



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Date: May 16, 2005
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TO: Vancouver City Council

FROM: General Manger of Engineering Services in Consultation with
Director of Current Planning and Manager of Parks and Recreation

SUBJECT: Concord Pacific Area 6A - Coopers Quay -
Design of the Extension of the Shoreline Protection Works

RECOMMENDATION

THAT Council approve the design of the extension of the shoreline protection works east of Coopers Park on False Creek, as shown in Appendix A.

CITY MANAGER'S COMMENTS

The City Manager RECOMMENDS approval of the foregoing.

COUNCIL POLICY

On May 20, 2004, Council approved the rezoning of Concord Pacific's Area 6A. As a condition of rezoning, the developer is required to complete the design and construction of the shoreline protection works and a waterfront pedestrian/bicycle path.

On January 14, 2003, Council approved the revised design of the Concord Pacific Area 1 seawall (Beach Neighbourhood) which, in response to concerns from the Department of Fisheries and Oceans, modified three sections of seawall from a retaining wall to a pile and deck structure.

On October 24, 1991, Council approved the report entitled Conceptual Shoreline Design, Coal Harbour and False Creek North and requested that with respect to detailed design, Council only review issues which represent changes to the approved proposals and principles.

All construction in and near water requires the approval of the Burrard Environmental Review Committee (BERC). The Department of Fisheries and Oceans, as part of the BERC application process, reviews and provides approval of the design and installation of such works.

The Department of Fisheries and Oceans, in reviewing Concord Pacific's application to build the shoreline protection works, determined that this section of shoreline should be completed with a pile and deck system, similar to the pile and deck system recently constructed in Concord's Beach Neighbourhood (Area 1). A pile and deck system provides productive habitat below the structure and reduces the loss of fish habitat.

DISCUSSION

Although a retaining wall is an appropriate design for an urbanized waterfront, staff recognize that this design is no longer supported by the Department of Fisheries and Oceans. Under their guiding principle of "no net loss", proponents must avoid any loss of habitat, especially when this can be achieved by a change in design. As such, changing the retaining wall design to pile and deck significantly reduces requirements for infilling and associated habitat losses.

Staff generally prefer retaining wall structures over traditional pile and deck treatment. However, in this location, staff worked with Concord Pacific and their consultants to generate an enhanced pile and deck design that provides a unique bridge-like feature described below, which will result in a more interesting and varied shoreline.

Design

To ensure an appropriate transition between the retaining wall section and the Plaza of Nations shoreline, staff have worked with Concord Pacific and their consultants to achieve the following:

- The pile and deck section is to appear like a "bridge" over water. A continuous facade will be installed over the concrete piles. To ensure that this design results in the appearance of a bridge over water even during low tide, Concord Pacific have agreed to alter the typical pile and deck design so that the elevation of the slope at the base of the shoreline works can be lowered. The resulting "bridge" will be a unique and interesting feature and will provide a suitable transition between the existing stresswall section and the Plaza of Nations shoreline.
- The proposed seawall will incorporate special paving materials at points lining up with "mews" or pathways through the redesigned Coopers Park. These areas will culminate in "overhang lookout areas".
- The revised design will continue to provide the standard 10.67 m. wide walkway/bikeway, with a 4.5 m. wide bikeway, a 4.5 m. walkway, and a 1.67 m. landscaped separation between the two.

The pile and deck system still results in a loss of habitat of 310 square metres. Under the "no net loss" principle, Concord is required to provide compensatory works. The proposed measures involve creating a sub-tidal reef from boulders and rocks. As well, rock clusters will be placed throughout the inter-tidal area. This proposal is acceptable to the Department of Fisheries and Oceans.

Staff recommend the endorsement of a shoreline protection works system consisting of a pile and deck structure where the supporting piles are covered by water for most of the time (75-80%). The resulting structure will appear more “bridge” like in character and will be attractive from the water and from the opposite shore. In addition, the design addresses the objective of minimal fish habitat losses.

CONCLUSION

Staff recommend that Council approve the design of the extension of Concord Pacific’s Area 6A shoreline protection works as shown in Appendix A. This design calls for the installation of a pile and deck system for the 80 m. section of seawall that remains to be completed. This design is acceptable to the Department of Fisheries and Oceans as it results in less loss of habitat than a retaining wall design. Staff support the change on the basis that the design has been enhanced to create a special bridge-like feature for this section of the walkway. With this change in design, Concord Pacific will be able to obtain the required permits to complete this section of seawall.

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