



## Urban Greening Factor

Former Hampstead Police Station, Corner of Rosslyn Hill and Downshire Hill,

London, NW3 1PD

Rostrack Limited

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## Executive Summary

Arbtech Consulting Limited was instructed by Rostrack Limited to conduct an Urban Greening Factor (UGF) evaluation of Former Hampstead Police Station, Corner of Rosslyn Hill and Downshire Hill, London, NW3 1PD (hereafter referred to as “the site”). The calculations undertaken serve to supplement a planning application for the restoration of the former Police Station, listed building and Magistrates’ courthouse, into a development of high-quality and mixed-used scheme, comprising of residential (5no. large family homes, a mixture of one and two beds, spread over the first and second floor) and commercial floorspace (lower ground, ground, and selection of first floor; hereafter referred to as “the proposed development”).

- ❖ The proposals are not thought to be considered as a major development. As the development is not considered a major development, no target UGF scores are applied. As such, this report serves to provide a quantified informative of the additional urban greening that the development will deliver.
  
- ❖ **The current proposed plan results in a UGF of 0.18.**

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## **1.0 Introduction and Context**

### ***1.1 Background***

Arbtech Consulting Limited was instructed by Rostrack Limited to conduct an Urban Greening Factor (UGF) evaluation of Former Hampstead Police Station, Corner of Rosslyn Hill and Downshire Hill, London, NW3 1PD (hereafter referred to as “the site”). The calculations undertaken serve to supplement a planning application for the restoration of the former Police Station, listed building and Magistrates’ courthouse, into a development of high-quality and mixed-used scheme, comprising of residential (5no. large family homes, a mixture of one and two beds, spread over the first and second floor) and commercial floorspace (lower ground, ground, and selection of first floor; hereafter referred to as “the proposed development”).

A plan showing the proposed development is provided in Appendix 1.

The aim of the UGF evaluation is to establish the level of urban greening of the proposed development from the existing site plans. London Plan Policy G5 requires all major developments to include urban greening as a fundamental element of site and building design. The policy introduces the use of an Urban Greening Factor (UGF) to evaluate the quantity and quality of urban greening provided by a development proposal. A UGF calculator has been prepared to help applicants calculate the UGF score of a scheme and present the relevant information as part of their application.

This report follows the UGF guidelines set out by the London Plan Guidance: Urban Greening Factor (2021) document (accessible [here](#)).

### ***1.2 Site Context***

The site is located at National Grid Reference TQ 26865 85546 and has an area of 1138m<sup>2</sup> comprising a former police station and a carpark. It is directly surrounded by residential and commercial buildings in all directions with scattered tree lines in the area. The closest green space is located 375m north of site. A site location plan is provided in Appendix 2.

## 2.0 Methodology & Results

### 2.1 Development Screening for UGF

The planning application type which triggers the requirement for UGF is outlined in the London Plan Guidance (2021) as:

1. All major developments

*For housing, development where 10 or more homes will be provided, or the site has an area of 0.5 hectares or more.*

*For non-residential development it means additional floorspace of 1,000m<sup>2</sup> or more, or a site of 1 hectare or more, or as otherwise provided in the Town and Country Planning (Development Management Procedure) (England) Order 2015.*

2. Applications below the threshold for major development if required by a local plan

The **London Borough of Camden** (2017; accessible [here](#)) does not reference the London Plan (2021) or a UGF target score.

The proposals are not thought to be considered as a major development. As such, this report serves to provide a quantified informative of the additional urban greening that the development will deliver.

### 2.2 UGF Targets of a Major Development

The targets of UGF be found in section 1.1.2 of the London Plan Guidance (2021):

*UGF scores should be set out in Local Plans. Where Local Plans do not have UGF scores, the London Plan UGF scores of 0.4 for predominately residential and 0.3 for predominately commercial developments should be applied. UGF target scores should be considered the minimum benchmark not the maximum required.*

As the development is not considered a major development, no target UGF scores are applied.

### 2.3 UGF Scoring System

The scoring system can be found in section 3.1 of the London Plan Guidance (2021):

*Different types of greening that can be incorporated into development are categorised by surface cover types which broadly indicate their relative quality. The UGF assigns a factor score to each surface cover type which are weighted based on 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. The weighting of surface cover type scores encourages the provision of higher-quality urban greening, rather than large quantities of low-quality features. For example, while amenity grassland can contribute to SuDS and play, it will usually require more intensive management and watering, and has relatively little ecological value compared to species-rich grassland. Accordingly, amenity grassland is awarded a factor of 0.4 and species-rich grassland awarded a factor of 1.*

The scoring system is summarized in Table 1 below.

Table 1. Surface cover types and their associated factor scores in UGF calculations

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

Surface Cover Type	Factor
Water features (chlorinated) or unplanted detention basins.	0.2
Permeable paving.	0.1
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0

#### **2.4 UGF Calculation**

The scoring system can be found in section 3.2 of the guidance note. The following steps should be followed to calculate the overall UGF score for a proposal:

1. Assign each surface cover type in the development the corresponding UGF factor in line with the factor scores in Table 3.1 of the guidance;
2. Measure the area of each surface cover type in m<sup>2</sup> (see Table A1.1 of the guidance for further information);
3. Multiply the factor score by the area of the corresponding surface cover type;
4. Add the scores together for each surface type; then
5. Divide the combined score by the total site area in sqm to determine the scheme's UGF score.

#### **2.4 UGF Results**

UGF results for the proposed development are presented in Table 2 below. See Appendix 3 for UGF plan.



Table 2. UGF Table Calculator for the proposed development (provided by the London Plan Guidance: Urban Greening Factor 2021)

Surface Cover Type	Factor	Area (m <sup>2</sup> )	Contribution	Notes
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1	37	37	Grassland areas to comprise of species-rich grasslands (i.e. Emorsgate EM1 or similar).
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1	0	0	
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	45	36	Extensive green roof on first floor and roof level.
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	68	54.4	Trees along the boundary; in lieu of proposed tree species the projected mature canopy is a very conservative estimate.
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	0	0	
Flower-rich perennial planting.	0.7	45	31.5	Flower-rich perennial planting in planters and communal greenspaces.
Rain gardens and other vegetated sustainable drainage elements.	0.7	0	0	
Hedges (line of mature shrubs one or two shrubs wide).	0.6	0	0	
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6	19	11.4	Tree in outdoor seating area; in lieu of proposed tree species the projected mature canopy is a very conservative estimate.
Green wall –modular system or climbers rooted in soil.	0.6	0	0	
Groundcover planting.	0.5	0	0	
Amenity grassland (species-poor, regularly mown lawn).	0.4	70.5	28.2	50% of grasscrete areas to account for the cellular reinforcement system.
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3	0	0	
Water features (chlorinated) or unplanted detention basins.	0.2	0	0	
Permeable paving.	0.1	48	4.8	Outdoor seating area.
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0	904.5	0	Surfaces including building footprint not covered by the green roof, paved areas, tarmacked areas, and 50% of the grasscrete area.
			<b>Total Contribution</b>	203.3
			<b>Total Site area (m<sup>2</sup>)</b>	1138
			<b>Urban Greening Factor (total contributions/site area)</b>	<b>0.178646749</b>

### **3.0 Evaluation & Discussion**

The proposals are not thought to be considered as a major development. As the development is not considered a major development, no target UGF scores are applied. As such, this report serves to provide a quantified informative of the additional urban greening that the development will deliver.

**The current proposed plan results in a UGF of 0.18.**

## 4.0 Bibliography

- Camden Local Plan (2017). <https://www.camden.gov.uk/documents/20142/4820180/Local+Plan.pdf/ce6e992a-91f9-3a60-720c-70290fab78a6>
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- The London Plan (2021). [https://www.london.gov.uk/sites/default/files/the\\_london\\_plan\\_2021.pdf](https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf)

## Appendix 1: Proposed Development Plan



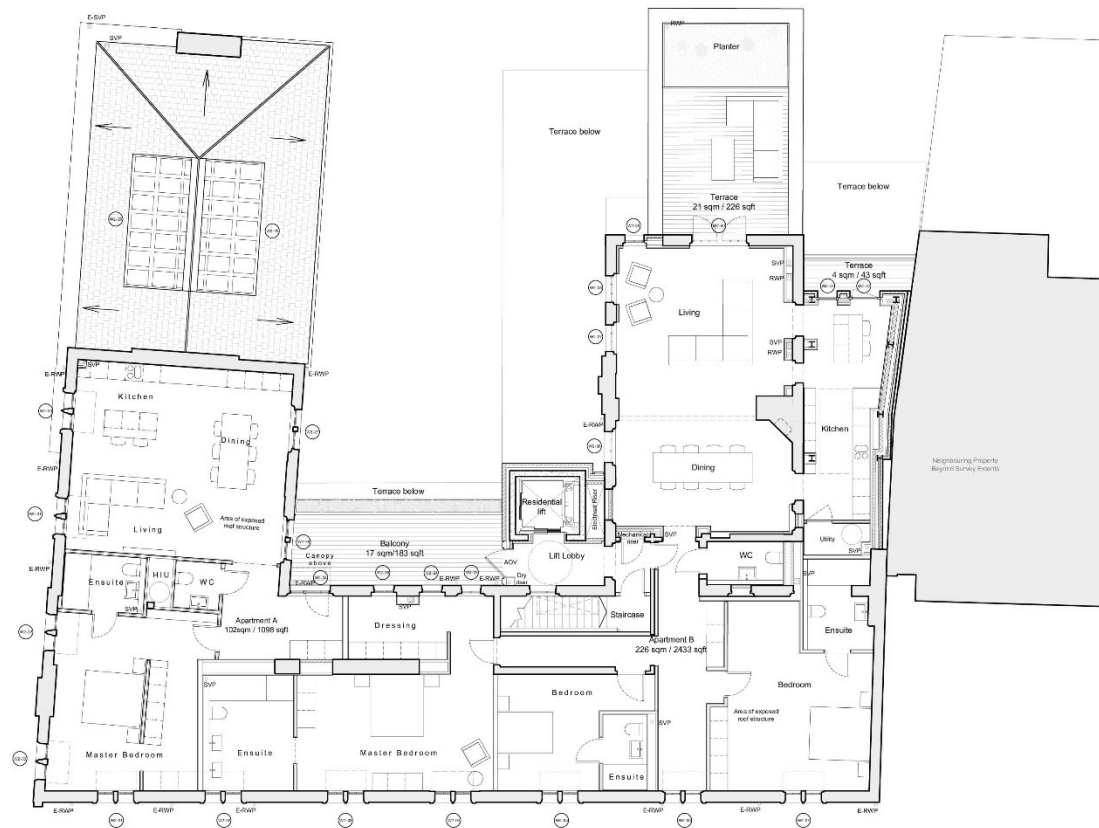


Project No.	Drawing No.	Project	Drawing Title	Drawn By	Checked By	Scale @ A1	Scale @ A3	Revision								
dMFK	2268	A101	Hampstead Police Station	Proposed First Floor Plan	DH	BK	1:75	1:150	P1	0.0	1.0	2.0	3.0	4.0	5.0 meter	6



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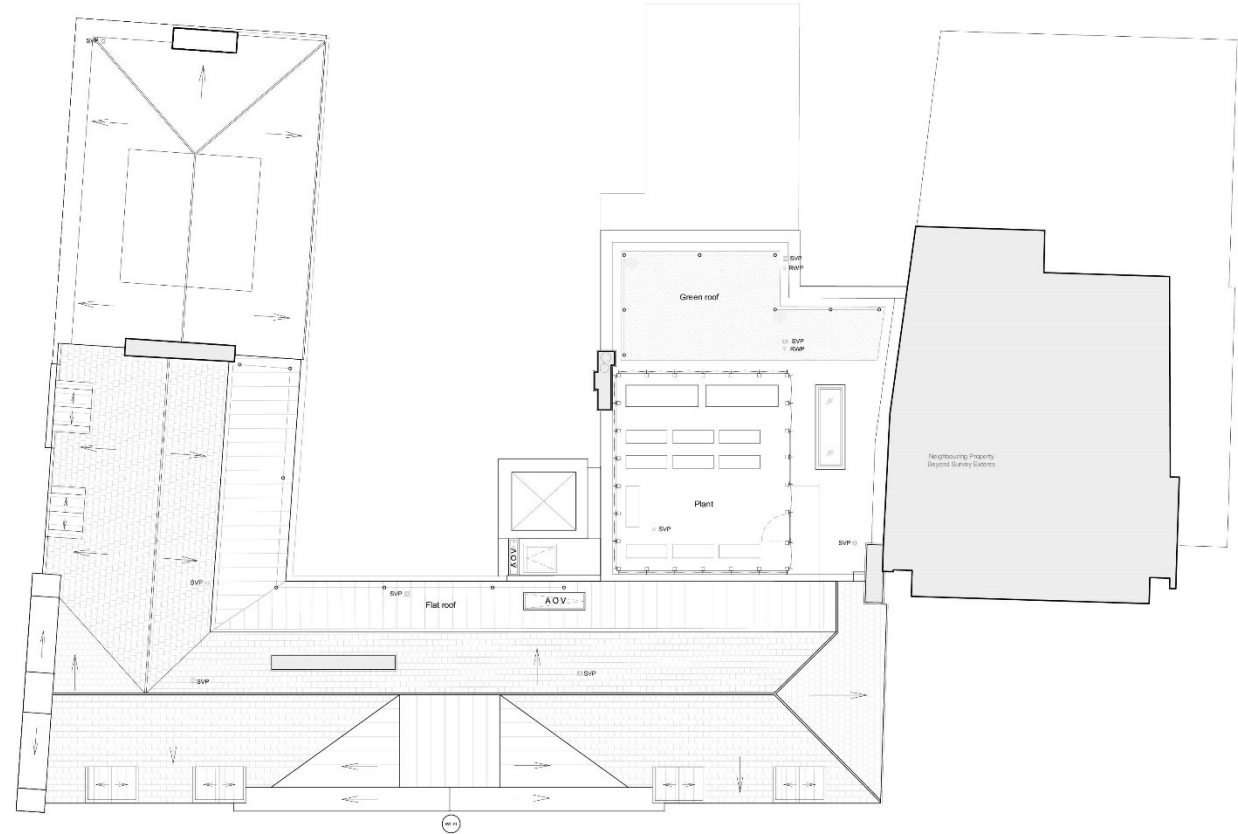


Project No.	Drawing No.	Project	Drawing Title	Drawn By	Checked By	Scale @ A1	Scale @ A3	Revision									
dMFK	2268	A102	Hampstead Police Station	Proposed Second Floor Plan	DH	BK	1:75	1:150	P1	0.0	1.0	2.0	3.0	4.0	5.0	meter	



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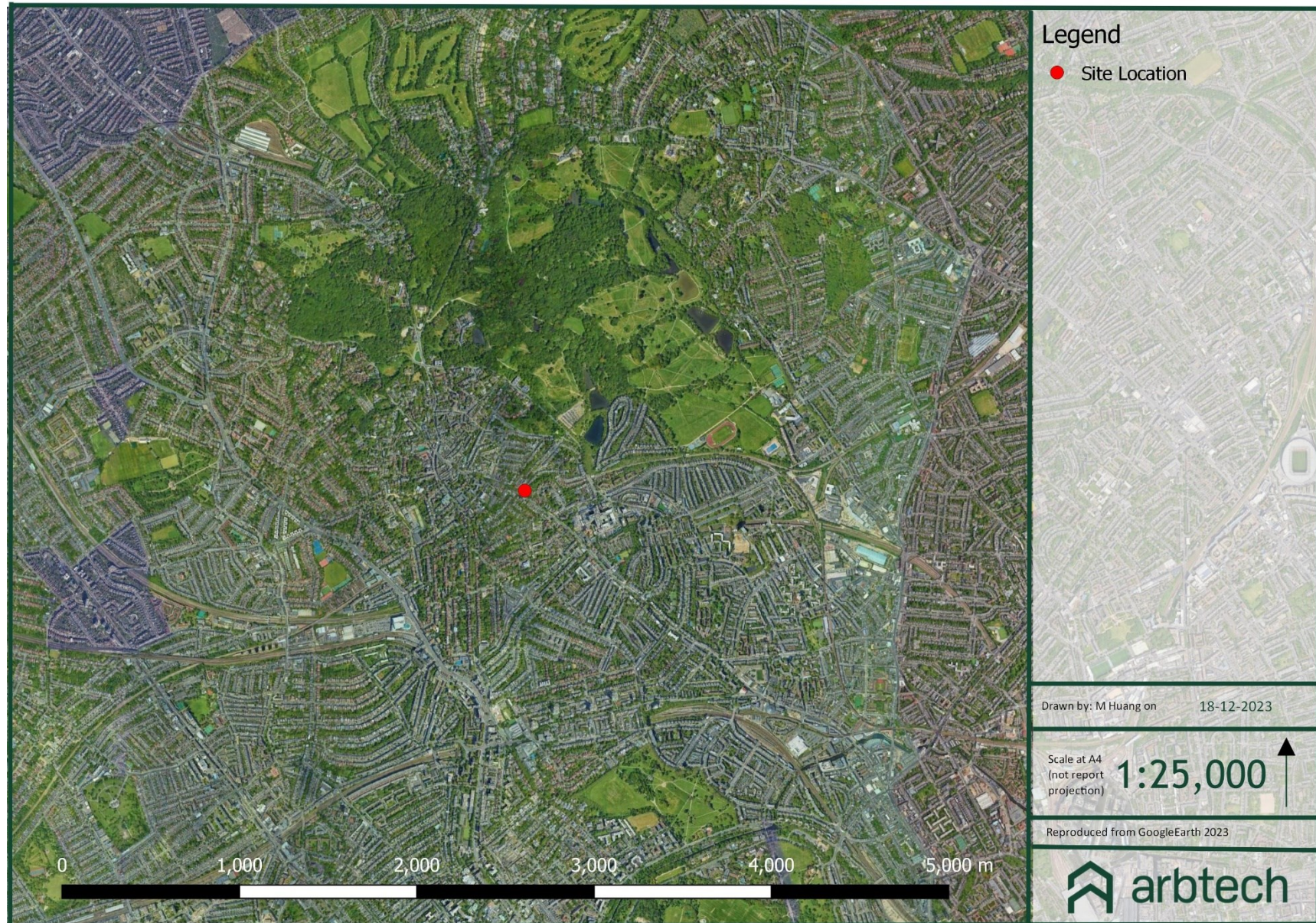


Project No.	Drawing No.	Project	Drawing Title	Drawn By	Checked By	Scale @ A1	Scale @ A3	Revision
dMFK 2268	A103	Hampstead Police Station	Proposed Roof Floor Plan	DH	BK	1:75	1:150	P1





## Appendix 2: Site Location Plan





### Appendix 3: UGF Plan

