03. DESIGN PARAMETERS

Design parameters

03.01 Design vision principles

This Development Framework supports Bristol City Council's strategic themes of delivering homes and communities, alongside their foundational principles of equality and inclusion, resilience, sustainability and world-class employment.

An extensive programme of public engagement that commenced in 2021/2022 resulted in key commitments to guide the transformation of Western Harbour. It was endorsed by Bristol City Cabinet on 12th July 2022.

Build on its tradition of innovation

Tackle challenges

Building on the legacy of maritime ingenuity and engineering innovation exemplified by Brunel, the development should provide ground-breaking, innovative solutions for the city's 21st century challenges.

Integrate resilience

A resilient flood protection system, sensitive to heritage assets, will be integrated into a playful and inclusive landscape design, forming a safe threshold between land and water.

Achieve net-zero

Lead the way for the city's sustainable future through regenerative development that is climate resilient and net-zero in operation.

Run on green energy

Innovative green energy systems should be integral to all new buildings, ensuring efficiency on a neighbourhood wide level.

Build-in sustainable drainage

The built environment will integrate green and blue surfaces in the landscape, streets and on roofs to achieve a sustainable drainage system,

Biodiverse built environment

Biodiversity net-gain will be achieved through the integration of wildlife friendly habitats in buildings and the public realm, for example through planting, bat and bird boxes, green roofs, green walls, and living structures.

Be a distinctive gateway to Bristol

Welcome to all

Western Harbour's regeneration should honour its historical role as the gateway between Bristol and the countryside, creating a destination where visitors and locals can enjoy both land and water.

Reduce local traffic

Amenities will be located within walking distance while cycling routes will be legible and safe. Public transport and active travel routes will be prioritised over cars.

Have character

New architecture and infrastructure will be of exemplar quality, distinct to Western Harbour, and respect the significance of existing local landmarks and views.

Create connections

New pedestrian and cycling routes extending the harbourside walkway will link into surrounding neighbourhoods, Ashton Court, and beyond.

Celebrate heritage

The heritage landscape will be explored and respected while looking to the future. Dock buildings and infrastructure will be restored, adapted, reused and explained, ensuring the iconic bonded warehouses remain the defining built structure within the landscape.

Encourage culture

A bonded warehouse will be converted for mixed use and include a cultural hub for Bristol, and beyond, that can offer a programme of national significance.

Design parameters

03.01 Design vision principles

> *In principle I applaud your vision for the Western Harbour. It is an important introduction to the historic dockyards and former workings of Bristol's docks. It is also a gateway to North Somerset.*

Embrace freedom and nature

Celebrate the waterfront

An extended harbourside walk will celebrate heritage, views and encourage activity on the water, while providing places to dwell and socialise.

Escape the bustle

The neighbourhood will offer a retreat from the hustle and bustle of the rest of the harbour, creating tranquil spaces where people can pause and reflect.

Promote recreation

Promoting and providing access to the site's natural spaces will encourage outdoor play and recreation, fostering a sense of freedom and supporting healthy, active lifestyles for both residents and visitors.

Provide vantage points

Beautiful public spaces to enjoy key views of the Clifton Suspension Bridge, Ashton Court and Avon Gorge both from within the area and across the city.

Nurture ecology

Protection and enhancement of harbour and river wildlife corridors, as well as targeted re-wilding projects, will nurture the area's ecology and biodiversity.

Connect to River Avon

New buildings and public realm should connect to the river corridor, provide access to nature and support the health and well-being of residents and visitors.

Support a thriving community

Inclusive places

Places that are free and accessible to all, where everyone is welcome, whether you live here, work here, or just like to visit.

Provide quality homes

High quality homes with a mix of sizes and tenures, of which 50% are affordable, will support the community to grow over generations.

Support enterprise

Local economic growth, training and job creation will be fostered through affordable space for small and medium businesses, and social enterprises.

Feel safe

Eye contact from window to street level, active ground floors with a mix of uses, and a generous public realm will create safe and lively streets.

Support community

Facilities will be provided for the growing population to meeting the needs of existing and new communities.

Safeguard treasured assets

The treasured assets of Riverside Garden Centre and the Brunel Way Pump Track will be accommodated within the areas regeneration for existing and new communities to enjoy.

Design parameters

03.02 Opportunities for Western Harbour

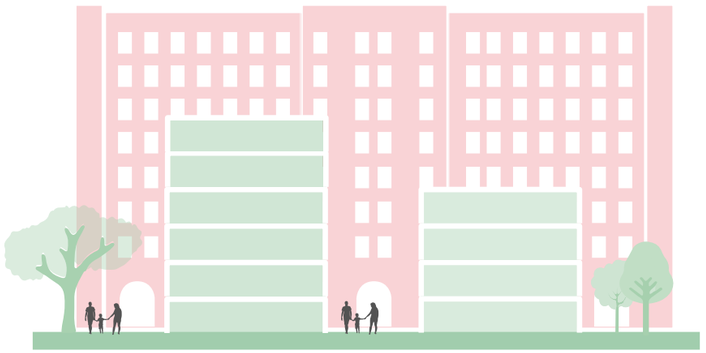
Opportunities

This underused brownfield site has ample opportunities to remove extraneous features and catalyse positive change, helping transform Western Harbour into one of the most captivating and beautiful places to live, work and visit in the UK.



Remove obsolete roads

Remove over 2 hectares of roads - unlocking the greatest opportunity to regenerate Western Harbour.



New homes

Potential for 1,600+ new mixed-tenure homes.



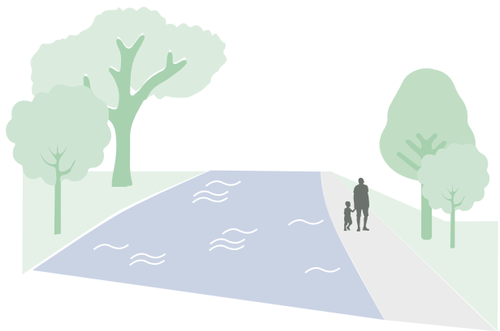
Plant additional planting

c. 1,000 new trees to supplement existing trees of high or moderate quality.



Active travel

Promote active travel, improved public transport connections and ease of access to the city centre.



New and improved public realm

Create up to 5 hectares of public realm and green space with a rich diversity of fauna and flora.



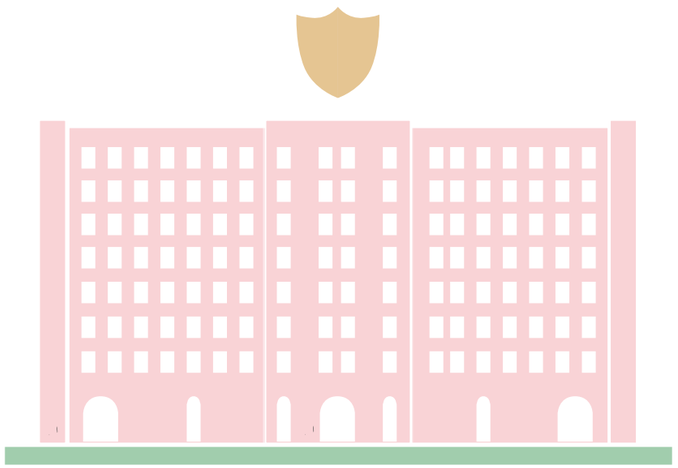
Enhanced parkland

Enhance c. 2.8 hectares of existing parks, creating high-quality amenity space for residents and visitors.

Design parameters

03.02 Opportunities for Western Harbour

Majority of people felt it is important to create a landscape that is better connected to both the river & the harbour.



Protected heritage

Provide long term conservation for the 17 listed structures that occupy the site.



Supporting social infrastructure

Create of non-residential space to support social and community life.



Improved biodiversity

Achieve a biodiversity net gain in excess of 10%.



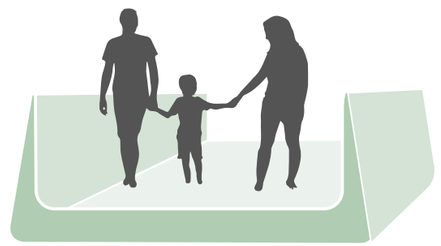
Improved green infrastructure

Achieve an urban greening factor of at least 0.4.



Encouraging a healthy lifestyle

Provide over 5 miles of active travel routes, making it easier for people to get around.



Improved connections across the River Avon

More reliable bridge crossings to protect the future mobility of the city.

Design parameters

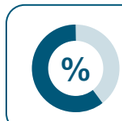
A place that celebrates Bristol's past engineering, ingenuity and endeavour and engenders a continuing celebration of that past through its future development and use across all its diverse communities.

03.03 Strategic parameters

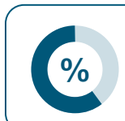
This chapter contains the parameter plans that set out the principles for development, such as routes, land-uses, public open spaces and active frontages. Developments must work within these parameters to maintain the vision of this regeneration project.

While the framework establishes clear expectations, it is not intended to be unduly prescriptive. Variations may be considered where proposals can demonstrate thorough testing and clear justification. Alternative approaches should deliver equal or greater benefits to design quality, sustainability, connectivity, viability, public benefit and policy compliance. Any departure from these baseline parameters must clearly evidence how the overarching objectives of the Development Framework are maintained or enhanced.

The parameter plans *(see figures 60-65)* form the baseline against which all development proposal are assessed. An illustrative summary of how these parameters interrelate is be found on the following page *(figure 59)*.



68% of people asked supported a simpler road layout through Spike Island.



76% of people asked supported the improved connections between Ashton Meadows and city centre



Figure 57: *Photo of Ashton Avenue Bridge crossing from Ashton Meadows towards A Bond*



Figure 58: *Extract from Development Framework animation looking west along Cumberland Basin*

Design parameters

03.03 Strategic parameters

Key

- Strategic boundary
- Existing buildings
- Development parcel
- New / existing trees (indicative)
- New / enhanced green space
- Other green space
- Essential road infrastructure to be delivered
- Key pedestrian routes
- Road / railway gantry
- AR2100 proposed flood protection infrastructure
- Railway
- Landmark structure/feature
- Key placemaking opportunity

Note: Design and integration of public realm and flood defence to be coordinated with Avon Riversides 2100 project

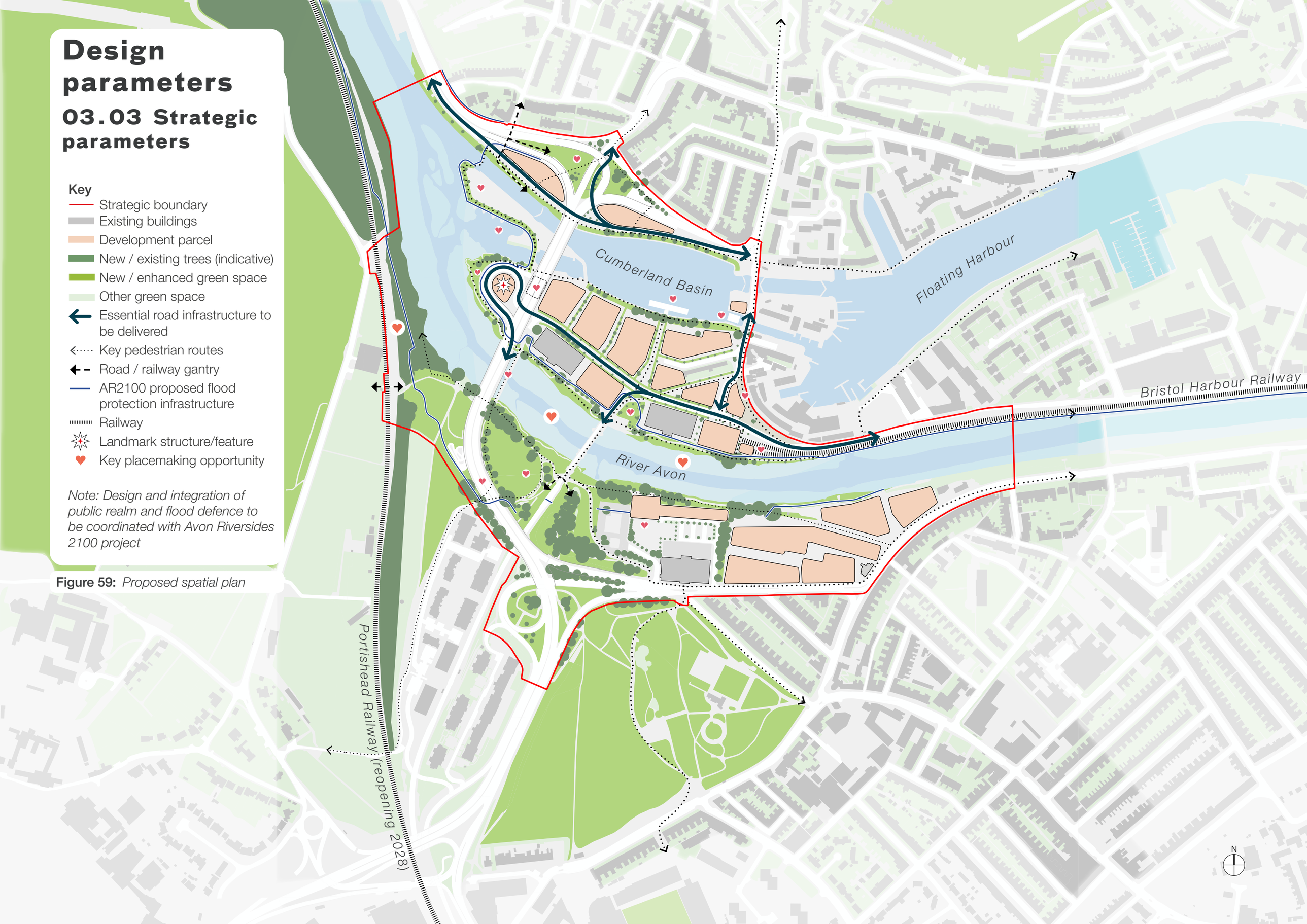


Figure 59: *Proposed spatial plan*

Design parameters

03.03 Strategic parameters

Key principles:

Development parcels

The Development Framework identifies up to 25 development parcels, some of which have existing planning permissions or are being redeveloped. Each plot provides flexibility for buildings to be brought forward in a variety of ways, responding to their surrounding context.

Key considerations:

01) Blocks adjacent to Brunel Way designed to mitigate any noise impacts of the adjacent elevated highway network.

02) A landmark structure / feature of exceptional quality. Marking the arrival into Bristol City Centre it sits within the context of Clifton Suspension Bridge.

03) A public square connecting Cumberland Basin to Butterfly Junction and south Bristol.

04) Planning permission has previously been granted for the development of the Paynes Shipyard site (ref: 19/06107/F).

05) Developments need to account for harbour operational requirements.

06) Any future consideration of the Tannery site should provide public access along the waterfront and connectivity into the surrounding area.

07) Waterfront-adjacent parcels are oriented to maximise views towards Cumberland Basin and the River Avon.

08) Development plots designed to maintain good levels of daylighting, outlook, and privacy for new and existing residents.

09) Development should consider Bristol's Transport Development Management Guidance (TDMG), including the TDMG Street Design Matrix (new residential street adoption standards)

Key

- Strategic boundary
- Development parcel
- Character area 01: Hotwells Reach
- Character area 02: Cumberland Wharf West
- Character area 03: Cumberland Wharf East
- Character area 04: Ashton Riverside
- Landmark building
- Pedestrian-focussed public square with space for ground-floor uses to spill out onto - vehicles restricted to emergency vehicles, harbour operations and deliveries
- Pedestrian priority streets with occasional servicing vehicles
- Residential street maintaining existing parking with local vehicle access only
- Widened car-free public promenade providing space for ground-floor uses to spill out into the public realm
- Traffic-calmed road with regular pedestrian crossings, dedicated cycle path and space for ground-floor uses to spill out into the public realm
- Primary road providing servicing access for the central site and public transport connections

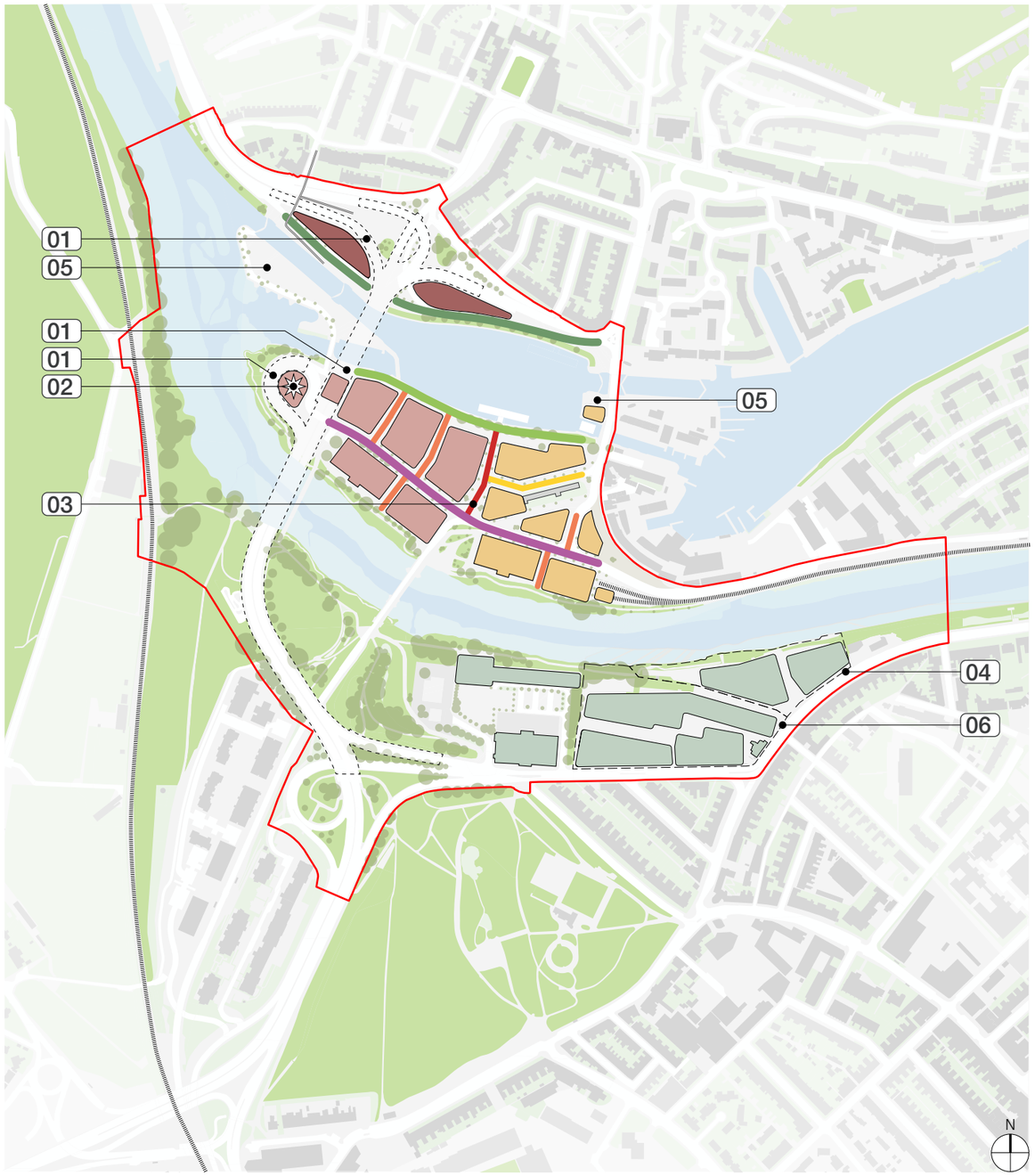


Figure 60: *Development parcels parameter plan*

Design parameters

03.03 Strategic parameters

Key principles:

Development parcels density

Located within Bristol's City Centre, the area is prime opportunity for sustainable development. Proximity to schools, shops, public transport and the centre of town. These connections and the areas capacity to support growth can support a design-led approach to density, informed by the site's location, character, accessibility and heritage.

Proposals should demonstrate how density has been optimised through building form, massing, typology and layout, rather than through numerical uplift alone.

Key considerations:

01) Provide regular gaps between buildings to retain the legibility and prominence of the bonded warehouses from the waterfront.

02) Contrast in scale and character with the bonded warehouses while maintaining their historical legibility and significance.

03) Reduced building density towards the east, with taller buildings located to the west.

04) Design of plots to mitigate the impact of development on existing residential properties.

05) Development plots should be designed in accordance with Bristol City Council planning policy, including the 'Urban Living SPD - making successful places at higher densities', which gives guidance on a design-led approach to optimal density, balancing efficient and effective use of land with aspirations for a positive response to context, successful placemaking and liveability.

06) Optimise layouts to maximise housing density, while maintaining excellent design standards, daylight, sunlight, outlook, and privacy.

> I think we should go higher in some locations, we need homes, we are falling behind other cities not just in the UK but all over the world... why not make the most of the limited space we have?

Key

- Strategic boundary
- Area of increased density
- Area of prevailing density
- Area of lower density
- Bonded warehouse to maintain landmark significance
- Key views
- Bristol City Centre designation boundary

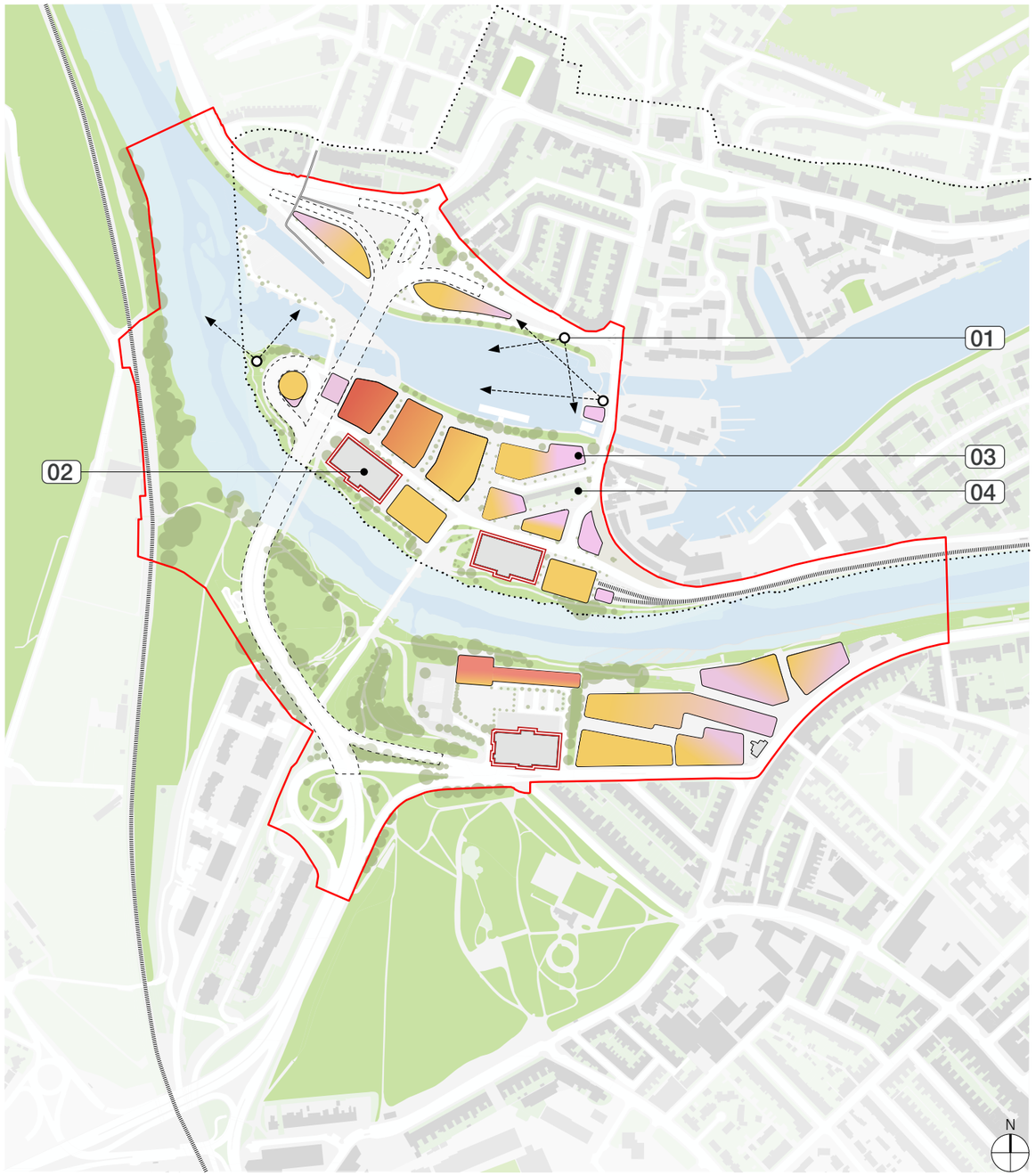


Figure 61: *Illustrative plan of development density*

Design parameters

03.03 Strategic parameters

Key principles:

Delivery of essential road infrastructure

Rationalising Western Harbour's road network while maintaining a resilient wider movement network will unlock Western Harbour's greatest opportunity to improve placemaking, enhance pedestrian connectivity and unlock land for regeneration.

A new spine road will replace the existing complex road layout on the central site. Tertiary branch roads provide servicing and emergency access.

Key considerations:

01) Faraday Road realigned to unlock northern development parcels.

02) Traffic calming along Cumberland Basin Road - improving access to the waterfront from Hotwells.

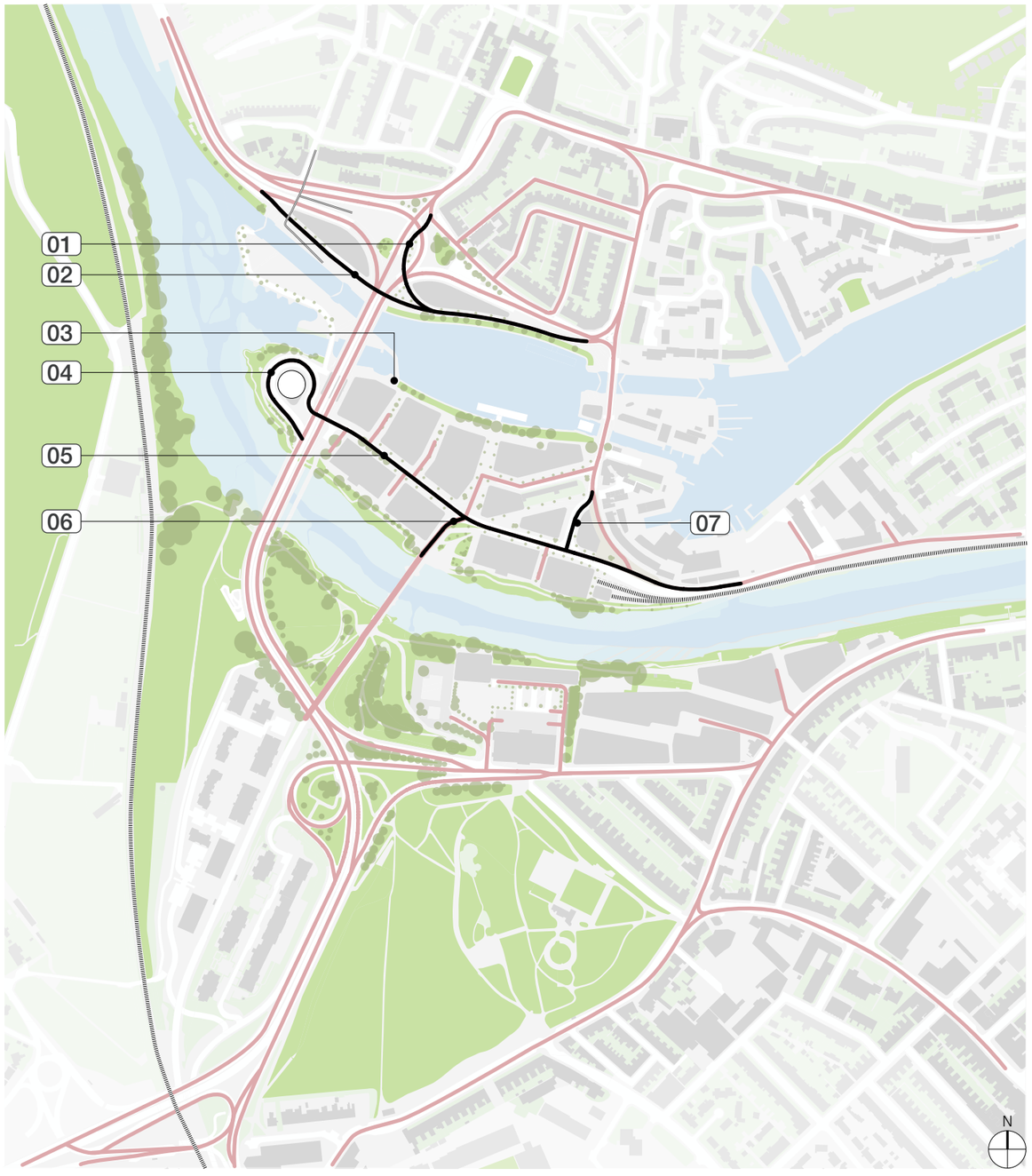
03) Restricted vehicular access along Cumberland Basin. Provision must be made for out-of-hours servicing, emergency services and harbour operations.

04) Ramped access to Brunel Way are reconfigured to maintain north and southbound diversionary routes.

05) A single spine road replaces much of the existing road network - rationalising access across the development.

06) The MetroBus route is retained and realigned to incorporate passive flood protection.

07) Diversionary route to provide traffic calming to Avon Crescent.



Key

Essential road infrastructure to be delivered

Wider road network connections to Western Harbour

Figure 62: *Road hierarchy parameter plan*

Design parameters

03.03 Strategic parameters

Key principles:

Active travel routes

Bristol's commitment to become a carbon neutral city and reduce car journeys by 40% will be supported by promoting low car ownership though the growth of excellent active travel, walking, cycling and wheeling routes.

Key considerations:

01) Create public routes through Cumberland Piazza to link Hotwells to the waterfront.

02) Extend the Harbourside loop to include the Look-Out.

03) Provide an elevated active travel route associated with AR2100 strategy

04) Create a north-south route between Butterfly Junction Park and Cumberland Basin.

05) Great opportunity to provide a new pedestrian footbridge parallel to Avon Fixed Bridge to increase connectivity across the site.

06) Provide a public route along the southern bank of River Avon with connections towards Southville.

07) Provide clearly marked and well designed active travel routes that promote a permeable neighbourhood through improved connections.

08) Provide convenient routes into the city centre.

A safe continuous route from Ashton Ave bridge to Hotwells Rd would be great as then it would link up with Anchor Rd bike lanes etc.

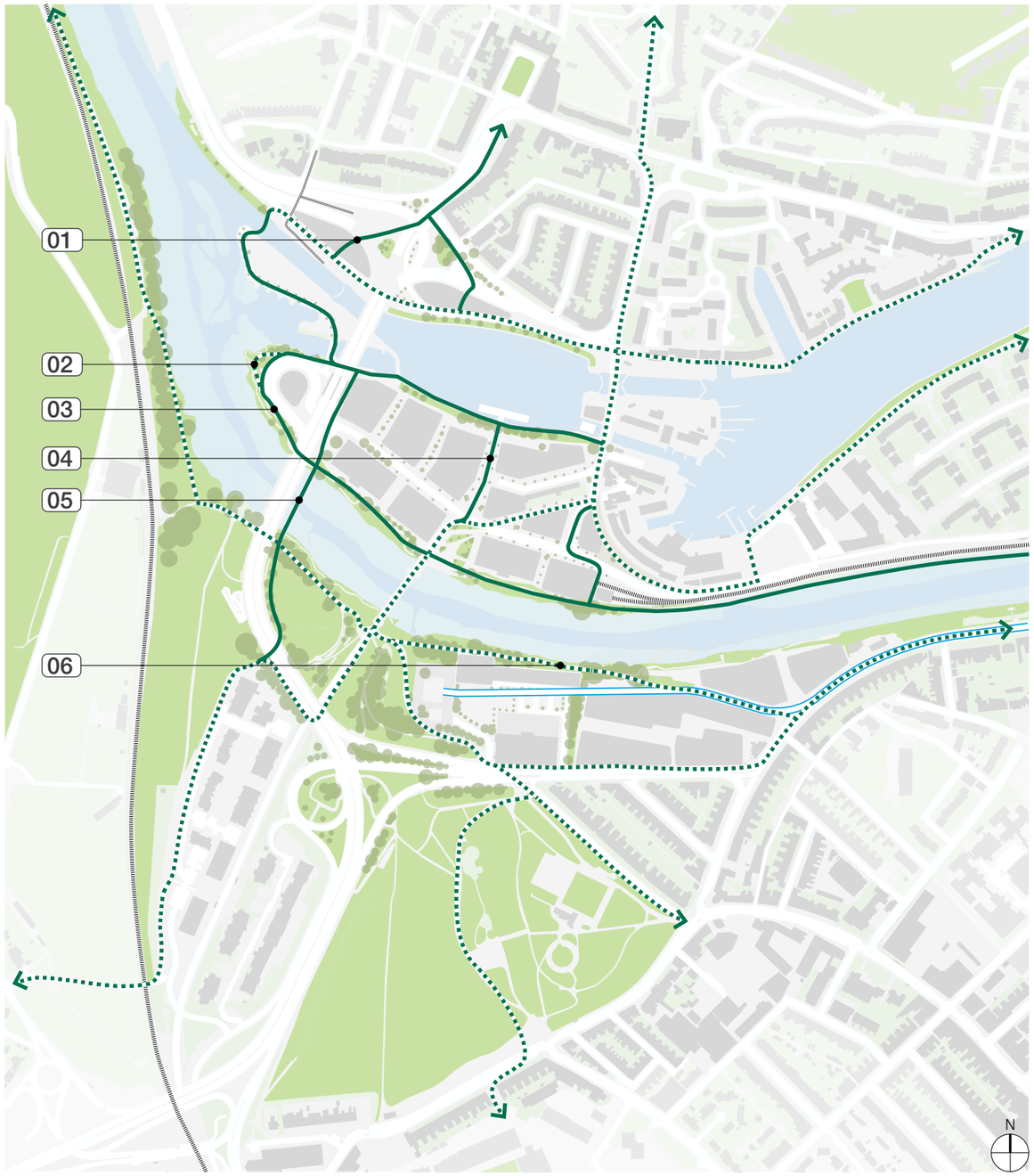


Figure 63: *Active travel routes parameter plan*

Key

- Proposed new active travel route
- Enhanced existing active travel route
- sewer culvert easement

Design parameters

03.03 Strategic parameters

Key principles:

Active frontages

For streets to be enjoyable and actively overlooked, buildings should be designed so that service entrances, refuse areas, and plant rooms are concealed and securely accessible. Service areas should be placed away from public spaces and be easy for vehicles to access.

Key considerations:

01) Active frontages along the promenade deliver an animated and revitalised Cumberland Basin waterfront.

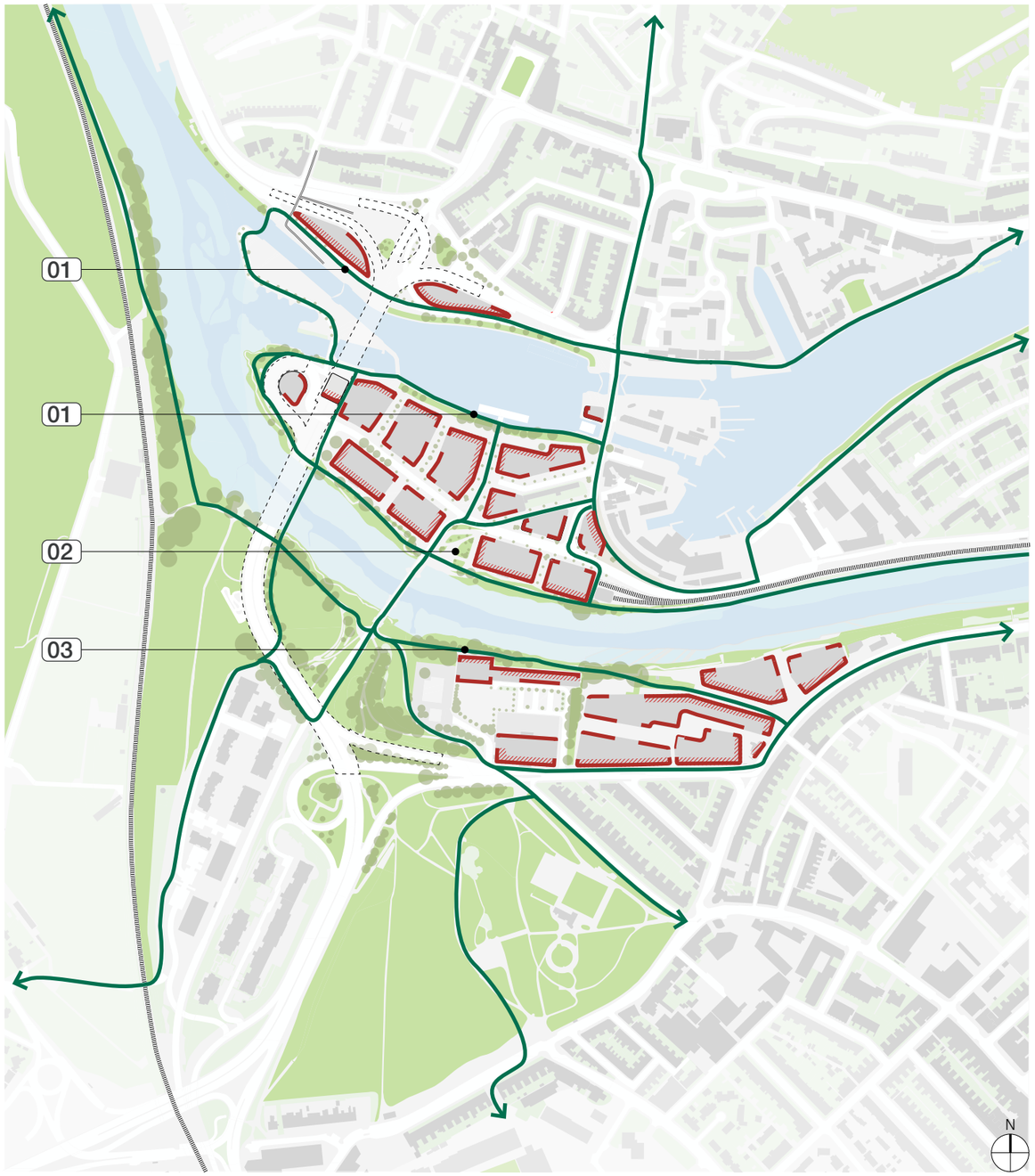
02) Activation of Butterfly Junction Park with multifunctional ground-floor uses within the bonded warehouse.

03) New active travel route along Avon New Cut to increase footfall and passive surveillance.

04) Position back of house and parking entrances away from key movement routes.

05) Active elevations predominantly facing public spaces along active travel routes to promote safer streets and a sense of safety.

06) Flexible ground-floor layouts to accommodate a variety of shops and restaurants, community uses (including nurseries and medical surgeries), workspace, and workshops.



Key

- Focus of active frontages
- Focus of public ground floor use
- Active travel routes

Figure 64: *Development parcels parameter plan*

Design parameters

03.03 Strategic parameters

Key principles:

Public realm

Public realm enhancements will further improve connections through the area and create enjoyable, varied, and safer places for people to enjoy.

Key considerations:

01) The Knuckle and Avon Quay accommodate several harbour operations with associated sluice gates, lock gates and bridge infrastructure. The quay walls should be publicly accessible but this must not obstruct harbour operations.

02) Informal play opportunities are to be embedded throughout the landscape with formal recreation concentrated along the Leisure Trail.

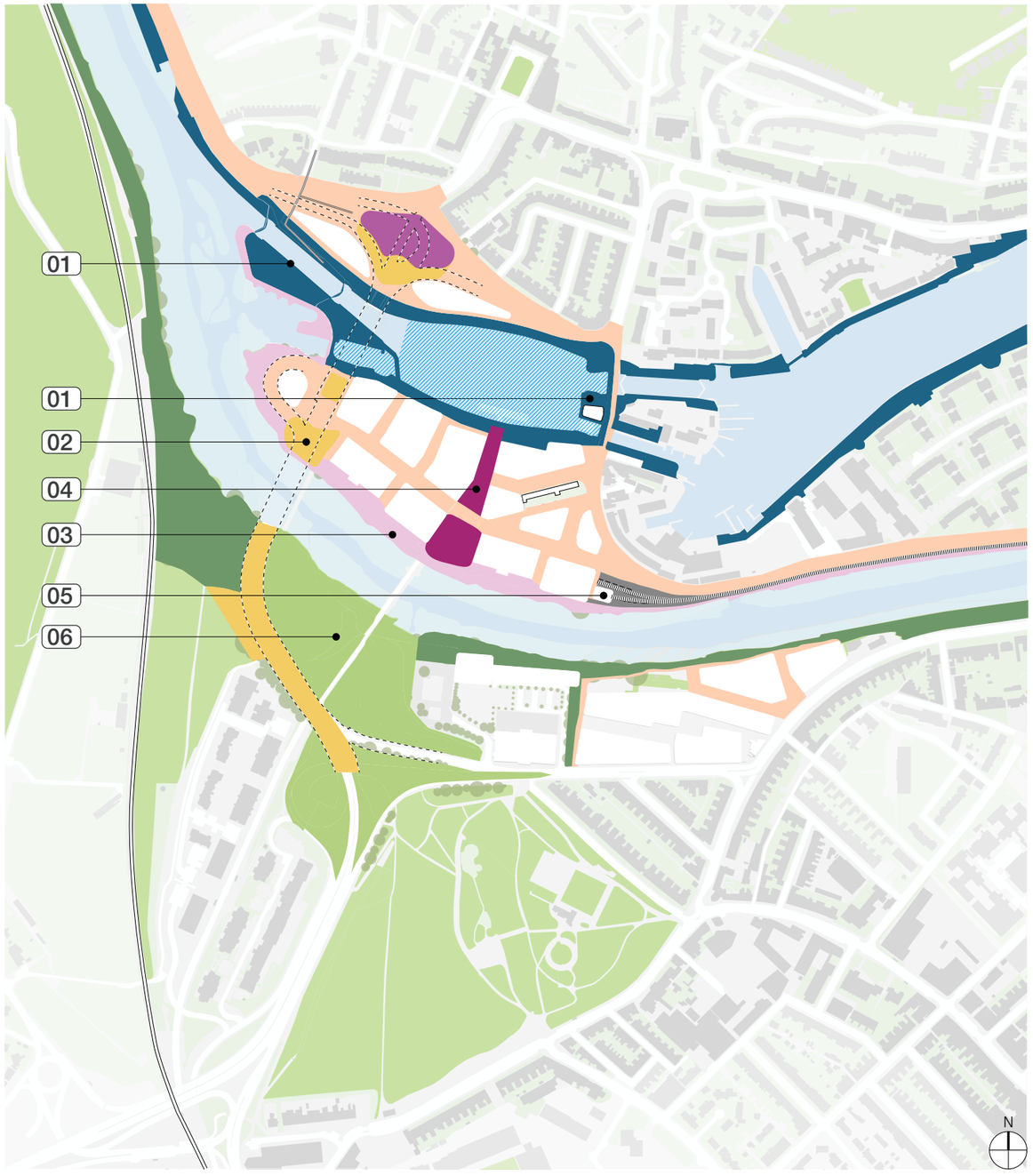
03) Landscape should be introduced along the waterside and provide accessible, safe and gradual routes down to the water's edge where appropriate.

04) The public square functions as a pedestrian-priority route lined with active ground-floor uses and integrated play elements.

05) Reinstated railway infrastructure preserves heritage character while allowing pedestrian and cycle connectivity between Underfall Yard and the river edge.

06) Enhance and protect Ashton Meadows to provide amenity green space for new and existing residents.

> People currently frequently cross these roads and plans need to include ways to do this safely so that the needs of people and not cars are prioritised.



Key

- Informal green space
- Formal parkland
- Leisure space
- AR2100 walkway
- Piazza
- Public square
- Harbour quay / operations
- Public roads / walkways
- Heritage railway station
- Waterfront activity zone (uses subject to AR2100 designs)
- Elevated roads

Figure 65: *Land use parameter plan*

Design parameters

03.04 Townscape

Key principles:

Townscape views

Arrival into Bristol is marked by the dominant bonded warehouses. Broad, panoramic views of the city's landmarks and topography, combine with focused views of notable historic assets.

All future schemes must be assessed against the views identified in *Figure 67*. These views are not exhaustive; the potential impact of development on them, and on other significant views, must be evaluated as part of any planning application, supported by appropriate townscape and visual analysis.

Building height

Western Harbour's building heights are not prescribed in this framework, but careful regard must be given to the setting and significance of nearby listed buildings and heritage assets. The key views and visual relationships that shape Western Harbour's historic character, sense of place and overall legibility is essential and must be preserved.

The three bonded warehouses should remain the most prominent built forms within Western Harbour. Their historic importance and landmark status should be reinforced, with new development responding positively to their scale, form, and architectural quality. This framework encourages a high quality contemporary design approach that complements, rather than competes with, these assets.

Key townscape points to be assessed:

- Impact on the setting of Clifton Suspension Bridge.
- Impact on the setting of Underfall Yard, particularly the appearance of any buildings within its backdrop.
- Legibility and dominance of the bonded warehouses.
- Ability to enhance the legibility and setting of other listed structures.
- Views through the development, linking Cumberland Basin to Ashton Avenue Bridge.
- Appreciation of the countryside and hillside from around Cumberland Basin.

> *Part of its attraction is the way nature dominates in the form of water with the harbour and river... It is very much the edge and end of the city...*

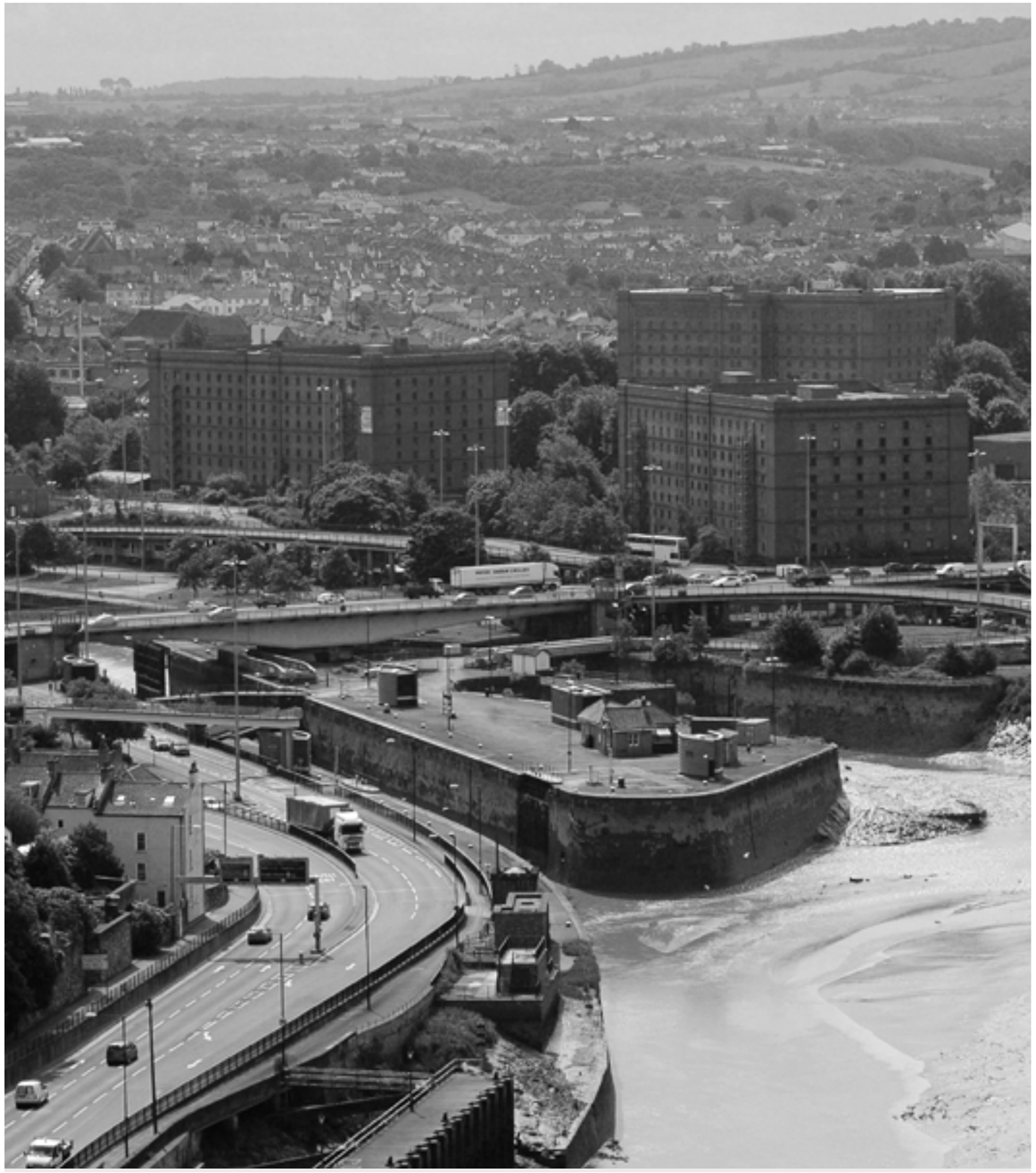


Figure 66: *The Knuckle with all three bonded warehouses in the background © Dick Darlington*

Design parameters

03.04 Townscape

Key

- Heritage viewpoint
- Heritage sequential viewpoint

01) Sylvia Crowe Look-Out viewpoint towards Clifton Suspension Bridge

02) Sequential views along Brunel Way

03) Views towards the gorge and Clifton from Sylvia Crowe's landscape and pedestrian/cycling route

04) Views from Clifton of Cumberland Basin, Floating Harbour and associated landmarks

05) Views from Clifton Suspension Bridge

06) Views of Clifton Wood and the Floating Harbour from Underfall Yard

07) Glimpsed views from Coronation Road of Underfall Yard and Clifton terraces

08) Views east and west from Vauxhall Bridge

09) View towards Underfall, bonded warehouses and landscape beyond from the northern side of the Floating Harbour

10) Sequential views along the Chocolate Path east and west

11) Views from Cumberland Basin Road south west towards A Bond and B Bond Warehouses

12) Views from Ashton Meadows northeast towards A Bond and B Bond Warehouses

13) View west across Underfall Yard with A Bond and B Bond Warehouses in the background

14) View north-west towards the gorge

15) View from Brunel Lock Road quayside towards Clifton Terraces

Figure 67: *Plan of key townscape viewpoints*

Hotwell Road

Cumberland Basin

Floating Harbour

River Avon

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Note: For a comprehensive list of all other views and landmark buildings that must be considered, refer to: *Conservation Area 17 – City Docks: Character Appraisal & Management Proposals (December 2011), pages 16 – 21.*