June 27, 1996

SUBJECT: STANLEY PARK SEAWALL

RECOMMENDATIONS:

THAT pedestrians, cyclists and in-line skaters continue to share the Stanley Park seawall, except for the 1.3 km section between Hallelujah Point and Lumbermen's Arch;

THAT greater physical separation between pedestrians and wheeled traffic be provided in sections where pedestrians, cyclists and skaters will continue to share the seawall east of Pipeline Road;

THAT a 3.0 metre wide portion of the Park Drive be reallocated to cyclists and skaters between Hallelujah Point and Lumbermen's Arch.

BACKGROUND

In recent years, the mix of increasing numbers of in-line skaters, cyclists, and pedestrians has been a growing source of concern. Peak volumes on the seawall have been measured to be as high as 2,000 movements per hour. During summer week-ends, volumes of 1,000 per hour are regularly registered.

On a daily basis, the mix pattern on the east side of the park shows that pedestrians are the predominant user in the mornings until about 11:00 o'clock, after which the cyclists and skaters predominate until 4:00 p.m., when the pedestrians predominate once again. The pattern on the west side is similar except that the cycling/skating dominant period is of shorter duration.

The growing competition between the various modes of transport has led to the Board studying Stanley Park transportation issues in detail in the last five years. In 1992, the Stanley Park Task Force advocated a rapid program of reducing the park's dependency on the automobile.

In 1993, the Board undertook on an experimental basis the creation of a bicycle path on the Park Drive, between the Vancouver Rowing Club and the north end of Pipeline Road. This six week experiment had a very mixed response, with automobile drivers being overwhelmingly against, due to the loss of parking and stopping opportunities along the Park Drive. Pedestrians were largely in favour, while cyclists were more or less evenly divided.

In 1994, the Board undertook a Stanley Park stakeholder process to review the transportation options. Unfortunately not all stakeholders decided to participate and this process essentially recommended that the status quo be maintained.

In 1995, the Board retained Urban Systems Ltd. to undertake a broader public participation process. The consultant prepared three options, which are fully described in a March 1996 report previously issued to

Board members. Plans of the options will be available during Board meeting.

Two of the options removed cyclists and skaters from the seawall. Instead, they would be routed onto the Park Drive from the park entrance to the north end of Pipeline Road. From here, they would either return to the park entrance back along Pipeline Road or alternatively go through the forest along a path that would lead to Second or Third Beach. The third option kept cyclists and skaters on the seawall and contemplated the widening of the seawall inland wherever possible.

The open houses in September 1995 attracted several hundred people and over 100 questionnaires were received. A large majority (70%) favoured the removal of cyclists and skaters from the seawall (options 1 and 2), although an analysis of the responses indicated that a large proportion of respondents were West End residents. A public meeting was held November 23, 1995, and a highly animated discussion took place among a small number of people.

The cycling and skating community stated very clearly their preference to remain on the seawall. They suggest that the solutions presented by the consultant are year-round ones, even though the seawall problem is basically a summertime one. In addition, they criticized options 1 and 2 because they effectively deny access to the seawall for cyclists and skaters on the entire west side of the park.

In the spring of 1996, staff met with some representatives from Cycling B.C., the Bicycle Advisory Committee and the In-line Skaters Patrol, to discuss alternative solutions. It was suggested that the raised cycling/skating lanes on the seawall between Prospect Point and Third Beach provide good separation and work reasonably well. Volumes in this area are high, yet violations appear to be few. No accidents have been recorded.

PURPOSE

This report outlines an interim initial phase of long term changes for the seawall east of Pipeline Road, where geographic conditions make options easier to achieve. The west side will require further analysis on the comparative merits of a raised separation (with essentially no widening) of the remaining level portions of the seawall versus a cross-park cycling/skating path from the north end of Pipeline Road to the Ferguson Point area.

TRANSPORTATION GUIDELINES

In considering changes to the Stanley Park seawall and Park Drive, staff have been guided by transportation priority list endorsed by both Council and the Board: 1) pedestrians; 2) cyclists; 3) transit; and 4) the private automobile.

In practical terms, the priority list implies: a) the creation of safer and more convenient routes for pedestrians, cyclists and skaters; b) a

reduction in the park's dependency on the automobile; and c) and improved transit into and around the park. The implementation of this transportation strategy is seen as a long term program. Any future change along the seawall and/or the Park Drive must meet the objectives of the transportation strategy.

In the medium term, this strategy can accommodate cyclists and skaters on the seawall. On the southeast portion of the seawall, this can be achieved by widening and separating their route from the pedestrian path. On the west side seawall, few improvements are recommended because, if pursued, they could only provide a limited improvement over existing conditions.

In the long term future, it is likely that the seawall (even if widened as much as possible) will not be able to accommodate the growth in pedestrian, cycling and skating traffic. This will occur when the downtown peninsula population doubles and the False Creek and Coal Harbour seawalls are complete. When this occurs, Park Board staff would likely recommend the removal of cyclists and skaters from the seawall, in order to create a pedestrian-only seawall.

It is therefore proposed to find a solution that allows cyclists and skaters to remain on the seawall in the medium term as long as conflicts between pedestrians and wheeled traffic can be managed; as well, the solution has to be able to meet the needs of a pedestrian-only seawall if cyclists and skaters are eventually removed from the seawall and completely routed onto the Park Drive.

Modifications to the seawall should be guided by the following principles:

- a) the seawall should be able to accommodate a moderate growth in cycling and skating traffic;
- b) all portions of the seawall, including cycling/skating paths, should be designed to be convertible to pedestrian paths; and
- c) any improvements to the seawall for cyclists and skaters should be moderately priced.

SEAWALL DESIGN GUIDELINES

Park Board staff have prepared an option that achieves these stated objectives. On the southeast portion of the seawall, the option is based on widening and vertically separating the seawall where it is easy and inexpensive to do so, as well as providing greater horizontal separation between pedestrians and wheeled traffic where space permits. In designing the modifications to the seawall, staff have used the following design guidelines (see Appendix A for cross-sections):

- a) that currently proposed changes be limited to the route east of Pipeline Road;
- b) that cycling and skating around the seawall be permitted only in

one direction, as is presently the case;

- c) that the cycling/skating path be 2.5 to 3.0 metres wide;
- d) that horizontal separation is the preferred design option;
- e) that in sections where the seawall can only be marginally expanded, vertical separation will be used;
- f) that in sections where the cycling/skating path is less than 2.5 metres wide and cannot be expanded for long segments, the cycling/skating path be provided on the Park Drive (this is the case on the northeast portion of the seawall);
- g) that a shorter seawall loop (about 6 km long) be created for cyclists/skaters by constructing a separated cycling/skating path along Pipeline Road.

PROPOSED ROUTE

The route is broken down into 5 sections, as shown on Map 1. Each section has different conditions, and consequently, different solutions as recommended for each section.

From Rowing Club to Hallelujah Point (section 1):

For most of this 1.7 km long segment, it is possible to provide a wider seawall to achieve much greater physical separation between wheeled traffic and pedestrians. Where room permits, a new 3.0 m wide cycling/skating path will be built parallel to the existing seawall and separated by a strip of lawn. Where this is not possible, a narrower (about 2.5 m wide) cycling/skating path will be provided immediately adjacent to the existing seawall, and raised about 15 cm above the pedestrian path in order to achieve good physical separation. The section east of the Vancouver Rowing Club (about 2.0 m for cyclists/skaters and 3.0 m for pedestrians) cannot be widened because of an existing retaining wall.

From Hallelujah Point to Lumbermen's Arch (section 2):

The seawall in this 1.3 km long segment is narrow and opportunities for widening are severely limited. Near Hallelujah Point, the cycling/skating path would gradually move away from the pedestrian-only seawall and get closer to the Park Drive. It is proposed that a physically separated cycling/skating path be built along the edge of the Park Drive by removing a parking lane. The cycling/skating path would be about 3.0 m in width and raised about 15 cm above the Park Drive. Appendix B shows a detailed sketch of this design at Brockton Point.

From Lumbermen's Arch to north end of Pipeline Road (section 3):

The seawall in this 1.1 km long section provides opportunities to widen in selective areas. It is proposed therefore to route the cycling/skating path back down to the seawall from the Park Drive east

of the existing Lumbermen's Arch water playground. In the short term, it is proposed to maintain the 'walk bikes' zone adjacent to the water playground. In the long term, a new cycling/skating bridge could be built adjacent to the existing vehicular overpass to eliminate conflicts between children and wheeled traffic. Because of the high capital costs (about \$345,000) for this facility, choosing whether or not to build the bridge can be made after other seawall modifications have been made.

West of the water playground, the first 500 m of the seawall in this section would have a 2.5 m wide cycling/skating path immediately adjacent to the existing seawall, and raised about 15 cm above the pedestrian path. The second 500 m can be widened to provide a 3.0 m cycling/skating path horizontally separated from the pedestrian path.

From the north end of Pipeline Road to Second Beach (section 4):

In the short term, no changes are proposed for this segment because there are few opportunities for widening. There are two long term scenarios for this area: a) cyclists/skaters remain on the seawall and the seawall is widened in areas that can be widened and vertically separated throughout (the estimated cost for this is \$380,000); or b) cyclists/skaters are removed from the seawall and a new path is created through the forest connecting the north end of Pipeline Road with Second or Third Beach.

The Pipeline Road loop (section 5):

For those who want to do a shorter loop in the park (about 6 km long), it is proposed to build a physically separated cycling/skating path along the west side of Pipeline Road. The southbound path would be 3.0 m in width and raised about 15 cm above the roadway. Parking along Pipeline Road would have to be eliminated to build the path. Near the Rose Garden, the cycling/skating path would head east of Pipeline Road to reconnect with the seawall east of the Rowing Club or alternatively to access the connections east and south.

COSTS

The total cost for this proposal has been estimated at \$1.51 million from the park entrance to Second Beach, including the Pipeline Road loop. The funding for this \$1.5 million project is included in the Draft 1997-99 Capital Plan. If the two items that are not recommended to be built in the short term are eliminated, the cost goes down to \$785,000. The following table breaks the cost down by section:

Section of route From Park Entrance to Hallelujah Point	Distance 1.7 km	Estimated Cost \$240,000
From Hallelujah Point to Lumbermen's Arch	1.3 km	\$200,000
From Lumbermen's Arch to	1.1 km	\$215,000

north end of Pipeline Road Pipeline Road loop	1.9 km	\$130,000
SUB-TOTAL:	6.0 km	\$785,000
New bridge at Lumbermen's Arch	0.1 km	\$345,000
From north end of Pipeline Rd. to Second Beach	3.4 km	\$380,000
TOTAL:	n/a	\$1,510,000

Staff are also proposing to create a better 2-way connection between Second Beach and the beginning of the seawall near Georgia Street. This proposal is estimated at \$300,000, and is included separately in the Draft 1997-1999 Capital Plan.

IMPACTS

The proposal will create safer and more convenient pathways for pedestrians, cyclists and in-line skaters on the eastern portion of the seawall. About 95% of the 4.1 km of seawall between the park entrance and the north end of Pipeline Road will have physical separation between pedestrians and wheeled traffic. One of the existing two 'walk bikes' zones would be eliminated for cyclists.

The project will result in an estimated loss of 350 parking stalls, 190 on the Park Drive and 160 on Pipeline Road. The project results in the removal of about 20 mature trees and removes 1.2 acres of grass.

FUTURE CONSIDERATIONS

It is anticipated that these improvements will address increasing volumes in the immediate future. However, as our population continues to increase, and as the Burrard Inlet, English Bay, and False Creek path systems get connected to each other and to Stanley Park, further increases in seawall traffic will warrant transportation management changes to maintain acceptable pedestrian, cycling and skating environments on and adjacent to the seawall. In particular, on the west side of the park, long-term volume increases may require a bicycle ban on this portion of the seawall. This would be replaced by a continuation of the removal of the Park Drive parking lane and its conversion to a bike lane from the north end of Pipeline Road around Prospect Point to Second Beach and/or a new cross-park cycling/skating path from the north end of Pipeline Road to the Second Beach area.

Planning & Development Division Board of Parks & Recreation City of Vancouver

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