

Planning Related Advice Professional Services (PRAPS) Framework				
PART 1: REQUEST FOR PROPOSAL				
Contract Title: PROJECT-BASED TREE CANOPY COVER CALCULATION - SPECIFICATION				
Contract Manager Name:	Redacted under FOIA Section 40 Personal Information			
Framework Reference Number:	PRAPS053	Lot Number:	Lot 10	
Atamis Number	n/a	Defra Group Commercial Contact	n/a	
Date: 14/01/2025				
Contract Start Date		01/02/2025		
Contract Completion Date		31/03/2025		
Procurement Route:	Direct Award	<input type="checkbox"/>	Mini-competition	<input checked="" type="checkbox"/>
Proposal return date:	28/01/2025			
Clarification Question Date:	21/01/2025			
Evaluation Criteria				
Suppliers: Failure to meet any minimum score threshold stated will result in the bid being removed from the process with no further evaluation regardless of other technical or price scores.				
Technical Weighting				60%
Price Weighting				40%
Quality sub-criteria weightings			Threshold	Technical Weightings:

1. Approach & Methodology	<ul style="list-style-type: none"> Clearly set out the proposed approach and methodology for delivering the contract, include justification on suitability. Demonstrate understanding of what Natural England is trying to achieve through the contract. 	50	30%
2. Proposed Staff (including CVs) and Supplier's experience/accreditations	<ul style="list-style-type: none"> Demonstrate previous experience of arboriculture and carrying out the work specified. Demonstrate that staff selected for the work have the appropriate skills and experience. Confirm the availability of staff put forward. CVs of key staff can be included as attachments, maximum of 2 A4 pages, font size 11. 	50	30%
3. Project Management, Ability to Deliver	<ul style="list-style-type: none"> Provide a project timeline including contingency. Demonstrate quality assurance measures. 	50	30%
4. Risk	<ul style="list-style-type: none"> Include specific risks involved & contingencies to ensure delivery within the target timeframe. 	50	10%
5. Health & Safety (if no working at height or near water, mark as 'N/A' and re-distribute %)	n/a		
6. Sustainability (if no travel etc. mark as 'N/A' and re-distribute %)	n/a		

Specification Summary (please see accompanying full specification for further details)
1. Description of work required – overall purpose & scope (including reporting requirements)
<p>Project aims: This short research project aims to create a simple method for converting a) actual tree data and information currently collected in BS 5837 tree survey and b) proposed new tree planting (collected within the Statutory Biodiversity Metric metric) into a consistent project-based</p>

canopy cover metric that can support the development of the new [Tree Canopy Cover Green Infrastructure Standard](#) and related tools such as the EBNT.

Project details.

Background

The measurement and assessment of tree canopy cover, both from existing trees on a development site and the predicted delivery of tree canopy cover from trees to be planted, is increasingly required as a metric in the context of planning applications.

This has been driven by the introduction of a number of methods and tools for encouraging green infrastructure of all types, notably the mandatory [Biodiversity Net Gain Metric](#) (BNG), and the currently voluntary [Urban Greening Factor system \(UGF\)](#), [The Environmental Benefits of Nature Tool \(EBNT\)](#) - along with new [Tree Canopy Cover Green Infrastructure standard](#), under development.

Development of a consistent and a commonly agreed methodology for the measurement and assessment of tree canopy cover that captures the essential components of tree canopy cover's active functionality; leaf area index or tree canopy volume would be a desirable and important step forward in how the UK's Planning system better integrates not just existing trees but also planned trees into the decision-making process. This project seeks to develop a tree canopy methodology that can work with the above systems to provide integrated solutions

Current Situation

Currently almost all UK planning applications that involve impacting individual or groups of trees start the assessment of those individual trees with a [British Standard 5837](#) compliant Tree Survey. The BS 5837 tree survey is a standard requirement as part of any Arboricultural Impact Statement and already requires developers to collect the baseline information necessary to make an effective and reliable assessment of existing tree canopy cover; a tree's DBH, height and canopy width and breadth.

Biodiversity net gain requirements also require the recording area of new tree planting relating to development within the Statutory biodiversity metric¹ as part of consideration of biodiversity impact, this information is then re-used within the EBNT to perform its analysis of potential impact on ecosystem services.

The missing element in the current planning system is the ability to consistently and reliably predict the *expected tree canopy cover* delivered by trees planted as part of the landscape detail on maturity and so be able to quantify and value the benefits provided by these newly planted trees in comparison to any that are lost as a consequence of the development.

At present, [Urban Greening Factor Guidance](#) refers to the Trees and Design Action Group's [Tree Species for Selection for Green Infrastructure](#) to provide surface cover values for standard/semi-mature tree planting. This provides a species-by-species estimate of mature tree size² and height, crown type and crown width. However, estimates of crown width are limited to a subset of species.

¹ This is provided its 'tree helper' functionality that generates area and values for newly planted trees, based biodiversity as a function of a tree's biomass

² Grouped as Small, Medium and Large

While limited, this document should provide a reasonable starting point for creation of reference values, collation of sources of evidence and consistent grouping of tree species that can assist the process set out below.

Proposed work

This desk-based study is expected to consist of a rapid literature review, followed by application of the assembled evidence to create new tree canopy calculation methods and formulas – capable in turn of converting tree information (already collected as part of the development) into new tree canopy metrics for a development.

This work will explore different approaches to provide an agreed final set of consistent tree-canopy calculation methods. This output will require creation of an accompanying short report, detailing options explored, evidence collated, and evidence support for the final calculation method selected – and include limitations of chosen approach to ensure transparency. A worked development example, illustrating how the calculation method can be readily applied to tree survey/ Biodiversity Metric outputs, is also required to demonstrate feasibility.

The work should:

1. be consistent with the developing [S5 Urban Tree Canopy Standard..](#)
2. use tree data acquired through BS 5837. the Statutory Biodiversity Metric & Urban Greening Factor Assessment) only.
3. use reasonable assumptions to generate estimated canopy figures to address limitations in the available data – these should be clearly identified in the accompanying report.

The solution sought is expected to be relatively simple and require a simplified grouping of tree species with similar characteristics and habits to provide an easily understandable, transferable and deliverable approach.

Timescale

The work is expected to be delivered from February to March 2025

2. Required skills / experience from the Supplier and staff. Include any essential qualifications or accreditations required to undertake the work.

Supplier should have a strong background in arboriculture and good working familiarity with tree measurement under [British Standard 5837](#) and associated with Urban Greening Factor and Biodiversity Net Gain, and the underpinning evidence base relating to tree canopy measurement.

3. Proposed program of work and payment table (Detailing specific tasks, key milestones, deliverables & completion date where appropriate)

Please provide details of the project timeline and how you will deliver the work to the required standard, including management and quality control.

Task no.	Task and deliverable	Completion date	Payment Schedule (%)
1	Online orientation meeting with Natural England & Forestry Commission to discuss the supplier's proposed approach and methodology & agree plan and contingencies.	07/02/2025	5%
2	Rapid literature review, and compilation of	07/03/2025	30%

	available evidence on methods for tree canopy calculation and tree canopy data.		
3	Creation of consistent formulas/ mechanisms based on the above to: 1. Convert BS 5837 tree data into existing tree canopy. 2. predictively model expected tree canopy development for small/medium and large trees classes - to generate potential expected tree canopy. 3. correct for constraints such as soil availability (planting in pits etc where recorded – to generate expected tree canopy in location. 4. convert tree area figures– derived from the Statutory Biodiversity Metric Tree Helper into Tree Canopy estimates.	31/03/2025	30%
4	Creation of a simple worked example/case-study showing how proposed formulas have been applied to convert tree data collated as part of standard procedures to tree canopy cover	31/03/2025	15%
5	Creation of a short supporting report highlighting the evidence base, key findings, assumptions supporting calculations and associated reference values/ options explored and areas for further investigation.	31/03/2025	20%

4. Risk

Note: This section is to be used to detail any risks relevant to the project i.e. Programme deliverable dates, data, consultees etc.

The short timescale for this work will require close project management, proportionate solutions and strong contingencies to ensure delivery within the target timeframe.

5. Health and Safety Requirements

Note: Only include if the work involves site visits. Do not request RAMS or similar risk assessments are returned with submissions. These should only be requested at contract award.

n/a

6. Sustainability Considerations (Only use if the work requires travel)

n/a

Planning Related Advice Professional Services (PRAPS) Framework

PART 2: PROPOSAL & QUOTE

To be completed by the Supplier

Note: Your proposal must not exceed 6 sides of A4 plus the Costs Proposal in Section 4 (unless indicated above). Attachments must not be included unless requested except for a programme diagram and full cost schedule if you consider these would support your proposal.

Do not make or append Caveats and Assumptions in your proposal – any points of uncertainty must be raised as a clarification point prior to submitting the proposal. Where assumptions are to be made, these will be stated by the Authority's Project Manager.

5. Health & Safety (only complete if requested in defined evaluation criteria)**6. Sustainability** (only complete if requested in defined evaluation criteria)**7. Cost Proposal**

Please use day rates, including any applicable discounts, as agreed under the framework contract. A full cost schedule may be attached to support the costs summarised below.

Task No.	Name	Framework Grade	Day Rate	No. of Days or part thereof	Cost
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Overall Costs (excluding VAT)	£15,568.00
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Overall Costs (including VAT)	£18,681.60
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By signing this form **(Insert Supplier's Name)** agree to provide the services stated above for the cost set out in your Cost Proposal and in accordance with the Planning Related Advice Professional Services (PRAPS) Framework – C

Supplier Project Manager:

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Signature:	
Date:	

Planning Related Advice Professional Services (PRAPS) Framework	
PART 3: AGREEMENT	
To be completed by Framework Manager and Authority Contract Manager	
Approved by Framework Manager:	Redacted under FOIA Section 40 Personal Information
Contract Award Date:	
Agreed by Supplier:	
Approved by Contract Manager:	Redacted under FOIA Section 40 Personal Information
Terms and Conditions	All call off contracts under the PRAPS Framework are subject to the terms and conditions agreed at framework award.
You must have a purchase order number from Natural England before you start any work in connection with this proposal.	

Planning Related Advice Professional Services (PRAPS) Framework

PART 4

Change Control Schedule

Notes

To be completed by Contracting Authority Project Manager

Any extensions, price changes or amendments to existing orders need to be discussed with the Framework Manager before being agreed with the Contractor. Please remember to amend your Purchase Order in SOP if necessary.

The table below should be used to record and authorise the agreed changes throughout the project. A Change Control Notice (CCN) should be completed for substantial changes to the project and a summary provided in the table below.

Send a copy of the revised Project Form and CCN (if used) to the Contractor once the change has been agreed and approved. A copy should also be sent to your Commercial Lead if a Atamis reference has been provided.

10. Change Control

All amendments to project scope, timetable or costs must be submitted to and approved by the Contracting Authority PM prior to implementing the change.

Change Details	CCN Ref. (if applicable)	Revised completion date (if applicable)	Revised Project Cost (if applicable)	Approved by (Framework Manager / Date)