

**GROSVENOR GARAGE,
13 FITZGERALD AVENUE, EAST SHEEN,
SW14 8SZ**

Urban Greening Factor Statement

Ref: 500261
Date: 22-03-2024

CONTENTS

1.0	INTRODUCTION.....	2
2.0	LOCAL PLAN POLICY.....	2
3.0	LONDON PLAN POLICY AND GUIDANCE	2
4.0	CALCULATING THE URBAN GREENING FACTOR.....	3
5.0	PHOTOVOLTAIC PANELS	5

Appendices

Appendix A:	Urban Greening Factor Surface Types (Dwg. No. CG-SK001B) / Urban Greening Factor Calculation (Dwg. No. CG-SK002B) / Extent of Proposed Climbers (Dwg. No. CG-SK003)
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1.0 INTRODUCTION

- 1.1.1 Hestia Homes is seeking to re-develop an existing vehicle repair facility at Grosvenor Garage, Fitzgerald Avenue, East Sheen for residential use. The existing garage buildings would be demolished and would be replaced by 3 No. 2½-storey houses and 5 No. 1 and 2-bedroom apartments and a commercial unit.

2.0 LOCAL PLAN POLICY

- 2.1.1 Policy LP 17 (Green roofs and walls) of the Local Plan states:

“Green roofs and/or brown roofs should be incorporated into new major developments with roof plate areas of 100sqm or more where technically feasible and subject to considerations of visual impact. The aim should be to use at least 70% of any potential roof plate area as a green / brown roof.

“The use of green / brown roofs and green walls is encouraged and supported in smaller developments, renovations, conversions and extensions.”

- 2.1.2 Paragraphs 5.6.5 and 5.6.6 of the Local Plan states that *“Green roofs do not preclude the use of renewable energy technologies. Green roofs and photovoltaic panels or solar thermal units can be used together and green roofs may increase the efficiency of solar photovoltaic panels by regulating temperature”* and *“A green wall, which is vegetation over a building’s vertical surfaces, may be an alternative if green roofs cannot be incorporated, provided they are properly designed and maintained.”*

- 2.1.3 Local Plan Policy LP 22 (Sustainable Design and Construction) states, amongst other things, that *“Developments will be required to achieve the highest standards of sustainable design and construction to mitigate the likely effects of climate change”*.

3.0 LONDON PLAN POLICY AND GUIDANCE

- 3.1.1 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 the Urban Greening Factor London Plan Guidance (LPG) (February 2023) to evaluate the quantity and quality of urban greening provided by a development proposal.

3.1.2 The Urban Greening Factor (UGF) is a tool used to evaluate the quality and quantity of natural features proposed as part of a development application, such as planting, waterbodies and green roofs, collectively referred to as urban greening. The LPG specifies that an UGF target score of 0.4 should be achieved for development that is predominately residential.

4.0 CALCULATING THE URBAN GREENING FACTOR

4.1.1 Section 3.0 of the Urban Greening Factor LPG sets out the scores and weighting for different types of greening that can be incorporated into a development. These are categorised by surface-cover types that broadly indicate their relative quality, in particular their potential for rainwater infiltration, which 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.

4.1.2 The following drawings (see **Appendix A**) have been prepared to demonstrate how an UGF score of 0.4 has been achieved.

- **Urban Greening Factor Surface Types (Dwg. No. CG-SK001B)**
- **Urban Greening Factor Calculation (Dwg. No. CG-SK002B)**
- **Extent of Proposed Climbers (Dwg. No. CG-SK003)**

4.1.3 The Urban Greening Factor Surface Types masterplan shows the different types of surface cover. The proposed hard landscape typologies comprise (1) permeable paving and (2) Sealed surfaces (see **Dwg. No. CG-SK001 B**). The proposed soft landscape typologies (see **Dwg. No. CG-SK001 B**) comprise:

- An extensive green roof with substrate of minimum settled depth of 80mm on top of all buildings and bin stores);
- Groundcover planting;
- Amenity grassland (species-poor, regularly mown lawn);
- Flower-rich perennials;
- 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 (4 No. trees proposed in two rear gardens, each tree 7m² projected area);
- Green walls (62m length of climbers grown up fences and walls up to 1.8m high);

- Green walls (2.5m length of climbers grown up to 3.0m high on the side wall of Apartment 1).

4.1.4 The LPG guidance principles have been adopted for calculating the UGF score as calculated on **Dwg. No. CG-SK002B**. These include the following:

- Areas of permeable surface underneath tree canopies have been included in the UGF calculation.
- Vertical surface areas of proposed green walls (i.e. climbers) have been included in the UGF calculation, but have not been added to the horizontal area calculation. The design intent is to achieve full vegetation coverage up to the stated height of each wall or fence. Climbers would be supported either by a timber trellis or a system of vine eyes and strained wires. The locations of climbers are identified on **Dwg. No. CG-SK003**.
- Extensive green roofs are proposed on the roofs of the buildings and on bin stores. The green roofs would have a substrate of minimum settled depth of 80mm and would meet the requirements of the Green Roof Code of Best Practice for the UK (Groundwork Sheffield, 2014). The substrate would have (1) a minimum settled depth of 80mm and (2) a maximum of 20% organic matter. Plants would include succulents, which would retain water within their structure, thereby reducing the risk of drying out. All areas would be regularly maintained to ensure the healthy growth of the vegetation and to remove any invasive plant species. A 300mm wide pebble margin would be provided along the outer edges of the green roofs.
- The total area of green roof includes areas that are underneath photovoltaic panels in accordance with the guidance.
- The flower-rich perennial planting would be dominated by mixed ornamental herbaceous planting. Mixed planting is proposed (e.g. perennials, ground cover and shrubs) but the whole planting beds have been assigned to flower-rich perennial planting as the dominant cover type.
- Projected tree canopies have been measured in square metres. Trees would be planted as standards and would have a 7m² (minimum) projected area, as stated by a supplier nursery. The trees would be 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.
- There is one existing tree alongside the northern site boundary, the canopy of which partially overhangs the site. However, this tree has not been included in the UGF calculation as the trunk is off-site.

5.0 PHOTOVOLTAIC PANELS

- 5.1.1 A total of 42 No. photovoltaic panels would be provided on the building roofs, as set out in the Sustainability and Energy Statement (Bluesky Unlimited) that has been submitted as part of this planning application. As noted in Local Plan Paragraph 5.6.5, green roofs may increase the efficiency of solar photovoltaic panels by regulating temperature. These panels would be set well back from the outer edges of the roof to avoid any visual impact issues.


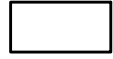

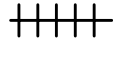







APPENDIX A

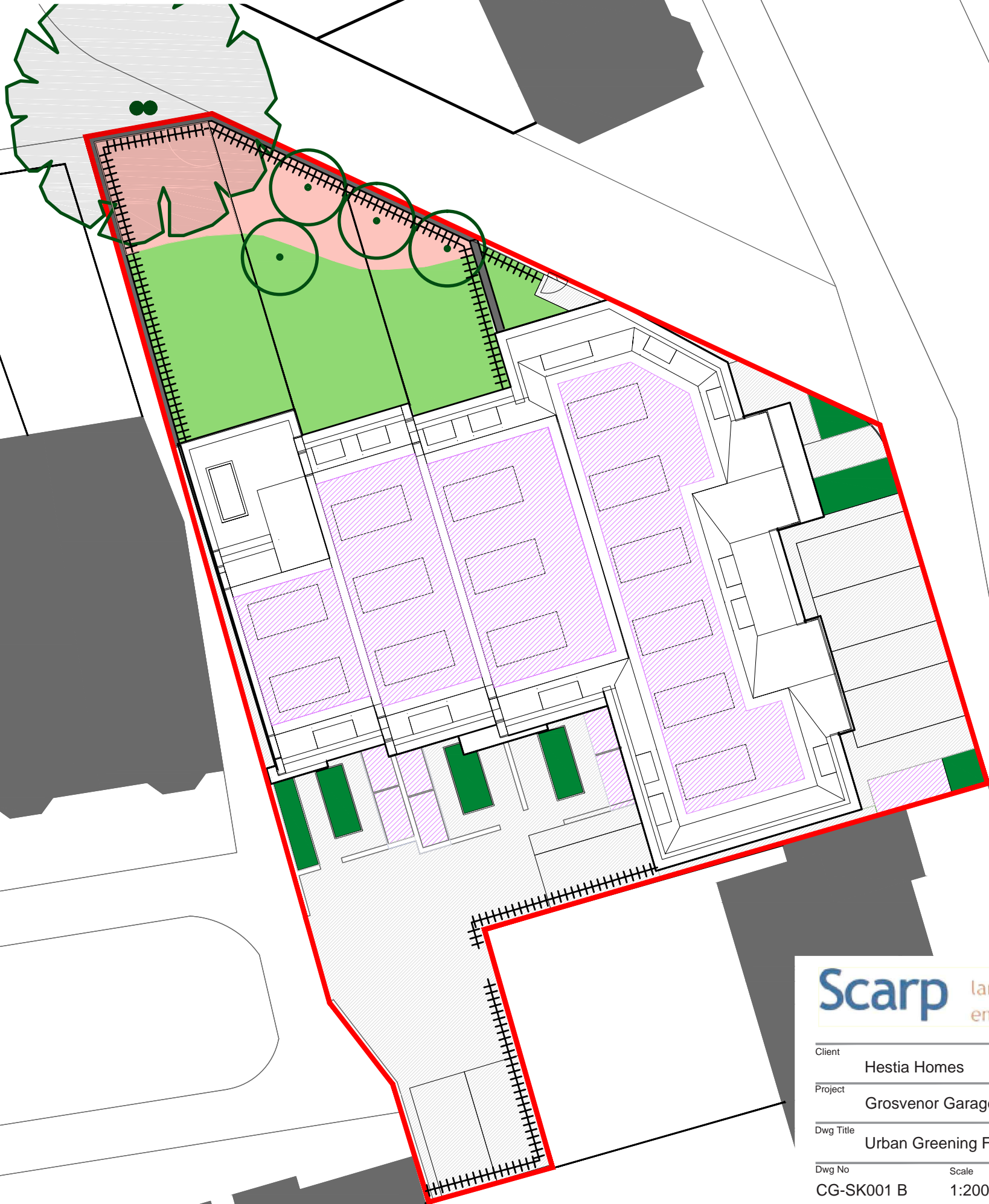
Urban Greening Factor Surface Types (Dwg. No. CG-SK001 B)

Urban Greening Factor Calculation (Dwg. No. CG-SK002 B)

Extent of Proposed Climbers (Dwg. No. CG-SK003)

LEGEND

-  SITE BOUNDARY 944,0m²
- PROPOSED HARD LANDSCAPE TYPOLOGIES**
-  Sealed Surfaced Roofs: Buildings 220,55m²
-  Permeable Paving 279,20m²
- PROPOSED SOFT LANDSCAPE TYPOLOGIES**
-  Climbers 63,10m
-  Extensive Green Roofs 239,65m²
-  Groundcover Planting 26,40m²
-  Flower-rich perennials 59,30m²
-  Amenity Grassland 115,30m²
-  Individual Trees (4No)
-  Existing Tree
-  Photovoltaic Panels


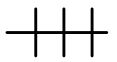



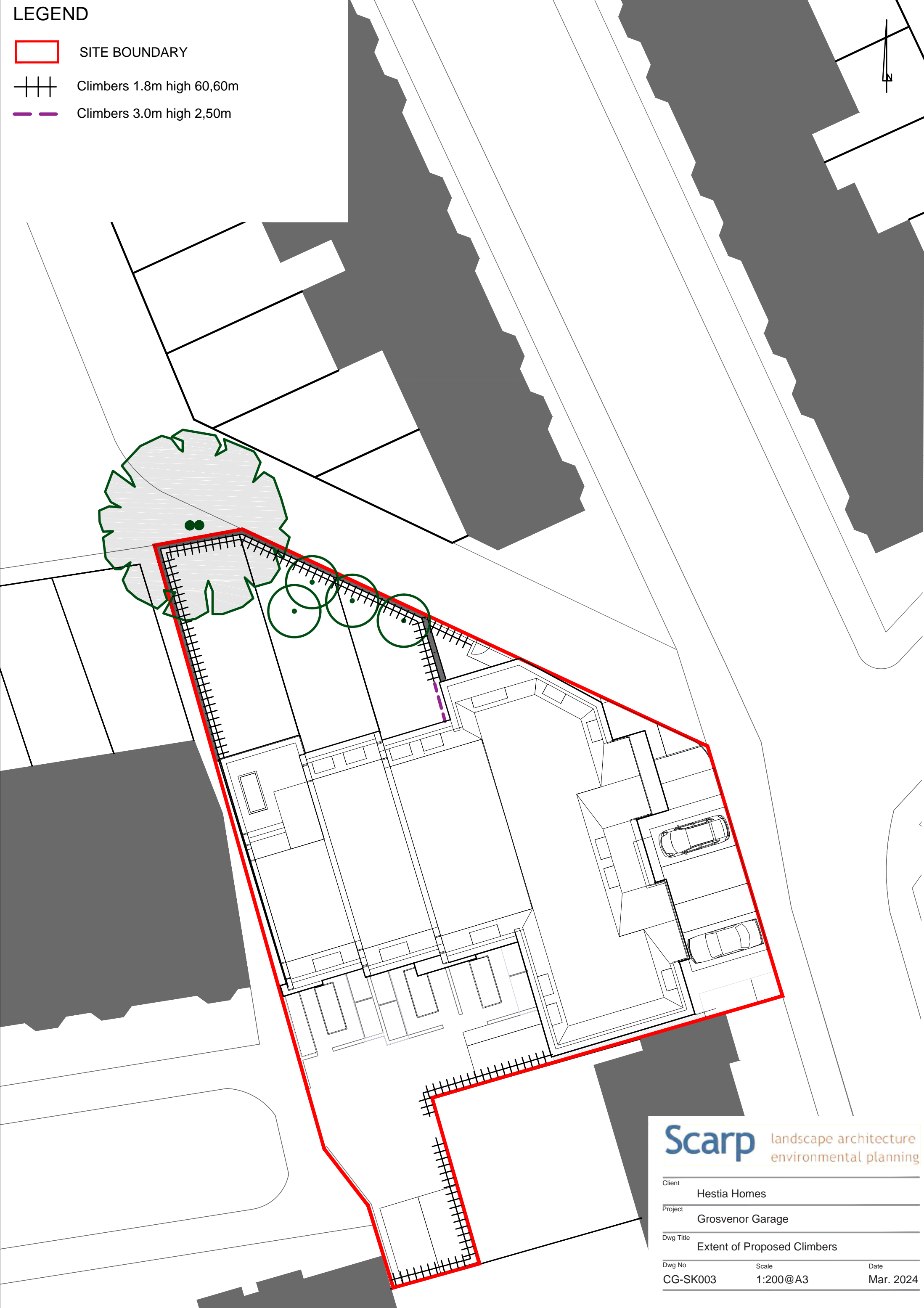
Scarp landscape architecture
environmental planning

Client	Hestia Homes	
Project	Grosvenor Garage	
Dwg Title	Urban Greening Factor Surface Types	
Dwg No	Scale	Date
CG-SK001 B	1:200@A3	Mar. 2024

URBAN GREENING FACTOR CALCULATION			
Surface Cover Type	Score	Proposed Area (m ²)	Contribution
Extensive green roof with substrate of minimum settled depth of 80mm over all buildings and bin stores)	0.7	239.65	167.75
Groundcover planting	0.5	26.40	13.20
Amenity grassland (species-poor, regularly mown lawn)	0.4	115.30	46.12
Flower-rich perennials	0.7	59.30	41.51
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. (4 No. trees proposed in largest two rear gardens, each 7m ²)	0.8	28.00	22.40
Permeable paving	0.1	279.20	27.92
Green walls (60.6m length of climbers up to 1.8m high)	0.6	109.08	65.44
Green walls (2.5m length of climbers up to 3.0m high)	0.6	7.50	4.5
Sealed surfaces (peripheral areas of building roofs)	0	220.55	0.00
Total Contribution Factor			388.84
Total Site Area			944.00
URBAN GREENING FACTOR			0.41

LEGEND

-  SITE BOUNDARY
-  Climbers 1.8m high 60,60m
-  Climbers 3.0m high 2,50m



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Client	Hestia Homes	
Project	Grosvenor Garage	
Dwg Title	Extent of Proposed Climbers	
Dwg No	Scale	Date
CG-SK003	1:200@A3	Mar. 2024

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