3888 – 19-37 Highgate Road, Landscape Management & Maintenance Plan

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4th August 2023

1.0 Introduction

1.1 This management plan has been prepared by Levitt Bernstein Associates on behalf of GM London Limited to meet the requirements of Planning Conditions and the Landscape Officer for the Highgate Road site. The plan concerns the establishment and on-going maintenance of the landscape over the first 5 years following completion. The plan provides guidance in respect of maintaining high quality landscapes associated with the residential development.

1.2 The Plan should be read in conjunction with the Planting Proposals drawing numbers: 3888-LB-ZZ-00-DP-L-200102 - Planting Proposals - Level 00 ; 3888-LB-ZZ-05-DP-L-200112 - Planting Proposals - Level 05 ; 3888-LB-ZZ-06-DP-L-200122 - Planting Proposals - Level 06 ; 3888-LB-ZZ-07-DP-L-200132 - Planting Proposals - Level 07

2.0 Key Aims

2.1 To keep the space clean, tidy and maintained to a high standard.

2.2 To undertake maintenance periodically with an emphasis on proactive measures to prevent the development of more onerous maintenance issues.

2.3 To ensure the on-going health of all plants maintaining a prolonged contribution to visual amenity and biodiversity.

2.4 To ensure input from suitably trained professionals (maintenance teams are to be well-briefed on contents of this report).

2.5 To monitor effectiveness of Maintenance plan and adapt it as necessary on basis of feedback received.

3.0 Site Layout

The planted areas are located over various floor levels as follows:

- Ground level – Planted beds within private terraces
- 5th Floor – Communal roof terrace with raised planters containing ornamental plants. Also area of biosolar biodiverse green roof amongst PV panels
- 6th Floor - Area of biosolar biodiverse green roof amongst PV panels
- 7th Floor – Communal roof terrace with raised planters containing ornamental plants.

4.0 Soft Landscape

4.1 Generally

The soft planting palette requires well–considered maintenance in order to provide continued impact. Species have been chosen which are not overly onerous in their maintenance requirements or water requirements. This planting design therefore consists of shrubs, perennials and grasses. However, there is an emphasis on appropriate maintenance by plant type and as such, maintenance by staff without horticultural training should be avoided (Refer to Royal Horticultural Society (RHS) for further information).

4.2 Shrub and Herbaceous Planting

Overall the shrub and herbaceous planting adds to seasonal interest and biodiversity as the species proposed are mainly wildlife attracting species.

The ground floor planting consists of two Hebe species which require little if any maintenance beyond clearing of dead branches and replacement of dead specimens should they die.

The planting to roof areas: The areas consist of more drought tolerant and hard-wearing species – Perovskia, Stachys, Rosmarinus and hardy grasses such as Deschampsia planted within raised planters. An emphasis should be placed on retaining the natural form of the species as far as possible through maintenance operations rather than clipping them to any boundary structure or random form.

The Contractor shall remove any dead, dying or diseased plants, which are evident during any maintenance visit. The Operations Manager shall be informed of the location, number and species of all material that has been removed. Any plants that have died shall be replaced during the next planting season. All replacement planting shall be with like species unless otherwise agreed.

All plants shall be checked and if necessary, firmed up in ground.

Any damaged shoots or branches shall be pruned off using secateurs.

The Contractor shall ensure that all shrubs are maintained 90% free of weed growth. This shall normally be achieved by hand weeding.

For the duration of maintenance period a wood chip or bark mulch will be laid around the base of all young plants to suppress weed growth and will be maintained to a depth of minimum 50mm.

These areas are to be kept free of litter with any plant failures to be replaced to match the size and quality of the original species planted. If such failures persist within the initial 5 year maintenance period, attention should be given to those specimens that have established more successfully with substitution of failing plants species as required.

The locations of the roof planting place the plants within exposed locations liable to drying through both sun and wind conditions. It is therefore vital to ensure regular watering to suit the climate conditions throughout the year. Watering of the ornamental shrub planting will be required more frequently during periods of prolonged drought or intense heat. Particular care will be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth. Dry periods at all times of the year will require watering of all roof planters.

Ensure watering of full depth of soil within planters.

4.3 Green Roofs

There are two levels of green roof areas in the form of biodiverse Bio-Solar roofs planted within the areas of Solar Panels – levels 5 and 6.

Living roof maintenance is best carried out twice to four times annually, during springtime and in late autumn, or as required.

Ensure safe access can be gained to the roof and that all relevant health and safety procedures are followed at all times.

Removal of leaf litter which has fallen from any surrounding trees, particularly during spring and autumn. This is to prevent the leaves from smothering the vegetation.

Remove excess bio-mass (invasive and tall species). These should be subsequently removed and disposed of at ground level. Plants which may be deemed to obscure the PV panels from the sun also to be removed. PV panels to be kept clear of plant obstructions.

Check all trims are fixed securely.

Ensure all outlets are unblocked and the roof is able to drain freely. Drainage outlets should be inspected regularly to ensure they are working as designed.

5.0 Hard Landscape

5.1 Hard Surfaces

Sweep clean to give the site a clean and tidy appearance. Leaf fall to be swept regularly.

Inspect all areas of paving and hard surfacing for broken, cracked and damaged units and edgings and replace or repair as required.

De-ice all pedestrian and vehicular areas as required.

5.2 Permeable Pavements

Regular inspection and maintenance is required for the effective operation of pervious pavements. Before handing over the pavement to the client, it should be inspected for clogging, litter, weeds and water ponding, and all failures should be rectified. After handover, the pavement should be inspected regularly, preferably during and after heavy rainfall, to check permeability and to identify any areas of ponding.

Pervious pavements to be regularly cleaned of materials to preserve their infiltration capacity. Sweeping once per year to maintain an acceptable infiltration rate – or more if under large trees. Timing to preferably be during and/or after leaf drop has finished.

A brush and suction cleaner should be used for regular sweeping. Care should be taken to avoid removal of jointing material. Any lost material should be replaced. It is possible to clean the surface using lightweight rotating brush cleaners combined with power spraying hot water.

If the surface has clogged then a more specialist sweeper with water jetting and oscillating and rotating brushes may be required to restore the surface infiltration rate to an acceptable level.

5.3 Surface drains

Surface drains will require regular maintenance to ensure continuing operation to design performance standards. Regular inspection and maintenance is important for the effective operation of drains.

Litter (including leaf litter) and debris removal should be undertaken as part of general landscape maintenance for the site.

6.0 Health and safety issues

- Underground services – underground services present within or in vicinity of planting beds. Consult as-built plans and use caution when excavating by hand or other means.
- Removal of sharps. Care should be taken when maintaining areas in case sharp objects are encountered. Ensure all staff are equipped and trained for handling such waste. A sharps disposal box should be provided for maintenance visits and protective gloves provided. Those collecting, carrying, storing, transferring and disposing of used needles and syringes should be aware of the regulations that govern waste of this type. The Hazardous Waste Regulations from 16th July 2005, together with further changes to waste management, have imposed new requirements on many people who deal with waste associated with drug use. Monitor and report to relevant authorities.
- Operatives are not to climb into or on raised planters in roof areas. All operations are to be carried out a paving finishes level. Should a situation arise where there is not alternative then appropriate measures need to be proposed, approved and monitored during works.
- The site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP's) and Health and Safety Executive (HSE) guidance. The landowner will be responsible for ensuring that risk assessments are undertaken for the site as required under the Management of Health and Safety at Work Regulations 1999, and for monitoring and reviewing the effectiveness of control measures implemented as a result of the risk assessment to ensure their effectiveness

Maintenance schedule

Shrubs, Herbaceous and grasses (Refer to RHS guidelines: http://www.rhs.org.uk/advice)

Items and actions	Frequency	Month 1 - January 12 - December	Year	Notes	Routine (every visit)	As required
Irrigation	Weekly Monthly	1st 3 months following planting 5-10	1 2-5	PLANTS TO BE WATERED FREQUESNTLY TO ENSURE PLANTS THRIVE DURING ESTABLISHMENT. After establishment climate conditions to dictate frequency of visits. Hot and/or dry spells require additional watering. Requirement and method to be kept under review in order to maintain healthy growth, especially when under drought conditions.	√	 √
Pruning, remove cuttings	Yearly	As recommended by RHS for each species.	2-5	By suitably qualified person. - Maintain natural shape. - Keep from encroaching paths.		√
Topsoil top up	Yearly	10	1-5	Only if deemed to be required.		√
Mulch top up	Yearly	10	1-5	To minimum 50mm depth.	√	
Hand weeding	3 times	4-9	1-5			√
Replacement of dead/dying plants	2 monthly Yearly	8-12 10	1 2-5			√
Apply fertiliser	Yearly	10	1-5	Following pruning, only if deemed to be required.		√
Remove leaf litter	Fortnightly	10-12	1-5		√	

Litter Picking	Weekly (other areas)	1-12	1-5	Segregation & recycling as far as possible in accordance with local provision.	√	
Green Roof	2 times	4-9	1-5	Inspect and remove large unwanted species. Keep PVs clear to sun. Inspect drainage outlets. Report on dead areas and make good as necessary.		√
Hard Landscape Elements						
Inspection of footpaths	Monthly	1-12	1-5	Clear any leaf litter, branches and trip hazards	√	
Inspection and repair of footpaths	Yearly	1-12	1-5	Identify and repair as necessary to make good and safe		√
Fencing	Yearly	1-10	1-5	To be inspected during site inspections and any repairs to be carried out as required.	√	
Surface Drains	Monthly 6 monthly	1-12	1-5 1-5	Remove litter and debris from drains and access chambers.	√ √	
Permeable paving	Yearly	10-12	1-5	Brush/vacuum all areas. Test / assess ongoing permeability and make good as necessary		√

Vandalism (hard & soft landscape, furniture, boundaries, etc)

Where vandalism noted by or brought to the attention of the management body, to be rectified promptly with advice sought from relevant body as necessary.

Monitoring, Audit, Consultation

Yearly inspection, ideally with representatives of Client team and Maintenance teams; and in consultation with local residents, to assess performance of maintenance plan and implement changes as deemed (and backed up by empirical data and site findings) to be recommended.