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Landscape Management & Maintenance Plan

FOR

PROPOSED WAREHOUSE DEVELOPMENT

AT

Kingswood Road and Kingswood Avenue, Citywest Business Campus, Dublin 24

November 2022

ON BEHALF OF

Rockface Developments

Prepared by
Enviroguide Consulting

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1 DESCRIPTION OF SITE AND CONTEXT

Rockface Developments Limited intend to apply for permission for development at a 2.629 Ha site at Kingswood Road and Kingswood Avenue, Citywest Business Campus, Dublin 24. The lands are generally bounded to the south-east by Kingswood Avenue, south-west and north-west by existing built development and to the north-east by Kingswood Road.

There is a tree line along the southwest boundary and partial tree cover along the other boundaries. The majority of the rest of the site is covered in long grass with some briar growth typical of a site that has had no recent landscape maintenance carried out for a number of years. There is also an area of hardstanding.

The site is bounded to the north by residential and small-scale office developments and by larger warehouse type buildings to the other boundaries.

Specifications for supply of plants and groundwork and grass establishment.

1.1 Supply of nursery stock:

The nursery stock material will be delivered following consultation between the employer's representative, landscape Contractor and the selected nursery. It is intended to serve notice of delivery by means of phased orders at least two months prior to commencement of the dormant season in November of that year. Delivery will be at all times by means of covered vehicles, and all plant material will be clearly labelled. The source of origin must be from the selected nursery as no other additional stock from other nurseries will be permitted without prior inspection and approval

1.2 Nursery stock:

All plant material shall be good quality nursery stock, free from fungal, bacterial or viral infection, aphids, red spider or other insect pests and any physical damage. It shall comply with the requirements of B.S. 3936: Parts 1-10: 1965

Specification for Nursery Stock, where applicable.

All plants shall have been nursery grown in accordance with good practice and shall be supplied through the normal channels of the wholesale nursery trade. They shall have the habit of growth that is normal for the species. Country of origin must be shown in all cases for species grown from seed.

Unless otherwise stated, the plant materials shall be supplied in accordance with the following codes where stated:

1+0 1 Year old seedling

1+1 1 Year old seedling lined out for 1 year

1+2	1 Year old seedling lined out for 2 years
1+1+1	1 Year old seedling lined out for 1 year, lifted and lined out for one further year.
2+2	2 Year old seedling lined out for 2 years
0/1	1 Year old Hardwood cutting
0/2	2 Year old Hardwood cutting
2X	Twice transplanted tree
3X	Three times transplanted tree
4X	Four times transplanted tree
P9	Containerised plant in 9cm pot c/g.
gt.	Girth ht. Height
r/b	Rootball b/r. Bareroot
MS.	Multi-stemmed
Ftd	Feathered trees

1.3 Species:

All plants supplied shall be exactly true to name as shown in the plant schedules. Unless stipulated, varieties with variegated and/or coloured leaves will not be accepted, and any plant found to be of this type upon leafing out shall be replaced by the contractor at his/her own expense.

Bundles of plants shall be marked in conformity with B.S. 3936: Part 1: 1965 and B.S. 3936: part 4: 1966. The nursery supplier shall replace any plants which, on leafing out, are found not to conform to the labels. Definitions of all terms used are in accordance with the following British Standards: -

B.S. No. 3936: Part 1: 1992 entitled "Nursery Stock- Trees and Shrubs" B.S. No. 3936: Part 4: 1984 entitled "Nursery Stock- Forest Trees"

B.S. No. 3936: 1992 entitled "Specification for Nursery Stock"

1.4 Tree and Shrub Specifications:

Trees shall have a sturdy, reasonably straight stem, and a well-defined straight and upright central leader, with branches growing out of the stem with reasonable symmetry. The crown and root systems shall be well formed. Roots shall be in reasonable balance with the crown and shall be conductive to successful transplantation. All trees shall be clearly labelled.

1.5 Multistem Trees4 – 4.5m

Multistem trees shall have a minimum of 3no. stems originating from or near ground level (<0.3m) and be of reasonable bushiness and health, with a well grown root system and a total height of min. 4.5m. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. All multistem trees stock trees shall have been undercut a minimum of 4no. times and provided with a rootball of min. diameter of 850mm.

1.5.1 Multistem Trees 3.5 - 4m

Multistem trees shall have a minimum of 3no. stems originating from or near ground level (<0.3m) and be of reasonable bushiness and health, with a well grown root system and a total height of min. 3.5m. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. All multistem trees stock trees shall have been undercut a minimum of 3no. times and provided with a rootball of min. diameter of 750mm.

1.5.2 Multistem Trees 2 - 3m

Multistem trees shall have a minimum of 3no. stems originating from or near ground level (<0.3m) and be of reasonable bushiness and health, with a well grown root system and a total height of min. 2m. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. All multistem trees stock trees shall have been undercut a minimum of 3no. times and provided with a rootball of min. diameter of 650mm.

1.5.3 Advanced Nursery Stock Trees 16-18cm gt. - Rootballed

Advanced nursery stock trees shall have a clear stem 2.0-2.5m in height from ground level to the lowest branch, a minimum girth of 16cm measured at 1.00 m above ground level and a total height of min. 4.0m. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. All extra heavy standard trees shall have been undercut a minimum of 3no. times and provided with a rootball of min. diameter of 750mm. All rootballs shall be wire and hessian-wrapped.

1.5.4 Extra Heavy Standard Trees 14-16cm gt. - Rootballed

Extra heavy standard trees shall have a clear stem 1.75-2.0m in height from ground level to the lowest branch, a minimum girth of 14cm measured at 1.00 m above ground level and a total height of min. 3.50m. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. All extra heavy standard trees shall have been undercut a minimum of 3no. times and provided with a rootball of min. diameter of 750mm. All rootballs shall be wire and hessian-wrapped.

1.5.5 Standard trees 8-10cm ht

Standard trees shall have a clear stem 1.70m in height from ground level to the lowest branch, a minimum girth of 8cm measured at 1.00m above ground level and a total height of 2.75-3.00 m. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation

1.5.6 Bare Root Transplants

Trees of species not listed in B.S. 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labelled from the time of lifting until planting to conserve moisture. Shoots, roots and aerial parts shall be free of disease, and/or damaged leaves or shoots.

1.5.7 Container grown Shrubs

Containerised Shrubs shall be of the size specified in the schedules, with several stems originating from or near ground level and of reasonable bushiness, healthy, vigorous and with a sound root system. Pots or containers shall be appropriate to the size of shrub supplied and clearly labelled. Shrubs shall not be pot bound or with girdled or restricted roots. Shoots and aerial parts shall be free of disease, and/or damaged leaves or shoots. No toxic plants to be planted adjacent to playground areas.

1.5.8 Bulbs

Bulbs should be firm, entire, should not be dried out or shrivelled, and should be visually free of pests, diseases and fungi. They should be removed from packaging immediately. If storage is necessary, they should be placed in a well ventilated, dark, covered location at 18-21 degreesC, for the minimum period of time, away from vehicle exhaust and fruit.

2 SPECIFICATIONS FOR CARE

2.1 Protection

The interval between the lifting of stock at the nursery and planting on site is to be kept to an absolute minimum. Plants shall be protected from drying out and from damage in transport. All stock awaiting transport shall be protected from the wind and frost and from drying out.

2.2 Damage

On completion of lifting of plants in the nursery, any broken shoots or severed roots shall be pruned, areas of damaged bark neatly pared back to sound tissue.

2.3 Inspections

The Employer's representative will inspect the hardy nursery stock during the execution of the works. Only plants selected and approved in the landscape contractors selected nursery will be accepted on the site.

2.4 Delivery and heeling in

All plants will be delivered on a phased basis as called up in advance in agreement with the Employer's representative and the appointed Landscape Contractor. In the event of the Employer's representative being dissatisfied with the care and attention given to the stocks, following heeling-in or arrival on site, he shall notify the Landscape Contractor who shall take steps to ensure careful heeling-in procedures. Any damaged plants must be replaced by the Landscape Contractor entirely at his own expense.

The preparation of the heeling-in area and its subsequent maintenance is the sole responsibility of the Landscape contractor. No responsibility for the maintenance of stock delivered to site will attach to the employer whilst stock is protected on site, even if the stock requires protection beyond the normal planting season.

3 SPECIFICATIONS FOR SITE OPERATIONS:

3.1 Setting out:

Setting out shall be in accordance with site meetings with the Employer's representative. No planting works shall take place when the soil /fill is in a waterlogged condition.

3.2 Topsoil

3.2.1 General Requirements for the Supply of Topsoil

Topsoil should be good quality, friable soil conducive to plant growth. Soil shall be free of waste, chemicals, large stones, builder's rubble and any other detritus in accordance with BS. 3882.

3.2.2 Weather and Soil Conditions

All work involving topsoil shall not be carried out under the following conditions unless the employer's representative permits otherwise:

Where areas have been exposed to a cumulative rainfall exceeding 60mm over the preceding 28 days measured at a point approved by the Employer's representative; or where soil moisture content is wetter than the Plastic Limit (PL) of the soil less 3%. The OL of the soil can be assessed in the field as the minimum moisture content at which the soil can be rolled and moulded into a thin thread approximately 3mm in diameter without breaking or cracking and in a laboratory according to BS 1377:Part 2.

3.2.3 Topsoil storage

Topsoil shall be stored in a single stockpile of dimensions no greater than 1.5m high and 5m depth, such that a long, narrow and low berm is created to preserve the intrinsic qualities (structure and soil life) of the topsoil whilst in storage. The topsoil shall be loose tipped to create the berm and lightly compacted with the back of a digger bucket to create a degree of compaction suitable for storage. No machinery shall be run over the soil berm.

3.2.4 Topsoil Spreading

Topsoil shall be moved and spread only in dry weather. Before topsoiling, remove all stones, rubble and rubbish over 50mm diameter from the surface of the subsoil formation. Dig out any areas polluted by oil or chemicals and make up with clean soil. Loaders shall load from the base of the soil storage berm only. Placement of soil should be carried out using a tracked

vehicle to avoid subsoil compaction. Reinstated areas of topsoil shall not be tracked over. The topsoil shall be allowed to settle to the thickness, and distances below the planter rim, shown in drawings. The contractor shall make full allowance for such settlement in applying the topsoil. Uneven areas shall be topped up as necessary.

3.3 Ground Preparation

3.3.1 Cultivation.

When the topsoil is reasonably dry and workable grade to smooth flowing contours, with falls for adequate drainage, removing all minor ridges and hollows. For all grass areas all topsoil to be cultivated to a depth of 150mm to produce a tilth up to 25mm suitable for seeding and turfing. For all shrub planting areas, topsoil to be cultivated to a depth of 200mm prior to planting. For all shrub areas, spray off existing grass/weeds prior to cultivating. Cultivate ground to a depth of 200mm prior to planting. All stones and debris 50mm, weeds and other deleterious materials shall be raked up and removed from site. When the topsoil is reasonably dry and workable grade to smooth flowing contours, with falls for adequate drainage, removing all minor ridges and hollows. Unless otherwise stated, finished levels of topsoil, after settlement, to be: 50mm above adjoining pavements and kerbs. Married in with adjoining soil areas.

All stones above 50mm diameter to be removed off site by the landscape contractor, All planting areas shall be left in a very even state, with all soil clumps broken up.

3.3.2 Grading:

Topsoil to be graded accurately to contours / levels / falls / crossfalls shown on drawings. Glazed / compacted areas of subsoil to be roughened or ripped as necessary. (Drainage to be installed where necessary to Engineer's specification.) Any compacted areas to be ripped after placing of soil.

Finished Grading: All areas planted by the landscape contractor shall be left in an even state, with all soil clumps broken up and stones of greater than 50mm diameter shall be removed.

3.3.3 Removal of Spoil

Sub-contractor is to be responsible for removal and disposal of all unsuitable material, spoil arisings, stones, sharp objects etc. from site.

3.4 Grassing / Seeding / Hydroseeding:

3.4.1 Amenity Grass Areas

Grass seeding to take place to reinstate existing grassed areas upon completion of the works. Grass seeding areas to be graded off to smooth contours, removing stones greater than 25mm diameter and tip off site. All hollows to be filled in. Roll all areas with roller as approved. Following the completion of grading and raking, the area is to be left fallow for a period of 14 days. Spray with a broad spectrum herbicide at recommended rates, and seed with: 'A Low Maintenance Mixture' is to be applied at a rate of 25g/Sq.m together with fertiliser 10:10:20 at a rate of 50g/Sq.m.

Species Mix:

Cultivar	Common Name	Latin Name
20% PINTOR	Hard Fescue	Festuca logifolia
30% CORRAIL	Strong Creeping Red Fescue	Festuca rubra rubra
15% CONNI	Smooth Stalked Meadow Grass	Poa pratensis
20% WILMA	Chewings Fescue	Festuca rubra commutata
15% HIGHLAND	'Oregon' Browntop Bent	Agrostis castellana

Table 1: Species Mix

3.4.2 Hydroseeding / Wild Flower Seeding:

Wild flower seeding areas to be graded off to smooth contours, removing stones greater than 15mm diameter and tip off site. All hollows to be filled in. Following the completion of grading and raking, the area is to be left fallow for a period of 14 days. Spray with 'Basta' at recommended rates, and hydroseed with Design By Nature EC05 Wetland Wild Flora (Seasonally Flooded) applied at a rate of 1.5gr/Sq.m. 100g per m2 Woodfibre pulp; 100 g per m2. Approved Hydraulic seeding binder e.g. Terrabind by Farmura @100g per m.

Wildflower Species Mix:

Species List: Code EC05 Wetland Wild Flora (Seasonally Flooded) by Design By Nature or equal and approved. Devils Bit Scabious; Common Sorrel; Cowslip; Fleabane; Greater Trefoil; Hemp Agrimony; Lesser Knapweed; Marsh Cinquefoil; Marsh Marigold; Marsh Ragwort; Meadow Buttercup; Meadowsweet;Oxeye Daisy; Purple Loosestrife; Ragged Robin; Red Clover; Red Rattle; Ribwort; Plantain; Selfheal; Sneezewort; Tufted Vetch; Water Avens; Wild

Angelica; Wild Valerian;Yarrow; Yellow Flag Iris; Yellow Rattle; Corn Chamomile; Corn Marigold; Corn Poppy; Corncockle; Cornflower; Scented Mayweed; Redshank. 100g per m2 Woodfibre pulp 100 g per m2 Approved Hydraulic seeding binder e.g. Terrabind by Farmura @100g per m

4 SPECIFICATIONS FOR PLANTING MATERIALS

4.1 Tree Support /Stakes

Round stakes shall be of peeled larch, pine or Douglas fir, preserved with a water-borne copper chrome arsenic composition in accordance with I.S. 131. All trees to be double staked with crossbar 100x25mm securely attached to uprights with galvanised nails. Stakes shall be round, 1.8m long, 75mm in diameter. Stakes shall be pointed at the butt end. Set stakes vertically in the pit and drive before planting. Drive stake with a wooden maul or cast-iron headed drive. Sledgehammer should not be used. Stakes shall be driven into the excavated planting pit to a depth of 1000mm.

4.1.1 Tree ties:

For standard and select standards, tree ties shall be of rubber, PVC or proprietary fabric laminate composition and shall be strong and durable enough to hold the tree securely in all weather conditions for a period of three years. They shall be flexible enough to allow proper tightening of the tie. Ties shall be min. 25mm wide for 150cms height trees and min. 38mm for larger sizes. They shall be fitted with a simple collar spacer to prevent chafing. Two ties per tree shall be applied to standards; for staked transplants, one tie per tree is required. Ties shall be nailed to the stake with one galvanised nail.

4.2 Underground guying

All trees planted in paving / grilles shall be anchored by means of root ball guying. Rootball is anchored by an underground (or equivalent) support system capable of securely holding each tree size in place which is fastened by wires (4mm galvanised cable guying wire) to 'dead man' anchors, kerbstones or timber beams located below the rootball.

4.3 Protection

The interval between the lifting of stock at the heeling-in area and planting on site is to be kept to an absolute minimum. Plants shall be protected from drying out and from damage in transport. All stock awaiting planting on site shall be stored in a sheltered place ***protected from the wind and frost and from drying out.***

All transplants shall be wrapped in polythene from the time of lifting to conserve moisture. Except when heeled-in, they shall be protected in polythene at all times until planted into their final position on site.

4.4 Damage

On completion of planting any broken branches shall be pruned, areas of damaged bark neatly pared back to sound tissue.

4.5 Watering / Fertilisers

All trees and shrubs shall be soaked in water for one hour prior to planting. Fertilisers shall conform to BS 5581:1981. Fertiliser must be mixed through and incorporated into the base of the planting hole and covered with soil in order to avoid roots of plants coming in direct contact. Follow manufacturer's instructions for all chemical products.

4.6 Setting out

Setting out shall be in accordance with site meetings with the Employer's representative. Transplants in mixtures shall be planted in staggered rows. Species shall be planted in groups, as indicated in the planting drawings. No planting shall take place until all planting holes (with ameliorants) have been inspected and approved by the Employer's representative, or a person appointed by him as a representative, to ensure accordance with the specifications. No planting shall take place when ground conditions are frozen or waterlogged. All planting holes shall be opened and closed on the same day.

4.7 Tree planting

Trees shall be planted at the same depth as in the nursery, indicated by the soil mark on the stem of the tree. They shall be planted in the centre of the planting pit and planted upright. Stones or other rubbish over 75mm shall be removed. Supply and drive the stake to depth as clause 7.3/7.4. Farmyard manure (FYM) and fertiliser (0.10.20) shall be applied to each tree pit prior to planting. Farmyard manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position

4.8 Plant specifications

Trees shall have a sturdy, reasonably straight stem, and a well-defined straight and upright central leader, with branches growing out of the stem with reasonable symmetry. The crown and root systems shall be well formed. Roots shall be in reasonable balance with the crown and shall be conductive to successful transplantation. All trees shall be clearly labelled.

4.9 Advanced Nursery Stock Trees 16-18cm gt. - Rootballed

Excavate tree pits to 1000mm x 1000mm x 100mm deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and one tablet per 4cm of trunk circumference of Sierrablen Flora fertiliser shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Install tree support as per clauses 4.1 and 4.2. Backfill planting hole with excavated topsoil or imported topsoil where excavated topsoil is deemed unsuitable by landscape architect, and remove all stones and debris, firming plant into position. Topsoil to meet topsoil clause 3.2.

4.9.1 Extra Heavy Standard Trees 14-16cm gt. - Rootballed

Excavate tree pits to 1000mm x 1000mm x 800mm deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and one tablet per 4cm of trunk circumference of Sierrablen Flora fertiliser shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Install tree support as per clauses 4.1 and 4.2. Backfill planting hole with excavated topsoil or imported topsoil where excavated topsoil is deemed unsuitable by landscape architect, and remove all stones and debris, firming plant into position. Topsoil to meet topsoil clause 3.2.

4.9.2 Standard trees 8-10cm ht – Bareroot

Excavate tree pits to 800mm x 800mm x 600mm deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and one tablet per 4cm of trunk circumference of Sierrablen Flora fertiliser shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Install tree support as per clauses 4.1 and 4.2. Backfill planting hole with excavated topsoil or imported topsoil where excavated topsoil is deemed unsuitable by landscape architect, and remove all stones and debris, firming plant into position. Topsoil to meet topsoil clause 3.2.

4.9.3 Multistem Trees 2 – 4.5m

Excavate tree pits to 1200mm x 1200mm x 1200mm deep, or as approved. Planting pits for multistem trees shall be filled with topsoil as per clause 3.2.2. Farmyard manure 60mm deep and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farmyard manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Install tree support system as per clause

4.9.4 Container-Grown Plants

Excavate planting hole to a depth of 300mm x 300mm x 300mm deep; the base to be broken to a depth of 50mm and glazed sides roughened. Apply 30gm 0.10.20. per planting pit. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

Containerised Plants shall be of the size specified in the schedules, with several stems originating from or near ground level and of reasonable bushiness, healthy, vigorous and with a sound root system. Pots or containers shall be appropriate to the size of shrub supplied and clearly labelled. Shrubs shall not be pot bound or with girdled or restricted roots. Shoots, roots and aerial parts shall be free of disease, and/or damaged leaves or shoots.

4.9.5 Transplants 90-120cms, 60-120cm, 60-90cms, 40-60, 30-40cms

Excavate tree pits to 400mm x 400mm x 400mm, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m.(equivalent to 60mm deep) and one tablet per 4cm of trunk circumference of Sierrablen Flora fertiliser shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Install tree support as per clauses 4.1 and 4.2. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position. Topsoil to meet topsoil clause 3.2.

4.9.6 Hedging:

Excavate trench 300 wide x 300 deep, the base to be broken to a depth of 50mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and 30gms of 0.10.20 shall be applied to each plant pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting trench with excavated topsoil, and remove all stones and debris, plant and firming plant into position. Do not plant any hedging at the lowest part of the proposed Ha-Ha feature.

4.9.7 Bulb Planting:

Bulbs should be planted so that the top of the bulbs is at a depth of approximately twice its height with the base in contact with the bottom of the hole. Backfill with finely broken soil and lightly firmed to the existing ground level. When planting in existing grassed areas neatly remove a plug of turf and replace after planting. Scatter naturalised bulbs at random positions over the allocated area and plant where they fall. Planting shall take place in Sept./Oct. and to supplier's recommendations. Bulbs to be planted in grassed area at rate of 50no./Sq.m. and in groups of 300- 500no.

4.9.8 Ground finish:

Upon completion of planting, all ground finish shall include for the removal of stones greater than 50mm excavated during the course of the digging for planting purposes. All soil surfaces should be even and free of mounds, rutting or hollows.

4.9.9 Spraying:

Following planting, weed free circles to be formed around individual plants, as directed, using an approved broad- spectrum contact herbicide, as approved by the Employer's representative, in mid-spring following planting. Herbicide to be applied using controlled drop applicator. The contractor shall be responsible for keeping the ground (1m diameter circle) around all planted material weed free by means of herbicidal application, using approved sprays, during the course of the contract. Weeds to be removed include grasses, broad-leaved annual and perennial weeds and all noxious weeds.

Liquid herbicides shall be applied using a CDA (Controlled Droplet Application). The application of herbicides shall be carried out by a trained professional / qualified person who is fully familiar with current health and safety standards, each herbicide and corresponding manufacturer's instructions. The use of a non-toxic colour indicator (eg Blazon) is recommended to ensure accurate herbicide applications. The use of a spray adjuvant to be incorporated into the liquid formulation.

4.10 Bark mulch

The product shall consist of matured Conifer Bark with an even nominal particle size distribution of 5-75mm with less than 5% dust and fines and less than 15% 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.

The natural heat treatment maturing process shall have been sufficient to ensure that excess volatile substances are driven from the product. During the process, temperatures within the product heaps must exceed 50°C for a minimum 14 day period, followed by a further period of stabilisation.

Lay Bark Mulch to a finished depth of 75mm allowing at least 10% for settlement after 30 days. All such mulch of good quality from an approved source will be inspected by the Employer's representative prior to delivery. All product volumes to be calculated using The Bulk Density method, as set out in BS EN 12579:2000 and BS EN 12580:2000. Slow release Nitrogen fertiliser to be applies to soil prior to mulching.

END.