STRATEGY AND SPECIFICATION FOR LANDSCAPE MAINTENANCE HED-1172-LA-902

NEW MONKS FARM DEVELOPMENT

LANCING

NEW MONKS FARM, LANCING

STRATEGY AND SPECIFICATION FOR LANDSCAPE MAINTENANCE HED-1172-LA-902

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Hyland Edgar Driver
Waterloo Court
10 Theed Street
London
England
SE1 8ST
Tel: +44 (0)207 8039636
Fax: +(0)1962 713945

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1.0 INTRODUCTION

1.1 Aims of the Report

This report has been developed to establish management and maintenance objectives for New Monks Farm Country Park, Lancing. The design, management and maintenance aims and intentions outlined will help to ensure that the park is maintained, in the form in which it has been designed, and should be read in conjunction with the NBS maintenance specification in section 4.

1.2 Site Maintenance and Responsibility

The Management Company responsible for maintaining the Country Park will also be responsible for inspecting the site and for keeping a logged record of inspections, faults and rectified works. Responses to any reported incident or vandalism will be commensurate with the level of risk or danger to the public, but will vary from immediate “temporary closure” of the area where the incident and/or vandalism has occurred until such time as the issue has been made safe, to rectification during the forthcoming routine maintenance visit for incidents or vandalism where the level of risk is deemed non-hazardous.

2.0 Hard Landscape Elements

2.1 Generally

Maintenance operations are to be carried out in order to provide a clean and safe environment which encourages public use. For the purposes of this report it is assumed that all the works required by the planning approval have been carried out in accordance with the approved drawings, and that they have achieved Final Completion and are no longer within the defects liability period (where the original contractor would be responsible for rectifying problems).

2.2 Footpaths and surfacing

Maintenance objectives

All hard surfacing to be maintained in a safe and clean condition, free of litter, leaves, algae and other obstructions or hazards. Appearance to be consistent, clean and tidy.

Inspections

A full visual inspection of all hard surfaces is to be carried out by the maintenance contractor at 6 monthly intervals, and on instruction or following reports from the general public or local authority that the footpaths or hard surfaces require repairing. A report of the inspection should be logged. Remedial action to repair damage should be agreed with the Client before commencement.

Maintenance Operations

Surfaces are to be kept free of litter, mud, arisings, deleterious material and hazardous obstructions. Surfaces are to be uniform in appearance and constructed from a homogenous material, free from ruts, grooves, hollows and pot-holes. Footpaths are to be repaired within 1 month of a reported fault, unless the potential hazard is severe in which case the area is to be cordoned off and repaired at the earliest available opportunity. Foundations and surfaces are to be repaired to the original specification, unless otherwise agreed with a service provider or the local authority.

Apply a suitable foliar acting or residual herbicide wherever weed growth occurs along foot paths. Allow recommended period for herbicide to take effect before clearing arisings.

2.3 Fencing, Gates, Railings, Signage, Information Boards and Benches

Maintenance objectives

Gates and railings, signs, information boards and benches are to be maintained in a safe and clean condition. Gates are to be in good working order. Signage and information boards are to be maintained in a safe and clean condition to ensure that information details are clearly visible and contact information available in case of an emergency.

Inspections

A visual inspection is to be carried out at 6 monthly intervals, and on instruction or following reports from the general public or local authority that a fault/damage/vandalism has occurred. A report of the inspection should be logged.

Maintenance Operations

Refer to Section 4 of this report. Gates and railings are to be kept free of litter, deleterious material and hazardous protuberances and in good working order. Surfaces are to be maintained uniform in appearance and coated in a homogenous paint, stain, enamel, or plastic coating in accordance with

the original specification. Gates and railings are to be repaired within 1 month of a reported fault, unless the potential hazard is severe. In which case the area surrounding the fault should be cordoned off and the fault repaired at the earliest available opportunity. Faults/damage is to be rectified with the original materials and to form a homogenous surface appearance. Signage and information boards are to be kept clean and any vegetation cut back to ensure that the information is clearly visible. Benches are to be inspected for damage and any graffiti removed. Dust and wash down signs and benches and dust down railings and gates to remove cobwebs, dirt and debris quarterly.

3.0 Planting, soft landscape and watercourses

3.1 Generally

Planting and trees are to be maintained in accordance with the NBS Landscape Specification Section Q35 (appended as section 4 of this strategy). 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.

Watercourses are to be maintained in accordance with the Environment Agency; Guidance to help you maintain your watercourse in River Maintenance Pilot Areas, 2014 and the latest version of the 'New Monks Farm Watercourse and Flood Defence Bund Management Plan' as produced by CEP.

Operational areas must be safe for users of the site, particularly when working overhead on trees, watercourses or with machinery or chemicals. Operatives must be trained and where appropriate qualified to carry out the operations which they are assigned.

3.2 Approvals

Work to trees is to be carried out by qualified arboriculturalist, and all work to trees covered by Tree Preservation Order or Planning Condition (trees which replaced or supplement pre-existing trees) must only be carried out after the Local Authority's Trees Officer's approval has been given.

Before work on watercourses commences ensure planned work will not impact upon protected wildlife species or cause the spread of invasive plant species. If unsure about the presence of protected or invasive species consult with relevant authority before work commences.

Local land drainage byelaws may require consent for activities on an ordinary watercourse. Contact the Lead Local Flood Authority (LLFA) or where applicable the Internal Drainage Board (IDB) before work commences.

3.3 Maintenance objectives

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, with dense and bushy growth and full cover of each bed's given area. Mulches are to be topped up to a full depth (75mm). Elevated edges to surfaces (such as the timber edge to footpath) must be kept clearly visible at all times.

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 in Section 4.

Watercourse are subject to a systematic annual programme of inspections, recording and maintenance operations in order to maintain them in a safe and ecologically rich state.

3.4 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.

3.5 Operations

Refer to the following section.

4.0 NBS Landscape Maintenance Operations

Q35 Landscape Maintenance

To be read with Preliminaries/ General conditions, Refer to HED-1172-LA-901_Landscape Specification

GENERALLY

105A MAINTENANCE OBJECTIVES TUSSOCK/WILDFLOWER GRASSLAND AREAS
- Location: As indicated on Planting Plan: HED-1172-LA-004
  - Duration: Until 2 years post Practical Completion
- Aims: Establish and maintain colourful flowering sward of native perennial wildflower meadow and tussock grasses planting
- Restrictions: n/a
- Results: As scheduled

106A MAINTENANCE OBJECTIVES WILDFLOWER MEADOW MIX RE1
- Location: As indicated on Planting Plan: HED-1172-LA-004
  - Duration: Until 2 years post Practical Completion
- Establish and maintain biodiverse flowering sward of wildflower meadow and grasses planting
- Restrictions: n/a
- Results: As scheduled

107A MAINTENANCE OBJECTIVES WATER EDGE MIX
- Location: As indicated on Planting Plan: HED-1172-LA-004
  - Duration: Until 2 years post Practical Completion
- Aims: Establish and maintain sward of native wildflower and grasses along 1:3 banks of watercourses
- Restrictions: n/a
- Results: As scheduled

108A MAINTENANCE OBJECTIVES NATIVE HEDGEROW
- Location: As indicated on Planting Plan: HED-1172-LA-004
  - Duration: Until 2 years post Practical Completion
- Aims: Establish and maintain dense native species hedge to provide visual screening and habitat creation
- Restrictions: n/a
- Results: As scheduled

110 NOTICE
- Give notice before:
  - Application of herbicide
  - Application of fertilizer
  - Watering
  - Each site maintenance visit
- Period of notice: 7 days

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

155 WATERING
• Supply: Non-potable water from on-site storage tank - via site irrigation system and manual watering
• Quantity: Wet full depth of topsoil as required to promote healthy establishment of planting
• Application: Do not damage or loosen plants
• Compacted soil: Loosen or scoop out, to direct water to root zone
• Frequency: As necessary for the continued thriving of all planting

160 WATER RESTRICTIONS
• General: 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

175 DISPOSAL OF ARISINGS
• General: Unless specified otherwise, dispose of arisings as follows: Remove to recycling facility

180A CHIPPING OR SHREDDING
• General: Permitted

190 LITTER
• Extraneous rubbish not arising from the contract work: Collect and remove from site

195 PROTECTION OF EXISTING GRASS
• General: Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass

195A PROTECTION OF GRASS
• General: Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass

197 CLEANLINESS
• Soil and arisings: Remove from hard surfaces
• General: Leave the works in a clean, tidy condition at completion and after any maintenance operations

GRASSED AREAS

220 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

226 TREE STEMS
• Precautions: Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree
- Operations close to stems: Complete using hand tools

250 LEAF REMOVAL
• Operations: Collect fallen leaves
• Special requirements: None
• Disposal: Remove from site for recycling

272A MAINTAINING GRASSED AREAS WITH PERENNIAL AND ANNUAL WILD FLOWERS
• Generally: As Q30

275 CUTTING WILD FLOWER MEADOWS
• Times of year/ Frequency of cutting: As instructed
• Height of cut: 75 mm in tussock/wildflower grasslands and chalkland wildflower meadow areas;
• Arisings: Leave for 2-3 days after cutting then remove

320A LEVELLING HOLLOWS AND BUMPS IN TURF
• Standard: To BS 7370-3, clauses 12.4 and 12.5 as adapted to meadow conditions

340A SPOT WEEDKILLING IN MEADOW AREAS
• Herbicide: Contractor's choice
• Operations: Spot treat
- docks (Rumex spp)
- injurious weed species listed in the Weeds Act 1959 and Wildlife and Countryside Act 1981
- Japanese knotweed (Fallopia spp)
- nettles (Urtica spp)
- willowherb (Epilobium spp)
- Other species as directed

345 CONTROL OF JAPANESE KNOTWEED
• Operations: Spot treat in June and September during suitable weather conditions and when plants are growing vigorously
• Herbicide: In accordance with the Environment Agency 'Code of Practice for the management, destruction and disposal of Japanese knotweed'
• Application: Brush applied
• Arisings: Remove

SHRUBS/TREES/HEDGES

500 ESTABLISHMENT OF NEW PLANTING
• Duration: Until 2 years post Practical Completion
• Weed control:
- Method: Keep planting beds clear of weeds by hoeing and screefing and maintaining full depth of mulch
- Area: 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
• Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch
• Watering: As Q31

510 TREE STAKES AND TIES
• Inspection/ Maintenance times: Monthly and immediately after strong winds
• Stakes:
- Replace loose, broken or decayed stakes to original specification
- If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie
• Ties: Adjust, re-fix or replace loose or defective ties, allowing for growth and to prevent chafing
- Where chafing has occurred, reposition or replace ties to prevent further chafing
• Removal of stakes and ties: When instructed
- Fill stake holes with lightly compacted soil

520 REFIRMING OF TREES AND SHRUBS

• 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 re-firm

525A TREE WRAPPING

• Adjust, re-fix or replace to original specification and to prevent chafing

540 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

545 PRUNING OF EXCESSIVE OVERHANG

• Timing: As instructed
• Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires
• Special requirements: None

555 PRUNING TREES AND SHRUBS

• Standard: To BS 7370-4.
• Special requirements: Growth retardants not permitted

570A 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
• Whips or feathered trees: Do not prune
• Pollards: Re-pollard back to knuckle as instructed
• Operatives: Member of the Arboricultural Association

615A TRIMMING NATIVE HEDGE

• Operations: Trim to instructed height and profile using suitable mechanical cutters

620 REMOVAL OF DEAD PLANT MATERIAL

• Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems

630 DEAD AND DISEASED PLANTS

• Removal: Within one week of notification
• Replacement: As agreed

635 REINSTATEMENT OF SHRUB/ HERBACEOUS AREAS

• Dead and damaged plants: Remove
• Mulch/ matting materials:
  - Carefully move to one side and dig over the soil, leaving it fit for replanting
  - Do not disturb roots of adjacent plants
• Replacement plants:
  - Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater
  - Additional requirements: None
• Dressing: Slow release fertilizer:
  - Type: As Q31
  - Application rate: As Q31

645 WEED CONTROL GENERALLY

• Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 100 mm high. No weed to be allowed to set seed. All areas to be completely weed free at practical completion
• Adjacent plants, trees and grass: Do not damage

650 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

657 HERBICIDE TO KILL REGROWTH

• Type: Suitable foliar acting herbicide to kill regrowth
• Timing: Allow recommended period for herbicide to take effect before clearing dead weeds

680 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

690 MAINTENANCE OF LOOSE MULCH

• Thickness (minimum): As Q31
  - Top up: Twice per year until Practical Completion
• Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area
• Weeding: Remove weeds growing on or in mulch by hand weeding or herbicide if previously agreed

700 SNOW REMOVAL FROM SHRUBS/ TREES
- Standard: To BS 7370-4
- Plants subject to snow removal: As instructed
- Timing: When instructed

705A WINTER LEAF REMOVAL
- Operations: Collect accumulations of drifted leaves from the vicinity and from planting beds
- Arisings: Remove to recycling facility

TREE WORK

810 TREE WORK GENERALLY
- Identification: Before starting work agree which trees, shrubs and hedges are to be removed or 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

815 ADDITIONAL WORK
- Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected

820 PREVENTION OF WOUND BLEEDING
- Standard: To BS 3998, clause 8

825 PREVENTION OF DISEASE TRANSMISSION
- Standard: To BS 3998, clause 9 and Appendix B

845 CROWN LIFTING
- Clearances: Remove branch systems to give clearance
  - Height: As instructed
- 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

865 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
- Liquid or flux oozing from apparently healthy bark: Give notice

910A FINE HOGGIN AREAS
- Herbicide: If required, apply a suitable foliar acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings
- Surfaces: Remove litter, leaves and other debris
- Re-surfacing: Apply additional dressing to repair scours, pot holes, irregularities and hollows. Re-dress surface prior immediately to practical completion

WATER WORK

Any work relating to the functionality of the watercourse will need to be carried out in line with the latest 'New Monks Farm Watercourse and Flood Defence Bund Management Plan' as produced by CEP.

HARD LANDSCAPE AREAS/FENCING

900 SNOW CLEARANCE

- Clearance: When instructed.
- Deicing: To roads and footpaths.
  - Material: Rock salt to BS 3247.
  - Timing: When the road surface temperature falls to +1°C with forecast of freezing conditions and ice forming.
  - Application rate: Spread evenly at a rate of As manufacturer's recommendations.

910A FLEXIBLY LAID PAVED SURFACES, STEPS, RAMPS AND LANDINGS

- Herbicide: Apply a suitable foliar acting or residual herbicide wherever weed growth occurs. Allow recommended period for herbicide to take effect before clearing arisings.
- Hard surfaces: Remove litter, leaves and other debris.
- Surface gutters and channels: Remove mud, silt and debris.
- Drainage gullies: Empty traps and flush clean.
- Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
- Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
- Stain removal: In accordance with BS 7370-2, table 4.

920A FENCING AND RAILINGS

- All fences, gates and railings: Inspect and repair to maintain condition and protection against corrosion

926A BENCH SEATS

- Benches to be maintained safe, clean, free of graffiti, chewing gum, algae and other hazards.
- Inspect condition of timber slats and concrete bases on each visit. Advise of any defects and where these affect safety, prevent access to the bench with temporary fencing panels if required.

930A GRAFFITI REMOVAL

- Method: Submit proposals.
- Subsequent treatment: Transparent, two part, anti-graffiti coating to concrete, natural and reconstituted stone surfaces.
  - Finish: Matt.

5.0 Long Term Maintenance of Ecological Habitats

5.1 Tussocky and wildflower meadow areas

Tussocky grassland area – EM10

- Maintenance is to take place every 3 years on a rotational basis, ensuring that no more than half the area is cut in any one year, to ensure reptile are protected and areas of undisturbed refuge remain at all times.
- Areas to be cut between October and February to a height of approx. 100mm
- Maintenance required to control scrub and bramble development.
- Remove all clippings from site.

Wildflower Meadow – RE1 and species rich grassland – EG22c

- Maintenance is to take place annually, with areas to be cut to 70mm.
- Areas to be cut after seed has set in September/October, clippings are to be left for 24 hours before removing to allow seeds to drop
- Any invasive perennial weeds are to be removed through spot weeding/ or pulling by hand.
- Remove all clippings from site

Hedgerow meadow mixture – EH1

- Maintenance is to take place annually, with areas within 2m to the hedgerow to be cut every 3 years on a rotational basis (for further details refer to Tussocky grassland area maintenance).
- Areas outside the 2m buffer to be cut annually in line with the wildflower meadow maintenance.
- Remove all clippings from site

Water edge mix – EP1

- Maintenance is to take place every 2-3 years on a rotational basis, working from one bank each year.
- Areas to be cut between September and November to a height of approx. 100mm
- Care must be taken when using machines and heavy equipment to avoid damaging soils structure and vegetation
- Dense stands of single species should be thinned to approx. 50% to create a varied habitat
- Any invasive perennial weeds are to be removed through spot weeding/ or pulling by hand.
- Remove all clippings from site

5.2 Mown grassland areas

Species rich grassland area – EG22c (mown paths only)

- Maintenance is to take place every 10-14 days during the growing season (usually March to October)
- Areas to be cut to 40mm
- Any invasive perennial weeds are to be removed through spot weeding/ or pulling by hand.
- Remove all clippings from site

5.3 Hedgerows

Native hedgerows

- Maintenance is to take place every 2-3 years, with hedgerows to be cut to a height of 2m.
- Hedgerows are to be cut outside the bird nesting season between September and January.
- Remove all clippings from site

5.4 Carr planting

- Maintenance is to take place every 2-3 years, through selective thinning creating varying habitat.
- Invasive weeds are to be removed through spot weeding/or pulling by hand.
- All maintenance works are to be carried out outside the bird nesting season between September and January
- Remove all cuttings from site

5.5 Tree planting (existing and new)

- Trees should be inspected annually by a trained arboriculturist
- Any tree works identified should be carried out in line with current British Standard (BS3998:2010).
- Where possible tree debris/cuttings will be retained on site to be added to existing log piles creating valuable habitat. If not possible or required to be retained cutting should be taken from site.

5.6 Other ecological enhancements

Wildlife boxes

- Wildlife boxes, such as bird and bat boxes, will be maintained in line with suppliers recommendation
- Boxes to be replaced if not fit for purpose