

HMS Cambria

Landscape Management and Maintenance Plan

December 2017



This document has been prepared by The Urbanists on behalf of:

Associated British Ports - HMS Cambria

UG1676, 05/12/2017

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1. Introduction

- 1.1 Landscape proposals for the proposed HMS Cambria building are shown on drawing *URB LA XX XX GA 90 001*. This document provides an outline for the operations needed over a five year maintenance period that will be needed to ensure successful establishment. During year 1 it is expected that a contractual defects liability period and maintenance contract will exist with the Development Contractor responsible for implementation. During Years 2 to 5 the landscape works will be maintained by the Maintenance Company appointed by Associated British Ports.

Objectives

- 1.2 The key objective is to ensure the successful establishment, over a five-year period, of the proposed planting and seeding. The following elements form part of the frontage and external works:
- Proposed tree & shrub planting.
 - Hedgerow planting.
 - Amenity grass seeding.
 - Wildflower meadow seeding.
 - Bulb planting.

Preliminaries

- 1.3 All loss or damage arising from theft or malicious damage prior to Practical Completion shall be made good by the Development Contractor.
- 1.4 The maintenance of planting or seeding after Practical Completion shall be carried out by the Development Contractor until responsibility is transferred to the appointed Management Company at the completion of the one-year defects liability/maintenance period.
- 1.5 Any plants found to be defective during the one-years defects liability period as a result of failure, poor materials, and/or lack of vigour shall be replaced by the Development Contractor. During years two to five defective planting/seeding will be addressed by the Management Company.
- 1.6 There shall be no limit on the number of times plant replacement is carried out in order to achieve complete planting and seeding coverage.

Plant Sources

- 1.7 Plant supply shall be obtained from a nursery that are members of the Horticultural Trades Association Nursery Certification Scheme and approved by the Contract Administrator or Employers Agent.

Plant Implementation

- 1.8 Plant handling and planting operations shall be undertaken in accordance with Horticultural Trades Association “Handling and Establishing Landscape Plants” (Parts I-III).
- 1.9 Topsoil shall be certified in accordance with BS 3882:2015 and found fit for purpose in accordance with a soil scientists interpretive report. It shall meet the sandy loam texture range and pH on placement between 7.0 and 5.5. A sample (1cu.m) shall be made available to the Contract Administrator or Employers Agent for approval prior to spreading.
- 1.10 Soil handling shall accord with BS 3882:2015, BS 8601:2013 and the 2009 DEFRA code. Soils to be loose tipped during suitable weather conditions (i.e. not during or after heavy rain such that the soil loses structure on placement).
- 1.11 Subsoil shall be certified in accordance with BS 8601:2013 and found fit for purpose by a soil scientists interpretive report. It shall meet the sandy loam textural range and pH on placement of 7.0-5.5.

Timetable for Implementation

- 1.10 Implementation shall be undertaken during the next available planting season following confirmation that the site is available for the proposed works. Planting and seeding shall be carried out generally during the following periods:
 - Deciduous trees and shrubs: Late October to late March.
 - Conifers and evergreen planting: September/ October or April/ May.
 - Container-grown plants: At any time if ground and weather conditions are favourable.
 - Grass seeding: Late march to early May or late august to early October.
 - Bulb planting: Late October –late November.

2. Key Elements

Proposed Tree & Shrub Planting

- 2.1 The landscape proposals, as shown on the Soft Works Layout [*URB LA XX XX GA 90 001*] shows a variety of tree, shrub and hedgerow species that will help enhance the frontage and perimeter of the site while simultaneously enhancing biodiversity.

Proposed Amenity Grass and Wildflower Meadow areas

- 2.2 The Soft Works Layout [*URB LA XX XX GA 90 001*] shows areas of amenity grass (mix Emorsgate EL1 Flowering Lawn Mix) and wildflower meadow seeding (UK Wildflower mix mas wwild-3). These mixes are ‘species rich’ and will enhance biodiversity within the site.

Proposed Bulb planting

- 2.3 Crocus (red, white and blue to symbolize Royal Navy colours) will provide seasonal interest in visible fringes to the perimeter of the site.

3. Management Plan

Proposed tree, shrub and hedgerow planting

- 3.1 All tree, shrub and hedgerow planting shall be managed to ensure establishment in accordance with the Soft Works Layout [URB LA XX XX GA 90 001]. Irrigation may be required.
- 3.2 Weeding will be required during the growing seasons (generally assumed to be March to October) for five years, achieving and maintaining a weed-free area within all planting beds and around each individual tree to a minimum 0.5m radius. Weeding generally will be by strimming, hand and/or chemical clearance using an approved herbicide in line with manufacturer's instructions and appropriate guidance, and maintenance of the mulch layer to the full specified depth. Weeding around the base of trees will be by hand and/or chemical clearance only and by maintenance of the mulch layer to the full specified depth.
- 3.3 Tree stakes and ties will be checked monthly and adjusted as necessary. Trees are to be maintained upright and adjustments will be made following strong winds. The Maintenance Company will remove stakes and ties at year three at the latest, providing that the trees are deemed to be self-supporting. Any trees that have failed to anchor by year three should be removed and replaced following examination of the reasons for failure and amendments to the specification accordingly.
- 3.4 Composted wood bark mulch shall be topped up annually to 50mm depth to suppress weeds and retain moisture. A slow-release fertiliser shall also be applied annually in March until and including year 5.
- 3.5 Pests will be identified and eradicated and litter will be removed. Annual monitoring of newly planted trees and shrubs will be undertaken each autumn for the first five years after planting. All trees and hedge planting will be subject to a one-year contractual defects liability period during which all dead, missing, dying or defective plants will be replaced with the same species and size of plants as per the original plant specification by the Development Contractor. During years two to five defective planting/seeding will be addressed by the Management Company.

Amenity Grassland (Seed mix Emorsgate EL1 Flowering Lawn Mix).

- 3.6 The sward height shall not exceed 75mm at any time with regular cutting required between March and the end of October to a minimum height of 40mm. All arising's shall be removed from site. Cutting will be suspended in periods of drought. All litter and debris to be removed before each cut.
- 3.7 At the time of each cut, all grass edges round the base of trees, manholes, etc. shall be trimmed, taking precautions not to damage the tree trunks. All arising's shall be removed, and all adjoining hard areas will be swept clear of cuttings and swept material removed.

- 3.8 The sward shall be kept substantially free of broadleaved weeds where required, by applying a suitable approved selective herbicide. Fallen leaves will be removed in autumn.
- 3.9 The grass shall be watered as necessary to ensure a healthy sward until it has become established. Any areas of extreme wear, bare patches or wheel ruts will be reinstated by means of re-cultivation and re-seeding.

Wildflower Meadow grassland (Seed mix mas-wwild3)

- 3.10 Wildflower areas will require two annual cuts. The first shall be undertaken in March prior to flowering and the second cut shall occur at the end of October. Sward height following cutting to be to 75mm height.
- 3.11 Cut material shall be removed and disposed of away from site or sent for composting. Ideally, material will be cut and left on the ground for 2-3 days to allow seed and invertebrates to drop out. The area shall be cleared of litter and debris in accordance with section 3.22 below.
- 3.12 Weed control shall be undertaken as required, so as to prevent pernicious perennial weed species from becoming established. Control methods shall comprise hand-pulling or spot treatment with a suitable approved selective herbicide, as appropriate.
- 3.13 Wildflower areas that are worn or damaged are to be repaired by over seeding into prepared seed bed with the appropriate wildflower mixture (MAS-WWILD3) as detailed on drawings, subject to seasonal limitations and suitable weather and ground conditions, in accordance with best practice.

Bulbs

- 3.14 Mowing operations within bulb planting will need to be programmed to avoid cuts during active bulb growth/flowering.

Litter Removal

- 3.15 The site shall be kept free of litter and other debris through monitoring, collection and disposal.
- 3.16 The Development Contractor and Management Company shall take particular care when collecting litter and rubbish to ensure that any discarded sharps/needles are safely removed. Such items must be packaged separately from the remainder of the litter, and contained in labeled puncture-proof containers.

- 3.17 All litter and debris shall be removed from site to an authorised tip, in accordance with the Code of Practice on Litter and Refuse and Associated Guidance 2007 (Welsh Assembly Government) and the Environmental Protection Act (1990).

4. Summary

Weekly

- 4.1 All trees & shrubs shall be irrigated as necessary to ensure successful establishment. Irrigation plan to BS 8545: 2014.

Monthly

- 4.2 Amenity grass to be cut to maintain maximum height of 75mm as specified.
- 4.3 Litter pick over all open space areas.
- 4.4 Weed control of all soft landscaped areas.
- 4.5 Mulch to be brushed/topped up monthly to ensure even coverage.

Quarterly/Bi-Annually

- 4.6 Wildflower areas to be cut twice annually as specified above in section .

Annually

- 4.7 Tree stakes and ties to be checked twice annually and adjusted as specified.
- 4.8 Wood bark mulch within shrub beds to be topped up to 75mm.
- 4.9 Replacement of all dead, dying or defective trees annually with the same species and size of plants as per the original plant specification.
- 4.10 Minor pruning of dead or damaged wood to be carried out following inspection by appropriately qualified arboriculturalist.
- 4.12 Apply a slow-release fertiliser annually in March.
- 4.13 Check for invasive species and remove from site or treat with suitable approved selective herbicide as specified.

- 4.14 It is proposed that the Landscape Maintenance and Management Plan will be reviewed annually for minor variations in maintenance or timing of work, and revised after 5 years to take account of changes to management operations.