Landscape Carbon Overlay to RIBA Plan of Work



0: Strategic Definition	1: Preparation and Brief	2: Concept Design	3: Spatial Coordination	4: Technical Design	5: Construction 6: Handover	7: In Use	8: End-of-Life
These initial stages present the greatest potential for avoiding and minimising carbon impacts through influencing the siting, scope and lifecycle of the project.		The design stages present opportunities to implement and deliver key actions such as protecting existing carbon stores, working with natural systems, minimising hard / maximising soft landscaping and specifying low carbon materials and processes.		Use the detailed design and specification to further refine the low carbon approach.	Implement management at Construction stage to ensure carbon objectives are achieved.	Implement management and adapt design during Operational stage to ensure carbon objectives are implemented.	Implement management at End-of-Life stage to ensure carbon objectives are implemented.
Initial Carbon Strategy as part of the Client's Requirements. Produce and agree Initial Carbon Strategy with Client and Project Team as informed by core tasks and Outline Carbon and Cost Calculations set out below.	Carbon Strategy as part of the Client's Project Brief. Produce and agree Carbon Strategy with Client and Project Team as informed by core tasks and Outline Carbon and Cost Calculations set out below.	Concept Design Produce and agree single Concept Design with Client and Project Team as informed by core tasks and Outline Carbon and Cost Calculations set out below.	Spatially Coordinated Plan Produce and agree a Spatially Coordinated Design with Client and Project Team as informed by core tasks and Outline Carbon and Cost Calculations set out below.	Technical Design Produce and agree Technical Design with Client and Project Team as informed by core tasks set out above and Carbon and Cost Calculations based on technical design and specification.	Construction Management Plan Prepared as part of the Technical Design and implemented through the construction process.	Operational Management Plan Prepared as part of the Technical Design and implemented through the maintenance period.	Lifecycle Management Plan Prepared as part of the Technical Design and implemented through the end-of-life process.
O.1 Project Scope Establish the Client's Requirements in terms of the proposed siting, scope and lifecycle of the project. Understand the extents to which carbon management has been considered.	1.1 Project Brief Prepare the Project Brief in response to the objectives set out in the evolving Carbon Strategy – to maximise carbon benefits and minimise carbon impacts.	2.1 Concept Design Development Use the findings of the Stage 0 and 1 core tasks and objectives set out in the Carbon Strategy to develop Concept Designs for the project.	3.1 Spatial Coordination Development Further develop the Concept Design by spatially coordinating the project layout to maximise carbon benefits and minimise carbon impacts.	4.1 Technical Design Development Develop a Technical Design that further refines the detail and specification to maximise carbon benefits and minimise carbon impacts.	5.1 Construction Management Plan Through monitoring, ensure carbon objectives are adhered to throughout construction.	7.1 Operational Management Plan Adapt management and design to respond to changing uses and climatic conditions.	8.1 End-of-Life Management Plan Apply rigour to ensure hard and soft landscaping is retained, reused or recycled.
<u>0.2 and 1.2 Project Review</u> Undertake an outline / detailed review of the siting, scope and layout of the project, highlighting implications for carbon management and identifying alternative sites, project scopes and lifecycle proposals where appropriate.		2.2 Test Concept Designs Generate alternative Concept Designs as a basis to test the comparative benefits in terms of carbon and cost calculations.	3.2 Test Spatially Coordinated Design Let the layout be informed by carbon and cost calculations in balance with other design requirements.	4.2 Develop Spatially Coordinated Design Let the detailed design and specification be informed by carbon and cost calculations in balance with other design requirements.	5.2 Work Collaboratively Work collaboratively with landscape contractors to ensure low carbon approach is implemented throughout construction.	7.2 Work Collaboratively Work collaboratively with landscape contractors to ensure low carbon approach is implemented throughout operation.	8.2 Work Collaboratively Work collaboratively with landscape contractors to ensure low carbon approach is implemented throughout end-of-life.
O.3 and 1.3 Legislation, Policy and Guidance Undertake an outline / detailed review of how legislation, policy and guidance relating to carbon management will influence the proposed siting, scope and lifecycle of the project.		2.3 and 3.3 Existing Carbon Stores and Emitters Make space in the project to protect, restore and expand existing carbon stores, and implement nature-based solutions to manage and reduce existing carbon emitters. In particular, protect soils from disturbance, compaction and capping.		4.3 Existing Carbon Stores and Emitters Design in protection and restoration for soils, trees, wetlands and other carbon stores and design nature-based solutions to manage and reduce carbon emitters.	Ensure protected areas on site and in adjacent areas are clearly defined and fully protected.	7.3 Use of Resources Ensure energy, water and other resources are used sparingly and efficiently.	8.3 Carbon Stores Ensure carbon stores are protected and extended beyond the project's lifecycle.
O.4 and 1.4 Existing Carbon Stores and Emitters Identify existing carbon stores on-site and in the surrounding area to be protected, restored and expanded, and existing carbon emitters to be managed and reduced.		2.4 and 3.4 Work with Existing Systems Let the concept designs and spatial co-ordination be guided by the existing soils, landform, hydrology, habitats, microclimate, active travel, transport networks, energy systems, commercial land uses and community networks.		4.4 Work with Existing Systems Ensure Technical Design fits with wider natural and human systems through taking a holistic approach and collaborating with other technical leads.	5.4 Site Inspections Undertake regular site inspections to ensure works comply fully with low carbon approach set out in plans /specification	7.4 Waste and Recycling Ensure systems in place on-site for collection and recycling of waste, such as compost heaps	8.4 Legacy Landscape Protect landscape areas that have been designed for longevity beyond the project's lifecycle.
0.5 and 1.5 Work with Natural Systems Identify benefits of integrating the project with existing natural systems such as soils, landform, hydrology, habitats and microclimate.		2.5 and 3.5 Minimise Hard and Maximise Soft Minimise the extents and carbon impacts of development and hard landscaping (above and below ground) and maximise the extents and carbon benefits of soft landscaping, with consideration of opportunities to implement advanced planting.		4.5 Specification of Hard and Soft Provide explicit detail on all aspects of specification to ensure low carbon approach is fully implemented.	5.5 Project Variations Uphold objectives of Carbon Strategy when implementing variations to project design.	7.5 Soft Landscaping Allow space for plants to grow to maturity, limit pruning and mowing, and encourage natural regeneration.	8.5 Material Circularity Use materials passport to enable the reuse and recycling of materials preferably in new use of site or on other projects.
0.6 and 1.6 Work with Human Systems Identify benefits of integrating the project with existing human systems such as active travel, transport networks, energy systems, commercial land uses and community networks.		2.6 and 3.6 Select Low Carbon Materials For hard and soft landscaping, reduce lifecycle carbon through considering sourcing, processing, manufacturing, transportation, construction, maintenance, repair, replacement, and with consideration of on-site sourcing and conservation of energy, water and other resources.		4.7 Reuse and Recycling Prepare a Materials Passport that records location, quantities, dimensions, specification, source of materials etc. Design in ability to disassemble and avoid permanent fixings and adhesives.	5.6 Record Variations Record variations to project design and their implications for carbon and cost calculations.	7.6 Hard Landscaping Use maintenance and repair to extend lifecycle of materials and record replacements in Materials Passport.	8.6 Disassemble and Dispatch Disassemble hard landscaping and structures to maximise opportunities for reuse.
O.7 and 1.7 Embed Lifecycle Approach Embed carbon management at all project stages by identifying natural and human assets to be retained, reused, restored and recycled at the start and end of the lifecycle, and considering carbon management through the design, construction and maintenance stages.		2.7 and 3.7 Design In Lifecycle Approach Design in the retention, repair, reuse and recycling of existing natural and human- made site features, inbuild low carbon considerations into design, construction and maintenance, and plan for end-of-life retention, repair, reuse and recycling across site.		4.8 Design In Lifecycle Approach Prepare management plans to cover construction, operational and end-of-life stages with the emphasis on taking a low carbon approach.	6.1 Handover Pack Carbon Strategy and associated plans that set out low carbon approach.	7.7 Occupancy Evaluation Review carbon calculations in light of changes at operational stage.	8.7 Waste and Recycling Ensure the deconstruction process minimises waste and maximises recycling.
<u>0.8 and 1.8 Outline Carbon Calculations</u> Prepare outline carbon calculations based on proposed land use changes to inform review of siting, scope and lifecycle of the project.		2.8 Outline Carbon Calculations Prepare outline carbon calculations to test comparative benefits of alternative Concept Designs.	3.8 Carbon Calculations Prepare carbon calculations over lifecycle and using EPDs where relevant / available.	4.8 Carbon Calculations Prepare carbon calculations over lifecycle and using EPDs where relevant / available.	6.2 Defects /Rectification Balance rectification against additional carbon impacts.	7.8 Redesign Consider redesign in response to climate change / changing use.	8.8 Redesign Influence siting, scope and lifecycle of new use of site.
 0.9 and 1.9 Outline Cost Calculations Prepare outline cost calculations based on carbon calculations to support a carbon led approach to the project. 		2.9 Outline Cost Calculations Prepare outline cost calculations based on carbon calculations.	3.9 Cost Calculations Prepare cost calculations based on final Spatially Coordinated Design.	4.9 Cost Calculations Prepare cost calculations based on detailed layout and specification.			