



CHAPTER 6



LANDSCAPE

Landscape

1 VINYL SQUARE LANDSCAPE

Defining a Sequence of Spaces from Hard to Soft

The concept for 1 Vinyl Square landscape focuses on creating a sequences of spaces that change as someone moves through them. From the industrial surrounding context, through the urban public realm, and into lush residential podiums. Each landscaped level within the 1 Vinyl Square also aims to provide a different function and have a different character.

Our design looks at enhancing these different characters as much as possible. The following characters have been defined for each floor; these are described in further detail in the rest of this document:

1. Floor 00 - The Ground Level

The ground level landscape aims to integrate the 1 Vinyl Square building with the existing Old Vinyl Factory masterplan. This is achieved through maintaining consistent materials, planting and design language. The building and ground level landscape has been designed to frame Vinyl Square, a key public space at the Old Vinyl Factory.

2. Floor 01 - Activity Terrace

The first floor terrace focusses primarily on providing an active and social space. Areas for informal play and group seating are integrated amongst planting.

3. Floor 09 - Social Terrace

The ninth floor terrace focuses on providing social seating spaces immersed within the planting.

4. Floor 10 - Social & Growing Terrace

The two linking terraces on the 10th floor provide both a social seating space that utilises wide views and a communal growing and herb garden.



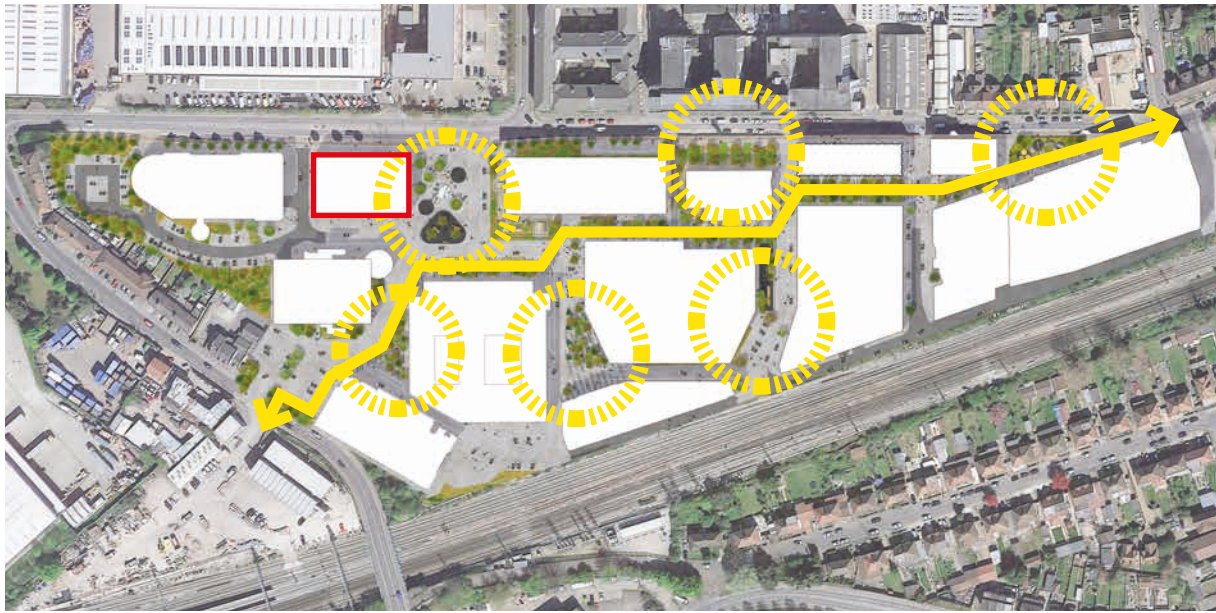
1. Arrival at station - Industrial context



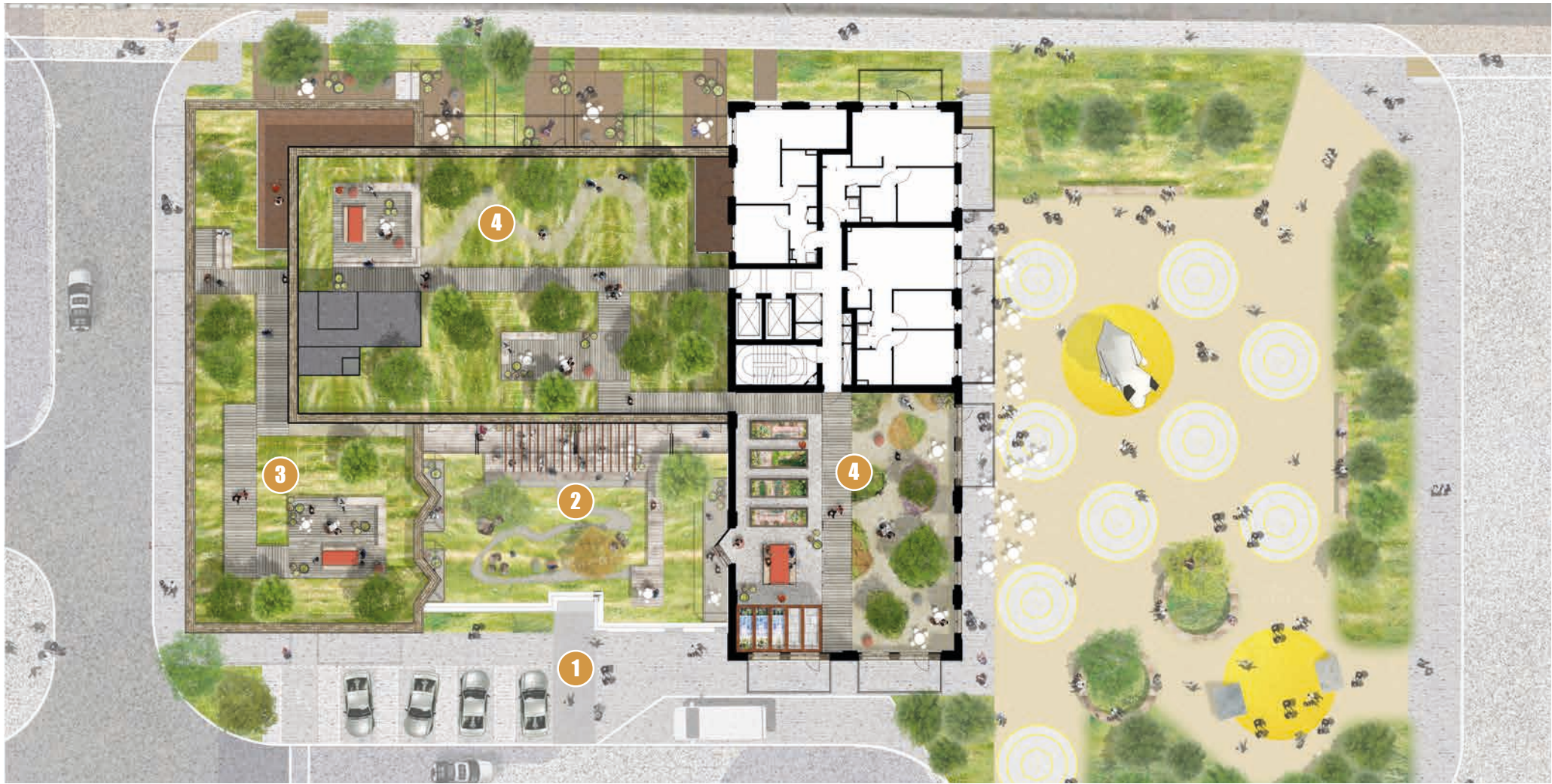
2. Walking through site - hard working urban landscape



3. Arriving at flat - Verdant podium landscape



Plan illustrating a sequence of public spaces that hang of The Groove pedestrian route
Vinyl Square is the key public space ant the heart of the scheme.



Plan illustrating all levels of I Vinyl Square Landscape

Landscape

AMENITY & PLAY PROVISION

1 Vinyl Square Amenity and Play Requirements

The areas that are required for amenity have been calculated using Hillingdon Design and Accessibility Statement Supplementary Planning Document - Residential Layouts SPD (2006). A total area of 3305m2 is required. A total of 2984.8m2 of amenity space has been provided. 1059.3m² is provided as communal amenity space though podium gardens on level 01, 09 and roof levels. 1925.5m² s provided as private amenity space on balconies. Including balconies in the amenity space calculations is accepted and described in the guidance above.

The areas that are required for play have been calculated based on the GLA Play Space Calculator 2012 and the GLA Play Space Calculator 2019. These calculations are illustrated on the diagrams on the opposite page. An average of these calculations has been used, resulting in a provision of 153m2 for children aged less than 5 years old. 64m2 of this is provided on the first floor podium, 89m2 is provided as part of the Vinyl Square play area. All play for older children is provided across the Old Vinyl factory masterplan.

The play space provided on the first floor podium aims to be informal and as natural as possible, encouraging children to engage with nature and maximising the amount of potential playable space. Timber logs, stepping stones, weaving paths and stages all act as informal play elements amongst sensory planting.

1 Vinyl Square Play Requirements

In order to ensure we can use some of the Vinyl Square play space as part of the 1 Vinyl Square play provision and that there is enough play provided across the masterplan we have conducted an site wide play space audit. This shows a residual area for publicly accessible space of 65m2. The calculations for this are shown on the tables opposite. The first table illustrates the amount of play required across the Old Vinyl Factory Masterplan and whether it is provided in a public or private space. The second table illustrates the total amount of publicly accessible play space at ground level. The third table illustrates the total residual area of ground floor play which is not associated with any development.

Assessing child occupancy and play space requirements							
Size of your development:							
Number of FLATS							
	Studio	1 bed	2 bed	3 bed	4 bed	5 bed	Total
Social rented/affordable	0	0	0	9	0	0	9
Intermediate	0	10	6	11	0	0	27
Market	11	31	54	2	0	0	98
Total	11	41	60	22	0	0	134
Number of HOUSES							
		1 bed	2 bed	3 bed	4 bed	5 bed	Total
Social rented/affordable		0	0	0	0	0	0
Intermediate		0	0	0	0	0	0
Market		0	0	0	0	0	0
Total		0	0	0	0	0	0
Proportion of children							
	Number of children	%					
Under 5	12	42%					
5 to 11	10	35%					
12+	7	23%					
Total	29	100%					
Play space requirements							
GLA benchmark (sqm)*	Alternative local benchmark (sqm)**	Total (sq m play space) required					
10		289.4					
	10	289.4					
* GLA benchmark standard=minimum of 10sqm of dedicated play space per child							
** Borough's local benchmark							

Play Provision based on 2012 Play Calculator

GLA Population Yield Calculator				
	1 bed	2 bed	3 bed	4 bed
Market and intermediate Units	52			
	52	60	13	0
Social Units	0	0	9	0
Total Units	134			
Geographic Aggregation	London			
PTAL	PTAL 3-4			
Notes				
Sample size of 39 sites				
Shaded cells require user input				
Select both geography and PTAL				
For developments in Outer London with PTAL 5-6 use (London/PTAL 5-6) or (Outer London/3-4) to calculate yield				
Yield from Development (persons)				
	Market & Intermediate	Social	Total	
Ages 0, 1, 2, 3 & 4	12.5	6.2	18.7	
Ages 5, 6, 7, 8, 9, 10 & 11	8.3	5.6	14.0	
Ages 12, 13, 14 & 15	2.1	3.8	5.8	
Ages 16 & 17	1.1	2.0	3.1	
18-64	206.5	17.9	224.5	
65+	4.9	0.4	5.3	
Total Yield	235.5	35.9	271.4	
Play Space Calculator				
Total Children	41.6			
Benchmark (m ²)	Total play space (m ²)			
Play space requirement	10	415.7		

Play Provision based on 2019 Play Calculator

Site Wide Play Requirements

	Under 5 Play	5 to 12 Play	12 Plus Play
Assembly Buildings	111 m2	43 m2	29 m2
Boiler House	15 m2	4 m2	4 m2
Gatefold	NA	NA	NA
Machine Store	31 m2	11 m2	9 m2
Material Store	120m2	50 m2	30 m2
1 Vinyl Square	153 m2 (89 provided at ground)	120 m2	79 m2
Total Publically Accessible Play Required	440m2		
Total Privately Accessible Play Required	369m2		

Publicly Accessible Ground Floor Play Provision

	Area
Vinyl Square Play Area	270 m2
Assembly Building East Play Area	235 m2
Gatefold Play Area	450 m2
Total Publically Accessible Play Provision	955 m2

Publicly Accessible Ground Floor Residual Play

Total Publically Accessible Play Provision	955 m2
Total Publically Accessible Play Required	440 m2
Gatefold Play not included	450 m2
Total Residual Play	65 m2

Site Wide Play Space Audit

Play Provided On Private Podium
Play Provided At Publically Accessible Ground Level



Landscape

GROUND FLOOR LANDSCAPE

The ground floor public realm around the curtilage of the 1 Vinyl Square Building has been designed to tie in with the Old Vinyl Factory Masterplan. This has been considered through the selection of materials and planting. The design is composed of the following elements:

- 1. Adoptable paving to tie in with Blyth Road materials.
- 2. Planted boundary to provide privacy for residential units.
- 3. Tree planting located to avoid below ground services.
- 4. Volume and impact of low level planting along Blyth Road maximised due to inability to plant trees in all locations as a result of below ground services.
- 5. Channel drain located along highways boundary to prevent water run off into highways land.
- 6. Paving strip to allow clean interface with bound surface material of Vinyl Square. Paving to match site wide specification.
- 7. Specimen trees with 2m clear stem to allow cars to have visibility around corner. Area of low level planting maximised.
- 8. Climbing plant species located along building edge to help animate building facade.
- 9. Paving to match site wide specification.



4. Example of high impact road-side boundary planting without the use of large specimen trees



7. Example of substantial tree planting adjacent to on street parking and multi storey car park entrance.



3. Use of trees and substantial planting to define residential boundary and provide privacy.



Landscape

FLOOR 01 – ACTIVITY TERRACE

The first floor terrace has been designed to primarily provide an active and social space. Areas for informal play and large seating groups are integrated amongst planting. The design is composed of the following elements:

- 1. Activity sun deck in south facing location. The deck is also the location for group seating, potted plants, community events and activities such as yoga.
- 2. Generous boundary planting to provide privacy to adjacent residential units.
- 3. Secluded small seating areas connected by raised deck.
- 4. High impact sensory grass planting creating noise and movement.
- 5. Informal sensory play route with natural play elements surrounded by sensory planting.
- 6. Garden surface materials to match architectural material palette.
- 7. Multi stem trees providing year round interest.
- 8. Pergola structure providing protection from wind.
- 9. 1.1m high parapet to match architectural material palette.



1. Sun deck large enough to accommodate activities, group seating and potted plants.



5. Informal, sensory play route aimed at the youngest children. Encouraging children to engage with nature.



3. Example of smaller seating area amongst dramatic grass planting connected by board walks.

Landscape

FLOOR 01 – ACTIVITY TERRACE

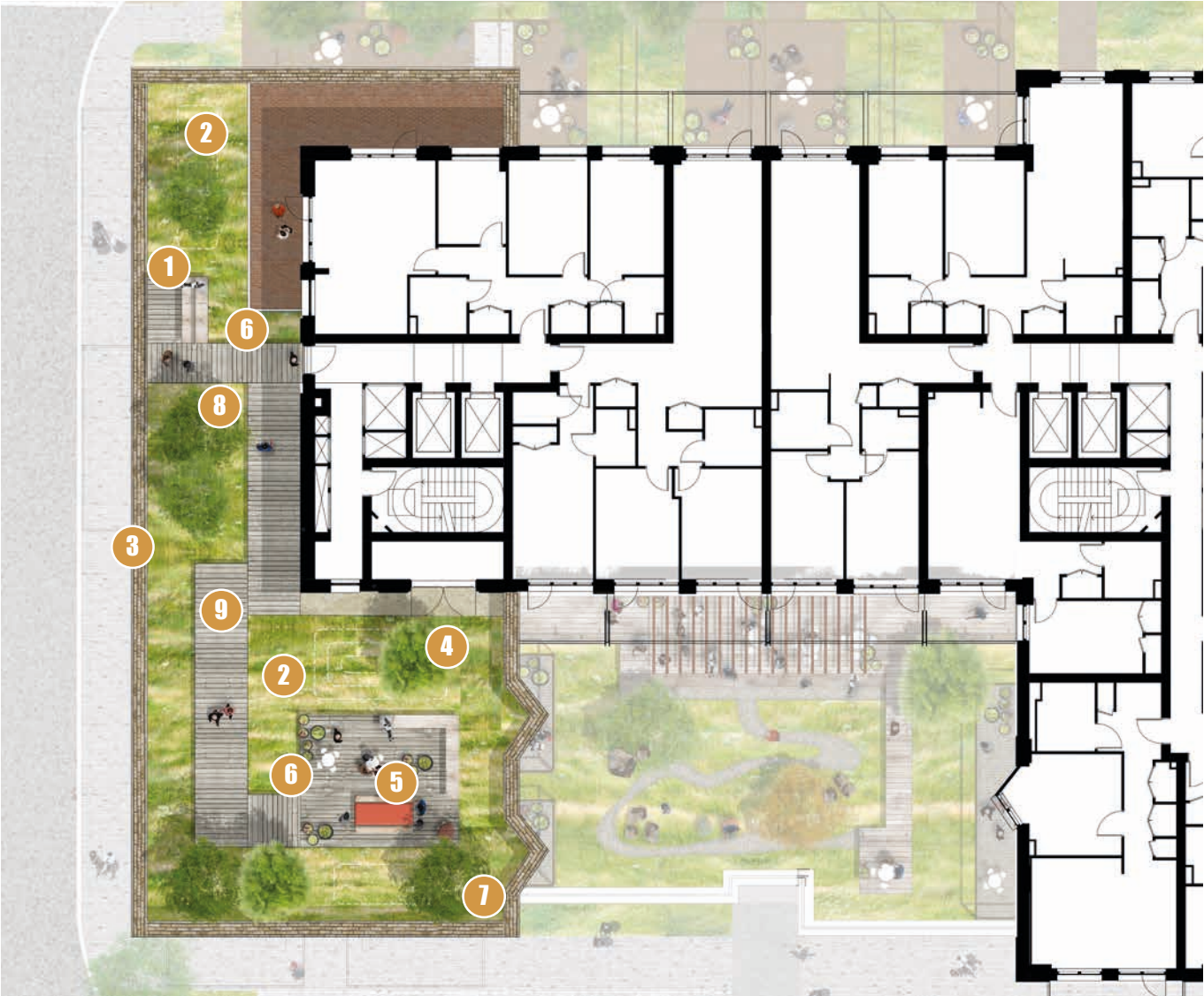


Landscape

FLOOR 09 – SOCIAL TERRACE

The ninth floor terrace aims to primarily provide social seating space amongst planting. The design provides one area that is smaller and creates a more secluded seating space. A second area is larger and surrounded by dense mounded planting, creating a protected environment suitable for seating. The design is composed of the following elements:

- 1. Small non combustible composite timber terrace with reclined seating.
- 2. Low level planting with dramatic seasonal interest and large variety of drought tolerant species.
- 3. High boundary wall providing protection from wind but obscuring views.
- 4. Mounded planting.
- 5. Sheltered terrace surrounded by mounded planting and small trees to ensure the seating area is completely protected form wind.
- 6. Variety of seat types for different group sizes and occasions, animated by pot planting.
- 7. Small structural trees and shrubs.
- 8. High impact planting at terrace arrival.
- 9. Non combustible composite timber connecting decks.



1. Example of reclined seating populating the smaller secluded terrace



5. Example of sheltered seating amongst mounded planting and small trees or shrubs

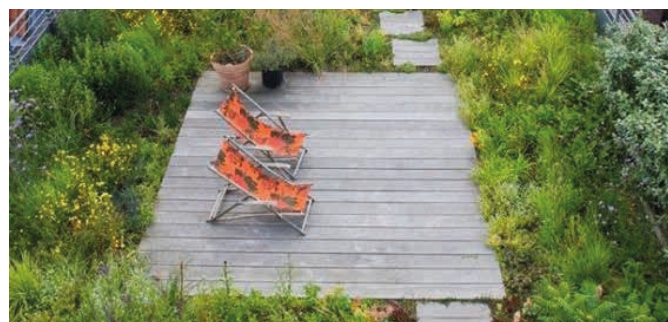


9. Example of decking connecting two terraces surrounded by naturalistic planting

ROOF LEVEL – SOCIAL & GROWING TERRACE

The two tenth floor terraces create both a communal growing space for residents and a social seating space amongst planting that utilises wide views. The communal growing space is provided through both a herb garden and raised allotment beds. The social seating space amongst planting provides one area that is raised to get the best views and is exposed to wind. A second area is surrounded by dense mounded planting, creating a protected environment suitable for seating. The two roof terraces are linked both internally and externally. The design is composed of the following elements:

1. Raised allotment beds.
2. Tables for group eating and preparation of grown produce.
3. Community space with green house and storage area.
4. Non combustible composite timber deck to allow access and prevent self bound gravel sticking to residents shoes.
5. Self bound gravel.
6. Climbing plant species to colonise brick façades.
7. South facing herb garden with species tolerant to exposure, wind and drought.
8. Scattered seating amongst fragrant herb plant beds.
9. Self bound gravel with no edging to plant beds.
10. Exposed raised non combustible composite timber terrace maximising wider views.
11. Low level planting with dramatic seasonal interest and large variety of drought tolerant species.
12. High boundary wall providing protection from wind but obscuring views.
13. Mounded planting.
14. Sheltered terrace surrounded by mounded planting and small trees to ensure the seating area is completely protected from wind.
15. Informal gravel path amongst planting with secluded seating areas.



10. Example of low level planting allowing wide views and exposure to elements



1 & 3. Example of community space and integrated green house with raised allotment beds



7. Example of herb garden with informal integrated seating.

Landscape

TECHNICAL CONSIDERATIONS

Studio Egret West's approach to planting is to create a plant community similar to that which is found in nature. In order to achieve this four specific plant layers are created. These layers can be categorised as functional layers that provide diversity and an ecological function, and design layers that respond to seasonal changes and form peoples impression of the landscape. Each of plant layers is described below:

1. Structure and framework plants. This layer is made up of trees, shrubs, uprights grasses, and large leaved

perennials. Plants have distinct forms, are long lived and form the visual structure of the plant bed.

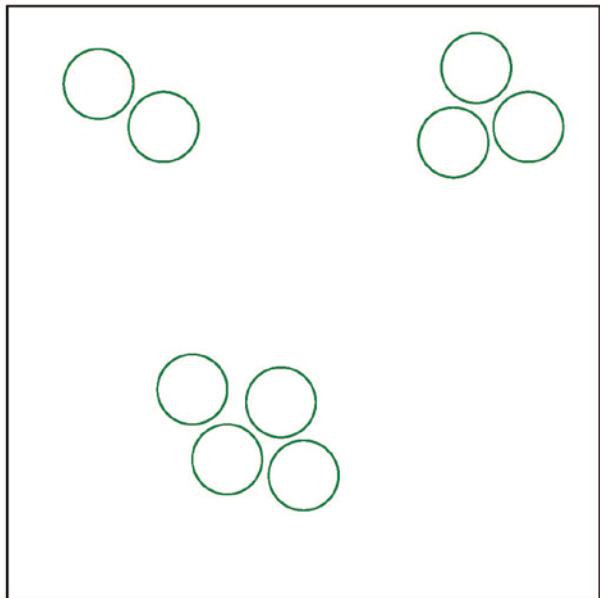
2. Seasonal theme plants. This layer is made up of mid-high plants that become visually dominant during a season because of their colour or texture.

3. Ground cover plants. These fill every bare patch of soil, help prevent soil erosion, prevent weeds and help create a natural mulch.

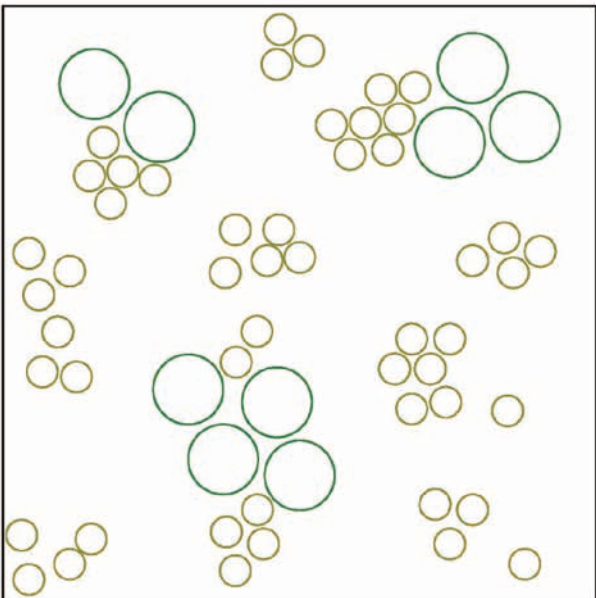
4. Filler plants. These are short lived species that temporarily fill gaps and add short seasonal display.

All planting on a raised podium or terrace uses a lightweight soil, reducing the impact of loading on the structure below. This ensures adequate soil depths can be maintained for trees and shrubs. In general a drought tolerant planting selection will be chosen that will thrive in lightweight soil and provide a more sustainable maintenance strategy.

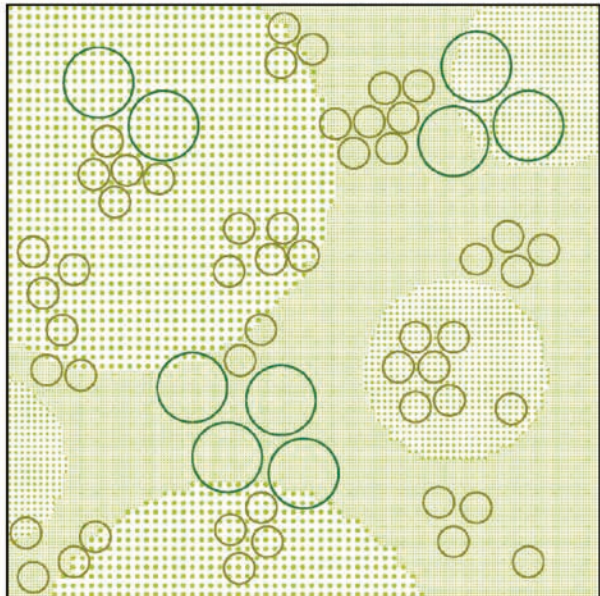
1. Structure and framework plants



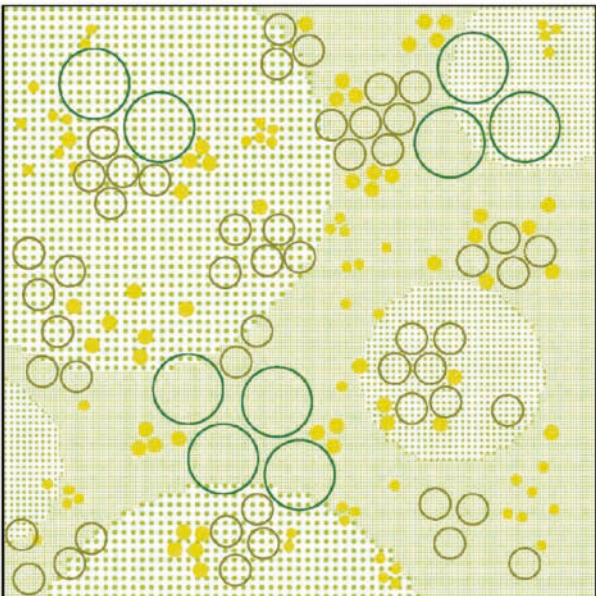
2. Seasonal theme plants



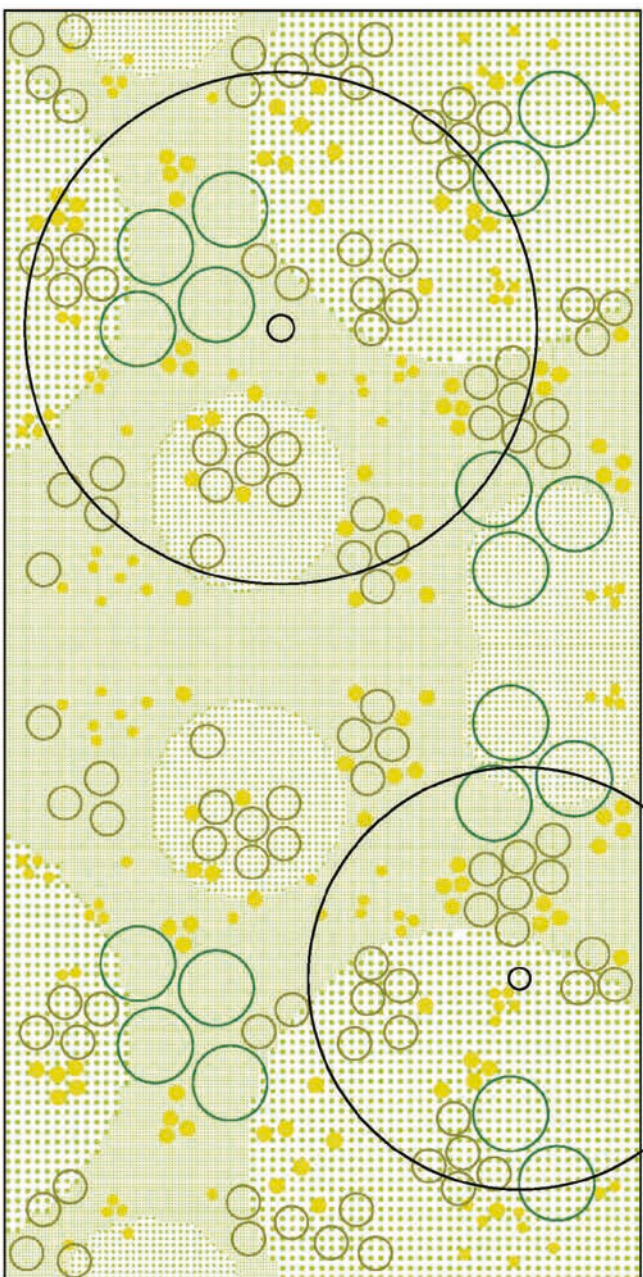
3. Ground cover plants



4. Filler Plants



Layered planting community

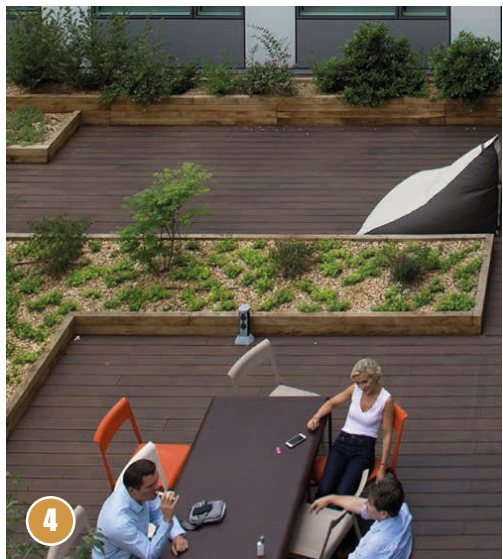
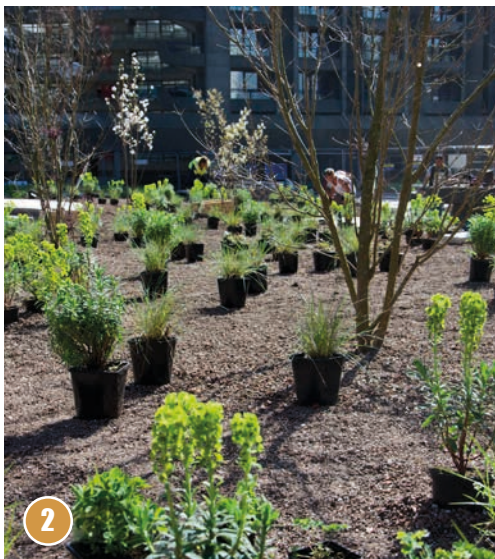
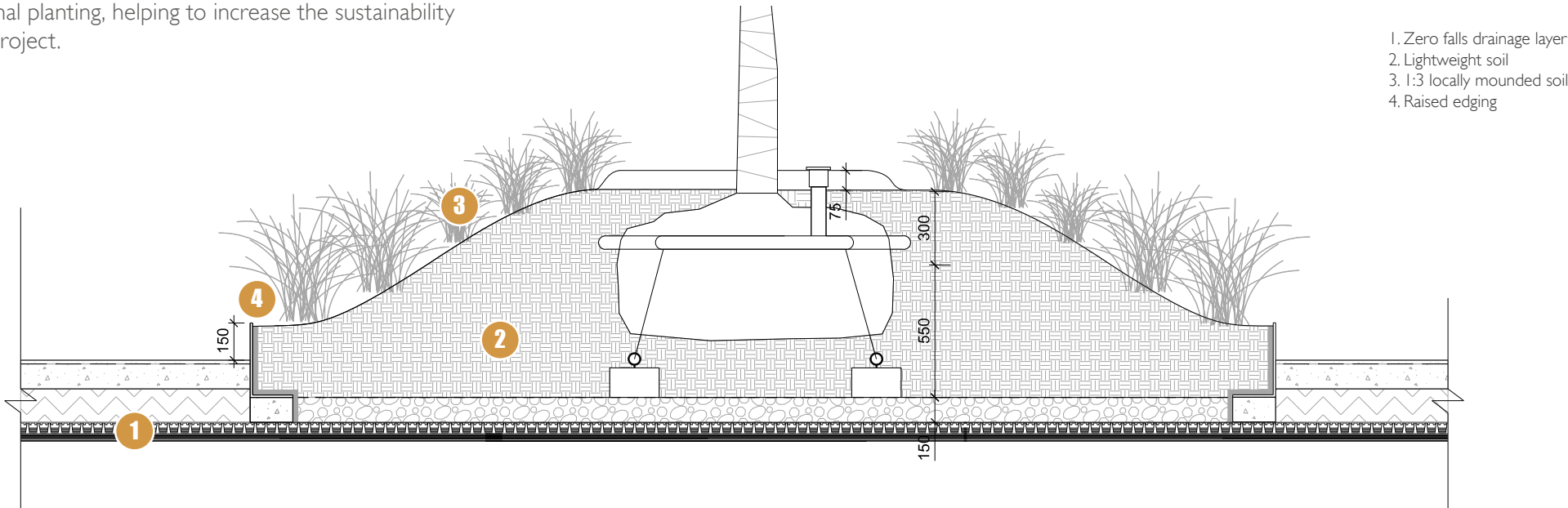


In order to ensure the envisioned planting and material palette can be achieved we have considered specific technical requirements to building landscape works above a slab. We have reviewed the following items:

Soil:
We are proposing that lightweight soil is used on all levels apart from the ground floor. This ensures adequate soil depths can be achieved without compromising the structural design. As a result of lightweight soil being very free draining we have specified drought tolerant plant species. These species require a lower watering and maintenance strategy than traditional planting, helping to increase the sustainability of the project.

Soil Depths:
In order to achieve adequate soil depths we are proposing a 150mm raised edge, with 250mm of soil below surface level. Where greater soil depths are required, such as around trees and shrubs, we have left enough room to locally mound soil to a maximum of 1m. Mounded slopes will be no steeper than 1:3.

Drainage:
We are proposing a zero falls drainage system that attenuates a layer of water before it is discharged. This ensures that build ups are consistent across podiums and ensures any surface material can be specified, from resin bound gravel, to paving to decking. Attenuated water can also be utilised by planting above.



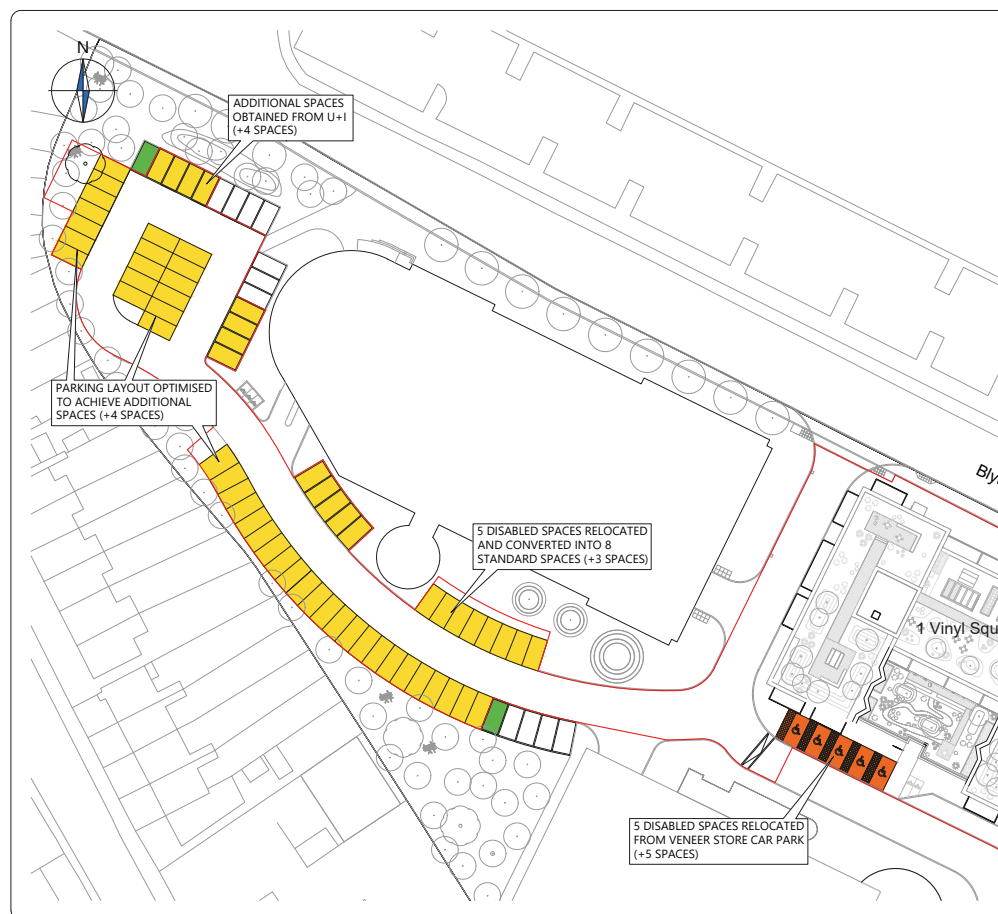
Landscape

veneer store surface car park

As part of the car parking strategy at I Vinyl Square a number of additional car parking spaces will be provided within the Veneer Store surface car park. A summary of this optimisation is illustrated on the drawing opposite. Creating additional spaces will require an adjustment to the planting which surrounds the car park.

The planting for this area is designed to replicate a woodland understorey. It is predominantly made up of hardy ground cover species, punctuated by groups of ferns, shrubs and native trees. Where car parking is being extended, understorey plants will be replaced and trees will be relocated.

All trees that are to be relocated will be moved using a method statement produced by the nursery the trees were purchased from. A total of 1 tree will need to be relocated, the location of this is highlighted in red on the image opposite.



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NOTES

1. Do not scale from this drawing.

2. This drawing to be read & printed in colour.

3. This drawing is for illustrative purposes only.

KEY :

62 SURFACE PARKING SPACES OBTAINED FROM U+I

5 DISABLED PARKING SPACES ON-SITE

2 CAR CLUB PARKING SPACES (TO BE DELIVERED BY VENEER STORE SCHEME)

B

A

Amended red line boundary.

Amended bays.

RB

DB

19.11.20

25.10.20

Rev

Details

REVISION HISTORY

Drawn

Checked

Date

Status:

☐ Preliminary

☐ For Approval

☐ For Construction

☒ For Information

☐ For Tender

☐ As Built

Client:

Joseph Homes

Project:

1 Vinyl Square, Hayes

Drawing Title:

Proposed Parking Layout Plan

Scale:

1:500m

Size:

A3

Drawn by:

RB

Checked by:

SMCC

Date:

11.10.2019

CANEPARO ASSOCIATES

Transport Planning & Highway Design

21 Little Portland Street • London • W1W 8ET • Tel. 020 3617 8200

Scheme Ref:

4120

Drawing No:

003

Sheet :

1 of 1

Rev.:

B



Landscape

URBAN GREENING FACTOR

SURFACE TYPE COVER	FACTOR	AREA (m²)
Semi-natural vegetation (e.g. woodland, flower-rich grassland) created on site.	1	155
Wetland or open water (semi-natural; not chlorinated) created on site.	1	0
Intensive green roof or vegetation over structure. Vegetated sections only. Substrate minimum settled depth of 150mm – see livingroofs.org for descriptions.	0.8	529
Standard trees planted in natural soils or in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree – see Trees in Hard Landscapes for overview.	0.8	240
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 – see Centre for Designed Ecology for case-studies.	0.7	39
Rain gardens and other vegetated sustainable drainage elements – See CIRIA for case-studies	0.7	0
Hedges (line of mature shrubs one or two shrubs wide) – see RHS for guidance	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	0
Green wall –modular system or climbers rooted in soil – see NBS Guide to Façade Greening for overview	0.6	13
Groundcover planting – see RHS Groundcover Plants for overview	0.5	0
Amenity grassland (species-poor, regularly mown lawn).	0.4	0
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014	0.3	0
Water features (chlorinated) or unplanted detention basins.	0.2	0
Permeable paving - see CIRIA for overview	0.1	0
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0	938
URBAN GREENING FACTOR	0.4	

TOTAL SITE AREA (m²)
2300

I Vinyl Square has been assessed to ensure it meets the recent GLA policy on urban greening. On all levels, planting has been maximised where possible whilst maintaining the function and programme of each space. The Urban Greening policy aims to achieve the following:

“Major development proposals should 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.

Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development.”

The table opposite illustrates the areas of planting and surface materials which are being provided at I Vinyl Square. Based on these areas and the overall area of the site I Vinyl Square has an Urban Greening score of 0.4. This meets the target advised by the Mayor of London.



CHAPTER 7

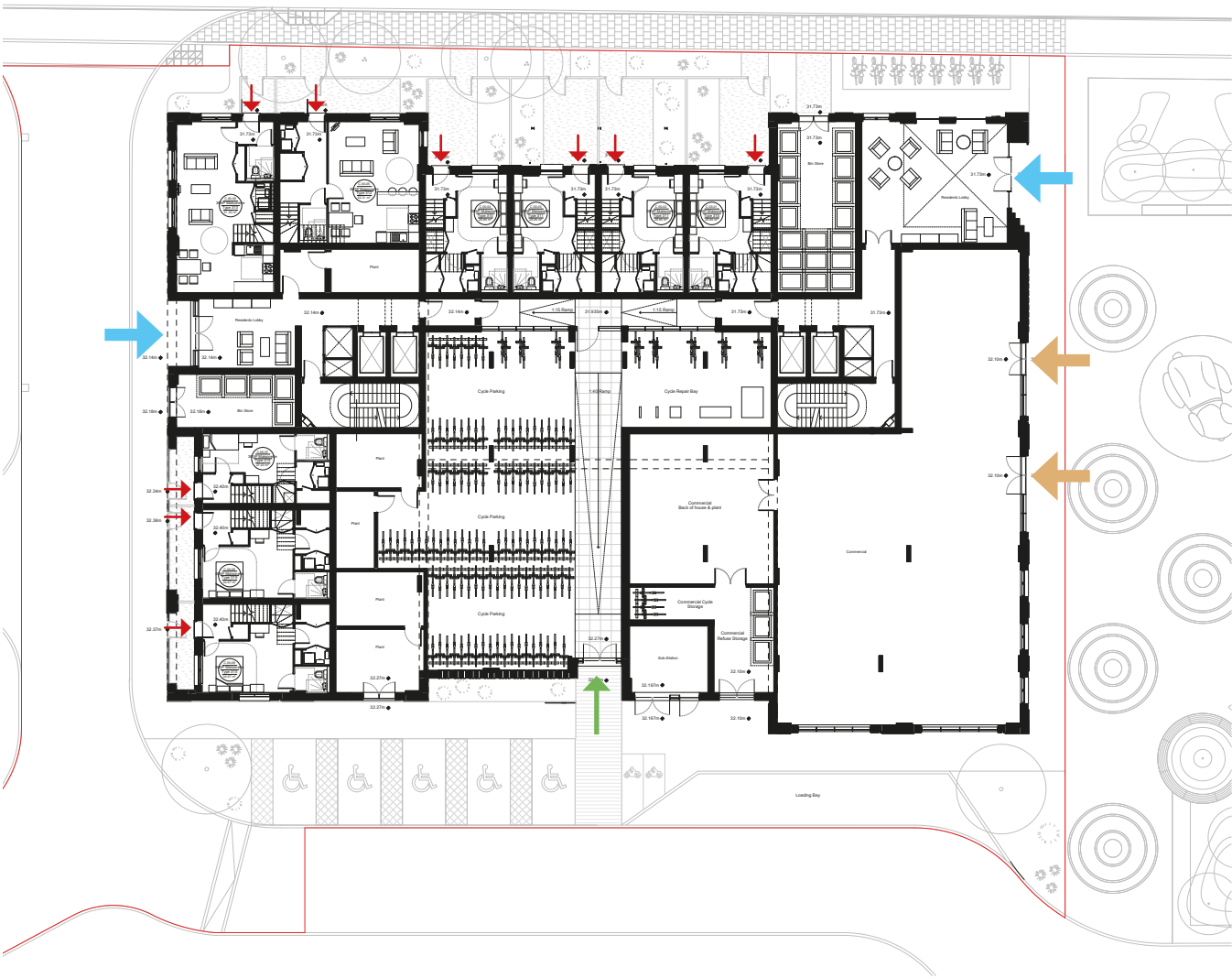


Access

ACCESS STRATEGY

Entrances are provided on all four sides of the building to ensure that all façades are animated. Primary, communal residential entrances are located on the western and eastern façades. In addition, the ground floor maisonnettes have their own entrances onto the street. The cycle hub is accessed with its own entrance to the south, which also provides a secondary residential entrance.

Commercial entrance(s) are located facing Vinyl Square and will help to animate this space.



- Primary residential entrances
- Secondary residential/cycle hub entrance
- Private maisonnette entrances
- Commercial entrance(s)

Access

REFUSE STRATEGY

Refuse storage is provided in line with Hillingdon's standards (confirmed in correspondence with Hillingdon's waste officer) as follows:

Studio	140 litres
1 Bedroom apartment	140 litres
2 Bedroom apartment	170 litres
3 Bedroom apartment	240 litres

Based on the unit mix for the development, this generates a requirement for 22,760 litres of refuse storage, which can be accommodated in 22 no. 1100 litre eurobins.

Space is provided for 22 eurobins across two refuse stores - one for the western core and one for the eastern core. A number of these bins in each store are accessible and a management strategy will be used to rotate bins within and between the stores to ensure that empty bins are available to residents at all times.

A separate commercial refuse store is provided within the ground floor commercial unit.



- Residential refuse stores
- Commercial refuse store
- Refuse vehicle collection point

