



THE GOODSYARD

Design Guide - Revision A

May 2020 - Part 4 of 6



ballymore.



3.0 PUBLIC REALM AND LANDSCAPE

3.1 PUBLIC REALM & LANDSCAPE

3.1.1 Open Space Components

3.1.2 Introduction

The open space components are the character areas that form the overarching structure for the landscape proposals on ground level, platform level, and roof level.

3.1.3 Components

The masterplan shall accommodate a range of open space components, including a series of gardens, amenity spaces and areas specifically designed for children and young people.

These will provide a variety of external spaces that will serve the development and wider neighbourhood.

These will form a layered, connected sequence of streets and spaces throughout the development that connect to the local area.

The various components shall provide the development with its own particular identity; responding to their historic context, specific locations and the function required.

This will create a development that is rooted in place, providing the following:

- Ground level network of *gateways, thresholds, streets and lanes*;
- Public *platform gardens* above the refurbished Braithwaite Viaduct and retained historic structures;
- Residential communal gardens;
- Commercial private terraces.

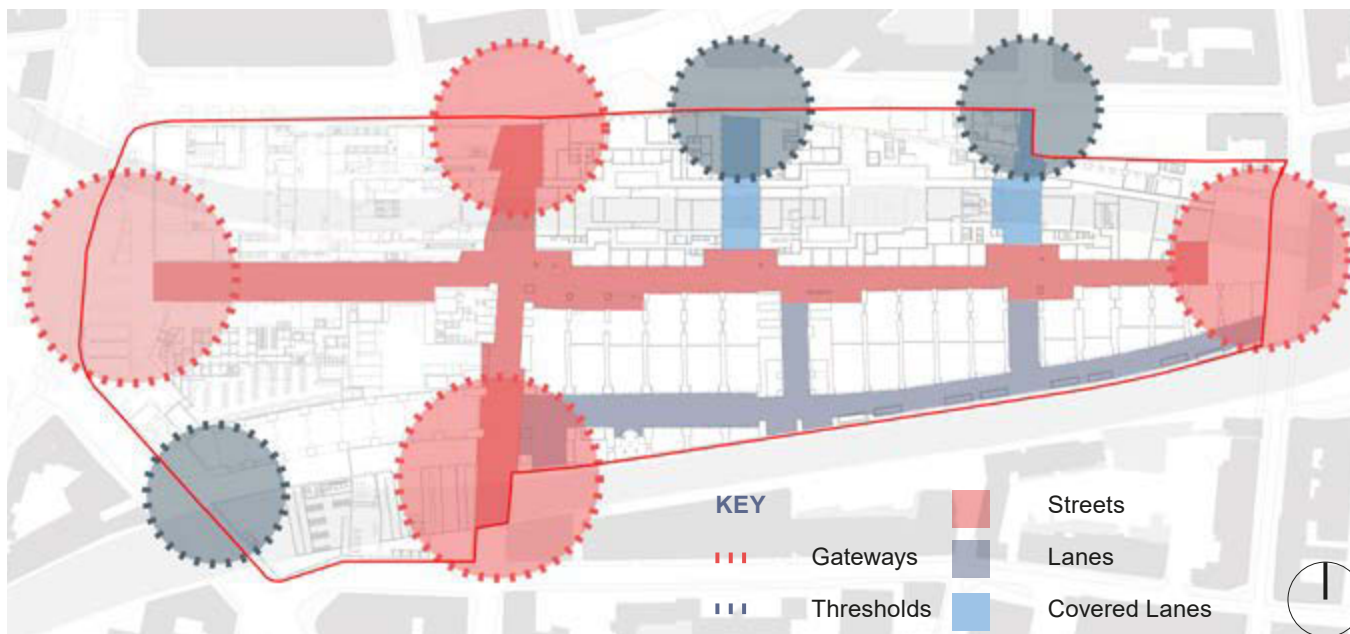


Fig 3.1.1: Ground level landscape components



Fig 3.1.2: Platform level landscape components

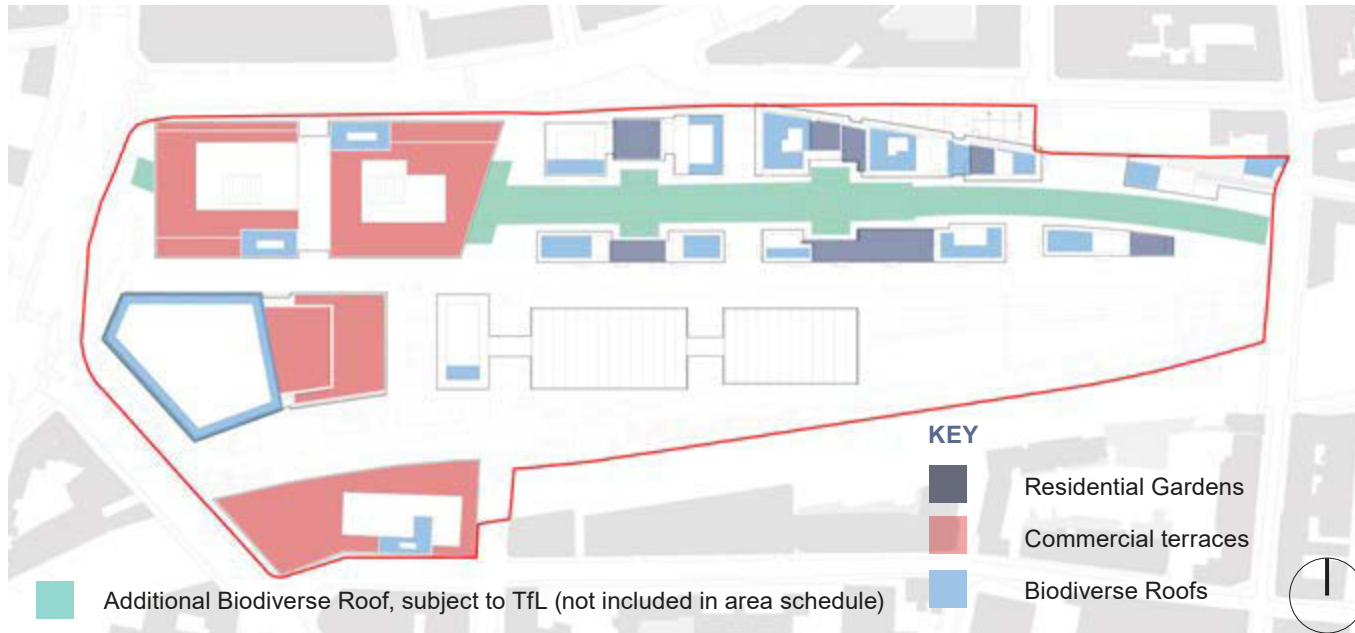


Fig 3.1.3: Roofscape level landscape components

3.1.4 Public & private realm quantum

3.1.5 Introduction

Some of the numbers contained within Table 3.1.1 have been updated/corrected.

Public realm quantum refers to the amount of publicly accessible areas within the masterplan. The publicly accessible areas are located on the Ground Level and Platform Level.

Private realm quantum refers to the amount of privately accessible areas within the masterplan. The privately accessible areas are located on the Platform Level and Roof Levels.

3.1.6 Quantum

The development shall provide areas of publicly accessible open space and privately accessible open space as set out in the diagrams and table opposite. For clarity the areas are divided into 4 typologies as follows:

- *Ground level - publicly accessible urban public realm;*
- *Platform level – publicly accessible green spaces;*
- *Platform level – private access garden;*
- *Roofscape level - private access gardens, biodiverse roofs, restricted access.*

This shall ensure that a sufficient and appropriate area of open space is provided to meet the needs of the development and its use by all users including residents, workers, local community and visitors.

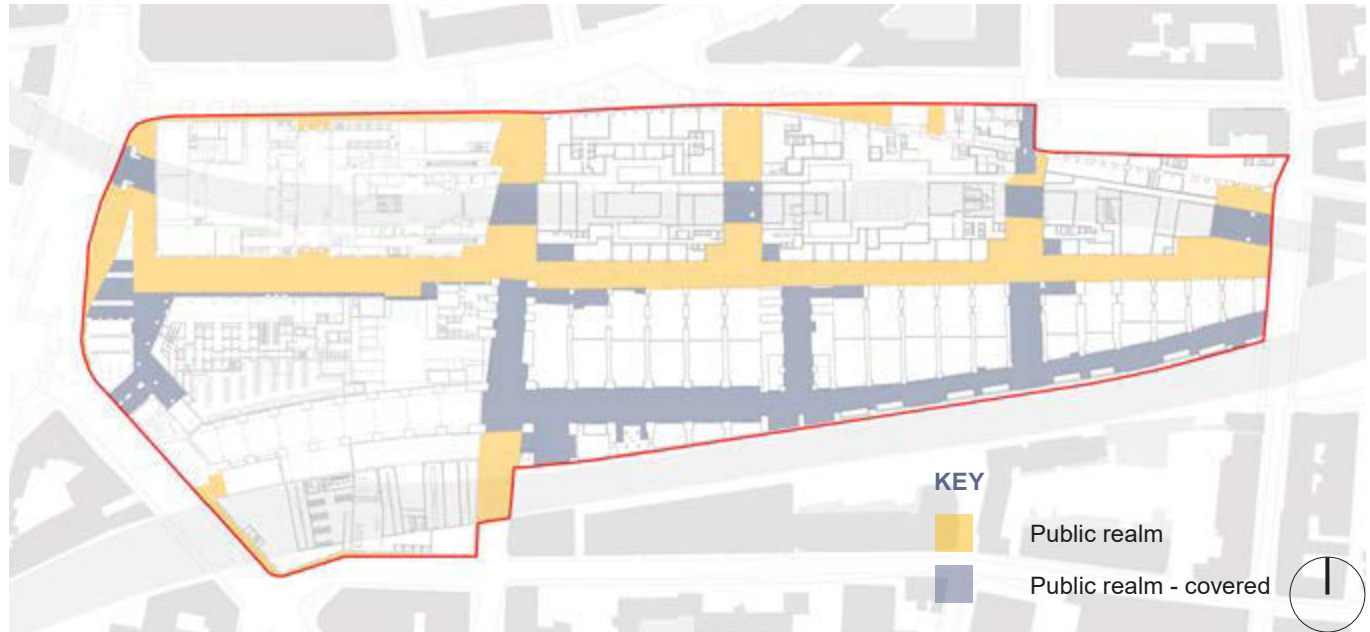


Fig 3.1.4: Ground level

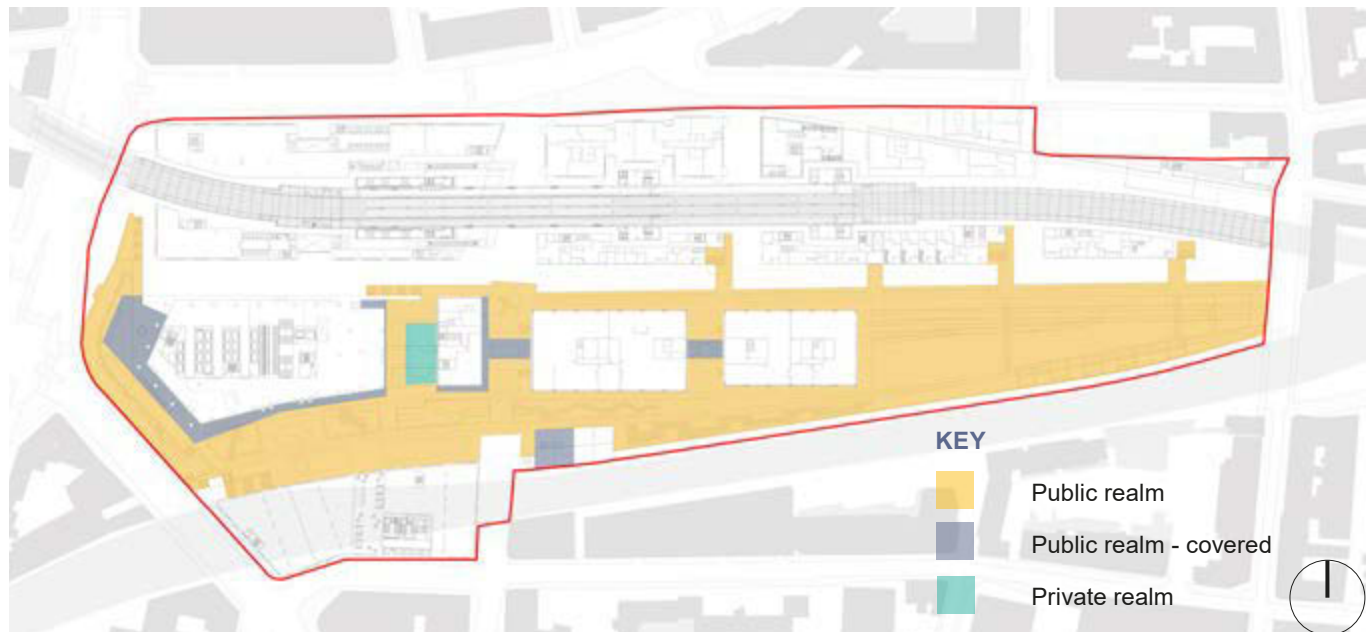


Fig 3.1.5: Platform level

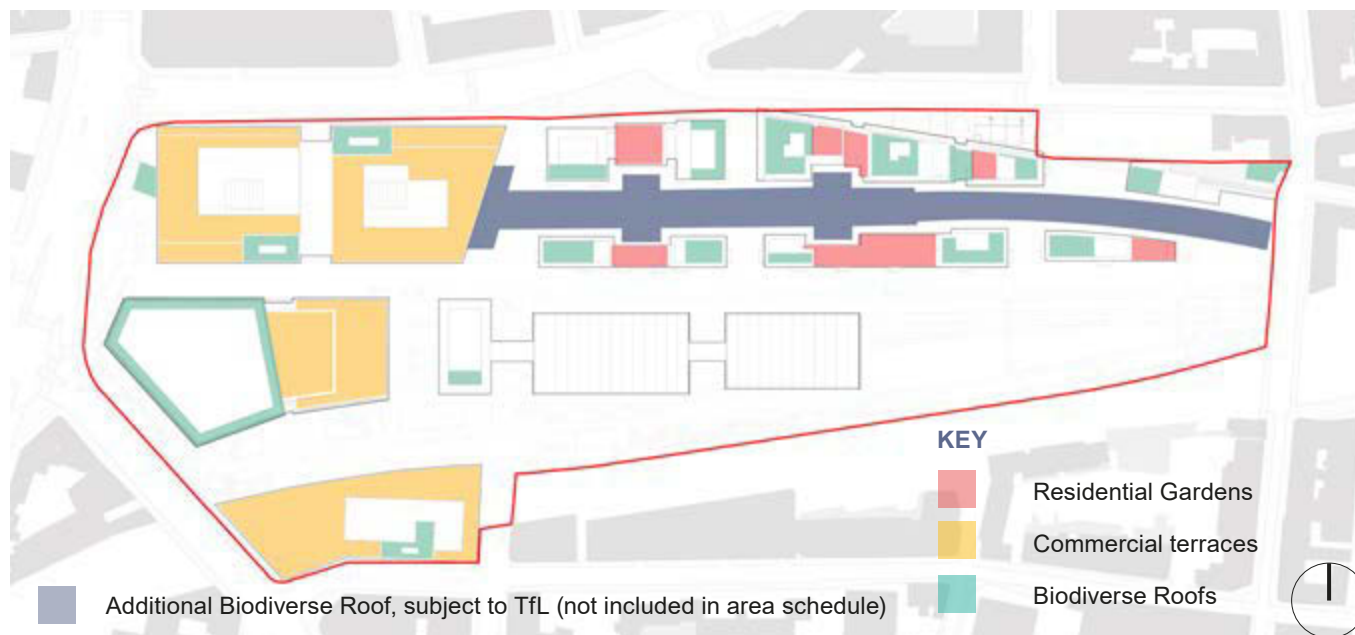


Fig 3.1.6: Roofscape level

Ground Level Public Realm	M ²	Hectares	Acres
Open	7005	0.70	1.73
Covered	5868	0.59	1.45
Total	12,872	1.29	3.18
Platform Level Public Realm	M ²	Hectares	Acres
Open	11,672	1.17	2.88
Covered	1182	0.12	0.29
Total	12,854	1.29	3.18
TOTAL PUBLIC REALM	25,726	2.57	6.36

Platform level Private Realm	M ²	Hectares	Acres
Residential Garden	210	0.02	0.05
Platform Level Total	210	0.02	0.05
Roofscape level Private Realm	M ²	Hectares	Acres
Shared Residential Garden	1116	0.12	0.28
Commercial Garden	5439	0.54	1.34
Biodiverse Roof	2079	0.20	0.51
Roofscape Level Total	8634	0.86	2.13

Table 3.1.1: Public realm & Private realm areas

3.1.7 Open Space Principles

3.1.8 Introduction

Open space principles relate to the key functions and themes that the Landscape and Public Realm designs must adhere to.

There shall be a series of key open space principles that underpin the development proposals;

3.1.9 High quality public realm

The landscape strategy shall provide a high quality public realm.

In doing so the proposals will improve, complement and integrate with the surrounding network of streets and lanes.

3.1.10 Legibility

The landscape strategy shall promote legibility through a hierarchy of streets and spaces which provide recognisable routes, places and landmarks that help people find their way around.

A legible landscape strategy provides:

- A clear hierarchy of well connected, permeable streets and spaces;
- Clearly defined public and private realm;
- Clean building and street interface;
- Building entrance legibility and wayfinding.

Principal public realm elements shall be employed to articulate the legibility and identity of the development.

Elements can be used to articulate legibility. The following elements should be considered:

- Tree structure;
- Selection and scale of surface materials;
- Street boundary treatment;
- Street furniture;
- Public realm lighting;
- Signage and Wayfinding.

The design and detail of the public realm shall promote cohesion throughout the development.

Cohesion is created by using:

- A co-ordinated and complementary palette of paving materials, street furniture and feature elements;
- A structure of tree planting, hedge planting and street boundary treatments;
- A palette of common details used to promote cohesion and reinforce public realm character.

A safe and secure public realm shall be provided.

Well designed places provide environments where users feel safe and secure, enhancing enjoyment of the place and associated community cohesion.

Celebration of heritage

Retention and celebration of existing historic elements shall provide the basis of the of the landscape strategy. Wherever possible an emphasis should be placed on historic narrative within the design expression.

This approach will create a sense of place and unique character to the development.

Inclusiveness; cultural and community

The landscape strategy shall take an inclusive approach to designing for all.

It is important that all spaces cater for all age groups, ethnicities, communities and abilities.

Social and cultural factors shall be considered for the design of all spaces.

This will create spaces that are suited to their use, but also provide for a diverse range of people.

3.1.11 Vertical circulation

Vertical circulation shall provide a legible structure of access points between the ground level and platform level.

Legibility is key to creating vertical circulation points that are visible and easy to use.

Vertical circulation points shall create a sense of theatre and drama.

Stairs and lifts can create architectural interventions that provide both functional connectivity, character and sculpture / visual interest.

The stairs shall be conceived as a holistic family, derived from the same industrial language but responding to the different conditions that are presented across the site.

This will lead to a cohesive vertical circulation strategy that responds the heritage of the site.

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3.1.12 Design narrative

3.1.13 Introduction

The detailed design narrative for the open spaces shall be informed by two key themes which have been developed for the public realm. These are the celebration of the history of The Goodsyard and other historic uses that took place in the area.

These themes shall be expressed differently on different levels, to create a variety of landscape characters throughout the development.

The forms of expression can be varied but shall respond, to the historic narrative, physical features and the aspect / micro climate. Variance in character is created through the form of the space, the planting, materials, and artistic expression.

3.1.14 Ground level - The Shoreditch Tapestry

The expression of the historical narrative of the site shall follow the following themes and features:

Themes:

- *A rich 'tapestry' celebrating historical and cultural layers;*
- *A robust hard landscape environment;*
- *Recognising the Goodsyard's historical perimeter;*
- *A sense of theatre to vertical circulation;*
- *Expressing the character of the surrounding area and The Goodsyard.*

Features:

- *Interpret elements of the grain or layout of The Goodsyard, for instance the foundations of the arches beneath the old platform level;*
- *Mark other historic uses on the site, such as Webb Square;*
- *Refurbish existing historic features such as the turntables, granite cobbles and rails on London Road;*
- *Predominantly hard spaces that include reuse of all existing paving materials from the site where possible;*
- *Flowering climbers on historic structures.*

This will create a unified approach to the character of the landscape; strategically responding to place and relating the design to the rich history of the site.

3.1.15 Platform level - The Goods Yard Platform

The expression of the historical narrative of the site shall follow the following themes and features:

Themes:

- *A touch of wilderness providing a peaceful retreat;*
- *Reimagining the features and layouts of the historic platform;*
- *Varying character within the different garden spaces;*
- *Enchanting and playful;*
- *Natural play, discovery and educational opportunity;*
- *Biodiversity and ecology.*

Features:

- *Interpret elements of the structure of The Goodsyard for instance, the Continental Fruit Bank, No 1 Bank and The Field;*
- *Distinct garden areas with different character and use, such as a flexible open lawn, woodland play garden / forest environment and communal growing gardens;*
- *Elevated water towers to create a marker visible from Brick Lane and through the platform;*
- *Integrated play for all ages;*
- *Dynamic play features, such as the Oculi, picking up on the historic narrative;*
- *Clear access points from the ground floor and the buildings which utilise the platform level.*

This will create a unified approach to the character of the landscape; strategically responding to place and relating the design to the rich history of the site.



Fig 3.1.7: Ground level - Shoreditch Tapestry

KEY

Ground Level

1. Primary East West route with turn tables
2. Boiler room, Coal room, Hydraulic accumulator
3. Goods storage vaults, numbered 1-65
4. Truck hoist

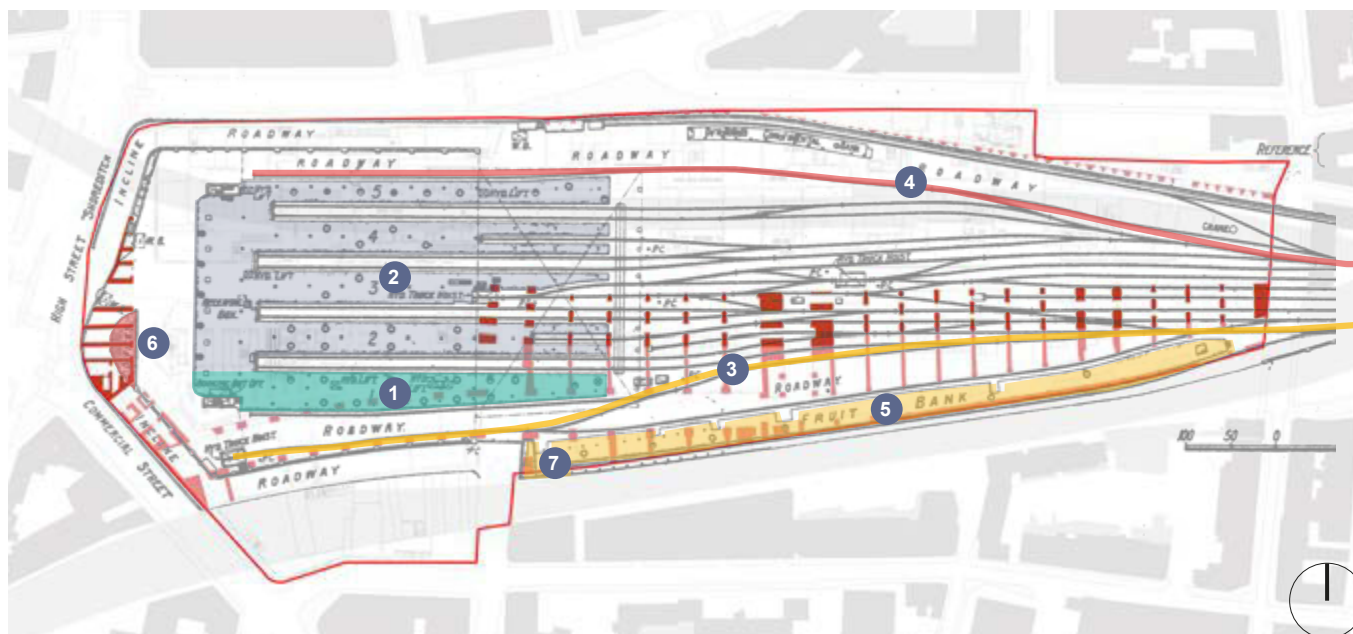


Fig 3.1.8: Platform level - The Goods Yard Platform

KEY

Platform Level

1. No 1 Bank
2. The Banks
3. Grain Road
4. Field Road
5. Continental Fruit Bank
6. The Offices
7. Boiler room chimney

3.1.16 Levels

3.1.17 Introduction

Creating an inclusive environment is a key consideration within the design proposals.

At Ground level the existing land rises gently from east to west and also from south to north. The level difference in both instances is circa 1 metre in height. Buildings are set at levels to coordinate with this and create a ground level public realm that is free of steps and ramps throughout. Existing levels are retained at site boundary and interfaces with all existing historic structures.

The Platform level public realm and landscape is predominantly constructed over existing retained structure. The outline levels proposals allow for the Structural Engineer's strategy for construction over retained historic structure as well as consideration of inclusive access, drainage falls, hard and soft landscape, attenuation and insulation requirements

3.1.18 Principles

3.1.19 *There are a number of design principles that shall be implemented these include the following:*

- *Site wide levels shall be designed for inclusive access;*
- *Site wide levels shall be set by the parameters of heritage assets;*
- *Site wide levels shall set the floor levels of the buildings to ensure a co-ordinated approach;*
- *Site wide levels shall consider ease of maintenance and access;*
- *Gradients shall be retained as flat as possible and shall be no steeper than 1:20;*
- *All gradients indicated in outline design shall have localised cross fall and long fall gradients applied appropriately.*

These principles are vital to creating an inclusive, attractive, co-ordinated and functioning public realm that respects the historic fabric and stitches seamlessly into its adjacent context.

3.1.20 Ground Level

Finished ground levels shall respect the retained heritage structures and shall tie in with the existing public highway and levels at the site boundary;

The retained structures and existing highways have fixed levels which are to be respected and form the parameters for setting new levels.

Finished levels in London Road shall generally be maintained as existing (13.80 AOD). They may be adjusted to remove minor level changes which could be a trip hazard and create appropriate surface for proposed pedestrian use.

London Road level is a heritage feature which inform the character of the lanes underneath the Platform.

Middle Road is intrinsically linked to London Road and shall be set to a general datum level of +13.80 AOD.

This strategy will allow site wide levels to tie into the existing perimeter street levels.

Platform Level

The levels shall generally fall from west to east, reflecting the historic structure. The levels shall accommodate requirements of the construction build-up are as follows:

- *Concrete slab (200mm depth)*
- *Waterproofing layer (10mm indicative depth)*
- *Insulation layer (250mm indicative depth)*
- *Water attenuation layer (500mm indicative depth)*

- *Lightweight fill (depth as required)*
- *Hard landscape (450mm depth)*
- *Soft landscape (550mm to 1400mm depth)*

Requirements for depths of water attenuation and insulation are indicative strategy only and will be subject to specific requirements of location in detail design stage.

This strategy will allow delivery of the associated technical requirements of the Platform Level design proposals.

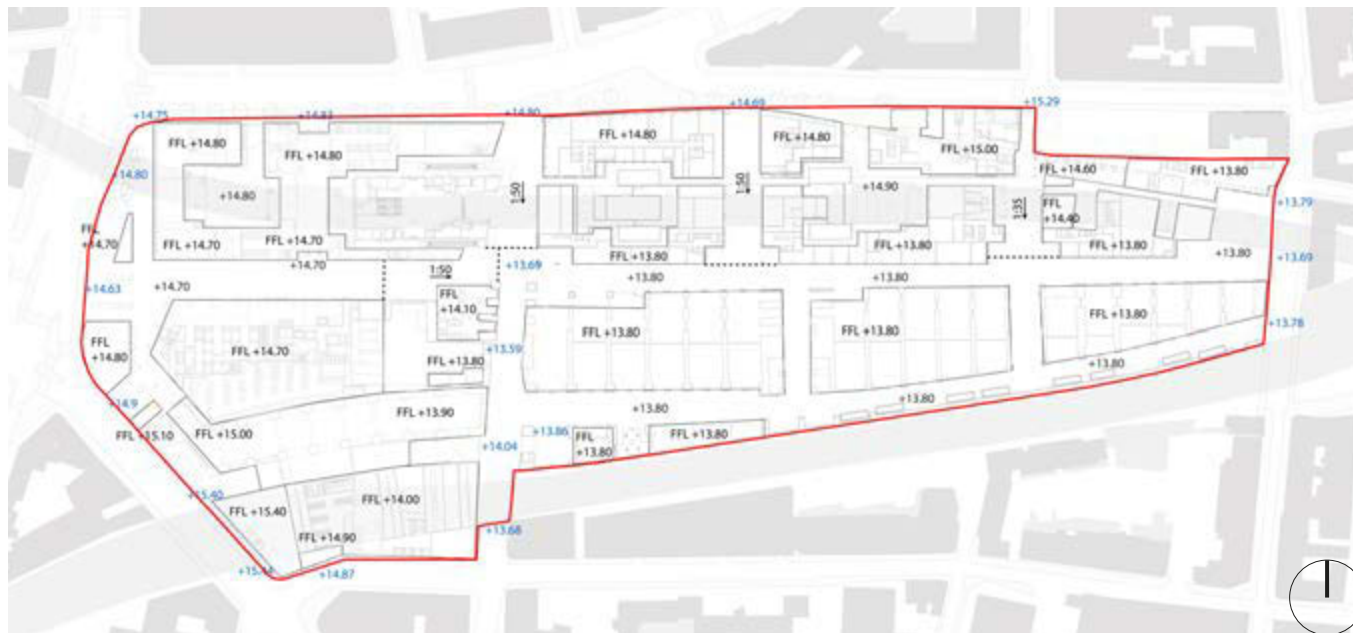
The proposed build-ups shall be minimised so as to keep levels as close to original Goods Yard levels as possible. However they shall need to provide for all functional and technical requirements of the design proposals.

This strategy will minimise level difference from Ground Level and Platform Level and associated requirements of stair and lift heights.

Interfaces with retained structures shall be a key design consideration. Levels at the Oriel Gateway shall be carefully considered to provide step free access to a finished level that allows pedestrians views through the Oriel structure windows.

Levels shall be articulated to create opportunities for long views out of the site. Step free access must be considered in the design of these elements.

A key strategy is to optimise higher levels on the Platform to provide long views south across the rail lines to local landmarks.



3.1.21 Hard landscape

3.1.22 Introduction

The hard landscape forms a key part of the proposals. The principles that underpin the hard landscape shall be:

- Simple and robust in appearance;
- Accessible for all users;
- Reflect and enhance the rich heritage and character.

3.1.23 Paving materials

Materials for the Ground Level and Platform Level within The Goodsyards shall respond directly to its rich heritage and the surrounding context.

Paving design within the development forms a key element to the proposed character and using the sites rich heritage as a key influence will significantly contribute to this.

The paving should celebrate The Goodsyards' history. London Road paving materials, including tracks and turntables shall be retained and relaid to an appropriate level for public realm use.

London Road is an important heritage feature of the Goodsyards and will add value to the development

Materials should, where possible, be re-used from:

- Ground and Platform levels;
- Demolished structures.

A thorough survey and audit of existing material shall be undertaken.

This will provide a catalogue quantum and types of material found within the site.

The proposed paving shall, through re-used materials, such as granite cobbles and bricks, make direct references to the existing and demolished Goodsyards structures.

On the Ground Level the re-used material shall be supplemented by granite, brick and yorkstone paving appropriate to the location.

On the Platform Level the re-used material shall be supplemented by in-situ concrete paving.

This will provide a simple and robust materiality that reflects and enhances the rich heritage and character of its surroundings

An apron of yorkstone shall form the perimeter of the site and threshold of the new Goodsyards linking seamlessly to the surrounding streetscape.

This will provide cohesion with how the development ties into the surrounding context.

Material types shall include the following;

- Granite - re-used granite to express heritage through paving and to build new structures such as planters and seating;
- Granite - expression of the 'Shoreditch tapestry' using new granite;
- Yorkstone - surrounding streetscape apron;
- In-situ concrete - new ground plane on the Platform;
- Brick - re-used brick to express heritage through paving and to build new structures such as planters and seating.

A selective palette for paving will provide continuity and coherence throughout the public realm. The overarching aim is to create a unique character for the Ground Level and Platform Level.

Re-used materials shall create a finished surface that is suitable for all users to walk on safely and easily.

An inclusive environment for all users is a requirement for all publicly accessible spaces.

3.1.24 Retained Historic Structures

3.1.25 Existing heritage structures including perimeter wall and vaults are in varying state of completeness, with some parts 'crumbling'

The approach to retained structure shall be to sensitively repair and make good with minimal intervention. The design intent should be to avoid sanitising the character of the heritage by over restoring to pristine original condition.

In some instances, such as the perimeter wall at the Oriel Gateway it will be appropriate to re-build brickwork to its original form.

In some instances such as the retained inner ramp wall adjacent to Building 2 entrance, where the setting is within the garden environment, it will be appropriate to make good the existing structure and not re-build to original form.

This historic character will form the foundations on which The Goodsyards development will be built upon, creating a unique and memorable place.

3.1.26 Edge Condition / Historic Structure Interface

Balustrading shall to provide safe and inclusive access at stairways, bridges and edges to The Platform Level.

Balustrading at interfaces with retained heritage elements shall minimise impact on existing structure and is to be of appropriate design and character.

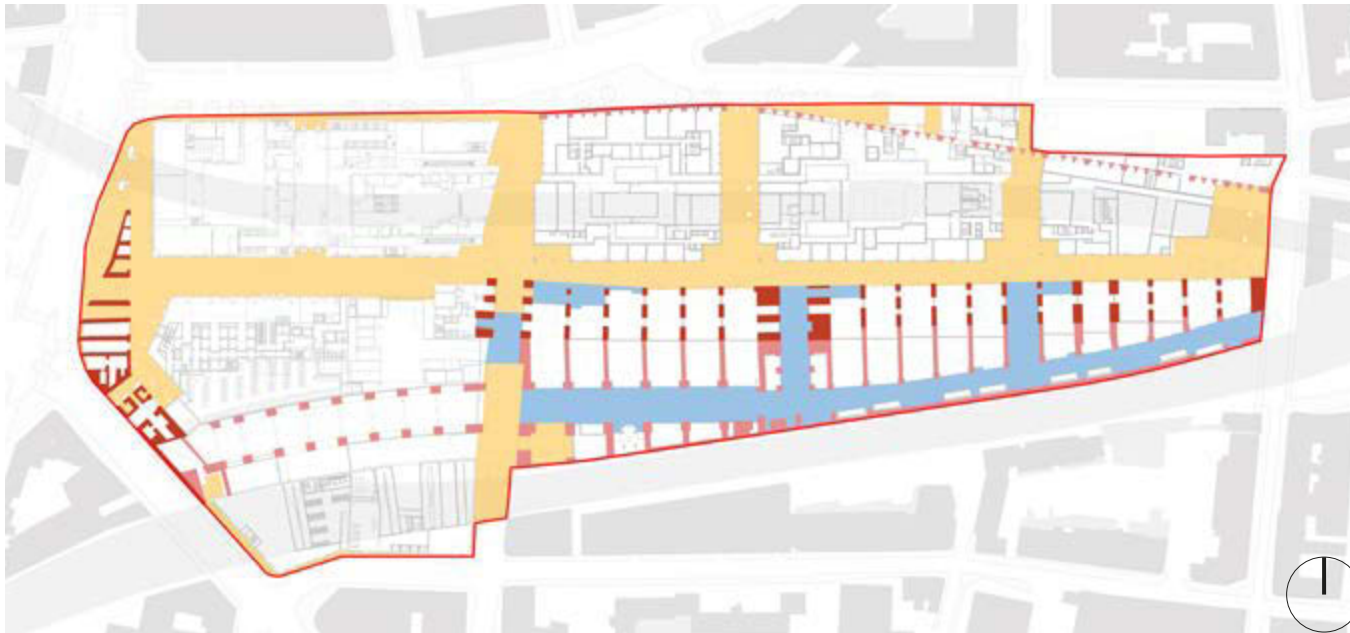


Fig 3.1.11: Ground level

KEY

Ground Level

- Retained listed structure
- Retained structure
- Retained and re-used paving materials
- Re-used paving materials supplemented with appropriate new paving materials as required

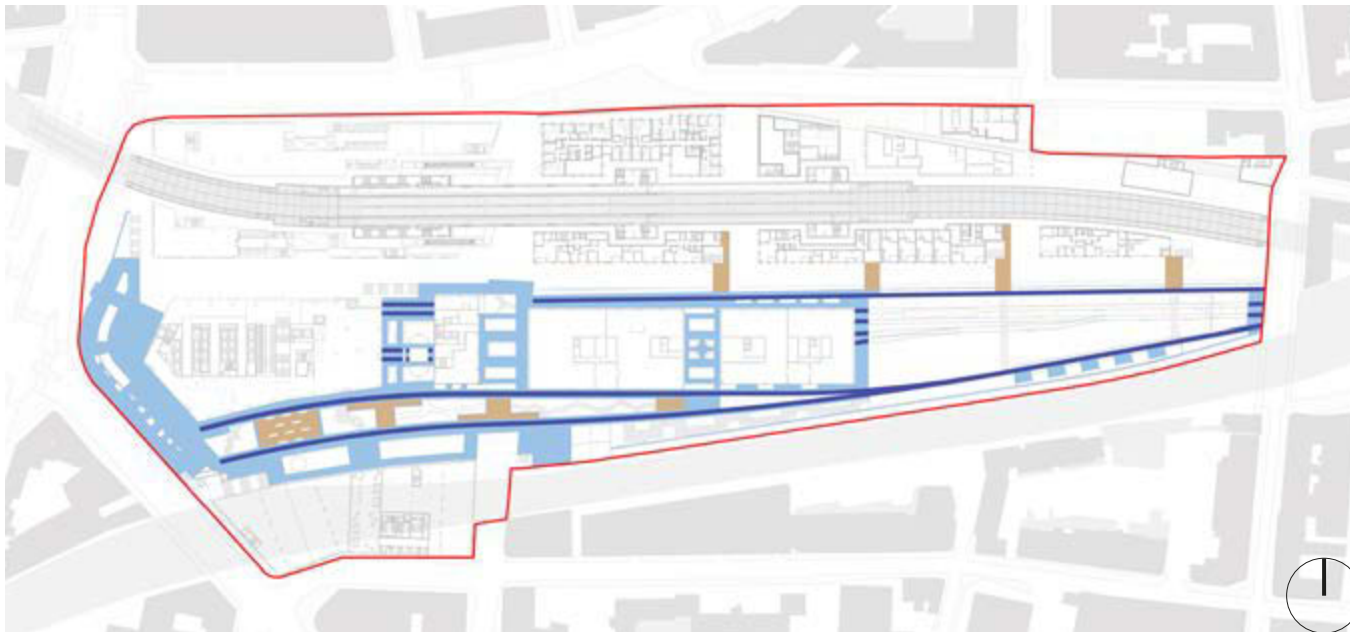


Fig 3.1.12: Platform level

KEY

Platform Level

- Re-used materials
- General paving : in-situ concrete supplemented with re-used and new paving material as required
- Detail area paving: new and re-used materials as appropriate to character and function

Planting included adjacent to and above retained heritage elements shall be accommodated within self-contained planter enclosures.

This approach will provide an enhanced edge condition that is appropriate to the historic structures whilst creating a safe elevated environment.

3.1.27 Street Furniture

Street furniture comprises the standalone elements that provide important functions within public space such as:

- Seating;
- Lighting (see 1.1.11 lighting section);
- Bicycle stands;
- Litter bins;
- Tree surrounds.

Street furniture throughout the proposed masterplan shall be of a contemporary, and simple design and be seen as a co-ordinated 'family'.

This approach will provide overall continuity while allowing some local variations to respond to the different character areas within masterplan.

Seating - shall be of a timber, metal and timber or stone design. Adequate accessible seating with arm rests should be included in each sitting area / space.

Well designed, comfortable seating in the right place enhances how people can enjoy the public realm space, contributing to successful inclusive design.

Bollards - These shall be used sparingly and in line with the security strategy. They should be a contemporary and unified design throughout.

Good design and strategic placement is required in order to reduce numbers and help integrate within the urban realm.

Litter Bins - shall be strategically placed and their specification should be a standard type that ties into the surrounding London context.

Standard litter bin specification creates a typical street scene and helps integrate within the urban realm.

Bicycle Stands - shall be located in association with public and open spaces, public transport, pedestrian routes and local community facilities.

These locations are to be at the site perimeter, major thresholds and the cycle hubs.

Standard 'Sheffield' stands create a typical street scene and helps integrate within the urban realm.

Tree Surrounds - Street trees shall be provided with a surround to match the surrounding paving with either a recessed tree grille or bound gravel infill.

Good detailing creates a seamless transition from paving to tree surround and all contribute to a high quality public realm.

3.1.28 Feature Structures

Feature structures are elements that are unique to their locality and provide integrated, distinct and attractive designs. They can be summarised as:

- Integrated seating;
- Rail edge (Continental Fruit Bank elements) ;
- Boiler room chimney;
- Water towers;
- Art installations.

Integrated seating, such as terraced seating, shall be provided where the aspect is appropriate.

Terrace seating provides a large quantity of seating whilst also providing elevated views across the site and longer views out of the site.

The rail edge condition shall be 3m in height and shall be expressed through a combination of:

- Non-metallic mesh;
- Solid wall with windows;
- Pergola structures.

This will provide a sequential and visibly permeable edge condition that has variety and responds to its particular location.

The scale and character of the Chimney shall reference the historic design.

This approach shall add to the character and identity of the Goodsyard.

The Chimney shall be located in it's historic location.

It is important that the Chimney forms an integral part of the wayfinding strategy and plays a key part in signifying the Quaker Street Gateway.

The Water towers shall provide irrigation for planting.

This will supplement the overall SUDs strategy.

The materiality and character of the Water towers shall reflect the industrial heritage of the Goodsyard.

This approach shall add to the character and identity of the Goodsyard.

The Water towers shall be located in positions that are visible from the surrounding streets.

It is important that the towers are an integral part of the wayfinding strategy, in particular the eastern location will play a key part in signifying the Brick Lane Gateway.



Fig 3.1.13: Ground level - Key spaces for fixed/integrated seating

KEY

Ground Level

- Opportunities for fixed/integrated seating



Fig 3.1.14: Platform level - Features structures and key spaces for fixed/integrated seating

KEY

Platform Level

- Opportunities for fixed/integrated seating
- Terrace seating
- Water towers
- Boiler room chimney
- Continental Fruit bank office
- Continental Fruit bank pergola
- Continental Fruit bank feature wall

3.1.29 Soft landscape

3.1.30 Introduction

Soft landscape consists of tree planting and planting in general. The soft landscape is to deliver a diversity of planting and green spaces across the site that will provide visual amenity, create character, enhance wildlife and improve local biodiversity.

3.1.31 Tree planting

Tree planting shall be a fundamental component of the public realm proposals on both Ground Level and Platform Level.

Tree planting brings structure to the landscape design, helps mediate the scale of large buildings and will bring significant amenity, environmental and ecological benefits to the Goodsyards.

Individual tree planting shall be assessed against the character of the area, natural light level, available growing medium and long term management.

This strategy of 'right tree, right place' will establish a mature landscape that people can enjoy for generations to come.

Tree planting shall be primarily of native provenance species.

Native species are best suited to our climate, good for wildlife and vital to preserving biodiversity. Native plants occur naturally in a region in which they evolved and without them the fauna that co-evolved with them cannot survive.

The tree nursery shall ensure trees are free of pest and diseases.

This will alleviate bio-security concerns and rule out the risk of the spread of pests and disease.

3.1.32 General planting

3.1.33 Multi-layered planting, including hedge, shrub, groundcover and herbaceous, is a fundamental component of the public realm proposals and will bring significant amenity, environmental and ecological benefits.

Planting shall be assessed against the character of the area, natural light level, available growing medium and long term management.

It is important to select the correct species for a particular space in order for the planting to thrive so that people can properly enjoy the spaces provided within the Goodsyards.

Planting shall be should be primarily of native provenance species.

Native species are best suited to our climate, good for wildlife and vital to preserving biodiversity. Native plants occur naturally in a region in which they evolved and without them the fauna that co-evolved with them cannot survive.

The nursery will need to ensure plants are free of pest and diseases.'

This will alleviate bio-security concerns and rule out the risk of the spread of pests and disease.

3.1.34 Species selection

In considering tree species, the following detailed criteria should be applied:

- *Consideration of the ultimate height and crown spread in relation to the ability of the*

street or space to accommodate the scale of the tree.

- *The likely growing conditions available within the urban environment to support healthy growth of the particular species.*
- *The impact of pests and diseases, known at the detailed design stage, on the potential future health of the tree species.*
- *Seasonal variation, Spring flowering, Fruit, Autumn colour.*
- *Ability of the species to survive and flourish in the specific local environmental conditions, with particular consideration of sunlight patterns and exposure to wind in the context of tall buildings.*

These criteria will result in a tree planting strategy that can be enjoyed for generations to come.

In considering plant species, the following detailed criteria should be applied:

- *Appropriate planting densities. Consideration should be given to day one planting but also ultimate height and spread of species.*
- *The likely growing conditions available within the urban environment to support healthy growth of the particular species.*
- *The impact of pests and diseases, known at the detailed design stage, on the potential future health of the specific species.*
- *Seasonal variation, Spring flowering, Fruit, Autumn colour.*
- *Evergreen structure.*

These criteria shall result in an established sensory planting scheme.



Fig 3.1.15: Ground level - Planting

KEY

Ground Level

- Existing tree planting
- Tree planting (subject to utilities survey)

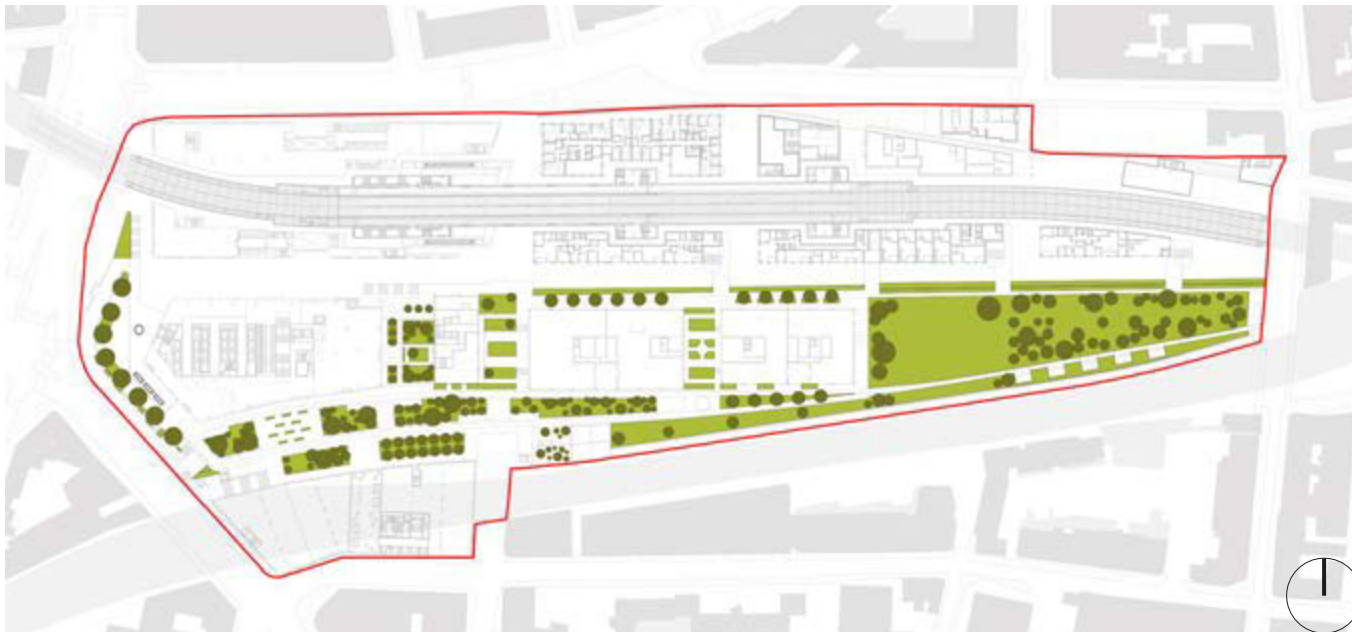


Fig 3.1.16: Platform level - Planting

KEY

Platform Level

- Tree planting
- Soft landscape

3.1.35 Growing medium

The historic structure of the Goodsyards allows for loads imposed by substantial tree planting and associated soil depths.

Tree planting shall have appropriate soil depths that will allow for an extensive and mature tree planting within The Platform Gardens.

Large planting

1

For large planting, such as trees, a minimum 1200mm soil depth (topsoil and sub-soil combined) shall be provided over 200mm granular drainage and drainage mat.

Medium planting

2

For medium planting, such as shrubs, a minimum 750mm soil (topsoil and sub-soil combined) depth shall be provided over 200mm granular drainage and drainage mat.

Low planting

3

For low planting, such as herbaceous and groundcover, a minimum 450mm soil depth (topsoil and sub-soil combined) shall be provided over 100mm granular drainage and drainage mat.

The creation of substantial green infrastructure at Platform Level is an integral element to the masterplan proposals. The provision of appropriate soil volumes for trees and other planting will allow that vision to be delivered and viable in the long-term.

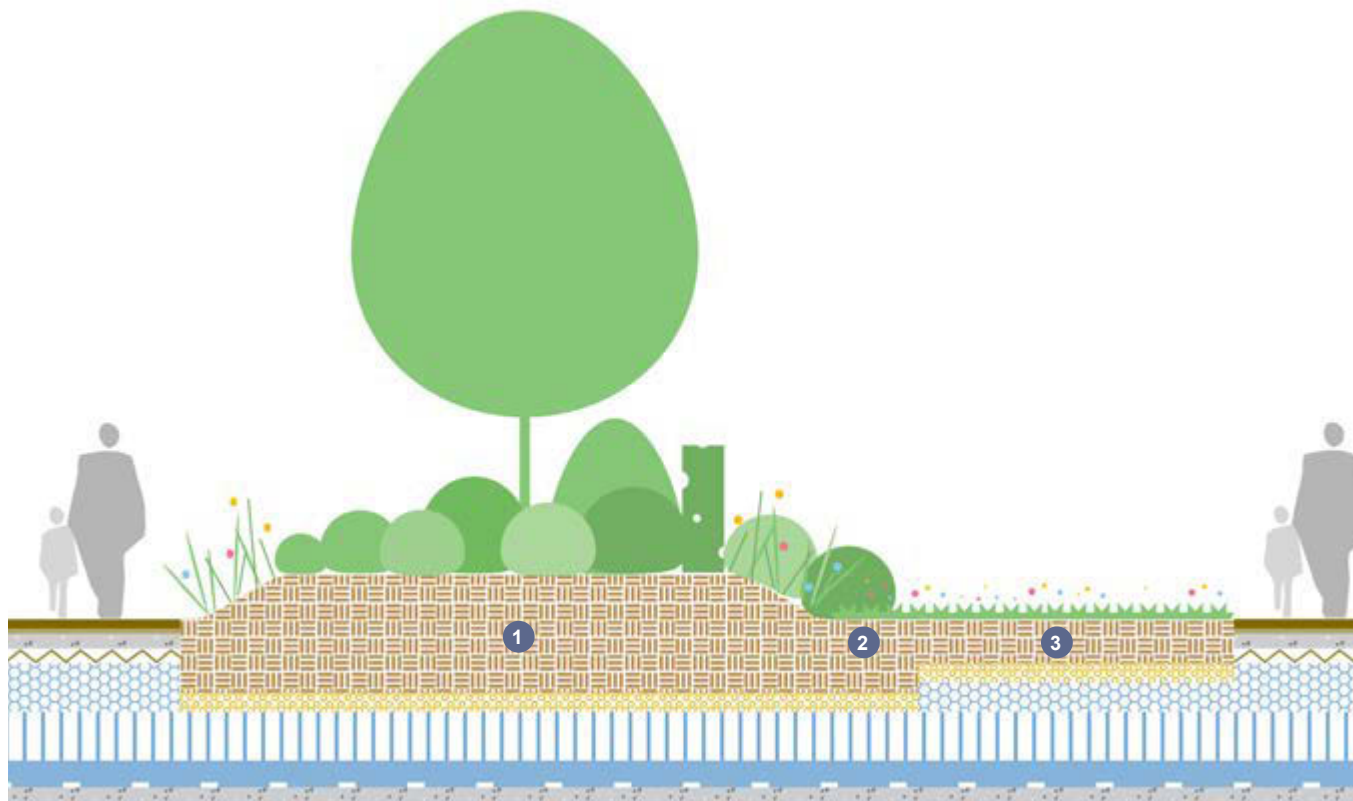









Fig 3.1.17: Typical section illustrating planting depths

KEY

-  Soil: varies 450 to 1200mm depth
-  Granular drainage: varies 100-200mm depth
-  Lightweight fill: varies, as required
-  Water attenuation zone: 500mm depth
-  Insulation layer: 250mm
-  Waterproofing
-  Concrete slab: 200mm

Note:

Requirements for depths of water attenuation and insulation are indicative only and will be subject to specific requirements of location in detail design stage.

3.1.36 Roof gardens (Residential)

3.1.37 Introduction

Residential amenity is the external space which provides exclusive benefits to residents in close proximity to their homes.

Principles

Gardens shall provide opportunities for a range of domestic and social activities, including outdoor dining, seating, meeting, gardening, play and communal social activities.

It shall be provided within the masterplan in the form of:

- Communal gardens;
- Private gardens;
- Access to platform and public open spaces close-by.

The residential communal gardens shall be designed as a 'family' of spaces. All are different in character due to their location and aspect, yet will share a number of following spatial components:

3.1.38 Communal space

The design principles of these spaces should relate to the wider Goodsyard landscape proposals where possible.

The visual link will enhance the experience of both the private and public spaces.

The planting and landscape typology of the spaces should be based on their microclimate and position.

Gardens will have thriving plant habitats which will contribute to the residents wellbeing and

enjoyment of the space.

Roof gardens shall be well overlooked.

Passive surveillance is increased as a result and creates gardens that residents feel comfortable using.

Defensible Space

Where there is semi-private space adjacent to residential dwellings a 2m wide defensible space shall be provided.

It will provide the residents with the right level of privacy without encroaching onto the communal areas

3.1.39 Growing Medium

The structure of the podium slab shall be designed to support a communal garden with the appropriate levels of planting and soft landscape. The required depths of growing medium will need to be considered in relation to the structural design of the roof slabs.

Communal gardens with planting ranging from small trees to lawn will create beneficial amenity for residents.

3.1.40 Irrigation/SUDs

Blue roofs are to be provided on roof gardens and will support the planting in the communal gardens. Where harvested rainwater is not sufficient mains supply irrigation shall be provided.

The design of the communal gardens is shaped by the need to mitigate against adverse local climate effects (microclimate) and of the wider implications of climate change.

3.1.41 Play

See 'Play' section



Fig 3.1.18: Platform level

KEY

Platform Level

- Residential Garden
- The Platform



Fig 3.1.19: Roofscape level

KEY

Roofscape Level

- Residential Garden

3.1.42	Ecology & Environment	3.1.45	Habitat creation
3.1.43	Introduction		<i>Biodiverse roofs shall form a significant amount of new habitats at Roof Level. The roofs shall include substrate of varying depths seeded or turfed with locally appropriate green roof wildflower mix.</i>
	Enhanced local biodiversity balanced with creating an attractive and appropriate environment is key to the landscape proposals for the Goodsyrd.		
3.1.44	Principles	3.1.46	They provide important habitats for wildlife, especially invertebrates. The roofs will be accessible for maintenance and contribute visual amenity, but will not be accessible as private amenity spaces.
	<i>The proposals shall create the following range of habitats which have educational and amenity value:</i>		<i>Bird nesting, bat boxes and hibernacula features shall be installed on site.</i>
	<ul style="list-style-type: none"> • <i>Wildflower rich grassland;</i> • <i>Woodland glade and woodland scrub;</i> • <i>Open mosaic habitat;</i> • <i>Large areas of continuous ground vegetation;</i> • <i>Varied vegetation structure using sculptural landform to provide a mosaic of habitat features;</i> • <i>Habitat integration through feature structures;</i> • <i>Cultivated Landscape.</i> 	3.1.47	They provide important habitats for wildlife.
	By employing a range of habitats the local biodiversity will be greatly enhanced and will create an attractive and appropriate urban environment.	3.1.48	Vertical Greening
			<i>Opportunities to plant blank vertical surfaces on buildings and within the Platform will be considered.</i>
		3.1.49	Provide important habitats for wildlife whilst providing visual greening on otherwise blank elements of architecture.
		3.1.50	Species selection
			<i>The detailed selection of species for these proposals will consider the use of predominantly native species or species with value for wildlife.</i>
			Species selection will provide opportunities to maximise biodiversity for native wildlife that depends on certain habitats. This will be considered as integral to the detailed design process.



Fig 3.1.21: Platform level - Habitat areas

KEY

Platform Level - Habitat areas

- Woodland glade / scrub
- Biodiverse lawn
- The Platform landscape
- Roof gardens and terraces
- Open mosaic habitat
- Cultivated landscape
- Habitat Features

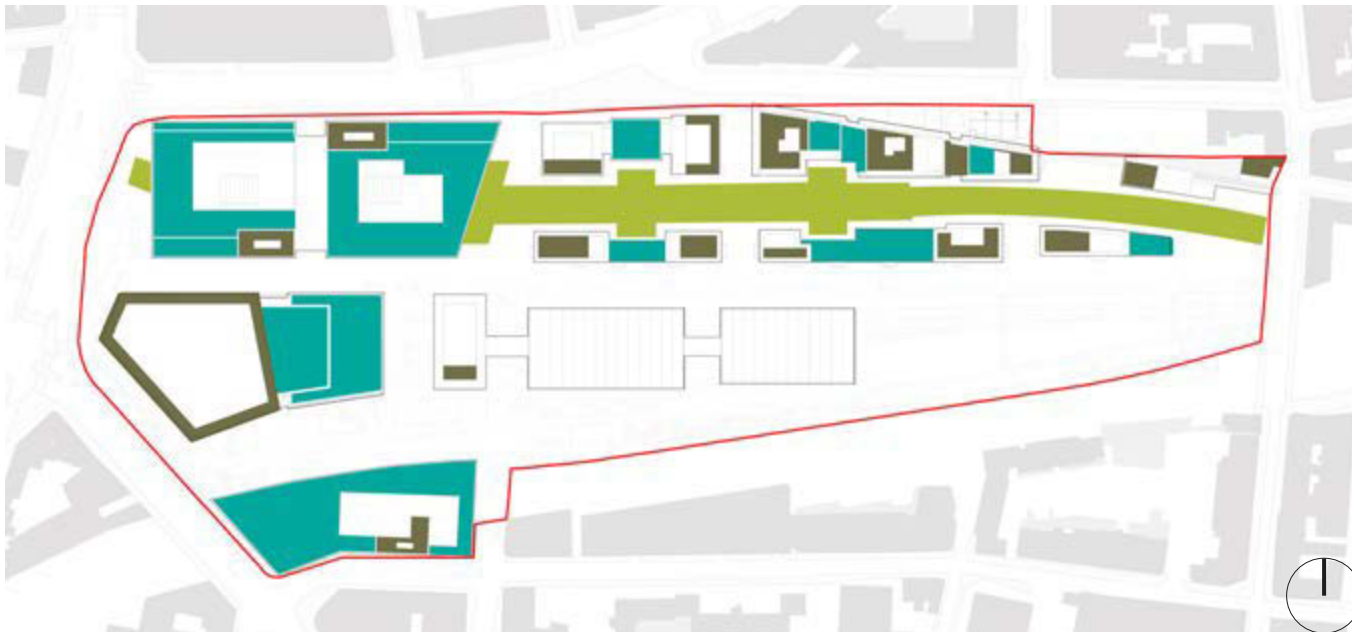


Fig 3.1.20: Roofscape level - Habitat areas

KEY

Roof Level - Habitat areas

- Roof gardens and terraces
- Open mosaic habitat / Biodiverse roof
- Biodiverse roof opportunity subject to TFL

3.1.51 Sustainable Urban Drainage (SUDs)

Significant volumes of water shall be attenuated across the site and shall align with the strategy identified within the Environmental Statement. These will be provided through the provision of blue roofs on buildings and below the hard and soft landscape finishes across the Platform Level.

As part of the site wide water management strategy water will be collected in a series of Water Towers that are to be use to supplement the required irrigation for the gardens.

Hard surfaces should be minimised where possible to maximise permeable surfaces.

The integration of SUDs is shaped by the need to mitigate against adverse local climate effects (microclimate) and of the wider implications of climate change.

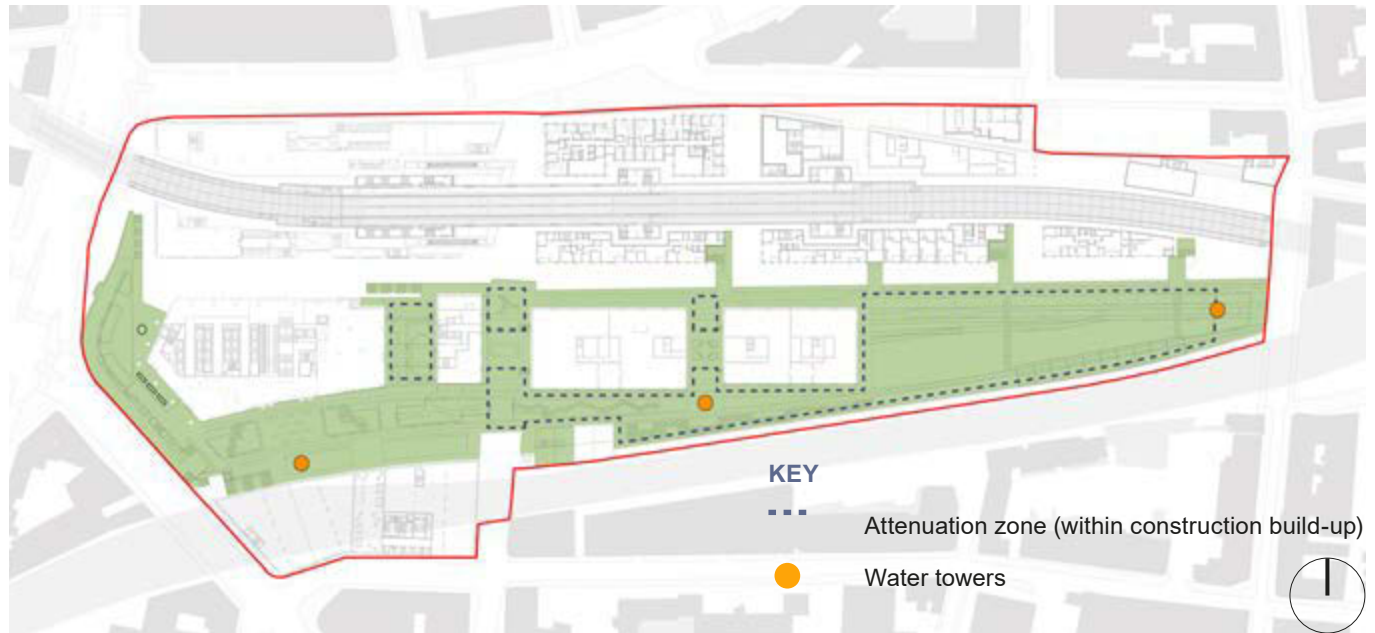


Fig 3.1.22: Platform level - SUDs

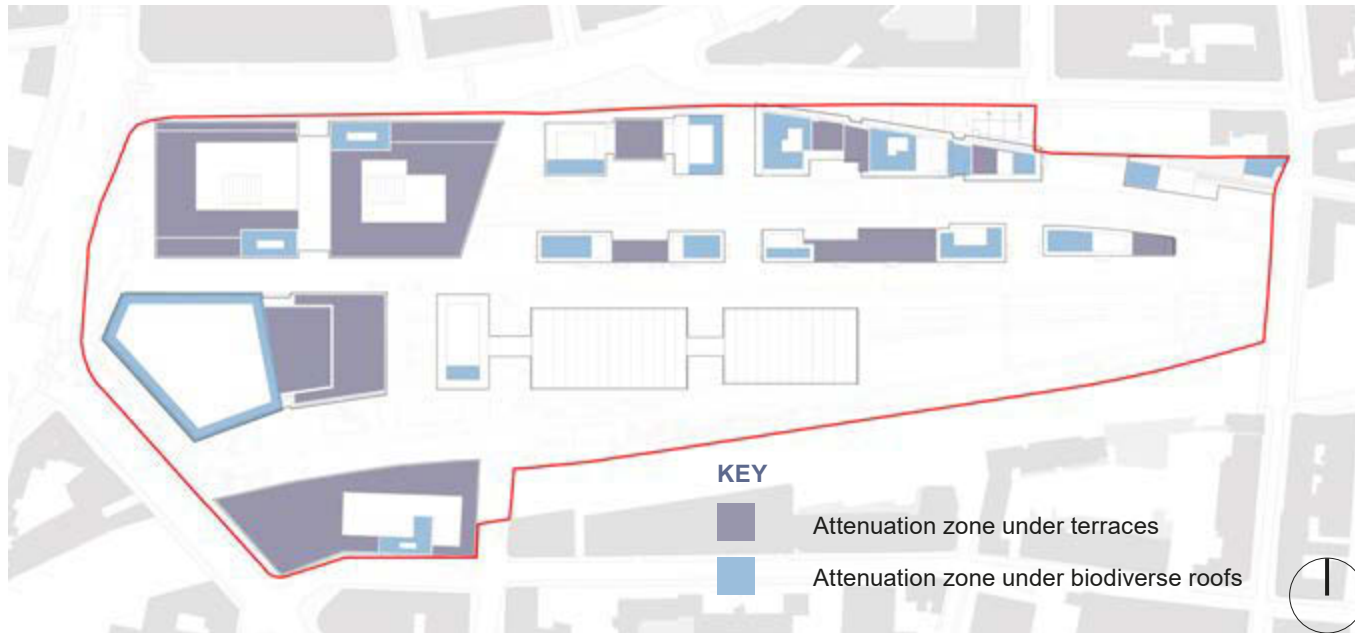


Fig 3.1.23: Roofscape level - SUDs

3.1.52 Play & recreation

3.1.53 Introduction

Play provides challenging and interesting opportunities for all ages to engage with the site and encourage social activity. A key aspect is to ensure that all play amenity considers the varying needs of users of all ages and abilities.

3.1.54 Approach

Play typologies will be based on natural landscape typologies inspired by the site's physical setting and microclimate and link in with the ecological proposals where appropriate.

Play in a natural environment provides a wide variety of benefits for children including physical, mental and social well-being. As well as diversifying learning experiences and providing the opportunity to develop an interest and understanding of nature.

Play components shall be integrated, imaginative and responsive to context.

Play shall be provided through 'incidental' and 'dedicated' playable space.

Play shall include elements such as walls, seats and natural play such as log piles, stepping logs and mounds.

Provision for education and knowledge based play shall be provided.

Play shall be well overlooked and be accessible for all abilities.

Good play contributes to cognitive, physical, social and well being of children and youth. It also provides an ideal opportunity for parents to fully engage with their children.

3.1.55 Quantum

The play strategy shall meet the Mayor of London's SPG Shaping Neighbourhoods: Play and Informal Recreation (September 2012). The development will provide 10sqm of dedicated play space per child, regardless of the age of the child. The child yields are associated with the new residential developments.

This rule is a GLA policy requirement.

The development shall provide the following quantum of space:

Development child yield range 110 - 162

Doorstep playable space 610m²

Local playable space 580m²

Youth space 430m²

Total playable space 1,620m²

note: 162 child yield based on current maximum parameter dwelling mix

This quantum will deliver play space in compliance with GLA policy.

The GLA population yield calculator has been updated as of 19th June 2019. This update increases the maximum child yield of the site from 162 children to 199, resulting in a total maximum playspace requirement of **1,990m²**.

In the absence of an updated Supplementary Planning Guidance, it is currently unclear how these new figures will be applied to the different types of playspace.

The overall provision of playspace proposed still significantly exceeds the increased requirement.

3.1.56 Types of play

Doorstep playable space shall be provided for on each residential plot. The category covers ages 0-5.

Play provision will include small age appropriate play equipment for the under 5 age group integrated into open space with potential for informal play through engaging play features and seating.

Local playable space shall be provided on The Platform. The category covers ages 0-11.

Provision will be in the form of open space with potential for informal play. Age appropriate play equipment where possible and seating.

Youth space shall be provided, where possible, on The Platform. The category covers ages 12 and older.

Age appropriate provision should be made where possible within The Platform to encourage integration of ages and social activity.

Facilities for informal recreation, trim trail and seating will be provided.



Fig 3.1.24: All levels - Play space distribution

KEY

On site play provision by age groups

■ Doorstep Playable space

0-5 age group

Engaging play features, seating

Total proposed area: 680m²

■ Local Playable space

5-11 age group

Engaging play features, seating and open lawn

Total proposed area: 2,800m²

■ Youth space

12+ age group

Space for informal sport, recreation

Total proposed area: 490m²

* Note: The overall Platform is 12,854m² and provides for numerous play areas within the public realm. Therefore it is considered a Neighbourhood Play Area that is suitable for all ages.

TOTAL AREA FOR PLAY REQUIRED

1,620m²

TOTAL AREA PROPOSED

3,970m²

3.1.57 Lighting

3.1.58 Introduction

Lighting will play a prominent role at the Goodsyards. Its use can be defined strategically as operational and feature lighting.

3.1.59 Approach

A white light should be used throughout the development providing a good natural lighting level.

White light provides both a safe and comfortable environment for the public realm at all times.

Lighting will also be used to highlight particular features and spaces which will provide visual interest.

The overarching concept of the lighting strategy should be to highlight the existing heritage of the Goodsyards.

Light fittings should be simple, contemporary and well crafted.

This will create a holistic family that will form an integral part of the overall street furniture strategy.

The following design principles should be taken into account as part of the detailed design of the scheme;

- *Street Lighting and Trees*
- *Retained heritage*
- *Streets and Lanes*
- *Security and Safety*
- *Feature Lighting*
- *The Platform*
- *Light Pollution*
- *Energy efficiency*

A site-wide lighting control system is to be put into place to allow the dimming of selected groups of lights after peak hours.

The implementation of a site-wide control system is to allow lighting across the site to be controlled and adjusted to respond to the changing conditions throughout the day and year through an automated sequence of programmable scenes.

3.1.60 Operational lighting

Lighting to designated pedestrian routes and service yards within site is to comply with identified lighting standards as noted in BS5489: 2013.

All identified routes are to be lit to a recognised standard in order to avoid areas of high contrast or excessive brightness.

Lighting should be attached to the buildings wherever possible

This will reduce street clutter within the development

A conical straight pole finished to match street furniture concept with single support arm can be used in certain situations.

Where wall mounted lights are not possible or not appropriate to the architecture.

In key locations the lighting columns should be distinctive and elegant but of a simplistic and contemporary design.

This is to be in keeping with the heritage assets of the site.

In ground up lighting should be used sparingly

and in appropriate areas of the development.

Light pollution is a key consideration of the lighting strategy.

No exposed light sources on bollards and columns

Louvres and optical glare control are to be utilised to eliminate views that create high contrast and disability glare.

3.1.61 Feature lighting

Feature lighting should be integral to street furniture, walling or the fittings. They should be located to avoid views of the light source except where lighting forms specific public art installation.

Examples of such locations include;

- *Lighting of historic structures/buildings/ architectural features*
- *Lights to entrances*
- *Uplighters to trees*
- *Accent lighting to planting*
- *Lighting integral to seats*
- *Lighting to feature park bench*
- *Low level lighting along walkways, pavements and steps*
- *Lighting to public art*
- *Light as art*
- *Light to define routes and locations*

Architectural lighting is to be applied to highlight building entrances and key architectural features such as vertical circulation cores as appropriate for the building use.

Accent lighting to key features will help to reinforce wayfinding across the site and assist in mental mapping of the area for employees and visitors. Where existing buildings are re-purposed the careful lighting of interiors will play a key role in avoiding seemingly over lit areas in relation to the context.

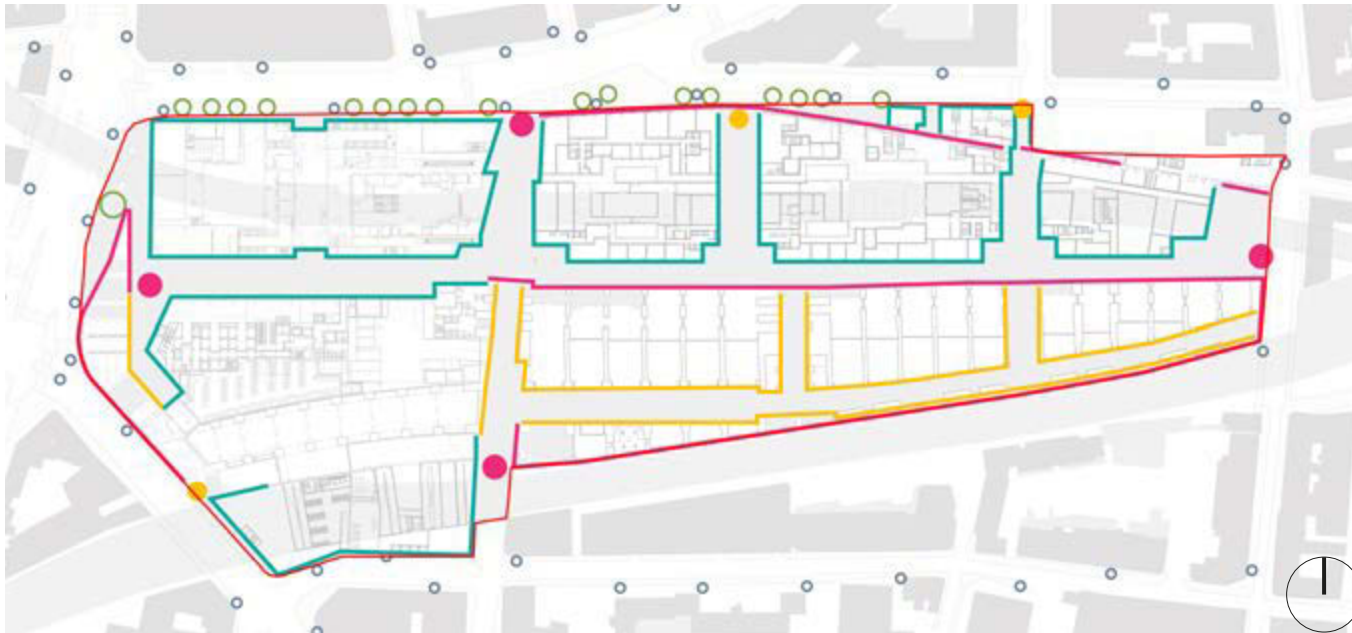


Fig 3.1.25: Ground level

KEY

Ground Level

- Operational lighting integrated into architecture
- Feature external lighting to historic structure
- Feature internal lighting to historic structure
- Feature 'gateway' lighting
- Feature 'threshold' lighting
- Uplighting to trees
- Existing street lighting

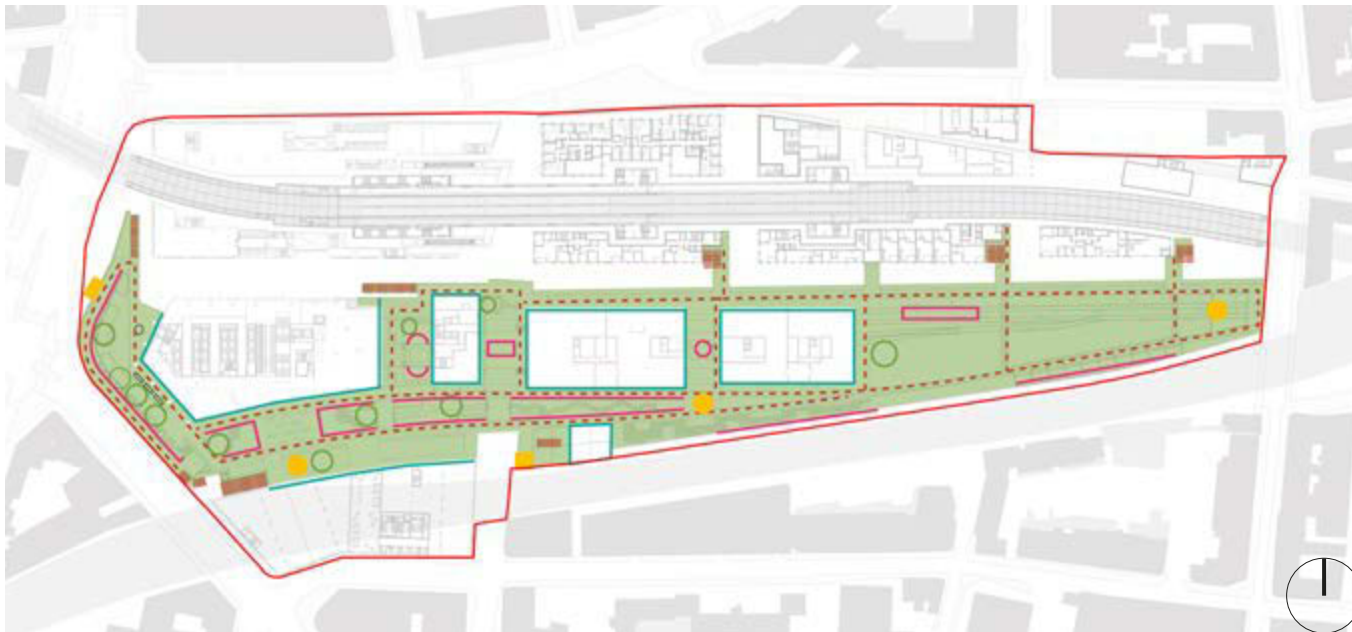


Fig 3.1.26: Platform level

KEY

Platform Level

- Operational lighting integrated into architecture
- - - Pathway lighting
- Integrated lighting to furniture/structures
- Integrated lighting to feature structures
- ||||| Integrated stairway lighting
- Uplighting to trees

3.2 SITE-WIDE SECURITY

Security relates to the protection measures that have been agreed in consultation with the Designing Out Crime Officers and Counter Terrorism Security Advisors during the pre-application process. This section will describe the strategic security rules in terms of the positioning and treatment of specific counter terrorism measures and more general crime reduction design requirements.

3.2.1 Structure and Surveillance

Active frontages will be introduced at ground and platform levels.

Active frontages will ensure that passive security will be enhanced across the site.

Inactive facades are to be limited where possible when facing publicly accessible streets and lanes.

Limiting areas of inactivity will ensure that publicly accessible spaces are passively overlooked.

Planting will be structured to ensure that trees are located away from the buildings and do not obscure CCTV lines of site.

Considered tree placement will ensure that they cannot be used as climbing aids.

A structured, hierarchical lighting scheme will ensure that the site is appropriately lit at night.

The lighting approach should be focused on the following elements, landscape, architecture, streets, service yards and control; definition of each of these elements will ensure that the proposals are appropriate.

Cycle storage will be actively monitored via staffed cycle hubs and CCTV.

CCTV will be extensively provided internally and externally and connected to a sitewide building management system.

CCTV footage will be of evidential quality

CCTV can have a positive impact on the impact of crime if correctly implemented with wider site management.

3.2.2 Physical Protection

Physical security measures will be integrated into the public realm.

Integration will ensure that the overall appearance is unaffected and that a positive impression is made with regards to the safety of the site.

Pedestrian arrival points of access into the site will incorporate Hostile Vehicle Mitigation (HVM) measures in a discrete way.

Feature benches, bollards and clever planting design will ensure that the overall impression of the site is open and welcoming.

3.2.3 Management and Maintenance

The site will be managed by a site wide estate management team on behalf of the Joint Venture.

A comprehensive maintenance regime will ensure that the site is well cared for and kept attractive throughout the year.

Blast mitigation measures will be built into the glazing and structure of the buildings on the site.

Appropriate blast mitigation will ensure that inhabitants are as protected as much as possible.

All buildings will have dynamic lockdown procedures in line with Home Office Guidance

This will be part of a wider site and building management system.



Fig 3.2.1: Structure



Fig 3.2.2: Physical Protection

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Hammerson