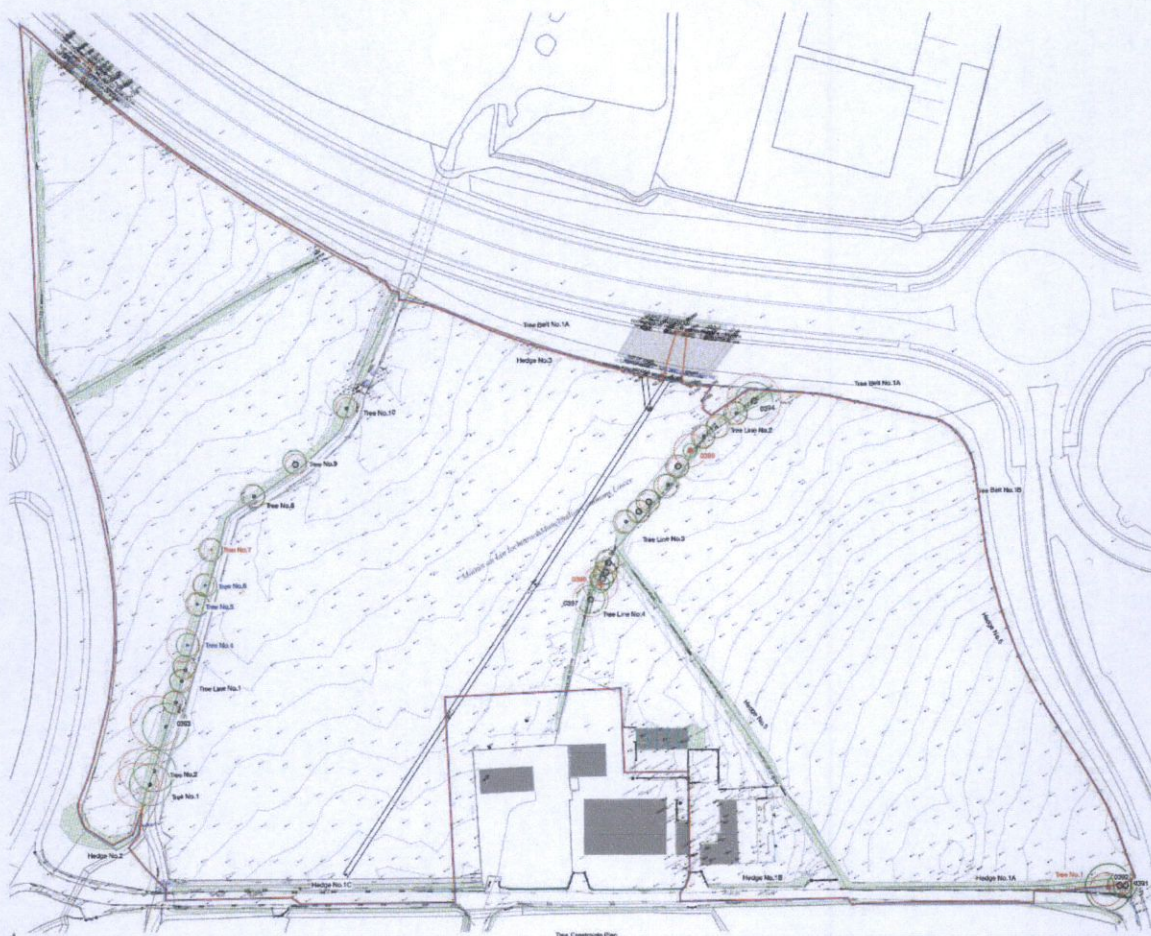
The site comprises mostly of vacant agricultural pasture lands. A number of hedgerows divide the site in a number of fields. Hedgerows "A" & "B" are established hedgerows with mature trees. Hedgerow "C" is a well structured but not continuous hedge as it features two openings "1" & "2"

Secondary to the agricultural character of these lands, the N7 slip road and the R136 are elevated highly above the baseline level of the subject site and are visually predominant.

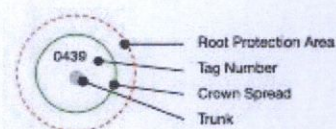


2.3 Tree Survey / Arboricultural Assessment





A tree survey and arboricultural assessment has been carried out by Ethan Gannon 'TechArborA' and Joe Codd 'TechArborA' Veon Limited. Below is an Tree constraints plan and tree survey. As per their report, Trees were assessed from ground level using the Virtual Tree Assessment methodology developed by Mattheck and Breloer (1994) in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction.



LEGEND



BS5837: 2012 - Category Retention Rating

-  Category U <10 years useful life expectancy
-  Category A 40+ years useful life expectancy
-  Category B 20+ years useful life expectancy
-  Category C <20 years useful life expectancy

The main components of this report includes the site inspection and methodology, the overall site description, the arboricultural Impact assessment and finally the arboricultural method statement.

In relation to the bat assessment, Veon Ecology's Official's Comment is as follows: "Each species of bat has an optimum level of light for emergence. For the specific Bat species identified on site, to maintain a network of dark corridors and bat foraging habitats, the maximum of 0.5 lux is general prescribed. It is scientifically acknowledged that 'absolute' darkness is typically not achievable, with ambient moonlight typically averaging around 0.2 lux level.

So, provided the lux levels calculated within the identified areas of ecological concern and sensitivity at the proposed Clondalkin RFC site are maintained at ≤ 0.4 lux, as detailed in the Clondalkin RFC Kingswood Redevelopment Lighting Report Compiled by Conor O'Byrne 19.12.2022, in our professional opinion, these light levels should be sufficient to create those 'dark corridors' we recommended in our Bat Report (August 2022) to avoid impacts to any foraging and/or commuting bats that may be present on site, such as direct loss, fragmentation, disturbance, and lighting, from the project."

3.0 Landscape Strategy

3.1 The primary objective of the landscape strategy is to minimise the impact of the this new development on the existing site, taking into account the past uses and existing site constraints and characteristics. The integrated design approach gave equal attention to the requirement of providing "best in class" sport infrastructure as well as integrating the development sensitively into the existing landscape and careful landscape design.



3.2 Subsequent to the further information and the clarification of further information request, the site layout plan has been modified and optimised to limit the removal of mature hedges to retain the mature trees. The main changes consist of the relocation of the competition pitch (CP) further to the south, the rotation of the practice pitches (PP), the omission of the training areas and the provision of a 10m wide streamside riparian zone along the Cammoc River.



3.3 Landscaping Net Gain



The limited loss of the selected hedges as shown on the diagram below is mitigated by the landscaping of this completed development with the use of trees, shrubs, hedging, herbaceous perennial, and bulb planting, as per above diagram. This planting has been judiciously placed to:

1/ complement existing trees and reinforce the existing hedgerows to incorporate this new development seamlessly in the existing surroundings and,

2/ create a sense of place in-keeping with the rural character of the site. As per the Arborist report, the additional of new trees, hedges, wildflower meadows, swales will provide good quality, sustainable, long-term tree cover and, as it establishes and grows, it will be continuously mitigating any negative impacts created with the loss of the existing hedge vegetation.

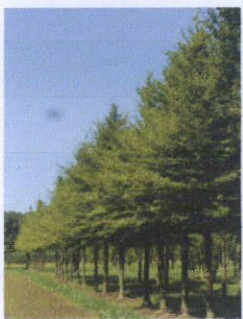
Considering the above the proposed development will have a net gain of hedges and trees and the river Cammoc will be further protected by the addition of a riparian zone.



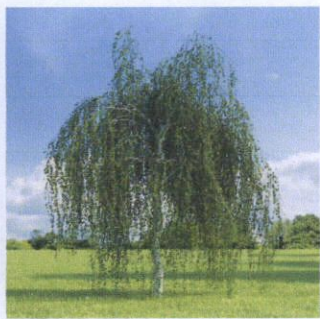
4.0 Landscape Components

4.1 Trees

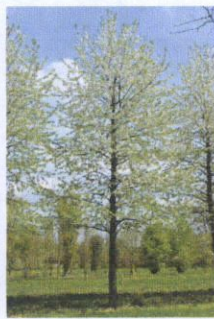
A wide selection of tree species have been included to reinforce the mature hedges, to provide screening to adjoining neighbouring dwellings, to integrate identifiable focal points and to provide greening to carpark areas.



Beech
Fagus sylvatica



Birch, Silver
Betula Pendula



Wild Cherry
Prunus avium



Yew
Taxus baccata



Mophead Maple
Acer Plat Globosum



Hawthorn
Crataegus monogyna



Blackthorn
Prunus Spinosa



Holly
Ilex Aquifolium



Crabapple
Pyrus Malus



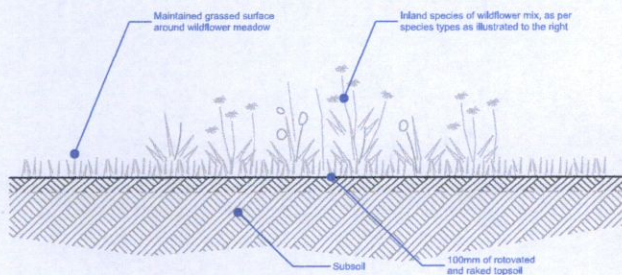
Rowan
Sorbus Aucuparia



Hazel
Corylus Avellana

4.2 Wildflower meadows

Selected areas in the "left over" spaces on site have been identified as ideal locations for wildflower meadows. These managed habitats provide spaces where pollinators can thrive and visually augment the rural quality of the site. The meadows are to include Bird's Foot-trefoil, Red Clover, Devil's Bit Scabious, Field Scabious, Lady's Bedstraw, Knapweed, Meadowsweet, Oxeye Daisy, Purple Loosestrife, Selfheal, Ragged Robin, and Vetches.



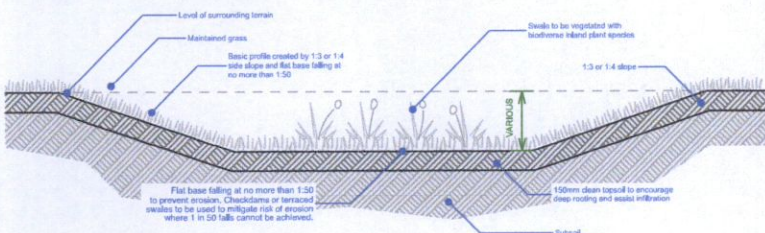
4.3 Riparian Landscaping Zone

A minimum 10m wide riparian strip alongside the Cammoc River has been included to protect the physical integrity of the stream ecosystem, set aside for proposed wild area and landscaping.

The landscaping includes plants with native marginal and emergent vegetation to support biodiversity including EU Habitats Directive objectives to include native tree species to include Holly, rowan, hazel and crab apple in conjunction to grass and wild flower species.

4.4 Swales

Swales are not only included for the requirements of the Sustainable Urban Drainage Strategy and will serve as a visual landscape element that is a beneficial for local wildlife and insects. The swales will include species such as *Carex appressa* (Tall Sedge), *Lomandra longifolia* (Bluedale), *Juncus flavidus* (Yellow Rush), *Melaleuca ericifolia* (Swamp Paperbark), *Goodenia ovata* (Hop Goodenia).



4.5 Hedges

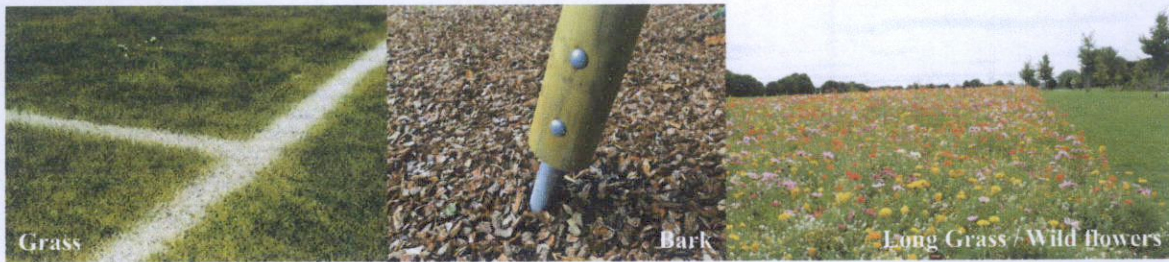
Larger proposed hedges will be a mix of Hawthorn (*Crataegus monogyna*) with a mix of Blackthorn (*Prunus spinosa*), Holly (*Ilex aquifolium*) and Hazel (*Corylus avellana*). Smaller hedges closer to the clubhouse will consist of *Buxus sempervirens* hedges at approximately 0.6m in height.



4.6 Surfaces

4.6.1 The surfaces of the site consist mainly of well maintained and demarcated grassed areas for the playing pitches. Permeable compacted Ballylusk Dust pedestrian and cycleway paths meander throughout the site and are soft in their beige appearance. Wildflower meadows are integrated to add to the visual quality of the areas that are not designated with an active use and are non-trafficked areas. The tarmac has been limited to the front of the site where vehicular traffic is required up to the proposed clubhouse. Below is the palette of surface finishes as proposed.

4.6.2 Soft Surfaces



4.6.3 Hard Surfaces / Permeable



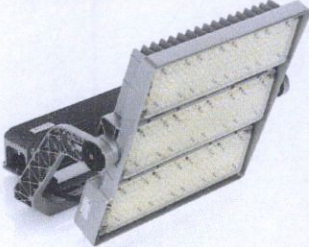
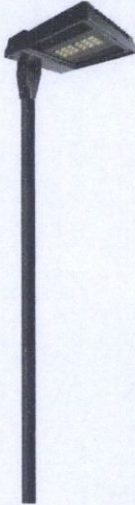


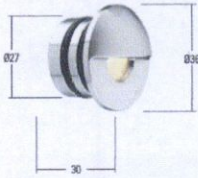
4.6.4 Rendered View illustrating the use of multiple surface finishes



4.7 Urban Furniture

	Model	Material Finish	Drawings / Images
B1	<p>Waste Bin</p> <p>Hartecast HC2050</p> <p>Dimensions: Height: 1130mm Width: 400mm</p>	<p>Material Finish: Polished stainless steel finish.</p> <p>Composition: Available with ashtray facility. 316 grade stainless steel, general wall thickness 3 mm. Liner in stainless steel. Approximately 75 litre total capacity.</p>	
B2	<p>Bench</p> <p>Hartecast HC2026c</p> <p>Dimensions: Width: 600mm Length: 1950mm Height: 840mm</p> <p>Material: galvanised and powder coated spheroidal graphite and seasoned iroko teak.</p>		
B3	<p>Players Dugout</p> <p>Dimensions: Heights: 6.0m</p> <p>Refer to Site Layout Plans for location</p>	<p>Material: Die-cast aluminium</p> <p>Colour: Grey</p>	

4.8 Lighting Fixtures

TYPE CODE	Model	Material Finish	Drawings / Images
L1	<p>Flood Light</p> <p>Dimensions:</p> <p>Heights: 18.0m</p>	<p>Material: Die-cast aluminium</p> <p>Colour: Grey</p> <p>Body: luminaire housing: diecast aluminium, powder-coated, Siteco® metallic grey (DB 702S),</p>	
L2	<p>Street Light</p> <p>LineaLight Parker</p> <p>Dimensions:</p> <p>Heights: 6.0m</p>	<p>Material: Die-cast aluminium</p> <p>Colour: Black</p> <p>Lamp: with LED High Power, 91W, 2200K</p>	
L3	<p>Lighting bollard</p> <p>Linea light Opti-Pole</p> <p>Dimensions: Width: 164mm Height: 550mm</p>	<p>Material: Cast aluminum alloy</p> <p>Colour: Black</p> <p>Lamp: 9.5W 2700K LED Module</p>	
L4	<p>Handrail Pod Asymmetric</p>	<p>Material: Cast aluminum alloy integrated into handrail</p> <p>Colour: grey</p> <p>Lamp: 1.4W asymmetric 2700K LED Module</p>	
L5	<p>Low Level Marker Lights</p> <p>Ultra low glare</p> <p>PIR Activated</p>	<p>Material: Cast aluminum alloy Mounted on low timber pole</p> <p>Colour: grey</p> <p>Lamp: 1.7W - 2700K LED Module</p>	

5.0 Landscape Maintenance and Management Plan

5.1. INTRODUCTION

The purpose of this section is to outline overall management objective for the common external areas and retained structural vegetation, as well as the long-term maintenance required to ensure that the planting flourishes and meets its design potential.

5.2. MANAGEMENT OBJECTIVES

The site shall be managed as a high quality sport and recreation area maintaining an attractive and safe finish to all landscape elements. The proposed structure planting will give a cohesive site character.

The proposed planting shall improve the biodiversity.

It is mandatory to adhere to the best health and safety practices at all times.

In order to monitor standards Management Company will review the management work (with reference to this document) at least quarterly with the maintenance team for the first year and once every next year.

Provide a safe environment, minimising potential risks to people, buildings and property.

5.3. GENERAL

All materials and workmanship are to be to the highest possible standards and shall be in accordance with relevant Irish Standards, good horticultural and arboricultural practices, and the landscape specification.

Management Companies and their appointed contractors shall comply with all relevant Health & Safety regulations and good working practices.

All work shall be carried out while soil and weather conditions are suitable.

Watering during the first two years after planting may be necessary during times of drought in summer months and, when watering is required, it shall be carried out on a regular basis to suit climatic conditions.

All shrubs/hedges shall be pruned to remove deadwood, tangled and damaged branches. Winter flowering shrubs shall be pruned in spring.

Plants shall be re-firmed when necessary to ensure that plants are securely planted.

Prior to planting all areas shall have stone debris greater than 50mm removed from site. Remove all solid contamination like plastic or glass and any other toxic substances in accordance with current Health and Safety legislation. Bark mulch levels shall be maintained, being topped up when necessary to a minimum depth of 50mm. Keep mulch from touching tree trunks and shrub stems. This prevents disease and rodent problems if using organic mulches, and bark abrasion if using inorganic mulches.

All planting to receive a minimum of 25liters water per m2 immediately after planting.

Further information as per SuDS & Site Maintenance in this document.

Protect grass areas affected by planting operations using boards/tarpaulins. Do not place directly on grass excavated or imported material.

Plant all trees and shrubs during the planting season, from October to March.

Planting details should be read in conjunction with Landscape Plan and Landscape Specification.

5.4. EXISTING VEGETATION

Retain existing trees, shrubs and hedges along site boundaries and along the river that provide a good habitat for many species of wildlife and birds.

Any dead, dying or defective trees shall be replaced as per arborist report.

5.5. PROPOSED TREES

In the first two years following planting, new trees are to be closely monitored at each maintenance visit to ensure that they are upright, firm, stable and in good health.

Checks shall be made to ensure all stakes and ties of planted trees are properly adjusted at each maintenance visit. Between years 5-7 tree stakes shall be removed once trees have established and are root firm.

Trees shall be maintained and watered throughout the first and second years of planting, taking into account prevailing weather conditions and dry periods. They should be watered with the use of a hose until the pit reaches full capacity.

Trees planted in grass areas shall have a 1000mm diameter circle around the trunk which should be maintained free of weeds and be mulched until the tree is no longer vulnerable to damage from mowing equipment.

All trees on site should be inspected by an arboriculture consultant every 2 years.

Any trees which are dead, dying or otherwise defective must be replaced by approved equivalent trees during the next suitable planting season unless otherwise instructed.

5.6. SHRUBS and HEDGEROW

All shrub beds shall be maintained substantially free of weeds. Work shall be done either manually or with appropriate selective weed killer in accordance with manufacturer's recommendations.

If weed killer is used the dead weeds shall be removed at the next maintenance visit.

Care must be taken to avoid damage to adjacent planting and grass and replaced immediately if affected by weed killer.

Once established, shrubs shall be selectively thinned or reduced in height as appropriate by removal or pruning to allow room for growth and avoid overcrowding and create a natural form.

Tidy up the base of the plants, removing dead foliage.

Apply a 50mm layer of fine horticultural mulch. This will help moisture retention in the soil, contribute to weed suppression.

A single fertilizer application should be applied just before or at the time of spring growth.

To encourage wildlife, trim the hedgerow no more than every 2nd year. This allows the shrubs and trees to produce more flowers, nuts and berries.

Avoid cutting all your hedgerows at once, consider a 3-5 year rotation to allow flowers and berries to grow in alternate sections. Gradually reduce cutting intensity each year to allow your hedgerow to expand and diversify. This is especially relevant for the young hedges which are just getting established.

5.7. GRASSED AREAS

Ensure the grass sward is level, attractive, and uniformly colored.

Maintain a sward length within the limits of 30mm-60mm and edges kept neat and tidy.

When necessary grass areas shall be sprayed with a suitable approved selective herbicide in accordance with the manufacturer's recommendations to control injurious or invasive weeds.

Damaged, defective or bare areas must be reseeded as necessary.

The aeration of compacted areas in autumn should be carried out as necessary with appropriate equipment.

Damage must be avoided to tree trunks when using a strimmer.

5.8. WILDFLOWER MEADOW AREAS

5.8.1 GROUND PREPARATION AND WEED ELIMINATION:

5.8.1.1 ORGANIC METHOD:

De-Turfing (do not use this method if the site is generally waterlogged and make sure you have properly risk assessed the work when working in groups).

Landscape Maintenance and Management Plan / continued

1. Cut existing vegetation to ground level (as low as possible) using a strimmer or lawnmower.
2. Remove turves by hand (with appropriate health and safety) or using a turf-stripping machine.
3. Fork over or rotovate area to loosen soil to a depth of 10cm and then rake to achieve a fine tilth.
4. Use a hand rake to break up the soil particles and open up the soil so it will accept seed. Remove stones greater than 5cm to create fine tilth.
5. Sow the seed mixture immediately afterwards as detailed below.

5.8.1.2 NON-ORGANIC METHOD:

1. Cut existing vegetation to ground level (as low as possible) using a strimmer or lawnmower.
2. Spray area using a suitable herbicide. Always follow the manufacturers instructions.
3. Wait 3-4 weeks, then rotovate or fork to a depth of 10 cm. Remove stones greater than 5 cm.
4. Wait 3-4 weeks or when there is re growth, then re-spray all growth with suitable herbicide.
5. Wait until herbicide has worked then prepare the seed bed by very lightly raking to achieve a fine tilth (but not deep enough to bring more seed to the surface).
6. Sow immediately afterwards as detailed below.

5.8.2 SOW METHOD:

Wildflower annual mixtures can be sown in the Autumn or Spring.

- Autumn: The latest date for autumn sowing is usually the end of October. The first flowering of annuals will take place in the spring/early summer after sowing. Perennials will not usually flower in the first year.
- Spring: The latest date for spring sowing is early June. The first flowering of annuals will be the same year as sowing. Perennials will not usually flower in the first year.

5.8.3 MAINTAINING

Allow the meadow to grow between mid-March and early September.

Keep the paths and meadow borders (along footpaths and roads) clear and tidy; mow these areas at least every 10 days.

Control noxious weeds before they go to seed

Ensure minimal dog fouling on meadows.

Cut and lift meadow areas in September (or from mid-August if necessary). A second cut and lift in spring can be carried out to remove winter growth.

Always remove cuttings from the meadow to reduce fertility (wildflowers grow best in less fertile soil).

Graze meadows between autumn (September) and winter (March) as an alternative to mowing.

Augment new meadows with locally harvested native seed and/or plug plants, best done after the autumn cut-lift.

5.9. SWALE

5.9.1 SUGGESTED MAINTENANCE ACTIONS

5.9.1.1 MONTHLY

Inspect your swale during and after storms to make sure that rainwater has drained and there is no erosion.

Remove sediment and debris from in and around the swale.

Remove weeds and plants that do not belong.

Check for any obstruction or blockage of flow along inflow areas or pipes, including trash, debris, or sediment.

5.9.1.2 SEASONALLY

Mow grass no shorter than 3 to 6 inches. Remove and compost all grass clippings.

Adjust mower height to avoid scalping the edges of the side slopes.

Remove and compost leaves in the fall and spring. Leaves may smother the grass and block the flow or rainwater.

5.9.1.3 AS NEEDED

Reseed bare areas to avoid erosion. Be sure to water during the initial establishment period.

Inspect and maintain or repair components.

After rainfall, check the swale to ensure the water does not pond longer than 2 or 3 days after a rain storm.

6. PLANT REPLACEMENT

The condition of trees and shrubs shall be assessed in September of each subsequent year after planting and a list of necessary remedial work and replacement planting prepared.

Replacement planting shall be implemented in accordance with the planning requirements.

Plants that are replaced shall be tagged.

REFERENCES

1. "Sustainable Drainage Explanatory Design & Evaluation Guide" 2022
2. "Planting a Native Hedgerow" Wycombe District Council, Planning & Sustainability 2008
3. "How-to-guide, Creation and management of a wildflower meadow" 2017, www.pollinators.ie
4. <https://www.rhs.org.uk/lawns/wildflower-meadow-maintenance>
5. <https://biodiversityireland.ie/practical-advice-on-managing-wildflower-meadows/>
6. "How to maintain your grass drainage swale" https://www.aacounty.org/departments/public-works/wprp/bmp_maintenance/Archive/Grass%20Swale%20Maintenance-2.pdf
7. "Hedgerow management" <https://www.farmingfornature.ie/wp-content/uploads/2020/11/Hedgerow-Management.pdf>

7. SITE MAINTENANCE SCHEDULE			
Type	Activity	Normal site care (Site) or SuDS-specific maintenance (SuDS)	Suggested frequency
Litter	Pick up all litter in SUDS Landscape areas along with remainder of the site – remove from site	Site	1 visit monthly
Grass	Mow all grass verges, paths and amenity grass at 35-50mm with 75mm max. Leaving cuttings in situ	Site	As required or 1 visit monthly
Grass	Mow all dry swales, dry SUDS basins and margins to low flow channels and other SUDS features at 100mm with 150mm max. Cut wet swales or basins annually as wildflower areas – 1st and last cuts to be collected	Site	4-8 visits per year or as required
Grass	Wildflower areas strimmed to 100mm in Sept or at end of school holidays – all cuttings removed Or Wildflower areas strimmed to 100mm on 3 year rotation – 30% each year – all cuttings removed	Site	1 visit annually 1 visit annually
Inlets & Outlets	Inspect monthly, remove silt from slab aprons and debris. Strim 1m round for access	SuDS	1 visit monthly
Permeable Paving	Sweep all paving regularly to keep surface tidy	Site	1 visit annually or as required
Occasional Tasks			
Permeable paving	Sweep and suction brush permeable paving when ponding occurs	SuDS	As required - estimate 10-15 year intervals
Flow controls	Annual inspection of control chambers - remove silt and check free flow	SuDS	1 visit annually
Wetland & pond	Wetland vegetation to be cut at 100mm on 3 – 5 year rotation or 30% each year. All cuttings to be removed to wildlife piles or from site.	Site	As required
Silt management	Inspect swales, ponds, wetlands annually for silt accumulation	Site & SuDS	1 visit annually
Silt	Excavate silt, stack and dry within 10m of the SUDS feature, but outside the design profile where water flows. Spread, rake and overseed.	Site & SuDS	As required
Native Planting	Remove lower branches where necessary to ensure good ground cover to protect soil profile from erosion.	SuDS	1 visit annually
Remedial Work			
General SuDS	Inspect SuDS system to check for damage or failure when carrying out other tasks. Undertake remedial work as required.	SuDS	Monthly As required