

Peter Marsh Consulting Ltd

Ecological Services

Urban Greening Factor Assessment

Capital City College Group (CCCG) College of Haringey,
Enfield and North-East



Reference No.: PRJ0009776 - UGF (Rev002)

Date: February 2024

Document Management

Project No: PRJ0009776
Title: Urban Greening Factor Assessment
Contracting Authority: Peter Marsh Consulting Ltd
Issue Date: February 2024
Issue Office: 20 Old Bailey, London

Rev001	Name	Job Title	Date
Authored by:	PA	Graduate Ecologist	01/02/2024
Reviewed by:	TH	Principal Ecologist	02/02/2024
Authorised by:	TH	Principal Ecologist	02/02/2024
Rev002			
Updated by:	PA	Graduate Ecologist	07/02/2024
Authorised by:	TH	Principal Ecologist	12/02/2024

This document is the property of Assystem Energy & Infrastructure Ltd (Assystem). The contents are project and Client specific. The document should not be copied or disclosed to a third party without the prior written permission of Assystem at our registered office. Thank you for your understanding. All rights reserved.

Executive Summary

Assystem were commissioned by Peter Marsh Consulting Ltd to undertake an Urban Greening Factor (UGF) assessment of land at College of Haringey, Enfield and Northeast London in Tottenham. This assessment has been completed in line with best practice guidance, provided by the Greater London Authority, and demonstrates how the proposed development complies with planning policy requirements established by the London Plan.

Consideration has been given the enhancement proposals for the Proposed Development and how these contribute to urban greening in line with planning policy requirements. The proposed Urban Greening Factor focuses on what can be delivered as part of the new Construction and Engineering Centre, rather than the wider College Masterplan.

A BioSolar roof, incorporating a biodiverse green roof with wildflowers, supported by a 150 mm substrate depth, is proposed across the eastern side of the building, with the remainder of the building comprising artificial surfaces.

The Proposed Development achieves a UGF score of 0.30, meeting the target score for commercial developments of 0.3.

Additional enhancement measures have been identified that can be incorporated into the habitats to increase their functionality for faunal species locally and add value to the habitats provided.

Table of Contents

1	Introduction.....	5
1.2	Site Description and Development Proposals	5
1.3	Quality Assurance	6
2	Methodology	7
2.1	Calculation of the Urban Greening Factor.....	7
2.2	Limitations and Constraints.....	8
3	Results	8
4	Discussion	9
4.2	Enhancements	9
5	Conclusions.....	10

1 Introduction

- 1.1.1 Assystem was appointed by Peter Marsh Consulting Ltd on behalf of Capital City College Group (the Applicant) to assess the Proposed Development's compliance with the Urban Greening Factor requirements in local planning policy.
- 1.1.2 The National Planning Policy Framework (NPPF)¹ requires Plans to “promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”. The London Plan², as the Spatial Development Strategy for Greater London, responds to this in part through Policy G5 on Urban Greening, which requires new development proposals to “contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage”.
- 1.1.3 The London Plan requires Boroughs to develop an Urban Greening Factor to identify the appropriate amount of urban greening required in new developments, based on the factors established in the Plan but tailored to local circumstances.
- 1.1.4 Haringey's Local Plan³ identifies biodiversity policies in Policy SP13: Open Space and Biodiversity, and whilst it encourages the inclusion of measures to enhance biodiversity and adoption of green infrastructure in development projects it does not include any specifics regarding an Urban Greening Factor assessment. The New Local Plan⁴, currently being prepared by the Council, will look to set up an Urban Greening Factor to facilitate the delivery of high-quality landscaping.
- 1.1.5 In the absence of a local Urban Greening Factor or policy target in the adopted Haringey Local Plan, the interim target in the London Plan applies which requires predominantly commercial developments to achieve a target score of 0.3.

1.2 Site Description and Development Proposals

- 1.2.1 Capital City College Group, Haringey, is a vocational college with a wide range of courses, one of several Capital City College Group centres throughout the city. Internally, the site consists of a number of classrooms, media studios and open courtyard space.
- 1.2.2 The site, approximately 1.99 ha in area, is bounded by a road (A10) to the east residential area to the south and north of the site and the railway tracks and further housing to the west. The site location is identified in Figure 1-1.

¹ Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework.

² Greater London Authority (2021) The London Plan. The Spatial Development Strategy for Greater London. March 2021

³ London Borough of Haringey (2017) Haringey's Local Plan. Strategic Policies 2013 – 2026. March 2013, Consolidated with alterations since 2017.

⁴ London Borough of Haringey (2020) New Local Plan. First Steps Engagement Summary Document. November 2020.

Figure 1-1: Site Redline Boundary (Contains maps data ©OpenStreetMap)



1.2.3 The Applicant is seeking to replace the existing Building Block located within the campus of the College of Haringey, Enfield and North East London, as it is of poor condition and is no longer fit for purpose. The current redevelopment proposals are restricted to the new Construction and Engineering Centre. However, a site wide Masterplan has been developed which will deliver more significant urban greening benefits in the longer term and the details set out in the Design and Access Statement. As a result, to reflect the enhancement relative to the scope of the redevelopment works subject to the application, the UGF assessment has focused on the area in which redevelopment works are being undertaken only rather than the wider site. The development area, identified in Figure 1-1, is 720 sq m.

1.3 Quality Assurance

- 1.3.1 All lead AEIL ecologists are members of (at the appropriate level) the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct when undertaking ecological work.
- 1.3.2 Assystem are a CIEEM Registered Practice, and as such champion high professional standards whilst delivering the best outcomes for biodiversity and supporting a thriving economy.

2 Methodology

2.1 Calculation of the Urban Greening Factor

2.1.1 The different types of greening that can be incorporated into development are categorised by surface-cover types that broadly indicate their relative quality, in particular their potential for rainwater infiltration. This is used as a proxy for naturalness and functionality. Scores range from 1 for semi-natural vegetation through to 0 for impermeable sealed surfaces, as identified in Table 2-1 from the GLA UGF guidance document⁵.

Table 2-1: Surface Cover Type and Factor Scores

Surface-cover type	Factor
Semi-natural vegetation (e.g., trees, woodland, species-rich grassland) maintained or established on site	1
Wetland or open water (semi-natural; not chlorinated) maintained or established on site	1
Intensive green roof or vegetation over structure; substrate minimum settled depth of 150mm	0.8
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two-thirds of the projected canopy area of the mature tree	0.8
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014	0.7
Flower-rich perennial planting	0.7
Rain gardens and other vegetated sustainable drainage elements	0.7
Hedges (line of mature shrubs one or two shrubs wide)	0.6
Standard trees planted in pits with soil volumes less than two-thirds of the projected canopy area of the mature tree	0.6
Green wall – modular system or climbers rooted in soil	0.6
Groundcover planting	0.5
Amenity grassland (species-poor, regularly mown lawn)	0.4
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014	0.3
Water features (chlorinated) or unplanted detention basins	0.2
Permeable paving	0.1
Sealed surfaces (e.g., concrete, asphalt, waterproofing, stone)	0

2.1.2 To calculate the overall UGF score for the proposal, the following steps should be taken:

- Each surface type within the redline boundary is assigned the corresponding UGF in line with the factor scores given in Table 2-1,
- The area of each surface-cover type is measured in square metres,

⁵ Greater London Authority (2023) London Plan Guidance – Urban Greening Factor. February 2023.

- The factor score is multiplied by the area of the corresponding surface-cover type,
- The scores are added together to give a total combined score,
- This combined total score is divided by the total site area (m²) to determine the scheme's UGF score.

2.2 Limitations and Constraints

- 2.2.1 The UGF assessment is based on the latest development proposals and information provided on landscape inclusion. However, as the detailed design is progressed and through construction, there may be potential for changes to the landscaping proposed. In such circumstances, review should be given to the implications of any such changes to ensure the development continues to deliver the requirements of the UGF.

3 Results

- 3.1.1 The development proposals allow for a BioSolar roof to be established on the eastern side of the building, in combination with photovoltaic panels. The BioSolar roof is proposed to comprise a native wildflower green roof with 150 mm substrate depth, similar to the Bauder extensive green roof with one an appropriate wildflower seed mix provided. It has also been confirmed that the structure has the loading capacity to support the system at a 150 mm substrate depth.
- 3.1.2 In terms of area, the development proposals identify an extent of 282 m² for the green roof system, however with an allowance for a 100 mm fire break surrounding the vegetation this would allow c. 273 m² green roof area.
- 3.1.3 The remainder of the development proposals comprise sealed surfaces associated with the building itself, totally c. 447 m².
- 3.1.4 The details of the UGF calculation based on these areas are identified in Table 3-1, with a resultant UGF for the Proposed Development of 0.30. The extent of these habitat areas are identified in Figure 3-1.

Table 3-1: UGF Calculation

Surface Cover Type	Factor	Area (m2)	Contribution	Notes
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	273	218.4	Green roof and vegetation over structure
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0.0	447	0.00	
Total Contribution			218.4	
Total Site Area (m²)			720	
Urban Greening Factor			0.30	

Figure 3-1: Extent of the Different Surface Cover Types within the Proposed Development (from Drawing 5219901-ATK-01-04-D-A-011006)



4 Discussion

4.1.1 Calculation of the UGF using the current proposed development provided a score of 0.30, therefore meeting the target value required as a “predominantly commercial development”. It should be noted that the calculation was limited to the development boundary and urban greening benefits of the Masterplan will be delivered in future phases.

4.2 Enhancements

4.2.1 Further enhancement to the habitats can enable the habitats to help establish coherent ecological networks that are more resilient to current and future pressures, widening their value beyond the site boundary. As a result, the following recommendations are proposed to enhance the biodiversity value of the habitats present:

- Native plant species should be used wherever possible, and where not possible plants should favour those of a known benefit to wildlife;
- Other features could also be installed on the building or associated with the green roof to enhance its ecological value. Stone or log piles would provide shelter for a variety of invertebrates and the installation of bird boxes on the building surrounding the green roof can help promote establishment of local bird populations that could use the habitat for foraging.

4.2.2 If the landscape plans are changed through further detailed design, the alterations will need to be reviewed and the UGF recalculated to ensure changes do not materially influence the outcome.

5 Conclusions

- 5.1.1 Consideration has been given the enhancement proposals for the Proposed Development and how these contribute to urban greening in line with planning policy requirements. The proposed Urban Greening Factor focuses on what can be delivered as part of the new Construction and Engineering Centre, rather than the wider College Masterplan.
- 5.1.2 A BioSolar roof, incorporating a biodiverse green roof with wildflowers, supported by a 150mm substrate depth, is proposed across the eastern side of the building, with the remainder of the building comprising artificial surfaces.
- 5.1.3 The Proposed Development achieves a UGF score of 0.30, meeting the target score for commercial developments of 0.3. Additional enhancement measures have been identified that can be incorporated into the habitats to increase their functionality for faunal species locally and add value to the habitats provided.

Assystem Energy & Infrastructure Ltd
Innovation Centre
1 Evolution Park
Blackburn
BB1 2FD

www.assystem.com
Email: UK-EI@assystem.com
Ecology@assystem.com