

Proposed Development Dunsbury Hill Farm, Havant



Landscape Management Plan

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Document Summary

This Landscape, Open Space and Ecology Strategy and Management Plan has been written by The terra firma Consultancy to provide a comprehensive vision for the creation and management of the external areas of the proposed development and adjacent fields at Dunsbury Hill Farm in response to planning conditions imposed by Havant Borough Council. Specialist ecological advice has been provided by Atkins (Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase March 2014) – Appendix A) with regard to managing ecologically sensitive habitats and this report should be read in conjunction with their recommendations.

This document and the accompanying plan 1569-1009 Landscape, Open Space and Ecology Strategy;

- provisions for publicly accessible open space
- a monitoring and review framework
- an ecological mitigation and management plan, and
- detailed plans and methods for establishment of a Habitat Creation Area, including its subsequent management and maintenance

This document should also be read in conjunction with detailed plans for the highways landscape 1569-1001, 1002, 1003, 1008.

This document outlines design and management principles and objectives and then gives more detailed guidance for the maintenance of the site's green infrastructure so as to ensure the long-term sustainability of the proposed and existing landscape framework as an amenity and biodiversity resource.

It is proposed that a management company be formed to co-ordinate landscape maintenance works to unadopted, public areas of the external environment of the development and that regular site visits be carried out by the management team to review work being undertaken and discuss and agree on-going programme and any changes to requirements with those carrying out the maintenance.

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1 Introduction

- 1.1 This document has been prepared by The terra firma Consultancy Ltd. The Strategy outlines design and management objectives and then gives more detailed guidance for the maintenance of the site's green infrastructure and publically accessible open spaces.
- 1.2 The extent of the Dunsbury Farm site is indicated on the accompanying plan 1569-1009.
- 1.3 Clauses have been written as fully as possible to allow for detailed landscaping proposals that are yet to be prepared for individual places.
- 1.4 A management company shall be formed to co-ordinate landscape maintenance works to unadopted, non-private areas of the external environment of the development. Where reference is made within this document to the 'Management Team', this shall comprise representatives from the aforementioned management company and external landscape and ecology consultants where required.
- 1.5 For ease of reference, this management plan uses the term 'Landscape Contractor' to describe any person, company or group of companies that carries out the landscape maintenance works, whether directly employed by the management company or an external contractor.
- 1.6 An initial site visit shall be undertaken by the management team and the landscape contractor to establish limits of acceptable change for each habitat type and discuss how these should evolve. Input may be provided by consultation with stakeholders and it may also be appropriate to produce additional detailed plans.
- 1.7 Regular site visits shall be carried out by the Management Team to review work undertaken to date and discuss and agree on-going programme and any changes to requirements. These should occur on a minimum quarterly basis in years 1-5 as the implemented landscape works establish following agreed handover from the construction teams at the end of an initial 12 months maintenance / defects liability period.

2 Background and history of scheme

- 2.1.1 This strategy and management plan has been produced as part of work to discharge conditions of the planning permission (application number: APP/12/00338 granted on 19/02/2014) comprising a part outline application relating to development for employment uses and a hotel with conference facilities and a part detailed application for a new access link road with bus gate to Woolston Road; together with landscaping, infrastructure and associated works.
- 2.1.2 As part of the hybrid planning application (March 2012), various studies were undertaken including a landscape and visual impact section of an environmental impact assessment, tree survey, ecology survey and protected species surveys and mitigation plans.

3 Design Intent and Realisation

3.1 Existing site at conception of scheme

- 3.1.1 The site comprises a 39 hectare area of land located just east of the A3(M), north east of the B2150, containing a series of extensive open fields enclosed with established hedgerows and woodland (including SINC woodland). It is dissected across the north east corner by Park Lane Bridleway which connects Waterlooville with the Leigh Park estate and runs south-east to north-west across the site and crosses the A3 (M) via a footbridge.
- 3.1.2 The site gently rises from 20 metres AOD in the south to approximately 45 metres AOD in the north and falls away to the east down towards the wooded enclosures around Hermitage Stream and down in the south west towards the A3 (M) embankment. An exposed high point or ridgeline coincides along Park Lane Bridleway. Land to the east, adjacent to Calshot Road and Prospect School is open, levelling out to the Leigh Park area at circa 15m AOD.



View north from the B2150



View east from the B2150



3.2 Design strategy

3.2.1 This design strategy aims to draw together the strategic objectives of the Design and Access Statement March 2012 by Atkins and the Environmental Statement Non-Technical Summary March 2012 by Atkins and should be read in conjunction with those documents.

3.3 The principle objectives are summarised as below:

Design principles:

- To create a sense of character and of place
- To respond positively to topography and landscape
- To create legible design to aid identity and movement and demarcate public and private areas

To developed areas:

- Create new wetlands
- Create attractive private and public sunlit places
- Use 3D landmarks, gateways and edges to aid legibility
- Treat the following high profile areas differently;
 - Site entrance/link roads
 - Hotel
 - Plot entrances
- Create communal areas between buildings for staff use and ensure they relate positively to buildings
- Use planting within car parks to prevent 'drive thru'

'Protect and connect'

- Ensure existing green infrastructure is protected and connected including:
- Hedgerows – thicken and link (including to connect Cherry Tree Row with Beech Road East via Dormouse underpass)
- Safeguard Sites of Importance for Nature Conservation (SINCS)
- Potentially aim to create link between proposed Havant Thicket Reservoir and Dunsbury Hill Farm
- Create 'woodland fingers' stretching east from Beech Wood
- Maintain a 150-180m min undeveloped buffer to A3(M)
- Replacement oak planting in vicinity of Neville's Park East / Neville's' Park

Access

- Manage some woodland for public access
- Improve management to open space to east of the site

Habitat Creation and Mitigation

- Plant buffers to woodlands and hedgerows (predominantly blackthorn/hawthorn mix and including dormouse-friendly species)
- Create additional wetlands including seasonal scrapes and SUDS
- Visual connections/mitigation (of appropriate form and scale) to Bridleway 123 (Park Lane) and to new footpaths/cycleways
- Habitat Creation Area to the north of site comprising:
 - Mosaic of woodland edge
 - Species rich grassland (possibly transplanted from Hotel footprint)
 - Scrub and scrapes
- New aquatic planting to SUDS to benefit fauna
- Mitigate views from Calcott and Ramsdale Roads and new Woolston Rd development
- Install dormouse crossing to bridge over Hermitage Stream
- Provide bat and dormouse boxes
- Create SUDS to drain car parks and hard standing

Water

- Create new wetlands and scrapes
- SUDS to drain to Hermitage and Park Lane Streams via SUDS
- SUDS to car parks and hard standing
- SUDS outside development plots to be managed by retention ponds
- De-canalise Hermitage Stream

Planting

- Use of blackthorn/hawthorn etc. hedge/shrub mix
- Locally appropriate trees species to integrate woodland
- 1.2m beech hedges to link road and plot boundaries
- Buildings set back from tree planting to max solar gain and prevent over shadowing
- Use of deciduous trees near building for summer shade and winter solar gain
- Street and car park trees to provide shelter and shade
- Advanced woodland planting within buffer to shelter development from prevailing wind

Management and access

- Management and governance structures to ensure maintenance of features and SUDS and to ensure community engagement and consultation. E.g. Trusts etc.
- SUDS to provide biodiversity and recreation opportunities and a high quality environment
- Woodland cover managed to diversify habitat, improve accessibility and potentially create a north-south walk via Neville's Park
- Improved open space management to Eastern boundary with Leigh Park for recreational purposes

3.4 The site layout includes the following principal components:

- Bus link
- Footpath / cycleway circulation
- Open Space
- Setting for employment / hotel use
- Hermitage stream rehabilitation
- SUDS system

4 Objectives

4.1 The overall objectives for the management works are as follows:

- 4.1.1 To realise the vision of the development's landscape design with the long term provision of high quality Green Infrastructure for the new community at Dunsbury Hill Farm and the wider community of Waterloooville and Leigh Park.
- 4.1.2 To sustainably manage the land and all its resources; soil, water, flora and fauna, in balance for the benefits of both human use and wildlife.
- 4.1.3 To maintain in a favourable condition and enhance the important ecological habitat features including the SINC's, meadows and rough grasslands, boundary woody vegetation and scrub, wetlands and Hermitage Stream, and mature and veteran trees on site.
- 4.1.4 To ensure the thriving of existing vegetation, successful establishment of all new planting and the long term health of all landscape elements for the benefit of the users and the wildlife (flora and fauna).
- 4.1.5 To maintain a crisp and tidy finish to all elements adjacent to building curtilages, access, car parks, entrances and other hard surfaces, so creating a high quality living environment.
- 4.1.6 To ensure best land management and health and safety practices at all times.
- 4.1.7 To continue improvements into the future through thorough and creative management.

5 Provisions for publicly accessible open space

- 5.1.1 Require further information but potentially;
 - Land to east of site adjacent to Leigh Park
 - Habitat creation area
 - Areas for workers' recreation between buildings
 - Cycleways and footpaths - existing and proposed
 - Accessible woodland

6 Monitoring and Review Framework

6.1 Maintenance

- 6.1.1 In order to monitor standards and make amendments where required, it is expected that the Management Team shall review the management work (with reference to this document) at least twice per year with the Landscape Contractor. Progress shall be measured against the activities checklists and programmes found in the Appendices. Consideration shall also be given to whether the overall objectives of this management plan (found in section 4) are being achieved.
- 6.1.2 All plant failures shall be logged by the Landscape Contractor and reported to the Management Team at the first opportunity. It is anticipated that replacement planting shall be carried out during the next planting season, with replacement shrub and groundcover plants to match size and species of adjacent plants unless specified otherwise. If the originally specified species is found to be unsuitable for the current situation, then an appropriate alternative may be selected. If perennials are to be replaced, it is acceptable to introduce new planting at the originally specified size.

- 6.1.3 Refer to appendix A Atkins (Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase March 2014, section 5, for monitoring of ecological features.

6.2 Design

- 6.2.1 In order to monitor standards and make amendments where required, it is expected that the Management Team shall review the management work (with reference to this document) at least twice per year with the Landscape Contractor. Progress shall be measured against the activities checklists and programmes found in the Appendices. Consideration shall also be given to whether the overall objectives of this management plan (found in section 4) are being achieved.
- 6.2.2 An annual review of the use of the site is to be carried out by the Management Team, looking at the following (as appropriate):
- Pedestrian routes and desire lines
 - Seating provision
 - Litter
 - Neighbouring properties and uses and any problems arising (such as littering or dangerous trees)
 - Wildlife impact
 - H&S management and duty of care
- 6.2.3 It is anticipated that following the review of the use of the site, any issues or changes that are impacting on the landscape shall be accommodated, either through design proposals or by approach to the appropriate body or person by the management company.
- 6.2.4 It is suggested that the management company discuss any significant changes to the site layout and management regime with the Landscape Architect and, where appropriate, the Local Authority.

7 Ecological Mitigation

- 7.1.1 Measures for the mitigation of effects on ecological assets have been set out in Atkins Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase) March 2014, see Appendix 1. These measures have been incorporated into landscape proposals for the road (terra firma drawings 1569-1001, 1002, 1003, 1008) and 1569-1009 Landscape, Open Space and Ecology Strategy.
- 7.1.2 Ecological mitigation measures include the following:
- Transplanting hotel footprint turf (where a suitable location is available)-ecologist to advise
 - Buffers to woodland SINCS
 - Strengthen and buffer to hedgerows – Connect and Protect
 - Transplant hedgerow to be moved
 - Replacement Oak Trees to Neville's Park
 - Additional trees to Edge of Beech Woods at Habitat creation area
 - Bat boxes, bird boxes, dormouse nest boxes
 - Hermitage Stream realignment
 - Dormouse crossing point
 - Green fingers heading eastwards from Beech Wood into individual parcels
 - Bat hop-overs
 - Habitat Creation Area (see below)

8 Health and Safety

8.1 Safe working in or near water

- 8.1.1 The Landscape Contractor is fully accountable for demonstrating statutory compliance and in particular comprehensive risk assessment for all works and undertakings in respect of the provision of landscape management. The Landscape Contractor is responsible for ensuring Risk Assessment and arising Method Statements are compliant with current best practice.

For example: All workers must exhibit due care and attention when working in or near water.

- 8.1.2 A full risk assessment must be carried out by the Landscape Contractor to ensure all hazards are identified. This shall include identification of potential hazards including, but not limited to, working in fast flowing water, use of suitable footwear and protective clothing, identification of underwater obstacles, risk of hypothermia, risk of drowning and quality of water. It should be noted that:

- Operating in or near to flood water can bring additional hazards not normally encountered in an everyday working environment. Fast flowing water is particularly hazardous as the weight of water exerted in these conditions will be extreme. Walking into, wading or driving through fast flowing water carries a significant risk that the person will be swept away with the force of the current.
- Following flooding staff should not wade through any water until a thorough survey for hidden obstacles has been carried out.
- Dirty contaminated water can also mask ditches, hollows and areas of deeper water. These types of situation represent an unseen hazard even in the shallowest of waters.
- Floodwater will contain substantial amounts of debris which could cause entrapment.
- Health hazards from water borne contaminants will be present in floodwater. These hazards may derive from overflow from sewage treatment plants, or from nearby agricultural or industrial premises.
- To minimize risk to infection, staff should undertake basic precautions such as:
 - a) Covering cuts and broken skin with waterproof plasters;
 - b) Wear protective clothing;
 - c) Wash hands after handling any animal or contaminated clothing or other material;
 - d) Wash hands before eating or drinking.

- 8.1.3 Risk Assessment Compliance Review, Audit and Action Plans shall be drawn up and a responsible person identified by the Management Team.

- 8.1.4 Access points shall be identified by workers to allow safe entry and exit to the working area.

8.2 Chemical Use

- 8.2.1 Use of pesticides and herbicides are covered by the following legislation:
- The Food and Environment Protection Act 1985 (FEPA)
 - Control of Pesticides Regulations 1986 (CoPR) and the CoPR (Amendment) Regulations 1997 (SI 1997/188)

- The Plant Protection Products Directive (91/414/EEC) and The Plant Protection Products Regulations 2005
 - The Dangerous Preparations Directive (99/45/EEC)
 - Control of Substances Hazardous to Health 1988 (COSHH)
- 8.2.2 CoPR specifically requires any person who uses a pesticide in a commercial undertaking to be properly trained and to hold a 'Certificate of Competence' in the safe use and handling of pesticides.
- 8.2.3 Anyone who **uses** a professional pesticide / herbicide product in the course of their business or employment may not use that pesticide or give instruction to others on their use unless they have received adequate instruction, training and guidance in their correct use.
- 8.2.4 Anyone who does not hold a Certificate of Competence but if required to can only **use** pesticides/herbicides if they are supervised by someone who does hold a certificate.
- 8.2.5 Obtaining Certificates of Competence is the responsibility of the Landscape Contractor and he is required to demonstrate adequacy of training to use specific types of equipment even if under the legislation you are not required to have one.
- 8.2.6 Currently, the recognized Certificates of Competence for the use of pesticides are issued by the National Proficiency Tests Council and the Scottish Skills Testing Service.
- 8.2.7 A full Risk Assessment shall be undertaken and documented for each planned chemical application.

8.3 Training

- 8.3.1 All staff employed should be trained or in training at a minimum standard of NVQ Level 1. On-going NVQ training should be available and encouraged to all staff. Copies of training records shall be available for inspection if required.
- 8.3.2 A minimum of one First Aid trained staff member should be present on site at all times during working hours when management operations are taking place.

8.4 Incidents

- 8.4.1 In the event of an incident occurring during the carrying out of the landscape management works this would be required to be reported to the Management Team. Any incident shall be reported immediately and emergency services contacted if necessary. The Landscape Contractor shall report immediately to the designated emergency contact point if required.

9 Procedures for external contractors

9.1 Welfare facilities

- 9.1.1 These shall be discussed and confirmed at initial site meetings.

9.2 Storage of materials and parking

- 9.2.1 These shall be discussed and confirmed at initial site meetings.

9.3	Location of underground services
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- 9.3.1 Records of all underground services should be kept by the Management Team, which should be made available to contractors and checked prior to any excavations taking place.

9.4	Contractor emergency procedures
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- 9.4.1 In the event of an incident occurring during the carrying out of the landscape management works this would be required to be reported to the Management Team. Any incident shall be reported immediately. The Landscape Contractor shall report immediately to the designated emergency contact point. Emergency services should be contacted by the Landscape Contractor.

11 Management Performance specification - General actions

- 10.1.1 The Landscape Contractor shall produce Method Statements for all operations including the composting of material (if applicable).
- 10.1.2 The Landscape Contractor is expected to adopt a pro-active approach to management generally, and bring any issues requiring attention and action to the notice of the Management Team.
- 10.1.3 A suitably qualified ecologist shall be consulted in relation to specialist habitat and species management as required.
- 10.1.4 All materials and workmanship shall be to the highest possible standards in accordance with relevant good practice, as described by British Standard documentation.
- 10.1.5 The Landscape Contractor shall ensure that best working practices are complied with and that all staff employed are trained or are in training at a minimum standard of NVQ Level 1 (refer to section 8.3).
- 10.1.6 All operatives must be appropriately skilled and experienced for the type and quality of work, especially where COSHH is applicable.
- 10.1.7 Work is only to be carried out while soil and weather conditions are suitable.
- 10.1.8 Only machinery and tools suitable for site conditions and the work to be carried out shall be used. Hand tools shall be used around existing trees and in confined places. Nylon filament rotary cutters or other mechanical tools shall not be used closer than 100mm to the stem of any tree or plant.
- 10.1.9 All grass cutting machinery shall be well maintained and correctly adjusted to give a clean and even cut. Each machine shall be appropriate to the management plan requirements.
- 10.1.10 Any ground disturbed during maintenance operations must be made good to original condition.
- 10.1.11 All woody or vegetative arisings shall be composted on site or removed from site if composting facilities are not available. All grass cuttings may be let fly as appropriate.
- 10.1.12 Soil and all other arisings shall be removed from hard surfaces and the area left in a clean and tidy condition after maintenance operations are complete.
- 10.1.13 All litter shall be collected from all soft landscape areas and carted offsite. No burning on site is allowed.
- 10.1.14 Mulch within planted areas shall be topped up each spring to maintain a continuous 75mm settled depth. Any additional material shall match existing mulch.
- 10.1.15 Mulch from formal areas spilling onto adjacent areas shall be swept up and replaced. If not contaminated with weeds or rubbish, this may be returned to planted/mulched areas. Remove weeds growing on or in mulch by hand weeding or use of herbicide.
- 10.1.16 The Landscape Contractor shall ensure regular feeding of all grass and plants (except trees) in formal areas of the development using a suitable and approved slow release fertiliser.

- 10.1.17 All plants and planting beds in formal areas shall be maintained as weed free at all times. Planting beds shall be kept clear of all weeds, including roots, by hand using hoes, trowels or forks, taking care to remove not more than a minimum quantity of soil and causing minimum disturbance to trees, plants, mulched surfaces and bulbs and leaving the area in a neat, raked, clean condition.
- 10.1.18 All plants and planting beds in formal areas shall be maintained as pest and disease free at all times. The Landscape Contractor is expected to adopt a pro-active approach to pests and diseases and treat accordingly. Any plant losses as a result of pest and disease infestation shall be reported to the Management Team and replacement planting discussed.
- 10.1.19 Chemicals are only to be used for weed, pest and disease control or other uses within formal areas and where specified and approved by the Management Team. All work and workmanship shall comply with latest COSHH regulations. Where work is near to water, drainage ditches or land drains it must comply with DEFRA / Environment Agency guidelines for use of chemicals. Where scheduled or instructed the Landscape Contractor shall apply a suitable foliar acting herbicide to kill regrowth and allow the recommended period before clearing arisings.
- 10.1.20 Dead plants within formal areas shall be removed and where deemed appropriate to the design of the landscape or required for functional purposes (i.e. screening), gaps should be filled during the next planting season using an appropriately sized replacement. Dead foliage, wood and flowers shall be removed as far as is practical, with priority given to areas subject to closest and heaviest pedestrian and vehicular traffic.
- 10.1.21 Trodden or otherwise compacted soil surfaces shall be pricked up using a fork to aerate the soil of root areas. Beds shall be forked over as necessary to keep soil loose, with gentle cambers and no hollows, taking care not to reduce depth or effect of mulch. Damage to plants and their roots shall be avoided.
- 10.1.22 All vegetation shall be pruned as necessary to avoid excessive overhang encroaching onto grassed areas, paths, roads and signs, or obstruction of pedestrians, vehicles, lighting, security cameras and sight lines.
- 10.1.23 All planted areas shall be checked for loose plants, especially after periods of high winds. Any plant found to be loose shall be re-firmed by carefully treading in without causing damage to the plant.
- 10.1.24 Watering of grass and planted areas shall not generally be carried out, with the exception of newly installed landscaping within formal areas, which shall be watered to ensure successful establishment, vigorous growth and continued thriving, particularly during dry periods. In the event of restrictions being put in place by Statutory Undertakers the Management Team shall be consulted for guidance on water use.
- 10.1.25 All operations shall be carried out with due regard for any protected species that may be present within the vicinity of the works (i.e. reptiles, birds, bats, dormice, badgers, invertebrates).

11 Management Performance Specification – All landscape areas

NOTES: All woodland, trees and hedgerows shall be managed separately by Arboricultural specialists – refer to section 13.

Certain landscape maintenance prescriptions, such as fertiliser application or mulch, should only be applied within formal areas as these operations are not suitable for areas that are to be managed primarily for the benefit of ecology (e.g. rough grass and hay meadow).

11.1 Hard surfaces and external fittings

Management objectives

- 11.1.1 To ensure that all hard surfaces in unadopted areas are kept in a neat and tidy condition, including vehicular and pedestrian circulation routes, parking and service areas.
- 11.1.2 To ensure that all fixtures and fittings in unadopted areas including drainage, signage, lighting, bollards and seating, are kept in a clean and safe working condition.
- 11.1.3 To ensure that all structures including bridges, boardwalks and decking, are kept in a safe working condition and provide access for all.

Management operations

- 11.1.4 Remove litter, fallen leaves and snow from all paving to maintain neat appearance and ensure safe access. Particular attention shall be paid to areas where leaves collect and within service, storage and car parking areas.
- 11.1.5 All roads, paths, paved and loose material surfaces (gravel / hoggin / mulch) shall be treated (as required) with a suitable herbicide spray in accordance with the manufacturer's recommendations to remove weeds and moss. Paving shall be swept thoroughly to remove any debris after the recommended interval following application. Debris shall be removed from loose material surfaces by hand. Thorough annual cleaning of block paving using jet wash or other effective means shall be allowed for.
- 11.1.6 All surface drains and pipework to be cleared out regularly by jet-washing or manually extracting debris, dependent upon drain type.
- 11.1.7 All fittings shall be maintained in a clean state at all times.
- 11.1.8 Any deterioration and damage to structures, fittings and hard surfacing shall be reported to the Management Team immediately to allow repair or replacement as soon as possible.
- 11.1.9 Painted fittings shall be regularly inspected for rust and any rusting surfaces reported to the Management Team. If authorised these shall be treated appropriately before applying paint to match existing.
- 11.1.10 Timber fittings shall be regularly inspected for decay and any decaying items shall be reported to the Management Team. Treated timber shall have matching treatment

reapplied at appropriate intervals as recommended by the manufacturer. Where adjacent to a watercourse ensure to take measures to avoid pollution events.

- 11.1.11 Particular attention shall be paid to timber decked areas, especially where these are beneath tree canopies, which are likely to become slippery. Appropriate measures shall be taken to ensure that the condition of the surface does not represent a hazard to users of the area. These may include, amongst other measures: jet washing, treatment of timber or addition of non-slip materials.

11.2 Gates and Fences

Management objective

- 11.2.1 To ensure that all boundary and internal gates and fencing are kept in a well maintained, neat and tidy condition. Where fencing is intended to provide site security it shall be checked regularly to ensure that it is not breachable.

Management operations

- 11.2.2 Remove litter and fallen leaves to maintain neat appearance on face and at base of gates and fencing. Particular attention shall be paid to areas where leaves gather, and these shall be removed regularly to prevent a build-up.
- 11.2.3 Particular attention shall be paid to the locations of Badger flaps, which shall remain free of obstructions at all times.
- 11.2.4 All posts shall be periodically checked for stability and damage to ensure that the integrity of fencing is not compromised. All cross members shall be similarly checked, as shall the tautness of wires where applicable.
- 11.2.5 Any damage or deterioration in condition of fencing shall be reported to the Management Team immediately to allow repair or replacement as soon as possible.

11.3 Retained semi-natural features i.e hedgerows and woodland areas

Management objectives

- 11.3.1 To ensure that retained semi-natural features are protected and managed to conserve and enhance their existing value in terms of amenity and ecology.
- 11.3.2 To ensure that landscape maintenance operations prescribed for formal areas of the residential landscape do not have an adverse impact on the retained semi-natural features.

Management operations

- 11.3.3 Mature and veteran trees shall be managed in accordance with guidance published by Natural England entitled 'Veteran Trees: A Guide to Good Management (IN13)'.
- 11.3.4 Semi-natural features such as established native hedgerows and rough grass areas shall not be subject to highly prescriptive landscape maintenance operations (such as regular cutting, weeding, mulching etc.) and shall be managed with minimal inputs that have due regard for wildlife. For example, native hedgerows shall generally be left to

look natural and cut, on one side only in any year, on a 2 or 3 year rotation during late winter to avoid the bird nesting season.

- 11.3.5 Dead plants shall not be removed from semi-natural areas in order to benefit wildlife, except where they represent a material and imminent danger to the public.
- 11.3.6 All landscape maintenance operations prescribed for formal landscaping shall be carried out with due regard for the proximity and health of semi-natural features. Where necessary appropriate measures shall be taken to ensure that semi-natural features remain unharmed (e.g. chemicals shall not be used for weed control within or immediately adjacent to rough grass areas).
- 11.3.7 Refer to Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase) produced by Atkins dated March 2014

11.4 Ornamental shrubs

Management objective

- 11.4.1 To establish and maintain attractive formal ornamental borders of healthily growing vegetation with a well-shaped framework for future healthy growth and a managed, tidy appearance.

Management operations

- 11.4.2 The planted area shall be maintained as weed free at all times.
- 11.4.3 Plants are required to be pruned to encourage healthy regeneration, bushy growth and desirable ornamental features e.g. flowers, fruit, autumn colour, stem colour. The Landscape Contractor shall ensure that they are aware of the specific needs of each variety of shrub. As a guide, prune flowering species as follows:
- Winter flowering shrubs in spring.
 - Shrubs flowering between March and July immediately after the flowering period.
 - Shrubs flowering between July and October back to old wood in winter.
 - Rose bushes in early spring to encourage basal growths and a balanced, compact habit.
- 11.4.4 All suckers shall be removed by cutting back level with the source stem or root.
- 11.4.5 When agreed with the Management Team the plants shall be selectively thinned to allow room for growth and avoid overcrowding. Care shall be taken to avoid overthinning, so creating obvious gaps in shrub beds.
- 11.4.6 The Landscape Contractor shall allow for re-firming soil around roots to ensure plants are securely planted and upright especially following periods of high winds.
- 11.4.7 Soils to receive a surface application of a compound, controlled-release fertiliser each spring.
- 11.4.8 Mulch within planted areas shall be topped up each spring to maintain a continuous 75mm settled depth. Any additional material shall match existing mulch.
- 11.4.9 At the end of the growing season, the Landscape Contractor shall check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

- 11.4.10 Any dead or damaged plants shall be replaced with matching species and size. Size shall match that of the surrounding plants, rather than the originally specified size.

11.5 Ornamental groundcover

Management objectives

- 11.5.1 To establish and maintain formal planting areas of dense, weed-free groundcover of healthy growth, clipped or pruned as necessary to give a neat and tidy finish with a crisp and even interface with all paved areas and contained within the planted area.

Management operations

- 11.5.2 The planted area shall be maintained as weed free at all times.
- 11.5.3 Where groundcover abuts paving or road kerbs, it shall be managed uniformly to end at the back edge of the top of the kerbs.
- 11.5.4 Care shall be taken to prevent groundcover encroaching onto roads or footpaths.
- 11.5.5 Where groundcover abuts grass, it shall be encouraged to develop onto the sward and shall then be trimmed to form a crisp interface.
- 11.5.6 Plants shall be trimmed and tidied to remove dead vegetation or overgrowing branches.
- 11.5.7 Untidiness of top growth shall be corrected by pruning as required.
- 11.5.8 Groundcover plants shall not be allowed to climb stems of shrubs, trees or hedges.
- 11.5.9 Soil around roots to be refirmed as necessary to ensure plants are securely planted and upright especially following periods of high winds.
- 11.5.10 Soils to receive a surface application of a compound, controlled-release fertiliser each spring.
- 11.5.11 Mulch within groundcover areas shall be topped up each spring to maintain a continuous 75mm settled depth until plants are sufficiently established to completely cover the ground. Any additional material shall match existing mulch.
- 11.5.12 Any dead or damaged plants shall be replaced with matching species and size. Size shall match that of the surrounding plants, rather than the originally specified size.
- 11.5.13 Ivy shall be pruned to maintain a fresh appearance and shall not be encouraged to form woody stems.

11.6 Ornamental perennials

Management objectives

- 11.6.1 To maintain formal planting areas of dense, weed-free perennials of healthy growth, trimmed and supported as necessary to give a neat and tidy finish contained within the planted area and a crisp and even interface with all paved areas.

Management operations

- 11.6.2 The planted area shall be maintained as weed free at all times.
- 11.6.3 Where perennials abut road kerbs, they shall be trimmed and supported as necessary to ensure that they do not spill over the face of the kerbs. Care shall be taken to prevent perennials encroaching onto roads or footpaths.
- 11.6.4 Where perennials abut grass, they shall be trimmed to form a neat and tidy interface.
- 11.6.5 Plants shall be trimmed and tidied to remove dead vegetation or overgrowing branches. Dead flower heads shall be removed.
- 11.6.6 Untidiness of top growth shall be corrected by trimming as required.
- 11.6.7 Staking shall be introduced as required to support larger plants.
- 11.6.8 Soil around roots to be refirmed as necessary to ensure plants are securely planted and upright especially following periods of high winds.
- 11.6.9 Soils to receive a surface application of a compound, controlled-release fertiliser each spring.
- 11.6.10 Mulch around perennials shall be topped up each spring to maintain a continuous 75mm settled depth. Any additional material shall match existing mulch.
- 11.6.11 Any dead or damaged plants shall be replaced with matching species, which need not be the same size as adjacent plants.

11.7 Formal grass

Management objective

- 11.7.1 To provide an even stand of vegetation of uniform colour and height within the specified range and comprising predominantly grass species, although a small percentage of dicotyledonous plants - no more than 5% - would be acceptable. Turf shall be maintained in a manner appropriate to the intended use and kept reasonably free from litter, fallen leaves, moss, thatch, frost heave, worm and mole casts, with neat well defined edges. Turf shall be maintained in a healthy vigorous condition, free from disease, fungal growth, discoloration, scorch or wilt and without compaction or waterlogging.

Management operations

- 11.7.2 All litter and fallen leaves, twigs and branches shall be removed to maintain a neat appearance (and before mowing).
- 11.7.3 All grass-cutting machinery must be approved by the Management Team and be appropriate to the grass-cutting operation required, giving due regard to grass type, mowing specification, ground contour and condition. Machinery shall be well maintained and correctly adjusted to give a clean and even cut without damage to the grass or ground.
- 11.7.4 Nylon filament rotary cutters or other mechanical tools are not to be used closer than 100mm to the stem of any tree or plant.
- 11.7.5 Mowing shall be carried out using approved machinery to maintain the vegetation length within the limits of 30 mm and 50 mm during April to August inclusive and

between 50 mm and 70 mm during the rest of the year. (As a guide, this will normally require mowing at up to once a fortnight in the peak of the season). The clippings shall be removed from site or to an agreed compost pile location.

- 11.7.6 Mowing shall be carried out without rutting or compaction of the surface, especially when ground conditions are soft. Do not cut during periods of drought, or when ground conditions or grass are wet, without the prior agreement of the Management Team.
- 11.7.7 Where bulbs and corms occur in grassed areas the maintenance cutting of these bulb and corm areas shall not take place until 6 weeks after they have flowered, or as instructed. Until such time the surrounding grass shall be cut, leaving the bulb and corm areas untouched.
- 11.7.8 Clippings are not to be left on paths or roads – all hard areas shall be swept clear of arisings.
- 11.7.9 All edges of grass areas, against footpaths, roadways, trees, posts, shrub borders and any other obstruction shall be kept trimmed neat and tidy at each mow.
- 11.7.10 Re-form edges abutting paths, borders, manhole covers and the like once a year, with a suitable edging tool, to clean straight lines or smooth flowing curves. A clean edge shall be formed, sloping slightly back from vertical (refer to diagram below). Soil shall be drawn back from edges to permit the use of edging shears and arisings removed.



- 11.7.11 The Landscape Contractor shall walk through grass areas with a suitable portable applicator and spot treat weeds as required with a suitable selective herbicide, approved by the Management Team and used in accordance with the manufacturer's instructions, taking particular care to treat injurious weeds listed in Weeds Act 1959 and Countryside Act 1981.

NOTE: Do not spray bulb and corm planted areas.

- 11.7.12 Spring Renovation - all close mown grass areas shall be scarified, spiked/verti-drained (or spiked with hand fork where access is restricted) and overseeded where necessary.
- 11.7.13 Following spring renovation works, all close mown grass areas shall receive an application of spring/summer turf fertiliser.
- 11.7.14 Between September and March one application of autumn/winter turf fertiliser shall be applied. Do not apply if rootzone is dry.
- 11.7.15 Any areas damaged by trampling, abrasion or scalping during mowing shall be re-seeded or repaired. Reinstate worn areas as follows:
 - Remove the damaged turf to a depth of 50mm, cultivate to a fine tilth and either:
 - Re-turf using turf of a quality and appearance to match existing, or;
 - fill with fine topsoil to BS 3882 premium (or as originally laid) grade, substantially free from stones, debris and weeds, and reseed with a seed mix to match existing grass in quality and appearance.

- Provide protection and watering to promote successful germination and/or establishment.
- Turf laid for new grass areas or as part of repairs to existing grass shall be watered immediately after laying, then repeatedly and sufficiently during the establishment period to allow water to reach the underlying soil and ensure establishment.

11.7.16 Hollows and bumps in turf shall be levelled using the methods in BS 7370: Part 3, clauses 12.4 and 12.5.

11.7.17 Surface compaction in turf shall be relieved using the methods in BS 7370: Part 3, clause 13.5.

11.8 Meadow/ Species-rich grassland

Management objective

11.8.1 To provide lower maintenance hay meadow grassland areas with enhanced ecological diversity and value.

Management operations

11.8.2 All grass-cutting machinery must be approved by the Management Team and be appropriate to the grass-cutting operation required, giving due regard to grass type, mowing specification, ground contour and condition. Machinery shall be well maintained and correctly adjusted to give a clean and even cut without damage to the grass or ground.

11.8.3 Nylon filament rotary cutters or other mechanical tools are not to be used closer than 100mm to the stem of any tree or plant and care shall be taken to ensure that cutting does not impact on reptile populations along the edges of rougher grassland and hedge boundary habitat.

11.8.4 Meadow grass shall be cut during dry weather once per year, to a height of 100mm in September following flowering. Arisings shall be left to dry and shed seed back into the sward before being removed within 3 days to prevent nutrient enrichment of the soil.

11.8.5 At the time of each cut all edges adjoining hard surfaces, manholes, tree pits and planting beds shall be trimmed.

11.8.6 Clippings are not to be left on paths or roads – all hard areas shall be swept clear of arisings.

11.8.7 The Landscape Contractor shall walk through grass areas with a suitable portable applicator and spot treat excessive weed growth of Common Ragwort, ensuring to retain Hoary Ragwort, Creeping Thistle and Spear Thistle but not allowing these to spread to other land in accordance with the Weeds Act 1959 and Countryside Act 1981. Only excessive weed growth shall be treated, with a suitable selective herbicide approved by the Management Team and used in accordance with the manufacturer's instructions.

11.8.8 Where meadow areas adjoin paths and roads a 1m wide close mown edge shall be maintained. Mowing shall be carried out using approved machinery to maintain the vegetation length within the limits of 30 mm and 50 mm during April to August inclusive and between 50 mm and 70 mm during the rest of the year. (As a guide, this will normally require mowing at up to once a fortnight in the peak of the season). The clippings shall be removed from site or to an agreed compost pile location.

11.9 Rough grassland

Management objective

- 11.9.1 To provide low maintenance grassland comprising a rough tussocky sward of uncut coarse grasses, to create areas with enhanced ecological diversity and value, particularly for protected species, having regard to reptile populations around the retained boundary features and the need to maintain rough grassland edge habitat for these populations.

Management operations

- 11.9.2 Rough grassland areas should be checked once per year to establish whether maintenance is necessary.
- 11.9.3 Rough grassland areas shall not be mown but their extent maintained by cutting back of excessive bramble and woody scrub growth using a mechanical tri-blade brushcutter or similar. Cutting shall only take place during winter months to minimise disturbance to wildlife. Rough grassland shall be a minimum of 1m wide and wider wherever possible.
- 11.9.4 Shallow 'scallops' or 'bays' (approximately 1m deep by 5m wide) shall be cut into woody vegetation bordering rough grassland areas, particularly on non-northerly facing hedges, to provide a wavy edge to hedges and wooded boundaries, providing an enhanced edge habitat for wildlife.
- 11.9.5 All arisings may be left in situ, or larger woody arisings removed and piled beneath wooded habitat to provide additional wildlife value.
- 11.9.6 Vehicles shall not be allowed to track across grassland habitat in order to protect wildlife.

11.10 Weed, Pest and Disease Control (including invasive weeds)

- 11.10.1 All plants, planting beds, trees and grass in formal, ornamental areas shall be maintained as weed, pest and disease free at all times. The Landscape Contractor is expected to adopt a pro-active approach to weeds, pests and diseases and treat accordingly.
- 11.10.2 The Landscape Contractor shall periodically inspect all planted areas, including trees, for any signs of pest or disease infection and report any such discovery to the Management Team.
- 11.10.3 The same diligence shall be required in monitoring soil and plant health in terms of the application of fertilisers, ameliorates, mulches or anti-desiccant sprays.
- 11.10.4 If damage is found to be occurring then, where necessary and with agreement and in consultation with the Management Team, appropriate pest control shall be used. The Landscape Contractor shall, where possible, use non chemical means in the first instance.
- 11.10.5 The Landscape Contractor shall notify the Management Team immediately of the presence of any other invasive weeds noted whilst working on site.

11.11 Bird and Bat boxes

- 11.11.1 A plan shall be provided when mitigation measures are in place showing the locations of all bird and bat boxes erected on site. Bird boxes can be cleaned of nesting material from September to December each year. Bat boxes can only be moved or inspected by a licensed Bat worker.

12 Management Performance Specification – woodland, trees, hedgerows (not including SINC)s

NOTE: Certain landscape maintenance prescriptions, such as fertiliser application or mulch, should only be applied within formal areas as these operations are not suitable for areas that are to be managed primarily for the benefit of ecology (e.g. woodland and native buffers).

12.1 Existing specimen trees in all areas

Management objectives

- 12.1.1 To maintain stable and healthily growing trees and groups of trees that will provide amenity and ecological benefits. To have regard to presence of known bat roosts and potential for bat roosts within trees on site, and that any works on such trees should be through consultation with a suitably qualified ecologist. Refer to Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase) produced by Atkins dated March 2014 – Appendix A.
- 12.1.2 To carry out an inventory of all Veteran and Mature trees on site and provide individually tailored management prescriptions for these trees in an action plan, and taking into account protected species.
- 12.1.3 To care for established trees in informal and recreational areas to maintain balanced canopies and frameworks for future healthy growth, with a natural appearance, including around the base of the trees. Standing dead wood habitat shall be maintained as a wildlife resource unless it represents an imminent danger to the public.
- 12.1.4 To prevent overcrowding of tree groups, selective thinning and stump removal may be required as trees mature. The extent of any thinning operations shall be carefully considered to ensure that connectivity of woody boundary features is maintained.
- 12.1.5 To ensure a balanced age structure within tree groups by planting new trees of the same species or allowing natural regeneration as appropriate to prevent group senility.

Management operations

- 12.1.6 Mature and veteran trees shall be managed in accordance with guidance published by Natural England entitled 'Veteran Trees: A Guide to Good Management (IN13)'.
- 12.1.7 The condition and management requirements of mature trees shall be assessed on a regular and ongoing basis by an appropriately qualified Arboriculturalist to ensure that trees remain in good health and public safety is not compromised. A report should be produced on the findings of each assessment, drawing attention to any signs of disease, decay or dead wood. Remedial pruning works shall be undertaken as soon as is practicable to address any safety concerns identified. Before any works take place, the potential for bat roosts will be checked with the relevant ecology plans, regard will

be had to any veteran tree management and a thorough assessment shall be made of any potential impacts on bat roosts or potential for bat roosts by a suitably qualified ecologist. Regard should also be had to potential for nesting birds.

12.1.8 Where trees are set within planting beds, the area to the base of each tree shall be maintained as weed free at all times unless published guidance specifies otherwise.

12.1.9 Trees shall be pruned as necessary to avoid any excessive overhang encroaching onto paths, roads, signs, sightlines and light fittings, or obstruction of pedestrians, vehicles, lighting, and sight lines. Before any works take place a thorough assessment shall be made of any potential impacts on bat roosts and bird nests and if necessary, works shall be delayed or, if this is not possible, the advice of an appropriately qualified Ecologist shall be sought.

12.1.10 Pruning generally:

- Prune in accordance with good horticultural practice. Prune larger branches and woody stems greater than 40mm diameter in accordance with good arboricultural practice.
- Thin, trim and shape appropriately to each species, location, season, and stage of growth, leaving a well-balanced natural appearance.
- Use clean sharp secateurs, hand saws or other tools approved by the Management Team. Trim off ragged edges of bark or wood with a sharp knife.
- Remove branches without damaging or tearing the stem.
- Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
- Prune larger branches neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- Notify the Management Team of any disease or fungus. Do not apply growth retardants, fungicide or sealant unless instructed by the Management Team.
- Before any works take place, the potential for bat roosts will be checked with the relevant ecology plans, regard will be had to any veteran tree management and a thorough assessment shall be made of any potential impacts on bat roosts or potential for bat roosts by a suitably qualified ecologist. Regard should also be had to potential for nesting birds. Refer to Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase) produced by Atkins dated March 2014

NOTE: Do not prune whips or feathered trees and do not prune any trees during the late winter/early spring sap flow period, unless specified otherwise.

12.1.11 Crown prune young trees up to 4m high by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head, ensuring the development of a single strong leader and the removal of duplicated branches and potentially weak or tight forks. In each case cut back to live wood.

12.1.12 Any necessary non-routine tree works, such as extensive pruning to young trees or any surgery to larger trees, must be carried out to BS 3998 by a member of the Arboricultural Association or qualified specialist and approved by the Management Team. Before any works take place a thorough assessment shall be made of any potential impacts on bat roosts and bird nests and if necessary, works shall be delayed or, if this is not possible, the advice of an appropriately qualified Ecologist shall be sought.

12.2 New specimen trees in formal areas

Management objectives

- 12.2.1 To establish, within three years from planting, well-shaped new trees with balanced canopies and frameworks for future healthy growth, and a natural but overall neat and tidy appearance, including around the base of the trees, free from all dead and dying vegetation and crossing wood.

Management operations

- 12.2.2 Where trees are set within planting beds, the area to the base of each tree shall be maintained as weed free at all times.
- 12.2.3 Where trees are set within grass areas a weed free circle of 1m diameter, mulched to a settled depth of 75mm shall be maintained at all times.
- 12.2.4 Where trees are set within hard landscaping, the area to the base of each tree shall be maintained as weed free at all times.
- 12.2.5 Mulch levels around tree bases in grass areas shall be topped up each spring to maintain continuous 75mm settled depth. Any additional material required shall match existing mulch.
- 12.2.6 In the first two years following planting, any new trees shall be closely monitored on a fortnightly basis to ensure they are upright, firm and stable and in good health.
- 12.2.7 It is important to ensure during the establishment period that new trees have adequate water, supplemented by other means if necessary. The soil around new trees in planting beds and tree pits shall be inspected to a depth of 300mm at regular intervals during the growing season to determine whether watering is required, and action taken if so.
- 12.2.8 In further years water newly planted trees throughout the summer months (May to August) at minimum fortnightly intervals after any period of four weeks without significant rainfall (less than 5mm). Heavy watering will be required in dry periods.
- 12.2.9 Should the Statutory Undertakers impose restrictions on the use of water for watering any plants, the Landscape Contractor shall be responsible for making any special arrangements which may be necessary to ensure regular and adequate watering of plant material to ensure successful establishment.
- 12.2.10 It is also important to ensure that the trees are not over-watered. All drainage points shall be regularly checked. Any plants lost due to water-logging or drought shall be replaced with matching species and size as appropriate at no additional cost to residents. Size shall match that of the surrounding plants, rather than the originally specified size, unless agreed otherwise with the Management Team.
- 12.2.11 Guys, stakes and ties shall be regularly checked for firmness, tightness and support and adjusted as necessary. Tree stakes shall be checked regularly for breaks and decay, replaced as necessary to original specification.
- 12.2.12 Adjust, refix or replace loose or defective ties as necessary, allowing for growth and some movement to encourage development of a stable root system whilst preventing chafing, excessive windrock, and to compensate for settlement. Where chafing has occurred, reposition or replace ties to prevent further chafing. Ties shall at no point be

over-tight on the tree and shall be checked and loosened regularly, especially at the start of the growing season to allow room for growth. Remove redundant tapes, tags, ties, labels and other encumbrances.

- 12.2.13 Where stakes are longer than the height of the lowest branch of the tree, cut the stake to this height in spring and retie to tree firmly but not tightly with a single tie.
- 12.2.14 If a tree with a defective stake has grown sufficiently to become self-supporting, the Landscape Contractor shall inform the Management Team and, if instructed, remove stake(s) and fill the hole(s) with lightly compacted soil.
- 12.2.15 Stakes and ties shall be removed once trees are established and as agreed with the Management Team (anticipated in the region of years 5-10).
- 12.2.16 Tree guy wires shall be inspected as outlined in the maintenance programme and after strong winds, and replace or re-secure loosened or missing guy wires, adjusting tension of guy wires to suit stem growth and to provide correct and uniform tension. Remove guy wires when instructed or, if not instructed, then after a maximum period of 10 years.
- 12.2.17 Soils around trees shall receive a surface application of suitable and approved compound, controlled-release fertiliser each spring.
- 12.2.18 Soil shall be firmed around the roots to ensure that trees are securely planted in the ground and upright. All trees shall be re-firmed in the spring period following planting. Any trees loosened due to late frosts, strong winds or surface water movement shall be refirmed as required. 'Collars' at the base of tree stems created by tree movement to be broken up by fork, avoiding damage to roots and stem, backfilled with topsoil as necessary, and refirmed.
- 12.2.19 Trees shall be pruned as necessary to remove any dead, diseased or damaged shoots and to create a balanced form for future growth. Before any works take place a thorough assessment shall be made of any potential impacts on bat roosts and bird nests and if necessary, works shall be delayed or, if this is not possible, the advice of an appropriately qualified Ecologist shall be sought.

12.3 New specimen trees in informal / SINC buffer

Management objectives

- 12.3.1 To establish, within three years from planting, well-shaped new trees with balanced canopies and frameworks for future healthy growth, and a natural appearance.

Management operations

- 12.3.2 Around the base of new trees within informal and nature conservation areas, only vegetation that may be harmful to the successful establishment of the trees shall be removed.
- 12.3.3 Trees within informal and nature conservation areas shall not be mulched.
- 12.3.4 In the first two years following planting, any new trees shall be closely monitored on a fortnightly basis to ensure they are upright, firm and stable and in good health.
- 12.3.5 It is important to ensure during the establishment period that new trees have adequate water, supplemented by other means if necessary. The soil around new trees in planting beds and tree pits shall be inspected to a depth of 300mm at regular intervals

during the growing season to determine whether watering is required, and action taken if so.

- 12.3.6 In further years water newly planted trees throughout the summer months (May to August) at minimum fortnightly intervals after any period of four weeks without significant rainfall (less than 5mm). Heavy watering will be required in dry periods.
- 12.3.7 Should the Statutory Undertakers impose restrictions on the use of water for watering any plants, the Landscape Contractor shall be responsible for making any special arrangements which may be necessary to ensure regular and adequate watering of plant material to ensure successful establishment.
- 12.3.8 It is also important to ensure that the trees are not over-watered. All drainage points shall be regularly checked. Any plants lost due to water-logging or drought shall be replaced with matching species and size as appropriate at no additional cost to tenants. Size shall match that of the surrounding plants, rather than the originally specified size, unless agreed otherwise with the Management Team.
- 12.3.9 Guys, stakes and ties shall be regularly checked for firmness, tightness and support and adjusted as necessary. Tree stakes shall be checked regularly for breaks and decay, replaced as necessary to original specification.
- 12.3.10 Adjust, refix or replace loose or defective ties as necessary, allowing for growth and some movement to encourage development of a stable root system whilst preventing chafing, excessive windrock, and to compensate for settlement. Where chafing has occurred, reposition or replace ties to prevent further chafing. Ties shall at no point be over-tight on the tree and shall be checked and loosened regularly, especially at the start of the growing season to allow room for growth. Remove redundant tapes, tags, ties, labels and other encumbrances.
- 12.3.11 Where stakes are longer than the height of the lowest branch of the tree, cut the stake to this height in spring and retie to tree firmly but not tightly with a single tie.
- 12.3.12 If a tree with a defective stake has grown sufficiently to become self-supporting, the Landscape Contractor shall inform the Management Team and, if instructed, remove stake(s) and fill the hole(s) with lightly compacted soil.
- 12.3.13 Stakes and ties shall be removed once trees are established and as agreed with the Management Team (anticipated in the region of years 5-10).
- 12.3.14 Tree guy wires shall be inspected as outlined in the maintenance programme and after strong winds, and replace or re-secure loosened or missing guy wires, adjusting tension of guy wires to suit stem growth and to provide correct and uniform tension. Remove guy wires when instructed or, if not instructed, then after a maximum period of 10 years.
- 12.3.15 Protective structures shall be regularly checked for stability, security and damage and adjusted or repaired as necessary.
- 12.3.16 Soil shall be firmed around the roots to ensure that trees are securely planted in the ground and upright. All trees shall be re-firmed in the spring period following planting. Any trees loosened due to late frosts, strong winds or surface water movement shall be refirmed as required. 'Collars' at the base of tree stems created by tree movement to be broken up by fork, avoiding damage to roots and stem, backfilled with topsoil as necessary, and refirmed whilst minimising disturbance to wildlife.

- 12.3.17 Trees shall be pruned as necessary to remove any dead, diseased or damaged shoots that may represent a material and imminent danger to the public and to create a balanced form for future growth. Before any works take place a thorough assessment shall be made of any potential impacts on bat roosts and bird nests and if necessary, works shall be delayed or, if this is not possible, the advice of an appropriately qualified Ecologist shall be sought.

12.4 Hedges

Management objective

- 12.4.1 To establish and maintain healthy thriving plants and encourage strong hedges.
- 12.4.2 To provide hedgerow habitat for nesting birds and small mammals.

Management operations

- 12.4.3 Formal hedges shall be cut to encourage dense bushy growth. The main stems of plants shall not be visible on the sides or top of the hedge. Care shall be taken to ensure that any cutting operations taking place between March and August do not expose or disturb any bird nests.
- 12.4.4 Formal clipped hedges shall be cut a minimum of twice a year to maintain a tidy appearance at all times and 'a wedge shape' to encourage healthy bushy growth, with formal shape. String lines shall be used if necessary to achieve straight, even lines. Beech hedging shall be cut in May and August.
- 12.4.5 Slowly establishing hedges shall be cut back hard in June and September to encourage bushy growth down to ground level and shaped to desired dimensions only by gradual degrees, depending on growth rate and habit.
- 12.4.6 Rapidly establishing hedges shall be encouraged to desired height as rapidly as possible, trimming back lateral branches moderately to establish the required shape.
- 12.4.7 Where transitions in hedge height and width are required these shall be achieved in a smooth uninterrupted manner. Where abrupt changes in height are required these shall be maintained as crisp right angled profiles.
- 12.4.8 The Landscape Contractor shall ensure that tools used are sharp and cut formal hedges so that top is narrower than the base to ensure base will remain clothed in leaves.
- 12.4.9 Native hedges shall generally be left to look natural and cut, on one side only in any year, on a 2 or 3 year rotation during late winter to avoid the bird nesting season and allow fruiting to take place.
- 12.4.10 Soils around formal hedges to receive a surface application of a compound, controlled-release fertiliser each spring.
- 12.4.11 Mulch levels the base of formal hedges shall be topped up each spring to maintain a continuous 75mm settled depth. Any additional material shall match existing mulch.
- 12.4.12 The Landscape Contractor shall allow for re-firming soil around roots to ensure plants are securely planted and upright especially following periods of high winds.

- 12.4.13 If required for support, any post and wire fencing shall be checked to ensure that it is kept in good condition, with taut wires, and hedge plants regularly checked to ensure that they are tied in. If not required, post and wire fencing should be removed.
- 12.4.14 Stakes and shelters shall be regularly checked for firmness, tightness and support and adjusted as necessary. Stakes shall be checked regularly for breaks and decay, replaced as necessary to original specification.
- 12.4.15 Stakes and shelters shall be removed once plants are established and as agreed with the Management Team (anticipated in the region of years 3-8).
- 12.4.16 Any dead or damaged plants shall be replaced with matching species and size. Size shall match that of the surrounding plants, rather than the originally specified size.
- 12.4.17 Regular checks should be made for presence of non-native invasive species including Himalayan Balsam and Variegated Yellow Archangel (with careful distinction made between variegated and native yellow archangel), with measures taken to remove invasive species at the earliest opportunity.

12.5 Woodland planting

Management objectives

- 12.5.1 To create and maintain a unified belt of attractive, safe, healthy and diverse woodland that benefits local wildlife, site users, and the general public.
- 12.5.2 To encourage an ecologically beneficial understorey in the long term to provide wildlife with green links across the site and provide habitat.

Management operations

- 12.5.3 Around the base of new trees within informal and nature conservation areas, only vegetation that may be harmful to the successful establishment of the trees shall be removed.
- 12.5.4 Trees within informal and nature conservation areas shall not be mulched.
- 12.5.5 Soils around trees and shrubs in formal areas only shall receive a surface application of suitable and approved compound, controlled-release fertiliser each spring until well established.
- 12.5.6 It is important to ensure during the establishment period that new trees have adequate water, supplemented by other means if necessary. The soil around new trees in planting beds and tree pits shall be inspected to a depth of 300mm at regular intervals during the growing season to determine whether watering is required, and action taken if so.
- 12.5.7 Should the Statutory Undertakers impose restrictions on the use of water for watering any plants, the Landscape Contractor shall be responsible for making any special arrangements which may be necessary to ensure regular and adequate watering of plant material to ensure successful establishment.
- 12.5.8 It is also important to ensure that the trees are not over-watered. All drainage points shall be regularly checked. Any plants lost due to water-logging or drought shall be replaced with matching species and size as appropriate. Size shall match that of the surrounding plants, rather than the originally specified size, unless agreed otherwise with the Management Team.

- 12.5.9 The Landscape Contractor shall allow for re-firming soil around roots to ensure plants are securely planted and upright especially following periods of high winds.
- 12.5.10 Stakes and shelters shall be regularly checked for firmness, tightness and support and adjusted as necessary. Stakes shall be checked regularly for breaks and decay, replaced as necessary to original specification.
- 12.5.11 Stakes and shelters shall be removed once plants are established and as agreed with the Management Team (anticipated in the region of years 3-8).
- 12.5.12 Any dead or damaged plants shall be replaced with matching species and size. Size shall match that of the surrounding plants, rather than the originally specified size.
- 12.5.13 The understorey (where comprised of appropriate species e.g. Hazel) shall be managed as coppice only as required for good woodland management, in compartments of approximately equal size, ensuring that each compartment does not span the full width of the woodland area in order to retain a continuous corridor for wildlife crossing the site.
- 12.5.14 Brambles shall be cut back to a suitable degree so as not to suppress newly planted or self-seeded native trees and shrubs. Particularly well established brambles shall be grubbed out in places to create a mosaic of mixed dominance within the understorey. Where bramble cutting is due to take place this should have regard to nesting birds and not disturb the ground where reptiles may be present.
- 12.5.15 When agreed with the Management Team the plants shall be selectively thinned to remove poor or weak specimens, allow room for growth and avoid overcrowding. Care shall be taken to avoid overthinning, so creating obvious gaps in planting.
- 12.5.16 Regular checks shall be made on the condition of trees for damage or potential hazards and any such issues reported to the Management Team along with suggestions for new planting as appropriate to prevent group senility.
- 12.5.17 Pruning of trees and shrubs shall be carried out as required in order to remove any dead, diseased or damaged shoots and to create a balanced form for future growth. Before any works take place a thorough assessment shall be made of any potential impacts on bat roosts and bird nests and if necessary, works shall be delayed or, if this is not possible, the advice of an appropriately qualified Ecologist shall be sought. Refer to Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase) produced by Atkins dated March 2014.
- 12.5.18 Pruning of mature trees generally:
 - Refer to section 12.1.10.
- 12.5.19 Any necessary non-routine tree works, such as extensive pruning to young trees or any surgery to larger trees, must be carried out to BS 3998 by a member of the Arboricultural Association or qualified specialist and approved by the Management Team.

NOTE: Any trees subject to a Tree Preservation Order will require permission from the Local Authority for any arboricultural work to be carried out.

- 12.5.20 Deadwood and arisings from pruning and thinning works shall be used to create habitat for invertebrates within the woodland area by stacking in log piles.
- 12.5.21 No trees works shall take place within the bird nesting season.

- 12.5.22 Before any trees works take place any trees identified as having roost potential for bats shall be inspected 24 hours beforehand to ensure that they have not become occupied. Any trees identified as having roosting potential for bats shall only have tree works undertaken after consultation with a qualified ecologist.
- 12.5.23 If problems are identified in trees off site, the Landscape Contractor shall notify the Management Team, who shall contact and notify the appropriate land owner.
- 12.5.24 Regular checks should be made for presence of non-native invasive species including Himalayan Balsam and Variegated Yellow Archangel (with careful distinction made between variegated and native yellow archangel), with measures taken to remove invasive species at the earliest opportunity.

12.6 Woodland edge planting

Management objectives

- 12.6.1 To establish and maintain trees and vegetation in a healthy, stable and safe condition with a well-shaped framework for future healthy growth of plants to achieve their natural form as part of a balanced and ultimately self-sustaining planting area, providing amenity and ecological benefits.
- 12.6.2 To prevent overcrowding of tree and shrub groups by selective thinning and stump removal, if required as plants mature, to create a well-structured habitat.

Management operations

- 12.6.3 The understorey of newly planted areas shall be maintained as weed free short grass at all times by use of a strimmer or brushcutter, taking care to avoid damage to plant stems, until such time as the planting provides sufficient coverage to suppress weeds and grasses.
- 12.6.4 It is important to ensure during the establishment period that new trees have adequate water, supplemented by other means if necessary. The soil around new trees in planting beds and tree pits shall be inspected to a depth of 300mm at regular intervals during the growing season to determine whether watering is required, and action taken if so.
- 12.6.5 In further years water newly planted trees throughout the summer months (May to August) at minimum fortnightly intervals after any period of four weeks without significant rainfall (less than 5mm). Heavy watering will be required in dry periods.
- 12.6.6 Should the Statutory Undertakers impose restrictions on the use of water for watering any plants, the Landscape Contractor shall be responsible for making any special arrangements which may be necessary to ensure regular and adequate watering of plant material to ensure successful establishment.
- 12.6.7 It is also important to ensure that the trees are not over-watered. All drainage points shall be regularly checked. Any plants lost due to water-logging or drought shall be replaced with matching species and size as appropriate. Size shall match that of the surrounding plants, rather than the originally specified size, unless agreed otherwise with the Management Team.
- 12.6.8 The Landscape Contractor shall allow for re-firming soil around roots to ensure plants are securely planted and upright especially following periods of high winds.

- 12.6.9 Stakes and shelters shall be regularly checked for firmness, tightness and support and adjusted as necessary. Stakes shall be checked regularly for breaks and decay, replaced as necessary to original specification.
- 12.6.10 Stakes and shelters shall be removed once plants are established and as agreed with the Management Team (anticipated in the region of years 3-8).
- 12.6.11 Any dead or damaged plants shall be replaced with matching species and size. Size shall match that of the surrounding plants, rather than the originally specified size.
- 12.6.12 When agreed with the Management Team the plants shall be selectively thinned to allow room for growth and avoid overcrowding. Care shall be taken to avoid overthinning, so creating obvious gaps in planting.
- 12.6.13 Regular checks shall be made on the condition of trees for damage or potential hazards and any such issues reported to the Management Team along with suggestions for new planting as appropriate to prevent group senility.
- 12.6.14 Pruning of trees and shrubs shall be carried out as required in order to achieve healthy, well-shaped growth.
- 12.6.15 Pruning generally:
 - Refer to section 12.1.10.
- 12.6.16 Any necessary non-routine tree works, such as extensive pruning to young trees or any surgery to larger trees, must be carried out to BS 3998 by a member of the Arboricultural Association or qualified specialist and approved by the Management Team.
- 12.6.17 No trees works shall take place within the bird nesting season.
- 12.6.18 Before any trees works take place those trees identified as having roost potential for bats shall be inspected 24 hours beforehand to ensure that they have not become occupied.
- 12.6.19 Deadwood shall be used to create wildlife habitat within woodland areas on flat ground by stacking in log piles.
- 12.6.20 If problems are identified in trees off site, the Landscape Contractor shall notify the Management Team, who shall contact and notify the appropriate land owner. Any trees identified as having roosting potential for bats shall only have tree works undertaken after consultation with a qualified ecologist.

13 Management Performance Specification – waterbodies

13.1 Hard surfaces and external fittings

Management objectives

- 13.1.1 To ensure that all structures including any bridges, boardwalks and decking, are kept in a safe working condition and provide access for all.

Management operations

- 13.1.2 Remove litter, fallen leaves and snow from all paving to maintain neat appearance and ensure safe access. Particular attention shall be paid to areas where leaves collect.
- 13.1.3 All drains and pipework to be cleared out regularly by jet-washing or manually extracting debris, as appropriate.
- 13.1.4 Particular attention shall be paid to timber decked areas, especially where these are beneath tree canopies, which are likely to become slippery. Appropriate measures shall be taken to ensure that the condition of the surface does not represent a hazard to users of the area. These may include, amongst other measures: jet washing, treatment of timber or addition of non-slip materials.
- 13.1.5 Any deterioration and damage to structures and associated hard surfacing shall be reported to the Management Team immediately to allow repair or replacement as soon as possible.
- 13.1.6 Painted fittings shall be regularly inspected for rust and any rusting surfaces reported to the Management Team. If authorised these shall be treated appropriately before applying paint to match existing.
- 13.1.7 Timber fittings shall be regularly inspected for decay and any decaying items shall be reported to the Management Team. Treated timber shall have matching treatment reapplied at appropriate intervals as recommended by the manufacturer. Where adjacent to a watercourse ensure to take measures to avoid pollution events.

13.2 Swales

Management objectives

- 13.2.1 To ensure that swales are maintained to allow free flow of water at all times whilst providing areas of damp rough grassland habitat.

Management operations

- 13.2.2 Swales shall be regularly checked and any build-up of dead material, leaves or rubbish is to be removed from pipes or outflows.
- 13.2.3 Within and around swales one strim per year shall be carried out to remove 25% of vegetation on rotation. 15% of the edge shall be maintained as bare accessible ground and 60% shall remain under cover of rough/marginal vegetation. Strimming shall only take place during winter months.

- 13.2.4 All material removed shall be left adjacent to swales (without compromising use of site) for two days to allow for migration of animals and insects back to channel, prior to removal off site. Areas adjacent to the swales used for clearance operations should be limited to avoid damage to grassed areas.
- 13.2.5 Accessible edges shall be checked to ensure good ground stability and adequate surfacing to prevent slips, trips and falls. Any shortfalls shall be reported to the Management Team and access to the edge of the swale restricted until appropriate corrective measures have been undertaken.

13.3 Ditches

Management objectives

- 13.3.1 To maintain ditches as clean, clear waterways with a dense fringe of healthy marginal vegetation, creating suitable habitat for a diverse range of invertebrates, plants, mammals, reptiles and birds.

Management operations

- 13.3.2 All ditches shall be checked for litter and other waste, which shall be removed and carted offsite. No burning on site shall be allowed.
- 13.3.3 Management operations such as cutting of vegetation and de-silting of ditches shall take place rotationally following an assessment of requirement.
- 13.3.4 De-silting of channels shall be undertaken in consultation with the Environment Agency and only where necessary (approximately every 10-15 years) in September or October. Machinery shall only be permitted on one bank. Marginal vegetation shall not be disturbed, nor will a minimum of one third of the channel. Regard shall be had for potential protected species present, such as reptiles. A method statement prepared with input from a suitably qualified Ecologist may be required to undertake works if protected species are found to be present within the area of works.
- 13.3.5 Fallen trees and other debris shall be removed from the water, with the exception of those which are regularly observed to be providing shelter for wildlife.

13.4 Ponds

Management objectives

- 13.4.1 To maintain water quality for amenity value and the benefit of wildlife.
- 13.4.2 To ensure water bodies are maintained to allow free flow of water and in a safe and healthy condition, and to encourage a naturalistic landscape setting to benefit the ecological value of the area. To maintain marginal and emergent growth as a visually attractive, varied and balanced habitat.
- 13.4.3 To maintain selected edges of the water body as safe, accessible areas and to ensure that grass margins form a safe and accessible point of approach to the water edge for pedestrians, whilst maintaining a margin of naturalised longer grass and water edge plants to create a suitable habitat for water side fauna and flora including birds, reptiles, amphibians and invertebrates.

Management operations

- 13.4.4 Water shall be tested regularly to ensure that it is free from contaminants and that the quality remains within acceptable limits (as determined by test kit parameters). Algal blooms and infestation by undesirable weed species should be responded to immediately.
- 13.4.5 Chemicals are not to be used within a 10m radius of ponds to minimise leaching.
- 13.4.6 The bottom of the water body shall be periodically dredged to redress the naturally occurring build-up of silt and debris, in order to maintain habitats and water quality. Regard shall be had to potential protected species presence such as reptiles and nesting birds. A method statement prepared with input from a suitably qualified Ecologist may be required to undertake works if protected species are found to be present within the area of works.
- 13.4.7 Any reed growth shall be cut on a rotational basis once a year during autumn. The aim is that the cutting back of reeds is undertaken in sections of no more than 1/3 at any time, so that the area is never left completely levelled, ensuring that wildlife value and visual appearance are maintained.
- 13.4.8 All materials removed shall be left adjacent to waterbodies (without compromising use of site) for two days to allow for migration of animals and insects back marginal habitat, prior to removal. Areas adjacent to the water bodies used for clearance operations shall be limited to avoid damage to marginal areas.
- 13.4.9 Accessible edges shall be checked to ensure good ground stability and adequate surfacing to prevent slips, trips and falls. Any shortfalls shall be reported to the Management Team and access to the edge of the water body restricted until appropriate corrective measures have been undertaken.
- 13.4.10 Grass edges around water bodies shall be cut in sections on a rotational basis during the early autumn, to leave sections of varied length. Some areas of bare mud will also be retained around the edge of ponds where there would otherwise be grass. Proportions shall be approximately as follows: 25% cut; 15% bare ground; 60% rough/marginal vegetation.
- 13.4.11 Planting on banks shall be cut back regularly to ensure it is maintained at a manageable height, whilst retaining wildlife habitat value. No more than 40% shall be cut back at any one time to provide shelter for wildlife and no cutting shall take place during the nesting season of aquatic birds.
- 13.4.12 Emergent and submerged vegetation of ponds (no more than 25%) shall be cleared during the autumn or winter of each year to create areas of both open water and varied structure.
- 13.4.13 Aquatic species shall be maintained as appropriate, dividing and removing any vegetation encroaching upon deeper areas of the pond outside of shallow pockets and ledges.
- 13.4.14 Pond weed and water lilies shall be reduced regularly to keep them manageable and prevent harm to other aquatic wildlife.
- 13.4.15 Ponds shall be managed in a pro-active way to adapt to the changes taking place as a result of succession.
- 13.4.16 Fallen trees and other debris shall be removed from the water, with the exception of those which are regularly observed to be providing shelter for wildlife.

- 13.4.17 Throughout the year, the water level shall be checked and topped up as required to provide sufficient cover for aquatic wildlife. In the event of restrictions being put in place by Statutory Undertakers, consult the Management Team for guidance on water use.

13.5 Scrapes (within habitat creation area)

Management objectives

- 13.5.1 To maintain the scrapes as seasonally wet depressions with a varied structure and fringe of healthy marginal vegetation, creating suitable habitat for a range of invertebrates, plants, mammals, reptiles and birds.

Management operations

- 13.5.2 The scrapes shall be checked for litter and other waste, which shall be removed and carted offsite. No burning on site shall be allowed. Natural debris such as branches shall be left in situ to provide shelter and habitat for wildlife, unless it is contributing to a debris dam that is harmful to the overall health of the scrapes.
- 13.5.3 Fallen trees and other debris shall be removed from the scrapes, with the exception of those which are regularly observed to be providing shelter for wildlife provided they do not cause a blockage by the formation of debris dams.
- 13.5.4 Management operations such as cutting of vegetation shall take place rotationally following an assessment of requirement.
- 13.5.5 Regard shall be had for potential protected species present, such as reptiles. A method statement prepared with input from a suitably qualified Ecologist may be required to undertake works if protected species are found to be present within the area of works.

13.6 The Hermitage Stream

Management objectives

- 13.6.1 To maintain the stream as a clean, clear waterway with a varied structure and dense fringe of healthy marginal vegetation, creating suitable habitat for a range of invertebrates, plants, mammals, fish, reptiles and birds.

Management operations

- 13.6.2 The channel shall be checked for litter and other waste, which shall be removed and carted offsite. No burning on site shall be allowed. Natural debris such as branches shall be left in situ to provide shelter and habitat for wildlife, unless it is contributing to a debris dam that is harmful to the overall health of the stream.
- 13.6.3 Fallen trees and other debris shall be removed from the channel, with the exception of those which are regularly observed to be providing shelter for wildlife provided they do not cause a blockage by the formation of debris dams.
- 13.6.4 Management operations such as cutting of vegetation and de-silting of the channel shall take place rotationally following an assessment of requirement.
- 13.6.5 De-silting of the channel shall be undertaken in consultation with the Environment Agency and only where necessary, in September or October. Machinery shall only be permitted on one bank. Marginal vegetation shall not be disturbed, nor will a minimum

of one third of the channel. Regard shall be had for potential protected species present, such as reptiles. A method statement prepared with input from a suitably qualified Ecologist may be required to undertake works if protected species are found to be present within the area of works.

- 13.6.6 Regular checks shall be made for the presence of Himalayan Balsalm, which shall be removed at the earliest opportunity by one of two means:
- Strimming or cutting all stems as close to ground level as possible by the end of June and before plants have set seed. Close monitoring should take place to ensure that plants do not regenerate and set seed within the season.
 - Pulling up before plants have set seed. Close monitoring should take place to ensure that late maturing seedlings are not overlooked.

14 Ecological Management

- 14.1.1 Refer to Atkins Habitat Management and Maintenance Plan (Link Road and Associated Infrastructure Phase) March 2014, section 4.

15 Habitat Creation Area

- 15.1.1 Management within this area to be as specified by a suitably qualified ecologist. Also refer to Atkins 2014 Dunsbury Hill Farm Series 3000 Appendices (namely, Atkins 2014 Dunsbury Hill Farm Volume 3 Works Information-Environment and Volume 4 Series 3000 Appendices- Landscape and Ecology), detail to follow.

11.1 Species –rich grassland (transplanted)

Management objective

- 15.1.2 To translocate grassland turves from the proposed location of the hotel which contain common spotted orchids and ensure their successful establishment and colonisation. To provide low-maintenance species-rich grassland to create areas with enhanced ecological diversity and value, particularly for protected species.

Management operations

- 15.1.3 All vegetation to be planted will be maintained in order for it to become established; and the planting will be monitored during the establishment period and any failing/dead plants must be replaced with the same native species.
- 15.1.4 The species-rich grassland will be managed in accordance with the management methodology described in the Dunsbury Hill Farm Works Information and Series 3000 Appendices – Landscape and Ecology

11.2 Hibernacula

- 15.1.5 Detail to follow

11.3 Log Piles/refugia

- 15.1.6 Detail to follow

Appendix A: Habitat Management and Maintenance Plan (March 2014)
(Appended separately)

Appendix B: 1-5 Year Indicative Programme

ITEM	ACTIVITY AND MINIMUM FREQUENCY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
General	Litter 12/yr												
	Top up mulch 1/yr												
	Check for loose plants and re-firm 1/yr												
Hard surfaces /fittings	Weed control as required												
	Inspect and clean 12/yr												
	Clear drains 12/yr												
	Treat rust as required												
	Paint as required												
Gates/fences	Inspect 12/yr												
Retained features	Cutting / trimming												
	Remove dangerous material												
Ornamental shrubs	Weed control as required												
	Pruning as required												
	Thinning as required												
	Fertiliser application 1/yr												
Ornamental climbers	Weed control as required												
	Trim 2/yr												
	Secure loose growth to support as required												
	Fertiliser application 1/yr												
Ornamental groundcover	Weed control as required												
	Trim edges 4/yr												
	Remove from other plant stems as required												
	Fertiliser application 1/yr												
Ornamental perennials	Weed control as required												
	Trim edges and deadhead 4/yr												
	Support as required												
	Fertiliser application 1/yr												
Formal grass	Cutting 16/yr												
	Edging 15/yr												
	Reform edges 1/yr												
	Selective herbicide/spot weeding as required												
	Spring renovation 1/yr												
	Fertiliser application 2/yr												
Meadow	Cutting 1/yr												
	Short cut at edges 16/yr												
	Edging where required 16/yr												
	Selective herbicide/spot weeding as required												
Rough grassland	Check for maintenance requirement 1/yr												
	Cut back excessive woody growth 1/yr												
Swales / ditches	Remove dead material and debris as required												
	Grass cutting 16/yr												

As required Frequency of visit

Appendix C 1-5 Year Indicative Programme (trees, hedges)

ITEM	ACTIVITY AND MINIMUM FREQUENCY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
General	Litter 12/yr												
	Check for loose plants and re-firm 1/yr												
Existing specimen trees	Weed control as required												
	Top up mulch 1/yr												
	Fertiliser application 1/yr												
	Pruning as required												
New specimen trees (formal areas)	Weed control as required												
	Top up mulch 1/yr												
	Water as required												
	Check stability and adjust ties, stakes and guys 2/yr												
	Fertiliser application 1/yr												
New specimen trees (informal areas)	Weed control as required												
	Water as required												
	Check stability and adjust ties, stakes and guys 2/yr												
	Check guards for stability and damage 2/yr												
	Pruning as required												
Hedges	Cutting 2/yr												
	Fertiliser application 1/yr												
	Weed control as required												
	Top up mulch 1/yr												
	Check stakes and shelters 2/yr												
Woodland areas	Fertiliser application 1/yr												
	Water as required												
	Check stakes and shelters 2/yr												
	Arboricultural work as required												
	Understorey management												
Native buffer planting	Thinning as required												
	Weed control as required												
	Fertiliser application 1/yr												
	Water as required												
	Check stakes and shelters 2/yr												
Scrub	Pruning as required												
	Check for maintenance requirement 1/yr												
Rough grassland	Cut back excessive woody growth 1/yr												
	Check for maintenance requirement 1/yr												

As required Frequency of visit