

Appendix 4- Implementation of this standard in an Ecologically Positive manner

	RIBA Stage 0 STRATEGIC DEFINITION	RIBA Stage 1 PREPARATION & BRIEFING	RIBA Stage 2 CONCEPT DESIGN	RIBA Stage 3 SPATIAL COORDINATION	RIBA Stage 4 TECHNICAL DESIGN	RIBA Stage 5 MANUFACTURING & CONSTRUCTION	RIBA Stage 6 HANDOVER	RIBA 7 USE
KEY OUTCOMES	<p>Flow of decision making for development that is compatible with the Ecologically Positive Council goal is shown below:</p>							
KEY OUTPUTS	<p>Cofnod data search as a key aspect of site appraisal work. <i>(Note: DCC has a service level agreement with Cofnod to do data searches for free).</i></p> <p>Standard critical success factors for ecology included within all client</p>	<p>Identify ecological survey required, complete surveys and ensure survey results guide design.</p> <p>Identify tasks which need ecological watching briefs or specific ecological input.</p> <p>Preliminary ecological appraisal as base minimum-</p>	<p>Incorporate features for biodiversity so the site delivers net benefit for biodiversity, informed by findings of earlier surveys. (e.g. methods of construction, material specification, landscaping schemes, building/roof orientation for green roofs, aspect and exposure for bat/bird boxes, incorporation of ponds, wildlife friendly gully pots/method of surface water drainage)</p> <p>Where bat/bird boxes are recommended, these should be integrated into the structure of the building to ensure that the</p>	<p>Integrated bat and bird boxes shown on the scheme design and technical drawings.</p> <p>Lighting specification- kelvin levels and light spill plans- vertical and horizontal.</p> <p>Landscaping schemes- detailed species mix and</p>	<p>Compliance with conditions to protect ecology on site.</p> <p>Ecological watching briefs tasks completed with ecological watching briefs.</p> <p>Ecological compliance audit followed and reporting completed.</p>	<p>Discharge of conditions.</p> <p>Submission of completed ecological compliance audit.</p> <p>Snagging of any mitigation areas which are being handed over to Authority to manage.</p>	<p>Ongoing management and monitoring of ecological features to ensure the site continues to deliver a net benefit for biodiversity (e.g. replacing dead plants, ensuring management followed for wildflower so species don't decline over</p>	

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	requirements documentation.	identifies issues and need for further surveys <i>(note: be aware of time constraints related to species- some surveys can only be done at certain times of year. A survey calendar can be provided)</i>	building provides habitat for wildlife in perpetuity. <i>(note: ecological enhancement will be bespoke for each development as will be in response to survey findings and thus be tailored to site)</i>		management going forward. Material specification e.g. low nutrient top soil for wildflower meadow creation. Ecological compliance audit devised. Maximise benefits for biodiversity from SUD schemes. Development of a costed Section 106 agreement.		Management plans finalised and handed over.	time, replacing bat/bird boxes if they fail).
EXAMPLES OF ECOLOGICAL CONSIDERATIONS BASED ON RIBA STAGE CORE TASKS/CORE STATUTORY PROCESSES <i>(note: list not exhaustive)</i>	<u>Site selection / appraisal</u> <ul style="list-style-type: none"> Ecological Surveys- type, timing, done early Retaining and integrating existing ecological assets into the design 	<u>Building placement/ orientation/ configuration/ massing</u> <ul style="list-style-type: none"> Ecological Surveys- type, timing, done early. Retaining existing ecological assets (e.g. hedgerow, 	<u>Material selection</u> <ul style="list-style-type: none"> Ecological stress testing on options and choices. Bitumen 1F felt to be used as roofing membrane not breathable roofing membrane – <i>the new 'bat safe' breathable membrane has limited test data and should be avoided for the time being while the BCT review the available data.</i> This applies to sites where bats are already roosting, or 	<u>Building design/ specification</u> <ul style="list-style-type: none"> Ecology enhancing measures. Retaining existing ecological assets. Integrated bee, bird and bat boxes. 	<u>Construction period</u> <ul style="list-style-type: none"> Ecological protection and mitigation in place prior to enabling works, where required (e.g. root protection areas and Great 	<u>Post construction</u> <ul style="list-style-type: none"> Monitoring and management of ecological mitigation, compensation and enhancement. Section 106 payments for 	<u>In use</u> <ul style="list-style-type: none"> Management of ecological assets retained/created. Ecological monitoring. 	

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<p><u>Building placement/ orientation/ configuration/ massing</u></p> <ul style="list-style-type: none"> Ecological Surveys- type, timing, done early. Retaining existing ecological assets. <p><u>Landscape design</u></p> <ul style="list-style-type: none"> Size Retaining existing ecological assets Habitat creation with high species richness Incorporation of tree canopy cover- 20% of site 	<p>specialist habitat, native providence trees etc.).</p>	<p>have the potential to roost. If design includes the use BRMs, then design team should ensure that these do not become accessible to bats through poor design, or degradation of the building structure.</p> <p><u>Mechanical and Electrical specification</u></p> <ul style="list-style-type: none"> Lighting output- ecological stress testing on options and choices – see <i>AONB Dark Skies lighting</i> Ventilation output- ecological stress testing on options and choices. <p><u>Drainage and water management</u></p> <ul style="list-style-type: none"> Use of ecologically enhancing features for SUDs– swales or balancing ponds Grass parking grids (https://www.ecodeck.biz/ecopark-grass-fill/) Rain water harvesting systems Drain ladders/frog ramps <p><u>Landscape design</u></p> <ul style="list-style-type: none"> Incorporate native plants in the landscaping design, which are of value as habitat for wildlife 	<ul style="list-style-type: none"> Green walls/green screens/green roofs for bins or cycle stores. <p><u>Material selection</u></p> <ul style="list-style-type: none"> Ecological stress testing on options and choices. Bitumen 1F felt to be used as roofing membrane not breathable roofing membrane – <i>the new 'bat safe' breathable membrane has limited test data and should be avoided for the time being while the BCT review the available data.</i> This applies to sites where bats are already roosting, or have the potential to roost. If design 	<p>Crested Newt fencing).</p> <ul style="list-style-type: none"> Ecological Compliance Audit followed and updated throughout construction. 	<p>management in perpetuity.</p>		

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		<ul style="list-style-type: none"> • The use of native species rich hedging (minimum of 7 species in each 30m length) which provide shelter and foraging opportunities for wildlife, instead of metal or wooden fencing. • Hedgehog friendly gravel boards/fence holes to be included where hedging is not possible • Use subsoil and grow wildflower meadows along car parks or bunds • Native and appropriate street trees <p><u>Post construction</u></p> <ul style="list-style-type: none"> • Monitoring and management of ecological mitigation, compensation and enhancement. 	<p>includes the use BRMs, then design team should ensure that these do not become accessible to bats through poor design, or degradation of the building structure.</p> <p><u>Mechanical and Electrical specification</u></p> <ul style="list-style-type: none"> • Lighting output-ecological stress testing on options and choices – see <i>AONB Dark Skies lighting</i> • Ventilation output-ecological stress testing on options and choices. <p><u>Drainage and water management</u></p>				

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			<ul style="list-style-type: none"> • Use of ecologically enhancing features for SUDs– swales or balancing ponds • Grass parking grids (https://www.ecodeck.biz/ecopark-grass-fill/) • Rain water harvesting systems • Drain ladders/frog ramps <p><u>Landscape design</u></p> <ul style="list-style-type: none"> • Incorporate native plants in the landscaping design, which are of value as habitat for wildlife • The use of native species rich hedging which provide shelter and foraging opportunities for 				

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