

HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

SUSTAINABLE TRAFFIC MASTERPLAN

A FRAMEWORK FOR DEVELOPMENT OF SUSTAINABLE NEIGHBOURHOODS

FINAL VERSION- APRIL 2010
CONSULTATION DRAFT - FEB 2009 v1.0a

CLIENT CLIFTONWOOD & HOTWELLS ACTION
FOR A SUSTAINABLE ENVIRONMENT (CHASE)
HOTWELLS & CLIFTONWOOD COMMUNITY ASSOCIATION (H&CCA)

CONCEPTS RICHARD WALKER

DESIGN PAUL WALKER-JONES © 2010



HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

AIMS & OBJECTIVES

FINAL VERSION APRIL 2010

The Hotwells and Cliftonwood community, like other inner urban communities, suffers from high levels of commuter through traffic and its negative impacts.

By contrast, local people are relatively low car users as they live within walking and cycling distance of the city centre and its amenities.

Unfortunately increased traffic, poor design and management of highways and streets and lack of investment have created a situation of significant environmental injustice where local journeys and our freedoms of movement, safety and activities are compromised.

It appears that the needs of car driving commuters from outside Bristol are put ahead of those of local people making local journeys and the wider life quality of local residents.

This has led to damage and ongoing constraints not just to our local environment but also to our economy and community.

The aim of this strategy is to identify a set of actions across the whole area that reduce risks, minimise congestion, allow us to reclaim our streets and help us to become a more balanced and sustainable community. However, it also aims to deliver reduced congestion and improvements to through traffic flows by seeking a rationalisation of the main route network.

The linked issues of parking and controlled parking zones are beyond the scope of this strategy. It aims to be fully independent of these issues. However, while not addressing parking it does seek a coherent set of actions that will stop dangerous and inappropriate parking on corners and on pavements and improve emergency vehicle access to residential streets.

The aims can be summarised as;

- ★ Get beyond highways accident statistics that do not show the distorting effects of dangers on our movements around our neighbourhood.
- ★ Identify constructive ways to reduce obstructions and manage the specific dangers and the impacts of traffic.
- ★ Better accommodate at least the current volumes of through flow traffic.
- ★ Promote and enable changes to local transport infrastructure to encourage regeneration and sustainable (low car dependant) development of key sites.
- ★ Develop and promote proposals that are fully independent of any residential parking scheme proposals.



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A simple one sheet questionnaire (with freepost return) was drawn up and inserted into the Summer 2007 Hotwells & Cliftonwood News which was distributed to every home across the whole community.

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HOTWELLS & CLIFTONWOOD COMMUNITY ASSOCIATION

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HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

SURVEY RESULTS MASTERMAP

FINAL VERSION APRIL 2010

- ★ 1 TOP OF CLIFTON VALE 17
- ★ 2 AVON CRESCENT & CUMBERLAND ROAD 15
- ★ 3 CONSTITUTION HILL & GOLDNEY AVENUE 15
- ★ 4 BOTTOM OF HOPECHAPEL HILL 15
- ★ 5 JACOBS WELLS ROUNDABOUT 15
- ★ 6 BOTTOM OF CLIFTON VALE & AMBRA VALE 13
- ★ 7 CUMBERLAND BASIN & MERCHANTS ROAD 9
- ★ 8 MIDWAY UP HOPECHAPEL HILL 8
- ★ 9 TRINITY TRAFFIC LIGHTS SEQUENCING 7
- ★ 10 CONSTITUTION HILL JUNCTION WITH JACOBS WELLS ROAD 7

1 DANGER SPOTS (NO. OF COMPLAINTS)

LINE WIDTH DENOTES VOLUME

- CAR JOURNEYS
- CYCLE JOURNEYS
- WALKING JOURNEYS
- WALKING WITH CHILDREN TO SCHOOL
- MOTORBIKE AND FERRY JOURNEYS
- ROAD

JOURNEY LINES ARE BASED UPON THE RESULTS FROM THE RESPONSES OF THE 2007 HCCA TRAFFIC SURVEY ONLY.



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HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

SURVEY RESULTS - HOT SPOTS

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1

At the top of Clifton Vale double yellow lines are needed around the corner and the junction to minimise conflict and congestion around blind double corner. An extension is needed to fill the critical missing section of pavement around the bend (with protective bollards). Ideally this would be done in combination with a road table to minimise speeds and collision risks (A road table being an area of raised road, like a much extended sleeping policeman).

SCORE 17



2

At the junction of Avon Crescent & Cumberland Road. Very bad sight lines, channelling of traffic into a residential street (as a result of continued use of temporary traffic lights on Smeaton Road Bridge), the high speed of cars and lorries swinging across the junction, and combined with the dangers of crossing both the junction of Avon Crescent and Cumberland Road to access the cycle path and Chocolate Path all urgently need addressing. These need to be resolved with a range of actions that reduce or stop through traffic on Avon Crescent, by reopening Smeaton Road Bridge to two-way traffic and restricting or blocking the turn into and possibly out of this end of Avon Crescent. The crossing of Cumberland Road will need to be light controlled and carefully positioned to get best fit between pedestrian and cycle desire lines (cross) and best traffic sight lines and should also be combined with other speed control actions on Cumberland Road.

SCORE 15 & 10



3

Between the top of Constitution Hill & Goldney Avenue a crossing needs to be installed (ideally a zebra on a road table) to provide a safe route across Regent Street / Clifton Road where they meet Constitution Hill / Goldney Road etc. to provide for a route to Christchurch School and between Clifton and Cliftonwood via St Andrew's Walk.

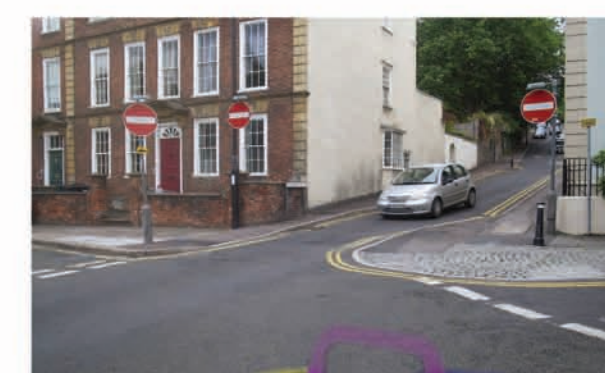
SCORE 15 & 5



4

At the bottom of Hopechapel Hill a zebra on a road table is needed protected by bell bollards to stop commuters using pavement on blind corner as extra roadway. It would also make sense to design a way to reclaim the wasted tarmac and dysfunctional 'lay-by' as element of proposed major actions to reduce this and adjacent section of Hotwell's one-way system to two lanes (it has been suggested we should rename this bit of the A4, "Deadman's Bend"). One way of assisting reclaiming Hotwell Road would be to stop traffic exiting from the lower part of Hopechapel Hill. This latter possibility met with considerable opposition during consultation and has therefore been removed from the detail on p14. Hopechapel Hill is therefore shown as allowing traffic access to Hotwell Road as now.

SCORE 15



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SURVEY RESULTS - HOT SPOTS CONTINUED

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5

Jacobs Wells Road Roundabout is chaotic for all road users especially pedestrians and cyclists. It is hoped that the changes made recently and the new pedestrian crossings introduced will receive positive responses during consultation. (According to the questionnaires twice as many of us travel through it on foot or by bike as by car).
SCORE 15



8

A simple raised zebra crossing halfway up Hopechapel Hill to help stop drivers treating the previous zig-zag calming as a challenge and to provide safe access to Hotwells school from the Polygon Path etc.
SCORE 8



6

At the Bottom of Clifton Vale (and Ambra Vale) problems of parking close to the corner, rat-running etc. creates conflict between cars and with pedestrians trying to cross along Hotwell Road. The action needed being a slightly set back zebra on the top of a road table right up to the junction with Hotwell Road for both Clifton Vale and Ambra Vale these will also have the effect of deterring rat-running from Hotwell Road.
SCORE 13 & 5



9

Trinity traffic lights need re-sequencing in favour rather than against pedestrians and they also need cameras to combat many reported incidents of red light running.
SCORE 7



7

At the corner of Cumberland Basin Road and Merchant's Road it is impossible to safely cross, locally referred to as "run for your life corner". This is a route that many local people, including those on the school run and those wanting to access the Harbourside, want and need to use. A light controlled crossing is needed as part of rationalisation of the feeder lanes and signage on Merchant's Road in association with proposed changes to the layout and approaches to Plimsoll bridge and significant reductions in use of the low level green swing-bridge.
SCORE 9



10

The Constitution Hill junction with Jacobs Wells Road needs improvements to enable safer left and right turns in and out of junction for cars and cyclists.
SCORE 7



In addition to the hot spots there is strong demand within the returned questionnaires for an area-wide programme to refresh existing double yellows, give way lines and other road markings many of which are in a very poor state of repair and to undertake a review of where new lines would assist. This would help to reduce dangerous and obstructive parking around junctions, provide clarity on rights of way and reduce conflict between road users.



HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

BEYOND THE TRAFFIC HOTSPOTS - HOMEZONING

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Actions on the community's identified traffic danger spots and securing a basic level of street maintenance and management is fairly low cost and are, we feel, reasonable expectations.

However, action on these will not themselves address the fundamental cause of negative traffic impacts – the high volume of through traffic overflowing from the main roads into residential side-streets and rat-running to try to avoid congestion much of which arises from the inconsistency of capacity of the main road network.

The following actions are proposed to improve the local network of main roads (for through traffic/commuters as well as local people), increase or balance through flow capacity while delivering significant improvements to the quality and sustainability of the local environment and economy.

The proposed traffic initiatives and outlined site regeneration opportunities created inter-relate with the hotspots and with each other. They are more complicated and some involve change just beyond the Hotwells and Cliftonwood area. Detailed design, costings and appraisal are beyond the scope of this strategy.

Hotwells and Cliftonwood (low cost) Homezone

Implement a ring of 'road tables' (informal zebra crossing on an extended flat-topped, speed hump) on all the entranceways from surrounding main roads. Sign it as 20mph and as a Homezone where pedestrians have priority and apply a 7 tonne weight limit (with exemptions).

This cross-area initiative could be implemented from the top and bottom of Granby Hill in the west, Cornwallis Crescent & Goldney Avenue in the north, from the top of Clifton Wood Road in the east and at the bottom of Ambra Vale, Clifton Vale, Hopechapel Hill and Joy Hill in the south.

Implementation of a Homezone could deliver on Nos. 1, 4, 6 & 8 of our Top Ten Traffic Hotspots. It should be combined with proposed refreshment of roadmarkings.

Homzoning could and should also be pursued for the Hotwells (traffic) Island & Harbourhead (see later) residential areas.

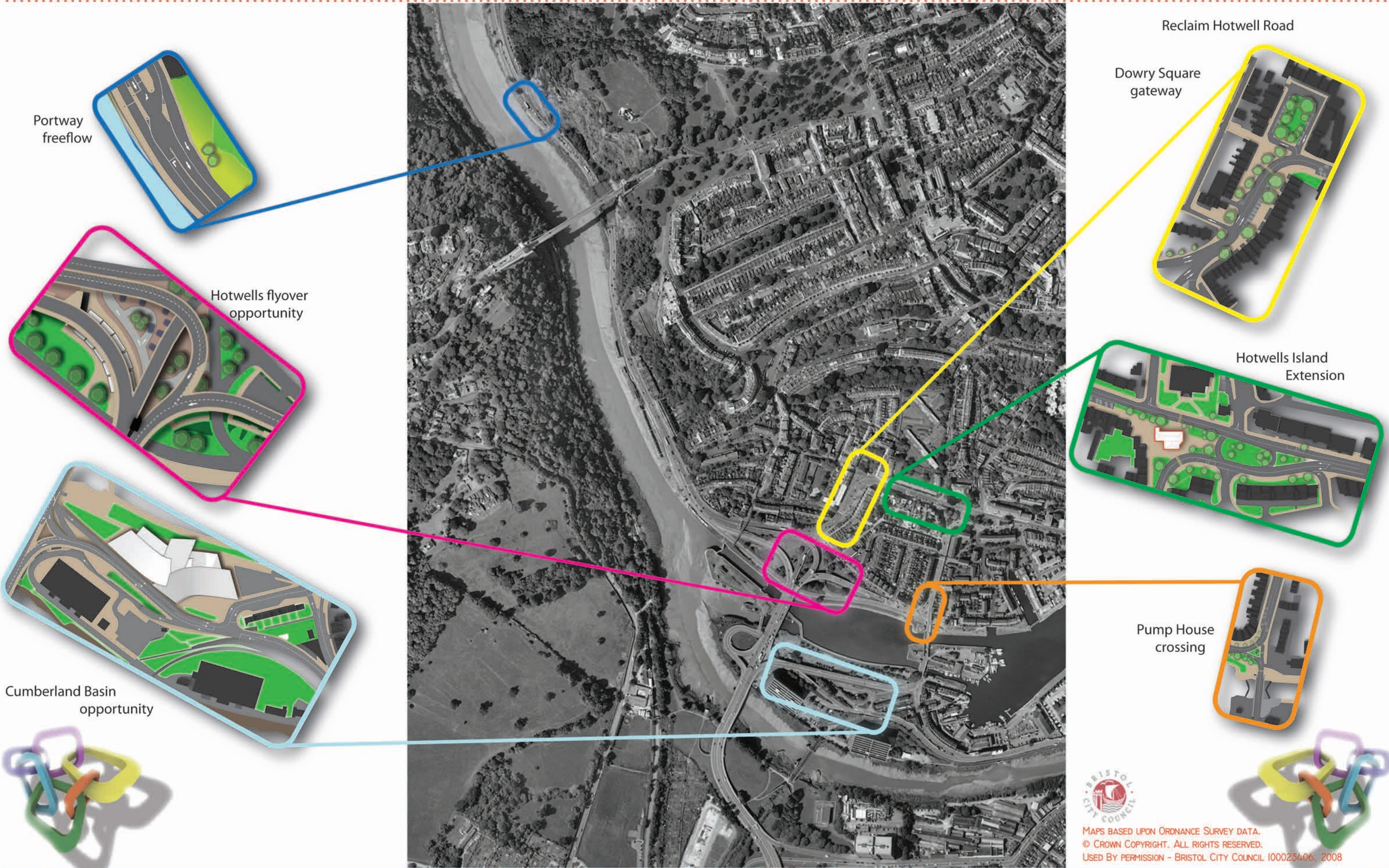


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HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

BEYOND THE TRAFFIC HOTSPOTS - RATIONALISING THE MAIN ROAD NETWORK AND REALISING OPPORTUNITIES

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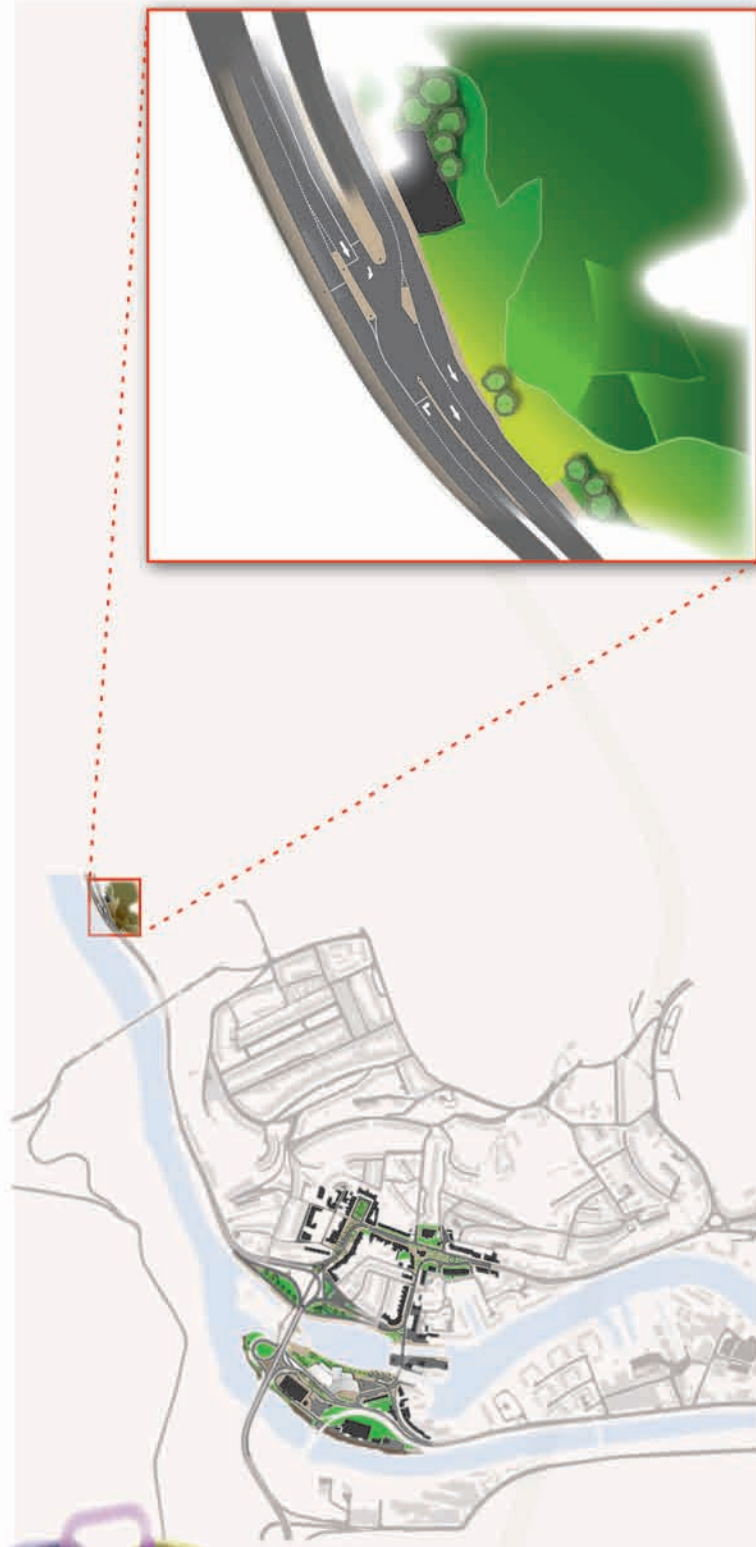
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A JOINED UP APPROACH - DELIVERING CONSISTENT TRAFFIC FLOWS

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Impressions of the vision



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PORTWAY FREEFLOW - BRIDGE VALLEY ROAD JUNCTION

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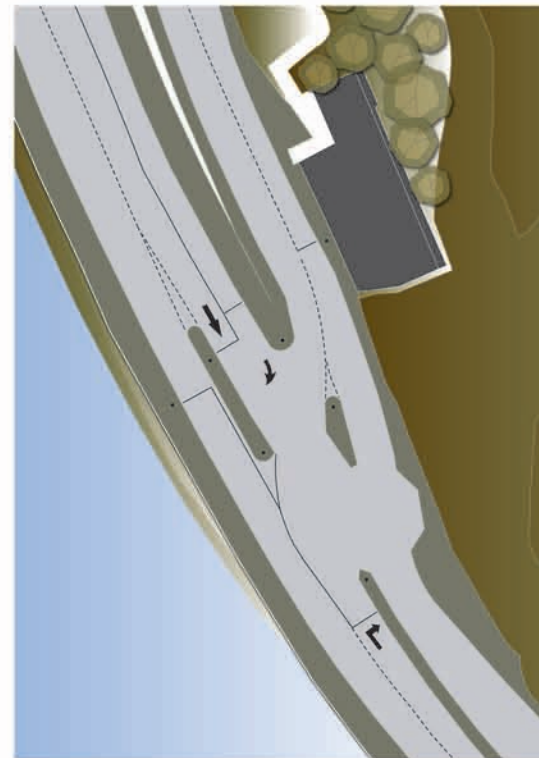
Photo of existing Bridge Valley Road junction with Portway



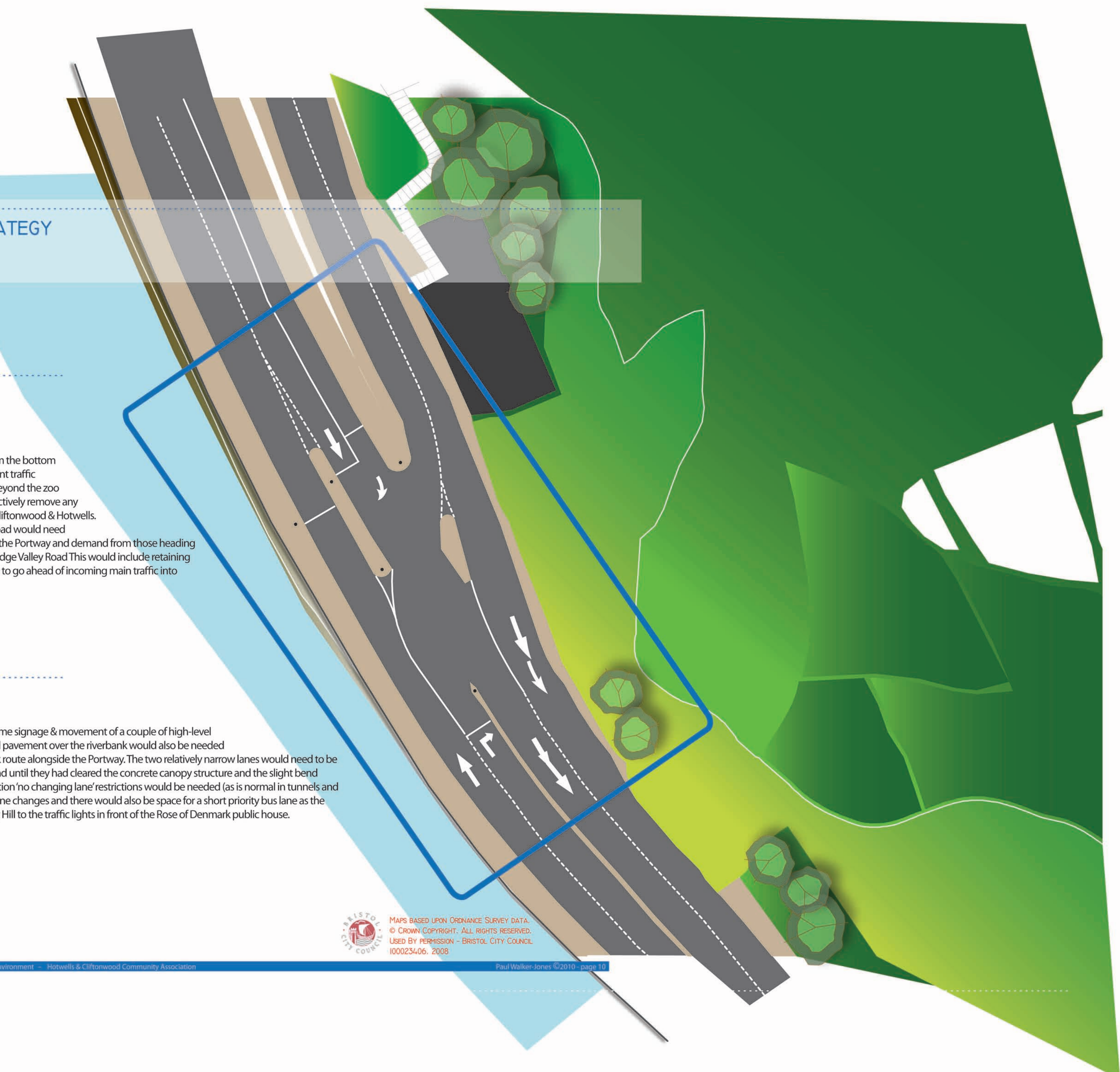
Improving access and flow along the Portway

Create a double lane on the Portway flowing into Hotwells from the bottom of Bridge Valley Road. Utilise the inside lane to provide a constant traffic feeder turning left out of Bridge Valley Road to stop tailbacks beyond the zoo on most weekday evenings. A constant feeder lane would effectively remove any incentive at this time of day to rat-run through Clifton Village, Cliftonwood & Hotwells. The rest of the light sequence at the bottom of Bridge Valley Road would need to remain to balance demand coming into the city from along the Portway and demand from those heading out from Cumberland Basin / Hotwells who want to turn up Bridge Valley Road. This would include retaining the existing bus lane and advanced green light, allowing buses to go ahead of incoming main traffic into outside lane aligned to Cabot Way and across Plimsoll Bridge.

Plan of existing junction showing lane narrowing and traffic controls



This change involves realignment of road markings, some signage & movement of a couple of high-level street lights. A short section of suspended/cantilevered pavement over the riverbank would also be needed to retain a good width and quality of shared cycle/walk route alongside the Portway. The two relatively narrow lanes would need to be restricted along their length to a 30 mph speed limit and until they had cleared the concrete canopy structure and the slight bend beyond the bottom of the rocks railway. Along this section 'no changing lane' restrictions would be needed (as is normal in tunnels and similar situations). This would leave plenty of time for lane changes and there would also be space for a short priority bus lane as the road splits and feeds down from the bottom of Granby Hill to the traffic lights in front of the Rose of Denmark public house.



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PORTWAY FREEFLOW - PORTWAY TREATMENT

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Freeflowing traffic

By suspending a pedestrian/cycle way over the existing river wall off the existing road lights we can increase the traffic flow on the Portway whilst providing a new exciting, safe and inclusive pedestrian and cycle routeway.

Photo montage and computer image of Portway treatment

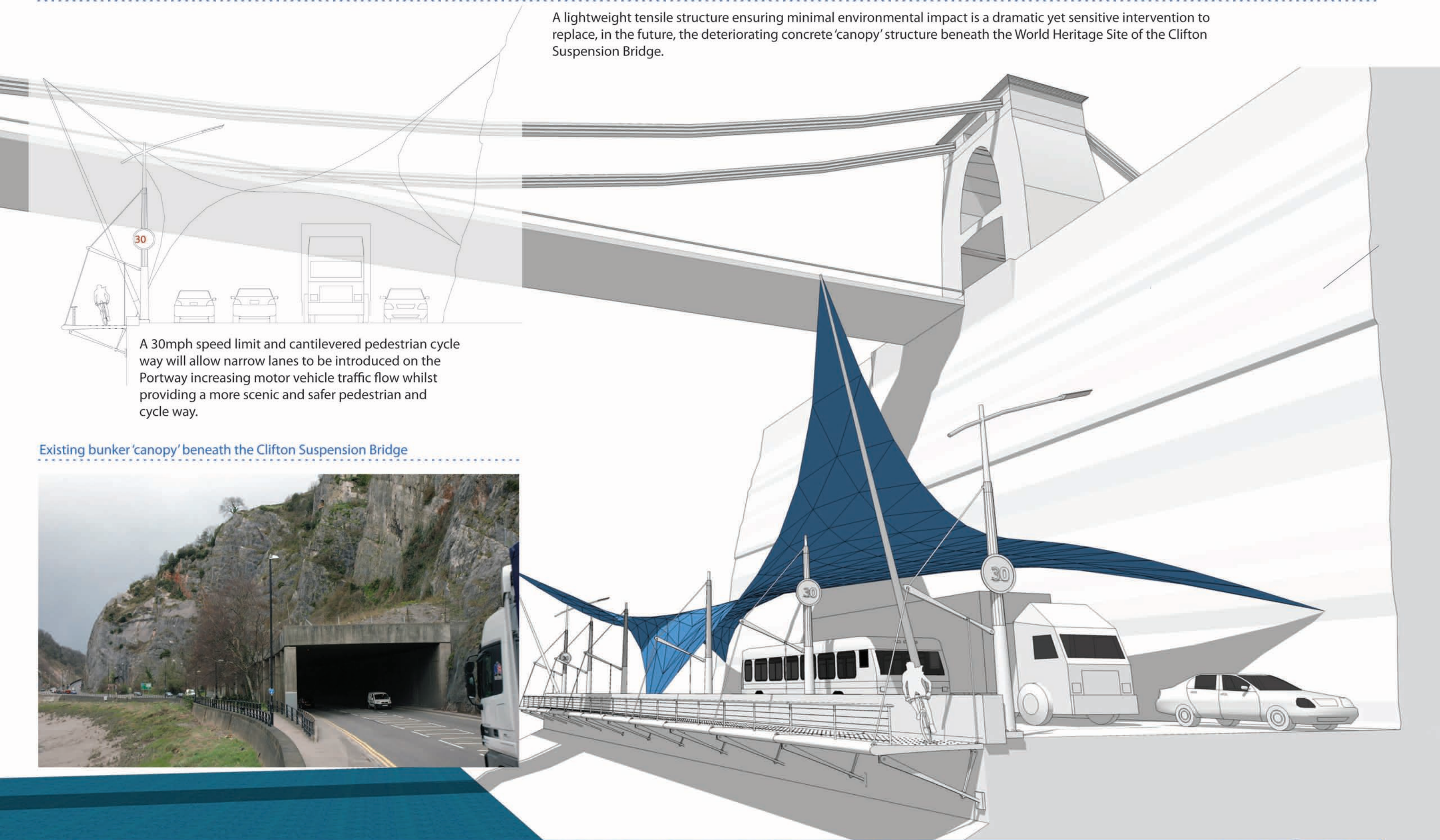


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PORTWAY FREEFLOW - CONTEXTUAL ELEGANCE

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A lightweight tensile structure ensuring minimal environmental impact is a dramatic yet sensitive intervention to replace, in the future, the deteriorating concrete 'canopy' structure beneath the World Heritage Site of the Clifton Suspension Bridge.



A 30mph speed limit and cantilevered pedestrian cycle way will allow narrow lanes to be introduced on the Portway increasing motor vehicle traffic flow whilst providing a more scenic and safer pedestrian and cycle way.

Existing bunker 'canopy' beneath the Clifton Suspension Bridge



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HOTWELLS OPPORTUNITY - BENEATH THE FLYOVER

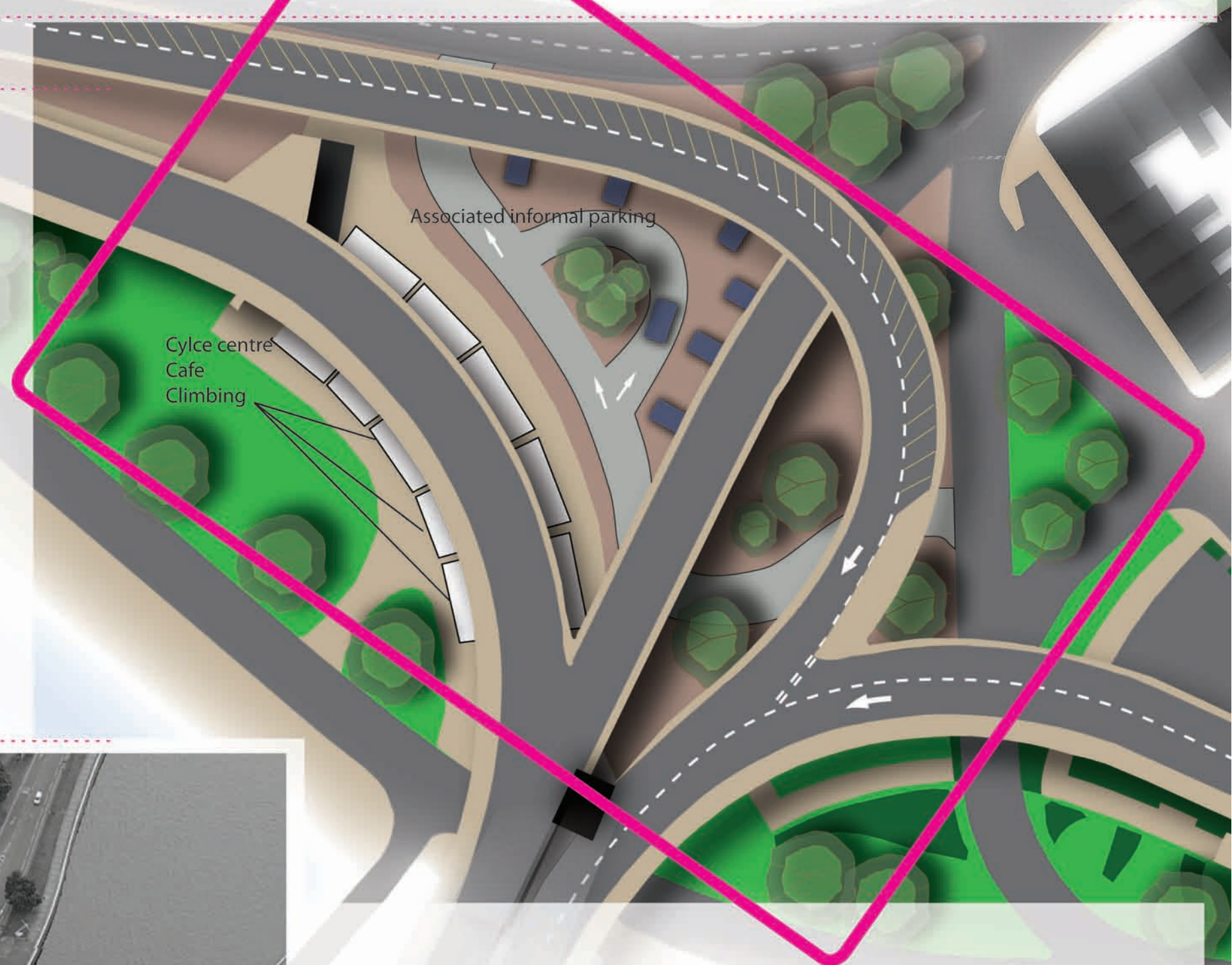
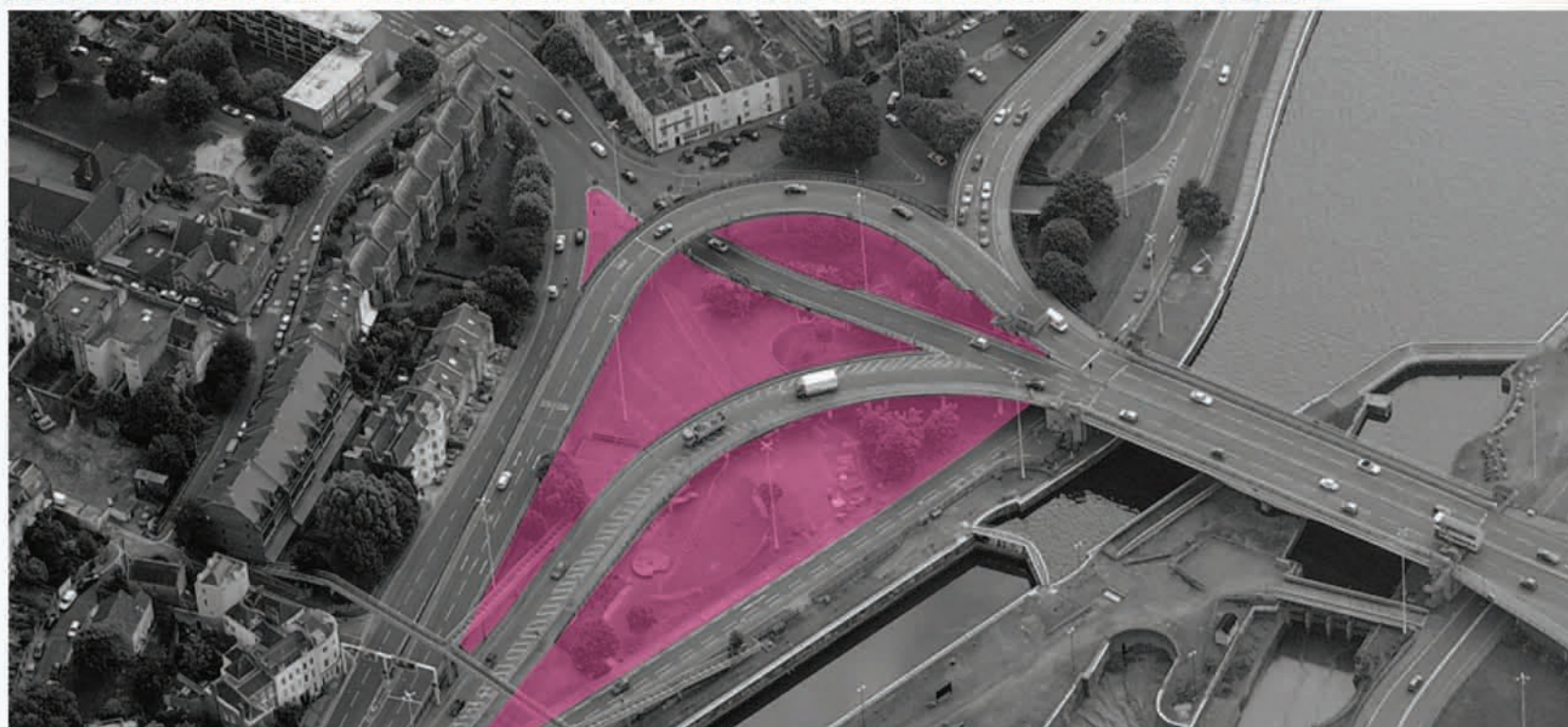
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View of part of the open space under the flyover



This designated open-space has been left for derelict. It has much potential and could be redeveloped as a youth orientated play and urban sports space with associated youth/sport facilities built under the canopies created by the flyovers. Hotwells, although so close to Ashton Court etc. does not have any parks, open spaces or facilities for young people or sports other than (uniformed) harbour based water-sports.

Opportunity to develop it as vibrant open space and facilities



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RECLAIM HOTWELL ROAD - DOWRY SQUARE GATEWAY

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View of existing road layout entering Hotwell Road from the South and West



The traffic light controlled routes from the Portway, Plimsoll Bridge and feeding back from Hotwell Road (east) currently feed via a two lane pinch point into three lanes past Dowry Square, around 'Deadmans Bend', before narrowing again to two lanes along Hotwell Road. This undulating sea of tarmac is inefficient and generates unnecessary confusion, conflict and congestion.

Plan of existing road layout Hotwells' Southwest gateway & Dowry Square



Rationalising the road width to a consistent two lanes would allow a reclaiming and redesign of historic Dowry Square and, via a pedestrian crossing with good sight lines, strong linkage across this dividing road between the Hotwells area and the Hotwells (traffic) Island including the remaining shops and local services on each side.

Improvements to Bridge Valley Road and access to Cumberland Road via the Plimsoll Bridge would reduce the commuter use demand placed on Hopechapel Hill, thus improving traffic flow on Hotwell Road.



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RECLAIM HOTWELL ROAD - HOTWELLS ISLAND EXTENSION

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A framework for retail and community revival on Hotwell Road

The effect, over some decades, of giving over the whole street width to a traffic roadway has fundamentally undermined Hotwell Road's once flourishing secondary retailing, suffocating it's economic and social vitality.

The existing layout in front of Trinity Church worsens the situation as it separates the two remnant runs of shops etc. and obstructs pedestrian movement between them.



Plan of existing road layout disconnects people from retail on Hotwell Road

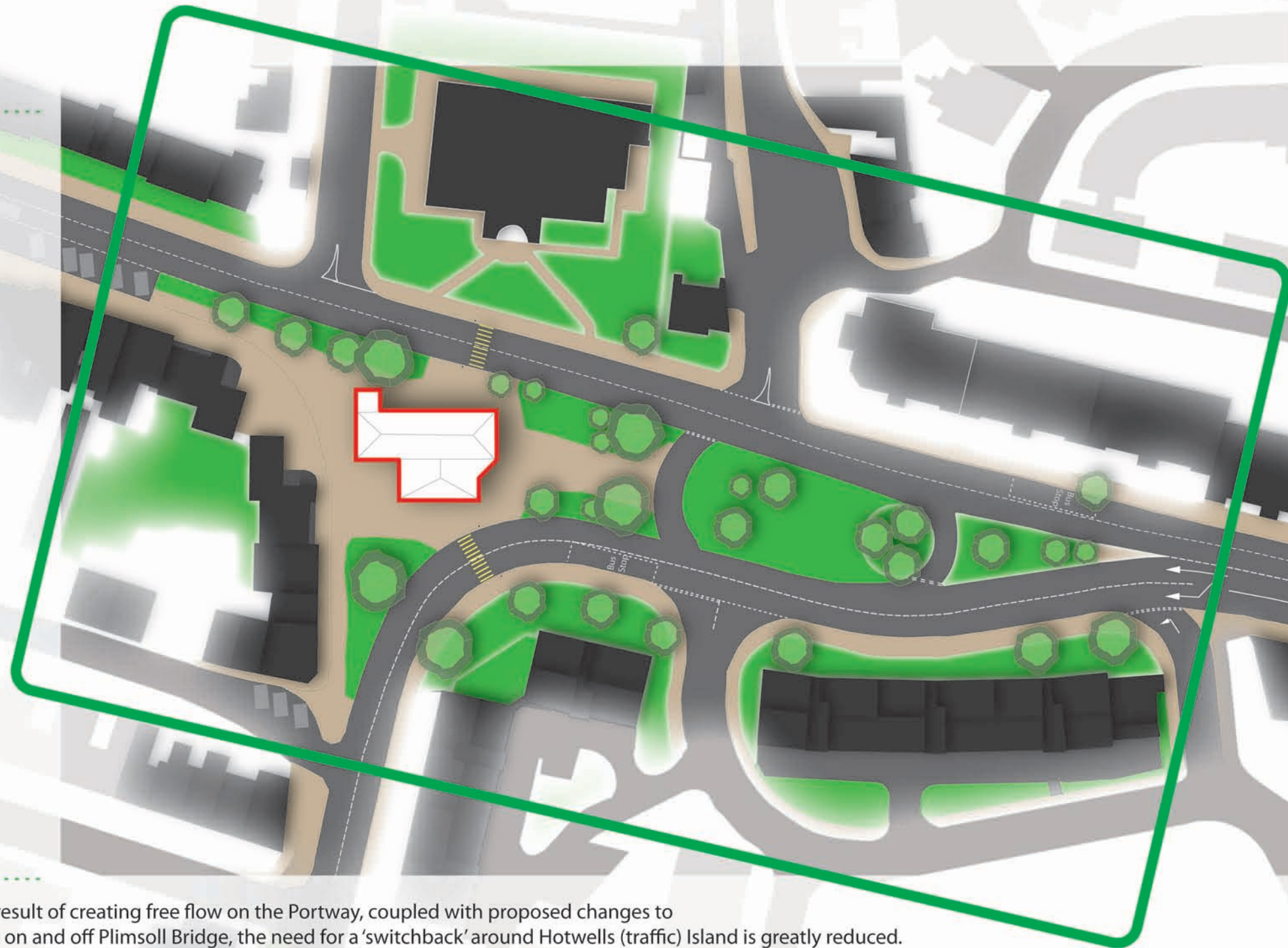


As a result of creating free flow on the Portway, coupled with proposed changes to flows on and off Plimsoll Bridge, the need for a 'switchback' around Hotwells (traffic) Island is greatly reduced.

As a result it becomes possible to extend the Hotwells (traffic) Island creating a substantial new site with excellent potential as the location for development of a new Hotwells and Cliftonwood Community Centre.

This island extension also creates a 'bridge' for pedestrians between the two separated commercial sections of Hotwell Road.

These changes would enable retail revival attracting customers and reflecting the interests, demands and relatively high disposable income of Cliftonwood & Hotwells residents. Thus road rationalisation delivers economic and social revitalisation and sustainability.



HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

RECLAIM HOTWELL ROAD - PUMP HOUSE CROSSING

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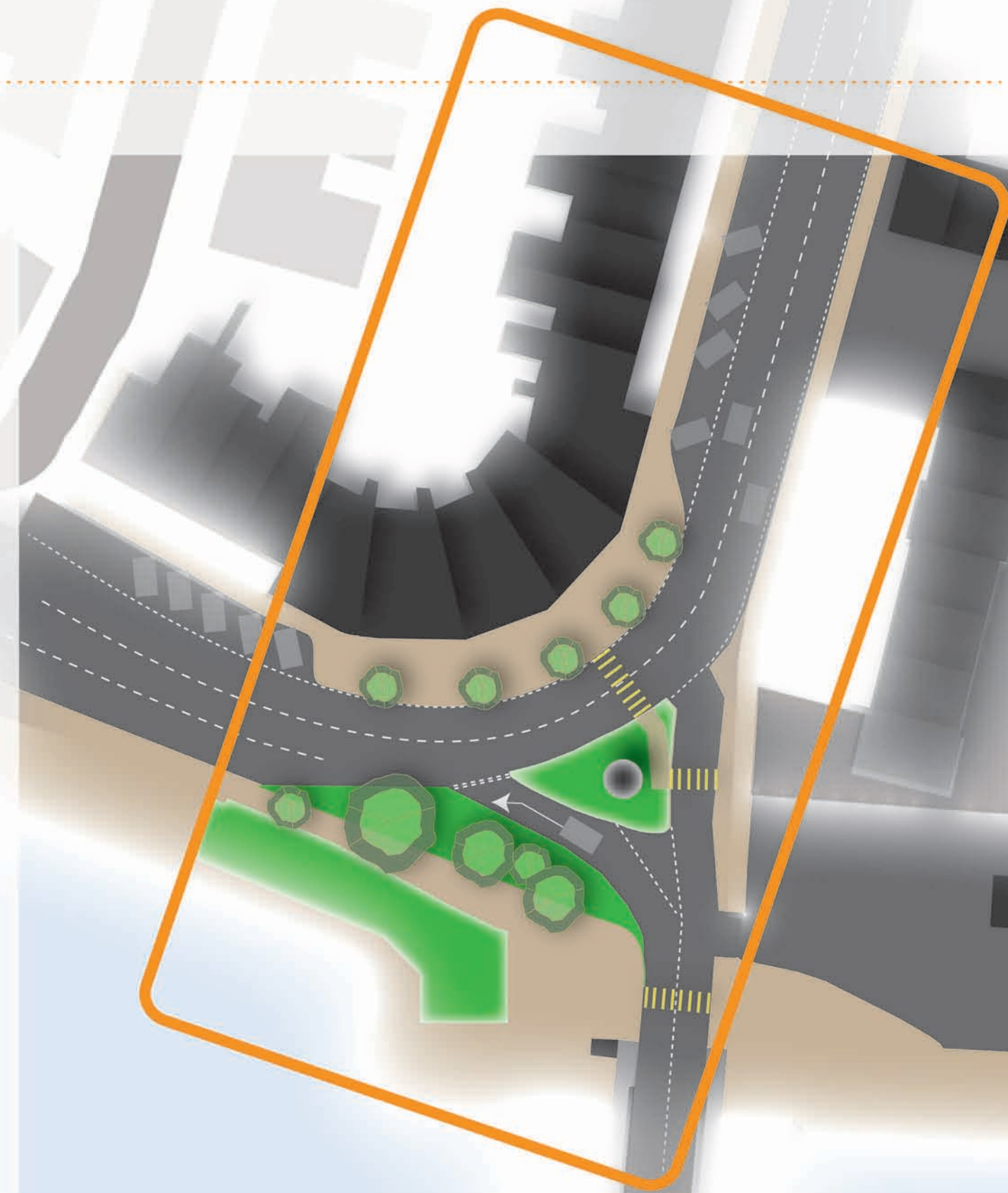
Connecting Hotwells (traffic) Island, The Harbourhead & Harbourside

Minimal treatment would be needed at this corner, implemented alongside the rest of the actions to reclaim Hotwell Road, to secure safe routes. As a result of the island extension only one set of traffic, coming out of the city centre would be released along Merchants Road. As a result a light controlled crossing can be put across the road and delay sequenced with that in front of Trinity Church and will have no effect on traffic flow. A second crossing by the bridge barriers is envisaged to facilitate pedestrian and cycle movement along the harbourside

If all but local access (and bridge swing) traffic can be sent over Plimsoll Bridge as per included alterations to Cumberland Road and Plimsoll Bridge roadway alignments, then Cumberland Basin Bridge and it's approach roads will become freer of traffic allowing free pedestrian movements between these neighbourhoods and along and around the Harbour.



Views of Merchants Road and 'run for your life' corner



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CUMBERLAND BASIN OPPORTUNITY & CUMBERLAND ROAD REALIGNMENT

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The tangle of access and exit ramps that lead up and away from Plimsoll Bridge are at present being poorly utilised both in terms of maximising traffic flow capacity and distribution and in minimising disruption and congestion to other local streets. In addition current direction signage and lane information is very confusing.

What is proposed is to feed all through-traffic, including that which comes from and heads towards Cumberland Road, across Plimsoll Bridge and restricting the use of Cumberland Basin Bridge to providing local access to the Harbourhead end of Spike Island local homes, businesses, the boatyard, the two bonded warehouses and to enable the unification and development of the regeneration sites.

Obviously Cumberland Basin Bridge would still need to be utilised taking all the re-routed traffic as and when the Plimsoll Bridge needs to be swung open.

Proposed changes accommodate this need while ensuring that, at least the rest of the time, the final missing section of traffic-free route around the whole of Bristol's floating harbour is completed.



HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

CUMBERLAND BASIN OPPORTUNITY & CUMBERLAND ROAD REALIGNMENT

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The multiple objectives can be met by –

Removal of the lower section of McAdam Way (ramp) & Brunel Lock Road on the south side of Cumberland Basin, Realignment of carriageway lanes on Cabot Way and Humphrey Davy Way on the north side to provide constant feeder lanes (and associated bus priority lanes) southwards across Plimsoll Bridge from the Portway and from the City Centre.

(These actions would remove the duplicate route southwards from the City Centre that uses Cumberland Basin Bridge and rises up to cross the high level Avon Bridge on the south side of the basin.)

At the combined top of Ashmead and McAdam Way (ramps) re-open the exit off Plimsoll Bridge feeding it down north side of the retained Ashmead Way ramp which would continue to carry traffic up from Cumberland Road heading south across Avon Bridge.

Traffic from Cumberland Road wanting to get north west along the Portway or north east along Hotwell Road would be able to use Smeaton Road and the curved up ramp to access and go across Plimsoll bridge with a similar form of feeder lane to provide good flow.

Existing road layout



Possible waterside development of museum, gallery, performance space, conference centre or other public building

To control these flows, provide access and exit from the Harbourhead area and to direct traffic across Cumberland Basin Bridge where the Plimsoll Bridge needed swinging an upgraded 4 phase set of traffic control lights will be needed along with minor re-alignment of roadways at Smeaton Road bridge.

It is also suggested that there is acknowledgement that traffic volumes on Cumberland Road have increased significantly and that if it is to be utilised as a quasi-main road then upgrading and other actions are needed to cut speeds and minimise effects along its length.

These changes would also need to link with and do support Traffic Action Hotspot No.2 and would enable the closure of Avon Crescent at the junction with Cumberland Road.



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HOTWELLS & CLIFTONWOOD COMMUNITY TRAFFIC STRATEGY

CUMBERLAND BASIN OPPORTUNITY - THE HARBOURHEAD

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Artists impressions of how the altered Cumberland Basin site might appear

Undeveloped open space



Possible space for public building – museum/gallery/performance space/conference centre.

