

LIDL STORE, KINGS MEADOW BRECON. LD3 8EG

PLANTING METHODOLOGY AND 10 YEAR AFTERCARE



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Corscadden Associates
77 Fairleigh Road
Cardiff
CF11 9JW
07966 423074

ca@corscaddenassociates.com

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1.0 INTRODUCTION

The project is for the proposed Lidl store and associated carpark. The site is located in the southern edge of Powys and in the central northern edge of Bannau Brycheiniog National Park. The Site is a small, isolated field area of 1.18 hectares (2.98 acres). It is relatively flat and a triangular shape above the Afon Tarell. The developable area is 8739 square metres (2.16 acres). The postal code is LD3 8EG and a grid reference SO 031 282 at an elevation of 141 metres AOD.

The southwest boundary is along bank edge of the Afon Tarell. The northwest boundary goes through a small woodland block and is then at the rear of the treelined hedgerow and verge of the A470 towards the roundabout. The eastern boundary is the rear of the treelined hedgerow and verge facing the A40 towards the roundabout. The roundabout is directly north of the Site.

To the south and southwest over the Afon Tarell is the Ffrwydgrech Industrial Estate. The Parc Menter Brecon commercial and retail area is on the other side of the A470. An access road into Brecon comes off the roundabout and there are residential areas abutting the A40 Brecon Bypass with access from within Brecon.

The roundabout has 5 roads coming off it, the A470 to Merthyr Tydfil and Cardiff, access road to Parc Menter Brecon and cattle market and onwards, A40 to Llandovery, A40 Brecon Bypass and B4601 into Brecon.

1.1 SCOPE OF LANDSCAPE WORKS

The proposals are

- Felling of TPO69 T1 Oak, T2 Common Oak and G1 Sycamore within the Site and a section of H1 with 6 trees from the A470 verge and treeworks north corner within the Site and off-site on A470 verge.
- Protection of retained trees including vegetation of the river bank.
- Clearance of the site scrub vegetation in accordance with ecological recommendations.
- Proposed planting beds.
- Proposed rain garden.
- Proposed native blocks.
- Proposed hedgerows.
- Proposed trees.
- Structural soil trees in carpark.
- Verge grass areas.
- Wildflower grass areas.
- Provision of bird and bat boxes.
- Provision of hibernacula and logpiles.
- Management for 10 years
 - Maintenance of landscaping for one year in landscape contract.
 - Nine Years by Client agent Ten Years in total.

1.2 DOCUMENTS

The design information provided by the Landscape Architect has overlaps with architectural work, civil and structural engineering work and mechanical and electrical engineering. The subcontractor should be aware that information required to undertake the landscape works will require reference to the documents prepared by other consultants.

The Planting Methodology and Aftercare was produced using information from the following resources.

Refer to the following documents as reference for the statement

- CA 2026-BRKM-01 Rev A Kings Meadow Brecon Existing Features
- CA 2026-BRKM-02 Rev A Kings Meadow Brecon Existing Features & Overlay
- CA 2026-BRKM-03 Rev A Kings Meadow Brecon Landscape Proposals Overall
- CA 2026-BRKM-04 Rev A Kings Meadow Brecon Landscape Proposals Trees and Native
- CA 2026-BRKM-05 Rev A Kings Meadow Brecon Landscape Proposals Hedges and Grass
- CA 2026-BRKM-06 Rev A Kings Meadow Brecon Landscape Proposals Planting Beds and Rain Garden
- CA 2026-BRKM-07 Kings Meadow Brecon Landscape Proposals Structural Tree Pits
- CA 2026-BRKM-08 Rev A Kings Meadow Brecon Landscape Proposals General Sections
- CA 2026-BRKM Kings Meadow Brecon Planting Schedule 22 September 2026
- CA 2026 Kings Meadow Brecon Planting Methodology & 10 Year Aftercare 22 September 2026
- CA 2026 Kings Meadow Brecon Green Infrastructure Statement 26 September 2026
- Arboricultural Report Site 1 Kings Meadow, Brecon (ArbTS 11 September 2026)
- Preliminary Ecological Appraisal BIO25-743/V1 (Biodiverse Consulting, 2026)
- Kings Meadow Bio25-743 LEEMP-V1.0
- 3223 P413B Proposed GA Site Plan

2.0 GENERAL CONDITIONS

EXISTING STRUCTURES ON OR ADJACENT TO SITE:

- Site within Bannau Brycheiniog National Park.
- Afon Tarell which is an SAC (Special Area of Conservation).
- The Site side of the riverbank is an area of Restored Ancient Woodland.
- Steep sided river banks with trees and scrub.
- The tree lined hedgerow in the A470 and A40 Brecon Bypass verges about the Site boundary and are outside the Site.
- Existing scrub, bramble and tall herbage within Site.
- No pedestrian footpaths on Site side of A470 and A40 Brecon bypass verges.
- Footpath on Parc Menter Brecon side of A470 and pedestrian access across roundabout roads to B4601 into Brecon.
- Ffrwydgrech Industrial Estate south of Afon Tarell
- Parc Menter Brecon to northwest of A70
- Residential areas to northeast Ashfield Place and Cwrt Tarell about A40 Brecon Bypass.
- Lampposts, services and overhead lines and underground services in the A470 verges.
- Overhead lines cross southern end of the Site
- Existing boundary fencing to the field area.
- A drainage ditch in upper part of river bank

- 2.1 SERVICE DRAWINGS:** Any service information on landscape drawings is notional only. The Contractor MUST obtain confirmation of all services from the Principal Contractor and relevant authorities. There are extensive services. Services may require the adjustment of tree positions in certain areas and care with excavations and a requirement for root barriers where necessary.

NOTIFY: All service authorities including the Employer/Principal Contractor of any proposed works which could affect services not less than one week before commencing site operations and observe service authorities' recommendations for work adjacent to existing services.

ACCESS TO THE SITE: - Permission must be gained from the Site Agent for access to visit the whole site. The Contractor's vehicles should not cause obstruction to the Highway and all necessary regulations relating to Highway working must be followed.

Other users who will require access through the landscape contract area are:-

- Principal contractor and other sub contractors
- Access will be required by sub contractors
- Statutory Authorities

WORKING AREA, WORKING HOURS, PARKING, ADVERTISING , HEALTH AND SAFETY Refer to the Principal Contractor's site requirements and attend site inductions and carry out all health and safety instructions required by the Principal Contractor. Provide all Health and Safety information and Method Statements required by Principal Contractor.

2.2 RISKS TO HEALTH AND SAFETY

The nature and condition of the site cannot be fully and certainly ascertained before it is all opened up. However the following risks are or may be present:

- Work close to service covers, street lights, service boxes and markers
- Hazardous materials gas and electricity.
- Work close to live services and working with live services.
- Site must be left safe at the completion of each day's work eg open trenches made safe,
- During the day all working areas are to be kept safe and all notices and safety procedures followed including temporary fencing where necessary
- Works on access roads eg drop kerbs which will require traffic management.
- Working by water and at height by river bank top of steep slopes.
- Maintenance during the maintenance period.
- Use of solvents, inflammable substances, and chemicals.
- Use of machinery with moving parts, cranes, drilling rigs, electrical equipment and general use of machines.
- Likelihood of chemical drift.
- Making noise or dust during Works
- Excavations danger of underground services
- Hazards due to cold/wet windy weather - Manual handling and lifting operations
- Other contractors working on site.

- 2.3 PROPRIETARY NAMES:** The phrase 'or equivalent approved' is to be deemed included whenever products are

specified by proprietary name. Where the specification permits the substitution of a product of a different manufacture or type to that specified such a substitution requires approval from the CA and where necessary documentary verification that the alternative product is equivalent in respect of material, safety, reliability, function and where necessary of appearance to the specified product.

BRITISH STANDARDS: All materials, workmanship and plant material must comply with the relevant British Standard unless otherwise indicated.

SIZES: Unless otherwise stated the size indicated is size required

- 2.4** The Contractor shall notify the CA of the date of commencement and completion of the operations outlined below and provide the CA with all necessary documentation required within 7 days to record and verify the Works as follows:
- a daily distribution return showing the number and description of men employed on the works including those employed by Contractors
 - a daily distribution return showing the number, type and capacity of all plant excluding hand tools currently employed on works.
 - record of actions taken to protect biodiversity and monitor their effectiveness.
 - record of weather conditions and other factors having material effect on progress of Works.
 - record sheets of pesticide applications as required under Control of Pesticides Regulations 1986
 - notification of dates of commencement and completion of operations, including all records of rates of application or use of materials, etc of application of fertilisers, pruning, mowing, litter picking and other maintenance visits etc.

Provide all necessary technical submissions, method statements and risk assessments at least one week in advance of relevant operation.

2.5 SUPERVISION/INSPECTION/DEFECTIVE WORK
CA CONTRACT ADMINISTRATOR

To be confirmed by Lidl.

SUPERVISION: In addition to the constant management and supervision of the Works provided by the Principal Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.

2.6 SAFETY/PROTECTION

Commonplace hazards which should be controlled by good management and site practice are not listed.

GENERAL CONDITIONS

- Site rules from Principal Contractor's Health and Safety Plan – use of PPE etc
- Continuing liaison :

OPERATIONS AND MATERIALS

- Hazard – Working on Highways
- Hazard – Working by water- steep river bank.
- Hazard- Use of Chemicals, paints, solvents, timber stain etc
- Hazard – Services
- Hazard - mechanical and manual handling
- Hazard – Tree felling and treeworks- working at height
- Hazard – protection of site users

MAINTENANCE

- Hazard – Working on Highways
- Hazard - Use of Chemicals
- Hazard - mechanical and manual handling
- Hazard – Protection of public .

HSE APPROVED CODES OF PRACTICE: Comply with the following:

- Management of Health and Safety at Work
- Managing Construction for Health and Safety

2.7 PROTECT AGAINST THE FOLLOWING

2.8 POLLUTION:

The contractor / landscape operatives must be conversant with the requirements of the Environmental Protection Act 1990, Pollution, Prevention and Control Regulations 2000, Hazardous Waste Regulations 2005 and the Control of Pollution (Amendment) Act 1989 for the Carriage of Controlled or Special Wastes. landscape contractors must be registered with a relevant Regulation Authority (Environment Agency) and be in possession of a valid Certificate of Registration or Certificate of Registration as a Broker of Controlled Waste under the Act. NOTE the Site is close to River Ebbw so care to avoid pollution important.

2.9 USE OF CHEMICALS

The contractor/ landscape operatives must comply with 'The Control of Pesticides Regulations 1986', 'The Control of Substances Hazardous to Health Regulations 1988' and any other current legislation and subsequent revisions.

All chemicals must be products on the current list of Agricultural Chemicals Approval Scheme and used strictly in accordance with the conditions of approval. The landscape contractor must comply with all relevant Codes of Practice issued by MAFF.

All pesticides/herbicides transported or stored in the landscape contractor's vehicles or on site (regardless of quantity) shall be locked in a separate storage compartment or within lockable containers which is secured to the floor of the vehicle. All storage lockers must be sealed and clearly marked as containing pesticides and bear a standard black and yellow hazard sign.

Apply pesticides/herbicides strictly in accordance with the manufacturer's instructions in calm, dry weather conditions. Chemicals should not be applied in wet, frosty or windy conditions.

The contractor/ landscape operatives must hold a BASIS Certificate of Competence, or work DIRECTLY under the supervision of a certified holder.

Notify the site operator at least 24 hours in advance of the location, type of pesticide/herbicide, active ingredient and timing of application prior to commencing work. The contractor/ landscape operatives shall erect warning signs at all entrances to the areas to be treated. When restricted to planting beds, warning signs shall be placed within close proximity in clearly visible locations. Details of application and contact person to be shown.

In accordance with COSHH Regulations the contractor shall protect employees and other persons, including the general public and adjacent land owners who may be exposed to substances hazardous to health.

Dispose of waste chemicals and containers in accordance with the 'Control of Pesticides Regulations 1986', 'Control of Pollution Act 1974' and the 'Water Act 2014' and any subsequent revisions.

The contractor / landscape operatives shall be responsible for making good and or compensation for any damage how so ever caused resulting from negligence in application, handling and/or storage of pesticides and herbicides. He shall also be responsible for keeping up to date with all legislation and regulations governing there use and inform the site operator of any changes that may affect the contract in any way.

The contractor / landscape operatives shall ensure that all property and utilities are protected against accidental or negligent damage that may occur. Any damage incurred by the contractor in carrying out their duties is to be made safe immediately and repaired to the satisfaction of the client or Utilities Company at the earliest convenient time, or as agreed, at the cost of the contractor.

It shall be the contractor / landscape operatives responsibility and liability for any damage to person or property, however caused. All operatives shall be trained according to the task to be undertaken.

2.10 EXISTING MAINS/SERVICES: GENERAL: The Contractor shall:

- Ascertain the exact location of all existing services and the like in, under or over the site or adjacent thereto. The Contractor will be held responsible for any damage or disruption to such services crossing the site or those used during the performance of the Contract. Any such damage as may occur must be made good to the satisfaction of the CA, Employer, Service Authorities and adjoining owners or occupiers, at the Principal Contractor's own expense.
- Check the positions of all services before starting work.
- Adequately protect and prevent damage to all existing services. Do not interfere with their operation without the consent of the Service Authorities or private owners.
- If any damage to services result from the execution of the Works, notify the CA and the appropriate Service Authority without delay. Make arrangements for the work to be made good without delay to the satisfaction of the Service Authority or private owner as appropriate.
- Replace any marker tapes or protective covers disturbed during the site operations to the Service Authorities' Recommendations.
- In the event of a service marker being disturbed for any reason it shall not be replaced other than in the exact position and to its former depth unless the repositioning is carried out at the direction and under the supervision of the Service Authority.
- Check all emergency and contact details for the varied service contacts and emergency numbers are up to date.

2.11 NOISE: Ensure that all measures to control noise produced by the Principal Contractor's operations required under or by virtue of the provisions of any enactment or regulations, or the working rules of any industry are strictly complied with.

- Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by the manufacturer's of the compressor, tools or vehicles.
- Do not use or permit the use of radios or other audio equipment which may cause nuisance

- 2.12 **NUISANCE:** Take all necessary precautions to prevent nuisance from dust, rubbish and other causes. Remove daily, and if it should occur on the highway carriageway immediately to avoid any hazard to road users from site rubbish and debris generated from the Works for disposal. Comply with all instructions from the CA in this respect.
- 2.12 **FIRE:** Take all precautions necessary to prevent personal injury, death and damage to the Works or other property by fire. Comply with Joint Code of Practice 'Fire Prevention on Construction Sites' published by Building Employer's Confederation and the Loss Prevention Council and National Contractors Group.
Advise the CA immediately if drought, arisings or other circumstances evident give rise to a fire risk.
- 2.13 **BURNING:** Burning is not permitted on site
- 2.14 **WATER:** Prevent damage from storm and surface water. Keep site and excavations free of water
- 2.15 **WASTE/ARISINGS:**
- Remove debris, rubbish, surplus material and spoil regularly, daily where arisings are from a specific process or work item and keep the site and Works clean and tidy.
 - Remove all rubbish, dirt and residues from excavations before infilling.
 - Ensure that non-hazardous material is disposed off at a tip approved by a Waste Regulation Agency.
 - Remove all surplus hazardous materials and their containers for disposal off site in a safe and competent manner as approved by a Waste Regulation Agency and in accordance with relevant regulations.
 - Retain waste transfer documentation on site.
- 2.16 **EXISTING FEATURES:** Prevent damage to existing structures, fences, walls, roads and paved areas and other site features which are to remain in position during the execution of the Works. If damage occurs make good at the Contractor's own expense and to the satisfaction of the CA.
- 2.17 **TIMING OF WORKS AND ECOLOGICAL CONSIDERATIONS**
INVASIVE NON-NATIVE SPECIES
- No Invasive non-native species (INNS) have been found on Site.
- 2.18 **GENERAL ECOLOGICAL ACTIONS AND TIMINGS**
The following measures should be incorporated into the design of the development, including the construction phase, to avoid and reduce impacts on wildlife:
- The further surveys recommended within the PEA (Provisional Ecological Assessment) will be completed in the 2026/2027 survey season and will inform further recommendations for mitigation and compensation to be outlined within an EcIA (Ecological Impact Assessment).
 - The Contractor will retain overall responsibility for ensuring that works are carried out in accordance with this LEEMP for Year 1 and the client will be responsible for Years 2-10.
 - Avoid site clearance works during the nesting bird season (March to August inclusive) unless the site is checked by a Suitably Qualified Ecologist (SQE) and active nests are confirmed to be absent no later than 48 hours before works commence.
 - All works will be undertaken in accordance with a CEMP (Construction Ecological Management Plan). Ecological receptors likely to be covered in this plan will include, but not be limited to bats, birds, otter, badger, reptiles, and amphibians.
 - All construction activities will be programmed to daytime hours to reduce disturbance to sensitive nocturnal species, such as bats and roosting bird species.
 - The development will require removal of part of the southern woodland because of the constrained nature of the Site. After the initial clearance works, no further encroachment into retained woodland will be permitted. Protective fencing will define the retained conservation area to south and riverbank, which will remain inaccessible to construction personnel and, once the Site is operational, to members of the public. The conservation fence will be installed prior to construction commencing together with the tree protective fencing secures all existing vegetation and southern conservation area.
 - During the construction phase, measures will be implemented to prevent both direct and indirect impacts on retained woodland and trees. Protective fencing will be installed in accordance with the approved Tree Protection Plan to establish exclusion zones around retained features, including their Root Protection Areas (RPAs). No excavation, soil stripping, changes in ground level, storage of materials, vehicle access or other construction activities will be permitted within these exclusion zones.
 - Indirect impacts, including soil compaction, contamination, alterations to drainage and accidental damage, will be minimised through adherence to the approved Arboricultural Method Statement, adherence to best practice construction protocols and toolbox talks.
 - Pollution Prevention measures will also be detailed within a CEMP that will include measures to avoid surface water run-off of dust and construction materials into the Woodland and adjacent River Tarell.
 - 3No Bird nest boxes and 3No Bat boxes to be located and installed to the ecologist's recommendations.

3.0 INITIAL WORKS

3.1 CLEARANCE AND INITIAL ENABLING WORKS

- Site Clearance of existing vegetation in accordance with actions and timings in of Para 2.18 above requirements.
- Felling of trees and hedgerow section as indicated in accordance with Arboricultural report.
- The Site has existing topsoil and subsoil and this should be selected and stored for future use.
- The southern Conservation Area 2 and riverbank will be fenced off with a 1.10m mesh fence.
 - Proctor Weldmesh Fencing PCD06 or other approved equivalent
 - Wire diameter 3.4mm with 50m x50mm mesh
 - Mesh fixed to horizontal wires which run through steel posts
 - Hot galvanised mesh to BS EN ISO 1461: 2009 Powder coated to match colour to be used for 2m Lidl Grey Paladin Fence.
 - Height 1.10m
 - Procter Fencing Supplies. 1 Pantglas Industrial Estate, Bedwas, Caerphilly CF83 8XD
Tel: 029 2085 5753.
fencingsupplies@procterbrothers.co.uk
- Conservation Fence and Tree Protective Fencing together secure all existing vegetation and southern conservation area.
- No works to be permitted on riverbank unless hazardous work with an approved method statement.

3.2 TREE REMOVALS

All tree felling and work to be to BS3998-2010 Refer to Arboricultural Report Site 1 Kings Meadow, Brecon (ArbTS 11 August 2026)

Most arisings are to be removed from Site though keeping suitable arisings for the construction of the logpiles and hibernacula..

Fell trees, grub up roots and remove most arisings from Site

- TPO 69 T1 Oak,
- T2 Common Oak
- G1 Sycamore within the Site
- A section of H1 with 6 trees from the A470 verge.

Treeworks cutting back vegetation

- Treeworks north corner within the Site and off-site on A470 verge.

3.3 EXISTING TOPSOIL AND SUBSOIL

The Site has existing topsoil and subsoil.

The southern Conservation Area 2 and riverbank will be fenced off with a 1.10m mesh fence which will protect the existing soils in these areas.

Where the proposed hedges and planting beds are close to the Site boundaries existing soil areas should be retained and protected where practical.

Existing topsoil and subsoil to be selected for reuse and stored carefully

- Place mounds on dry, level ground away from tree root protection areas, site traffic, and surface drainage pathways. Clearly signpost each heap by soil type
- Topsoil: Max height 2m metres to avoid crushing the living micro-organisms at the base.
- Subsoil: Max height 3m]
- Long-Term Management (>6 Months): If stockpiles will sit for more than 6 months, seed them with a fast-growing, low-maintenance grass mix. This prevents weed infestation, stops wind/rain erosion, and maintains biological activity.

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NOTE imported topsoil to BS 2882:2025 Topsoil - medium loam will be required for the proposed carpark structural tree pits unless existing soil is tested and approved and meets the BS standard for medium loam .

3.4 IMPORTED TOPSOIL FOR STRUCTURAL TREE TRENCHES IN CARPARK

- Quantity: All topsoil that is to be imported is to conform to this specification
- Standard: To BS3882 2015. Plus the following:
- Source: Submit proposals.
- Classification: Multipurpose.
- Texture to BS3882: Medium loam.
- Reaction, to BS1377-3: pH 6 - 7.5.
- Crumb structure: Made up of discernible crumbs.
- Stones:
- Size in any dimension (maximum): 20mm.
- Stone content by dry weight (maximum): 15%.

In addition to conforming to the above BS standard the soil should also conform to the following.

Visual Examination:-

Provide the CA a 1kg sealed sample bag of representative soil, for approval of the physical structure of the

soil, before chemical analysis is progressed. Obtain approval of a sample load on site of not less than 2m³. Retain for comparison with subsequent loads. Provide a full analysis from an approved testing station in accordance with 'Analysis for Topsoil'.

Physical Parameters:-

Clay (less than 0.05mm) 5-27%

Silt (0.002 – 0.05mm) 5-45%

Sand (0.05 – 2.00mm) 45-85%

(At least 50% of the total soil fraction should fall within the medium to coarse sand range)

Permeability 10⁻⁵ – 10⁻⁶ m/sec

Chemical Parameters:-

PH value (1:2.5 soil/water) 6-7.5 pH

Electrical Connectivity (1:2.5 soil/water) <1500 µS/cm

Electrical Connectivity (1:2.5 CaSO₄) <2800 µS/cm

Organic Matter (Walkley Black) 4.0 – 10.0%

Total Nitrogen (Dumas) >0.2%

Extractable Phosphorus (RB427) >26 mg/l

Extractable Potassium (RB427) >220 mg/l

Extractable Magnesium (RB427) >50 mg/l

- TOPSOIL ANALYSIS• All imported topsoil is to be analyzed
- Soil analyst: Submit proposals.
- Samples: Collect in accordance with BS3882.
- Submit:
- Declaration of analysis:
- Chemical analysis and contaminants;
- Maximum stone content, stone size and pH value;
- Nutrient content, pH value and textural classification;
- PH value and textural classification;
- Phytotoxic and CLEA elements; and
- Textural classification and maximum stone content.
- Report detailing soil analyst's recommendations.

The Landscape Contractor shall obtain a sample for analysis, to determine all of the requirements listed above.

The results and a brief analysis and interpretive report making comment on suitability of material in comparison to BS3882 and the specification included within this document, including recommendations for additives and/or amendments to bring sub-grade soil up to the required specification standard. Topsoil requirements and to support broadleaf native trees with particular reference to the requirement identified above and levels of metals and the likely effects of these on nutrient availability and protection of plant growth.

A certificate of Analysis should also be provided shall be submitted to the CA who may adjust the composition of any specified fertiliser of soil ameliorant and the rate of application, after examination of the Landscape Contractors cost. Where suitable amelioration is not possible the CA may reject the topsoil.

3.5 SANDY LOAM TOPSOIL FOR RAIN GARDEN

All sandy loam topsoil is to be imported to be used in Rain Gardens

All imported sandy loam topsoil to comply with BS3882 2015 with the following textural class

SANDY LOAM TOPSOIL Textural Class

55% Sand

30% Silt

15% Clay

SANDY LOAM SUBSOIL

All sandy loam subsoil is to be imported to be used in Rain Gardens

All imported sandy loam subsoil is to comply with BS8601-2013 with the following textural class

SANDY LOAM SUBSOIL Textural Class

55% Sand

30% Silt

15% Clay

3.6 MATERIALS FOR STRUCTURAL TREE PITS

- TOPSOIL Texture to BS3882: Medium loam Topsoil infill to planting hole within 1200x1200mm x 700mm concrete planting frame.
- STRUCTURAL SOIL consists of

- 200mm layer 20-40mm clean stone
 - 600mm layer of 32/63mm clean stone combined with a 1:1 mix of enriched biochar and compost (15% by volume)
- **CARBON GOLD BIOCHAR TREE SOIL IMPROVER**
Carbon rich biochar is specific type of charcoal that is made by pyrolysis when organic matter like wood chip is heated in the absence of oxygen. It remains in the soil and is black a fine grained with a large surface area. The specific type required is 'Biochar Tree Soil Improver'
info@carbongold.com
0117 244 0032
3c Windmill Business Park. Clevedon BS21 9DN
To be used with PAS 100 Compost in 1:1 mix
- **STOCKHOLM TREE TRENCHES**
 - Concrete planting frame 1000mm x 700mm
 - Tree Pit Aeration Well 400 x400mm cross-section depth 700mm
 - 100-300g/m2 separation geotextile
 Stockholm Tree Trenches
07872 609633
www.stockholmtreepits.co.uk
Obtain their installation guide
- **PLATIPUS EARTH ANCHOR**
info@platipus-anchors.com
01737 762300
The tree anchors are required for the Advanced Nursery Standard trees 18-20cm girth 5.0-5.50m height. 3 No S61 anchors per tree using stainless steel accessories and platimats for the collar areas.
- **METAL TREE GUARDS** for structural trees
Ullswater vertical steel guard 1800mm high 600mm including tree guard tie which fixes to Green Blue Arborresin
Precast tree grille in Brittany Bronze tree grille 1000mm square. 600mm central aperture with galvanized support frame. Paint the verticals in Lidl blue and yellow alternately in groups of 3

ROOTSTART MYCORRHIZA FUNGI for topsoil backfill
From GreenBlue Urban or other approved equivalent.
05180 830800
enquiries@greenblue.com
- Set to two sides of the tree grilles are Glasdon Neopolitan delineators
Height 1000mm above ground level. Post 95mm diameter, 120mm at base and square base plate 160mm by 160mm. The base plate must be located a minimum of 100mm from any edge of concrete or tarmac base.
Colour black
185mm top and 20mm bottom retroreflective banding
Fixing either by socket unit or ground plate bolting according to site conditions.



Glasdon 01253 732558
sales@glasdon.com
www.glasdon.com

3.7 RIP SUBGRADE BEFORE LAYING SUBSOIL

Scarify subgrade to promote free drainage. The surface on which subsoil is to be placed will be thoroughly ripped to a depth of 200mm before subsoil placement. A cross-ripping effect will be achieved by two passes at an angle of 45 degrees to the

edge of the strip at 90 degrees to one another. Remove all stones with largest dimension exceeding 50mm. ***If standing water is present on ripped surface inform the CA before placing subsoil***

3.8 PRODUCTS AND MATERIALS

3.9 TOPSOIL AND SUBSOIL

Existing topsoil and subsoil to be retained in-situ where practical and stored reused for new landscape areas.

NOTE Imported topsoil of BS 2882:2025 Topsoil medium Loam to be used in carpark structural tree pits if the existing soil does not conform to BS 2882:2025 Topsoil Medium Loam

Topsoil and subsoil depths required for the soft landscaping where existing soil areas has not been retained.

- 300mm topsoil 300mm subsoil in planting beds, hedges and native blocks.
- 300mm topsoil 600mm subsoil in tree pit
- 150mm topsoil 150mm subsoil for verge grass areas
- Wildflower grass areas are all in native blocks

RAIN GARDEN

Imported sandy loam topsoil 200-300mm depth and sandy subsoil 200-300mm depth to be used for the Rain Garden 27m²

3.10 AMELIORANTS

ROOTDIP: Root-balled trees are used a solution of one part Seanure Root Dip to ten parts water be applied around the roots as part of the puddling-in planting system. Barerooted trees to be dipped in root dip solution.

ANTIDESSICANTS: All trees and evergreen plant material on arrival at site shall be sprayed with an appropriate antidessicant approved by the CA unless the temperature is below 10degC.

GREEN COMPOST: Green recycled compost shall be used which will have an organic and fibre content and some trace elements. It shall improve soil structure and help retain moisture. Green Compost to be made under strictly controlled conditions from green, organic recycled material. PAS 100 standard. Sample to be approved before full orders made. The supplier is to provide a sample and details of the compost components and approved by the Client before use on site.

Spread 50mm depth of compost on surface of all planting beds work into full topsoil depth.
Green Compost to be 10% tree pit and work into full topsoil depth.

To be obtained from a local supplier and sample approved before full load brought to site.

MULCH:

Bark mulch to be used. The product shall consist of

- predominantly matured European Pine Bark with an even nominal particle size distribution of 5-35mm with minimal dust and fines and less than 5% wood content.
- The pH to be between 4.5 and 5.5.
- The product shall be pest, disease and weed free and not have been treated with Methyl Bromide or any additives.
- The product shall have been tested in accordance with the requirements of BS 4790:1987, for fire resistance.

Or other approved product with the same specification.

SLATE MULCH:

To be 40mm Blue Slate chipping 50mm thick laid over Geotextile weed membrane

GEOTEXTILE WEED MEMBRANE

Terram Weedguard

Terram

Tel:-01621 874200

Email:-info@terram.com

For planting beds only where practical.

PERMEABLE ROOT BARRIER

The root barrier is to be Terram Rootguard which is a permeable root barrier. These are to be used in tree sides facing services or easements within 2.00m of tree stems

Terram

Fiberweb Geosynthetics Ltd

Blackwater Trading Estate

The Causeway, Maldon

Essex CM9 4GG

Tel: +44 (0) 1621 874200

email: info@terram.com
www.terram.com

3.11 ACCESSORIES

TREE TIES: Tree ties are to be Hessian webbing 50mm wide, wrapped around tree stem and nailed to the stakes with 40mm galvanized nails according to tree type.

TREE STAKES: Tree stakes shall be larch or sweet chestnut poles celcure treated, 75mm in diameter, straight with butt end. Extra Heavy Standard Trees will have 2 No stakes. The stakes are to be set 1200mm above ground.

STRIMMER GUARDS

Spiral strimmer guards for trees except trees in structural tree trenches.

GUARDS FOR HEDGE AND NATIVE BLOCK PLANTS

Green Tech Rainbow Bio Spiral Guards with a green tint. 60cm x 50mm diameter

For Holly only 600mm high open mesh shrub shelter supported by and tied to a 900mm x 32mm timber stake.

ROOTRAIN URBAN for tree aeration and irrigation with fixed grid inlet

From GreenBlue Urban or other approved equivalent.

05180 830800

enquiries@greenblue.com

3.12 PLANT MATERIAL SUPPLY

PLANTS GENERALLY

Trees and plants are to conform to the relevant section of BS 3936 (publication series) and the National Plant Specification. No substitutes are to be accepted without the consent of the landscape architect and the local planning authority. All plants shall be true to size specified on the planting plan and schedule. All plants shall be healthy, bushy, pest and disease free and not pot-bound, dry, water-logged, leggy or weak. A minimum of five breaks per shrub is required. Trees shall be vigorous, of good shape and with a well-branched head.

Plants that are container grown (CG):

- Supplied in a growing medium with adequate nutrients for the plant to thrive until permanently planted.
- Centred in the container, firmed and well-watered.
- With root growth substantially filling the container, but not root bound, and in a condition conducive to successful transplanting.
- Grown in the open for at least two months before being supplied.
- Grown in containers with holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

HANDLING AND DELIVERY: The Contractor shall comply with the recommendations of the booklet 'Plant Handling' published by the Committee for Plant Supply and Establishment in July 1985.

The Contractor shall include for packing, loading and transporting plant material, trees, etc from the source of supply to the site. All plant material shall be carefully packed and protected to survive transport to site without damage in lifting from the nursery, loading, transit or unloading. Any plant material which sustains major damage shall be rejected and replaced at the Contractor's expense, but slight mechanical damage may be corrected by careful pruning and wounds exceeding 25mm diameter shall be treated with fungicidal sealant.

If plants are not planted within 24 hours of delivery they shall be heeled in by placing the roots in a prepared trench covering them with fine soil and well firming and watering to prevent air pockets.

PLANT INSPECTION: The CA reserves the right to inspect all plant material prior, during and after planting and reject any plants that fail to meet a satisfactory standard.

TREES: They shall have either a well balanced head or well defined central leader with branches growing from the stem with reasonable symmetry and shall comply with the following definitions:

- Advanced Nursery Standards for structural soil trenches shall be rootballed. They shall be of a minimum height of 5.00-5.50m with a sturdy taper and reasonably straight stem minimum 1.75- 2.00m in height from ground level to the lowest branch with a minimum girth of 18-20 cms when measured 1.00m from ground level.
- Extra Heavy Standard Trees shall be rootballed. They shall be of a minimum height of 4.00-4.50mm with a sturdy taper and reasonably straight stem minimum 1.75- 2.00m in height from ground level to the lowest branch with a minimum girth of 14-16 cms when measured 1.00m from ground level.
- Native Hedge Plants- Native Block Plants. These are to be strong well-rooted nursery stock evenly developed with a single well defined, straight and upright central leader. The main stem shall be furnished with lateral shoots. The

plant shall be self supporting with a stem circumference at the root collar of 30-50mm. Overall heights as specified in the Plant Schedule. All whips are to be bareroot.

- Some native plants are container grown refer to POT GROWN SHRUBS.

CONTAINER STOCK TREES

Container stock trees are **not** to be used. Tree planting is to be undertaken in season.

POT GROWN SHRUBS: A shrub which is pot-grown or container-grown may, according to species, be cut back or trimmed to encourage bushiness. The size of pot shall be as stated in the Plant Schedule. The height of shrubs shall be measured from the ground level, excluding rootball or any container.

3.13 GRASS SEED MIXES

SPECIES	Native	Pollinator	NAME	SIZE	QTY
WILD FLOWER GRASS AREAS : NATIVE BLOCKS 1-4				Native 1-4	1125 m2
EM1 STANDARD GENERAL PURPOSE MEADOW MIXTURE					
Emorsgate Seeds enquires@emorsgateseeds.com 01553 829028				GRASSES 90%	
Agrostis capillaris	N		Common Bent		9 %
Cynosurus cristatus	N		Crested Dogtail		31.5 %
Festuca rubra	N		Slender Creeping Red Fescue		27 %
Phleum bertolonii	N		Smaller Cat's Tail		4.5 %
Poa pratensis	N		Smooth-stalked Meadow Grass		18 %
				WILDFLOWERS 10%	%
Centaurea nigra	N	P	Common Knapweed		1.5 %
Daucus carota	N	P	Wild Carrot		0.6 %
Galium verum	N	P	Lady's Bedstraw		0.5 %
Leucanthemum vulgare	N	P	Ox Eye Daisy		1.5 %
Malva moschata	N	P	Musk Mallow		1.5 %
Plantago lanceolata	N	P	Ribwort Plantain		1.9 %
Poterium sanguisorba ssp snaguisorba	N	P	Salad Burnet		1.5 %
Rhinanthus minor	N	P	Yellow Rattle		0.5 %
Silene dioica	N	P	Red Campion		0.5 %
TOTAL					100 %
sow at rate of 4gms per sqm					
VERGE REINSTATEMENT				G1-G4	162 m2
EG1 GENERAL PURPOSE MEADOW GRASS MIX					
enquires@emorsgateseeds.com 01553 829028				100%	
Agrostis capillaris	N		Common Bent		10 %
Cynosurus cristatus	N		Crested Dogtail		35 %
Festuca rubra	N		Slender Creeping Red Fescue		30 %
Phleum bertolonii	N		Smaller Cat's Tail		5 %
Poa pratensis	N		Smooth-stalked Meadow Grass		20 %
TOTAL					100 %
sow at rate of 5gms per sqm					

4.0 WORKMANSHIP - LANDSCAPE

4.1 SITE CONDITION

The Contractor shall be held responsible for the keeping of the Works in a neat, tidy and litter free condition through the duration of the Contract.

Litter means arisings or residues from the Works, cans, bottles, paper and other extraneous objects.

4.2 WATERING: Water is to be provided by the Principal Contractor and access without cost to the private water system. The Landscape Contractor is to supply hoses and sprinklers and ware as necessary up to Practical Completion and as necessary during the defects/maintenance period.

Quantity: Wet full depth of topsoil.

Application: Even and without displacing plants, mulch or soil.

Frequency: As necessary to ensure the establishment and continued thriving of all seeding/turfing and planting.

Watering for planting of trees, shrubs and whips after planting and if dry conditions occur

DROUGHT CONDITIONS: If water supply is or is likely to be restricted by emergency legislation- inform the CA without delay of the additional cost of second-class water supply from a sewerage works or other approved source.

- if planting has not been carried out, do not do so until instructed.
- if planting has been carried out, obtain instructions on supply of water.

PERMANENT DRAINAGE SYSTEM: This is not to be used for disposal of water from excavations without approval.

4.3 FORMATION OF GENERAL GROUND LEVELS

The levels of the site of the site will be as the Architect's or engineer's details

New ground levels need to be as required by the Engineer for paving edges and other hard surface edges and left ready for soil profiling if required to the required depth for the finish of shrub or shrub and tree planting so that the finished topsoil levels can be 50mm below finished hard edging adjacent to the building and within the carpark areas.

The areas shall be excavated or filled to the correct depth for the soil profile.

The subbase material in the excavated bed areas, grass areas and planting pits are to be broken up to a depth of 200mm as required,

4.4 SOIL PROFILE FORMATION

LOOSE TIP FILLING FOR LANDSCAPE AREAS

SUBSOIL FILL

Do not firm, consolidate or compact when laying.

Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

PLACING FILL GENERALLY

- Ensure that areas to be filled are free from loose soil, rubbish and standing water.
- Do not use frozen material or materials containing ice. Do not place fill on frozen ground.
- Take all necessary precautions to secure the stability of adjacent structures.
- Place fill against structures, or buried services in a sequence and manner that will ensure stability and avoid damage.
- Plant employed for transporting, laying and compacting must suit the type of material. ie light earth moving plant to be used for all subsoil areas.
- Earthmoving equipment: Vary route to avoid rutting.
- Filling: Layers not more than 300 mm thick.
- Lightly compact each layer to produce a stable soil structure when grading them to an even level.

4.5 HANDLING TOPSOIL

- Ensure topsoil is free of aggressive weeds weed species: Included in the Weeds Act, section 2 or the Wildlife and Countryside Act Schedule 9, part II.
- Give notice: Obtain instructions before moving topsoil.
- Multiple handling: Keep to a minimum. Use topsoil immediately after stripping.
- Areas to be topsoiled are to be laid over the finished subsoil levels.
- Topsoil areas to be graded to be 50mm below finished edging levels.
- Do not use topsoil contaminated with subsoil, rubbish, oil-based products or other materials toxic to plant life.
- Dispose of contaminated topsoil to the Contractor's tip
- Apply herbicide to perennial weeds and allow period of time recommended by manufacturer to elapse before cultivating

SPREADING TOPSOIL DEPTH to the depths specified

Once spread the topsoil shall be kept free of weeds by physical means or by spraying with an approved weedkiller until such a time as planting is carried out.

GREEN COMPOST

PLANTING BEDS/NATIVE BLOCKS AND HEDGES

- Spread 50mm layer of Green Compost and cultivate into full depth of topsoil.
- Reduce top 100mm of all topsoil to a fine tilth suitable for final grading
- Remove all undesirable material brought to the surface, including stones larger than 50mm in any dimension, roots, turf or grass and foreign matter.
- Cultivation and planting shall not be carried out when the soil is very wet or waterlogged, or during periods of frost.
- At all times during ground preparation care shall be taken not to re-compact the soil.

5.0 PLANTING GENERAL

5.1 CLIMATIC CONDITIONS: Carry out the work while soil and weather conditions are suitable for the relevant operations. Do not plant during periods of frost or strong winds. Plant only during the following periods:

- Deciduous trees and shrubs: Late October to late March
- Container grown plants: At any time if ground and weather conditions are favourable.
- Ensure that adequate watering and weed control is provided.

NOTICE

Give notice before:

- Setting out.
- Delivery of plants/ trees.
- Planting shrubs.
- Planting trees

5.2 TREE, SHRUB PLANTING

Planting shall be carried out in accordance with the Plant Schedules and the Contract Drawings.

SETTING OUT: All areas shall be set out in accordance with the Contract Drawings.

PLANT SPACING: Plant spacing shall be carried out in accordance with the Contract Drawing. The CA reserves right to adjust the exact position of all plant material after it has been set out.

The aim will be to space the plants evenly so that when established they will completely fill the areas indicated as fully as possible.

NEW PLANTING AREA

Prior to the placing of topsoil and subsoil ensure existing ground under is thoroughly broken up to a depth of 200mm to allow free drainage.

Remove all rubble, concrete washings, and other builder's debris to provide sufficient depths for topsoil placement. Cut back excessive haunching where it restricts topsoil depths. Excavate tree pits into subgrade prior to top soiling to ensure sufficient depths of soil. Mark tree pit locations with timber stakes.

PLANTING AND CULTIVATION: All planting shall comply in all respects with BS 4428: 1968 General Landscape Operations and for Tree Planting BS 8545: 2014. All plants shall be planted in accordance with good horticultural practice, upright with the roots well spread out at same depth at which they had been previously grown in the nursery. Care being taken to avoid damage to root systems and stems. The plants shall be placed in position in accordance with the Contract Drawings showing their best side to the front. Suspended planting and cultivation when weather or soil conditions are unsuitable.

Cultivations are as previously specified. Soil to be free of weeds prior to commencing planting works, where necessary the topsoil will have weeds removed by physical means or will be treated with weedkiller where necessary to destroy weed growth prior to commencing planting.

Evergreens to be dipped in or thoroughly sprayed with antidessicant after planting. Do not apply in rainy or frosty weather. Ensure full coverage of underside of foliage.

ROOT BARRIERS

Root barriers are to be used where trees are within 2.00m of service runs. The root barriers are to be either installed vertically or laid to line service trenches where appropriate. The root barrier is to be Terram Rootguard which is a permeable root barrier.

Terram

Fiberweb Geosynthetics Ltd

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5.3 EXTRA HEAVY STANDARD TREES

These are to be planted in Planting Beds around the site

- Within the planting beds of the Lidl Store and carpark which are all to be slate mulched.
- In the Native Block 1-4 within wildflower grass finish provide bark mulch 75mm depth in 1.00m diameter circle around each tree.

General

- At planting the localized tree pit dug shall be not less than minimum dimensions or 1200 x 1200mm x 900mm depth. Allow the tree at planting to have the root flare at finished topsoil level. (this may be the soil mark on the nursery stock. Check this is the root flare point before planting. Correct planting depth is important.)

- Water rootball of rootballed trees with seaweed extract root dip.
- All wires hessian and other rootball wrapping to be removed at planting.
- Trees need to be orientated for the best crown development. It might be found that due to the nature of growing trees on nursery lines crowns develop asymmetrically.
- Supply and fix aeration/irrigation unit around rootball.
- Tree pit is backfilled with subsoil 600mm depth and topsoil 300mm depth.
- Add 10% Green Compost is to be mixed-in thoroughly into top 150mm of the topsoil backfill.
- The returned soil shall be lightly consolidated by treading as filling proceeds layer by layer with subsoil replaced first and then topsoil in layers above the subsoil
- The tree shall be set upright in the centre of the tree pit so that the soil level after settlement will be at the original soil mark on the tree stem.
- The two stakes shall be driven into the pit 150mm from the edges and fixed before backfilling
- The returned soil shall be finely broken down and placed around the roots gently shaking the tree to allow particles to work around the rootball and ensure close contact with all rootball and prevent air pockets. The returned soil shall be lightly consolidated by treading as filling proceeds layer by layer, care being taken to avoid damaging the rootball. Soil around the root flare of the tree shall be consolidated firmly with the heel.
- Secure the tree to the stakes with Hessian webbing 50mm wide wrapped around tree stem and nail the webbing to the stakes with galvanised nails. The stakes are to be 75mm diameter set 1200mm above ground level.
- Water tree thoroughly after planting.
- Supply and fix strimmer guards
- Provide 75mm depth of bark mulch for a 900mm diameter circle around trees in native blocks. Other trees will be in planting beds which have a slate mulch finish.

5.4 STRUCTURAL TREE TRENCHES IN THE CARPARK AREA

There are 3 Trenches in the carpark area using Stockholm Tree Pit construction. Construct the pit in accordance with manufacturer's recommendations for

- 3 No Trenches 2000mm width and 13.65m, 25m and 38m in length with an 800mm depth below hard surface carpark construction depth with a flat edge kerb to the tree pit level with the carpark bays

The trees used are Alnus cordata Advanced Heavy Nursery Standards with a girth 18-20cm.

- No in each trench with a flat concrete on all sides around the 1000mm square tree grille frame.
- Flat edged kerbing level to carpark and walkway to be detailed by others.
- Proposed tree location within the trenches to the carpark bay junctions as indicated. to 800mm depth below carpark construction depth.
- If services occur within the pit area where possible keep them towards edges of the pit and wrap the service within a permeable root barrier with 4/10mm aggregate) located within the structural soil area.
- Compact the subbase and provide drainage connection to structural engineer's requirements.
- Structural soil to be 32/63mm clean stone combined with a 1:1 mix of enriched Carbon Gold Tree Soil Improver Biochar and Approved PAS 100 Compost. Mix the structural soil using an excavator. 100% clean stone mixing well in 7.5% Biochar and 7.5% compost. If the mixture is not used immediately. It should be covered to prevent rainfall causing the Biochar and compost to be washed down the pile.
- Supply and lay 200mm & final 250mm layers of structural soil over the subbase using a vibrating whacker plate.
- Install the concrete frame at the desired height for the final level below the galvanized tree grille frame. Temporarily hold frame together with a ratchet strap as layers laid.
- Place the Stockholm aeration well so the lower part of the perforations are just above the finished structural soil level as layers laid.
- Supply and lay a 200mm aeration layer of 20/40mm of clean stone and compact with a whacker plate. Then lay a 100-300g/m² geotextile over aeration layer with geotextile upstand by concrete planter frame brick upstand to aeration well.
- Install a mortared brick upstand over the aeration well within carpark construction depth with a gully grate at finished carpark/walkway level.
- Carpark/walkway construction layer to Engineer's detail over geotextile layer and flat kerb edges installed level with carpark and walkway levels.
- Fix Platipus anchors in place within the concrete frame.
- Install compacted structural soil to provide a base for the rootball so the tree can be positioned so that root flare is just below final ground level.
- Supply and fix flat kerb edges set on a concrete haunch to support the tree grille frame level with walkway and carpark.
- Water rootball of rootballed trees with seaweed extract root dip.
- Remove all non-perishable wrappings prior to planting. Perishable wrappings – hessian and non galvanized chicken wire basket retained until the tree is in position. Then peel back and remove the perishable parts from the top third of the rootball.
- Trees need to be orientated for the best crown development. It might be found that due to the nature of growing trees on nursery lines crowns develop asymmetrically.

- Supply and fix a Single Inlet Aerator/Watering/Feeding System around the tree rootball an fix inlet and cap into tree grille frame.
- Fix the earth anchor collar to the tree and secure the tree in an upright position within the concrete frame.
- Supply medium loam topsoil with RootStart Mycorrhiza Fungi at manufacturer's recommended rates to the topsoil and lightly compact around the rootball within the concrete frame.
- Water tree thoroughly after planting.
- Kerbing and carpark bay construction to be detailed by others
- Supply and fix a galvanized steel support frame and supply and fix a GreenBlue 1000 x 1000mm square Arboresin Tree Grille with 600mm centre circlr with galvanized unit for fixing Ullswater Tree Guard
Fix Ullswater steel tree guard 1800m high x600mm diameter including tree guard tie. Paint verticals in Lidl blue and yellow for each 3 vertical rails around the guard to make them stand out.
- Supply and fix 2 No Glasdon Neopolitan Delineators at a minimum of 100mm away from the concrete frame and any tarmac edge. Fixing either socket or ground base fixing according to Site conditions. Posts to be black in colour with retroreflective bands at top 185mm and 20mm base

SUPPLIERS

Stockholm Tree Pits

07872 609633

www.stockholmtreepits.co.uk

Obtain their installation guide

info@carbongold.com

0117 244 0032

3c Windmill Business Park. Clevedon BS21 9DN

PLATIPUS EARTH ANCHOR

info@platipus-anchors.com

01737 762300

Green Blue Urban

01580 830 800

enquiries@greenblue.com

Glasdon 01253 732558

sales@glasdon.com

www.glasdon.com

Any drainage required to link the tree pit to the existing surface water drainage system is to be specified and detailed by the Engineer

5.5 HEDGE PLANTING : HEDGES 1-9

All hedgerows are native hedges and planted at 0.30m centres in a line. The hedges vary

- Single row hedges H1 and H6.
- Double staggered rows 0.50m between rows H4, H5, H7, H8 and H9.
- Triple staggered rows 0.50m between rows H2 and H3

All container grown plants shall be well-soaked in water with alginure root dip in the water prior to planting and planted into the trench area and all bare-rooted plant material to be dipped into alginure root dip prior to planting.

EITHER

- Excavate hedge trench 1000mm wide to a depth of 600mm.
- Break up base of hedge trench to a depth of 300mm
- Spread 300mm depth of imported subsoil and 300mm depth of imported topsoil over the trench.
- Cultivate trench and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.
- Plant the hedge plants in the hedge trench,

OR

- Excavation to be adjusted where hedge lines are close to Root Protection Areas and there is existing retained soil areas.
- Remove existing vegetation and top up soil level with existing topsoil to finished bed edging level.
- Cultivate Hedge line area and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.
- Slit plant the hedge plants in the hedge lines and minimize the pit for the holly plantings.

BOTH

- Supply and fix spiral guards to all the hedge plants except holly plants where shelter guards to be fixed.
- Hedges H1, H2, H4 and H9 supply and spread a layer of bark mulch 75mm deep over area of hedge lines.
- Hedges H3,H5, H6, H7 and H8 supply and spread a layer of 40mm of slate.

- Water plants thoroughly after planting

5.6 ORNAMENTAL PLANTING BEDS 1-5

Supply and plant shrubs at spacing indicated on the Contract Drawings and of species and sizes indicated on the Plant Schedule.

All container grown plants shall be well-soaked in water with alginure root dip in the water prior to planting

EITHER

- Excavate planting beds to a depth of 600mm.
- Break up ground under to a depth of 300mm only where beds are excavated out.
- Spread 300mm depth of existing subsoil and 300mm depth of existing topsoil over area.
- Cultivate planting beds and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.

OR

- Excavation to be adjusted where planting beds close to Root Protection Areas and there is existing retained soil areas.
- Remove existing vegetation and top up soil level with existing topsoil to finished bed edging level.
- Cultivate planting beds and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.

BOTH

- Supply and lay a geotextile weed membrane with a minimum overlap of 200mm and holes cut for planting. Sufficient pins to be installed to prevent membrane lifting.
- Supply and plant the plants as specified
- Supply and spread a layer of slate mulch 40mm deep over the planting bed areas.
- Water plants thoroughly after planting.

5.7 RAIN GARDEN

There is on Rain Garden on Site next to the proposed pedestrian access to the store entrance in the north of the Site. It is 27m²

- Supply and plant shrubs at spacing indicated on the Contract Drawings and of species and sizes indicated on the Plant Schedule.
- Supply and lay a permeable root barrier over the Engineer's drainage layer.
- Supply and spread 200-300mm Sandy Loam Topsoil, 200-300mm mm Sandy Loam Subsoil for the Rain Garden planting bed area. Soil depth available to be confirmed by Engineer.
- Cultivate planting beds and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.
- All pot grown shrubs shall be well-soaked in water with alginure root dip in the water prior to planting and planted into the bed area.
- No bark mulch or slate mulch finish – leave bare soil.
- Water plants thoroughly after planting.

5.8 NATIVE BLOCKS

Supply and plant plants and underplanting of species and sizes indicated on the Plant Schedule and Drawings.

All container grown plants shall be well-soaked in water with alginure root dip in the water prior to planting and planted into the trench area and all bare-rooted plant material to be dipped into alginure root dip prior to planting.

Native blocks occur in 4 different locations

- Native 1 at the north side.
- Native 2 at rear of the store and below the service bay and top of riverbank.
- Native 3 an area next to existing riverbank top behind proposed conservation fence.
- Native 4 south of the Site behind proposed conservation fence.

The 4 native blocks together with the riverbank form the nature conservation area with no public access.

NOTE

- All 4 Native Blocks are to be seeded with EM1 Standard General Purpose Meadow Mix
- Native 1 and 3 planted at 1.00m centres.
- Native 2 and 4 planted at 1.20m centres.

Native 1 and 2 General area preparation these are in areas where exiting ground has been retained.

- Remove existing grass and herbage cover.
- Grade over area to remove vehicle ruts and disturbed ground from SI investigation

- Cultivate native blocks and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.
- Supply and plant the plants as specified
- Supply and fix spiral guards to all the hedge plants except holly plants where shelter guards to be fixed.
- 500mm diameter circle of bark mulch 75mm depth.
- Water plants thoroughly after planting

Native 3 and 4 General area preparation

- Excavate native blocks to a depth of 600mm.
- Break up ground under to a depth of 300mm.
- Spread 300mm depth of subsoil and 300mm depth of topsoil over area.
- Cultivate native blocks and work in Green Compost, 50mm layer spread over area to full topsoil depth. Remove any debris arising from cultivations.
- Supply and plant the plants as specified
- Supply and fix spiral guards to all the hedge plants except holly plants where shelter guards to be fixed.
- 500mm diameter circle of bark mulch 75mm depth.
- Water plants thoroughly after planting

5.9 PROTECTIVE FENCING

If necessary protective fencing will be erected to protect completed works where necessary where other adjacent works are in progress and there is a risk of damage by others of completed landscape works

5.10 BAT AND BIRD BOXES

Supply and fix 3No Schwegler 1B Bird boxes to be located and installed as recommended by Ecologist informed by further survey.

Supply and fix 3No Schwegler 2F-DFP Bat boxes to be located and installed as recommended by Ecologist informed by further survey.

5.11 LOGPILES AND HIBERNACULUM

LOG PILES 3No in nature conservation areas at rear of store and south of Site. 1000 x 1000mm square

7No logs from felled Site trees even size approximately 150mm diameter and 750mm long.

Covered with a layer of turf. Leave front and rear faces open.

HIBERNACULUM 2No

Dig a pit 1200 x 1200mm square in nature conservation areas at rear of store and south of Site.

500mm depth. Infill split logs, rock, dead wood and bricks loosely filled with topsoil with about 150mm above ground level.

Cover with a layer of turf. Leave front and rear faces above ground level open.

5.12 DEFECTS LIABILITY

All tree, hedge, native, climbers and shrub planting is to be maintained for 10 Years after Practical Completion (1 Year as part of contract and 9 years with managing agent).

All planting completed prior to Practical Completion of the whole soft Landscape works is to be maintained as per maintenance requirements until Practical Completion.

After planting remove all soil from hard surfaces and leave all areas in a clean and tidy condition at Practical Completion.

FAILURES OF PLANTING: Post Practical Completion maintenance of the planting is to be carried out by the Contractor as specified. Any tree/shrubs/plants which are dead, dying or otherwise defective at the end of each growing season within the Defects Liability Period will be regarded as defects due to materials or workmanship not in accordance with the Contract. They must be replaced by approved equivalent tree/hedge/shrub/plant material at the next suitable planting season unless otherwise instructed.

This will not apply if defects are caused by malicious damage after Practical Completion.

6.0 GRASS SEEDING : NEW GRASS AREAS

Areas for grass establishment are as indicated on the Contract Drawing.

- Wildflower Grass Areas are to be EM1 Standard General Purpose Meadow Mix seeded at the rate of 4gms per square metre for Native 1-4 blocks where ground has already been prepared for native block planting.
- A470 verge areas are to be EG1 Standard General Purpose Meadow Grass Mix seeded at the rate of 5gms per square metre for G1-4 grass areas.

All works specified shall be carried out in accordance with BS4428 "Recommendations for General Landscape Operations Section 5"

SEEDING AREA REQUIREMENT

- Growth and development: Healthy, vigorous grass sward, free from the visible effects of pests, weeds (undesirable species) and disease.
- Appearance: A closely knit, continuous ground cover of even density, height and colour for grass areas.

CLIMATIC CONDITIONS

- General: Carry out the work while soil and weather conditions are suitable.

NOTICE

Give notice before:

- Setting out.
- Applying herbicide if appropriate..
- Preparing seed bed.
- Seeding.

SETTING OUT

- Boundaries: Mark clearly.
- Delineation: In straight lines or smoothly flowing curves as shown on drawings.

6.1

GRASS OPERATIONS

- Areas to be excavated out as necessary for spreading subsoil and topsoil in A470 verge areas
- Prior to subsoil and topsoil spreading break up ground under to a depth of 300mm
- Supply and spread exiting topsoil to required depths
- Native blocks already prepared for planting and therefore seeding

GENERAL GRADING

- Contours: Smooth and flowing, with falls for adequate drainage.
- Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.

CULTIVATION

All soil areas are to be free of weeds prior to commencing seeding..

Before seeding the areas shall be raked to provide a suitable tilth, all stones larger than 50mm shall be removed from the surface and removed from site to the Contractor's tip.

SOWING

The Contractor shall obtain approval of the prepared soil before seeding. Supply and cross sow with the grass mix specified. After sowing once seeds have germinated - the seeded areas are to be lightly cross raked and rolled.

GENERALLY SEEDING OF GRASS AREAS

- Care will be required when programming seeding of grass areas to ensure that completed seeding is not damaged by trafficking by others or additional works being undertaken in grass areas after seeding.

PROTECTIVE FENCING

- If it is necessary protective fencing will be erected to protect completed works where necessary where other adjacent works are in progress and there is a risk of damage by others of completed landscape works.

INITIAL GRASS CUTTING : GRASS AREAS

After the seed has germinated then a first cut is to be made when the grass has reached 75mm in height and cut to 50mm height.

GRASS AREA WATERING.

The Contractor shall water the sown grass areas as necessary and agreed with the CA as failure due to drought will be the sole responsibility of the Contractor.

6.2 DEFECTS LIABILITY**FAILURE OF SEEDING BEFORE PRACTICAL COMPLETION)**

If germination has failed within one month of original seeding the above shall be repeated until a total grass cover is achieved. If turf fails before Practical completion it is to be replaced.

Grass Areas - Bare areas and areas of dead grass which are apparent at Practical Completion will be regarded as defects and must be made good by recultivation and seeding at times agreed with CA.

FAILURE OF SEEDING (AFTER PRACTICAL COMPLETION)

Grass Areas - Bare areas and areas of dead grass which are apparent after Practical Completion will be regarded as defects and must be made good by recultivation and seeding at times agreed with CA.

6.3 PRACTICAL COMPLETION FOR GRASS SEEDED AREAS

Grass areas will only be accepted for Practical Completion when germination is seen to be even and of correct density and all weeds removed and the first cut has been satisfactorily undertaken.

No individual areas of grass area will be accepted for Practical Completion until the entire landscape works are completed to the satisfaction of the CA.

Should Practical Completion be delayed all grass areas shall be maintained in accordance with the specification for maintenance.

6.6 GRASS AREA MAINTENANCE UNTIL PRACTICAL COMPLETION

The first growing season, the new wildflower and grass areas should be cut regularly (one cut per Month from March-October inclusive) to approximately 50mm to control annual weeds

Water as necessary

7.0 LANDSCAPE MAINTENANCE

MAINTENANCE PERIOD 10 YEARS: CONSTRUCTION MAINTENANCE PERIOD IS YEAR 1 AND FOLLOWING 9 YEARS BY THE CLIENT'S MANAGING AGENT.

INSPECTIONS AND MONITORING

Landscape monitoring - Annual defects checks to be made in following 9 years to assess defects replacements and monitor the landscape establishment.

Ecologist to receive annual Landscape reports

Ecologist to undertake inspections in Year 1 and 5 with additional inspections if the landscape report raises issues.

Thereafter management of the Site will be reviewed on a five-yearly basis for the lifetime of the development to ensure aims and objectives are being met.

7.1 Definitions

CA: Contract Administrator shall mean the agent appointed by the Client

7.2 PROGRAMMING AND SITE ATTENDANCE

PROGRAMME OF WORKS: The Contractor shall provide a programme of maintenance works at the commencement of the Contract The Contractor shall maintain an operation plan that demonstrates the monthly progress and the month in advance. The operational plan is to include management objectives to achieve this plan.

SITE ATTENDANCE: The aim of this item is to ensure that small matters are corrected.

The Contractor shall attend to incidental matters which are defined as follows:

- inspect the site and undertake as necessary litter picking, sweeping, leaf clearance and other maintenance Items which require attention in key areas such as at the site entrance, car parking areas and entrances to Buildings
- 'making-safe repairs' to such items as staked trees, fencing etc
- 'making safe' any hazardous items on site eg damaged service covers etc (full repair to be undertaken by Employer's CA.
- reporting to CA any matters requiring more than one hours attendance or requiring specialist work.

MAINTENANCE RETURNS

The Contractor shall submit a monthly maintenance return issue this to CA and copy it to the CA.

7.3 REMOVAL OF ARISING:

The Contractor shall remove all leaves, litter, rubbish, dirt and other arisings shall be swept up, collected and disposed of on the same day as the various items of work are undertaken. These arisings shall be collected and unsuitable material disposed off at the Contractor's tip. The Contractor shall take sole responsibility for providing a tip and for all charges, fees, transport and any other expenses in connection with tipping unless otherwise specified in writing by the LA.

Where indicated arisings are to be dispersed.

Ornamental planting beds and trees within ornamental areas arisings are to be removed from site.

Note all green waste arisings is to be recycled via local recycling facilities as the site has not suitable locations for composting material or operations for reusing composted material. Some arisings from native blocks may be retained to use to upgrade the logpiles and hibernacula.

7.4 INSPECTIONS

During maintenance operations the Contractor shall note and report without delay to the CA any of the following:

- activities by others which prevent the normal maintenance operations proceeding in the site areas egg

Statutory Authorities work, new constructions, storage of materials and parking on landscape areas etc.

- damage caused to the site areas by the activity of others on site.
- missing gully covers or damaged service covers noted during the course of the works.
- damage to boundary fences, other fences, railings and other features for which the Employer is responsible.
- persistent litter problems
- theft or malicious damage, or clearly unauthorized use of the site areas
- damage to building structures within site area

Inspect trees after high winds. Refix newly planted trees upright as necessary.

- 8.0 TREE MAINTENANCE: GENERAL** The Contractor is to take care not to damage tree stems, any damage or tree death resulting from damage shall be made good at the Contractor's expense.

EXISTING TREES

Check trees annually and after high winds and undertake any remedial actions required.

8.1 STAKED TREES

INSPECTING TREES

- Inspection of new trees should be monthly in the first year and bi-monthly thereafter and after high winds to assess remedial work needed due to storm damage, clearing of dead trees, prevention of trees overhanging roads and footpaths.

PEST AND DISEASE CONTROL: The Contractor shall report to the CA any indications that pest or disease control treatment is required. Allow for one application of a treatment approved by the CA. Report any squirrel damage noted to CA.

TREE REMOVAL: Remove dead or dying or trees which are poorly located after obtaining approval from the CA. Where the tree is removed from a grass area reinstate soil levels to marry with adjacent levels and seed with an approved mix.

REFIRMING: Ensure that all trees remain firmly bedded in the ground after strong winds, frost and other disturbances. Refirm by treading around the base. Any 'collars' forming at the base of the trees shall be broken up and then backfilled with topsoil.

STAKED TREES

- Check tree stakes for firmness and signs of rot or damage.
- Refirm or replace as required. Tree stakes to be supplied by the Contractor at his sole cost to be suitable for the size of tree to be staked, fully tanalised, round, peeled and pointed at one end.
- Tree stakes should be removed after three growing seasons. If the tree has failed to anchor at this time the tree is to be replaced.
- Check all tree ties. Remove, adjust, refix or replace if broken. Ties to be supplied by the Contractor at his/her own expense. The make of replacement ties must be approved by the CA before use on site. Ties to be nailed securely to the stake.
- Remove trimmer guards in Year 4
- Provide aeration where compaction is considered to be one cause for poor tree condition.
- Trees are within planting beds and native blocks.
- Top up bark mulch around trees in native blocks in Year 1 and Year 2.

GENERAL

- Water as necessary during dry periods
- Any trees which die or are otherwise defective during Year 1-5 Defects/Maintenance Period shall be replaced at the Contractor's cost in Year 1 and by the Client in Years 2-5 the next November and March planting season. A final review in Year 10 with replacement as necessary by Client.

EARTH ANCHOR TREES

- Adjust earth anchors as necessary to ensure the tree is retained in a vertical position
- Apply foliar feed in first two years to manufacturer's recommendations
- Water as necessary during dry periods
- Any trees which die or are otherwise defective during Year 1-5 Defects/Maintenance Period shall be replaced at the Contractor's cost in Year 1 and by the Client in Years 2-5 the next November and March planting season. A final review in Year 10 with replacement as necessary by Client.

These works to staked trees are to be carried out **between September and February each year unless specified otherwise and when necessary during the remaining part of the year – work should be undertaken when trees are dormant.**

PRUNING TREES as follows:

- Remove dead or damaged branches and cut back any ragged edges of wounded bark back to healthy tissue.

- Remove side growths beneath the crowns and any suckering growth from tree base. All cuts to be pared back flush to the stem, trunk or scar tissue.
- Where tree in very poor condition tree removal may be required.
- Pruning shall be undertaken once per year during between October and February. The use of chainsaws and the like will not be permitted, unless instructed by the CA.

9.0 MAINTENANCE OF PLANTING BEDS: GENERAL REQUIREMENTS

PEST AND DISEASE CONTROL: The Contractor shall report to the CA any indications that pest or disease control treatment is required. Allow for one application of a treatment approved by the CA. Pest and disease control includes for the control of slugs, snails or any other pest (not vermin) which adversely affects plant material. Repeat treatments are to be made as necessary.
Report any rabbit damage noted to CA.

REFIRMING: Ensure that all shrubs remain firmly bedded in the ground after strong winds, frost and other disturbances. Refirm by treading around the base. Any 'collars' formed at the base of the shrubs shall be broken up and then backfilled with topsoil.

AERATION : Where the bed is compacted or the soil water logging aerate the soil avoiding damage to any underground plant rhizomes etc and avoid damage to underground services where these occur.

- 9.1 **WEEDING PLANTING BEDS:** All planting beds are to be kept weed free at all times. The use of chemicals is to be minimised and only a targeted spotweed treatment is to be used. The Contractor is to provide a list of suitable herbicides for use in planting beds and obtain the written approval of the CA.
NOTE ALL RAIN GARDEN BEDS ARE TO BE HANDWEEDED NO HERBICIDES TO BE USED

NOTE CHECK THAT HERBICIDE USED IS SUITABLE FOR USE ACCORDING TO THE PLANT COMPOSITION OF THE BED IF NOT HANDWEED.

9.2 BED MAINTENANCE

MAINTAINING SLATE MULCHED BEDS: During weeding and maintenance operations do not incorporate mulch into the underlying soil. Each Autumn rake over the slate mulch to provide a neat and tidy appearance. Top up mulch in Years 1 and 2

PLANTING BED EDGES: On one occasion per year the soil at edges of planting beds shall be reduced to 50mm below the adjacent hard or grass surface. The resulting soil shall be removed. Care shall be taken to ensure that the bed edges against grass areas are well defined unless otherwise directed by the CA.

NOTE; Where good horticultural practice for the particular shrubs/plants within a bed require a specific fertiliser treatment this shall be applied.

DISEASES: The CA shall be notified of any pest or disease outbreaks. If cutting out diseased material all implements shall be sterilized between shrubs to prevent spreading the pathogen

CONTROL OF UNSUITABLE VEGETATION

During routine visits inspect plantings for sucker growth, and unsuitable/atypical growths and feathers on stems and remove at the point of origin.

- 9.3 **PRUNING SHRUBS AND GROUND COVER:** All pruning is to be carried out in accordance with the correct horticultural practice for the type of shrub. Vary the amount and nature of the pruning, trimming and shaping according to the species, stage of growth, season and required visual effect.

GENERAL

The Contractor shall allow for pruning once a year, and trimming of vigorous species as necessary through the year.

In all cases dead, diseased and damaged material shall be removed.

Where necessary remove growth encroaching onto footpaths, roads, hard areas, grassed areas, signs, lights, sightlines and other features and if directed by the CA.

- Trim as necessary the species to prevent straggly growth or growth beyond the bed limits, reduce the height of shrubs to free tree stems as directed, trim to maintain tall shrubs at a defined height and round off the planting as directed to provide a neat appearance.
- Any plants and rain garden plants which die or are otherwise defective during Year 1-5 Defects/Maintenance Period shall be replaced at the Contractor's cost in Year 1 and by the Client in Years 2-5 the next November and March planting season. A final review in Year 10 with replacement as necessary by Client.

ALL ARISINGS FROM PRUNING SHALL BE SHREDDED AND REMOVED FROM SITE AS GREEN WASTE.

PRUNING GENERALLY: The CA will give directions on site for all planting beds to indicate the approach to be

adopted for pruning beds and the effect required.

PRUNING EQUIPMENT: The Contractor shall use only two bladed secateurs or other cutting equipment approved by the CA. All cut ends shall be left with a clean finish.

The adjacent plantings should not over run one another and judicious pruning of the shrubs should be undertaken to achieve the best visual effect.

10.0 HEDGE MAINTENANCE

There are two types of hedges

- Free standing hedge
- Hedges which reinforce existing hedges and most existing hedges are off-site on the A470/A40 verges

GENERAL

- Ensure that all plants remain firmly bedded in the ground after strong winds, frost and other disturbances.
- Refirm by treading around the base. Any 'collars' forming at the base of the plant shall be broken up and then backfilled with topsoil
- Provide aeration where compaction is considered to be one cause for poor plant condition.
- Spotweed treat slate or bark mulched trenches.
- Check and refix, reduce height if necessary the spiral guards and shelter. Remove in Year 3
- Any hedge plants which die or are otherwise defective during Year 1-5 Defects/Maintenance Period shall be replaced at the Contractor's cost in Year 1 and by the Client in Years 2-5 the next November and March planting season. A final review in Year 10 with replacement as necessary by Client.
- Maintaining Slate Mulched Beds: During weeding and maintenance operations do not incorporate mulch into the underlying soil. Each Autumn rake over the slate mulch to provide a neat and tidy appearance. Top up mulch in Years 1 and 2
- Maintaining Bark Mulch: During weeding and maintenance operations do not incorporate mulch into the underlying soil. Each Autumn rake over the bark mulch to provide a neat and tidy appearance. Top up mulch in Years 1 and 2.

10.1 HEDGE CUTTING:

FREE STANDING HEDGES

- Trim carefully and neatly to regular line and shape, with the width at the top less than that at the base, using suitable mechanical cutters unless otherwise directed by the CA. Both sides and tops of hedges shall be cut back to previous year's growth. The Contractor is to finish all work to give a neat and tidy appearance over the whole hedge and remove arisings. All cuts shall be cleanly made, without tearing. Remove all grass and weed growth from the base of the hedge together with any litter.
- New freestanding hedges to be maintained at a height of 1.50m generally.

REINFORCEMENT HEDGE

- The main purpose of reinforcement hedging is to provide leaf density at a lower level where the existing overgrown hedges are weak at the base in sections. The existing hedges are on the A470/A40 verges and generally 4.00m with trees in the hedgerows giving additional height. These reinforcement hedges are one side of the existing hedge.
- Trim carefully and neatly to regular line and shape, with the width at the top less than that at the base on the outward facing side, using suitable mechanical cutters unless otherwise directed by the CA. The top of hedges shall be cut back to previous year's growth. The Contractor is to finish all work to give a neat and tidy appearance over the whole hedge and remove arisings. All cuts shall be cleanly made, without tearing. Remove all grass and weed growth from the base of the hedge together with any litter.
- Reinforcement hedges to be maintained at a height of 1.50m generally.

11.0 NATIVE BLOCKS

There are 4 Native Blocks and there are also proposed tree planting in the blocks and are to be grown to increase woodland areas to complement the adjacent Restored Ancient Woodland on the riverbank.

- Ensure that all native plants/whips remain firmly bedded in the ground after strong winds, frost and other disturbances.
- Refirm by treading around the base. Any 'collars' forming at the base of the whip shall be broken up and then backfilled with topsoil.
- Provide aeration where compaction is considered to be one cause for poor whip condition.
- Top up bark mulch circles to 75mm depth for Year 1 and Year 2.
- Check and refix, reduce height if necessary the spiral guards and shelter. Remove in Year 3
- Any native plants which die or are otherwise defective during Year 1-5 Defects/Maintenance Period shall be replaced at the Contractor's cost in Year 1 and by the Client in Years 2-5 the next November and March planting season. Maintain a stocking level of 70%. A final review in Year 10 with replacement as necessary by Client.
- Any native plants/whips which die or are otherwise defective during the Years 1-5 Maintenance Period shall be replaced in the next October and March planting season to maintain a stocking level of 70%.

•
PRUNING NATIVE PLANTS/WHIPS it is to be undertaken as follows:

- Remove dead or damaged branches and cut back any ragged edges of wounded bark back to healthy tissue. Prune only to encourage bushy growth. Pruning shall be undertaken once per year during mid/late Spring and be **completed by 15 June and once during October in first two years. Thereafter once per year between October and February.** The use of chainsaws and the like will not be permitted
- In Year 5 thin the block favouring strongest growing best formed plants.

12.0 GRASS AREAS

GENERAL GRASS MANAGEMENT

INSPECTION OF GRASS AREAS AND LITTER PICKING: The Contractor shall inspect grass areas on each occasion before commencing grass cutting operations and shall remove and dispose of all litter, stones and other debris which may cause personal injury, or damage to buildings, machinery or equipment and installations.

COMMENCEMENT OF OPERATIONS: Once grass cutting has commenced on an area, the whole area shall be cut and completed.

VERGE - GRASS CUTTING MACHINES: Grass cutting machines shall be appropriate for the size of area being maintained and the standards of finish specified. Inaccessible margins, isolated rough areas of any size, corners, bases of fencelines,

VERGE AND NATIVE BLOCK WILDFLOWER GRASS AREAS :

All grass, weeds, isolated brambles and the like shall be cut. The finish shall be even, regular and free from wheel marks. This item shall include for the trimming around all trees and other obstructions at the same time. The Contractor will obtain approval from the CA for the type of mowers/trimmers to be used prior to commencing mowing operations.

NOTE A470/A40 grass verge areas to revert to Highway Authority TBC with Years 2-5

MINIMUM HEIGHT not to be less than

Year 1

Mow frequently to control
flush of weed growth in

75mm

Year 2-5

First cut March

Second

'Hay cut' Sept/Oct

March cut height 40-70mm

Sept/Oct cut 40mm

Remove arisings

bases of hedges. Cutters of all mowers shall be sharp, properly set and shall cut the sward evenly and cleanly.

STRIMMER – FOR NATIVE BLOCKS GRASS – Strimmer to have a strimmer guard and carefully trim between the planting.

REMOVAL OF ARISINGS: All arisings from grass cutting scattered over roads, paths and planting beds should be swept up, collected and removed from on the same day mowing is undertaken.

Arisings from Verge and Wildflower Grass Areas to be removed.

Strimming the Native Blocks will be reduced as the canopy cover of the planting reduces light and grass growth reduced and natural colonisation of native ground cover allowed to grow around years Year 4-5.

12.1 CONTROL IN GRASS AREAS

Verges controlled by mowing of strimming

Native Block grass areas- trim back or spotweed docks, bramble, thistles, Rosebay willow Herb, Ragwort, Maretail and other noxious weeds.

GRASS REINSTATEMENT

Reseed failed grass areas within Years 1-5 as necessary using original grass mixes.

Grass areas water if drought in Years 1 and 2.

13.0 INVASIVE NON NATIVE SPECIES

In the event that invasive plant species become established on site they will be controlled at the nearest opportunity using approved methodology and guidance (<http://www.nonnativespecies.org>) to avoid the risk of further contamination and spread. Common example include:

- Cut Himalayan balsam (*Impatiens glandulifera*), by hand or machine below the lowest node to prevent the formation of flowers and seeds.

LIDL STORE : KINGS MEADOW : BRECON : MANAGEMENT PLAN
GENERAL YEARS 1-10

26-Sep-26

Management Objective/ Feature	Task Description	Year 1					Year 2					Year 3					Year 4					Year 5					Year 6					Year 7					Year 8					Year 9					Year 10								
		Jan Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan- Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec						
YEARS 1-10																																																							
LITTER	Clear all litter on every visit for landscape maintenance minimum monthly from soft landscape areas.																																																						
EXISTING TREES Provide nesting opportunity for birds	Check annually and after high winds Undertake minor works as necessary				After High winds				After High winds					After High winds				After High winds									After High winds									After High winds										After High winds									
NEW STAKED TREES Enhance visual amenity Enhance biodiversity Reinforce site character and streetscape Provide Pollinators	Check the trees and after high winds Check to include health/disease/pest etc and remedial measures Refirm Aeration if necessary Check trees refix upright as necessary. Cut ties loose in Yr 3 and remove stakes in Year 3	Monthly				Every 2 months								High winds				High winds									High winds									High winds									High winds										
		Monthly check and refix				2 month check and refix																																																	
Consider Climate Change	Remove weeds for first four years Top up mulch for first two years only where trees in grass Water as necessary during drought periods,regularly in dry periods during first two years of establishment Apply foliar or liquid fertiliser if necessary in first two years Pruning as necessary to remove deadwood and as necessary to retain natural habit form of the crown Replace defective plants as necessary in 5 Year period Review in Year 10 and replacements as necessary																																																						
		March				March																																																	
					Oct	March			Oct	March				Oct	March			Oct	March				March				Oct	March																											
EARTH ANCHOR TREES IN STRUCTURAL PITS AND RAIN GARDENS as above	Adjust earth anchors as necessary to keep tree in a vertical position. Structural Pits Empty aeration well once per year Replace defective plants as necessary in 5 Year period Review in Year 10 and replacements as necessary																																																						
					Nov	March			Nov	March				Nov	March			Nov	March				Nov	March				Nov	March																										
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PLANTING BEDS Enhance biodiversity Provide Pollinators	Check to include health/disease/pest etc and remedial measures Refirm Remove weeds for first four years Top up slate mulch for first two years as necessary Aeration if necessary Water as necessary during drought periods for first 2 years Prune as necessary according to species type Replace defective plants as necessary in 5 Year period Review in Year 10 and replacements as necessary	Monthly				2 months																																																	
					Oct	March			Oct	March				Oct	March			Oct	March				Oct	March				Oct	March																										
RAIN GARDENS : PLANTING BEDS Enhance biodiversity Provide Pollinators	Check to include health/disease/pest etc and remedial measures Refirm Remove weeds and handweed no chemicals to be used. Water as necessary during drought periods for first 2 years Prune as necessary according to species type Replace defective plants as necessary in 5 Year period Review in Year 10 and replacements as necessary	Monthly				2 months																																																	
					Oct	March			Oct	March				Oct	March			Oct	March				Oct	March				Oct	March																										
HEDGEROWS Enhance visual amenity Enhance biodiversity	Refirm Remove weeds for first four years Top up bark/slate mulch for first two years only where present All new Hedges to be maintained at a height of 1.50m Water as necessary during drought periods for first 2 years Check, refix and replace spiral guards as necessary. Cut back if necessary. Remove in Year 3 Replace defective plants as necessary in 5 Year period Review in Year 10 and replacements as necessary																																																						
					Oct	March			Oct	March				Oct	March			Oct	March				Oct	March				Oct	March																										
NATIVE BLOCKS Enhance visual amenity Enhance biodiversity Provide Pollinators	Refirm Remove weeds and handweed no chemicals to be used Top up bark mulch for first two years only around plants Prune as necessary for bushy growth and thin in Year 5 Water as necessary during drought periods for first 2 years Check, refix and replace spiral guards as necessary. Cut back if necessary. Remove in Year 3 Replace defective plants as necessary for 70% establishment Thin in Year 5 and 10 to favour long lived species Review Site in Year 10 and confirm actions																																																						
					Oct	March			Oct	March				Oct	March			Oct	March				Oct	March				Oct	March																										
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	LIDL STORE : KINGS MEADOW : BRECON : LD3 8EG				22-Sep-26	
		Native	Pollinator			
KEY	SPECIES			NAME	SIZE	QTY
	TREES					
Ac ANS	In structural tree pits Alnus cordata			Italian Alder	18-20cm girth Advanced Nursery Std	9 No
	All trees to be rootballed for autumn planting/winter planting only All Tree pits 1200 x 1200mm square as indicated					
AcE EXH	Acer campestre Elegans	N	P	Field Maple	14-16cm girth Extra Heavy Standard	5 No
Ag EXH	Alnus glutinosa	N		Alder	14-16cm girth Extra Heavy Standard	6 No
CbL EXH	Carpinus betulus Lucas	N		Hornbeam	14-16cm girth Extra Heavy Standard	3 No
Cm EXH	Crataegus monogyna	N	P	Hawthorn	14-16cm girth Extra Heavy Standard	1 No
Qr EXH	Quercus robur	N	P	Common Oak	14-16cm girth Extra Heavy Standard	8 No
Aps EXH	Acer pseudoplatanus	N	P	Sycamore	14-16cm girth Extra Heavy Standard	4 No
	TOTAL					36 No
	NATIVE BLOCKS			NATIVE 1-4		1125 m2
	Note all native blocks are seeded with General Purpose Meadow Mix All native plants at 1.00m or 1.20m cts within the blocks according to location					
Ac	Acer campestre	N	P	Field Maple	60-90cm 1+1	130 No
Cm	Crataegus monogyna	N	P	Hawthorn	60-90cm 1+1	240 No
Ca	Corylus avellana	N	P	Hazel	60-90cm 1+1	85 No
Cs	Cornus sanguinea	N	P	Dogwood	60-90cm 1+1	65 No
la	Ilex aquifolium	N	P	Holly	30-45cm 3Lpot	110 No
Lv	Ligustrum vulgare	N	P	Wild Privet	60-90cm 1+1	50 No
Ms	Malus sylvestris	N	P	Crab Apple	60-90cm 1+1	36 No
Ps	Prunus spinosa	N	P	Blackthorn	60-90cm 1+1	37 No
Rc	Rosa canina	N	P	Dogrose	60-90cm 1+1	32 No
RF	Rubus fruticosus	N	P	Bramble	60-90cm 0/1	10 No
Sn	Sambucus nigra	N	P	Elder	60-90cm 1+1	15 No
Vo	Viburnum opulus	N	P	Guelder Rose	60-90cm 1+1	50 No
	TOTAL					860 No
	HEDGEROWS 1-9			HEDGE 1-9		215 linm
	Hedgerows vary from single row, double rows and triple rows according to location. Hedge plants are planted at 0.30m centres and where double or triple rows staggered with 500mm between rows					
Ac	Acer campestre	N	P	Field Maple	60-90cm 1+1	317 No
Cb	Carpinus betulus	N		Hornbeam	60-90cm 1+1	394 No
Cm	Crataegus monogyna	N	P	Hawthorn	60-90cm 1+1	419 No
la	Ilex aquifolium	N	P	Holly	40-60cm 3Lpot	343 No
Ca	Corylus avellana	N	P	Hazel	60-90cm 1+1	10 No
Cs	Cornus sanguinea	N	P	Dogwood	60-90cm 1+1	10 No
Ps	Prunus spinosa	N	P	Blackthorn	60-90cm 1+1	10 No
Vo	Viburnum opulus	N	P	Guelder Rose	60-90cm 1+1	10 No
	TOTAL					1473 No
	RAIN GARDEN 1					25 m2
ITN	Iris Tropic Night		P	Iris	2Lpots	40 No
CS	Cornus sanguinea	N	P	Dogwood	30-45cm 3Lpot	40 No
MC	Mahonia Caress		P	Form of Mahonia	30-45cm 3Lpot	25 No
EH	Euonymus Harlequin			Dwarf Euonymus	20-30cm 2Lpot	30 No
	TOTAL					135 No
	PLANTING BEDS 1-5					139 m2
Asp	Asplenium scolopendrium	N		Harts tongue fern	2LPot	29 No
CAZ	Choisya Aztec Pearl		P	Mexican Orange	45-60cm 3Lpot	110 No
EPB	Euonymus Paloma Blanca			Dwarf Euonymus	20-30cm 2Lpot	100 No
EH	Euonymus Harlequin			Dwarf Euonymus	20-30cm 2Lpot	155 No
GMA	Geranium macrorrhizum Alba		P	Geranium semi-evergreen	2Lpot	40 No
HH	Hedera helix Hibernica	N	P	Hebe	20-30cm 2Lpot	100 No
IJCT	Ilex aquifolium JC van Tol	N	P	Form of Holly	45-60cm 3Lpot	210 No
LMD	Lavandula Munstead Dwarf		P	Lavender	20-30cm 2Lpot	28 No
Pset	Polypodium setiferum	N		Evergreen Fern	2Lpoy	55 No
	TOTAL					827 No
	WILD FLOWER GRASS AREAS : NATIVE BLOCKS 1-4				Native 1-4	1125 m2
	EM1 STANDARD GENERAL PURPOSE MEADOW MIXTURE					
	Emorsgate Seeds enquires@emorsdgateseeds.com 01553 829028				GRASSES 90%	
	Agrostis capillaris	N		Common Bent		9 %
	Cynosurus cristatus	N		Crested Dogstail		31.5 %
	Festuca rubra	N		Slender Creeping Red Fescue		27 %
	Phleum bertolonii	N		Smaller Cat's Tail		4.5 %
	Poa pratensis	N		Smooth-stalked Meadow Grass		18 %
					WILDFLOWERS 10%	%
	Centaurea nigra	N	P	Common Knapweed		1.5 %
	Daucus carota	N	P	Wild Carrot		0.6 %
	Galium verum	N	P	Lady's Bedstraw		0.5 %

	LIDL STORE : KINGS MEADOW : BRECON : LD3 8EG				22-Sep-26	
		Native	Pollinator			
KEY	SPECIES			NAME	SIZE	QTY
	Leucanthemum vulgare	N	P	Ox Eye Daisy		1.5 %
	Malva moschata	N	P	Musk Mallow		1.5 %
	Plantago lanceolata	N	P	Ribwort Plantain		1.9 %
	Poterium sanguisorba ssp snaguisorba	N	P	Salad Burnet		1.5 %
	Rhinanthus minor	N	P	Yellow Rattle		0.5 %
	Silene dioica	N	P	Red Campion		0.5 %
	TOTAL					100 %
	sow at rate of 4gms per sqm					
	VERGE REINSTATEMENT				G1-G4	162 m2
	EG1 GENERAL PURPOSE MEADOW GRASS MIX enquires@emorsdgateseeds.com 01553 829028				100%	
	Agrostis capillaris	N		Common Bent		10 %
	Cynosurus cristatus	N		Crested Dogstail		35 %
	Festuca rubra	N		Slender Creeping Red Fescue		30 %
	Phleum bertolonii	N		Smaller Cat's Tail		5 %
	Poa pratensis	N		Smooth-stalked Meadow Grass		20 %
	TOTAL					100 %
	sow at rate of 5gms per sqm					