

## LANDSCAPE MANAGEMENT PLAN

Theatre Square (100 Avenue Road)

Essential Living

SC-Landscape Management Plan-R-CAM

Planning Condition Discharge  
Rev. B

09<sup>th</sup> August 2019

## Contents

1.0	Introduction
1.1	Programme & Practical Completion
1.2	Landscape Implementation Plan
1.3	Contact Details
2.0	Description Of The Works
2.1	Tree Planting
2.2	Hedging
2.3	Public Realm Planting
2.4	Areas Of Paving
3.0	Design Objectives For Landscape Elements
3.1	Long Term Design Objectives & Management Activities
4.0	Landscape Maintenance Activities Generally
4.1	Summary Of Maintenance Operations Required To Tree, Hedge & Shrub Planting Generally
4.2	Summary Of Maintenance Operations Required To Grass Seed / Turf Areas Generally
4.3	Summary Of Maintenance Operations Required To Areas Of Paving
4.4	Landscape Management Responsibilities
4.5	Schedule Of Landscape Maintenance Activities
TABLE: SCHEDULE OF LANDSCAPE MAINTENANCE ACTIVITIES	
5.0	Specific Maintenance Requirements

## 1.0 Introduction

This Landscape Management Plan (LMP) has been prepared by Camlins Landscape Architects on behalf of Essential Living. Its purpose is to describe the proposed soft landscape implementation strategy and long-term maintenance activities required. Planting is fundamental to the quality of the finished product and as such the highest standards of horticulture, materials and finish will be expected. This Landscape Management Plan is to be read in conjunction with Drg. No. **SC-CAM-00-GF-DR-L-0081** General Arrangement – Planting Plan and the written ‘**Planting Schedule**’.

The following Landscape Management Plan describes the works to be carried out under the construction Contract; identifies the long term design objectives for all soft landscape areas; the parties responsible for the implementation of the Plan; identifies maintenance activities to be carried out under the construction Contract and later by Essential Living Management Company; and finally provides a scheduled summary of all the maintenance operations.

The main construction Contract allows for a:

- 24 month maintenance and establishment period for all areas of grass, perennials, shrubs and bulbs from the date of Practical Completion.
- 24 month maintenance and establishment period for all new tree and hedge planting from the date of Practical Completion.

**The Contractor must allow for a minimum of 1 maintenance visits to site per week throughout the construction Contract maintenance and establishment period.** During these maintenance visits the Contractor must ensure that the maintenance activities described within this Landscape Management Plan are undertaken to the satisfaction of the Employer.

Following the 24 month construction defects Contract maintenance and establishment period the hard and soft landscape areas within the external public realm will be maintained by Essential Living Management Company.

### 1.1 Programme & Practical Completion

This Landscape Management Plan and the written ‘Planting Schedule’ assumes that the **opening date** for the scheme will be during the summer months (May to August). Once the construction and hand-over programme has been agreed between the Contractor and Employer these planting proposals are to be re-appraised. Where possible the exact planting programme must ensure an attractive and established planted environment at Practical Completion. The Contractor programme must consider seasonal planting requirements to ensure an established planted environment at Practical Completion. The exact programme of all soft landscape works must be confirmed with the Landscape Architect once the programmed completion date has been agreed. The objective is to provide an attractive and established landscape setting at the time of Practical Completion in order to maximise marketing and sales opportunities for the Client.

### 1.2 Landscape Implementation Plan

The Contractor must prepare a **Landscape Implementation Plan** to be submitted to the Landscape Architect prior to the commencement of landscape works on site. This Landscape Implementation Plan must include:

- The identification of a Project Landscape Coordinator. This member of the Contractors on site team will be the principal point of contact between the Contractor and Landscape Architect and will be responsible for planning the landscape works.
- A programme of works for the procurement and installation of all trees, hedges, shrubs, climbing plants and grassed areas etc
- A Contractor programme which allows for the inspection and approval of all trees, hedges, shrubs and climbing plants at the nursery. All plants to be good examples of the species and to be approved by the Landscape Architect.
- A Contractor programme which allows for all trees, hedges, shrubs and climbing plants to be selected and approved by the Landscape Architect at the nursery from a group of at least 200% of the required quantity. Representative photos of trees, hedges, shrubs, and climbing plants to be provided before any nursery visit. Cost of all trees, hedges, shrubs and climbing plants to include travel expenses for nursery visits as necessary.

- A Contractor statement on the feasibility of early installation of trees, hedges, shrubs, climbing plants and grassed areas to allow maximum possible period for the establishment of soft landscape works prior to hand over.
- The identification of any temporary protection measures required to prevent other trades compacting areas of installed growing medium or damaging installed planting.
- A Contractor programme which allows for the reinstatement of soft landscape areas affected by the works.
- The identification of procedures and documentation required for Landscape Architect approval of all installed landscape works prior to Practical Completion. Contractor to ensure all works are 'snagged' and rectified by Contractors on site team prior to any requests for Landscape Architect approval of completed works.
- Project Landscape Coordinator to monitor progress on site against programme with particular regard to seasonal restrictions of soft planting works. Contractor to liaise with Landscape Architect to ensure installed planting provides an attractive and established landscape setting at the time of Practical Completion.

### 1.3 Contact Details

Contact details are as follows:

Juey Thanyakittikul	Project Manager	Essential Living 2 Gee's Court, Marylebone, London W1U 1JA Tel: 020 7340 0300
Barry Coltrini	Development Manager	Essential Living 2 Gee's Court, Marylebone, London W1U 1JA Tel: 020 7340 0300
Marie Shirley Smith	Landscape Architect	Camlins Landscape Architects New Dolanog House Severn Road Welshpool Powys SY21 7AR Tel 01938 554886

## 2.0 Description Of The Works

The external works at Theatre Square creates a series of public landscaped spaces. The public streets encourage pedestrian movement through attractive streetscape with shallow gradients, accessible surfaces and a variety of routes.

Refer to Drg. No.'s **SC-CAM-00-GF-DR-L-0001** General Arrangement Public Realm & Landscape & Drg. No.'s **SC-C00-GF-DR-L-0081** Planting Plan – details of the external landscape planting.

## 2.1 Tree Planting

Trees are to be planted throughout the site. Refer to Drg. No. **SC-CAM-00-GF-DR-L-0071** General Arrangement for tree planting schedule. For details of tree pit construction and tree planting refer detailed drawings (available on request).

All trees planted as part of the construction Contract are subject to a 24 month defects liability period to ensure establishment.

## 2.2 Hedging

Hedges are to be planted throughout the site.

Refer to Drg. No.'s **SC-CAM-00-GF-DR-L-0001** General Arrangement Public Realm & Landscape & Drg. No.'s **SC-CAM-00-GF-DR-L-0081** General Arrangement – Planting for details of the external landscape planting.

Any hedges planted as part of the construction Contract would be subject to a 24 month defects liability period.

## 2.3 Public Realm Planting

A series of raised planters and ground level planting are to be formed within the public realm. These areas will include shrubs, grasses, perennials and bulb planting. For the location and details of all planting to public realm gardens refer to Drg. No.'s **SC-CAM-00-GF-DR-L-0001** General Arrangement Public Realm & Landscape & Drg. No.'s **SC-CAM-00-GF-DR-L-0081** General Arrangement – Planting Plan for details of the external landscape planting.

All areas of public realm planting (adjoining communal areas and public streets) undertaken as part of the construction Contracts are to be subject to a 24 month defects liability period.

## 2.4 Areas Of Paving

The external spaces of Theatre Square (Swiss Cottage) are to be surfaced with stone and granite flags, clay paving. For the location and details of all hard landscape elements refer to Drg. No. **SC-CAM-00-GF-DR-L-0001** General Arrangement – Public Realm & Landscape, **SC-CAM-00-GF-DR-L-0031** General Arrangement – Areas Of Paved Surface.

All areas of hard landscape constructed as part of the construction Contract are to be subject to a 12 month defects liability period.

## 2.5 Green Roof Areas

Refer to Architect's drawings for location of each of the following areas, which contain hard surfacing and planting areas:

- 2.5.1 Barren Roof
- 2.5.2 Brown Roof
- 2.5.3 Extensive Green Roof
- 2.5.4 Semi-Intensive Green Roof
- 2.5.5 Intensive Green Roof
- 2.5.6 Roof Terrace with timber deck, planting to be containerised

### 3.0 Design Objectives For Landscape Elements

The long-term design objective for the landscape scheme is to provide a series of attractive communal external spaces and gardens. All planting must provide an attractive green setting for the residents. Tree planting provides height and structure within the external landscape and must provide a high quality landscape setting.

The long-term management and maintenance activities set out within this Landscape Management Plan seek to ensure the successful establishment of the external landscape spaces:

- the establishment of healthy **trees** of good form with a flowing branch line, strong leader and clear stems (dependant on species);
- the establishment of **public realm planters** with herbaceous perennial / grass borders free from weeds;
- the establishment of a healthy vigorous **grass** sward, free from disease, fungal growth, discoloration, moss, thatch and weeds with an even smooth surface and neat well-defined edges;
- the establishment of **wildflower / meadow areas** by timeous maintenance and mowing regimes according to design objectives.
- the maintenance of smooth, even pedestrian **hard landscape** surfaces.

### 3.1 Long Term Design Objectives & Management Activities

The construction Contract will allow for a defects liability period to ensure the successful establishment of all landscape elements. All areas of soft landscape installed as part of the construction Contract will be subject to a defects liability period from the date of Practical Completion:

- the Contract will include for a 24 month maintenance and establishment period for all areas of grass, shrubs and hedges from the date of Practical Completion
- the Contract will include for a 24 month maintenance and establishment period for all new tree and hedge planting from the date of Practical Completion

Following the 24 months defects liability period Essential Living Management Company will continue the maintenance of the external landscape spaces to ensure the continuation of the landscape structure and objectives.

## 4.0 Landscape Maintenance Activities Generally

The landscape maintenance works required within the construction Contract are specified in an NBS Landscape Specification issued as part of the contract documents. This is a contractual document between the selected Contractor and Essential Living. The Design & Build Contract identifies a 24 month Maintenance Period following Practical Completion for all areas of grass, shrubs and perennials and a 24 month Maintenance Period following practical completion for all new tree and hedge planting.

The Defects Liability Periods will begin from Practical Completion and will be as follows:

- Trees: 24 months or until leafing out in the third growing season after planting whichever is the later.
- Hedges: 24 months or until leafing out in the third growing season after planting whichever is the later.
- Grass: 24 months.
- Meadows: 24 months
- All perennial planting: 24 months

### 4.1 Summary Of Maintenance Operations Required To Tree, Hedge & Shrub Planting Generally

- Frequency of maintenance visits: weekly throughout the construction Contract maintenance and establishment period.
- Plants/trees/shrubs that have failed to thrive (unless due to theft or malicious damage after completion) during the defects liability period stated above are to be replaced with equivalent plants/trees/shrubs.
- Replacements are to match size of adjacent or nearby plants of same species or match original specification (allowing for growth of originally planted stock) whichever is the greater size.
- Timing of making good: within 8 weeks of notification of failure (subject to planting season restrictions).
- Weed control: Maintain weed free area around each tree and shrub, minimum diameter the larger of 800mm or the surface of original planting pit. Keep planting beds clear of weeds, by hand and mechanical means.
- Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
- Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
- Staking: Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Frequency of checks: 4 weeks.
- Trees: Spray crown when in leaf during warm weather. Carry out in the late afternoon / evening.
- Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape. Prune trees to favour a single central leading shoot, unless type and form is of a multi stemmed or pleached nature.
- Watering: As necessary depending on weather conditions and season, to ensure establishment and proper development at the discretion of the Contractor.

### 4.2 Summary Of Maintenance Operations Required To Grass & Wildflower Meadow Areas Generally

- Frequency of maintenance visits: weekly throughout the construction Contract maintenance and establishment period.
- Make good by re-cultivation and reseeding/re-turfing areas that have failed to thrive (unless due to theft or malicious damage). Timing of making good to be within 8 weeks of notification of defect (subject to planting season restrictions).
- Grass cutting and strimming of edges: maximum growth to be 50mm high, cutting to be to height of 25mm unless otherwise directed. Remove all litter and arisings. Strimming to be at time of each cut, trim all grass edges, including around the base of trees, manholes etc and remove arisings.
- Application of fertiliser for turf: in March, spring turf fertiliser 15:10:10 at 35g/m<sup>2</sup>; and in September, autumn turf fertiliser 5:10:10 at 50g/m<sup>2</sup>.
- Weed control. Keep the sward substantially free of broad leaved weeds by applying a suitable selective herbicide.
- Watering to prevent drying out and to ensure establishment.
- Wildflower / Meadow areas – strimming and removal of arisings during autumn to ensure a regenerating meadow.

#### **4.3 Summary Of Maintenance Operations Required To Areas Of Paving**

- Every month throughout the year sweep all areas of external paving free of mud, grit, debris etc and remove any weeds or litter.
- Throughout the winter months collect leaves and dead-head planting

#### **4.5 Summary Of Maintenance Operations Required To Roof Areas**

- Annually and during the growing season (April to November) inspect the roof areas for self-seeded woody shrubs and remove by hand.
- Annually, at the end of the growing season (around October / November) strim any meadow areas to approximately 60mm sward, remove arisings, to ensure a regenerating meadow (Semi-intensive green roof only)
- Watering to prevent drying out and to ensure establishment (Semi-intensive and intensive roofs only).
- Check gutters / gravel margins for weeds, leaf litter, weeds etc and remove.

#### **4.6 Landscape Management Responsibilities**

The maintenance operations for all areas of new tree planting, hedge planting, shrub planting and grassed areas are to be undertaken by the Contractor as part of the construction Contract for the required defects liability period.

Following the 24 months defects liability period Essential Living Management Company will continue the maintenance operations for the external spaces at 100 Avenue Road (Theatre Square).

#### **4.7 Schedule Of Landscape Maintenance Activities**

Please refer to the 'Schedule Of Landscape Maintenance Activities'. This table provides a summary of the landscape maintenance activities set out within a standard NBS Specification in a single matrix. It sets out the annual time periods during which specific maintenance activities should be undertaken.



## SCHEDULE OF SEASONAL LANDSCAPE MAINTENANCE ACTIVITIES

Maintenance Activity:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Grass, Trees, Hedges &amp; Shrubs:</b>												
Weeding where necessary (including Intensive green roof and containers)												
Litter and debris collection (including Intensive green roof and containers)	x	x	x	x	x	x	x	x	x	x	x	x
Tree, hedge and shrub replacements if necessary.												
<b>Grass &amp; Wildflower Meadows:</b>												
Cutting (Amenity Lawn areas, close mown areas of grass)			x	x	x	x	x	x	x			
Fertiliser application			x						x			
Scarifying areas of grass if necessary									x			
Top dressing and reinstatement of grass if necessary												
Cutting back wildflower meadows including semi-intensive green roofs and removal of all arisings										x		
<b>Shrubs:</b>												
Fertiliser application			x									
Watering (sufficient to prevent wilt) if necessary												
Trimming and pruning (dependant on species) if necessary												
<b>Trees:</b>												
Fertiliser application				x								
Watering (sufficient to prevent wilt) if necessary												
Underground guying to be inspected and maintained if necessary												
Pruning if necessary												
<b>Hedges:</b>												
Fertiliser application			x									
Watering (sufficient to prevent wilt) if necessary												
Cutting (when at sufficient size)							x			x		
<b>Paving:</b>												
Every month through year sweep all areas of external paving free of mud, grit, debris etc and remove any weeds. Remove any surface debris from channels, gully's and slot drains etc.	x	x	x	x	x	x	x	x	x	x	x	x
Every month throughout the year inspect and scarify Self Binding Aggregate surfaces as necessary to provide continuing even and permeable surface.	x	x	x	x	x	x	x	x	x	x	x	x
Removal of leaves, ice and snow as necessary.	x	x	x	x					x	x	x	x

	Hatched areas indicate timescale within which activity is to be undertaken if found necessary.
x	Indicates month activity is to be undertaken.

Note 1: Contract allows for 24 months maintenance and establishment period for all areas of grass and shrubs from date of Practical Completion.

Note 2: Contract allows for 24 months maintenance and establishment period for all new tree and hedge planting from date of Practical Completion.

Note 3: Following the 24 month defects liability period Essential Living Management Company will continue the long-term maintenance of the external spaces.

## 5.0 Specific Maintenance Activities

In addition to the general maintenance requirements set out within Section 4.0 'Landscape Maintenance Activities Generally' the following section lists the specific maintenance requirements for all areas of planting.

Types of planting, individual beds and specific areas of planting are identified within No.'s **SC-CAM-00-GF-DR-L-0081** General Arrangement – Planting Plan. The following points refer to the specific maintenance requirements for these planting types.

### **Area 1 - Tower Frontage**

### **Area 2 - Theatre Lane Planter**

### **Area 3 - Retail Terrace & Park Frontage**

### **Area 4 - Off Site - South Facing Planting Bed**

### **Area 5 - Avenue Road Frontage**

- Throughout the year herbaceous/shrub planting areas should be kept weed and pest free using hand tools and clear of fallen leaves and litter.
- Dead or damaged plants should be pruned regularly and dead flower heads removed as appropriate for each species. Contractor to note that some flower and seed heads retain winter interest. Trimming of dead heading to be agreed with Landscape Architect on site.
- Where necessary, plants should be staked or supported in as unobtrusive a manner as possible.
- After flowering, clip flower heads and remove arisings.
- At the end of the growing season plants should be cut back unless seed heads are to be retained for autumn and winter appeal and plants split when they have become overgrown in size.
- Grasses, Sedges and ferns which form part of the planting mix (refer to Schedule of Planting) should be left for winter appeal and cut back in early spring before new growth commences.
- Climbers to be trained as required to ensure they grow up adjacent fences and walls.

### **Roof Level – Extensive, Semi-intensive & Intensive Green Roofs.**

At installation:

- Watering to ensure establishment (sedum, seed or turf)

Annually:

- Strimming in October, to height of 60mm (sedum & wildflower)
- Removal of cuttings
- Removal of any self seeded woody plants (shrubs) such as buddleja and invasive weed species
- Inspection and clearance of outlets
- Slow release fertiliser application 80g/m<sup>2</sup> (sedum only)

As necessary depending on weather conditions and season:

- Irrigation with hosepipe in extended dry periods of weather during Year 1.
- Litter picking

### **Hedge Planting**

Hedges to be clipped and managed to achieve and retain ultimate height of 1200mm and 800mm. All clippings to be removed from private residential gardens. Any access requirements to private residential gardens to be agreed in advance with property owners.

- Hedges to be irrigated on a weekly basis following planting, and increasingly if weather conditions are dry, sunny or windy.
- Any hedge failures to be removed from site and replaced with a new small tree of matching species and form.

### **Tree Planting - Refer to Drg. No. SC-CAM-00-GF-DR-L-0071**

- Formative and remedial pruning of trees and multi-stemmed trees to remove deadwood.
- Trees to be pruned to maintain shape and density. Clippings to be removed.

- Trees to be irrigated on a weekly basis following planting, and increasingly if weather conditions are dry, sunny or windy.
- Any tree failures to be removed from site and replaced with a new small tree of matching species and form.

#### **Maintenance Activities For Hard Landscape Areas**

- Every month through year sweep all areas of external paving free of mud, grit, debris etc and remove any weeds. Remove any surface debris from channels, gully's and slot drains etc.
- Every month throughout the year inspect hard surfaces and notify Client of any damaged surfaces or trip hazards.
- Seasonal activities to include salting and clearance of snow and ice, and leaves, to footways.
- Litter bins to be emptied on a regular basis. When required bins should be cleaned with a pressure washer and scrubbed down with a detergent and if needed a proprietary disinfectant. Hinges may need to be oiled on a seasonal basis to ensure smooth operation.
- Hardwood timber benches and seats to be checked during visits for maintenance of planted areas. Vandalism and graffiti to be notified to the Client and any remedial measures required must be undertaken in accordance with manufacturers recommendations, potentially including power washing and light sanding. Timber not to be treated with preservative or varnish.