In 2011, Southend Borough Council completed the major 'Victoria Gateway' public realm improvement scheme. This encompasses the area surrounding Victoria Station, the link between the station and the High Street, and the junction of the A127 Victoria Avenue and the A13 Queensway.

A key feature of the scheme is the use of "shared space" principles to reduce traffic dominance, increase pedestrian priority, enhance public space, and present a positive image of the town to all those using the station itself and others passing by. In keeping with good practice, and bearing in mind the level of innovation represented by the scheme, the Council commissioned this post-implementation design review to assess the extent to which the scheme has achieved its objectives and to recommend any changes deemed to be appropriate in response to observed issues arising since scheme opening.

The review was prepared by John Dales, Director of transport and urban realm design consultancy Urban Movement (formerly part of Urban Initiatives), who also undertook the post-implementation design review of the 'City Beach' scheme in 2011.

In order to complete the review, the following key tasks were undertaken:

1. A comprehensive briefing meeting with key individuals, including Council officers and the consultants involved in scheme design and implementation.

2. A visit to the scheme area and on-site discussion with Council officers representing different relevant areas of interest.

3. Additional site observations at different times by the report author.

4. Correspondence with groups representing people with impaired mobility, to seek their views on the scheme, especially the impact of the "shared space" design on people with visual impairments.

5. A review of all relevant available papers, reports and data, including the safety audit reports.

6. A design review charrette with Council officers, the scheme designers and other experts, to consider key issues identified arising from the above tasks and to seek consensus on any recommended changes.
2.1 Project Objectives

As set out in the December 2007 brief to designers, the changes at Victoria Gateway were part of a wider Masterplan for Southend ['City by the Sea'] that sought a step change in the function and quality of the town centre and the seafront in accordance with the overall aspiration to make Southend a more attractive destination for both residents and visitors.

As originally conceived, the Gateway area was part of a design initiative covering a wider area – ‘The Victorias’ – that also encompassed Queensway as far west as the roundabout junction with London Road, and London Road from Queensway to the High Street. Over time, the focus of the design narrowed in view of cost and deliverability considerations. The principal project objectives for the Gateway area, established in the design brief, were as follows.

- To create a more visible gateway entrance to the town centre with clear signposting and conveying a sense of arrival and orientation
- To create an attractive and viable space for public transport, private vehicles, but one providing equal if not greater priority for pedestrians and cyclists
- To create attractive and visible linkages to the town centre
- To foster sustainable forms of transport
- To explore opportunities for the introduction of quality and enduring public art and lighting and illumination

The London Road/Victoria Circus element of the original scheme was not implemented (due to costs). However, it is noteworthy that, while, one of the design objectives for this element was “to establish pedestrian priority shared surfaces”, this was not a specific objective for the Gateway area.

2.2 Scheme Description

As the images on pages 10-11 show, the area around Victoria Station, including the junction of the A13 Queensway and A127 Victoria Avenue, has been transformed through the replacement of a large, four-arm roundabout by a smaller, though still multi-lane, three-arm signalised ‘T-junction’. Where previously there was a large, inaccessible, oval greenspace in the centre of the roundabout, there is now both a generous, easily-accessible hard-paved space to the north that is contiguous with the station forecourt, and a smaller hard-paved space to the south that provides a better pedestrian link to the High Street.

Limited traffic, principally buses and taxis, is allowed to move through the northern space along a ‘carriageway’ that is at the same level as the surrounding pedestrians space and formed of materials that harmonise with the new surroundings. The conventional distinction in colour/materials and level difference between ‘carriageway’ and ‘footway’ is therefore minimised. The main A13 and A127 carriageways are, however, dressed in conventional black tarmac and, other than at formal crossing points, are separated from the adjacent footways by vertical kerb edges. The captioned photos on pages 12 and 13 show a number of different aspects of the scheme in more detail.

Although not a specific requirement of the brief, the scheme designers sought from the outset to use the “shared space” concept as a means for increasing pedestrian and cycle priority in parts of the study area where vehicles would continue to require access. Therefore, while the main carriageways were significantly remodelled and rationalised, with the southern arm of the junction (The Deeping) being closed altogether, bus, taxi and other direct vehicular access to the station was maintained on the ‘single surface’ immediately south of the station building. The southern hard-paved space is also for shared use - though here by just pedestrians and cyclists.
The initial and revised design concept illustrations on page 9 show that the core movement-related characteristics were retained in the final scheme, as was the granite paving, the key hard landscaping element. However, to ensure that the scheme was delivered on time and to budget, some changes were made to reduce the 'greening' aspects, since these could be delivered later. This has been picked up in the joint Council and Sustrans 'Pocket Places' initiative, currently underway, which seeks to create a broader proposal for enhancing the green space and activity along Queensway (from the London Road to Chichester Road).

Construction of the Victoria Gateway scheme began in January 2010 and was completed in March 2011.
Visualisation of the original preferred design option (above) and of the modified/value-engineered version (below)
Stone benches and new street trees in northern space

View of northern hard-paved space, looking west

View of vehicle path through single-surface hard-paved northern space

View north across vehicle path towards southern station entrance

Delivery vehicle outside station western entrance - large vehicles in inappropriate locations have damaged slabs

Cycle parking near western station entrance - also helps to guide pedestrians around relatively steep slope
End of westbound off-carriageway cycle track and feeder into shared pedestrian/cycle southern hard-paved space

View north towards station across the Toucan crossing of Queensway

View south towards (hidden) High Street across Toucan crossing of Queensway

Westbound Queensway approach to Victoria Ave junction: cycle feeder lane/awkward relationship with bus stop

View from southern space towards High Street showing unwelcoming/illegible nature of narrow ‘slot’ access

View towards station from south-west corner of Gateway area: project to improve ‘greening’ is in hand.
3.1 Documents

The following documents have been reviewed as sources of information about the Victoria Gateway scheme. They are listed for reference purposes.

- Guidance on the Use of Tactile Paving Surfaces (Department for Transport, December 2005 [modified June 2007])
- Victoria’s South and London Road (Public Realm Improvement Scheme) Tender Submission for Lead Landscape Architect Role (Renaissance Southend, December 2007)
- Southend on Sea Public Realm Improvement Schemes, Scope for Transport Consultant Services (Renaissance Southend, February 2008)
- The Victoria’s Public Realm Improvement Scheme, Southend – Stage 4 Design Report (Chris Blandford Associates, October 2008)
- Victoria Station Gateway, Stakeholders Engagement Report (Atkins, July 2009)
- Victoria Gateway Post-Occupancy Review (Atkins, August 2011)
- Local Transport Note 1/11 Shared Space (Department for Transport, October 2011)
- Victoria Gateway Stage 4A Road Safety Audit (Atkins, August 2012)

3.2 Historic Collision Data

The collision record for the site since the Gateway scheme opened indicates that there are no specific safety issues or clusters associated with the hard-paved, single-surface northern space, even though this is still very well used, with thousands of pedestrians crossing the vehicle path every day. The collision record overall for the Gateway area is also encouraging.

For the area as a whole, analysis of 21 months of ‘after’ data (April 2011 to December 2012 inclusive) compared with 36 months of ‘before’ data (12th February 2007 to 11th February 2010) indicates that the overall collision rate has dropped from 9.3/year to 5.7/year; with the number of people injured reducing from 11/year to 9.1/year. The collision rate for pedestrians has reduced from 4/year to just 1.7/year.

3.3 Site Observations

Site observations were undertaken at different times and on different days in each of October 2011 and June, August, September and October 2012, to observe the Gateway scheme in operation under a wide range of circumstances, including a variety of weather conditions. In August 2012, John Dales had a guided tour of the study area in the company of nine Council officers with different interests and responsibilities (see panel) and was able to have numerous questions answered concerning scheme design, delivery and operation.

Site Walkabout Attendees, August 2012

Paul Mathieson, SBC (Group Manager)
Collette Kemp, SBC (Road Safety Officer, Cycling)
Tim Totten, SBC (Traffic Engineer)
Cheryl Hindle-Terry, SBC (Team Leader- Traffic Management and Road Safety)
Adrian Watling, SBC (Traffic Engineer)
Sue Goss, SBC (Senior Transport Planner and MoveEasy Officer)
Graeme Newman, SBC (Transport Policy Officer/Engineer, Buses)
Paul Whitwell, SBC (Principal Engineer, Maintenance)
Karen Gearing, SBC (Major Transport Schemes Project Manager)
3.4 Representations from Disability Groups

The following organisations were asked to comment on the Victoria Gateway scheme as they consider it to impact upon people with mobility impairments, specifically those who are blind or partially-sighted:

- Guide Dogs for the Blind Association
- National Federation of the Blind (NFB)
- Disabled Information Advice Line (DIAL) Southend
- Avro/Viking Community Resource

These groups, and others representing people with a range of mobility impairments, had been present at a scheme design development meeting on 23rd June 2009. At this meeting, the proposals for change were introduced, a wide range of issues were raised, and numerous comments were made that helped influence the final design. As is the case with most consultation exercises relating to such complex schemes, not all recommendations from this meeting could be incorporated within the design as delivered, not least because those from some groups present were hard to reconcile with those from others.

In the context of this post-implementation review, neither DIAL Southend nor Avro/Viking provided new feedback on the Victoria Gateway scheme, both groups having commented in general on "shared space" principles and certain aspects of the Gateway scheme when they were consulted in 2011 in connection with the City Beach scheme. Avro/Viking had been given a guided tour of the scheme in October 2011, where its principles were explained and practical issues related to its use were discussed.

Local representatives of Guide Dogs and the National Federation for the Blind kindly prepared a written report of their joint feedback on the Victoria Gateway scheme.

The following represents a summary of the key points raised in relation to the scheme by disability representative groups:

- Concern that blind and partially-sighted people are unable independently to orientate themselves to specific destinations, such as the train station entrances and bus stops, without encountering significant risk of injury by moving traffic.
- Tactile and colour-contrasted clues/land marks are unsatisfactory and almost unusable.
- The removal of a defined delineation between footway and carriageway has created an environment in which blind and partially-sighted feel unsafe.
- The controlled (signalised) crossing points within the Gateway scheme are difficult for blind and partially-sighted people to locate independently.
- The 'internal' carriageway used principally by taxis and buses has no designated safe or controlled crossing point.
- The busy and noisy Gateway environment is one that blind and partially-sighted people find confusing and stressful to navigate.

A schedule of helpful comments on details was also prepared by Guide Dogs/NFB, and these were used as briefing notes for the design review charrette.
3.5 Design Review Charette

A charette is a design workshop where issues are not only discussed and debated but design solutions recommended and sketched live. This very helpful exercise for Victoria Gateway was undertaken on 5th October 2012, and was attended by ten people including independent advisors, the scheme designers and Council officers (see panel). The charette addressed each of the key issues set out in section 04 below.

**Design Charette Participants, October 2012**

Phil Jones, Independent, Phil Jones Associates
Paul Dodd, Independent, Out Design
David Grubb, Atkins (Gateway Design Team)
Andrew Harris, Atkins (Road Safety Auditor)
Neil Hoskins, SBC
Tim Totten, SBC
Richard Backhouse, SBC
Graeme Newman, SBC
Colette Kemp, SBC
Peter Shrimplin, SBC
The following key questions and related issues were derived from the work in undertaking tasks 1-5 of this review (see section 01, page 7):

4.1 Are some users put at risk by, and/or do they feel unsafe using, the single surface area through which buses, taxis and some general traffic passes?

- Perceived problem of bus and other vehicle speeds through bus path. ‘Sharing’ depends on relative volumes and driver courtesy. Likely problem of buses speeding to try and ‘beat the red’ at the Victoria Avenue junction.
- General traffic can come eastbound through bus/taxi area if entering via taxi-drop-off forecourt to west of station.
- Check entry restrictions at the west/Victoria Ave end of bus path

4.2 Is the type and provision of tactile surfacing and/or other guidance sufficient for enabling visually impaired people to negotiate their routes safely and effectively?

- ‘Guidance Path’ tactiles through main ‘shared space’ are intended to be walked along. Do they work?
- Review of why/how tactile surfaces were deployed as they are.
- Check stick-down rubber corduroy paving near the southern station entrance.

4.3 How can pedestrian conflict/capacity issues on the main Toucan crossing of Queensway between the station and the High Street best be resolved?

- Technically signalised as a single stage, direct crossing, but central reservation area encourages half-way crossing during red man and central reservation capacity often overspills.
- Elimination of central reservation would involve modifications to whole of dual carriageway layout, be costly, and appear a retrograde step from pedestrians’ point of view.
- Widening of reservation could be achieved through lane narrowing, especially of southern carriageway (wider than northern at crossing, due to flaring for the westbound approach to Victoria Ave junction).
- General concern that signal timings mean pedestrians often try to walk across through traffic blocked back from main junctions, even through red man showing. Blocked-back queues may be in one or more lanes and usually westbound.

4.4 Would changes to the layout/operation/marking of the westbound approach to the Queensway/Victoria Avenue be beneficial?

- Concern that buses use the bus stop as a fourth bus-only lane (when not stopping)
- Is the cycle filter to the wide advanced stop zone a safe/appropriate/necessary facility?
- The signals allow two of the three lanes to turn right and one go straight ahead. Is there a way to improve safety and efficiency by adjusting the signal design in conjunction with modifications to the carriageway (including cycle box and bus lay-by)?
- All westbound buses want to move into the offside Queensway lane west of this junction, in order to go ahead at the next roundabout, and there is a concern about conflicts with other traffic going ahead as buses swing over to the right straight after the junction.
4.5 How can cycle routes through and to/from the Gateway area be improved?

- Relates to issue re advanced cycle stop zone in Q4 above.
- Improve legibility of existing east-west off-carriageway route through the ‘shared space’ on the south side of Queensway.
- Generally, seek better cycle links to/from both west and east.
- Need to improve cycle links to/from the north, incl the link in front of the museum.

4.6 What changes could help improve the sense of place/arrival?

- Opportunities for encouraging people to dwell in the space – more, different or better-located seating; more greenery/shade; greater protection from traffic noise?
- Possible new lighting scheme?
- More prominent public art/orientation feature?
- Commercial activity/development – short term small unit/kiosk; long term larger, permanent building on part of space?
5.1 Safety/risk on the single surface

The collision record for the site since the Gateway scheme opened does not indicate that there are any clear identifiable safety issues with the single surface area through which buses, taxis and some other motor vehicles pass. Anecdotal evidence of excessive vehicle speeds is notoriously subjective, and concerns seem to have diminished since the early days of the scheme.

A collision involving a bus and a wheelchair user led to reports in which the term “shared space” was inaccurately cited as the major contributory factor. The August 2012 Road Safety Audit, together with further collision analysis (see 3.1 and 3.2), reveal that collisions overall, and within the northern single-surface area, have reduced, and that pedestrian collisions have dropped markedly, despite the area still being very well-used. Bearing in mind also that a formal crossing point across the bus path (zebra or signals) would not in any case prevent a pedestrian or wheelchair user from crossing where they choose, there is no persuasive case for change.

However, although the record of actual collisions is positive, concerns remain that some user groups are excluded because of perceived danger. Clear, consistent kerb delineation is sought by groups representing blind and partially-sighted people. While retro-fitting vertical kerb delineation would be of value to some users, it would diminish its utility for others; and it would also unbalance the scheme and be very costly. Nevertheless, there is a case for enabling blind and partially-sighted users more readily to recognise the boundary between the pedestrian-only area and the vehicle path. This is considered in 5.2 below.

An additional way of addressing concerns over potential pedestrian/vehicle conflict would be to reduce the width of the vehicle path at the point where most of the pedestrians cross on the route between the southern station entrance and the town centre. The vehicle path here flares to allow access to/egress from the bus stops to the east; and, because the pedestrian desire line is on the diagonal, the walking distance across the vehicle path is lengthened further (see photo).

While there is theoretical scope for narrowing the vehicle path at this point, as indicated in Diagram 1, this would be likely in practice to have a negative impact on bus queuing in a connection with movements into and out of the bus stops.
Since this could have negative knock-on effects both on bus passenger journey times and on local pedestrian amenity, and would also be costly, the option of narrowing the vehicle path should only be considered if clear evidence of overall benefit is presented. Notwithstanding anecdotal concerns expressed in the early days after scheme opening, there is currently no compelling evidence that the scheme requires modification in this regard.

5.2 Tactile surfacing

Two basic types of tactile surfacing are present within the scheme: ‘blister paving’ to delineate transition between pedestrian-only areas and areas where vehicles can move; and ‘guidance path’ which people can walk on or alongside to get from A to B.

Concerning blister paving adjacent to the vehicle path through the single surface, this is presently only located on the direct crossing path on the main desire line from the southern station entrance to the Queensway crossing. This means that, for much of the extent of the vehicle path, there is no tactile marking of the transition between it and the pedestrian area to either side. This circumstance is similar to that encountered on City Beach at the junction between Marine Parade and Hartington Road, and a similar response to what was recommended there is justified at Victoria Gateway. That is to say, while blister paving is appropriate at the main crossing points, ‘corduroy’ tactile paving (introducing a third type of tactile) should be deployed wherever the transition between the vehicle path and the pedestrian-only area is flush. (This type of treatment has also been used in other UK locations, such as Exhibition Road, London.)

To adopt the above course of action would obviously have an impact on the single surface junction between the bus path and the egress from the taxi/servicing/short-stay parking area adjacent to the station’s western entrance.

Options for change here are complicated by the nuances of ‘shared space’ design, where the notion of vehicle paths and junctions between them is blurred. At Victoria Gateway, in practice, the bus path is considered by many users as a ‘carriageway’ to be crossed, and therefore the edges of this path, where it is flush with the pedestrian-only area, would be the obvious location for corduroy tactile paving delineation.

If this general course of action is agreed, the issue then arises of how best to treat the very lightly-trafficked ‘junction’ of the bus path with the access to the western station forecourt. This could be considered like a simple footway crossover for access, rather than a junction as such. If so, the layout could be modified along the lines shown in Diagram 2, where the NW-SE pedestrian path across the access (shaded white) is given visual priority over vehicle movement (which is egress only from the western station forecourt). This could be achieved through repaving the pedestrian crossing path in materials that match the existing pedestrian-only areas. The proposed deployment of corduroy tactile paving for this option is shown as a red line. Diagram 2 also shows the possibility of tightening the radius of the left turn out of the forecourt area (shaded green) to make the pedestrian crossing path shorter and encourage slower vehicle speeds.

It is recognised that the cost implications of moving to a Diagram 2 layout will not be inconsiderable, and that options for change depend upon the extent to which the conjunction between the bus path and western forecourt is regarded as a ‘junction’. Nevertheless, the simplicity and clarity of the continuous corduroy delineation of the bus path (where flush) is worth pursuing.

If the corduroy delineation is implemented, the ‘cannon ball’ bollards could be removed; especially if both the corduroy and blister tactile paving ‘edge’ to the vehicle path were to be in a visually contrasting colour to the surrounding
materials. If this is considered an appropriate move, the contrasting colour should nevertheless harmonise with the rest of the Gateway scheme (e.g. dark grey) rather than clash (e.g. standard buff paving). Selected ‘cannon balls’ could be retained purely to protect against vehicle over-run in specific locations where justified.

While the above are presented as options for consideration, one change that is required concerns the guidance path tactile paving designed to provide a link across the main space from the station southern entrance to the crossing of Queensway. This is currently incomplete, stopping short of the station entrance and with the gap only partially filled by temporary by stick-down rubber corduroy [see red box in Diagram 3 and picture on page 16]. This temporary arrangement should be made permanent as soon as possible, using granite elements as for the rest of the guidance path track.
5.3 Main pedestrian crossing of Queensway

The main concern here relates to pedestrian crossing activity at the formal Toucan facility, principally pedestrian over-crowding the central reservation and also walking in between static vehicles at times when vehicles have a green light. Replacing the Toucan with a Zebra crossing was suggested by some review participants, but this would be likely to have adverse impacts on the efficiency/queuing of vehicles at peak times, which would quite likely feed back into adverse impacts on pedestrians related to pedestrian visibility and driver frustration.

On balance, and bearing in mind that there are no practical measures for stopping pedestrians crossing on a red man should they choose/deem it safe to do so, the best approach would seem to be to combine a widening of the central reservation with a reconfiguration of the westbound Queensway carriageway at this point, associated with other measures to reduce vehicle queuing (see 5.4 and 5.5 below).

This physical change is made relatively straightforward by the fact that there is currently an unusable half lane-width on the westbound Queensway carriageway just west of where the separated cycle track terminates and feeds cyclists into the shared southern hard-paved space. The essentials of the proposed change are shown in Diagram 4, with the new pedestrian area shaded yellow. SBC officers consider that this proposed arrangement would also assist with improved lane discipline by drivers, and hence may also help to ease congestion and improve road safety.

Diagram 4
5.4 Westbound approach to the Queensway/Victoria Avenue junction

In association with changes described in 5.3 above and 5.5 below, there is the opportunity to remodel the existing westbound approach to the main junction in relatively modest ways that should also achieve a number of user benefits. This depends both on remarking the three general traffic lanes in accordance with the remodeling of the Toucan shown in Diagram 4 and the removal of the existing cycle filter lane and advanced stop zone (ASZ) [see middle photo on right side of page 11].

The short nearside filter lane into a four-lane-wide ASZ is of extremely limited (if any) practical value to cyclists, and may even encourage cyclists to undertake hazardous manoeuvres. They also represent an inefficient use of the carriageway at a critical point where greater efficiency could benefit all users.

Using the space currently occupied by the cycle filter lane, as well as the existing ‘wasted’ space between it and the bus stop bay, it would be possible to reconfigure the layout and modify the signal infrastructure and controls so as to allow the ahead and right-turn movements to be separately signalled and the whole junction to run more efficiently as a result.

The effects of this proposal will need to be modelled to help clarify precisely which new layout will be most beneficial in terms of general junction efficiency, bus priority and also pedestrian and cyclist safety and convenience (at the controlled crossing points). One possible revised layout is shown in Diagram 5.
5.5 Cycle facilities

As mentioned in 5.4, it is considered that the marked cycle facilities at the westbound Queensway stop-line are of limited (if any) value to cycling. This is for a number of reasons, including the lack of practical utility and cyclist safety concerns inherent within the existing arrangement.

Should the markings be removed, as proposed in 5.4, any cyclists who choose to will remain able to adopt the `vehicular cycling’ approach of moving into and occupying the appropriate general traffic lane, adopting the `primary position’.

All cyclists, however, can travel westbound towards the London Road – bypassing the signals altogether – by leaving the separated cycle track as it emerges from under the over-bridge and then passing through the shared southern space, to rejoin Queensway west of the junction. There are alternatives as to how cyclists could rejoin Queensway west of the junction: they could either use the existing ramp – which should be widened and more clearly marked; or they could continue off road by using the footway along the south side of Queensway, should this be made shared-use for pedestrians/cyclists. (This proposal forms part of the ‘Pocket Places’ study currently in hand). For cyclists travelling through the Gateway from the east towards Victoria Avenue, it is straightforward to use the Toucan crossings and continue on the cycle track. (The Council’s cycle team confirms this as acceptable.)

In order to make the off-carriageway cycling options more visible, legible and hence better-used, it would be beneficial to introduce some cycle signage – using existing poles and/or lamp columns – as well as to emphasise to all users of the southern space that it is shared by pedestrians and cyclists. This could be achieved appropriately subtly by replacing a small number of paving elements with some carrying the shared pedestrian/cycle symbol (see picture below). Again, this forms part of the ‘Pocket Places’ study.
5.6 Sense of place/arrival

It is understood that, as was mentioned in section 2.2, the implementation of key ‘place’ elements of the design was compromised by a necessary value engineering exercise prior to delivery. With cost therefore being a key issue, it is recognised that simply saying ‘more should now be spent on new features’ is at best a partial response to the challenge of enhancing the sense of place at Victoria Gateway. However, there was clear agreement amongst the participants in the walkabout and design review charrette that there is real potential for further enhancements to the sense of place and activities in the Gateway. Although not directly within the remit of this technical design review, it is worth recording the various suggestions that arose from the charrette.

- Enhanced ‘greening’ of the Gateway, including repairs to the existing tree pits. (Subsequent to the charrette, the ‘Pocket Places’ project is now focusing on the Queensway urban corridor and supporting the local communities to improve activity and interaction by increasing walking and cycling, improving street infrastructure and landscaping and helping re-knit the social and physical fabric of the area.)

- Possible new/re-located seating associated with new green shelter from traffic noise.
- A bolder public art installation than ‘The Return’; a clearer landmark being more appropriate for a space of this scale.
- Feature lighting – which could be integral to a new public art installation.
- Use of the large flank walls enclosing the southern space for lighting/public art, and/or to locate large news/public information screens.
- Pop-up building/kiosk – which could house commercial activities (e.g. coffee bar, florist) and/or be changed with the seasons.
- Seasonal active use for the space, such as fixed table tennis or other playful/exercise elements. Could actively encourage skate-boarding in part of the space, rather than consider it a menace.
- Long-term, consider re-use of some of the large space for permanent built development generating a financial return for the Council.
The Council undertook the Victoria Gateway scheme recognising that it would transform the area, and intending that it should. Because of the comprehensive change that the scheme introduced, and some of the unfamiliar features it contains (e.g. the northern and southern hard-paved single-surface areas), it was expected that some concerns would be raised by some users about some aspects. It was for this reason that the Council sought this post-implementation design review.

While some particular concerns have indeed been raised, in good faith, by specific user groups, these are not to be confused with less well defined and intentioned criticisms that have been voiced, or with general confusion over the term “shared space”. Now that the scheme is over two years old, and analysis of the collision record over a substantial period is possible, the overall conclusion of the review is that the Gateway scheme has been largely successful when measured against its objectives (see 2.1).

The modifications that are identified below are a combination of options to be considered and definite recommendations for specific changes (see section 05 for further details). They are regarded a measured response to issues raised both by specific user groups and by other participants in this review. They are relatively minor, not least because of the importance of not undermining the integrity of the scheme as a whole.

The Council should now explore the costs, construction challenges and possible disruption that implementing the recommendations will incur, and consider them in that light.

**Tactile Paving**

a) Install corduroy tactile paving to mark the full edge of the main vehicle/bus path where this is flush (and there is no existing blister paving). Consider use of appropriate colour contrast (e.g. dark grey) and consider removal of ‘cannon ball’ bollards, other than where necessary to prevent damage caused by overrunning vehicles.

b) Extend ‘guidance path’ tactile paving all the way to the southern station wall, replacing temporary rubber corduroy extension.

**Queensway Pedestrian Crossing**

c) Widen the central pedestrian reservation by local carriageway realignment and reducing the westbound carriageway to just two lanes of equal width at that point.

**Westbound Approach to Main Junction**

d) Remove marked cycle feeder lane and advanced cycle stop zone; and
e) reconfigure lane markings/layout and signal controls to increase efficiency and safety for all users, including cyclists and pedestrians.

**Cycle Facilities**

f) Increase the visibility/legibility of the cycle bypass route through southern shared space, including TSRGD Diagram 956-style paving tiles and improvements to the westbound cycle on-slip to Queensway west of the junction.

g) Enhance local cycle signage, to emphasise the route across the Queensway Toucan, using existing columns/poles, not new vertical elements.

h) Link (f) with the shared foot/cycleway on south side of Queensway, if this proposal is implemented in due course as per the related 2012 study.

**Single Surface**

i) Along with [a], consider modification of the ‘junction’ between the main vehicle/bus path and the western station forecourt.