

LITTLEHAMPTON LEISURE CENTRE LANDSCAPE STRATEGY

10.02.17

LD&DESIGN

1.0 PLANTING STRATEGY



PLANTING CHARACTER

- LAWNS INCLUDING AREAS TO BE REINSTATED
- WILDFLOWER PLANTING
- SPECIES RICH GRASSLAND MIX / DRY COASTAL GRASSLAND
- NATURALISTIC PLANTING
- COASTAL PLANTING
- SCREENING PLANTING / SCRUB
- SPACE TO BE PLANTED AS PART OF COMMUNITY ENGAGEMENT
- PROPOSED HEDGEROW
- EXISTING WOODLAND RETAINED
AREAS AFFECTED BY BUILDING WORKS TO BE REPLANTED
- COMPENSATORY WOODLAND / UNDERSTORY SHRUB
PLANTING TO MITIGATE LOSS FROM CONSTRUCTION
- EXISTING TREE PLANTING
- PROPOSED TREE PLANTING

2.0 PLANTING INTENT

The design of the planting has been developed specifically to thrive in the unique physical and climatic condition of this exposed coastal location only a few metres inland from the beach. The selection of species and mixes of cultivars has been carefully crafted to work with the existing environmental conditions of the site such as persistent winds, full sun, occasional salt spray and light, impoverished sandy soils. Plants have also been chosen that require minimal maintenance and are more drought tolerant than other species. A number of plants have also been chosen because of their appeal to bees or because they are in declining UK populations (e.g. Eryngium) and a number of annuals (e.g. poppy, sea rocket) in small quantities will also be included to add biodiversity and will hopefully self-seed after the first year.

The design of the planting has been developed with the following objectives

- To fulfil the ultimate aspirations of a new southern gateway to Mewsbrook Park
- To interpret a spontaneous coastal planting arrangement (naturalistic, not formal), where there is not a continuous cover of plants instead appear sporadically as if they have naturally colonised.
- Plant species have been chosen because they are either typical of the West Sussex coastline or evoke a seaside character.
- To withstand the coastal environment.
- To create visual interest for as much of the year as possible.
- To introduce biodiversity and benefits for wildlife.
- Will require minimal on-going maintenance.

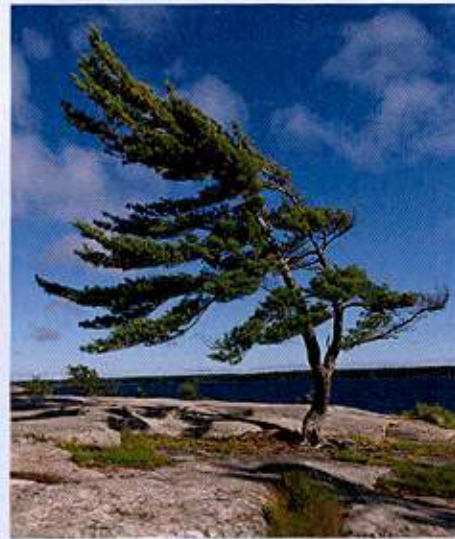


PLANTING CONCEPT
TYPICAL PLANTING CHARACTER

3.0 PLANTING PALETTE



Pinus radiata



Pinus radiata



Populus alba



Betula pendula

3.1 COMPENSATORY WOODLAND / UNDERSTORY SHRUB:

A body of woodland will be planted to mitigate the loss of existing trees with species selected to respond to the local context. A consistent mix of native trees such as *Pinus radiata*, *Populus alba*, *Acer pseudoplatanus* and *Salix alba* will be introduced to blend with the existing woodland and provide a natural setting for the new building to nestle within the surrounding landscape.

3.2 SPECIMEN TREES:

Small naturalistic groups of trees will be planted within the lawns and planted areas to provide shelter from the wind whilst framing views over the lawns and to the seafront. Informal groupings of trees will filter views over the car park and towards the blank facades of the building. Tree species will be suitable for coastal environments that are fully exposed to high winds and salt spray with individual trees planted in the lawn areas create living sculptures as their form is contorted by harsh coastal elements creating beautiful objects in the landscape.



Kniphofia 'Alcazar'



Rudbeckia fulgida var. sullivantii



Achillea 'Moonshine'



Leucanthemum x superbum



Silene maritima



Ballota pseudodictamnus



Armeria maritima alba



Miscanthus sinensis 'Gracillimus'



Eryngium maritimum



Crambe maritima

3.3 HERBACEOUS: COASTAL PLANTING

Planting areas surrounding the lawns and car park are designed to create a naturalistic border which merges the site with the surrounding coastal landscape. This planting will cover approximately 60% of the planting beds to evoke the concept of spontaneous coastal planting. The planting mix contains sub-shrubs, ornamental grasses and herbaceous perennials with a balance of evergreen plants to ensure year-round interest.



Calamagrostis x acutiflora
'Overdam'



Sedum Herbstfreude
(Autumn Joy)



Perovskia 'Blue Spire'



Molinia caerulea edith
dudszus



Stipa tenuissima



Indicative Naturalistic Planting



Salvia and *Alliums*



Festuca amethystina



Eryngium yuccifolium



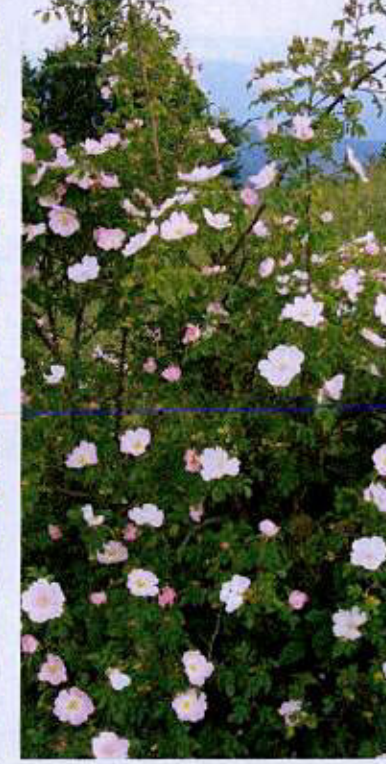
Sanguisorba officinalis



Helenium 'Waltraut'

3.4 HERBACEOUS: NATURALISTIC PLANTING

Planting located at the heart of the scheme is more densely planted providing an attractive route from Sea Road to the building arrival space. Swathes of ornamental grasses such as *Calamagrostis*, *Miscanthus nepalensis* and *Stipa tenuissima* are punctuated by clusters of more vibrant species creating a colourful spine through the site with a mix of striking purples, golds and oranges. This planting design will help fragment the surrounding areas of tarmac and provide shelter within an exposed site. Beautiful use of colour, form and texture sheltered beneath small groupings of multistem trees reinforce the naturalistic theme.



Indicative screening planting / scrub

3.5 NATURAL SCREENING PLANTING / SCRUB

Planting around the new location of the boat store to provide screening function for residents in Hendon Avenue. The planting design will create a naturalistic setting surrounding the boat store whilst also reducing views into the compound from nearby housing.



Indicative wildflower planting

3.6 WILDFLOWER PLANTING

Wildflower planting introduced to sloping landform surrounding the building creates a blanket of colourful, helping to anchor the building within the surrounding landscape and enhances the naturalistic setting. Tolerant to shaded areas, specifically around trees wildflower planting will form an ecological connection between the building and the existing woodland enhancing the biodiversity within the site, supporting birds mammals, bees, butterflies and other invertebrate species.

4.0 MAINTENANCE STRATEGY

GENERAL

All works are to be carried out in accordance with best horticultural practice and current legislation in particular with regard to the use of hazardous substances such as herbicides, and tools, such as pruning implements and other potentially dangerous mechanical equipment. Operational areas must be safe for users of the site, particularly when working overhead on trees, or with machinery or chemicals. Operatives must be trained and where appropriate qualified to carry out the operations which they are assigned. Work to trees is to be carried out by qualified arboriculturalist.

TIMING

Mature trees must be subject to a systematic annual programme of inspections, recording and maintenance operations in order to maintain them in a safe state, and to record that all reasonable actions have been taken to minimise potential hazards. All other planting is to be managed and maintained in a neat and tidy appearance. Should emergency tree maintenance be required, immediate steps will be taken on notification, to ensure the areas concerned are made safe and if necessary secure.

All planting is to be visually inspected at each maintenance visit, and assessed for pruning or other operations in accordance with the specification below.

INSPECTIONS

Inspections are to be made monthly from March to October and bi-monthly from November to February, or as otherwise instructed. Annual inspections of trees (by qualified Arboriculturalist) are mandatory.

REINSTATEMENT

Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstate to original condition.

WATERING

- Potable mains water supply where available, or from bowsers.
- Wet full depth of topsoil during extended periods of dry weather and if planting exhibits signs of drought induced stress.
- Do not damage or loosen plants.
- Loosen or scoop out compacted soil to direct water to rootzone.
- Water as necessary for the continued thriving of all planting.
- If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

DISPOSAL OF ARISING

General: Unless specified otherwise, dispose of arisings as follows:

- Remove biodegradable arisings to off-site composting or recycling facility.
- Remove grass cuttings to off-site composting or recycling facility.
- Remove to shrub and tree prunings off-site composting or recycling facility.

- Remove Litter and nonbiodegradable arisings to off-site disposal facility.

LITTER

Extraneous rubbish not arising from the contract work: Collect and remove from site.

CLEANLINESS

- Remove Soil and arisings from hard surfaces.
- Leave the works in a clean, tidy condition at completion and after any maintenance operations.

ESTABLISHMENT OF NEW PLANTING

- Establishment period of five years.
- Keep planting beds clear of weeds by hoeing/screefing where required and maintaining full depth of mulch.
- Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
- Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.

ESTABLISHMENT OF NEW PLANTING - FERTILIZER

- Fertilise between March or April.
- Use slow release fertiliser.
- Spread evenly. Carefully lift and replace any mulch materials.
- Use manufacturer's application rate recommendations.

PRUNING GENERALLY

- Pruning: In accordance with good horticultural and arboricultural practice.
- Removing branches: Do not damage or tear the stem or bark.
- Wounds: Keep as small as possible and cut cleanly back to sound wood.
- Cutting: Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
- Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
- Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- Disease or infection: Give notice if detected.
- Growth retardants, fungicide or pruning sealant: Do not use unless instructed

REMOVAL OF DEAD PLANT MATERIAL

- At the end of the growing season, check all shrubs and remove all dead

foliage, dead wood, and broken or damaged branches and stems.

DEAD AND DISEASED PLANTS

- Removal: As soon as possible.
- Replacement: In the next suitable planting season.

WEED CONTROL GENERALLY

- Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 100 mm high.
- Adjacent plants, trees and grass: Hand weed, do not damage trees.

HAND WEEDING

- General: Remove weeds entirely, including roots.
- Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
- Completion: Rake area to a neat, clean condition.
- Mulch: Reinstate to original depth.

SOIL AERATION

- Compacted soil surfaces:
- Prick up: To aerate the soil of root areas and break surface crust.
- Size of lumps: Reduce to crumb and level off.
- Damage: Do not damage plants and their roots.

MAINTENANCE OF GRASSED AREAS

- Maintain turf in a manner appropriate to the intended use.
- Soil and grass to be maintained to a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
- Prevent waterlogging and compaction
- Repair trampling, abrasion or scalping.
- Maintain reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
- Edges: Neat and well defined, in clean straight lines or smooth flowing curves.
- Remove litter and fallen leaves regularly to maintain a neat appearance.

GRASS CUTTING GENERALLY

- Before mowing: Remove litter, rubbish and debris.
- Finish: Neat and even, without surface rutting, compaction or damage to grass.
- Edges: Leave neat and well defined. Neatly trim around obstructions.
- Adjoining hard areas: Sweep clear and remove arisings.
- Drought or wet conditions: Obtain instructions.

MOWING LAWNS

- Grass height: Maintain between 25 and 35 mm.

- Arisings: Remove.

TOP DRESSING

- Location: All lawns.
- Timing: November.
- Material: Sandy loam.
- Product reference: Contractor's choice.
- Application rate: 1 kg/m².

SPIKING

- Location: All lawns.
- Timing: February or March, after first mowing.
- Operations: Aerate the soil and improve surface water penetration.
- Depth (minimum): 75 mm into soil.

SCARIFYING

- Location: All lawns.
- Timing: February or March, before first cut.
- Operations: Relieve thatch conditions and remove dead grass.
- Depth (maximum): 15 mm into soil.
- Arisings: Remove.

RE-FORMING GRASS EDGES

- Location: All edges and Where damage occurs.
- Edges: Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical.

FERTILIZER - SPRING APPLICATION

- Type: Slow release.
- Application rate: 60 g/m

FERTILIZER - AUTUMN APPLICATION

- Type: Slow release.
- Application rate: 60 g/m

REINSTATEMENT OF DAMAGED LAWNS

- Damaged turf: Remove to a depth of 30 mm.
- Preparation: Cultivate substrate to a fine tilth.
- Reinstatement: Contractor's choice of returfing or topsoiling and reseeding:
- Returfing: Quality and appearance to match existing.
- Reseeding: Fill with fine topsoil to BS 3882 multi purpose class, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.

- Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

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TREE WORK GENERALLY

- Identification: Before starting work agree which trees, shrubs and hedges are to be pruned.
- Protection: Avoid damage to neighbouring trees, plants and property.
- Standards: To BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- Removing branches: Cut as Arboricultural Association Leaflet
- 'Mature tree management'. Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
- Appearance: Leave trees with a well balanced natural appearance.
- Chain saw work: Operatives must hold a Certificate of Competence.
- Tree work: To be carried out by an approved member of the Arboricultural Association. Tree guy: Inspect tree guy wires twice a year in spring and autumn and immediately following strong winds and replace or re-secure loose or missing guy wires or adjust to suit stem growth and to provide correct and uniform tension.
- Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.

CLEANING OUT AND DEADWOODING

- Remove:
- Dead, dying, or diseased wood, broken branches and stubs.
- Fungal growths and fruiting bodies.
- Rubbish, wind blown or accumulated in branch forks.
- Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- Other unwanted objects, e.g. tree houses, swings.
- Climbing plants if present.

CUTTING AND PRUNING GENERALLY

- Tools: Appropriate, well maintained and sharp.
- Final pruning cuts:
- Chainsaws: Do not use on branches of less than 50 mm diameter.
- Hand saws: Form a smooth cut surface.
- Anvil type secateurs: Do not use.
- Removing branches: Do not damage or tear the stem.
- Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
- Cutting: Make cuts above and sloping away from an outward facing healthy bud, angle so that water will not collect on cut area
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- Large branches: Remove only if unavoidable and with prior approval.
- Remove in small sections and lower to ground with ropes and slings.
- Dead branches and stubs: When removing, do not cut into live wood.
- Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
- Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.
- Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.

- Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- Disease or infection: Give notice if detected.
- Growth retardants, fungicide or pruning sealant: Do not use unless instructed

FORMATIVE PRUNING OF YOUNG TREES

- Standard: Type and timing of pruning operations to suit the plant species
- Time of year: Do not prune during the late winter/ early spring sap flow period
- Young trees: Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader
- Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood
- Operatives: Member of the Arboricultural Association

CROWN REDUCTION/ SHAPING

- General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.
- Operations: Reduce crown of new trees by 15% where necessary and in consultation with Local Authority Trees Officer where appropriate.

CROWN LIFTING

- Clearances: Remove branch systems to give clearance.
- Height: 2.5 m above footpaths or planting areas if required.
- Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

CROWN THINNING

- Removing branches: Remove inward growing, crossing, rubbing, dead and damaged branches.
- Thinning: Selectively remove secondary and small live branch growth evenly throughout the crown.
- Quantity: As required to form an even, close head.
- Cutting: Make no cuts of more than 25 mm diameter without prior approval.
- Branches: Cut back to lateral or sublateral buds or branches without leaving stumps.
- Appearance: Leave a uniform and well balanced structure of branches and foliage.

CUTTING TREE ROOTS

- Excavating: Use hand tools only.
- Protected area: Do not cut roots within an area which is the larger of:
 - The branch spread of the tree.
 - An area with a radius of half the tree's height, measured from the trunk.
- Outside protected area: Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.
- Cutting: Make clean smooth cuts with a hand saw.
- Wounds: Minimize. Avoid ragged edges.
- Finishing: Pare cut surfaces smooth with a sharp knife.

BACKFILLING:

- Protection: Cover cut roots with clean sharp sand.
- Material: Backfill with original topsoil.

BARK DAMAGE

- Wounds: Do not attempt to stop sap bleeding.
- Bark: Remove ragged edges using a sharp knife.
- Wood: Remove splintered wood from deep wounds.
- Size: Keep wounds as small as possible.
- Iquid or flux oozing from apparently healthy bark: Give notice.

CAVITIES IN TREES

- Investigation: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
- Water filled cavities: Do not drain.
- Sound wood inside cavities: Do not remove.
- Cavity openings: Cavities in new trees will indicate serious disease and the tree should be replaced.

A UNDERGROUND TREE GUY WIRES

- Inspection/ Maintenance times: Immediately after strong winds and each spring.
- Replace or resecure loose or missing guy wires.
- Adjust to suit stem growth and to provide correct and uniform tension in accordance with guidance from manufacturer

REFIRMING OF TREES

- Timing: After strong winds, frost heave and other disturbances.
- Refirming: Tread around the base until firmly bedded.
- Collars in soil at base of tree stems, created by tree movement:
- Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

FERTILIZING ESTABLISHED TREES AND SHRUBS

- Time of year: During February or March.
- Type of fertilizer: Organic.
- Application: Spread evenly.
- Rate: As manufacturer's recommendations.

PRUNING OF EXCESSIVE OVERHANG

- Timing: Annually.
- Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
- Special requirements: Ensure edges to decking are clearly visible at all times.