

4. 7. Roof terraces

Approach and principles

- 4.7.1. The design **should** provide for a variety of activity to reflect the broad range of residents that will live there : relaxation, fresh air, sunbathing, eating, playfulness (not part of formal play allowance), exercise, contemplation, growing, work (esp with hybrid working becoming more common), small gatherings or events.
- 4.7.2. Common wi-fi **should** be provided on all roof spaces.
- 4.7.3. The scale of the roof terrace spaces will influence the range of activity it is possible to provide for. The design **should** try to include a variety of scale of spaces and character within each roof terrace to meet diverse needs and interests.
- 4.7.4. Direct views out across the surrounding area **should** be encouraged, to help residents understand their place – connect them to their neighbourhood: e.g. Views to Balfour, key spaces e.g. Highland Place or the Town Square, distant views to the east or Canary Wharf.
- 4.7.5. Sunlight **must** be exploited and the time of day it lands on the space considered. The mornings designed for coffee and breakfast, elevenses, lunch, relaxing in the afternoon, post- school family and children’s space, or an evening space for post-work drinks.

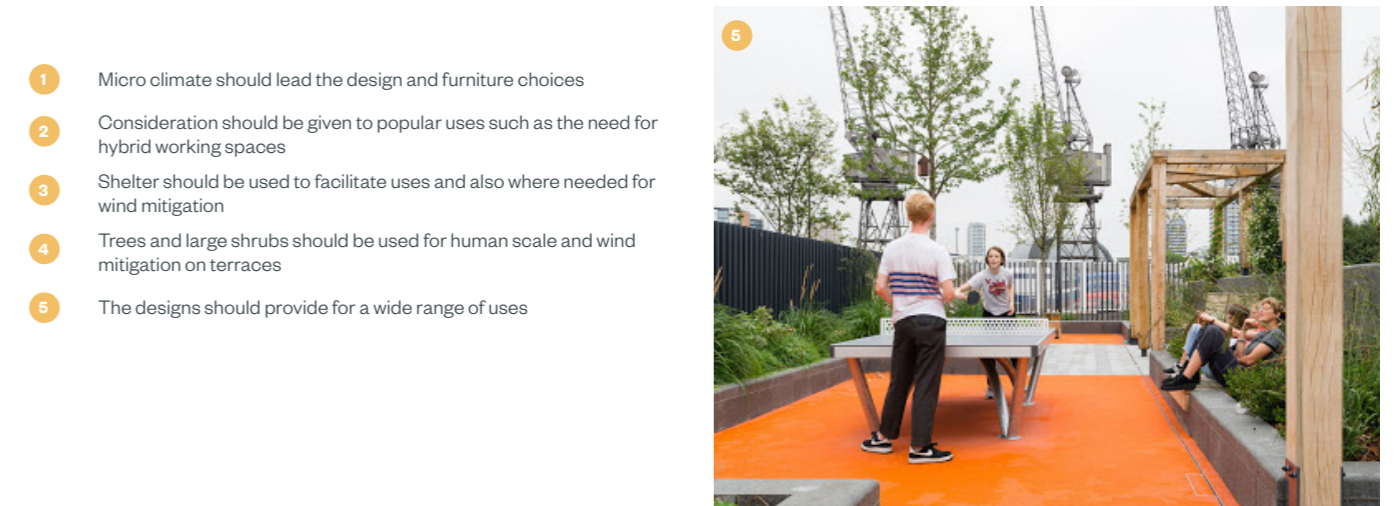
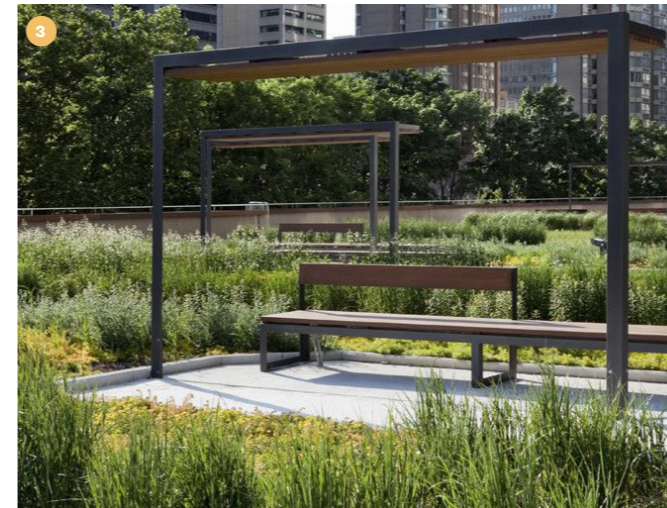


Fig.101 Diagram showing the opportunity for roof terraces (illustrative plan)

- 4.7.6. Spaces **must** be created that have elements of intimacy and human scale for comfort, to provide options for quiet contemplation. This **should** also include locations where overlooking is screened and bespoke elements to communicate human consideration.
- 4.7.7. Although LBTH’s High Density Living SPD does not consider designated play to be counted towards the GLA target on roof terraces, the masterplan principle still stands that all external spaces **must** have playful qualities and have children’s needs in mind alongside everyone else.
- 4.7.8. Roof terraces **must** have a balance of hard and soft surfaces. Hard surfaces **should** be for circulation and formal activity, and have texture and interest. Soft surfaces, such as grass, **should** be incorporated wherever possible for informal/relaxation. The terraces **should** offer flexible multifunctional space as well as programmed elements.
- 4.7.9. Terraces **must** include a generous proportion of planting, delivering variety, texture, seasonality and flowers. Wellbeing benefits **must** be maximised by making planting as visible as possible. Biodiversity and contact with nature **must** be encouraged, including wildlife installations, bird baths, bird feeding to encourage interest and engagement and communication about nature and its benefits.
- 4.7.10. Spaces will mostly be visible and looked down upon from surrounding apartments. They **must** look aesthetic and interesting from above as well as function well for their users.

Further information on roof terraces can be found in Chapter 7 “Public realm” of the “Design and Access Statement: The Masterplan”.

Communal spaces should be designed for a wide range of users, offering important access to nature and the outdoors.



- 1 Micro climate should lead the design and furniture choices
- 2 Consideration should be given to popular uses such as the need for hybrid working spaces
- 3 Shelter should be used to facilitate uses and also where needed for wind mitigation
- 4 Trees and large shrubs should be used for human scale and wind mitigation on terraces
- 5 The designs should provide for a wide range of uses

4.8. Hardscape

Approach and principles

The materials and furniture palette has been selected as a whole to create a cohesive environment that considers its surroundings.

4.8.1. The public realm hard landscape surfaces and furniture **should** support the following 5 objectives:

- Be simple and consistent
- Promote accessibility for all
- Promote connectivity through legibility
- Be robust and fit for purpose
- Promote sustainability

Surfacing

4.8.2. Public open spaces and individual streetscapes **should** have a consistent approach to material use. An indicative hard landscape material palette for each of the character areas in Chapter 5 of the design code.

4.8.3. The general palette of new pavements **should** be paved with clay pavers, or neutral (light grey) concrete flags, based on what is appropriate to the specific location. In places, this may be altered to support tree retention, delineate adjacent change of uses, or provide specific accents to the local character area e.g. Squares. Surfaces **must** be permeable wherever appropriate.

4.8.4. The re-surfacing of existing pavements may match the existing surface treatment or align with adjacent new pavement surfaces.

4.8.5. Where pavements are located adjacent to public open spaces, the material palette of the public open space may inform or override the material of the general pavement surface treatment to promote the local sense of identity.

4.8.6. Crossing areas within streetscape **should** be defined by the appropriate road markings or a change in the surface material to indicate safe crossing routes for pedestrians and provide traffic calming.

4.8.7. Footways **must** have a consistent approach to paving bond or paving jointing (including joints in in-situ materials), which **should** be perpendicular the primary direction of travel. In all situations, the bond of the footway **must** be at 90 degrees to the alignment of the kerb face and direction of travel.

4.8.8. Unitised paving bonds **should not** change direction on the corner, but extend 4m around the corner or to a logical position before rotating to create a neat junction with minimal cuts. Paving units and kerbs **must not** be cut to less than 50% of their original size.

4.8.9. Transitions between bond directions **should** be cut straight not interlocked.

4.8.10. Transitions and jointing **should not** be made over service covers or other utilities.

4.8.11. All access chambers, inspection chambers and manholes within the footway **must** be aligned to the paving layout. Kerbs and edges **must not** be interrupted by covers. All covers shall be inset with the adjacent paving material.

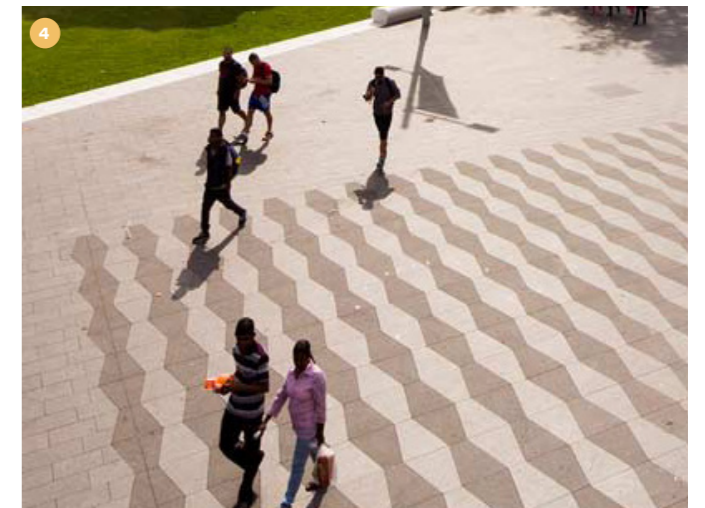
4.8.12. Utility covers within planted areas **should** have a unified dark colour.

4.8.13. The material of the tertiary street's carriageways may be variations of asphalt or macadam surfacing, blocks or setts. The design intent generally **should** be to provide minimal necessary width for vehicle routes.

4.8.14. Kerb heights **must** be a minimum of 60mm, within the development's residential streets, and a maximum of 125mm, to match the surrounding context. This is to be both accessible and also signal to cars that they are entering an area of pedestrian priority.



Further information on hardscape can be found in Chapter 7 "Public realm" of the "Design and Access Statement: The Masterplan".



- 1 The hard landscape products should be durable and pick up on its local context.
- 2 Changes of material should be used to demarcate space and provide legibility
- 3 Paving should have consistent approach to finish and colour that supports the overall sense of place.
- 4 The use of feature paving should be limited to the key public open spaces such as the Town Square

4.8. Hardscape

Furniture

- 4.8.15. Street and park furniture **must** be part of a coherent palette. It **should** be selected or designed to ensure coherence of appearance, design and materiality of each area.
- 4.8.16. Street and park furniture **must** be of robust construction, be easy to maintain and be placed in positions that minimise risk of damage by vehicles, along with preventing unsightly damage from skateboarding and other hard wearing activities.
- 4.8.17. Seating **should** be provided within the public open spaces to provide social opportunities and resting places.
- 4.8.18. Seating **must** follow the guidance as set out in BS 8300-1:2018 with regards to accessibility. This includes: an appropriate level of seating / resting areas **should** have seats with backrests and arms on both sides; appropriate heights and contrast to immediate context selected to be obvious to people with visual impairment; and including spaces for pushchairs, prams, wheelchair and scooter users where possible.
- 4.8.19. Street furniture **should** be located with enough space around it to safely fulfil its function.
- 4.8.20. All street furniture **should** be placed to allow access for street cleaning.
- 4.8.21. Where walls and retaining structures are required, they **should** be used and enhanced for seating.
- 4.8.22. Street furniture **should** be clustered in appropriate zones to avoid physical obstructions and respect pedestrian desire lines.
- 4.8.23. Where seating areas are located adjacent to vehicle traffic, seating **should** be either built in or protected from adjacent traffic (e.g. by kerb or planting area), and be safely accessible.
- 4.8.24. New street furniture **should** use a colour palette and texture palette that is harmonious with the materials of its adjacent setting, both of the landscape and architecture.
- 4.8.25. Use of bright colours within furniture, play elements, and other Site furnishings **should** be carefully considered within the same public open space or streetscape.
- 4.8.26. Cycle stands **should** be consistent across the entire public realm and they **should** be located to complement the usability of the public realm.
- 4.8.27. Care **should** be taken that street furniture at the rear edge of the footway does not make adjoining properties less secure by providing climbable access to windows.
- 4.8.28. Litter bins **should** be located throughout the masterplan in locations where people are likely to congregate, rest or pause.
- 4.8.29. The provision of in ground/ pop up power units within public open spaces **should** be considered in relationship to the planned uses of the proposed public open space e.g. the square and Millennium Green.
- 4.8.30. Street furniture **must** consider sustainability as a selection criteria. Where possible products with low levels of embodied energy and carbon emissions, recycled content, reusable materials, recyclable materials **must** be considered.



- 1 Key criteria for the selection of Site furnishings are its durability and suitability for its location within the masterplan.
- 2 Where walls and retaining elements are required they should double up as seating opportunities
- 3 Appropriate levels of seats should have backrests and armrests to follow BS 8300-1:2018
- 4 Cycle stands should be consistent across the public realm

4.9. Biodiversity

Approach and principles

- 4.9.1. Any landscaping **must** maximise the use of native species and those known to have wildlife value.
- 4.9.2. Plants and trees **must** be of local provenance, where possible, tolerant of local climatic conditions and species selection **must** take in to consideration the impacts of climate change.
- 4.9.3. Where possible, vertical spaces **must** be utilised through the incorporation of native climber species on trellises such as hop, ivy, clematis etc.
- 4.9.4. The inclusion of rain gardens, where possible, and as part of a wider Site surface water drainage strategy.
- 4.9.5. Stag beetle loggeries **must** be created (specification will be set out within a future Ecological management Plan (EMP).
- 4.9.6. Created and retained landscapes **must** be managed with biodiversity in mind.
- 4.9.7. A selection of bird, bat and invertebrate features such as boxes, bricks and panels **must** be installed throughout suitable habitat.

4.9.8. Lighting **must** be designed in accordance with the ILT and BCT guidelines for bats and lighting and **must** include:

- Directional lighting,
- Appropriate luminescence and protection from light spill (see information in guidance document),
- No uncontrolled lighting **must** occur and light spill should be minimised;
- No light sources such as security lights **must** be positioned near artificial roost entrances (if present e.g. bat box) and neither **must** any light sources be directed towards any roost entrances i.e. no up-lighting of the building' and
- No light **must** fall on any areas of vegetation suitable as a commuting and/or foraging resource.


 Background information on ecology strategy can be found in Chapter 7 "Public realm" of the "Design and Access Statement: The Masterplan".



Fig.102 Diagram showing the opportunity for biodiversity (illustrative plan)

All design of the landscape should maximise the Site's potential for biodiversity



- Key:**
- 1 Rain Gardens, Essex Road, Waltham Forest
 - 2 Stag beetle loggery
 - 3 Vertical greening
 - 4 Species with wildlife value
 - 5 Bird boxes



4.10. SuDS

Approach and principles

4.10.1. The planning and design of SuDS **must** follow guidance laid out in Urban Design London's (UDL's) Designing Rain Gardens: A Practical Guide (2018) and CIRIA's Guidance on the construction of SuDS (2017).

4.10.2. Bioretention areas and rain gardens **must** have a finished mulch level at least 80mm below adjacent paving levels in order to allow sufficient free-board.

4.10.3. Soft landscape areas **must** contribute to the SuDS strategy, for example through conveyance or storage.

4.10.4. Any underground storage tanks **must** be arranged in such a way that it does not impact the ability for tree planting, play and soft landscape within the design.

4.10.5. Extensive green roofs **must** be incorporated within the scheme wherever possible. These **must** endeavour to provide interest for residents viewing them from above.

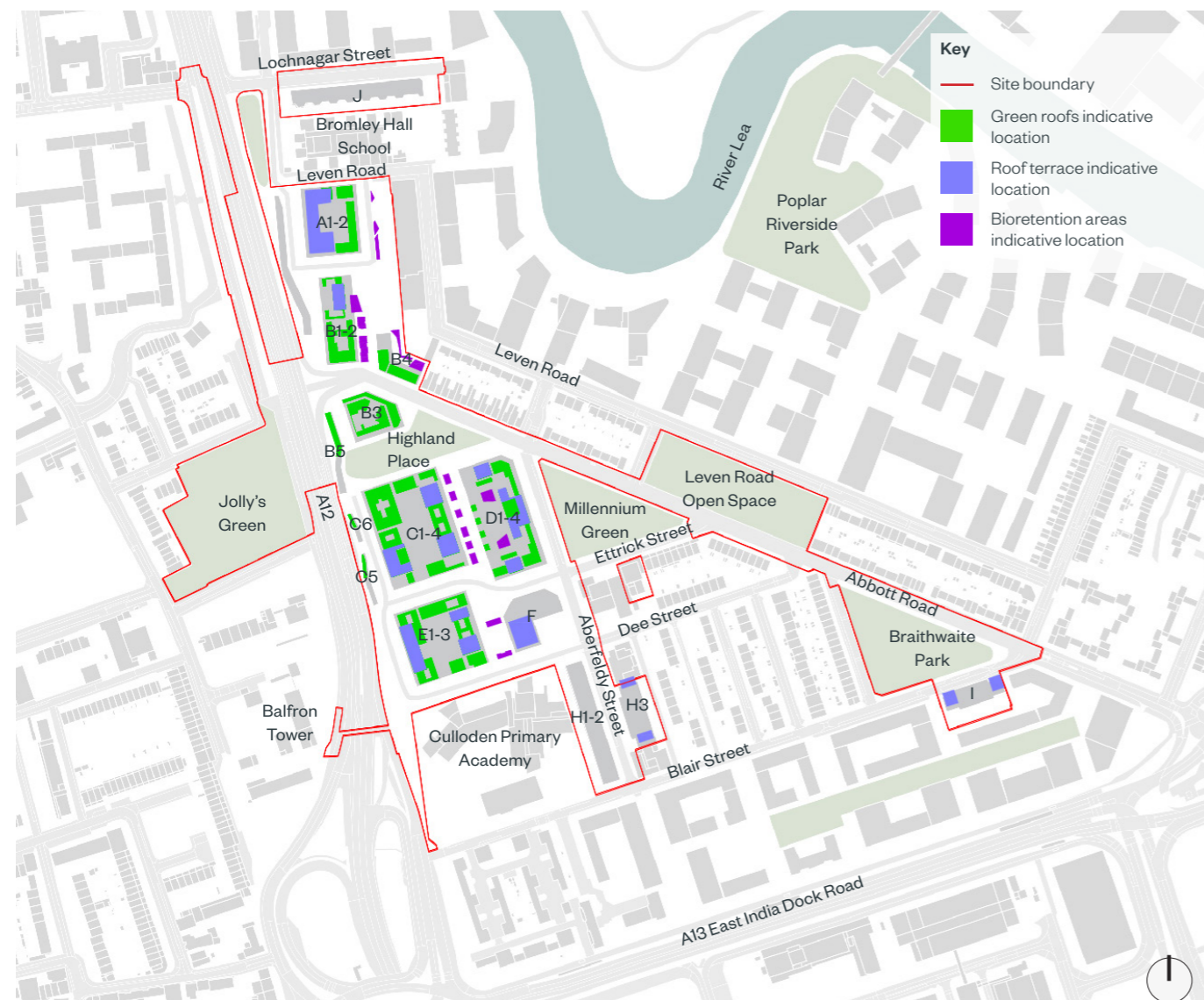
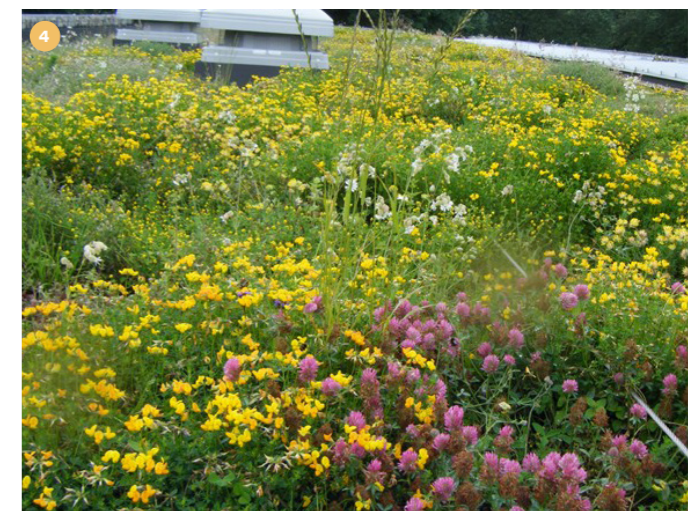


Fig.103 Diagram showing the opportunity for SuDS (illustrative plan)



Key:

- 1 Rain gardens should follow guidance and precedents, Grey to Green, Sheffield
- 2 Swales should be utilised to contribute to the SuDS strategy
- 3 Playful features should be incorporated into rain gardens and SuDS
- 4 Extensive green roofs should be encouraged wherever possible