Gatwick Airport Northern Runway Project

Environmental Statement
Appendix 8.8.1: Outline Landscape and Ecology Management Plan – Part 1 – Clean Version

Book 5

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EXECUTIVE SUMMARY

This Outline Landscape and Ecology Management Plan (oLEMP) forms Appendix 8.8.1 of the ES. The report describes the various existing landscape and ecological zones within the site boundary and the features and elements that make these distinctive. The report describes how the Project will be developed within these zones and the integrated approach to landscape and ecological proposals that will be delivered as part of this and the ongoing management and maintenance operations required.

Mitigation and enhancement measures have been developed based on a set of environmental objectives including landscape integration, landscape amenity, public access and biodiversity. The mitigation measures will incorporate flood compensation areas, replacement public open space and ecological enhancement areas to benefit the local community, visitors and staff within the airport. Outline landscape proposals have been developed to illustrate the broad concept of soft and hard landscape proposals and water bodies within the site boundary. Landscape elements have been defined which describe the range of soft landscape treatments that will be implemented to enhance the landscape zones.

Ecological surveys have been undertaken to identify a range of protected/notable species. The overall "ecology strategy" for the Project (which is contained within this oLEMP) aims to facilitate the creation of a coherent ecological network that seeks to increase the biodiversity of the Project site and support the broader aims of integration and amenity within the landscape proposals.

This outline management plan sets out the requirements for workmanship during implementation and ongoing maintenance and management with reference to relevant guidance and legislation. A schedule of maintenance and typical programme of annual operations is set out for each landscape and ecological element.

It is intended that the principles within this oLEMP will be expanded and finalised, as necessary, during detailed design of the individual developments within the Project. It is anticipated that each element of the Project will have an individual LEMP, based on this document. The obligations within this document will be secured via a Requirement within the Development Consent Order (DCO), to be discharged by the relevant planning authorities.

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1 Introduction

1.1 Purpose and scope

1.1.1 This document forms Appendix 8.8.1 of the Environmental Statement (ES) prepared on behalf of Gatwick Airport Limited (GAL) for the proposal to make best use of Gatwick Airport's existing runways and infrastructure (referred to within this report as 'the Project').

1.1.2 This document provides the outline Landscape and Ecology Management Plan (oLEMP) for the Project. The obligations within this document are secured through a requirement in the **Draft DCO** [REP1-004]. Before work can commence on any part of the Project a landscape and ecology management plan (LEMP) for that part must be submitted to and approved by the local planning authority. Those LEMPs must be in general accordance with the principles in this document.

1.1.3 It is anticipated that LEMPs will be prepared for collective or individual elements of the Project to align with the delivery programme. This oLEMP sets the overarching vision for the Project and the principles to be consistent across the LEMPs to deliver coherent landscape and ecological features and management across the Project.

1.1.4 The report outlines the various soft landscape zones and elements which form part of the existing airport and which will be augmented and, in places, extended as part of this proposal, and puts forward the necessary actions required for their ongoing maintenance and management. The full extent of the Project is described in **ES Chapter 5: Project Description** [REP1-016].

1.1.5 The document provides details of:

- The environmental objectives which will be followed in the delivery of the detailed landscape and ecology management plans (section 2)
- The overarching landscape strategy describing the existing landscape features of each "zone" of the site and the objectives for the detailed design of the landscape and ecology management plans relevant to each zone (section 3)
- Landscape principles which are specific to each zone and particular development features (section 4)
- Performance requirements (section 5)
- the overarching ecological strategy for the site, including how impacts to ecology will be managed during implementation and maintenance phases (section 6)
- how the habitat creation that forms part of the landscape zones will ensure the Project delivers an overall enhancement for ecology (section 7).
- the principles of workmanship which will deliver the works described in the detailed LEMPs (section 8)
- the approach to responsibilities for delivering the works (section 9)
- a description of the maintenance principles that will be implemented post practical completion of all soft landscape areas to ensure the effective long-term management of the scheme (section 10).

1.1.6 This outline plan incorporates a number of plans which are described within the relevant sections including the:

- proposed Illustrative Landscape Overview and Key Plan which illustrates the main areas of existing and proposed vegetation, built infrastructure and water bodies at Figure 1.1.1,
- illustrative landscape proposals and concept plans which illustrate key soft and hard landscaping, earthworks and water bodies at Figures 1.2.1 to 1.2.18 and
- Landscape Management Zoning Plan which illustrates the eight distinctive character zones the Project is divided into and how these will be managed at Figure 4.1.1.

1.1.7 Accompanying schedules in Annexes 1, 2 and 3 provide an overview of typical plant species and maintenance and management regimes and programme necessary to achieve and maintain the long-term soft landscape objectives for the Project. These schedules will be revised to form bespoke elements of the detailed LEMP's as they are prepared for individual developments within the DCO Project.

1.1.8 Annex 4 includes a detailed tree survey for the surface access improvements area and a set of preliminary tree removal and protection plans.

1.1.9 Annex 5 includes preliminary locations for advance planting within the Project where opportunities exist for substantial mitigation and enhancement planting proposals to take place. The obligation to implement advance planting included in the oLEMP would be secured through Requirement 8 in the Draft DCO [REP1-004]. The detailed extent of advance planting and its timing within the programme to deliver the Project would be set out in the detailed LEMP's and submitted to be approved by the local planning authority. The following areas have been identified as areas where advance planting may be able to be delivered;

- Land at Brook Farm, north of the flood attenuation feature at Museum Field. Mix of woodland, scrub and grassland planting (approximately 10ha)
- Crawter's Brook. Replacement hedgerow planting (approximately 2.5ha)
- Replacement hedgerow beside Perimeter Road East/A23. Linear planting (approximately 0.3ha)

1.1.10 Further tree survey plans, tree quality schedules, tree removal plans and impact assessment for the Project site are included in Appendix 8.10.1: Tree Survey Report and Arboricultural Impact Assessment [REP1-026, REP1-027, REP1-028, REP1-029, REP1-030]. The document provides outline plans for tree retention and trees likely to be removed based on preliminary designs. The report identifies root protection zones which informs protective measures during construction.

1.1.11 Activities and mitigation measures which will take place during the pre-commencement and construction period of the Project are defined within **ES Appendix 5.3.2: Code of Construction Practice (CoCP)** [REP1-021]. Annex 6 of the CoCP [REP1-023, REP1-024, REP1-025] includes an Outline Arboricultural Method Statement which identifies measures to protect retained trees and root protection zones. The arboricultural measures along with Detailed Tree Removal and Protection Plans specifying the trees to be retained, will be contained as part of the Detailed Arboricultural Method Statements for approval by the relevant planning authority prior to the relevant construction works commencing, as set out in the Outline Arboricultural Method Statement [REP1-023, REP1-024, REP1-025].

1.2 Landscape and ecology features forming the Project

1.2.1 The full extent of the works required to deliver the Project is described in **ES Chapter 5: Project Description [REP1-016]** and the illustrative soft landscape works referred to within this outline plan form part of the Project. For each area of work an approved LEMP will set out the landscape and ecology features that will be delivered and the relevant management measures that are required. This includes:

- Decked Purple Parking relocated to Car Park X.
- South Terminal and North Terminal extensions and forecourts.
- Hotels, multi storey car parks and offices at South Terminal.
- CARE facility.
- New hangar.
- North Terminal Long Stay decked car parking
- Noise mitigation feature.

- A23/M23 Spur improvements including North and South Terminal roundabout and Longbridge roundabout improvements

1.2.2 For those planting areas which have been included specifically as mitigation or enhancement for the Project, specific principles have been included in this oLEMP to ensure that the detailed LEMPs include certain features which contribute to ensuring that the area operates as effective mitigation. These include:

- River Mole diversion works.
- Pentagon Field spoil deposition and reinstatement works (Figure 1.2.18).
- Museum Field Environmental Mitigation Area incorporating a flood compensation area, and environmental features for the benefit of the local public and wildlife (Figure 1.2.1).
- Replacement public open space at car park B incorporating new footpath link to Riverside Garden Park (Figure 1.2.2).
- Replacement public open space at Longbridge roundabout with links to Church Road (Horley) Conservation Area and incorporating cultural heritage information boards (Figure 1.2.3).
- Reed beds within a constructed wetland system as part of the water treatment works (Figures 1.2.19 and 1.2.20).

2 Environmental Objectives

2.1 Environmental objectives

2.1.1 The broad objectives of the landscape and ecology management proposals have been developed to ensure a coherent approach is taken across the Project. The proposals within this oLEMP are aligned with these objectives. The objectives are as follows:

- **Landscape Integration:** to provide an appropriate setting for the new developments within the airport, responding to adjacent urban and rural land uses and the existing character of the airport. Retention of green infrastructure assets wherever possible. Integration with and expansion of the existing green infrastructure network within and around the airport. Enhancing, restoring and reintroducing characteristic landscape elements which have been lost or degraded.
- **Landscape Amenity**: to respond to the scale and character of the airport and enhance the experience of people working within and visiting the airport, the local communities that live next to the airport and people travelling through the area.
- **Public access**: Maintain and enhance the footpath/cycleway routes within the airport and links to the strategic network to benefit people living and working within the area. To provide replacement areas of public open space and links to the existing rights of way network.
- **Biodiversity:** Implement a coherent ecology strategy to protect, manage and enhance the nature conservation value of appropriate areas of the Site.
- **Biosecurity:** Implement a comprehensive Invasive Non-Native Species (INNS) strategy for the Site and wider airport.

2.2 Site Wide Landscape Objectives

2.2.1 These landscape objectives will be considered in the preparation of LEMPs for each area of the Project as relevant.

Vegetation removal/retention proposals

2.2.2 For all elements of the Project that coincide with existing significant vegetation including hedgerows, woodland, trees, shrubs, wetland and amenity planting or elements of the Project that lie immediately adjacent to significant vegetation that may be affected during the construction phase or during maintenance activities, vegetation retention plans will be prepared and retained vegetation will be considered in the design:

- To ensure green infrastructure assets are retained wherever possible and adverse impacts on the important features and locally distinctive patterns of development at Gatwick Airport are minimised.
- To minimise adverse impacts on the character of surrounding landscapes and townscapes.
- To prevent coalescence of the airport and settlements of Crawley and Horley.
- To protect important urban green spaces including Riverside Garden Park and Church Meadows.
- To ensure that visually significant vegetation is retained to minimise adverse effects on visual receptors, protect important views and protect the natural beauty and setting of AONBs.
- Proposed woodland, tree, scrub, shrub, wetland, amenity and grassland planting;
- To ensure a high quality environment is created within the airport and surrounding landscape/townscape.
- To provide replacement/compensation planting where vegetation will be removed, particularly as a result of surface access improvements within and adjacent to the A23/M23 Spur corridor.

2.2.3 Detailed Tree Removal and Protection Plans specifying the trees to be retained, will be submitted as part of the Detailed Arboricultural Method Statements for approval by the relevant planning authority prior to the relevant construction works commencing, as set out in the Outline Arboricultural Method Statement [REP1-023, REP1-024, REP1-025] Annex 6 of the CoCP.

Proposed earth shaping, embankments, cuttings or bunds

- To ensure that visual screens are provided to minimise adverse effects on visual receptors and provide an opportunity for the creation of diverse habitats.
- To provide replacement/compensation features where they have been removed.
- The detailed design of the environmental mitigation will take account of the presence of buried archaeological remains, see **ES Chapter 7: Historic Environment** [APP-032].

Proposed fences, walls or barriers

- To ensure that visual screens are provided to minimise adverse effects on visual receptors.
- To provide replacement/compensation features where they have been removed.

Existing and proposed green infrastructure

- Management of, or implementation of, proposed mitigation to enhance existing green infrastructure including hedgerows, woodland, trees, shrubs, wetland and amenity planting;
- To enhance the character, visual quality and biodiversity of the airport and surrounding landscape/townscape.
- To enhance the screening capacity of visually significant vegetation.
- Tree and shrub planting will be provided within built-up areas (such as car parks) to reinforce retained tree lines and across the Project. The landscape planting will include a variety of native trees and shrubs and wildflower grasslands.
- New woodland will be planted along the highway works and new road alignments. In particular an existing non-native hedgerow comprising Leyland cypress between the A23 London Road and Perimeter Road East will be replaced with a native species-rich hedgerows.
- Any retained trees, scrub and hedgerows which are features of ecological value will be reviewed to see if they could be incorporated within the design, where feasible to do so.

Advance Mitigation and Enhancement Planting Opportunities

- Opportunities for Landscape and ecological proposals to be implemented early in the construction phase to compensate for loss of existing green infrastructure.
- Opportunities to provide visual screening and enhancements to landscape/townscape character at the earliest opportunity.
- Opportunities to provide biodiversity benefits and deliver ecosystem services provisions at the earliest opportunity.

3 Landscape and Ecology Zone Objectives

3.1.1 For the purposes of design, function, landscape treatment and management the existing land within the Project site can be divided into eight broad geographic "zones", some of which share landscape typologies. These are shown on the Landscape Management Zoning Plan (Figure 4.1.1).

3.1.2 This section describes the current landscape typologies and features of each zone together with the proposed landscape and ecology features and objectives. The objectives for each zone will inform the detailed design for any development to be carried out within that zone.

3.2 Zone 1: Southern Zone

Current Landscape Typology

3.2.1 Riparian corridor of Crawter's Brook and perimeter landscape features integrated with surface and decked car parks, and infrastructure associated with the airfield fringes. Aquatic, marginal vegetation and native hedgerows associated with the alignment of Crawter's Brook. Site boundary hedgerows and tree belts.

Objectives

3.2.2 This zone will incorporate a limited palette of planting which will combine with existing retained features including mown amenity grassland beside taxiways, native woodland belts and hedgerows.

3.2.3 The landscape and ecology objectives for this zone are:

- Integration of built form within the airport and at Lowfield Heath and Manor Royal
- Softening of site boundaries and transition to countryside
- Visual screening
- Enhancement of watercourse ecology
- Enhanced ecological connectivity along the south of the airport

3.3 Zone 2: The Airfield Zone

Current Landscape Typology

3.3.1 Airside space of runways, taxiways, stands and ancillary airport infrastructure interspersed with mown amenity grassland. Species poor grassland managed as close mown sward for operational purposes (airport safeguarding) located within the heart of the airport. This is, through operational requirements, a highly limited grassland environment.

Objectives

3.3.2 The landscape and ecology objectives for this zone are:

- Safe and practical space within an operational airside area.

3.4 Zone 3: River Mole Corridor

Current Landscape Typology

3.4.1 Riparian corridor of the River Mole including wet grassland, marginals, native woodland belts and hedgerows integrated with planted earth bunds within the airport. This zone incorporates the existing North West Zone biodiversity area. Pasture farmland and hedgerow field boundaries lie at the interface with the surrounding rural landscape.

Objectives

3.4.2 This is a river corridor environment that will incorporate surface water management and public open space east of the existing Museum Field. It will combine with existing retained features and will be linked to the rural farmland edge. It includes the creation of a new bund area, designed to replicate that already in place on the edge of Brockley Wood, as open mosaic habitat, along with areas of meadow grassland, to be managed for the benefit of a variety of ecology receptors, including skylark.

3.4.3 Pasture farmland and hedgerow field boundaries will be enhanced to form a series of connected open spaces for the public with footpath links to the Sussex Border Path. A section of the River Mole corridor will be realigned and enhanced to provide greater ecological diversity.

3.4.4 Measures will be included within the River Mole channel to mitigate for the extension of the culvert that conveys the River Mole beneath the runways and improve fish passage through the watercourses in the vicinity of the airport.

3.4.5 The landscape and ecology objectives for this zone are:

- Expansion of existing GAL biodiversity area
- Enhancement of watercourse ecology through land shaping and habitat creation
- Maintain fish passage through the River Mole
- New public open space and footpath links
- Native woodland and hedgerows
- Creation of meadow grassland
- Softening of site boundaries and transition to countryside
- Visual screening

3.5 Zone 4: North Western Zone

Current Landscape Typology

3.5.1 Structure planting associated with treed site boundaries and development zones. Woodland, woodland edge and grassland margins associated with the site perimeters.

Obejctives

3.5.2 This zone will include a locally characteristic palette of native planting incorporating existing hedgerows, woodland and tree belts.

3.5.3 The landscape and ecology objectives for this zone are:

- Integration of built form within the airport
- Enhancement of disconnected framework of vegetation
- Transition to habitats of River Mole corridor
- Visual screening

3.6 Zone 5: North Terminal Campus

Current Landscape Typology

3.6.1 This is a busy urban environment that forms a focus for people working within and visiting Gatwick which extends into airside spaces associated with piers and stands. Ornamental landscape planting is associated with the terminal buildings and immediate infrastructure. Structure planting is associated with the development zones and at the interface with vegetated zone boundaries, A23 transport corridor and River Mole corridor.

Objectives

3.6.2 The zone will incorporate multiple transport corridors, gathering spaces and structure planting which will combine with existing retained features including tree belts and avenues, ornamental shrub planting, and amenity grassland and will be linked to the native woodland planting along road and river corridors.

3.6.3 The landscape and ecology objectives for this zone are:

- Integration of built form within the airport and high-quality external spaces
- Safe and practical space within an operational airside area
- Softening of hard landscaped public areas
- Enhancement of grassland communities
- Green corridors associated with footpaths/cycleways
- Visual screening

3.7 Zone 6: Surface Access Corridor

Current Landscape Typology

3.7.1 This is an existing highway corridor environment incorporating surface water management and public open space. Vegetation comprises predominantly structure planting associated with the transport corridors and junctions of the A23/M23 Spur.

3.7.2 GAL has worked closely with the relevant highway authorities to develop the designs for the surface access works.

Objectives

3.7.3 The highway corridor will incorporate further surface water management features and replacement/new public open space combined with existing retained features including native woodland and will be integrated with both rural farmland and urban townscape. Native woodland, woodland edge, scrub and grassland communities wioud be established to replace highway vegetation removed to accommodate construction activities.

3.7.4 Planting will maintain ecological connectivity along this corridor and integrate with neighbouring public open spaces at Riverside Garden Park and Church Meadows to restore exposed woodland edges and extend into new areas of replacement open space at Longbridge roundabout and Car Park B. Footpaths and cycleways will link to and expand the existing network.

3.7.5 The landscape and ecology objectives for this zone are:

- Maintain ecological connectivity along north of airport
- Integration of highway infrastructure with built form within the airport and adjacent urban and rural land uses
- New public open space and footpath links
- Native woodland, grassland, reed bed and wetland habitats
- Semi-ornamental planting associated with airport green spaces linked to South Terminal
- Softening of site boundaries and transition to countryside
- Visual screening

3.8 Zone 7: South Terminal Campus

Current Landscape Typology

3.8.1 This is a busy urban environment that forms a focus for people working within and visiting Gatwick which extends into airside spaces associated with piers and stands. The area incorporates multiple transport corridors and gathering spaces. Landscape elements include ornamental planting associated with the terminal buildings, hotels, offices and immediate infrastructure and structure planting associated with the development zones and at the interface with vegetated zone boundaries, A23 transport corridor and Gatwick Stream corridor.

Obejctives

3.8.2 The zone will expand the landscape infrastructure through provision of tree belts and avenues, hedgerows and woodland, ornamental shrub planting, amenity grassland and will be linked to the native woodland planting along road corridors and the surrounding rural landscape.

3.8.3 The landscape and ecology objectives for this zone are:

- Integration of built form within the airport and high-quality external spaces
- Safe and practical space within an operational airside area
- Softening of hard landscaped public areas
- Enhancement of grassland communities
- Green corridors associated with footpaths/cycleways
- Softening of site boundaries and transition to countryside
- Visual screening

3.9 Zone 8: Eastern Zone

Current Landscape Typology

3.9.1 This is a small, distinct zone comprising Pentagon Field and a series of linked grassland spaces set within mature native woodland. Neighbouring areas of residential development, car parks at South Terminal, farmland and flood management areas provide the zone's context.

Objectives

3.9.2 The zone will include a locally characteristic palette of native planting incorporating existing hedgerows, woodland, tree belts and grassland.

3.9.3 The landscape and ecology objectives for this zone are:

- Native woodland and hedgerows
- Reed beds and wetland habitats at surface water treatment works
- Enhancement of grassland communities
- Softening of site boundaries and transition to countryside
- Visual screening

4 Landscape Zone Proposals

4.1.1 The existing soft landscape elements which are the defining elements of each zone and the key landscape proposals and their overall management within each zone, to ensure their continued character, are summarised below.

4.2 Zone 1: Southern Zone

4.2.1 Landscape proposals for this zone:

- Maintain existing linear airport fringe and river corridor habitats including aquatic and marginal vegetation and native hedgerows and site boundary tree belts.
- Native woodland planting to define Project boundaries and to provide buffers with existing development and transport corridors
- Native scrub and hedgerow planting to define river corridor and airside areas
- Mown grassland fringing airside areas
- Marginal and aquatic planting within river corridor.
- Car Park X Flood Compensation Area - Soft/bio engineering will be used in preference to concrete where natural river banks require protection at the connecting spillways to the new FCAs from watercourses. The bank forms will also be varied where they are being altered/lowered to aid natural variance of flow in the channel.

4.3 Zone 2: The Airfield

4.3.1 Landscape proposals for this zone:

- Maintain existing mown grassland habitats extending across large airside operational areas to be maintained.

4.4 Zone 3: River Mole Corridor

4.4.1 Landscape proposals for this zone:

- Maintain existing river corridor habitats including aquatic and marginal vegetation and native hedgerows and Project site boundary tree belts.
- Public open space at Museum Field and Brook Farm incorporating flood compensation area, planted earth bunds and grassland and hedgerows with trees.
- Meadow grassland management of existing grazing pasture to improve species diversity
- Native scrub and hedgerow planting to supplement exiting field boundaries and filter views
- Open scrub planting and exposed soil surface on earth bunds to provide habitats for target species
- Wet woodland planting to utilise soil conditions in low lying areas.

River Mole

4.4.2 Specific proposals for the works in or around the River Mole:

- The diversion of the River Mole should create an increased length of channel with a more sinuous, natural course and more diverse channel profile. The improvements should provide ecological linkages through enhanced wildlife corridors and nodes.
- The capacity of the River Mole floodplain (including the associated culvert and syphon outfall structures) will be increased through the provision of a new re-naturalised, two-stage channel downstream of the existing River Mole culvert beneath the two runways. The design will include varied cross sections to mimic natural processes, bed and bank forms, and will be of a suitable bed gradient, sinuosity and appropriate substrate at the realignment in order to maintain sediment transport capability, see **ES Chapter 11: Water** [APP-036]. Creation of a more natural planform and a two-stage channel will improve flow regime channel diversity and floodplain coupling. Suitable substrate will be added to the re-naturalised channel following the works

- The design should consider the creation of new habitats comprising species-rich grassland managed through hay cuts and coppicing of woodland strips and marginal and aquatic planting within the river corridor.
- An extension to the River Mole footpath should be provided to the land at Museum Field and Brook Farm.

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- Natural plan form to improve flow regime increasing the existing capacity of the river. This mitigation will also increase the resilience of the surrounding area to flooding, including from changing climate and provide additional habitats, see **ES Chapter 15: Climate Change [APP040]**.

Museum Field Environmental Mitigation Area

4.4.3 Specific landscaping proposals for the Museum Field Environmental Mitigation Area:

- The design of the Museum Field Environmental Mitigation Area should include the creation of new habitats in the western part of the site, comprising woodland, wet woodland, scrub and tree planting and species-rich grassland.
- The proposed earth bund in the south and east of Museum Field should provide a mosaic of habitats comprising scrub, grassland and bare or poorly vegetated ground to provide a matrix of habitats suitable for a variety of invertebrates.
- Wet grassland communities to utilise transient inundation of flood compensation area.
- The flood compensation areas (including access arrangements) at Museum Field and Brook Farm will be designed in a manner that minimises the disturbance of buried archaeological remains as far as practicable, see **ES Chapter 7: Historic Environment** [APP032].
- Soft/bio engineering will be used in preference to concrete where natural river banks require protection at the connecting spillways to the new FCAs from watercourses. The bank forms will also be varied where they are being altered/lowered to aid natural variance of flow in the channel. Planting will take place on the Museum Field FCA. This will restore natural vegetation to the floodplain whilst protecting the banks from erosion.
- Provision of new recreational routes around the proposed flood compensation area to the east of Museum Field to enhance local public access opportunities.
- The FCA will include measures to reduce their own impact including:
  - Fish refuges. For example, low points within the FCA could be connected to the watercourse by swales to encourage any fish that move with rising flood water to return to the river as flood waters recede.
  - Design flow control structure to reduce water levels slowly. (If the water level receded rapidly fish are more likely to be stranded).
  - Loss of aquatic habitat for fish will be mitigated by in-channel habitat in the River Mole.

4.4.4 For concept design see **Figure 1.2.1 Museum Field Sketch Landscape Concept.**

4.5 Zone 4: North Western Zone

4.5.1 Landscape proposals for this zone:

- Native woodland planting to define Project boundaries and to provide buffers with existing development and transport corridors
- Mown and meadow grassland verges
- Native hedgerow planting to supplement exiting field boundaries and filter views.

4.6 Zone 5: North Terminal Campus

4.6.1 Landscape proposals for this zone:

- Native linear structure planting associated with transport corridors and development sites.
- Tree groups and specimen trees
- Woodland fringe
- Amenity and meadow grass areas with a variety of species composition and mowing regimes
- Bulb planting within meadow and grassland
- Avenue trees, shrubs and grassland verges for green transport corridors
- Formal hedge planting to subdivide spaces and define use zones
- Ornamental shrub, herbaceous planting and groundcover

4.7 Zone 6: Surface Access Corridor

4.7.1 Through engagement with the relevant highways authorities the landscape proposals have been discussed and evolved to reflect those discussions.

4.7.2 Illustrative landscape proposals are based on highway designs by Arup to appropriate National Highways Design Manual for Roads and Bridges (DMRB) standards including DMRB LD117 Landscape Design, the Manual of Contract Documents for Highways Works, Major Projects and DMRB Asset Data Management Manual Volume 13.

4.7.3 Landscape proposals for this zone:

- Road corridor planting to replace removed woodland and soften infrastructure, signage, lighting and traffic.

- Native woodland planting, woodland fringe and scrub to provide diverse, dense green corridor and buffer with neighbouring landscapes and townscapes.
- Amenity and meadow grass areas with a variety of species composition and mowing regimes
- Wet grassland and reed bed communities to utilise transient inundation of flood compensation areas
- Ornamental shrub, herbaceous planting and groundcover where corridors transition to terminal zones.
- The provision of the extension of the footpath/bridge link to provide access to land within and adjacent to the Church Road (Horley) Conservation Area through the environmental mitigation land at Longbridge Roundabout.
- Information boards to provide interpretation of local cultural heritage features and enable a greater understanding of the significance of heritage assets, see **ES Chapter 7: Historic Environment** [APP-032].

Replacement Open Space

4.7.4 Specific landscaping proposals for the provision of replacement open space:

- The location of open space should be easily accessible by all groups of people, including those with disabilities. The design of the space should also consider the needs of different groups of people, such as families with children, older adults, and people with disabilities.
- The activities and amenities provided in the open space should be versatile and suitable for different age groups and interests. For example, the space could include areas for sports, playgrounds, seating areas, and green spaces for picnics and relaxation.
- Open spaces should be appropriately lit and have clear lines of sight to prevent criminal activity and anti-social behaviour. Security measures should be provided, such as CCTV cameras, to deter criminal activity and provide a sense of safety for users.
- There should be footpath connections between the existing areas of open space in Riverside Garden Park and Church Meadows and replacement areas in Car Park B and to the west of the River Mole adjacent to Church Meadows.
- Woodland, scrub and species-rich grassland creation within Car Park B to provide an extension of Riverside Garden Park.
- Creation of new habitats within a newly created mitigation area north and east of Longbridge roundabout comprising woodland, scrub and tree planting and species-rich, wet and dry grassland creation
- Marginal planting will also be introduced around new attenuation ponds.

4.7.5 For landscape proposals and concept designs see:

- **Figure 1.2.2 Car Park B Sketch Landscape Concept**
- **Figure 1.2.3 Longbridge Roundabout Sketch Landscape Concept**
- **Figure 1.2.4 to 1.2.15 Surface Access Landscape Proposals**
- **Figure 1.2.16 Surface Access Illustrative Cross Section**
- **Figure 1.2.17 Surface Access Illustrative Cross Section**
- **Annex 4 Preliminary Surface Access Tree Removal and Protection Plans**

4.8 Zone 7: South Terminal Campus

4.8.1 Landscape proposals for this zone:

- Tree groups and specimen trees
- Woodland fringe
- Amenity and meadow grass areas with a variety of species composition and mowing regimes
- Bulb planting within meadow and grassland
- Avenue trees, shrubs and grassland verges for green transport corridors
- Formal hedge planting to subdivide spaces and define use zones
- Ornamental shrub, herbaceous planting and groundcover

4.9 Zone 8: Eastern Zone

4.9.1 Landscape proposals for this zone:

- Native woodland planting to define Project boundaries and to provide buffers with existing development and transport corridors
- Reed beds and wetland habitat at surface water treatment works
- Grassland management of existing and proposed habitats to improve species diversity
- Native scrub and hedgerow planting to supplement exiting field boundaries and filter views.

Pentagon Field

4.9.2 Specific landscape proposals for the works at Pentagon Field:

- The spoil deposition area of Pentagon Field should have grassland reinstated for grazing of livestock.
- Blocks and belts of native woodland should be established along the boundary of Balcombe Road to mitigate impact of tree loss generally within the Project, extend existing woodland, create ecological connectivity and a visual screen and buffer at the airport perimeter

4.9.3 For a concept design see **Figure 1.2.18 Pentagon Field Sketch Landscape Concept**

5 Performance Requirements

5.1.1 The performance requirements of these elements, where possible/practical, are described below.

5.1.2 There will be consideration of climate change in the plant species choice and design of landscaping to enhance green infrastructure and habitats. In particular, resilience to extreme weather conditions will be considered. This includes drought resistant species in the planting options to increase the resilience to future drought conditions (see **ES Chapter 15: Climate Change** (Doc Ref. 5.1)).

5.1.3 There will be monitoring of the build-up of sediment during operation in the realigned River Mole channel following re-naturalisation, at the spillway to Museum Field flood compensation area and at the outfall of at Car Park X. Best practice guidelines will be used during operation to prevent the spread of invasive species, see **ES Chapter 11: Water** (Doc Ref. 5.1).

5.1.4 The detailed design of environmental mitigation and management proposals will be created in consultation with the Airport Safeguarding team.

5.2 Woodland and Scrub

5.2.1 Native tree and shrub species, planted at 1 metre centres will be thinned out, coppiced (appropriate species) and beat-up as they develop to create a multi-levelled woodland/shrub buffer, providing new habitat, amenity and screening capabilities. New tree and shrub species will be supplied with rabbit guards and/or shelters to protect them from browsing and to create a favourable microclimate.

5.2.2 At Year 3 it is expected that they will have established a single leader, or multi stemmed habit where intended, and any guards will be removed. Their lower branches will be retained and a weed free circle maintained around the plants for the initial 3-5 years.

5.3 Specimen Trees

5.3.1 Individual trees planted as specimens, in groups or avenues will include ornamental and native species. At Year 3 it is expected that they will have established a single, central branch leader, or multi stemmed habit where intended. Their lower branches will be retained unless a clear stem is required to avoid encroachment upon footpaths/cycleways or carriageways. Stem clearance of over 2 metres will be required for trees along carriageways.

5.3.2 They will be maintained thereafter to develop and retain a well-balanced crown, shape and character typical of the species.

5.4 Hedgerows and Hedges

5.4.1 Hedge planting will form a full, dense hedgerow at Year 3 with 100% coverage of the hedgeline, and no gaps present. Hedgerows, where adjacent to the highway or car parking, will be maintained at 600 mm in height. Single species ornamental hedges (where planted) will be clipped to maintain a formal habit.

5.4.2 Mixed native hedgerows will be cut on a 3 year rotation with alternate sides cut in Year 1 and topped in Year 3 to maintain an even shape and dense screen. Cutting will only be carried out in the autumn or winter and hedgerows maintained at approximately 2 metres in height.

5.5 Shrub and Herbaceous Planting

5.5.1 Native shrub mixes and ornamental shrubs and groundcover plants will be planted to cover 100% of the relevant area at Year 3 and maintained thereafter as necessary. It is anticipated that the plants will attain growth rates and a form typical of the relevant species and will be managed to prevent encroachment upon footpaths/cycleways or carriageways. Climbing shrubs will, with time, screen and soften free standing walls and structures. Where necessary formative training may be required to ensure the shrubs adhere to these hard structures. Ornamental grass and herbaceous species will be planted to cover 100% of the relevant area at Year 2 and maintained thereafter as necessary.

5.6 Climbers

5.6.1 Climbers will, with time, screen and soften prominent freestanding masonry walls and structures with a preference for suckering or self-supporting species to reduce maintenance.

5.6.2 Where necessary formative training or means of support may be required to ensure the climbers grow as intended to provide vertical interest and effective covering.

5.6.3 Climbers will be planted to provide visual relief to the built form and infrastructure and enhance the setting of ornamental planting.

5.7 Meadow and Wet Grassland

5.7.1 Grass and flora species appropriate to the situation and intended maintenance regime will be established to create an even sward to cover at least 95% of the intended area and contain a minimum of 20% herb species.

5.7.2 Meadow grass will be flailed/cut annually after flowering and seeding to a height of 50 mm with all arising removed to encourage diversity of species.

5.8 General Amenity Grassland

5.8.1 Grass species appropriate to the situation and intended maintenance regime will be established to create an even, uniform sward to cover at least 95% of the relevant area and contain a maximum of 10% herb species.

5.8.2 Amenity grass areas will be maintained at a height of 50-75 mm, with an average of 13-14 cuts per season.

5.9 Marginal and Aquatic Planting

5.9.1 A mix of native marginal and aquatic plants will create a variety of habitats suitable for flora and fauna, with aggressive growers avoided to prevent over colonisation. Waterbodies will be created and managed in consultation with the Airport Safeguarding team.

5.9.2 A third of the water surface will be maintained free of plants to ensure healthy water quality and prevent over domination of plant material, with thinning of aggressive plant species in winter.

5.9.3 An attractive wetland environment will be created with planting to compliment the setting and offer valuable wildlife habitat and seasonal interest.

A series of six reed beds surrounded by embankments would form part of a constructed wetland system to provide biological treatment of de-icer contaminated surface water from the pollution storage lagoons. The treatment works will create a naturalistic wetland area with a variety of species and habitat typesand taking account of climate change resilient, in land off Radford Road, south of the Crawley Sewage Treatment Works.

5.10 Riparian habitat

5.10.1 Soft/bio engineering within riverbanks should avoid plastics to prevent the release of microplastics into the watercourse.

5.10.2 The renaturalised section of the River Mole downstream (north) of the runway culvert will not be netted to avoid it restricting tree growth and the natural movement of the channel impacting the biodiversity of the watercourse and its corridor.

5.11 Bulb Planting

5.11.1 Swathes of spring bulbs for a naturalistic appearance will be planted frequently in grassed areas and encouraged to colonise naturally.

5.11.2 Foliage will be allowed to die back naturally after flowering.

5.11.3 Bulb planting will provide seasonal interest in areas of open grassland, in particular in prominent areas of the site.

5.12 Existing Vegetation

5.12.1 Existing trees and hedgerows, where retained, will be protected, conserved and enhanced to contribute to a mature green infrastructure for the airport.

5.12.2 Tree belts and hedgerows provide important wildlife corridors and will be enhanced, wherever practicable, to support the movement and foraging of birds, mammals and insects.

5.12.3 Vegetation will be maintained in a sympathetic manner to ensure species replicate their natural form including imperfections and local characteristics.

5.12.4 Annual inspections will be carried out to ensure the structural integrity, health and vigour of trees and hedgerows and the effectiveness of any remedial works carried out as required.

5.12.5 In areas where vegetation is present it will provide an established landscape setting for the airport and the proposed development of the Project offering instant maturity and sense of place to the built form and infrastructure and demonstrate integration of existing landscape features into development. The green and blue infrastructure will be conserved, where practicable, and managed and enhanced for the ongoing benefit of the airport and the wider landscape and townscape setting.

6 Ecological Strategy

6.1 Ecological Baseline

6.1.1 A range of surveys were undertaken to inform the DCO application. Details and results can be found in ES Chapter 9: Ecology and Nature Conservation and associated Appendices.

6.2 Habitats within the site

6.2.1 The majority of the Project Site comprises habitats associated with the airport including amenity grassland, areas of tarmacked hard standing and an array of buildings associated with the wider airport.

6.2.2 Undeveloped areas around the periphery of the airport include areas of broadleaved woodland, neutral grasslands and dense scrub. In addition, there are the two river corridors (Gatwick Stream and River Mole), along with Crawter's Brook.

6.3 Species identified on site

6.3.1 The surveys identified a range of protected/notable species present including:

- Great crested newts and common toad were recorded within four ponds.
- Grass snakes were recorded both within and immediately adjacent to the site.
- Of the 51 bird species recorded as breeding or possibly breeding within the survey area, 20 species meet at least one criteria relating to special statutory protection or conservation importance (as set out in Table 3.2.1).
- A variety of bat species were recorded across the survey area, including the rare Bechstein's bat.
- Signs of badger activity were recorded during badger surveys. Due to the sensitive nature of badger data, the full findings of the surveys are reported in a confidential appendix of the ES (Appendix 9.6.4) which is available upon request to those with a legitimate need for the information.
- Invertebrates of conservation interest were recorded within the two existing Gatwick biodiversity areas.
- A variety of fish and aquatic invertebrates were identified within the Gatwick Stream and River Mole.

6.4 Legislation

6.4.1 A summary of relevant wildlife legislation is provided in Table 3.2.1 below. These will all be fully complied with.

Table 3.2.1 Summary of relevant wildlife legislation

Receptor	Legislation
Bats	All bat species are legally protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
Birds	All breeding birds, their eggs, nests and young are protected under the Wildlife and Countryside Act 1981 (as amended).
Great Crested Newts	Great Crested Newt is legally protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
Grass Snake	Grass snake is partially protected under Schedule 5 of the WCA 1981 and is also listed under Section 41 of the NERC Act (2006).
Common Toad	Common Toad is protected under Schedule 5 of the WCA 1981.
Badger	Protection of Badgers Act 1992.

6.5 Ecological Strategy

6.5.1 The overall ecology strategy for the Project aims to facilitate the creation of a coherent and resilient ecological network that seeks to increase the biodiversity of the Project site in a controlled manner such that it integrates with and supports the existing ecology of the area. It also aims to support the broader aims of the landscape proposals with respect to integration and amenity. Figure 3.3.1 provides an overview of the ecology strategy.

6.5.2 It will achieve this by building on the work already completed by GAL in their existing management of the site. There are currently two areas managed for wildlife benefit within the GAL estate (Figure 3.3.1):

- Land East of the Railway Line (LERL); and
- The North West Zone.

6.5.3 The LERL includes the Gatwick Stream, the ancient woodlands of Horleyland Wood and Picketts Wood as well as the flood attenuation areas. It currently covers circa 40 ha.

6.5.4 The North West Zone includes the River Mole corridor and Brockley Wood. It currently covers some 35 ha and includes the various grasslands and woodland strips that adjoin the River Mole.

6.5.5 Existing management of both areas includes improved understory planting and reintroduction of coppicing in woodlands, and hay cut of grasslands and collection of arisings.

6.5.6 Management of biodiversity within the airport led to GAL being awarded the Wildlife Trusts' Biodiversity Benchmark Award in 2014, which it has retained annually since.

6.5.7 The ecology strategy for the Project includes the enlargement of the North West Zone along the River Mole Corridor with the inclusion of Brook Farm and Museum Field, but also through the creation of new wildlife nodes and enhancements to existing features that will increase the area of valuable habitat available (Longbridge, Car Park B and enhancements to Pentagon Field) (see Figure 3.3.1). Wildlife nodes provide larger areas of habitat to be managed for biodiversity benefit, providing opportunities for wildlife to breed and forage.

6.5.8 The extension of the North West Zone to include the Museum Field Environmental Mitigation Area also ensures that habitat already used by Bechstein's bat is enhanced. This will help improve connectivity for this species to the north and west of the airport, encouraging bats to use this corridor to move towards the woodlands in the wider landscape to the west that are their core breeding habitat rather than move south towards the airfield.

6.5.9 The ecology strategy builds on the presence of the two rivers running broadly north-south through the airport (the Gatwick Stream and the River Mole) along with Crawter's Brook that runs east-west along the south of the airport. These wildlife corridors function by providing continuous habitat to facilitate the movement of species along them, providing ecological linkage both through the Project site and with the surrounding habitat, facilitating wildlife dispersion to the wider landscape.

6.5.10 The wildlife nodes will be broadly created along these corridors to provide additional habitat for a variety of wildlife that is then able to move between them and the wider landscape along the corridors.

6.5.11 In addition to the wildlife nodes, incidental opportunities to support the ecology strategy will be created through the provision of new planting that enhances the connectivity around the wider airport. For example, along the southeast corner, linking the

LERL and Crawter's Brook and to the north along the River Mole corridor where planting is currently patchy.

6.5.12 The creation of six reed beds as part of a constructed wetland system to treat the de-icer contaminated waters will provide an opportunity for a naturalistic wetland area with a variety of species and habitat types adjacent to the Gatwick Stream and flood attenuation features north of Radford Road.

7 Ecological Mitigation Measures

7.1.1 This section outlines the ecological mitigation required to ensure that protected and/or notable species and habitats are not harmed during management and maintenance activities. These measures are designed to complement those that are expected to be required through the relevant licence and permitting regimes.

7.1.2 Measures specifically required for the construction period are set out in ES Appendix 5.3.2: Code of Construction Practice (Doc Ref. 5.3).

7.2 Habitats

7.2.1 The ecology onsite will provide a mosaic of habitats comprising scrub, grassland and bare or poorly vegetated ground to provide a matrix of habitats suitable for a variety of species. Woodland and hedgerows will also be maintained, removed, or managed where applicable. Other habitats will include woodland, wet woodland, scrub and tree planting and species-rich grassland.

7.2.2 Habitat creation will include:

- Creation of an earth bund in the south and east of Museum Field;
- Tree and shrub planting to mitigate for loss of existing habitat within built-up areas (such as car parks);
- Woodland creation to compensate for loss of existing habitat;
- Landscape planting to include a variety of native trees and shrubs and wildflower grasslands; and
- Tree and shrub planting to reinforce retained tree lines.
- Reed bed and wetland creation as part of the water treatment works.

7.2.3 The creation of these new habitats will provide nesting sites for breeding birds (where appropriate) and maintain and enhance connectivity for foraging and commuting bats. It will also support a variety of invertebrates, reptiles and amphibians found on site.

7.2.4 The land around car parks will be used to assist with the ecology on site. For example, tree and shrub planting will be undertaken to reinforce retained tree lines within existing car parks and to improve habitat connectivity across them. Woodland, scrub and species-rich grassland creation within Car Park B will assist with providing an extension of Riverside Garden Park and to compensate for habitat loss along the highway.

7.2.5 The creation of woodland belts in Pentagon Field will assist with mitigating the impact of woodland and trees lost in other parts of the site in a location that extends existing woodland and enhances connectivity.

7.2.6 Waterbodies are important for the ecology on site. The creation of various small attenuation ponds and drainage ditches will act as part of the highway proposals for the Project supporting wet grassland, marginal plants and reed beds. Due to aircraft safeguarding considerations, none are being designed to hold open water permanently.

7.2.7 The airfield satellite construction compound will occupy land outside of the River Mole diversion footprint to allow the new river channel to establish early in the Project. A minimum 8 metre buffer will be created along the channel to allow for this.

7.2.8 Diversion of the River Mole will create an increased length of channel with a more sinuous, natural course. The diversion will have a two stage profile with a central low flow channel and a higher bench or berm to provide flood capacity.

7.3 Species

Birds

7.3.1 To avoid disturbance to nesting birds, any vegetation removal which is required will be undertaken outside of the bird nesting season (March to August inclusive) where practicable. Where this is not practicable, the relevant areas will be inspected by a suitably experienced ecologist 48 hours prior to removal, to check for the presence of nesting birds. If an active nest is present, the nest and a minimum 5m buffer will need to be retained until the young birds have fledged.

7.3.2 Cutting of meadow and rank grasses will be carried out in early autumn to prevent disturbance of ground nesting birds and all cut material disposed of off-site. This will help ensure that species such as skylark are able to nest successfully in these areas.

7.3.3 A scheme of installation of new bird boxes will be implemented at the start of construction across the GAL estate. Locations will be detailed in a LEMP and chosen in discussion with the GAL Biodiversity team but will include a variety of box types, some for woodland species and some for more urban settings.

Bats

7.3.4 The illumination of bat roosts and foraging corridors creates disturbance. Therefore, sensitive lighting will be used during operation in order to minimise disturbance to bats. Lighting will be designed in accordance with Institution of Lighting Professionals/Bat Conservation Trust guidelines as relevant.

7.3.5 Lighting will be directed to where it is needed only, to avoid light spillage. Accessories such as hoods, cowls and shields will be used to direct light to the intended area only.

7.3.6 Light levels will be as low as the guidelines permit. If lighting isn't needed, it will be avoided.

7.3.7 Any disturbance or removal of bat roosts identified during pre-construction surveys will be mitigated under an appropriate licence from Natural England.

7.3.8 A programme of new bat boxes will be incorporated at the start of construction across the site. Locations will be detailed in a LEMP and chosen in discussion with the GAL Biodiversity team and will include a variety of box types. They will be located within woodland managed by the GAL Biodiversity team.

Badger

7.3.9 Following a re-survey, loss of any setts that require closure will be appropriately mitigated under a suitable licence from Natural England.

Reptiles and Amphibians

7.3.10 Field margins and other vegetation on site will be cut in stages, under the precautionary principle and overseen by a suitably qualified ecologist. Cutting of meadow and rank grasses will be carried out in early autumn to prevent disturbance of reptiles and all material disposed of off- site.

7.3.11 The creation of an attenuation pond supporting reedbed to the north of South Terminal Roundabout will provide a high value habitat for breeding birds, invertebrates and amphibians.

7.3.12 There will be an emphasis on the creation of new, high value habitats comprising a mixture of wet and dry neutral grasslands

along the new channel of the River Mole and within the Museum Field Environmental Mitigation Area.

7.3.13 Once the new habitats had been created, the installation of refugia and hibernacula will be undertaken to enhance the suitability of these new habitats for use by Great Crested Newts and reptiles.

Terrestrial Invertebrates

7.3.14 In addition to the various areas of habitat creation to take place within the Project, the creation of a new earth bund beside the flood attenuation feature within Museum Field will provide a range of habitats for terrestrial invertebrates.

7.3.15 The south-facing slope will be managed as an open mosaic, creating areas of longer grass, scrub, bare ground and open substrate of a variety of sizes. This is intended to mimic the existing bund to the south of Brockley Wood created when the River Mole was originally diverted. This is known as a focal point for the existing invertebrate interest on the airport due to the diversity of habitats present

Aquatic Ecology

7.3.16 Riparian planting would be included on both banks of the River Mole in the extended runway culvert section. This section will be roofed with a road traffic specification grid to allow light passage to the river surface beneath.

7.3.17 A fish pass on the upstream (south) of the River Mole culvert would be designed in consultation with the Environment Agency and constructed at the same time as the culvert extension.

7.3.18 A low-level weir will be constructed on the inlet (southern side) of the existing River Mole runway culvert to concentrate flows into a single box in times of low flow to maximise flow depth to support fish passage.

A fish resting pool at the northern (downstream) exit to the culvert would be designed in consultation with the Environment Agency and constructed at the same time as the culvert extension.Invasive Non-Native Species (INNS)

Management of INNS within the Project will follow the regime set out in The Great Britain Invasive Non-Native Species Strategy 2023 to 2030 (DEFRA 2023). The aim will be to minimise the spread of INNS through prevention and surveillance, early detection and monitoring. Prevention throughout the Project will take place through good practice measures as outlined in a biosecurity risk assessment that will be included within each area LEMP. Surveillance and monitoring will take place all INNS. Management of the invasive species will include avoidance of spread via buffer/exclusion zones or removal via herbicides.

8 Workmanship

8.1.1 Where, and to the extent that, materials and workmanship are not fully specified in this outline LEMP they are to be suitable for the purposes of the stated objectives and in accordance with good horticultural practice or the current British Standard with particular reference to:

- **BS 3998**: Recommendations for tree work
- **BS 4428**: Code of practice for general landscape operations, and
- **BS 7370**: Grounds maintenance, referencing specifically Parts 1 to 5 of this standard as follows:
  - **Part 1:** Recommendations for establishing and managing grounds maintenance organisations and for design considerations related to maintenance.
  - **Part 2**: Maintenance of hard areas.
  - **Part 3**: Maintenance of amenity and functional turf (other than sports turf).
  - **Part 4:** Maintenance of soft landscape (other than amenity turf).
  - **Part 5:** Maintenance of Water and Wetland Areas

9 Responsibilities for Management

9.1.1 The landscape planting and ecological proposals implemented as part of the Project that form part of the adoptable highway will be adopted and maintained by the local highway authority or National Highways.

9.1.2 Following the end of the establishment period and satisfactory completion of any landscape defects or necessary reinstatement works, all maintenance and management of soft landscape areas which form part of the Project within the airport and public open spaces will be undertaken by a suitably qualified landscape management contractor on behalf of GAL.

9.1.3 Ongoing management and maintenance of the Gatwick Airport estate will incorporate landscape proposals within the Project to provide a comprehensive approach going forward.

9.1.4 Areas for management include;

- Zone 1: Southern Zone
- Zone 2: The Airfield Zone
- Zone 3: River Mole Corridor
- Zone 4: North Western Zone
- Zone 5: North Terminal Campus
- Zone 6: Surface Access Corridor (areas outside of highway boundary)
- Zone 7: South Terminal Campus
- Zone 8: Eastern Zone

9.1.5 The landscape maintenance works will be periodically reviewed by a suitably qualified and experienced person to ensure that the landscape management operations are being completed in accordance with the approved relevant LEMP. During the first two years of establishment, the works will be inspected three times (during the growing season) and thereafter the works will be inspected annually. Inspection reports will be made available to the local authority.

10 Schedule of Maintenance

10.1.1 The establishment and upkeep of the various soft landscape elements that remain in GAL's control following the completion of the construction of the Project will entail the key maintenance operations described in this section.

10.2 Health and Safety

10.2.1 The contractor will refer to the site's Health and Safety File for residual risks and ensure strict compliance to any health and safety measures set out. All maintenance operations will only be carried out with due consideration to the welfare of the landscape maintenance operatives and members of the public.

10.2.2 The contractor will carry out their own risk assessment(s) as necessary to assess current conditions at the time of operation, including compliance when making use of any subcontractors to carry out specialist areas of works.

10.3 Native Woodland and Buffer Planting

10.3.1 Key maintenance operations will include:

- Formative pruning as necessary to establish a dense screen / buffer.
- Selective pruning of native woodland planting and buffer planting as required where shrubs / trees start to encroach on footpaths/cycleways, highways, water courses and bodies and

buildings, maintaining a full planted screen at all times along boundaries, where appropriate.
- Remedial pruning/tree surgery as necessary in accordance with BS:3998 or to remove growth obstructing paths, carriageways, lighting and signs.

10.4 Urban, Open Space and Hedgerow Trees

10.4.1 Key maintenance operations will include:

- Checking, adjusting and replacing tree support systems and tree grilles / guarding as necessary during establishment period.
- Removing redundant tree support systems once trees are fully established.
- Formative pruning as necessary to establish a well balanced and healthy crown appropriate to the species and purpose, along with the removal of any dead, dying or diseased limbs.
- Remedial pruning/tree surgery as necessary in accordance with BS:3998 or to remove growth obstructing paths, carriageways, lighting and signs.
- Replacing any dead, dying or diseased plants in the following planting season with stock of similar specification to the original for the initial five year establishment period.

10.5 Native Scrub and Ornamental Amenity Shrub, Groundcover and Herbaceous Planting

10.5.1 Key maintenance operations will include:

- Maintaining and topping up mulch as necessary during establishment period or until canopy closes.
- Controlling weed growth as necessary by physical or mechanical means (use of chemicals only permitted with the prior approval of client).
- Remedial pruning as necessary during establishment period.
- Selective pruning to remove growth obstructing paths, carriageways, lighting, sightlines and ground floor windows or to rejuvenate planting as necessary.
- Pruning only as necessary to remove old wood, to encourage new growth or to encourage desirable ornamental features such as flowers, fruit, autumn colour, stem colour, etc.
- Pruning shall maintain natural growth and habit of the relevant plant species.
- Annual pruning of herbaceous species including ornamental grasses at the beginning of the planting season to encourage fresh new growth.
- Replacing any dead, dying or diseased plants in the following planting season with stock of similar specification to the original for the initial five year establishment period.

10.6 Meadow Grass

10.6.1 Key maintenance operations will include:

- Reseeding and repairing all areas which fail to establish or become damaged in the following planting season as required.
- Trimming all edge areas to form neat, tidy edges to planted borders and hard surfaces.
- Cutting once annually (in late summer / early autumn - once the wildflowers have flowered and seeded) to a sward height of 100 mm. Spring flowering bulbs will be maintained within longer grass until foliage had died down.
- Removal of all arisings from site. Composting on site from arisings will be permissible, subject to agreement with GAL.
- Spot weed-killing to control coarse ruderal or pernicious weed species as necessary.
- Reseeding/rejuvenating areas of poor establishment and thinning sward as required.

10.7 General Amenity Grass

10.7.1 Key maintenance operations will include:

- Reseeding and repairing all areas which fail to establish or become damaged in the following planting season as required.
- Trimming all edge areas to form neat, tidy edges to planted borders and hard surfaces.
- Generally mowing established areas at regular intervals throughout the growing season to maintain a maximum sward height of 75mm. Spring flowering bulbs will be maintained within longer grass until foliage has died down.
- Removing all arisings.
- Spot weed-killing to control coarse ruderal or pernicious weed species as necessary.
- Reseeding/rejuvenating areas of poor establishment and thinning sward as required.

10.8 Airside Grassland

10.8.1 Airside grassland is required to be managed according to CAP 772 (CAA 2017). Key maintenance operations will include:

- Airside grassland will be managed at a height of approximately 220mm to 300mm to deter nesting, feeding and loafing birds.
- Areas around aerodrome visual aids will be maintained as short grass.
- Grassland around ILS infrastructure will be managed as per current plans (mown to maintain between 100 and 200mm).

10.9 Attenuation Ponds, Channels, Swales, Marginals, Reed Beds and Water/Wetland Planting Areas

10.9.1 Key maintenance operations will include:;

- Removing litter, leaves and debris to maintain an unrestricted water flow.
- Cutting back up to 10% of the marginal plants a year in order to maintain space for open water. Arisings will be left at the side of the attenuation/water feature for one week to allow animals to return to the wetland, then cleared away for on-site composting or removed from site. The aim will be to retain a minimum of 30% of the area shown on the plan as potential for open water.
- Establishing a 10-20 metre wide buffer zone around the ponds and channels where herbicide use will be restricted in accordance with BS7370-5. Instead, weed control will be by hand. Control of non-native invasive weed species is described below.
- Inspection of reed beds to monitor the biological function of the treatment of de-icer contaminated waters.

10.10 Habitat boxes

10.10.1 Key maintenance operations will include:

- Bat boxes will be inspected annually by a suitably licensed bat ecologist to ensure compliance with the law protecting bats. Any evidence of roosting will be recorded. Boxes will be maintained over winter when bats are unlikely to be present. Any bird nests will be removed (after checking not in use).
- Bird boxes will be maintained annually outside of the nesting period (March to August inclusive). Any old nesting material will be removed to prevent accumulation of parasites.

10.11 Habitat piles

10.11.1 Key maintenance operations will include:

- Refugia and hibernacula will be created around the site in suitable locations from site-won materials such as logs, turf and stone.
- Piles will be monitored annually and added to as necessary.

10.12 Control of invasive species

10.12.1 Invasive, exotic species of plants will be removed. Three non-native invasive bank species associated with watercourses will require particular attention. These are:

- Japanese knotweed (*Fallopia japonica*)
- Giant hogweed (*Heracleum mantegazzianum*)
- Himalayan balsam (*Impatiens glandulifera*)

10.12.2 Other species that could occur include *Cotoneaster* spp. and *Robinia* spp.

10.12.3 All these species are listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) making it an offence to *'plant or otherwise cause to grow in the wild'.*

10.12.4 Where monitoring reveals a significant infestation of the non-native invasive plants named above, consideration should be given to herbicide control. Only herbicides containing the active ingredient glyphosate are currently approved for use in or near water.

10.12.5 Agreement must be obtained from the Environment Agency to use herbicides in or near water. Spraying needs to be carried out at the optimal time for the problem species.

10.12.6 When seeking agreement from the Environment Agency a range of information will need to be supplied including details of the site, the problem species, any nature conservation sites, downstream users and fish presence, along with details of the herbicide to be used and how it will be applied.

10.12.7 Anyone who uses herbicides in or near water must have the necessary skills, knowledge and qualifications. They must hold a relevant National Proficiency Test Certificate (NPTC) certificate of competence, which must be supplied with the application. The NPTC certificate must be for applying herbicides in or near water.

10.12.8 Best practice guidelines will be used to prevent spread of invasive species including American signal crayfish and New Zealand mud snail.

10.13 Plant Nutrients

10.13.1 Plant nutrients / fertiliser will be applied to planting only if poor growth and signs of deficiency appeared and will be subject to soil / leaf analysis and professional advice. The use of any fertilisers will be in strict accordance with the manufacturer's recommendations.

10.13.2 Fertilisers will not be applied to meadow/ wildflower areas.

10.14 Watering

10.14.1 Watering will only be carried out to maintain the health and continued vigour of the trees and shrubs until fully established. Water usage will be controlled and monitored at all times to avoid waste.

10.14.2 Areas which become prone to waterlogging will be alleviated suitably, and/or drainage added as required.

10.15 Pesticides Generally

10.15.1 All pesticides will be selected from the current list of approved chemicals and applied in strict accordance with the Control of Pesticide Regulations 1986 (as amended 1997) and other related Acts and Regulations.

10.15.2 The approval of the Environment Agency will be required when applying a pesticide to or within 3 metres of any watercourse.

10.15.3 Appropriate action will only be taken if a severe infestation occurs. If a problem persists over a number of years, consider changing the plant species concerned to one less vulnerable to infestation.

10.16 Leaf Fall

10.16.1 At regular intervals during the autumn/winter months, fallen leaves will be removed from grass and paved areas.

10.16.2 Fallen leaves will be left in planting areas to form a natural mulch and humus layer. They will only only be removed if they were likely to smother smaller plants.

10.17 Existing Mature Trees

10.17.1 To ensure all mature trees are in a safe and healthy condition all existing mature trees will be inspected annually by a qualified and experienced arboriculturist. All survey results will be recorded and passed to GAL. Additional inspections will be tasked after storms / periods of bad weather.

10.17.2 Complete pruning / deadwooding recommended by the above survey will be carried out. All such works will accord with BS3998:2010. This includes ensuring that nesting birds or roosting bats were not disturbed.

10.18 Litter Control

10.18.1 Collection and removing of litter from all hard and soft areas will be undertaken at regular fortnightly intervals.

10.18.2 After each litter control visit all hard and soft landscaped area will be completely litter free.

10.19 Monitoring and Inspection

10.19.1 Routine monitoring will be provided to ensure that maintenance tasks are being undertaken as programmed and to review their effectiveness and make adjustments as necessary.

10.19.2 Appropriate action will be taken to deal with damage and debris arising from storms, flood events, heavy snowfall and / or interference.

10.19.3 Personnel completing inspections will be suitably qualified and experienced in monitoring landscape works (such as a Member of the Landscape Institute).

10.19.4 Ecological monitoring will take place to review the condition of habitats and the re-aligned River Mole (including a river condition assessment). This will ensure that the assumptions with respect to biodiversity net gain were being achieved. Such monitoring will comprise UK Habitats Condition Assessments of the newly-created habitats within the airport at yearly intervals.

10.19.5 Further monitoring will be required by licences for specific species including GCN, bats and badgers.

10.19.6 Regular monitoring of any change to the channel bed and banks will be undertaken in the vicinity of the River Mole re-naturalised channel, the Museum Field FCA spillway and Car Park X FCA outfall.

10.19.7 This monitoring will be undertaken using fixed point photography. If significant negative change occurs, appropriate mitigation will be implemented. For example, excessive erosion of the bank will require suitable bank protection measures to stabilise the bank. Any monitoring programme developed should have a resolution and timing appropriate to the impacts being monitored. It is recommended that the monitoring is carried out over a period of between 3 to 5 years, and data is collected at intervals of 3 to 6 months, and after flood events.

10.20 Ecological Stewardship

10.20.1 It is an offence to disturb nesting wild birds and roosting bats including their nests/roosts under the Wildlife and Countryside Act 1981 (as amended).

10.20.2 Clearance, pruning and trimming operations during the bird nesting period, generally March to August inclusive will be avoided where practicable. If operations have to take place during this time then a qualified Ecologist will check in advance that there are no birds nesting in the planned area of operation.

10.20.3 Cutting of meadow / rank grasses will be carried out in early autumn to prevent disturbance to reptile or ground nesting birds and all material disposed of off-site.

10.20.4 Disturbance and clearance/thinning of vegetation within water bodies and wetland areas will be completed in the winter months and any material removed left by the bank side for a week to allow insects and mammals to return to the pond or swale before removal.

10.20.5 Opportunities for further enhancement following routine maintenance and management will be encouraged, such as creating brash and/or log piles to offer refuge to wildlife.

10.20.6 Reference to the site's specific ecological considerations will be taken into account before carrying out any routine maintenance and management operations, consulting a suitability qualified ecologist in case of doubt.

10.21 Biosecurity

10.21.1 The threat of pests and diseases that affect plant species is widely recognised and all landscape practitioners have a responsibility to detect, monitor and control pests and diseases at every stage of a plant's life from growing, specifying, handling, managing and destroying plants.

10.21.2 Wherever practicable all planting will be specified to be of local provenance and from reputable sources, with supporting paperwork provided and retained at each stage to demonstrate an auditable supply chain.

10.21.3 Reference will be made regularly to updates from DEFRA and the Forestry Commission with any recommendations or warnings strictly adhered to, to prevent further spread of disease including reporting known outbreaks as appropriate.

10.21.4 Good plant husbandry will be implemented on site to prevent further spread of diseases, particularly where symptoms or confirmed outbreaks of disease has occurred.

11 References

Wildlife and Countryside Act 1981 (as amended)

Conservation of Habitats and Species Regulations 2017 (as amended)

Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006)

Protection of Badgers Act 1992

Institution of Lighting Professionals/Bat Conservation Trust guidelines

BSI, BS 3998: Recommendations for tree work

BSI, BS 4428: Code of practice for general landscape operations

BSI, BS 7370: Grounds maintenance

Control of Pesticide Regulations 1986 (as amended 1997)

Arboricultural Association, Standard Conditions of Contract and Specification for Tree Works

Civil Aviation Authority, CAP 772 Wildlife Hazard Management at Aerodromes, Version 2, 2017

DEFRA (2023) The Great Britain Invasive Non-Native Species Strategy 2023 to 2030. https://www.nonnativespecies.org/assets/Uploads/The-Great-Britain-Invasive-Non-Native-Species-Strategy-2023-to-2030-v2.pdf

Highways England, DMRB LD117 Landscape Design, the Manual of Contract Documents for Highways Works, Major Projects

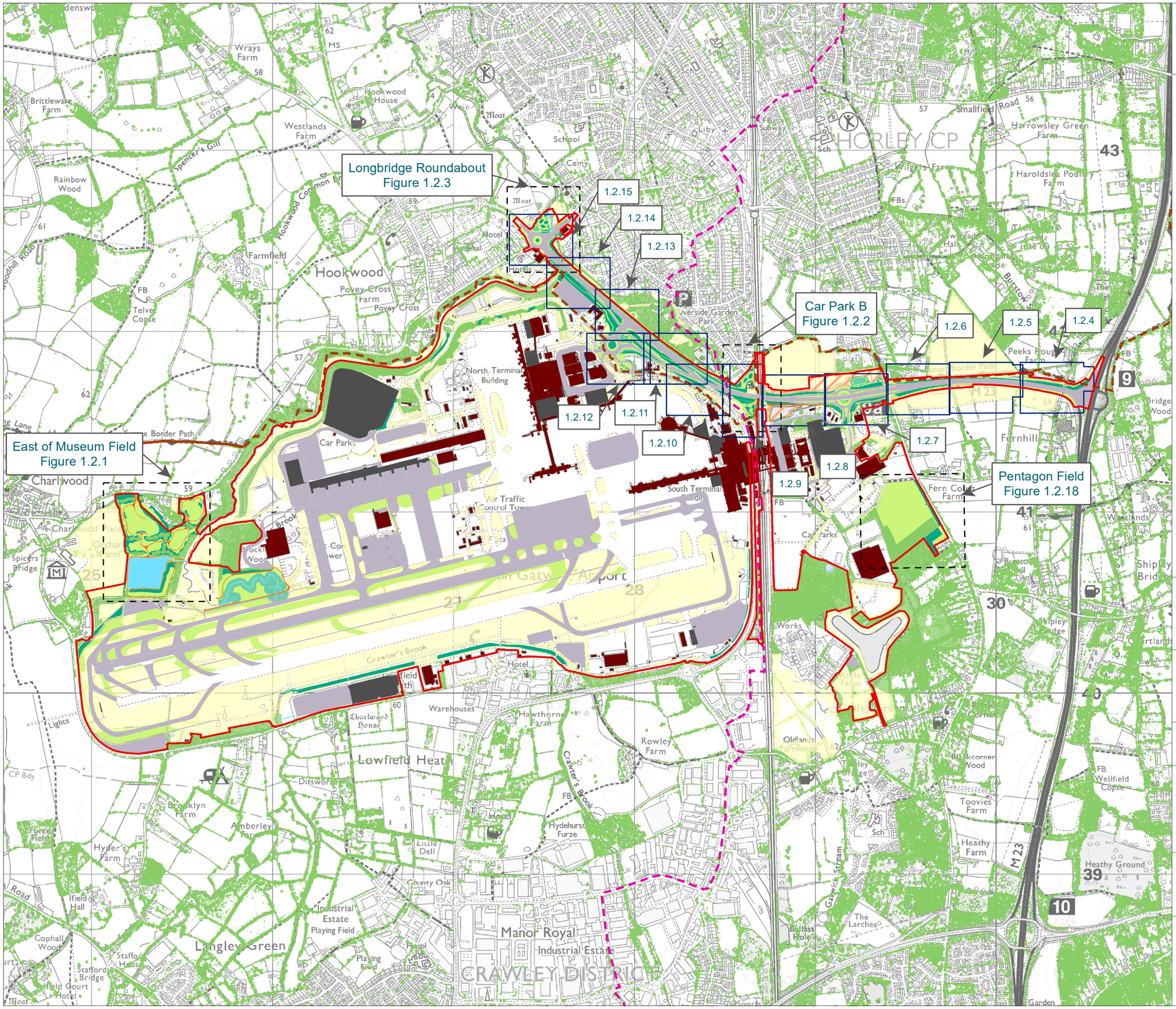
Highways England, DMRB Asset Data Management Manual Volume 13

12 Glossary

12.1 Glossary of terms

Table 1012.1.1

Term	Description
AONB	Area of Outstanding Natural Beauty
BS	British Standard
CARE	Central Area Recycling Enclosure
CMLI	Chartered Member of the Landscape Institute
cm	Centimetre
DEFRA	Department of the Environment Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges
EIA	Environmental Impact Assessment
ES	Environmental Statement
GAL	Gatwick Airport Limited
ILS	Instrument Landing System
L	Litre
LERL	Land East of the Railway Line
m	Metre
mm	Millimetre
NPTC	National Proficiency Test Certificate



LONDON GATWICK

KEY

- Project Site Boundary
- Surface Access Improvements Figure Extents
- Replacement Open Space & Landscape Proposals Figure Extents
- Proposed paths and bridges
- Proposed grassland
- Proposed reedbeds and wet vegetation
- Proposed tree, scrub, and hedgerow vegetation
- Proposed water features
- Proposed hard standing
- Proposed buildings
- Existing water features
- Existing hard standing
- Existing buildings
- Existing tree, scrub and hedgerow vegetation
- Existing grassland and vegetation
- Reinstated habitat
- Sussex Border Path
- National Cycle Route 21 (NCR21)

DOCUMENT

Environmental Statement
Appendix 8.8.1

DRAWING TITLE

Illustrative Landscape Overview and Key Plan

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	FIGURE 1.1.1	For ES Issue
	DRAWN BY: JM	PM / CHECKED BY: PE

SCALE @ A3 1:20,000

0 270 540 1,080 m

O:\11055 Gatwick - Genesis\Tech\Drawings\11055-0595-07.mxd

LONDON GATWICK

KEY

- Project Site Boundary
- Existing woodland and trees retained
- Existing buildings
- Proposed woodland and trees
- Proposed scrub
- Proposed grassland

DOCUMENT

Environmental Statement
Appendix 8.8.1

DRAWING TITLE

Museum field
Sketch Landscape Concept

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 1.2.1	For ES Issue
	DRAWN BY: RM	PM / CHECKED BY: PE

SCALE @ A3 1:2,500

0 25 50 m

LONDON GATWICK

KEY

- Project Site Boundary
- Existing woodland and trees retained
- Existing buildings
- Proposed woodland and trees
- Proposed scrub and ground cover
- Proposed grassland
- Proposed seating
- Proposed retaining walls
- Surfaced footpaths

DOCUMENT

Environmental Statement
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DRAWING TITLE

Car Park B
Sketch Landscape Concept

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 1.2.2	For ES Issue
	DRAWN BY: RM	PM / CHECKED BY: PE

SCALE @ A3 1:1,500

0 15 30 m

LONDON GATWICK

KEY

- Project Site Boundary
- Existing public footpath
- Existing woodland and trees retained
- Existing buildings
- Proposed woodland and trees
- Proposed scrub and ground cover
- Proposed grassland
- Proposed drainage ditches
- Proposed retaining walls
- Timber footbridge

DOCUMENT

Environmental Statement
Appendix 8.8.1

DRAWING TITLE

Longbridge Roundabout
Sketch Landscape Concept

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 1.2.3	For ES Issue
	DRAWN BY: RM	PM / CHECKED BY: PE

SCALE @ A3 1:1,500

0 15 30 m

Peeks Rough Farm

Ellerton

0.91m RH

Track

Path (um)

Drain

Peeks Brook Lane

The Yard

Land returned to scrub/woodland edge

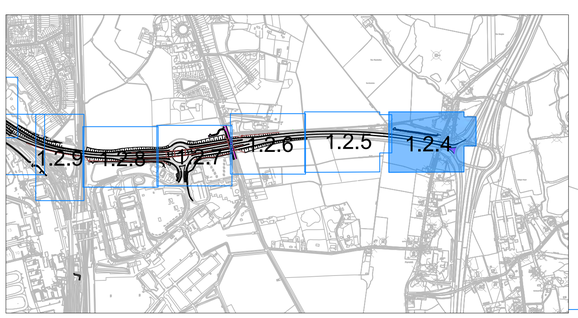
M23 Spur

Embankment to be planted in accordance with previously consented scheme

59.4m

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
- EXISTING VEGETATION RETAINED (refer to Tree Removal and Protection Plans, Annex 4) — T00
- CONSTRUCTION ACTIVITY BOUNDARY
- LIMITS OF DEVIATION BOUNDARY
- NOISE BARRIER
- DRAINAGE FEATURES
- RETAINING WALLS
- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE



DOCUMENT

Environmental Statement

DRAWING TITLE

Surface Access Landscape Proposals
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DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	1.2.4	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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LONDON GATWICK

Vegetation managed within corridor of 11kv overhead power line.

T54

Drain

Path (um)

Balancing Pond

M 23

M23 Spur

Drain

Embankment to be planted in accordance with previously consented scheme

Land returned to grazing pasture

Track

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
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- NOISE BARRIER
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- RETAINING WALLS
- REINSTATED HABITAT
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ORIENTATION	DRAWING NO.	REVISION
N	1.2.5	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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LONDON GATWICK

Section of existing hedgerow to be replanted following removal for construction access.

T54 T54 T55 T54 T54 T56 T54 T57

M23 Spur

Balcombe Road

Land returned to grazing pasture

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
- EXISTING VEGETATION RETAINED (refer to Tree Removal and Protection Plans, Annex 4) T00
- CONSTRUCTION ACTIVITY BOUNDARY
- LIMITS OF DEVIATION BOUNDARY
- NOISE BARRIER
- DRAINAGE FEATURES
- RETAINING WALLS
- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE

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ORIENTATION	DRAWING NO.	REVISION
N	1.2.6	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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Land returned to grazing pasture

T43 T44

T45 T46

Extent of category A existing trees identified for potential retention to be confirmed subject to further detailed design.

Ring Road North

Ring Road South

Offices

Car park

LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
- EXISTING VEGETATION RETAINED (refer to Tree Removal and Protection Plans, Annex 4)
- CONSTRUCTION ACTIVITY BOUNDARY
- LIMITS OF DEVIATION BOUNDARY
- NOISE BARRIER
- DRAINAGE FEATURES
- RETAINING WALLS
- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE

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ORIENTATION	DRAWING NO.	REVISION
N	1.2.7	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

Land returned to grazing pasture

Airport Way

Pond F

Land returned to amenity grass

T41

Extent of category A existing trees identified for potential retention to be confirmed subject to further detailed design.

LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
- EXISTING VEGETATION RETAINED (refer to Tree Removal and Protection Plans, Annex 4) T00
- CONSTRUCTION ACTIVITY BOUNDARY
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- NOISE BARRIER
- DRAINAGE FEATURES
- RETAINING WALLS
- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE

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ORIENTATION	DRAWING NO.	REVISION
N	1.2.8	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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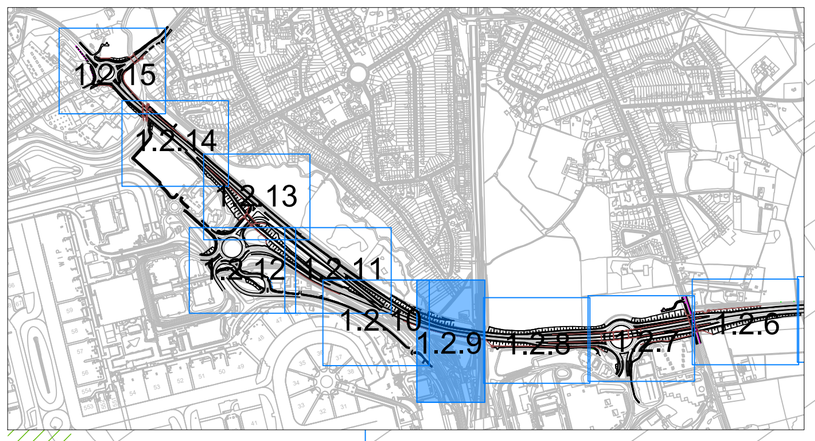

Car park B

T1

Airport Way

London Road

Car park B

LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
- EXISTING VEGETATION RETAINED (refer to Tree Removal and Protection Plans, Annex 4) — T00
- CONSTRUCTION ACTIVITY BOUNDARY
- LIMITS OF DEVIATION BOUNDARY
- NOISE BARRIER
- DRAINAGE FEATURES
- RETAINING WALLS
- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE

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ORIENTATION	DRAWING NO.	REVISION
N	1.2.9	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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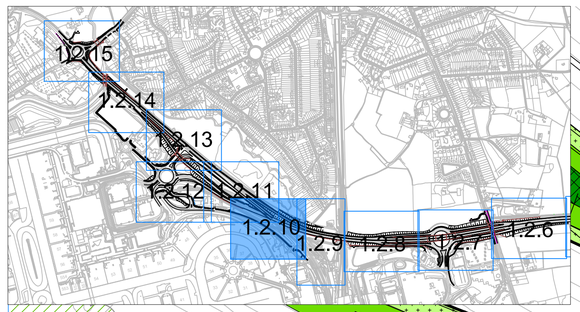

LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
- REED BED
- EXISTING VEGETATION RETAINED (refer to Tree Removal and Protection Plans, Annex 4)
- CONSTRUCTION ACTIVITY BOUNDARY
- LIMITS OF DEVIATION BOUNDARY
- NOISE BARRIER
- DRAINAGE FEATURES
- RETAINING WALLS
- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE

T11

T00

37

London Road

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ORIENTATION	DRAWING NO.	REVISION
N	1.2.10	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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Riverside Garden Park

London Road

Airport Way

Riverside Garden Park

Pond

Police Station

Perimeter Road North

Racecourse Road

LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
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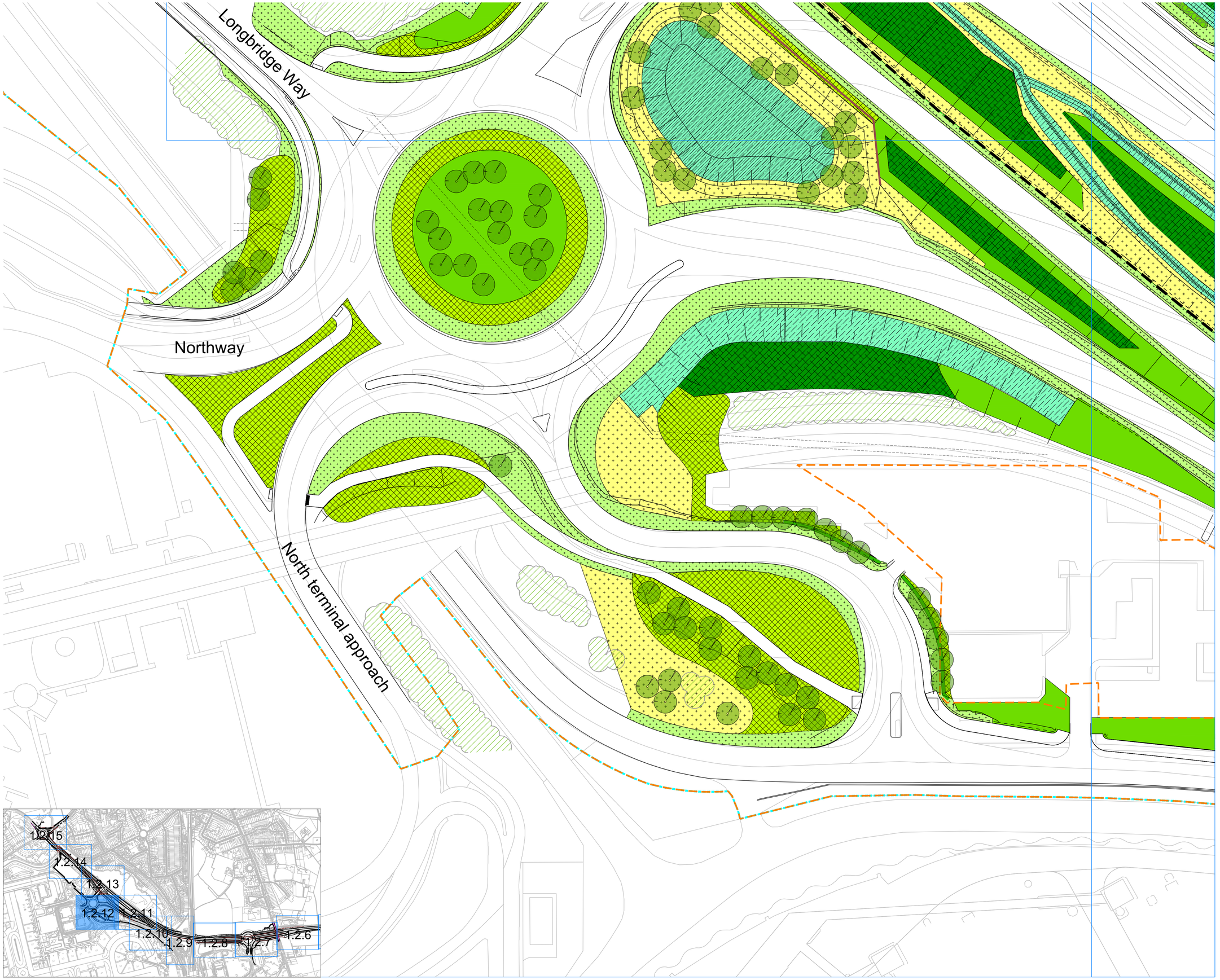
ORIENTATION	DRAWING NO.	REVISION
N	1.2.11	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m



LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
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ORIENTATION	DRAWING NO.	REVISION
N	1.2.12	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
- INDIVIDUAL TREE
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- REINSTATED HABITAT
- REPLACEMENT OPEN SPACE

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DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	1.2.13	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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London Road

Longbridge Road

Car park

London Road

LONDON GATWICK

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
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ORIENTATION	DRAWING NO.	REVISION
N	1.2.14	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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LONDON GATWICK

Land returned to amenity grassland/meadow

A217

Brighton Road

Land returned to amenity grass

Texaco PFS

Land returned to amenity grass

Povey Cross Road

T19

T19

T19

T18

Land returned to amenity grass

London Road

1.2.15

1.2.14

1.2.13

1.2.12

1.2.11

1.2.10

1.2.9

1.2.8

1.2.7

1.2.6

LEGEND

- AMENITY GRASS
- MEADOW GRASSLAND
- WET GRASSLAND
- SCRUB/WOODLAND EDGE
- INTERMITTENT SCRUB
- WOODLAND
- GROUNDCOVER
- HEDGE
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N	1.2.15	For ES Issue
	DRAWN BY: SH	PM / CHECKED BY: PE

SCALE @ A1

0 25 50 m

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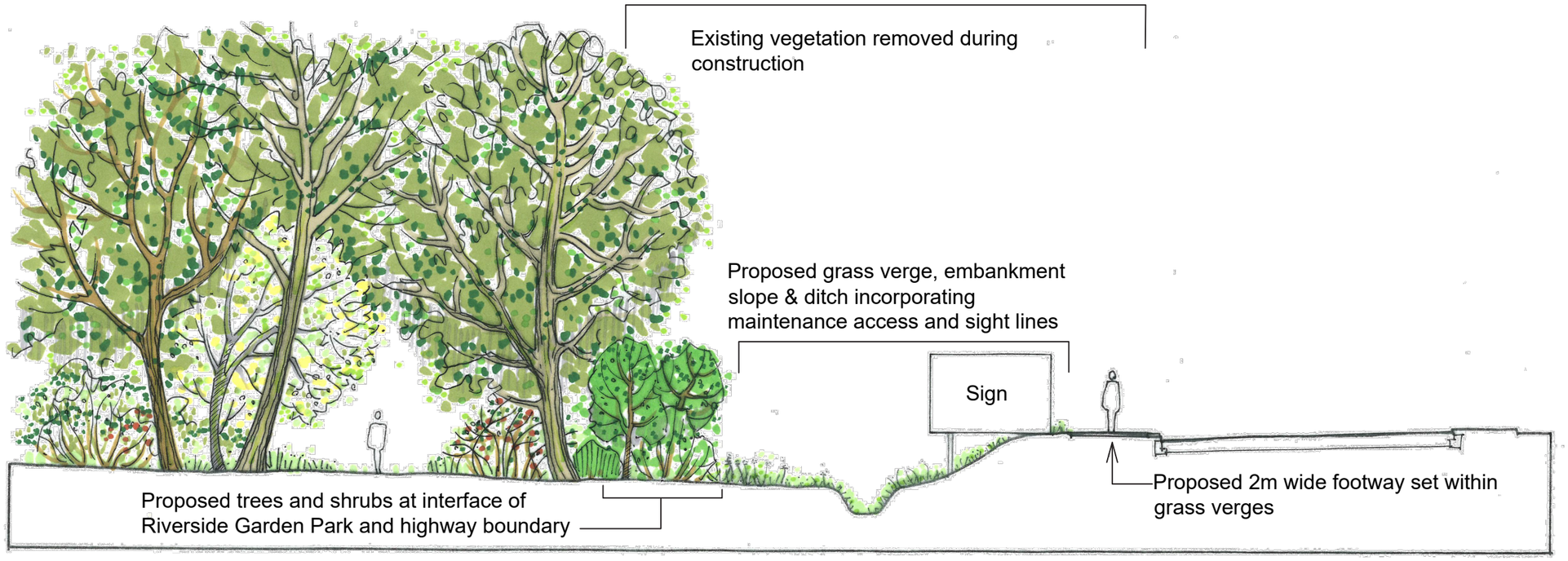
Existing Cross Section: Riverside Garden Park. Chainage 340.00



Proposed Cross Section

LONDON GATWICK

KEY

DOCUMENT
Environmental Statement
Appendix 8.8.1

DRAWING TITLE
Surface Access Illustrative
Cross Section

DATE
July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 1.2.16	For ES Issue
	DRAWN BY: JM	PM / CHECKED BY: PE

SCALE @ A3 Do not scale