Town Square scale comparison

To understand the scale of the Town Square it is useful to compare the size and character of Leicester Square and courtyard of Somerset House.

Leicester Square, London

Description:

One of the best known and used public open spaces in London. This world famous square is home to a thriving and diverse mix of people and functions. The square is enclosed on four sides by medium rise buildings averaging 7 storeys and a pedestrianised street.

Characteristics:

Approximate Size:	90m x 90m
Primary Activity:	Meeting, seating, shopping
Edge Event:	Cinemas, clubs and restaurants
Central Event:	Seating, formal and informal
Dominant Materials:	Grass and stone and trees
Hard Soft Proportion:	70% soft 30% hard

Management:

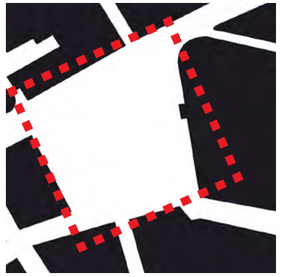
Private / Public Space:	Public
Managing body:	The City of Westminster
Frequency of use:	Very Heavy
Open hours:	24 hr
Gated:	Yes, central space only

Significance:

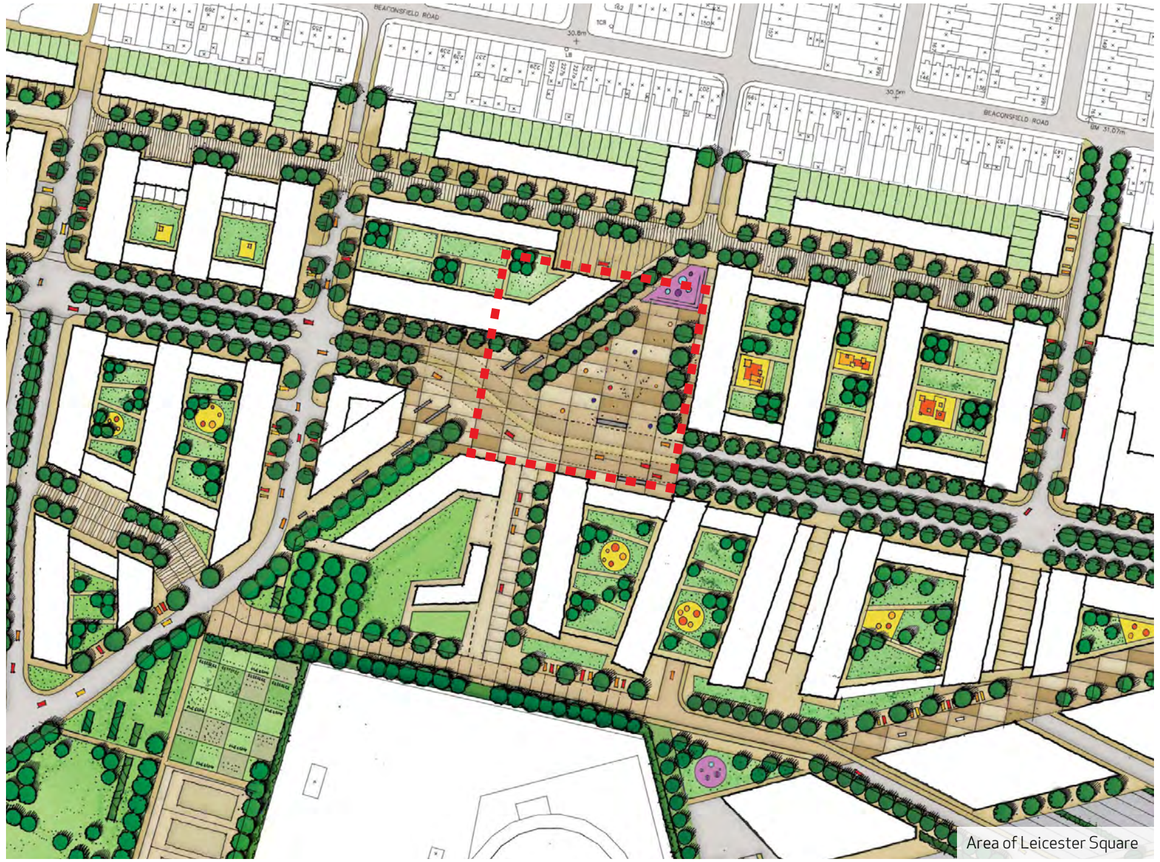
Leicester Square is defined by medium rise buildings on all four sides. Pedestrian movement is located but not restricted to the edges of the square with an area of 'green' located to the centre and it has large trees planted that are in keeping with the scale of the surrounding buildings. The clubs and bars surrounding the square generate 24hr users and the associated management problems relating to antisocial behaviour, noise and litter.

Leicester Square

Leicester Square



Block plan of Leicester Square



Area of Leicester Square

Somerset House, London

Description:

Historic London buildings frame 4 sides of the new public open space. The granite paved space has fountains for summer usage and a series of festivals and events attracting people throughout the year, including a popular ice rink at Christmas.

With low usage by local office workers, Somerset House is primarily a destination space. The courtyard draws tourists and local communities from both Covent Garden to the north, and Southbank to the South, as well as to those from further afield.

Characteristics:

Approximate Size:	60m x 80m
Primary Activity:	Interactive fountains and year round organised events
Edge Event:	Restaurants, cafe and museum
Central Event:	Water fountains
Dominant Materials:	Stone and fountain
Hard Soft Proportion:	100% hard

Management:

Private / Public Space:	Private
Managing body:	Somerset House
Frequency of use:	Well used especially during events
Open hours:	Approx. 16 hr
Gated:	No

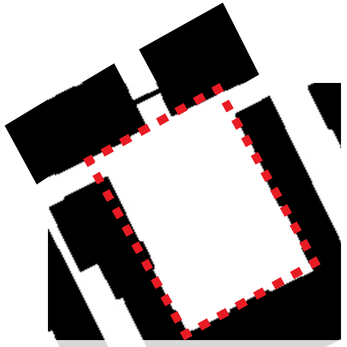
Significance:

Somerset House is defined by its magnificent setting of historic buildings.

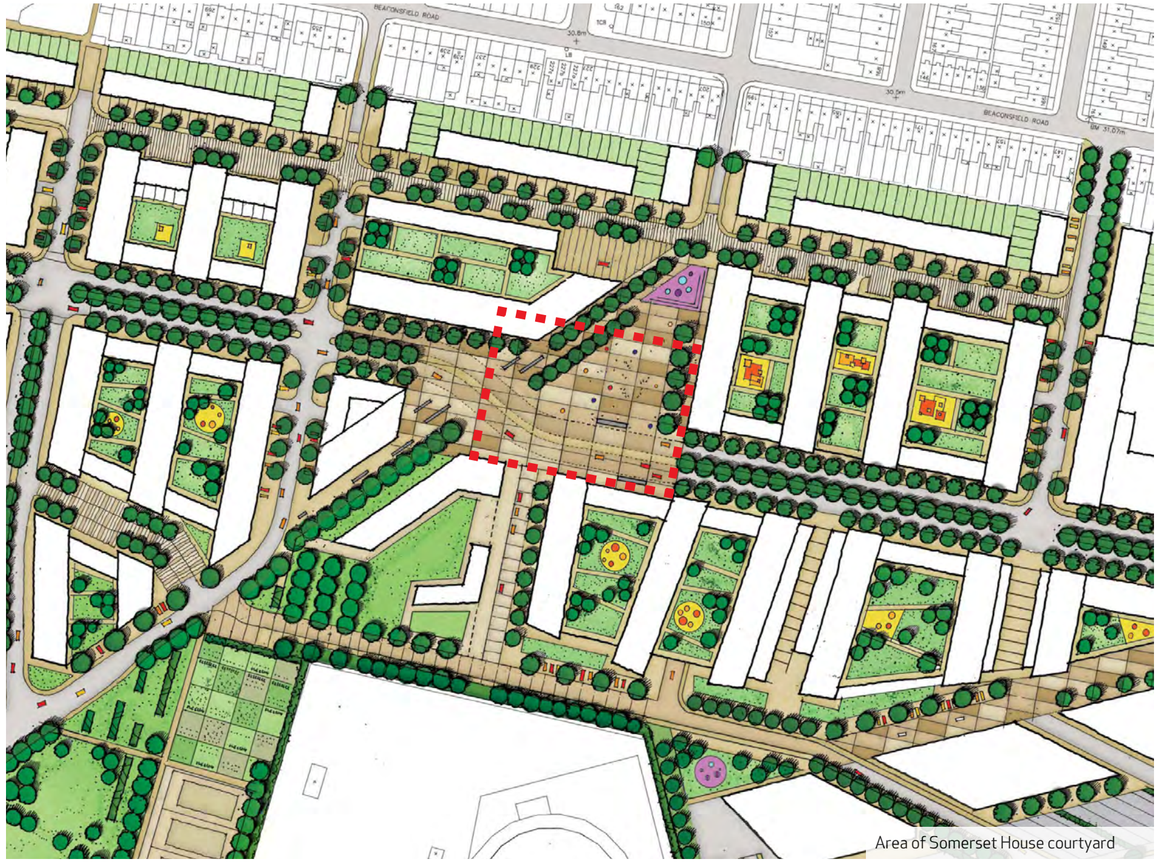
The high quality management, publicity and organisation of space has created the destination space and the events are well attended.

Somerset House

Somerset House courtyard in Winter



Block plan of Somerset House



Area of Somerset House courtyard

4.8 West Street

From the Town Square a vista down the primary axis of West Street continues the arrival experience and aiding the transition to the Active Canal Zone. This street forms a continuation of the triple tree-lined avenue of East Street.

The street is designed to be a pedestrian oriented environment continuing the same design articulation as East Street.

The termination of West Street vista at the main pedestrian access point of the Active Canal Zone is provided by a landmark building adjacent to the Canal Plaza. Along with sculptural elements and integrated lighting this aids orientation and legibility of the site and its context, defining the hierarchy of spaces, and signifying the location of the canal.

Function

- Tree lined boulevard as visual connectivity and amenity from west to east
- Primary vehicular, pedestrian and cycle route
- Green spine reinforcing the green network
- Define road hierarchy and aid in orientation
- Provide human scale and shade
- Cohesion and clarity reinforced by continuity of street tree form, street furniture and lighting
- Transition zone to active canal area
- Wayfinding element to end of vista

Soft Landscape Treatment

- Triple avenue tree planting, single species selected for form, longevity and seasonal interest
- Understorey planting

Hard Landscape Treatment

- High quality paving to footways
- Designated cycle route to roadway
- Cycle parking
- Central reservation with safety elements
- Intelligent bus stops
- Shared surface crossing point in natural stone
- Co-ordinated high quality street furniture, lighting, signage and sculptural elements/ public art

Community on the street

Cafe activity

Co-ordinated street furniture

View D on page 155

View D - Artist impression of West Street towards Canal Plaza

4.9 Park Street

Park Street provides the primary route through the residential area extending from the retail area of West Street to the new Pump Lane linkage. The curving residential boulevard with a double avenue of trees offers expansive views across the Central Park providing a more informal green country park driving experience. The residential built form frames the road reinforced through groups of trees, hedge and shrub planting. Pocket parks and residential road entrances connect with the boulevard linking the green network across the site.

Park Street is designed to be pedestrian oriented whilst taking into account safety and the needs for vehicular movement. Where Park Street joins West Street, a central reservation breaks the road down into a more pedestrian friendly crossing environment whilst allowing a landscape zone for tree and understorey planting. Where the road flanks the Central Park, wide tree lined pedestrian pavements and raised pedestrian crossing points at key intersections allows the road to become integrated into the landscape. On-street parking is allowed to either side of the roadway.

Function

- Primary vehicular, pedestrian and cycle route
- Tree lined boulevard as visual connectivity and amenity from north to south and west to east
- Green spine reinforcing the green network
- Define road hierarchy and aid in orientation
- Provide human scale and shade
- Transition zone to Central Park play and recreation area

Soft Landscape Treatment

- Grass verge
- Double avenue tree planting, single species selected for form, longevity and seasonal interest
- Understorey planting

Hard Landscape Treatment

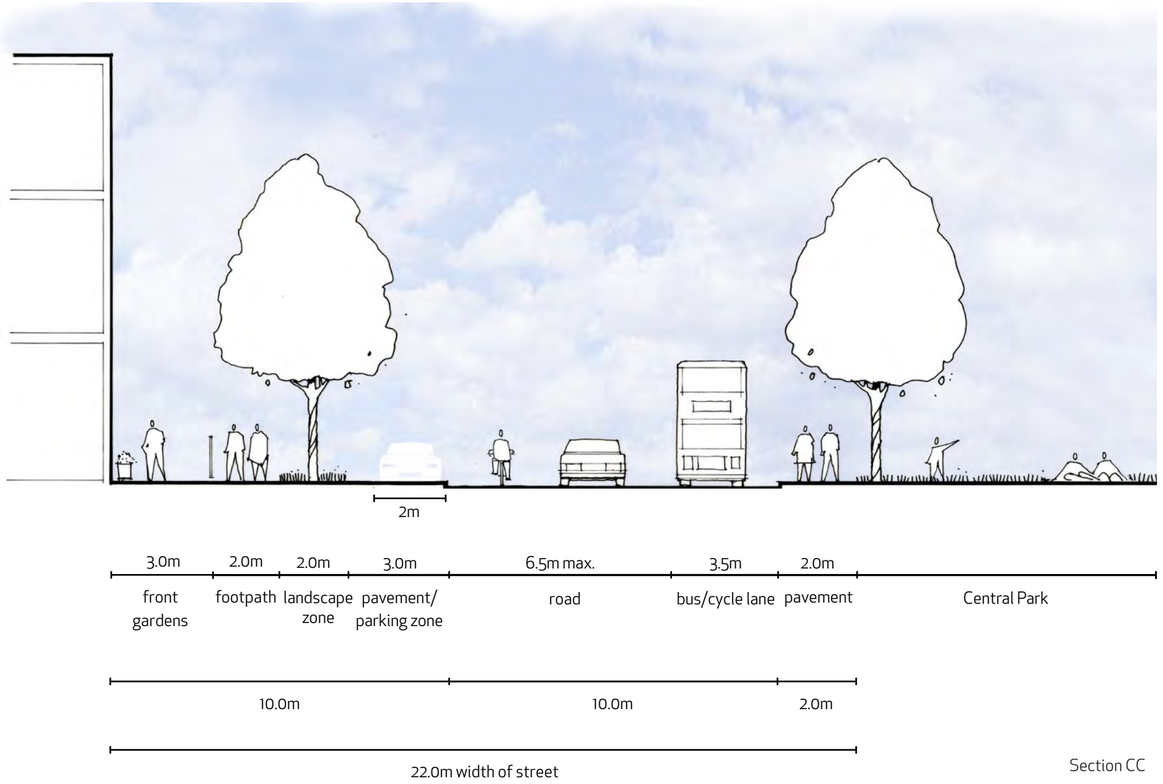
- Robust paving materials
- Paving to footways
- Designated bus/cycle route to roadway
- Central reservation with safety elements
- Traffic-calmed with speed tables at key intersections
- Intelligent bus stops
- Co-ordinated high quality street furniture, lighting and signage

Safe and enjoyable cycling

Set back and defensible space

Section CC on page 158
View G on page 159

Park Street character



Section CC

View G - Artist impression looking southwards of Park Street and Central Park

4.10 Central Park

In the heart of the site is a large Central Park and urban retreat arranged around a primary circular space, the village green and cricket pitch. A variety of open spaces are created of varying scale and character to provide for wide ranging recreational activities for the local community. The primary areas of the park around the village green/cricket pitch are the wetlands, the sports grounds, the ornamental garden and the community gardens.

The village green/cricket pitch and hard surface sports grounds provide the primary play and recreation provision and are located to allow for ease of access for all users. The village green/cricket pitch open green space provides a visual focus and is defined by a circle of trees. Hard surface all weather pitches and courts, with lighting, for structured formal sports and games such as tennis, basketball, netball and hockey, multi-use games are located in a linear arrangement alongside the site boundary.

To the north of the village green/cricket pitch, a richly planted contemporary ornamental garden, defined by formal clipped hedging, topiary trees and feature walling, provide a more intimate sensory garden environment. Planting will be selected for variety of colour, texture, scent, botanical interest and seasonal variety. Seating, water, incidental art and sculpture elements will assist the creation of a contemplative quiet space which also provides screening between the structured play facilities and adjoining residential areas.

Adjacent to the ornamental garden are the community gardens which provide land for food and plant growing activities. They provide an opportunity for community development and promotion of sustainable community lifestyles. Located with good access to the school, surrounding residential units and play space provide variety of activity and associated natural surveillance.

The community gardens are designed to respond and evolve to the needs of the local community. Typically cultivated by a number of individuals, but often managed by volunteer groups or site manager, community gardens offer opportunities for people to learn new skills and abilities, improve physical and mental health and gain a better understanding of nature's seasons and cycles. Associated gardening activities could become part of local community children clubs, school visits and play facilities.

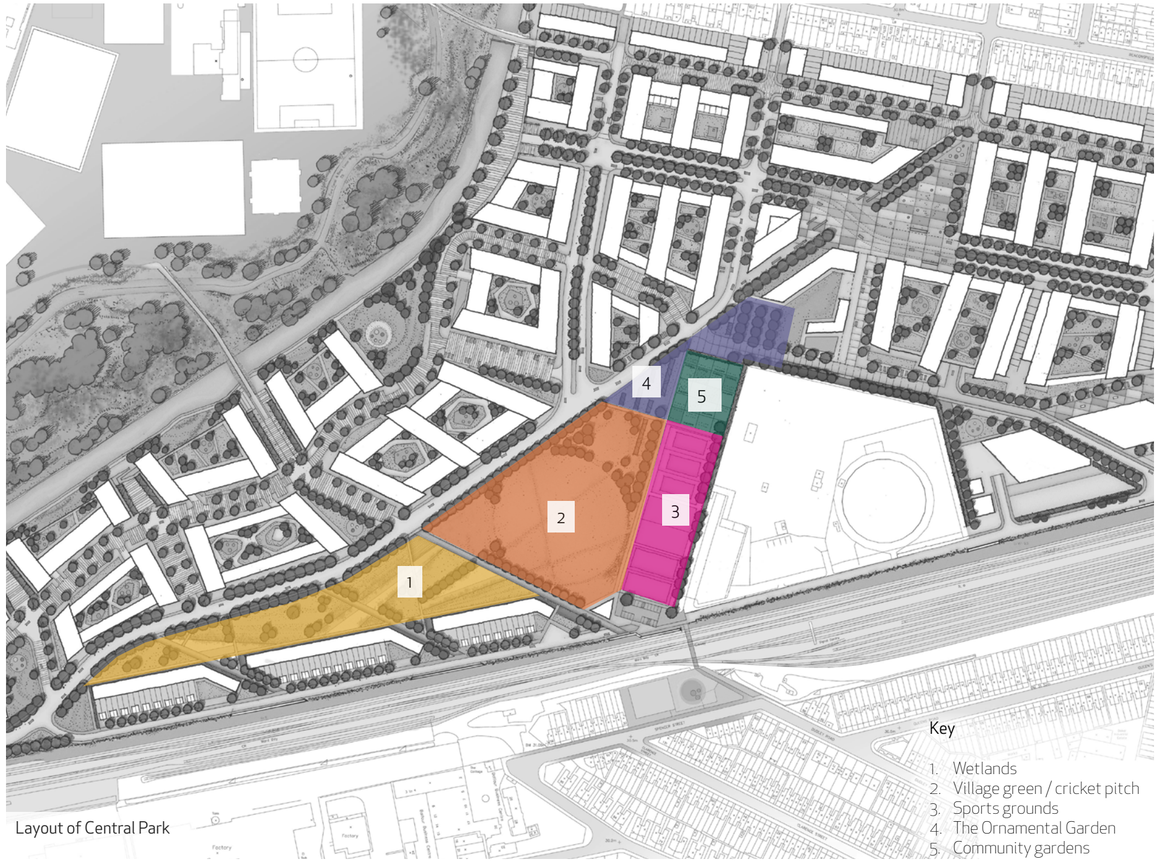
To the west the wetland area provides significant biodiversity and habitat opportunities and allows a different type of park character and associated activities to occur. A series of waterbodies provide balancing ponds as part of the site-wide sustainable urban drainage system.

Timber boardwalks and informal paths provide access to and around the area which also offers good environmental educational potential. The wetland area of the park provides a distinctive visual amenity and setting for the adjacent residential properties. A landmark building to the west end provides a visual marker and signal to the Pump Lane linkage.

Opportunity for healthy lifestyles

Wetland habitat creation

Free play in open space



Layout of Central Park

Key

1. Wetlands
2. Village green / cricket pitch
3. Sports grounds
4. The Ornamental Garden
5. Community gardens

Function

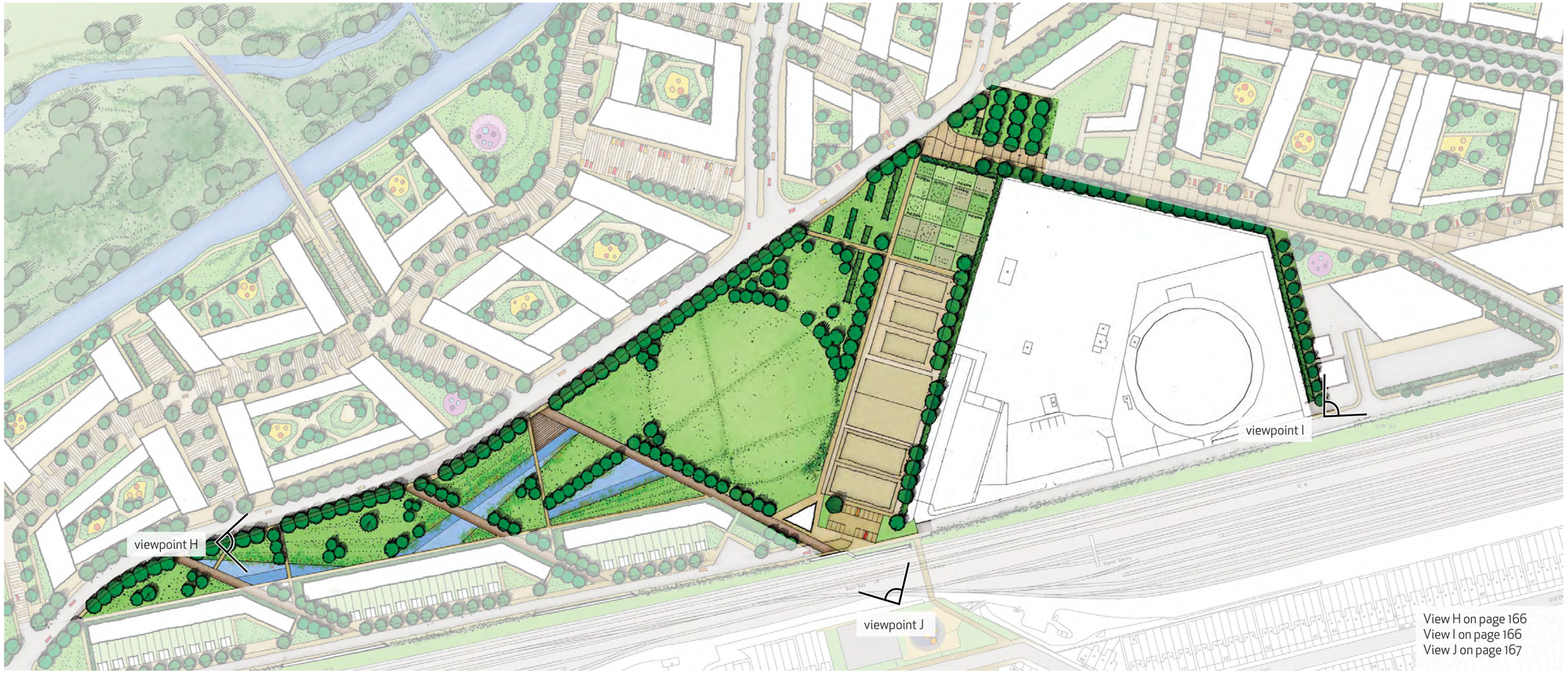
- Informal recreation and park activity
- Green lung
- Structured formal play facilities and activities
- Wildlife and wetland habitat creation
- Educational and recreational resource
- Wetland ponds accommodate elements of sustainable urban drainage system
- Green gym
- Screening of gasworks to site though planting
- Community food and plant growing
- Visual amenity

Soft Landscape Treatment

- Semi-mature trees to define activity areas
- Native woodland and hedge planting to screen the gasworks and for conservation value
- Clipped hedges, box head trees and ornamental planting to contemplative garden
- Informal landscape treatment to wetland area for conservation value
- Variety of structural planting to provide framework for the community gardens
- Management regime to promote biodiversity

Hard Landscape Treatment

- Variety of robust paving materials
- Natural gravel paving to footpath/ cycle paths
- Sports surfacing to court areas
- Control spill lighting with conservation sensitive luminaires
- Play equipment
- Safety surfacing to children's play areas
- Co-ordinated high quality street furniture, lighting and signage
- Youth/ Environmental Centre
- Art/ Sculpture including water walls
- Feature elements including walls, seating and water features to the ornamental garden
- SUDS drainage features including balancing ponds
- Timber boardwalk to wetland areas
- Storage and work sheds to the community gardens



View H on page 166
View I on page 166
View J on page 167

Central Park area character

Community garden, food growing and well being

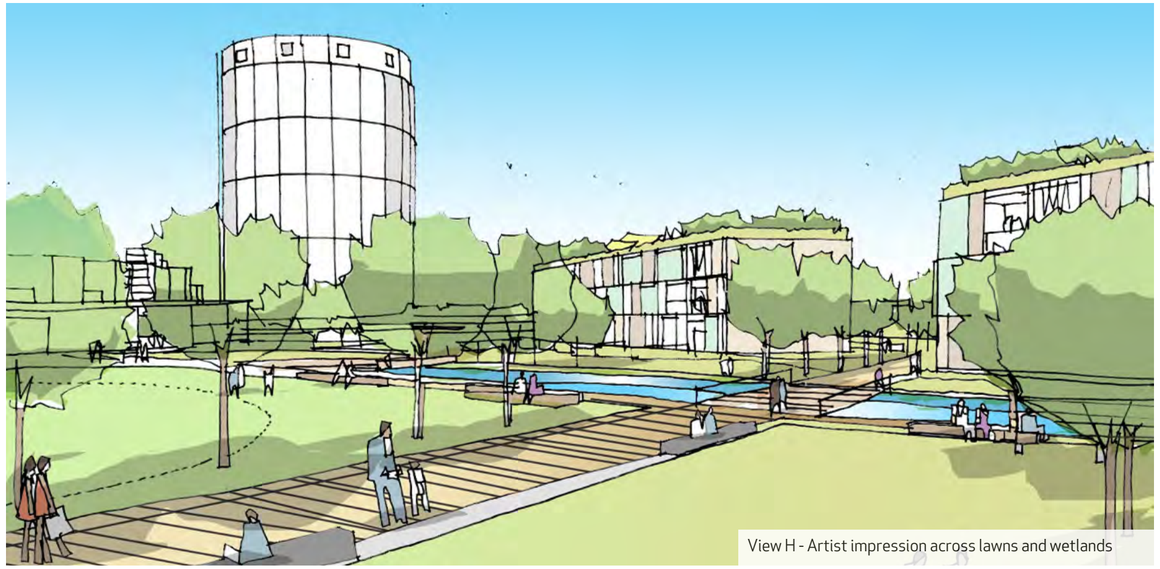
Structured play on all-weather surface

Cricket on the Village Green

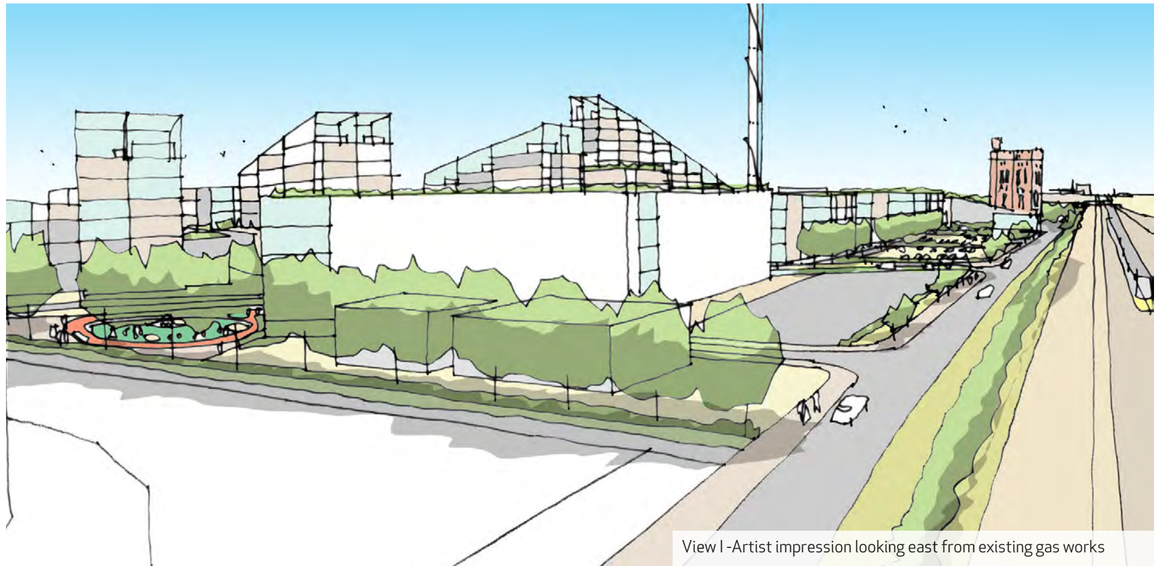
Enclosure and surveillance

Colour and texture in nature for all

Variety of planting form



View H - Artist impression across lawns and wetlands



View I -Artist impression looking east from existing gas works

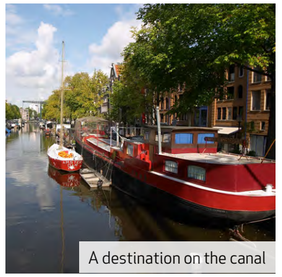
View J -Artist impression aerial view of Central Park

4.11 Canal zone

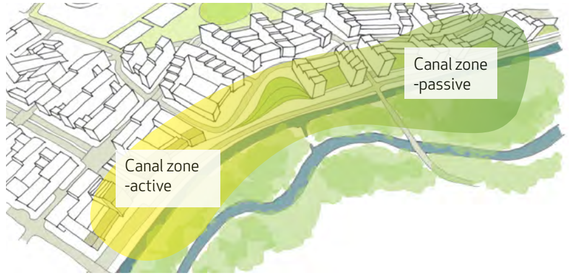
The canal corridor provides a broad landscape buffer along the full length of the development site reinforcing the natural edge of the adjoining Minet Country Park. The corridor has distinctive character zones determined by activity along its length; active around the Canal Plaza area and passive around the residential zone.

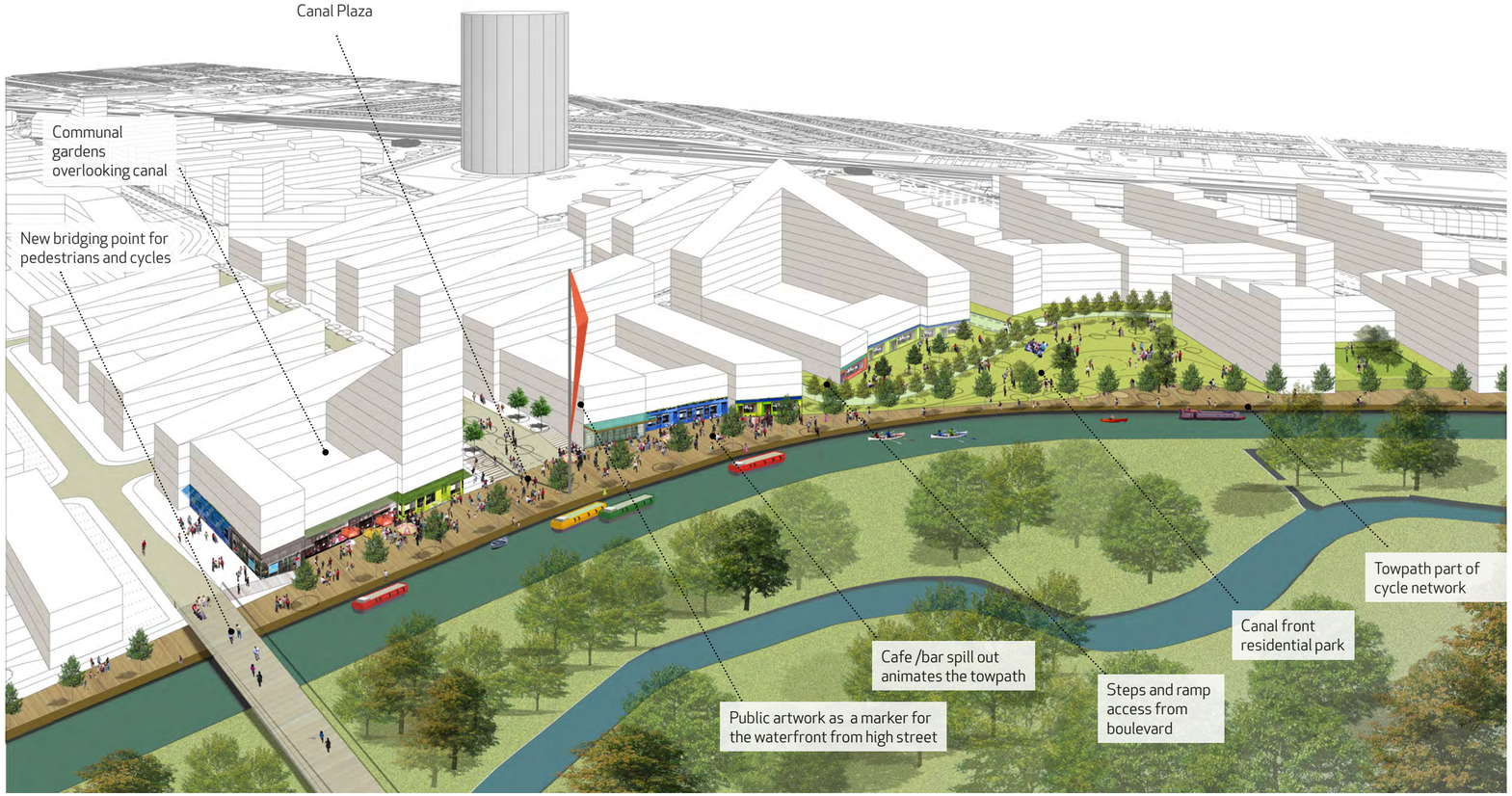
The canal revitalised - Birmingham

Active frontage



A destination on the canal





The canalside residential zone stretches south from Canal Plaza along the length of the canal to the Pump Lane bridge characterised by residential accommodation fronting the canal. The generous towpath is minimum 8.5m wide is defined by a local park by Canal Plaza and a series of residential buildings enjoying the open views over the canal and beyond. Between the buildings, routes from the centre of the scheme meet the canal in a stepped ramp arrangement - the route aligned with the eastern railway underpass has a pedestrian bridge over the canal and Yeading Brook connecting the Minet Country Park.

The residential buildings incorporate an open courtyard to ensure the canal front is not overwhelmed and maximise views. The open courtyard has a landscaped edge to ensure the towpath doesn't feel contained whilst house boats may moor against the tow path to reinforce the quieter, passive character of this zone.

Early concept sketch of canal frontage

Canal Plaza

The provision of an active zone - Canal Plaza - located at the end of West Street, accessed through a series of stairs and ramps, responds to British Waterway vision of creating a dynamic day and night time canal side edge with both water and land based recreational, cultural and educational facilities. Cafés, bars and restaurants located in this space will provide additional animation and attraction to the canal further integrating the canal into the development. These aspirations respond to the Blue Ribbon Network policy.

Canal boats are encouraged to moor against the canal edge. through the provision of an active boat zone. A 2.5 metre wide landscape and street furniture free area will allow free movement on and off boats and mitigate conflict between boaters, pedestrians and cyclists. Within the active canal zone this edge is defined by a different material which discourages pedestrians to walk against the canal edge ie. rumble granite setts.

Opportunities to improve the visual and physical linkages and recreational access between West Southall and Minet Country Park are provided through two proposed pedestrian and cycling bridges over the canal. The bridges are located to provide controlled access points to Minet Country Park and avoid disruption to wildlife and ecologically sensitive areas within the park. Sensitive lighting designs respond to the biodiversity value of the park and canal edge. The bridges advertise new linkages to the wider community and act as primary local markers and place making elements, enhancing the development's legibility and memory grid. The bridges also form regional markers which are important in the wider context of Southall.

Function:

- Active social space and destination
- Dynamic canal-side environment with day and night time activity
- Landscape buffer to built development and Minet Country Park
- Recreational linkages and activities along towpath enhanced, particularly into Minet Country Park
- Informal recreational resource
- Visual amenity

Soft Land scape Treatment

- Formal tree planting to delineate zones and arrival area
- Native and robust understorey planting

Hard Landscape Treatment

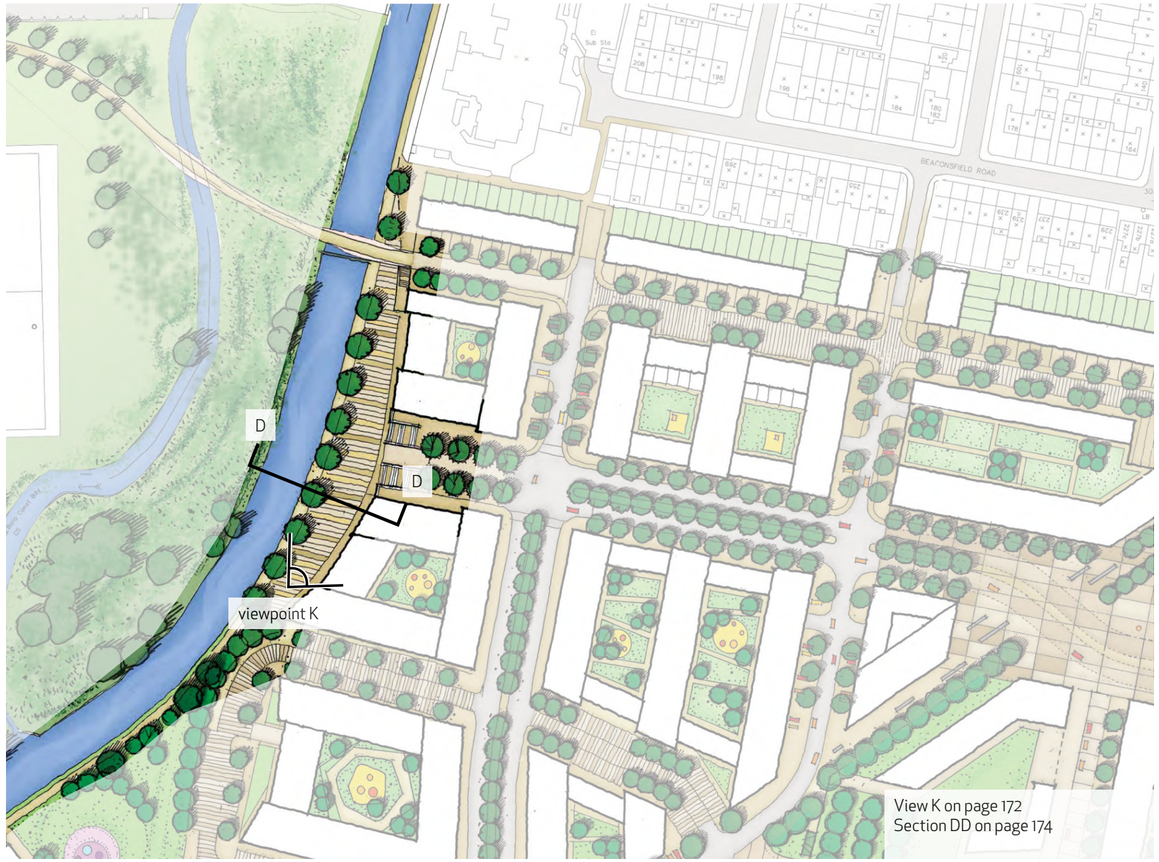
- Robust paving materials, including a variety of natural stone
- Appropriate materials within active boat zone
- Site responsive pedestrian bridges
- Co-ordinated street furniture used to define edge of active boat zone, including directional signage
- Canal zone - active, integration to existing towpath outside site boundary


Safe cycle zone


Night time social gathering destination


Clutter free active boat zone

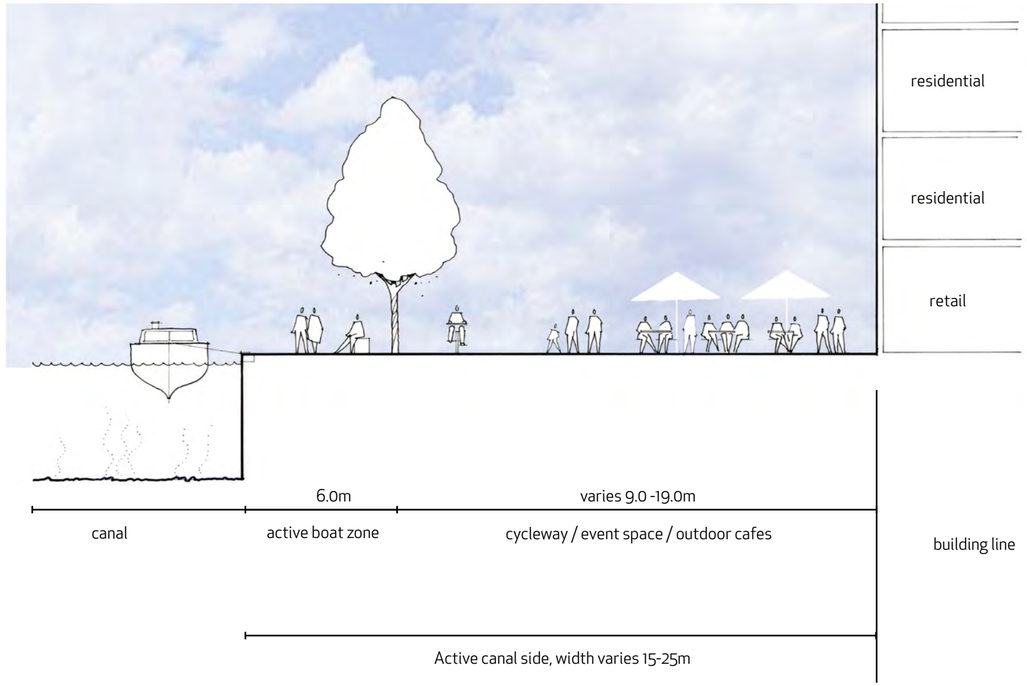

Active boating edge



View K on page 172
Section DD on page 174

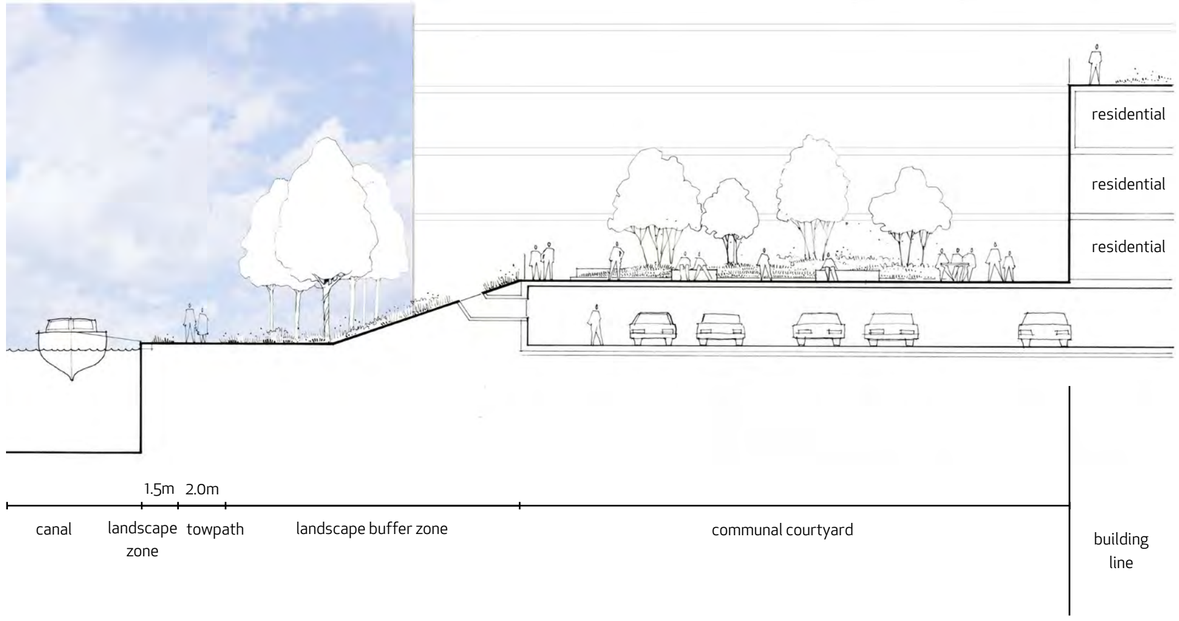
View K - Artist impression of Canal Plaza

Section DD through Canal Plaza



Section DD

Section EE through canalside residential zone



Section EE

Canalside residential zone

Within the more passive environment of the canalside residential zone, landscape planting enhances the conservation value of the area creating new habitats and increasing biodiversity. Careful integration of landscape levels between the buildings and towpath edge are considered through subtle terrace and bank landform with swathes of native planting reinforcing the canal buffer whilst mimicking a more natural and sinuous watercourse.

The development offset between the canal edge and the built form is a minimum of 8.5 metres. This responds to the Environment Agency's guidelines of providing a clear maintenance and access zone. This offset is maintained along the entire length of the canal and in some locations widened to further integrate the landscape/ towpath zone.

Canal boats are encouraged to moor against the canal edge of the passive zone. A footpath/cycle way shall be provided to a minimum width of 2m and set back 1.5m from the canal edge which is planted with a variety of grasses of different colour, texture and height.

Green links extend from the passive canal zone into the development through the canal side park and the linear parks of the residential area. The canal side park incorporates landform modelling to act as a landscape marker and aid in wayfinding and orientation within the development.

Function

- Visual amenity for residents
- Peaceful canal-side environment for bird and wildlife watching
- Landscape buffer to built development and Minet Country Park
- Recreational linkages and activities along towpath enhanced, particularly into Minet Country Park
- Educational resource
- Formal and informal play facilities
- Wildlife corridor

Soft Landscape Treatment

- Swathes of native tree, hedge, shrub and grasses
- Planting, landscape treatment and landform profile to enhance conservation value between built form and canal
- Native grasses and wildflower to passive zone canal edge

Hard Landscape Treatment

- Resin bound gravel to towpath
- Site responsive pedestrian bridges
- Co-ordinated street furniture used to define linkages to residential areas
- Play equipment
- Educational signage
- Canal zone - passive, integration to existing towpath outside site boundary

Safe cycle routes

Residential waterfront edge

Temporary moorings

Working canal and wildlife corridor

Section EE on page 175
View L on page 178

View L - Artist impression of Minet Country Park

4.12 Residential - play streets and local parks

The residential area is broken up through a network of play streets and pocket parks forming important public open space for the local community. This creates a leafy, spacious and high quality living environment between the built form along with the communal courtyard gardens within the blocks.

A focal green spine through the residential area provides an internal pattern of movement. In addition, the gentle curved layout gives enclosure to the space and adds a feeling of security.

The streets are designed as a place where people and vehicles share the whole of the road safely and on equal terms, and where the quality of life takes precedence over ease of traffic movement. These spaces are for the use of the local community with facilities and services for informal and formal recreation, relaxation and social interaction, children's play and activities for all ages and abilities.

Local identity is created through lighting, paving, street furniture, art elements and integration of on-street parking. To aid in wayfinding, taller features at focal points and entrances add interest and hierarchy to the overall character of the spaces.

The side streets benefit from views between the park and the canal and sunlight is encouraged to penetrates into the main street past the low fingers of the residential blocks.

Function

- Visual amenity for residents and local community
- Provision of open space for informal and formal recreation and social interaction
- Children's play facilities
- Community resource for all age groups
- Gathering and meeting place for local community and events
- Natural surveillance provided by adjacent dwellings, open views and lighting
- Green network

Soft Landscape Treatment

- Clear stemmed avenue trees to provide shade and enclosure whilst allowing clear views through and visibility from adjoining housing
- Grouped tree planting, selected to provide variety and seasonal interest
- Range of shrub and hedge species, size, colour, form and texture to provide variety and establish character
- Elements of formal planting as features
- Ornamental hedge and shrub planting

Hard Landscape Treatment

- Traffic calming with variety of surface materials to create a pedestrian dominant environment, whilst guiding vehicular movement and providing pedestrian safety
- Robust paving materials
- Local play facilities to provide sculptural interest and stimulate a range of activities
- Play equipment
- Art elements
- Co-ordinated seating and street furniture
- Feature and safety lighting
- Robust paving materials

Shared surfaces and landscape zones

Playable space

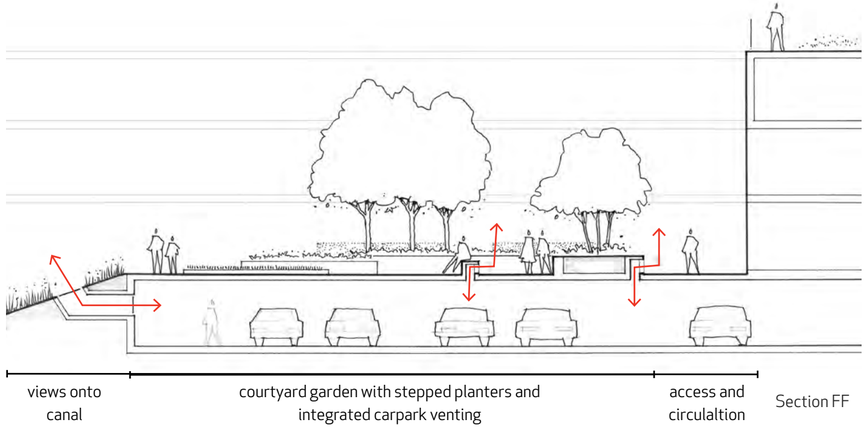
Equipped play for learning and co-ordination

Section FF on page 182
View M on page 184
View N on page 185

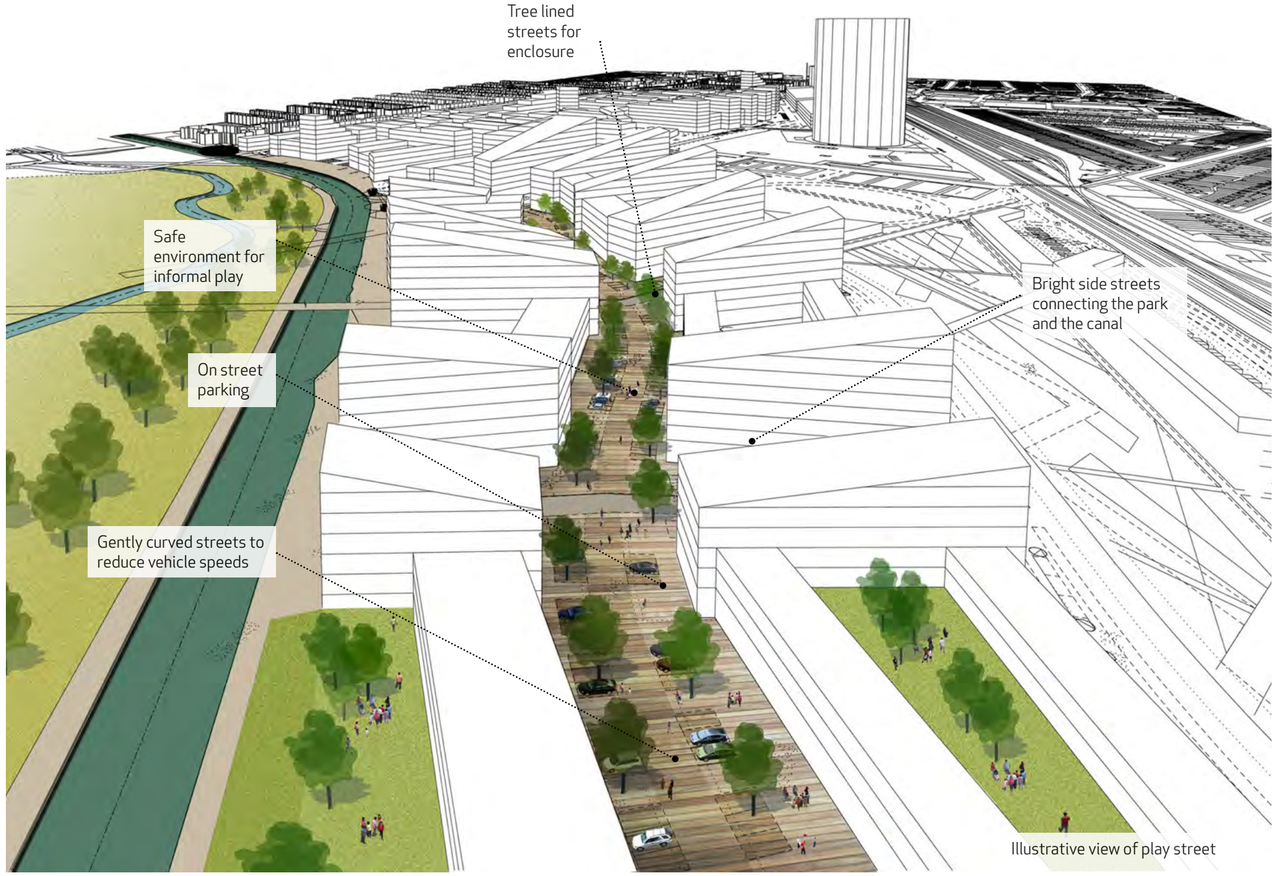
Residential courtyards and play street character

Safe and secure play environment

Early concept sketch of residential street



Section FF



Illustrative view of play street

Interactive art and play

Pedestrian friendly

Shared surface

View M - Artist impression of of play street

View N - Artist impression of play and local parks

4.13 Residential - communal courtyards

The courtyard gardens on the podium level of the residential buildings create sheltered quiet spaces for residents to relax in close proximity to their homes whilst providing screening of views into apartments. Amenity lawns, fruit bearing trees, climbers, bosques of trees and a specie rich hedge and shrub planting palette with multi-stem shrubs, low level flowering bulbs, grasses and herbaceous planting is arranged to provide a series smaller garden rooms where opportunities for private gathering and organised resident events can occur.

Minimal use of hard materials is proposed to ensure a predominantly soft environment is created. However, careful location of paths and edgings to entrance points, landscape features and desire lines will be carefully considered. Careful integration of the slab, venting details and the landscape proposals are required to ensure that the gardens are well integrated and provide maximum area of open usable space.

Within the courtyards doorstep play features are proposed to deliver the play and recreation strategy requirements. These elements are designed for children aged under five, therefore must be easily accessible from their homes and offer natural and child carer surveillance. These elements are designed to form sculptural pieces within the gardens for when the play elements are not being used, thus providing a flexible approach to play and garden aesthetic.

The creation of the courtyard gardens increases the ecological benefit of the development with planting and lawns encouraging wildlife foraging and intercepting rainwater for use by the soft landscape. In addition to these gardens, there will be opportunities for vegetated roofs as outlined in the biodiversity strategy.

Function

- Informal & formal recreation
- Community resource for all age groups
- Natural surveillance provided by adjacent dwellings, open views and lighting
- Green network
- Visual amenity

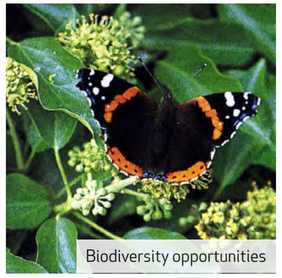
Soft Landscape Treatment

- Grass lawns
- Fruit bearing and bosques of trees
- Multi-stem trees and shrubs
- Herbaceous planting
- Low level flowering bulbs
- Hedge planting
- Ornamental shrub planting
- Range of planting species to provide variety of colour, scent, texture and seasonal interest

Hard Landscape Treatment

- Doorstep play elements
- Minimal paving materials
- Fencing and railings
- Seating

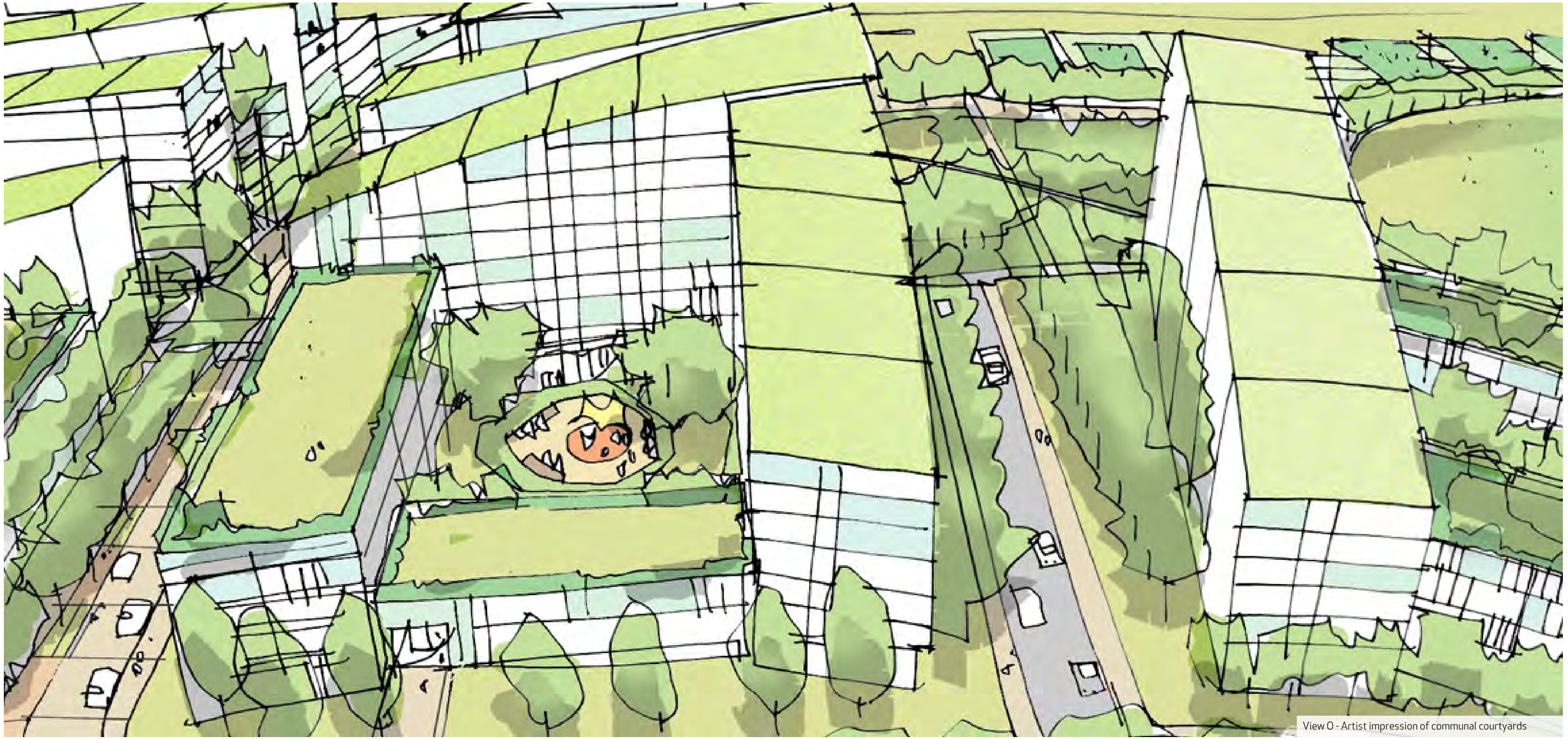
Seasonal planting, colour and variety



Biodiversity opportunities

Social gathering

Social gathering



View 0 - Artist impression of communal courtyards

4.14 Railway edge

The railway edge forms a linear corridor along the full length of the southern site boundary providing separation and environmental protection between the railway line and adjoining built form, open space and associated parking provisions.

A combination of hard and soft vertical wall treatments created through gabion stone walls and green walls will function as an acoustic barrier along the railway. This provides an opportunity to create an exciting landscape element which will be identifiable to the passengers on the passing trains. The wall is designed to complement the rhythm of the built form and open spaces and adjoining street pattern of Southall which has been severed by the railway line.

The road adjacent to the railway line corridor creates a circulation route for buses, car users, cyclists and pedestrians. The road to the west of the gasworks leads to a carpark area for users of the central park facilities and pedestrians and cyclist entering from Dudley Street underpass. The road to the east facilitates the required bus parking provision and access into the multi-storey carparks fronting East Street. Two underpasses provide key pedestrian linkages from here to the adjacent areas south of the railway.

Function

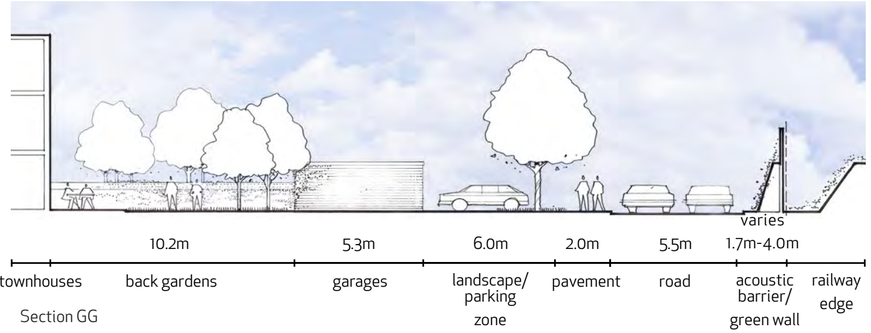
- Transport corridor
- Acoustic and environmental protection
- Vehicular, cycle and pedestrian movement
- Visual screening
- Potential habitat value

Soft Landscape Treatment

- Avenue tree planting
- Grass verges
- Greenwall planting
- Evergreen hedge and shrub planting

Hard Landscape Treatment

- Paving to footway
- Vertical walls typologies including timber, masonry, gabion stone walls, interactive media and lighting walls



Section GG

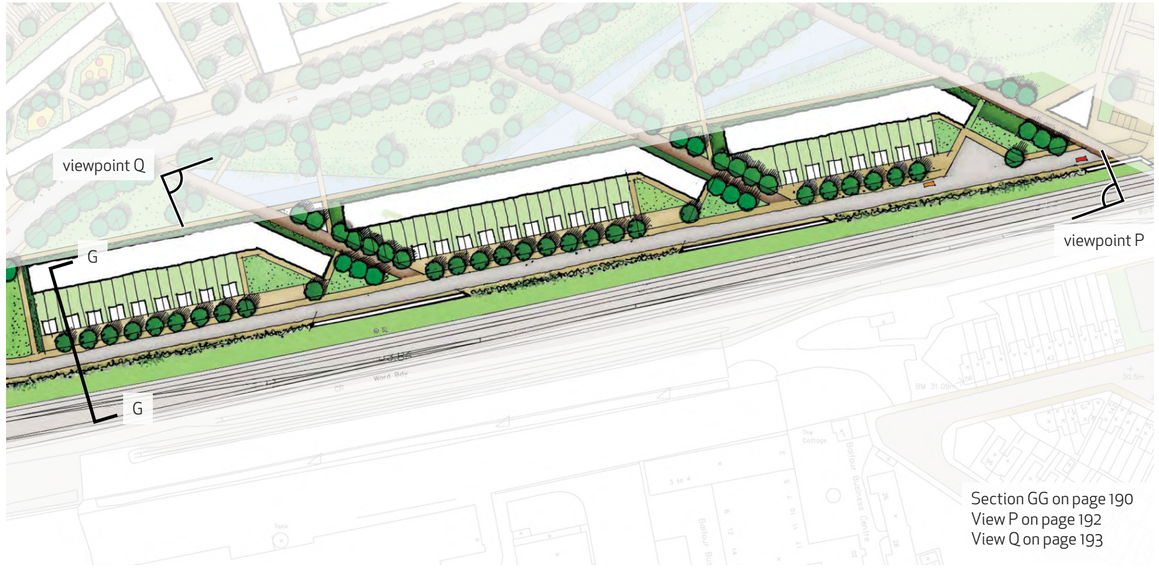

Greening to the acoustic barrier


Colour and texture


Colour and texture

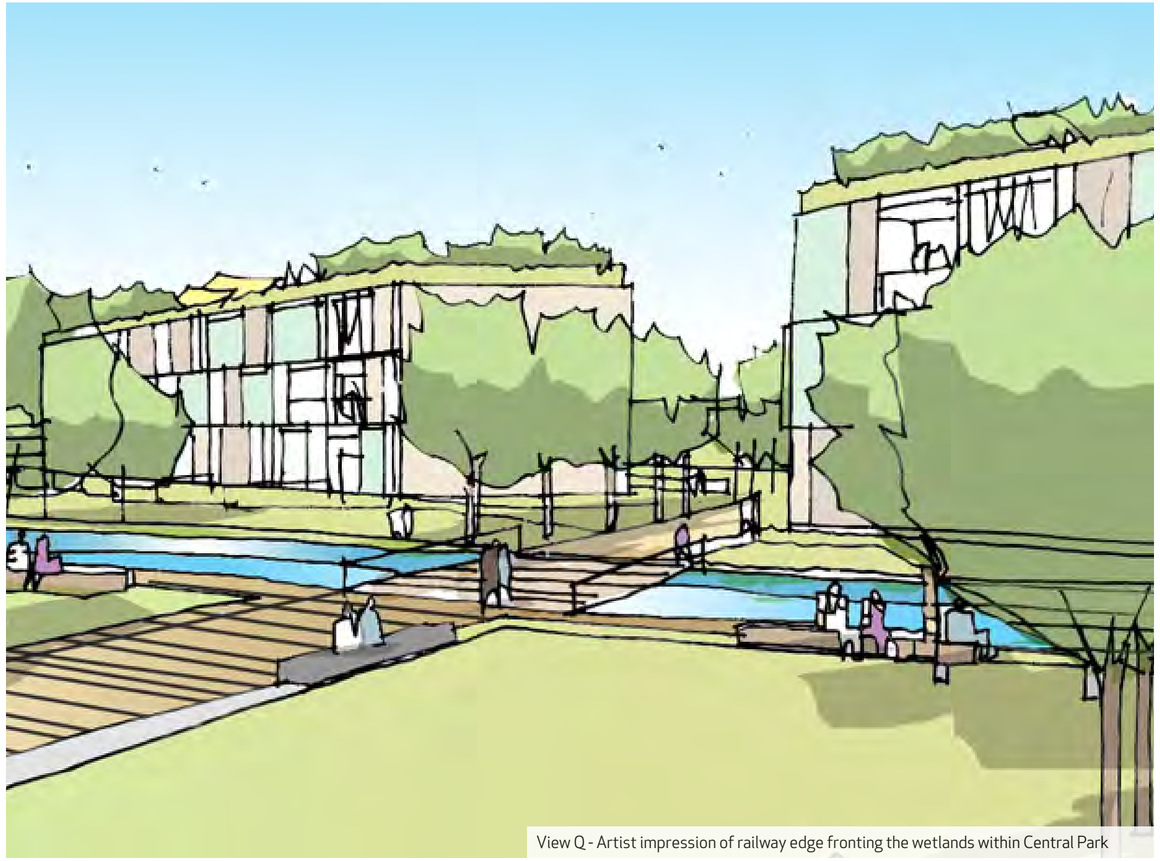

Gabion Wall


Varied green wall structure



Section GG on page 190
View P on page 192
View Q on page 193

View P - Artist impression of railway edge



View Q - Artist impression of railway edge fronting the wetlands within Central Park

4.15 Linkages

There are two primary and several secondary access points into the site which link vehicular, pedestrian and cycling movements between West Southall and Southall. Re-linking these networks into West Southall is vital in re-connecting West Southall into the existing urban grain and improving cross-site movement.

The two principal vehicular access points are South Road to the east and Pump Lane to the west. Pump Lane serves as the main entrance into the residential area and Central Park whilst South Road provides a connection to the East Street retail area including the town square and parking facilities.

The landscape spaces at the primary entrances are framed by the corresponding built and roadway form which will create the overall setting. Tree planting responds to the existing off-site boundary elements to frame access points, maximise visual links, open views or provide screening as appropriate.

Along South Road a strong visual and physical connection between the site and Southall Station is created to retain and enhance panoramic views over the site. This is also to allow for free pedestrian movement between West Southall and the station, clear orientation and identification of landscape features and landmark buildings.

There are several secondary access points northward towards Beaconsfield Road, north-westwards to Minet Country Park and southwards to Dudley Road. These additional linkages are key to connecting the development to the surrounding context and community.

The landscape treatment at these entrances through signage, bollards, lighting to aid orientation and security and street tree planting allows clear identification and legibility. Openness along the footpaths and cycleways is maximised to provide natural surveillance and safety.

The linkages to the north include access adjacent to the Blair Peach school and canalside path. Landmark pedestrian and cycle bridges provide key access to and from the Minet Country Park.

Function

- Provide legible linkages to surrounding area
- Frame views
- Create identity and aid orientation
- Vehicle and footpath/ cycleway access points
- Provision of visual barrier and landscape screening

Soft Landscape Treatment

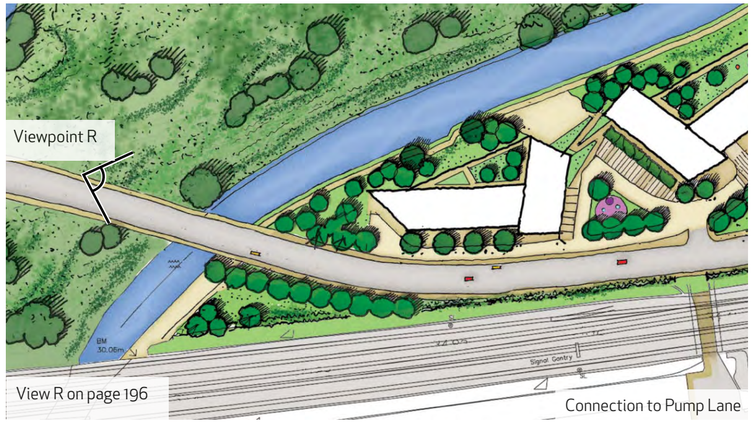
- Avenue tree planting
- Structural tree planting providing screening and framing views
- Mixed shrub planting with a variety of species to provide colour, texture, seasonal interest
- Clear stemmed avenue trees to provide shade, enclosure and clear site lines
- Grass verge

Hard Landscape Treatment

- Paving to footway and cycleways
- Lighting
- Boundary walls defined by combination of walling, timber fencing and metal railings.
- Sculptural elements to mark footpath/ cycleway entrances ie. timber carved bollard pedestrian/ cycle only entrances
- Coordinated high quality street furniture, lighting and signage

Clear and legible routes

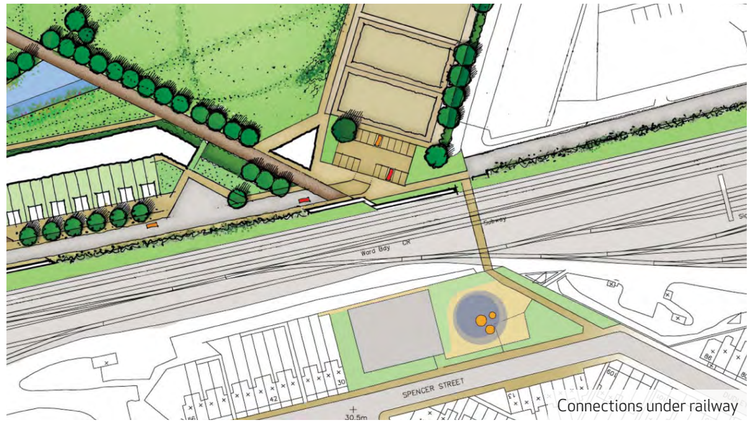
Framing views



View R on page 196

Connection to Pump Lane

Connections to Beaconsfield Road



Connections under railway

Connection to Minet Country Park

View R - Artist impression of approach from Pump Lane

View A2 - Artist impression of Eastern Gateway from South Road

4.16 Play and recreation strategy

A key component of children's development and learning is play and recreation. To provide a comprehensive range of play activities requires a sophisticated approach to the siting, orientation, design and selection of equipment and surfacing. Play facilities must be fit for purpose, safe, convenient and accessible. Research shows that the location of place for play is the single most important key to its success.

The opportunity to play creatively and with ease in high quality and safe environment is essential for children's behavioural development and early learning. Through their play and interaction with others or elements they acquire skills and abilities which can be learnt in no other way. Children in urban environments require play areas and facilities to allow these activities to occur. The quality of play facility is directly linked to the quality of experience and level of learning which a child can gain. Children's independence is related to the need for children of different ages to play at appropriate distances from home with the ability to access these facilities safely and independently.

Objectives

The play and recreation objective is to achieve a high quality and enjoyable experience within the public and private realm for children and young people. These areas are treated as incidental and flexible spaces. Design objectives which promote appropriate inclusion and improve the environment for children and young people include the following:

- Create playful, child-friendly and innovative design elements throughout the public realm
- Ease of access to play areas and spaces through the integration of pedestrian and cycle routes
- Promote independence through the design of safe, legible and well connected play spaces within the public realm
- Landscape elements create incidental play opportunities
- Integration of public art and sculpture so elements can be activity and age diverse
- Play streets to provide local playable spaces which are well-designed streets in conjunction with car share schemes or car free initiatives to reduce car use
- Inclusion of indoor play facilities for older children/ young people which could be incorporated into community facilities where appropriate
- Use of community gardens and vegetated roofs as a play and learning tool
- Ensure children and young people have free and unrestricted access to dedicated play space at all times
- Play environment to be safe and secure through design arrangement and natural surveillance

Strategy

Public or private shared spaces within the development are designed to allow for safe and stimulating play opportunities. Community courtyard gardens, sheltered and open space within the public realm and the play street are all designed to encourage free unobtrusive play. Each area has been developed to allow parents and child minders comfortable natural surveillance.

The strategy comprises of the three primary aspects:

Structured Play: These are formal play spaces which are located in the Central Park. They include the village green/ cricket pitch, playgrounds, sportgrounds and multi-use games area.

Unstructured Play: A variety of informal play and recreation can occur across the site within the open spaces that are designed to create safe and welcoming environment for all users. They include pocket and linear parks and playgrounds with integrated public art/ sculpture.

Educational: The community gardens and wetlands will provide opportunities for educational play. They allow children to develop a greater understanding of nature's cycles and processes.

The play and recreation strategy will also draw upon the areas wider recreation resource of Minet Country Park. Improvements to linkages between the structured play areas and parks of West Southall and the open areas of this district park will be through the canal bridges and supporting network of paths.

Current guidelines and policy

A well considered play strategy which satisfies the Mayor's Supplementary Planning Guidance (SPG), Providing for Children and Young People's Play and Informal Recreation (March 2008) will be designed at West Southall. The SPG outlines the need for varied play forms that provide appropriate provision for different age groups, whilst allowing for flexible play integrated throughout the open space.

The Mayor's Strategy has established a benchmark standard of a minimum of 10 sq. m of dedicated play space per child. The benchmark standard will be applied to the number of children within different age bands in the population to establish an overall requirement. This assessment has been carried out by specialist consultants and is included in the Play and Recreation Policy Provision section.

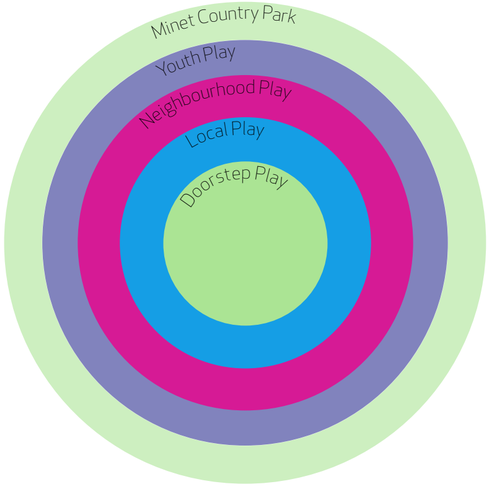
The proposed typologies of play spaces builds on the multi-functional concept of 'playable space' rather than play spaces and defines a hierarchy of play provision:

- Doorstep playable space - under 5s
  Elements: equipment, engaging play features, equipment and seating
- Local playable space – up to 11
  Elements: equipment, landform, kick-about area and seating
- Neighbourhood playable space - under and over 11s/ all ages
  Elements: equipment, kick-about area, skateboard/ bike facilities, basketball nets and seating
- Youth space (sport-based activities) – 12 plus
  Elements: facilities for informal sport & recreation, MUGA, exercise trails, youth shelter

Play and recreation provision

The strategy embraces the aspirations which are set out in the SPG to provide comprehensive and inclusive play provision for the development. The play spaces provided on site exceed the play space requirement calculated using the SPG benchmark.

The play space typologies will be designed as public open space with each typology offering different characteristics. In some play locations the different typologies will be combined, however some form of separation or boundary is desirable between youth spaces and other types of space in the hierarchy.



Play and recreation - key principles

Structured and unstructured play areas will strive to provide essential elements of good playground design including:

Risk and challenge	Enables children to develop important skills through experiencing controlled elements of risk
Adaptable equipment	Introducing unstructured play equipment which can be adapted to suit different children, scenarios and stories.
Variety	Catering for a range of ages as well as guardians accompanying the child. It is important to understand the development need according to the childs age.
Social interaction	Well designed street corner playgrounds are key in knitting together the social fabric of the community
Catering for basic requirements	Accessibility, successful management and durable play equipment, meeting the requirements of BS EN 1176 and BS EN 1177.
Integrated flexible play	Catering for different activities, different age groups at different times of the day. This will be achieved through • structured play • unstructured play • educational play

Doorstep play

Climbing wall feature

Interactive elements

Robust equipment

Social opportunities

Structured play

Space for kick about

Formal court provision

Opportunities for all ages

Local sports clubs

All weather facilities

Structured play

Incidental play

Small scale play

Art installations

Intrigue and curiosity

Seasonal delight

Unstructured play

Social play

Colour and nature

Pond dipping

Incidental play

Outdoor classrooms

Educational

Play and recreation - strategy plan

Play space (SPG guidelines)

Doorstep Playable Space

- 0 - 5 age group
- min. 100 sq m
- Engaging play features, equipment and seating

Local Playable Space

- 0 - 11 age group
- min. 300 sq m
- Equipment, landforms, kick about area and seating

Neighbourhood Playable Space

- all ages
- min. 500 sq m
- Secluded and open areas
- Equipment, kick about area, skateboard / bike facilities, basketball nets and seating

Youth Space

- 12 + age group
- min. 200 sq m
- Space and facilities for informal sport or recreation
- MUGA, exercise trails, boulders and youth shelter

5 min. walkzone - 400m

10 min. walkzone - 800m

Informal recreation / amenity

Homezone/Play streets

Wetlands

Public Squares

Central Park

Play and recreation - provision

Parkland, public squares, play spaces and home zones form an integral part of the landscape and public realm and are within resonable walking distances from both retail and residential areas.

The play spaces provided on site exceeds the play space requirement calculated using the London SPG of 10 sq m per child. The total play space is 2.50 hectares which is 1.27 hecatares greater than the requirement; this amounts to 20.5sq m per child within the site area.

The documents reviewed to calculate play provision requirement include:
•London Plan Supplementary Planning Guidance (SPG)
•Ealing Unitary Development Plan (UDP)
•Ealing Play Strategy

Base Information

Total site area	337,000 m2	33.7 ha
buildings		9.3 ha
open space		24.4 ha
Total open space	244,000 m2	24.4 ha
communal		4.6 ha
public		13.5 ha
highway		6.3 ha
Open space requirement per child		10m2
Child Yield		1,216
Play space requirement		1.23 ha
Play space provision		Total 2.5 ha
Doorstep Playable space		0.24 ha
Local Playable Space		0.16ha
Neighbourhood Playable Space		0.72 ha
Youth Space		1.38 ha

Informal recreation / amenity space provision	Total 11.0 ha
Public Squares	1.15 ha
Parkland	1.30 ha
Homezones	2.00 ha
Wetlands	1.15 ha
Public Realm	5.40 ha

1. Ealing Council Unitary Development Plan

Adopted 2004

Outdoor Playing Space for Children

- Garden space is no less than:
• 50 sq m for a house with under 5 habitable rooms
• at least 75 sq m for a larger house or for a group of up to 5 flats

Note: The space should be in a form that is adequate to accommodate children's play without loss of amenity to other residents.

Age breakdown for this development

0-2	3 to 4	5 to 11	12 to 16	17 to 18	19-59	60+
268	166	435	254	93	4635	644

TOTAL 6,495

2. The London Plan, SPG March 2008 and
The Mayor's Guide to Preparing Play Strategies, 2005

Providing for Children & Young People's Play & Informal Recreation

Outdoor Playing Space for Children

- Minimum 10 square meters of dedicated playspace/ child

B6: Play provision in new developments

No. of children	**10 – 29**	**30 – 49**	**50 – 79**	**80+**
Size of space required	100-300 sq m	300-500 sq m	500 – 800 sq m	800 sq m +
Facilities for under 5s	On-site doorstep playable space	On site local playable space	On-site local playable space	On-site local or neighbourhood playable space
Facilities for 5-11s	Off-site within 400 m			
Facilities for 12+	Off-site within 800 m	Off-site within 800 m	Off-site within 800 m or on-site subject to size and local circumstances	On-site youth space
Possible variation to reflect existing provision	If area is deficient in play space for 5–11s, some on-site facilities should be provided	If area is within 400 m of existing facilities for 5–11s, an off-site contribution may be considered if in accordance with Play Strategy	If area is deficient in spaces for 12+, some on-site facilities or new off-site provision should be provided within 800 m	If area is within 800 m of existing facilities for 12+, an off-site contribution may be considered if in accordance with Play Strategy

4.17 Biodiversity strategy

A well-designed public realm integrated into the biodiversity strategy and principles of sustainable living adds significant value to any development and the quality of people's lives. The richer the urban landscape in terms of native biodiversity, the greater the benefits in terms of human health and well-being.

National and Local Government legislation and policy guidance provides a strong planning framework for the protection of features of ecological value. New developments should now include measures to support the conservation status of certain species and habitats, in particular those listed on the priority lists of the National Biodiversity Action Plan and London Biodiversity Action Plan, and described in the Mayor's Biodiversity Strategy.

The biodiversity strategy for West Southall has explored a range of possible synergies and design solutions to maximise opportunities for native biodiversity enhancements within the redeveloped site including:

- Public open space (public squares, streetscapes and parks):
  Maximize the number of diverse species planting areas within hard and soft landscape areas and consider the green linkages between these spaces.
- Canal Corridor:
  Planting of native grasses, shrubs and trees along the canal edge reinforces this faunal corridor and green linkages between the site and Minet Park.
- Community gardens:
  Richly textured and diverse landscape types ranging from meadow grasses, fruit bearing trees, nectar rich ground covers, shrubs and biodiversity elements to encourage urban habitat opportunities.
- Green facades & roofscapes:
  Maximise the horizontal and vertical faces of the buildings through greenwalls and various roofscape typologies to improve the biodiversity value of the site.
- Communal residential courtyards:
  Lawn, shrub, wildflower and tree planting within the courtyards will provide a strong landscape framework within the site's urban context.
- Wetland area:
  Provides biodiversity and habitat opportunities. Richly textured and diverse landscape types ranging from meadow grasses, marginal and aquatic plants.

Biodiversity value

The function, character and biodiversity elements within these areas is developed in close association with each other to provide a multi-functional and well integrated landscape. Part of the biodiversity strategy is to provide a dense 'quantum' of vegetation on as many suitable horizontal and vertical surfaces as possible. The layout and connections of open spaces at West Southall carefully considers habitat opportunities with the aim of creating a successful network of green corridors for movement, migration and circulation of wildlife and people.

The proposed plant communities, especially on the roofspaces, walls, parklands, community gardens and streetscapes will offer opportunities to provide 'analogues' of important habitats found in the wider area and as listed on the London BAP. At ground level these will include native grasslands and deciduous tree planting. At roof level analogues of heathland, acid and chalk grassland and scree will be created. In other areas, such as the streets and community roof gardens, both native and non-native species will be selected for their native fauna value (ie. nectar, berries etc). These communities will in turn attract other native flora and fauna characteristics.

Amenity/ cultural/ educational value

The communal gardens and community roof gardens will provide an educational resource through a readable tableau that both delights and educates with seasonal change in both plant condition and the array of fauna using the site. Potential for iconic urban species including the Black Redstart, the House Sparrow and House Martin, bats, Stag Beetles and various colourful butterflies, could all be accommodated in the design. In addition the street tree planting, shrub and wildflower planting and species rich companion planting within the open space will enable the landscape to filter air, produce oxygen, provide shade and bring multiple psychological benefits to urban living and well being.

4.18 Roofscape typologies

Vegetated roof value

Roofs can provide significant visual amenity through the layout of gravels and plantings of grasses, wildflowers or shrubs. These bays will be designed on a relatively low nutrient mixture of crushed brick and crushed concrete. The depths of substrate will vary between 50-200 mm depth depending on the structural loading characteristics. Different colours of brick will be used to create different substrate effects in different areas for visual interest and to increase the micro-habitat variation and niches across the roof spaces. The biodiversity benefits coupled with the seasonal variation in the planting will create a dynamic and ecologically valuable roofscape.

Water collected from all roofs will form part of the sustainable drainage element and an integral part of the vegetated roofs. Where practical, water will be stored at basement level for re-use in irrigation. In addition, the wetland ponds in the central park will be located at higher levels to capture, filter and store rainwater to discharge into the lower wetland ponds. These ponds will be lined with pond liner, stones and aquatic marginal planting to ensure they are effective features in times of drought when water may not be present. Some of this water may also be filtered, collected and stored for re-use within the irrigation system.

Amenity

- Lightweight topsoil potentially required
- Locally sourced plug plants, seed and shrubs
- Reduced depth of rootballs to fruit trees
- Substrate depths range 200-1200mm (greater depths located over roof columns/ beams raised or mobile planters)
- Regular maintenance required
- Irrigation required/ ongoing

Brownroof

- Locally sourced substrate types
- Provide a variety of substrate depths 50-150mm (greater depths located over roof columns/ beams)
- Locally sourced seed mixes to create:
  - rock outcrop which reflects local geology ie. cliff edge, scree
  - lichen swards
  - moss swards
  - sedum swards
- Self maintaining within 1-2 years
- Irrigation required for establishment

Greenroof

- Locally sourced substrate types
- Substrate depths 100-400mm (greater depths located over roof columns/ beams)
- Locally sourced plug plants and seed mixes to create:
  - chalk and neutral grasslands and meadowflowers
  - river gravel
  - heathland
  - acid grassland
- Periodic maintenance required
- Irrigation required for establishment/ ongoing

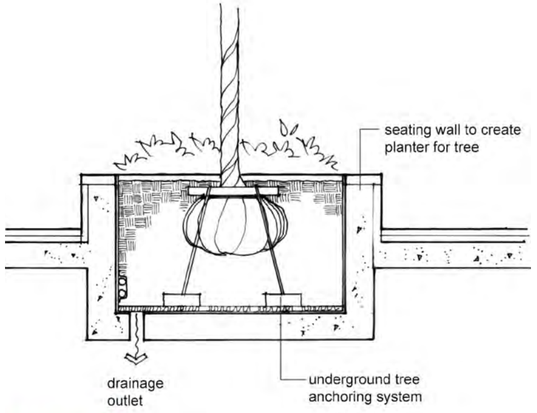
4.19 Courtyard planting details

Concept

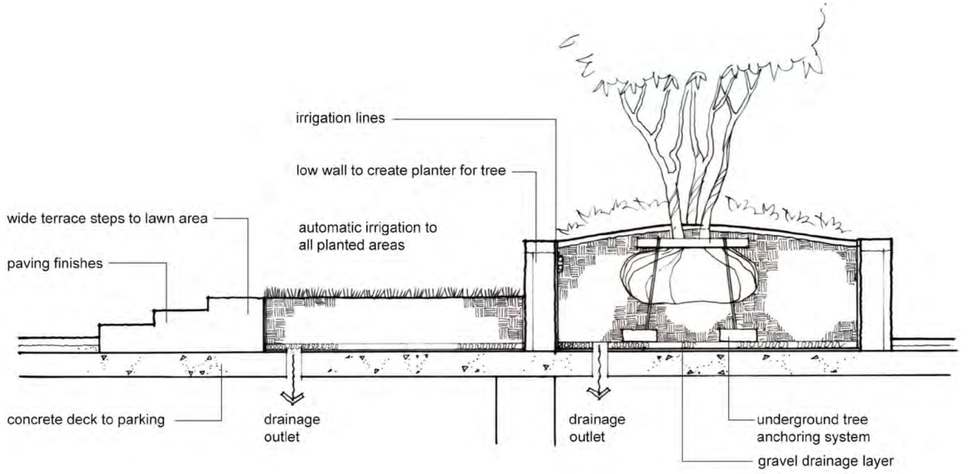
Successful podium planting should appear as though it is planted within natural ground. Where this is not possible, a gradual build up for the rootball is required. Street planting is flush to create a strong boulevard effect.

Elements for consideration

There are many factors to consider when deciding the location of trees and planting. Cost implications, irrigation and water requirements are important. The additional loading on slab and overall function of the space are also important. However any of the options 1-4 are acceptable.



Option 1



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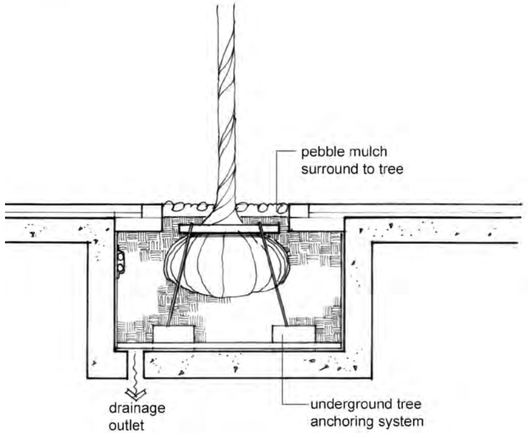
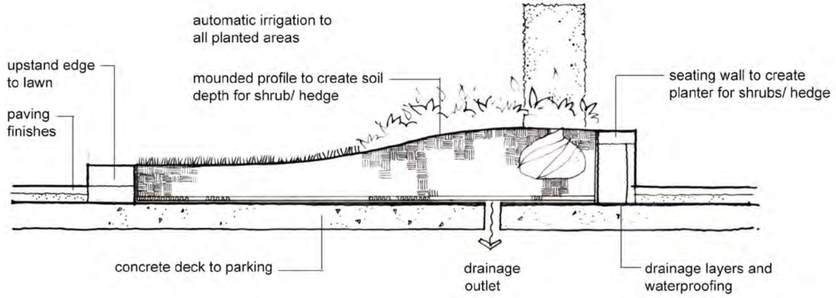


Option 3



Option 4

4.20 External lighting

External lighting creates an interesting environment which greatly influences the visual appearance of a building or space, providing a unique atmosphere during the evening hours. It is important that the proposed lighting scheme is considered in conjunction with the architectural and landscape design and integrated into the overall development for the site.

Lighting design aims:

Feature lighting:

- Complement West Southall and promote the development
- Create an amazing visual experience in key areas
- Integrate the mixed use development, commercial, retail and residential aspects of the development
- Create a theatrical backdrop with feature lighting
- Design to reflect the rich and diverse culture and nature of the area
- Lighting to reflect site sensitivities and awareness such as important habitat areas

Safety lighting:

- Provide a high quality environment for a thriving new community to enjoy safely and with ease
- Create spaces which are inviting and feel secure
- Facilitate and enhance after dark activities and events
- Define hierarchy of circulation routes at night time

Design Objectives

- Provide lighting that assists the visual enhancement of the site creating an exciting and safe environment
- Highlight architectural form of key buildings and landscape areas, thus creating visual links on site during the evening hours
- Incorporate luminaires that are integrated with design and style of architecture and landscape and where appropriate form design features themselves
- Create dynamic lighting effects by changing the lighting colour or brightness of the selected character areas (either seasonal or time related change) to enhance the character of the area, but also maintain a well lit environment to meet safety requirements
- Ensure lighting systems are integrated within the hard and soft landscape design preventing unwanted dark areas, but also allow for variation in the brightness to create desired contrasts
- Ensure that all luminaires are appropriate with respect to the environment into which they are installed e.g. unwanted light spill to environmentally sensitive areas not allowed
- Apply general principles of using light sources that are efficient, have longevity with regard to lamp life, are consistent in colour temperature and have good colour rendering creating a well lit safe atmosphere
- Use simple control systems so that the operation of lighting effects throughout the day and evening is automated.

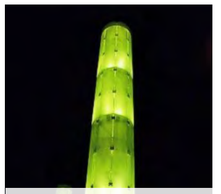
Key lighting design opportunities:

Town Square
Plazas
Boulevards
Bridges
Retail and leisure precincts
Landmark buildings
Streets
Parks
Landscape features
Public art
Canal side park
Built edges
Cycle and pedestrian routes


Reflected light source


Footpath feature


Gateway feature


Identity and legibility


Temporary installations


Intelligent surfaces

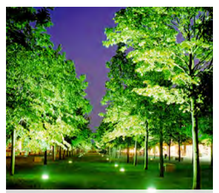

Animated groundplane


Edge animation


Legibility and orientation

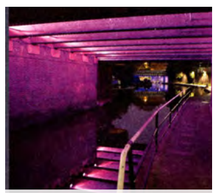

Special effects feature


Animated facade


Tree uplighting


Identity and legibility


Safety and legibility

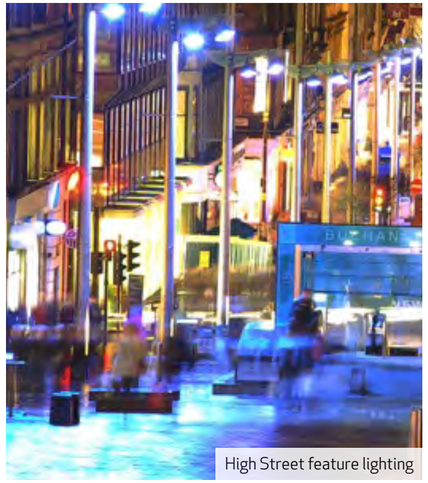

Colour and identity

Lighting plan

The lighting strategy complements the urban design to create visual hierarchy after dark. Variations in brightness allow the eye to be drawn to principal entrances, and from one space to another, ensuring the overall composition is balanced, holistic and integrated.

Key consideration has been taken to respect the local ecological habitat along the canal with reduced brightness and carefully directed lighting in these areas.

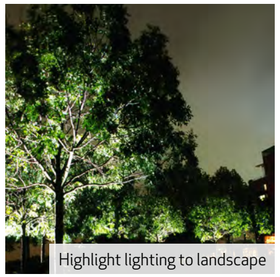
The landscape and external lighting is designed to achieve a safe public realm at all times and ensure that natural surveillance from adjacent buildings overlooking the routes and spaces is enhanced.



High Street feature lighting

Illuminated base of buildings

Sensitive lighting to canal edge



Highlight lighting to landscape

4.21 Landscape summary

Section 4.21 describes the design principles that apply to the landscape to ensure spatial and quality standards are maintained.

The principles are structured as follows:

- Minimum area requirements for landscape and public realm, Principle 4.1
- Landscape General Arrangement - Principle 4.2-4.6
- Soft landscaping planting, Principle 4.7
- Existing trees retained, Principle 4.8
- Hard landscape paving, Principle 4.9
- Lighting, Principle 4.10
- Street furniture, Principle 4.11
- Play, Principle 4.12
- Art and landmark features, Principle 4.13

Minimum area requirements for landscape and public realm

- Principle 4.1A — Gateway Place Area
  = 1,500 sqm minimum
- Principle 4.1B — Town Square Area
  = 8,500 sqm minimum
- Principle 4.1C — Play & Recreation Area
  = 27,000 sqm minimum
  This area is to include:
  - 1,300 sqm of ornamental topiary garden
  - 5,000 sqm for sport pitches
  - 8,000sqm for village green/ cricket pitch
- Principle 4.1D — Wetland Area
  = 11,500 sqm minimum
- Principle 4.1E — Canal Plaza Area
  = 2,000 sqm minimum
- Principle 4.1F — Canalside Park Area
  = 3,500 sqm minimum
- Principle 4.1G — Community Garden Area
  = 2,300 sqm minimum
- Principle 4.1H — Youth Space Area
  = 200 sqm minimum per space
- Principle 4.1J — Neighbourhood Playable Space Area
  = 500 sqm minimum per space
- Principle 4.1K — Local Playable Space Area
  = 300 sqm minimum per space
- Principle 4.1L — Doorstep Playable Space Area
  = 100 sqm minimum per space

Landscaping general arrangement

Principle 4.2 - site-wide principles

- 4.2A All elements of streetscape (to include but not limited to the following: seating, bollards, bus shelters, barriers and railings, refuse storage, re-cycling facilities, way finding, highways signage, utilities cabinets, CCTV, lighting, cycle storage etc) are to be of co-ordinated design as set out in detail in principle 4.10 lighting and Principle 4.11 street furniture
- 4.2B All pedestrian routes and areas are to comply with 'Secure by Design' principles to provide natural surveillance
- 4.2C All aspects of the streetscape shall be co-ordinated to achieve a safe clutter free environment.
- 4.2D All paving and hard surface materials are to be of a co-ordinated design as set out in principle 4.9, hard landscape paving
- 4.2E All hard landscape detail design is to provide inclusive access for all users
- 4.2F All pedestrian road crossings and shared surfaces are to be flush with adjacent pavements

Principle 4.3 - East and West Street & Park Street (north)

- 4.3A Overall width of street (building face to building face) to be a minimum width of 28.2 metres
- 4.3B Central reservation landscape strip to be a minimum width of 3.0 metres
- 4.3C Footway/pavement to be a minimum width of 5.35 metres including a 3.0 metre width treepit zone
- 4.3D Width of main carriageway to be a maximum width of 7.25 metres to include combined bus and cycle way
- 4.3E All pedestrian crossings or shared surfaces to be flush with adjacent pavement
- 4.3F Bus shelter location and design are to be co-ordinated with streetscape as set out in principle 4.11

Principle 4.4 - Central Park

- 4.4A Sport pitches to be a minimum length of 130 metres and 40 metres width
- 4.4B Sport pitch offset from site boundary to be a minimum width of 8.0 metres for planting and fencing
- 4.4C Village green/ cricket pitch to be a minimum radius of 50.0 metres
- 4.4D Route from community centre to sports pavilion and Dudley Street underpass to be a minimum width of 3.0m
- 4.4E The land use in the wetland zone is to be predominantly water. It is to be designed to optimise bio-diversity and habitat opportunities.
- 4.4F The wetland ponds are to have a three level profile for bio-diversity:

  -Deeper water refuge: up to 2.0 metres depth with shoal features to create an uneven topography and provide varying depths

  -Half depth area: 0.75-1.0 metre depth with a gradient of 1:10

  -Fringe edge: shallow gradient of 1:30, maximise south facing aspect
- 4.4G There will be a minimum of 2 timber boardwalks to provide access across wetland area
- 4.4H All marginal and aquatic planting species will be native and of local provenance where possible.
- 4.4I Pond design will be carefully considered to ensure the SUDS and fresh water ponds operate as separate hydrological water systems. However, visually and from a biodiversity perspective the two will work together as successful and cohesive habitat.

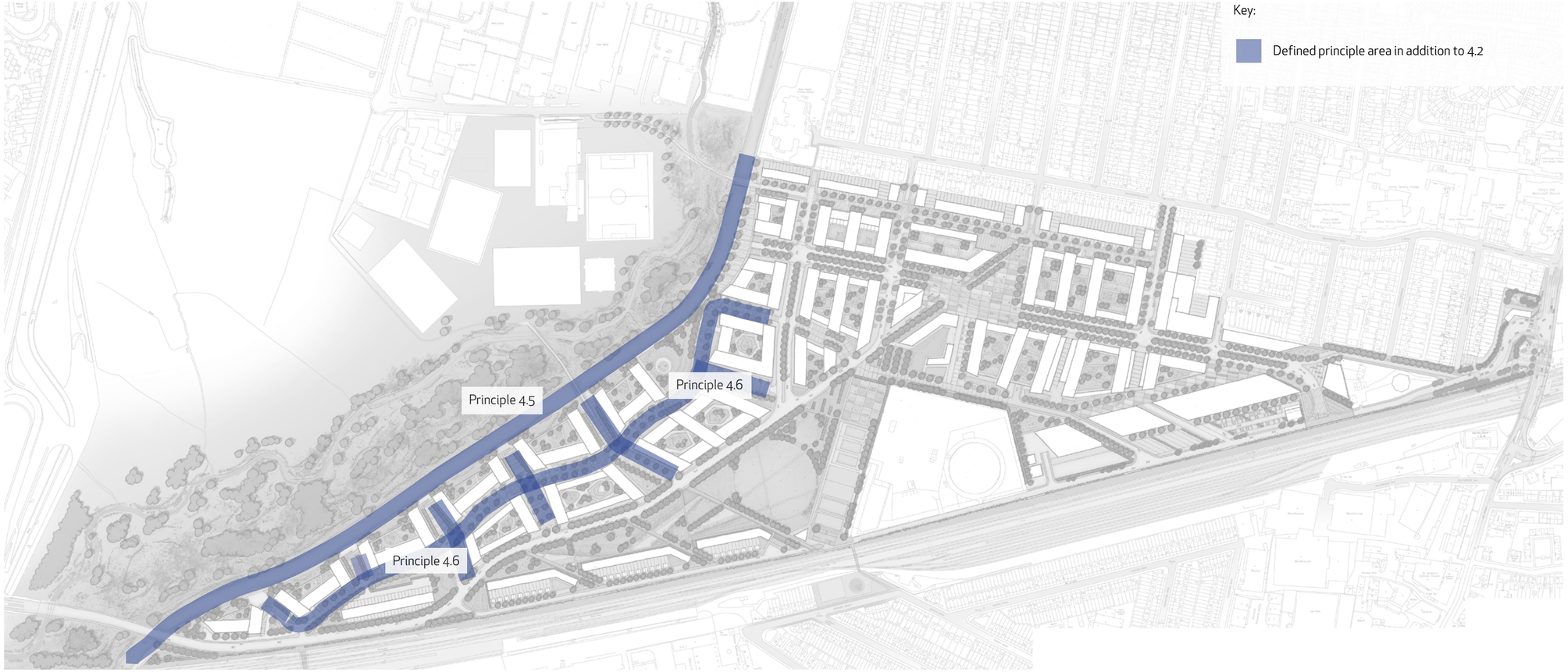
Landscaping general arrangement cont.

Principle 4.5 - canalside

- 4.5A Offset between canal edge and built form is a minimum of 8.5 metres
- 4.5B Active Canal Zone: offset between canal edge and built form is a minimum of 14.0 metres and a maximum of 25.0 metres
- 4.5C Active Canal Zone: Landscape and street furniture free zone for boat users to be minimum distance of 2.5 metres. Mooring rings shall be provided.
- 4.5D Passive Canal Zone: This zone shall be predominantly soft landscape. A footpath/cycleway shall be provided to a minimum width of 2.0m and set back 1.5m from canal edge
- 4.5E Passive Canal Zone: There shall be mooring rings provided at locations along the passive canal zone. There will be an area of hard paving at these locations
- 4.5F The pedestrian/cycle bridges shall be accessible for all users

Principle 4.6 - play street & linkages

- 4.6A The play streets are to be of a co-ordinated design with hard and soft landscape treatments as set out in principle 4.7, 4.9, 4.10, 4.11
- 4.6B The play streets are to be designed to include the following:
  - provide a place for people through a high quality street environment
  - allow for a well-designed arrangement of on-street parking
  - provide convenient access to active frontages
  - encourage street vitality
  - provide well designed, connected and legible streets to meet the needs of pedestrians, cyclists and public transport users
  - accommodate a range of users
  - create visual interest and amenity
  - encourage social interaction

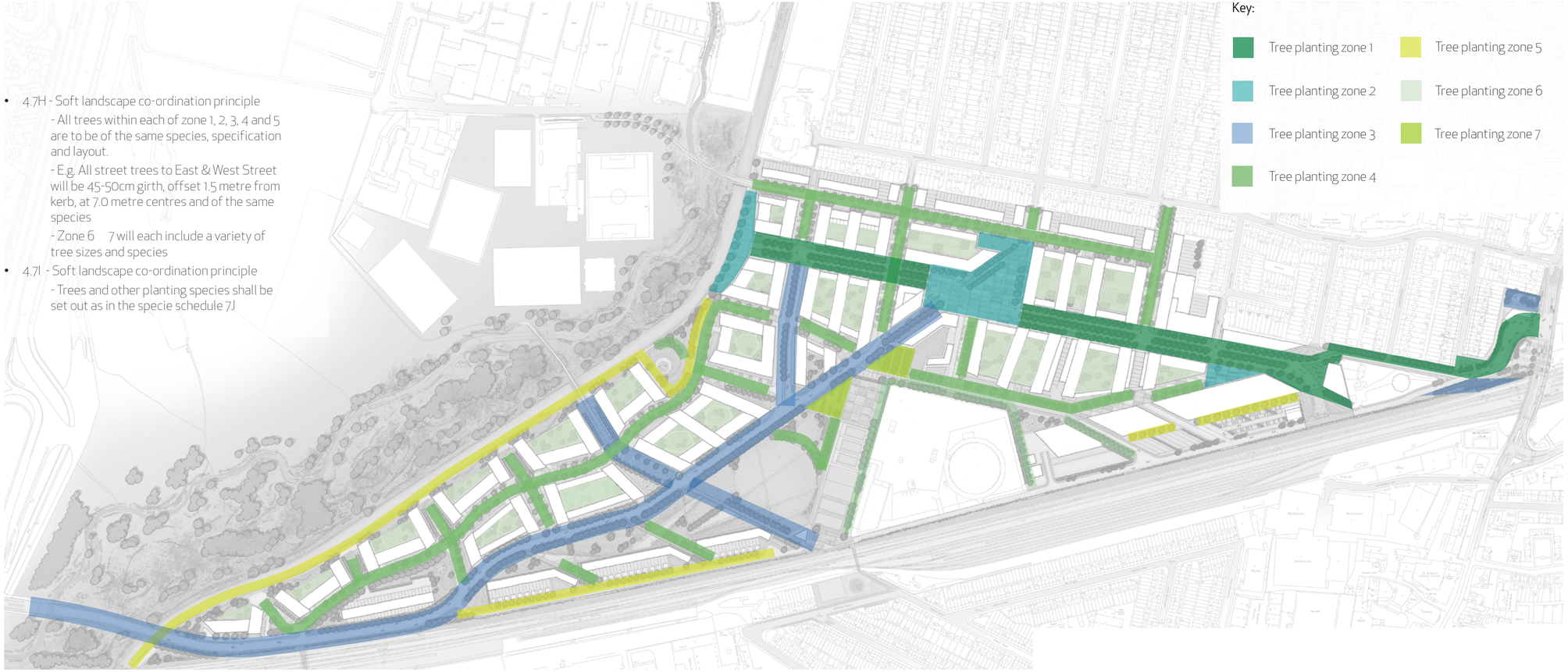


Soft landscaping planting

Co-ordination Principles
Principle 4.7 - Tree Specification

- 4.7A - Zone 1 – Semi mature trees
  - Minimum girth = 45 - 50cm
  - Height = 8.0 – 10.0 metres
- 4.7B - Zone 2 – Semi mature trees
  - Minimum girth = 45 - 50cm
  - Height = 8.0 – 10.0 metres
- 4.7C - Zone 3 – Semi mature trees
  - Minimum girth = 40 - 45cm
  - Height = 6.0 – 8.0 metres
- 4.7D - Zone 4 – Semi mature trees
  - Minimum girth = 30 - 35cm
  - Height = 5.0 – 7.0 metres
- 4.7E - Zone 5 – Semi mature trees
  - Minimum girth = 20 - 25cm
  - Height = 3.0 – 5.0 metres
- 4.7F - Zone 6 – Extra-heavy standard trees
  - Minimum girth = 18 - 25cm
  - Height = 2.5 – 3.5 metres
- 4.7G - Zone 7 – Semi mature trees
  - Variable girth = 20 - 50cm
  - Height varies = 3.0 – 10.0 metres
  - Specimen trees to include:
    - box form
    - topiary form
    - multi-stem
  - Specimen hedge and shrubs to include:
    - pre-formed hedge
    - topiary hedge
    - ornamental shrub
    - sensory shrubs
  - Specimen herbaceous species to include plants for:
    - flower interest
    - colour interest
    - botanical interest
    - seasonal variation
    - sensory experience

- 4.7H - Soft landscape co-ordination principle
  - All trees within each of zone 1, 2, 3, 4 and 5 are to be of the same species, specification and layout.
  - E.g. All street trees to East & West Street will be 45-50cm girth, offset 1.5 metre from kerb, at 7.0 metre centres and of the same species
  - Zone 6 7 will each include a variety of tree sizes and species
- 4.7I - Soft landscape co-ordination principle
  - Trees and other planting species shall be set out as in the specie schedule 7J



4.7J species schedule

Zone 1
Trees will be selected from the following:

Botanical Name	Common Name
Liquidambar Styraciflua	Sweet gum
Platanus hispanica	London Plane

Zone 2
Trees will be selected from the following:

Botanical Name	Common Name
Liquidambar Styraciflua	Sweet gum
Platanus hispanica	London Plane
Tilia spp. (non drip)	Lime

Zone 3
Trees will be selected from the following:

Botanical Name	Common Name
Carpinus betulus	Hornbeam
Fraxinus spp.	Ash
Liriodendron tulipfera	Tulip tree
Liquidambar Styraciflua	Sweet gum
Platanus hispanica	London Plane
Quercus spp.	Oak

Zone 4
Trees will be selected from the following:

Botanical Name	Common Name
Betula spp.	Birch
Pyrus spp.	Pear
Sorbus spp.	Mountain Ash
Pinus spp.	Pine
Prunus spp.	Cherry


Platanus hispanica


Pyrus chanticleer


Tilia platyphyllos


Prunus avium 'plena'


Tilia Cordata 'greenspire'


Amelanchier lamarkii


Quercus coccinea


Fagus sylvatica


Betula spp.


Sorbus aucuparia


Carpinus betulus


Malus spp.


PInus spp.


Prunus spp.


Pyrus communis


Acer campestre


Liquidambar

Fraxinus spp.


Liriodendron


Quercus robur

Zone 5
Trees will be selected from the following:

Botanical Name	Common Name
Acer campestre	Field Maple
Tilia spp. (non drip)	Lime
Quercus spp.	Oak
Pyrus spp.	Pear

Zone 6
Trees will be selected from the following:

Botanical Name	Common Name
Amelanchier lamarkii	Snowy Mespilus
Alnus glutinosa	Common Alder
Betula spp.	Birch
Malus spp.	Apple
Morus nigra	Mulberry
Pyrus spp.	Pear

Zone 7
Planting will be selected from the following:

Botanical Name	Common Name
Acer spp.	Maple
Catalpa Bignonoides	Indian bean tree
Cercis siliquastrum	Judas tree
Malus spp.	Apple
Morus nigra	Mulberry
Prunus spp.	Cherry
Taxus baccata	Yew
Tilia spp.	Lime


Cercis siliquastrum


Pyrus chanticleer

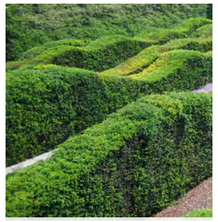

Taxus baccata


Prunus avium 'plena'


Tilia Cordata 'greenspire'


Amelanchier lamarkii


Quercus coccinea


Taxus baccata


Betula spp.


Acer platanoides


Morus nigra


Malus spp.


Prunus spp.


Alnus spp.

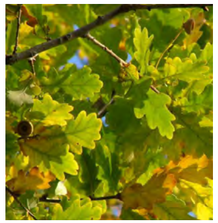

Pyrus communis


Catalpa Bignonoides


Acer campestre


Tilla spp.


Prunus spp.


Quercus robur

4.7J species schedule continued
Zones 1-7

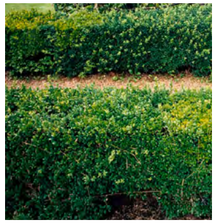
Shrubs, hedges and groundcovers -
To be selected from the following:

Botanical Name	Common Name
Arundinaria spp.	Bamboo
Berberis spp.	Barberry
Buddleia spp.	Butterfly Bush
Buxus sempervirens	Box
Carpinus spp.	Hornbeam
Ceanothus spp.	Lilac
Choisya ternata	Mexican orange blossom
Cistus spp.	Rock rose
Cornus spp.	Dogwood
Cotinus spp	Smoke bush
Cotoneaster spp.	Cotoneaster
Cytisus spp.	Broom
Elaeagnus spp.	Elaeagnus
Escallonia	Escallonia
Euonymous	Spindleberry
Fagus spp.	Beech
Fatsia japonica	Japanese aralia
Hebe spp.	Hebe
Hydrangea spp.	Hydrangea
Juniperus communis	Common juniper
Lavandula agustifolia	Lavender
Laurus nobilis	Bay tree
Lonicera spp.	Honeysuckle
Mahonia	Oregon grape
Osmanthus spp.	Osmanthus
Pachysandra spp.	Pachysandra
Philadelphus spp.	Mock orange
Photinia x fraseri 'Red Robin'	Christmas berry
Prunus spp.	Laurel
Pyracantha spp.	Firethorn
Rosa spp.	Rose
Rosmarinus	Rosemary
Skimmia spp.	Skimmia
Spiraea	Spiraea
Viburnum spp.	Viburnum
Vinca spp.	Lesser periwinkle

Native shrub planting -
To be selected from the following:

Botanical Name	Common Name
Cornus spp.	Dogwood
Corylus avellana	Hazel
Euonymus europaeus	Spindle tree
Ilex aquifolium	Holly
Prunus spinosa	Blackthorn
Rosa rugosa	Shrub rose
Rosa Canina	Dog rose
Salix spp.	Willow
Viburnum lantana	The wayfaring tree
Viburnum opulus	Guelder rose

Shrubs, hedges and groundcovers


Buxus sempervirens


Fagus spp.


Lavandula agustifolia


Lonicera pileata

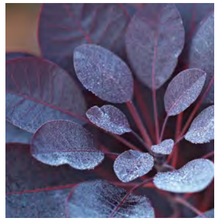

Rosmarinus


Ceanothus spp.


Hebe spp.

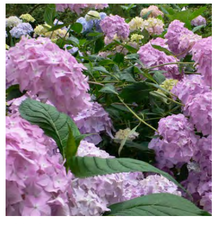

Berberis


Cistus spp.


Cotinus spp.


Escallonia


Euonymous


Hydrangea spp.


Mahonia spp.


Vinca spp.

Native shrubs


Viburnum opulus


Prunus spinosa


Rosa Canina


Ilex aquifolium


Cornus sanguinea

4.7J species schedule continued
Zones 1-7

Herbaceous/bulbs planting -
To be selected from the following:

Botanical Name	Common Name
Anemone japonica	Japanese Anemone
Cerastium tormentosum	Snow in summer
Convallaria majalis	Lily of the Valley
Crocus tommasinianus	Crocus
Euphorbia Characias	Spurge
Galanthus nivalis	Common snowdrop
Geranium renardii	Geranium
Helleborus foetidus	Hellebore
Liriope muscari	Lily turf
Narcissus spp.	Daffodil
Tulipa	Tulip

Climbing plants -
To be selected from the following:

Botanical Name	Common Name
Clematis spp.	Clematis
Hedera helix	Common Ivy
Humulus lupulus	Hop
Hydrangea spp.	Hydrangea
Jasminium nudiflorum	Winter Jasmine
Lonicera spp.	Honeysuckle
Parthenocissus quinquefolia	Virginia Creeper
Parthenocissus tricuspidata	Boston Ivy
Vitis spp.	Vines
Wisteria spp.	Wisteria

Grasses -
To be selected from the following:

Botanical Name	Common Name
Carex spp.	Sedge
Deschampsia caespitosa	Tufted Hair-grass
Miscanthus spp.	Maiden grass
Pennisetum alopecuroides	Fountain grass
Pennisetum setaceum rubrum	African fountain grass
Stipa gigantea	Giant feather grass

Marginal and aquatic plants -
To be selected from the following:

Botanical Name	Common Name
Caltha palustris	Marsh marigold
Carex nigra	Common sedge
Iris pseudacorus	Yellow flag
Iris sibirica	Iris
Juncus effuses	Soft rush
Lotus ulignosus	Marsh trefoil
Mentha aquatica	Water mint
Phragmites australis	Common reed
Ranunculus acris	Meadow buttercup
Schoenoplectus	Club rush

Herbaceous


Convallaria majalis


Euphorbia Characias


Helleborus foetidus


Anemone japonica


Cerastium

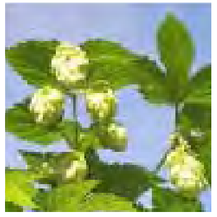
Climbers


Vitis vinifera


Jasminum nudiflorum


Wisteria


Parthenocissus tricuspidata


Humulus lupulus

Grasses


Carex sylvatica


Carex pendula


Deschampsia caespitosa


Pennisetum alopecuroides


Pennisetum setaceum rubrum

Wetland and aquatics


Phragmites australis


Caltha palustris


Iris sibirica


Lotus ulignosus


Iris pseudacorus

Existing trees retained

Principle 4.8 - Tree Retention

- 4.8A The strategy is to retain all existing trees where practicable. Final confirmation of trees to be retained shall be subject to the following:
  - Encountered levels of contamination during works and other below ground conditions currently unknown
  - Construction work requirements

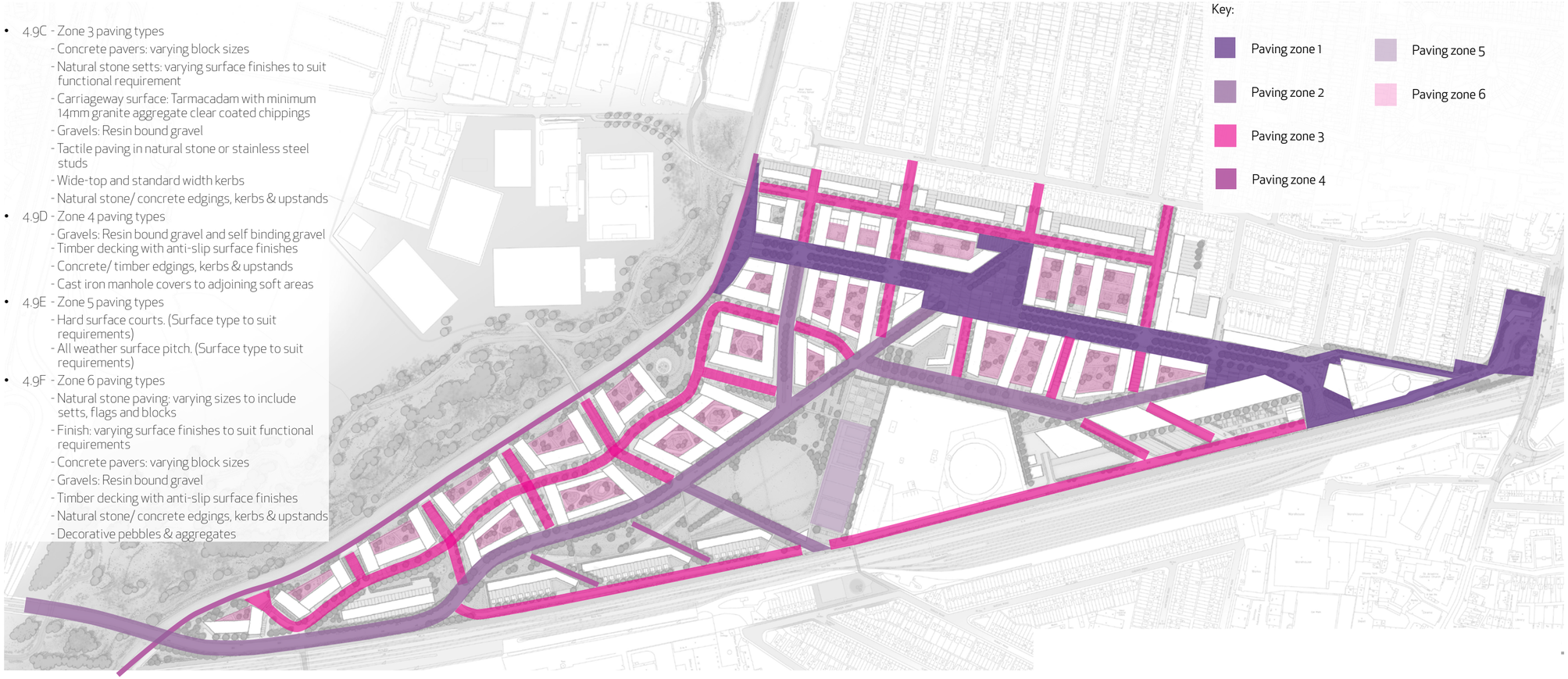
- 4.8B Trees to be retained and protected as in accordance with BS 5839:2005 Trees in relation to construction

- 4.8C The Arboricultural report (May 2008, White Young Green) highlights the following:
  - There are no TPOs within the site boundary
  - There are no Category A trees or groups within the site boundary
  - 79 trees were identified as Category B trees (within the site boundary and including adjacent areas surveyed within Minet Country Park)
  - 86 trees were identified as Category C trees (within the site boundary and including adjacent areas surveyed within Minet Country Park)
  - 44 trees were identified as Category R trees and will require felling because of their condition, irrespective of the development (within the site boundary and including adjacent areas surveyed within Minet Country Park).
  - Trees to be retained within the site boundary, identified by the following numbers in the arboricultural report (May 2008):
    5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 19, 21, 22, 23, 36, 38, 39, 40, 41, 43, 64, 65, 67, 68, 69, 70, 71, 77, 78, 79, 80, 81, 86, 87, 88, 89, 90, 96, 97, 98, 99, 112, 113, 115, 117, 195, 211, 215, 216, 228, 230, 231

Hard landscape paving

Principle 4.9 - Paving

- 4.9A - Zone 1 paving types
  - Natural stone paving: varying sizes to include setts, flags and blocks
  - Finish: varying surface finishes to suit functional requirements
  - Carriageway surface: Tarmacadam with minimum 14mm granite aggregate clear coated chippings
  - Tactile paving in natural stone or stainless steel studs
  - Wide-top kerbs
  - Natural stone edgings, kerbs & upstands
  - Manholes: All manhole service covers shall be recessed type to accomodate adjacent paving material in pedestrian and shared surface areas
  - Identification of covers required by relevant statutory authorities/utility company, to be provided on the cover frame
  - Special paving types to the Town Square, Canal Plaza, Gateway Place may include the following: engraved/ inscription paving; bespoke paving features, interactive paving or other feature element
  - Surface water drainage elements to Town Square, Canal Plaza, Gateway Place shall use slot and channel drains, integrated into the paving design
- 4.9B - Zone 2 paving types
  - Natural stone paving: varying sizes to include setts, flags and blocks
  - Finish: varying surface finishes to suit functional requirements
  - Carriageway surface: Tarmacadam with minimum 14mm granite aggregate clear coated chippings
  - Concrete pavers: varying block sizes
  - Tactile paving in natural stone or stainless steel studs
  - Wide-top kerbs
  - Natural stone/ concrete edgings, kerbs & upstands
- 4.9C - Zone 3 paving types
  - Concrete pavers: varying block sizes
  - Natural stone setts: varying surface finishes to suit functional requirement
  - Carriageway surface: Tarmacadam with minimum 14mm granite aggregate clear coated chippings
  - Gravels: Resin bound gravel
  - Tactile paving in natural stone or stainless steel studs
  - Wide-top and standard width kerbs
  - Natural stone/ concrete edgings, kerbs & upstands
- 4.9D - Zone 4 paving types
  - Gravels: Resin bound gravel and self binding gravel
  - Timber decking with anti-slip surface finishes
  - Concrete/ timber edgings, kerbs & upstands
  - Cast iron manhole covers to adjoining soft areas
- 4.9E - Zone 5 paving types
  - Hard surface courts. (Surface type to suit requirements)
  - All weather surface pitch. (Surface type to suit requirements)
- 4.9F - Zone 6 paving types
  - Natural stone paving: varying sizes to include setts, flags and blocks
  - Finish: varying surface finishes to suit functional requirements
  - Concrete pavers: varying block sizes
  - Gravels: Resin bound gravel
  - Timber decking with anti-slip surface finishes
  - Natural stone/ concrete edgings, kerbs & upstands
  - Decorative pebbles & aggregates



Hard landscape paving cont.

Co-ordination Principles

- 4.9G - Hard landscape co-ordination principle
  - All paving to be continuous throughout each element within each zone.
    For example, all footpath paving to East and West Street shall be flag stone paving using Scoutmoor York stone units of 900 x 600mm. There may be variety of texture and unit sizes as required to suit functional requirement i.e. tactile paving, shared surface, pedestrian crossings.
- 4.9H - Hard landscape co-ordination principle
  - All service covers shall be aligned to co-ordinate with landscape arrangement and paving orientation.
- 4.9I - Hard landscape co-ordination principle
  - All exposed elements of surface water drainage channels are to be co-ordinated and aligned with the paving orientation and arrangement
- 4.9J - Hard landscape co-ordination principles
  - The principles of inclusive design shall be used throughout
- 4.9K - Hard landscape co-ordination principle
  - Loadings: All paving types to suit vehicular and pedestrian loadings as required
- 4.9L - Hard landscape co-ordination principle
  - Hard landscape materials shall be set out as in the hard landscape materials schedule 9M

4.9M hard landscape materials schedule

Zone 1
- York stone paving
- Granite stone paving
- Limestone paving
- Porphyry stone paving
- Tactile paving in natural stone or stainless steel studs
- Tarmacadam with granite aggregate clear coated chippings
- Natural stone edgings, kerbs and upstands
- Feature paving

Zone 2
- Granite stone paving
- Large unit concrete pavers with granite aggregates
- Granite stone setts
- Tarmacadam with granite aggregate clear coated chippings
- Tactile paving in natural stone or stainless steel studs
- Granite kerbs
- Natural stone edgings, kerbs and upstands

Zone 3
- Large unit concrete pavers
- Granite stone setts
- Tarmacadam with granite aggregate clear coated chippings
- Resin bound gravel
- Tactile paving in natural stone or stainless steel studs
- Natural stone/concrete edgings, kerbs and upstands

Zone 4
- Resin bound gravel
- Self binding gravel
- Timber decking
- Concrete/timber edgings

Zone 5
- Hard surface courts with playing lines.
- All weather surface pitch with playing lines.

Zone 6
- York stone paving
- Granite stone paving
- Large unit concrete pavers with granite aggregates
- Granite/york stone setts
- Resin bound gravel
- Timber decking
- York stone/granite/concrete edgings
- Decorative pebbles & aggregates

Natural stone paving


Yorkstone


Mixed granite


Limestone


Granite setts


Porphyry Paving

Other paving materials


Concrete paving

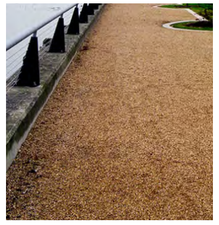

Concrete pavers with granite aggregates


Concrete pavers with granite aggregates


Concrete kerb


Tarmacadam with granite aggregates


Timber decking


Resin bound gravel

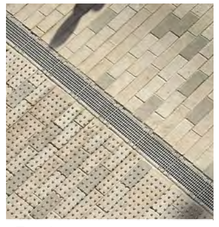

Services infrastructure intergrated into landscape


Service cover


Tree within hard landscape

Other paving types and features


Discreet surface storm water


Tactile paving


Public art features


Intergrated steps and ramps


Intergrated steps and ramps

Lighting

Principle 4.10 - Lighting

- 4.10A- Zone 1 lighting types
  - Road column light: Stainless steel, height range 6-10 metres
  - Footpath column light: Stainless steel, height range 4-6 metres
  - Footpath wall/ building mounted light: Stainless steel
  - Feature lighting may be included
- 4.10B- Zone 2 lighting types
  - Footpath column light: Stainless steel, height range 4-6 metres
  - Low level footpath light: Stainless steel illuminated bollard
  - Footpath wall/ building/ upstand mounted light: Stainless steel
  - Feature lighting may be included
- 4.10C- Zone 3 lighting types
  - Road column light: a variety of materials and finishes may be used, height range 6-10 metres
  - Low level footpath light: illuminated bollard, a variety of materials and finishes may be used
  - Feature lighting may be included
- 4.10D- Zone 4 lighting types
  - Footpath column light: a variety of materials and finishes may be used, height range 4-6 metres
  - Low level footpath light: illuminated bollard, a variety of materials and finishes may be used
  - Footpath wall/ building mounted light: a variety of materials and finishes may be used
  - Feature lighting may be included
- 4.10E- Zone 5 lighting types
  - Low level footpath light: illuminated bollard, a variety of materials and finishes may be used
  - Lights shall be control spill, dark skies compliant
- 4.10F- Zone 6 lighting types
  - Low column light: control-spill illuminated bollard, a variety of materials and finishes may be used
  - Low level footpath light: control-spill illuminated bollard, a variety of materials and finishes may be used
  - Parkland wall/ upstand mounted light: a variety of materials and finishes may be used
  - Feature lighting may be included
- 4.10G- Zone 7 lighting types
  - Sports pitch column light: control-spill light, a variety of materials and finishes may be used, height range 4-6 metres
  - Low level footpath light: control-spill illuminated bollard, a variety of materials and finishes may be used
- 4.10H- Zone 8 lighting types
  - Low level footpath light: illuminated bollard, a variety of materials and finishes may be used
  - Footpath wall/ building mounted light: a variety of materials and finishes may be used
  - Feature lighting may be included