



City of Richmond

Report to Committee

To: Parks, Recreation and Cultural Services Committee **Date:** October 6, 2015

From: Mike Redpath, Senior Manager, Parks **File:** 06-2345-20-GARR2/Vol 01

Re: 2017 Garry Point Park Legacy Pier Proposal Celebrating Canada 150

Staff Recommendation

1. That Option 2 as detailed in the staff report titled "2017 Garry Point Park Legacy Pier Proposal Celebrating Canada 150," from the Senior Manager, Parks, dated October 6, 2015, be selected as the preferred option; and
2. That an amount up to \$5 Million be submitted for Council consideration in the 2016 Capital Program in order to fund the construction of a Permanent Legacy Pier and Float at Garry Point Park as detailed in the staff report titled "2017 Garry Point Park Legacy Pier Proposal Celebrating Canada 150," from the Senior Manager, Parks, dated October 6, 2015.

Mike Redpath
Senior Manager, Parks
(604-247-4942)

Att. 5

| REPORT CONCURRENCE | | |
|--|---|---|
| ROUTED TO: Engineering | CONCURRENCE <input checked="" type="checkbox"/> | CONCURRENCE OF GENERAL MANAGER |
| REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE | INITIALS: | APPROVED BY CAO |

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Staff Report

Origin

At the May 26, 2015, Parks, Recreation and Cultural Services Committee meeting, staff received the following referral:

That staff prepare a concept and develop cost estimates for the modification of the Garry Point Park marine pilings and associated structures for the creation of a permanent pier and accessible float to be considered as a legacy project for the Canada 150 Fund and report back to Committee.

The purpose of this report is in response to the above referral and to present options for consideration for a 2017 legacy waterfront community infrastructure to celebrate and commemorate Canada's 150th anniversary in Richmond.

This report supports Council's 2014-2018 Term Goal #2 A Vibrant, Active and Connected City:

Continue the development and implementation of an excellent and accessible system of programs, services, and public spaces that reflect Richmond's demographics, rich heritage, diverse needs, and unique opportunities, and that facilitate active, caring, and connected communities.

2.3. Outstanding places, programs and services that support active living, wellness and a sense of belonging.

This report supports Council's 2014-2018 Term Goal #6 Quality Infrastructure Networks:

Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.

6.1. Safe and sustainable infrastructure.

6.2. Infrastructure is reflective of and keeping pace with community need.

Analysis

Background

In October 2010, a new waterfront development legacy project was initiated at Garry Point Park to enhance, promote and accommodate tourism and maritime activities within the Steveston Harbour. The improvements are primarily located on city-owned water covered lot/parkland and at one of Richmond's deepest water lots, which is approximately 7.0 metres in depth (Attachment 1), permitting large vessels with deep drafts. This location is deeper than anywhere else in the Steveston Harbour where the average depth is 4.5 metres.

The works in 2010 at Garry Point Park included:

- the construction and installation of a 600 x 20 foot wide steel and timber modular float located approximately 150 feet from the main beach/shoreline.
- the installation of 12 permanent steel piles, 42 inch diameter, to secure the float (at depths of more than 3 metres below local low water).
- the installation of temporary approach ramps and gangways situated on top of the existing rip-rap (boulder/rocks) areas for access to the float and mitigation of habitat vegetation along the shoreline (temporary piles would be used to secure the approach floats).

The improvements at Garry Point Park, some which were temporary and some which are permanent were used in 2011 to host the first annual Ships to Shore event. While the steel pilings from the 2011 installation remain in place at Garry Point Park, the 600 foot concrete and steel float has been relocated to Imperial Landing (Attachment 2) where it is currently annually programmed for the Ships to Shore event.

The Imperial Landing float is also marketed on the Pacific West Coast as a destination for recreational boating overnight and day moorage in the protected Steveston Cannery Channel. The Imperial Landing dock has become a popular tourist and resident-visitor destination permitting people a chance to get close to the water in the Steveston Cannery Channel. In addition, agreements are in place with local boat tour operators as well as a kayak and paddleboard vendor that is both generating revenue for the City and animating the Steveston waterfront in support of the Council approved Waterfront Strategy. The float at Imperial Landing has recently been upgraded to include electrical service for visiting vessels that pay for moorage as well as access to water.

Permanent Legacy Pier Opportunity

A permanent pier structure at Garry Point Park will enhance both maritime and special event activities similar to destinations found at White Rock's waterfront and Vancouver's Coal Harbour, where the public can stroll directly at the waterfront's edge or recreationally fish at one of the most desirable riverfront locations in Richmond. The park is already a popular tourist destination and a pier will only add to the unique character and experience of Steveston Village. Also, it would be legacy infrastructure to celebrate and commemorate Canada's 150th anniversary in Richmond and would be enjoyed for years to come.

This proposed legacy project is responsive to Council's adopted Steveston Waterfront Strategy vision of:

A world-class, internationally recognized maritime waterfront that respects the past and lives the future.

The Steveston Waterfront area, with its working fishing harbor, historic village centre, active street life, festivals, and beautiful riverfront setting, will be a unique and popular place to live, work, and play and a key visitor destination for the region.

If approved, the proposed legacy pier will be an inclusive amenity accessible by all. Leveraging the strategic location at Garry Point Park, the legacy pier is an innovative modification of the existing 2011 improvements and current investments at the site.

Given the strategic location of the Garry Point Park pilings and the unique deep water access of the site, the location at Garry Point Park can be modified with improvements to facilitate a permanent pier and infrastructure. In response to the referral from the May 26, 2015, Parks Recreation and Cultural Services Committee to “...*prepare a concept and develop cost estimates for the modification of the Garry Point Park marine pilings and associated structures for the creation of a permanent pier and accessible float...*” staff present the following four options for consideration:

Option 1: Installation of Repurposed Washington State Highway Pontoons

This option (Attachment 3) would involve the purchase, restoration and installation of an existing repurposed used concrete floating pontoon to the location at Garry Point Park. Staff have been made aware of a used concrete pontoon for sale that was part of the old Hood Canal Floating Bridge previously located in Washington, which was in operation from 1961 until 1979 when it suffered a catastrophic failure and sunk into the ocean in the Hood Canal during a severe windstorm.

After a three year restoration process, the bridge reopened and operated until 2002 before being dismantled and sold as sections to various agencies. Sections of the now 55 year old structure bridge were refurbished and the pontoons are now being utilized in Australia, Port Alberni and Alaska. The restoration of the concrete and steel chamber pontoons today and their acquisition could range from \$4.0M to \$5.0M depending on a final negotiated price. Additional costs for the construction of permanent approach ramps as well as mooring the concrete floats to the existing steel piles at Garry Point Park would need to be considered. Estimated costs to include the float and ramps are between \$400,000 and \$1.2M depending on either temporarily utilizing existing assets from Imperial Landing or building new ones at Garry Point Park.

The freeboard or distance from the water to the top of the pontoons is approximately 5 to 6 feet making these pontoons in their current configuration not suitable for recreational day moorage, thus limiting their utility as a recreational amenity. In addition, a four-storey lookout tower/electrical room from the former Hood Canal Bridge is located on the structure. Concerns regarding the height of the structure would necessitate the need for perimeter railings to be installed due to the fast moving water at Garry Point. No engineering studies have been completed with respect to the hull integrity of this structure.

Any further consideration of this structure as a pier, breakwater, dike or other feature in the South Arm or Steveston Harbour would require extensive testing, modelling and engineering analysis to determine structural integrity, sedimentation impacts, failure risks and retrofit and maintenance costs. Discussions with our federal partners at the Steveston Harbour Authority suggest that they are not prepared to consider this type of structure for their long term vision planning process for the potential of a breakwater structure.

Given the age of the concrete pontoons that are being offered for sale as well as their visually unappealing character, they are not recommended to be located at Garry Point Park.

Estimated costs for the repurposed concrete pontoons in 2016: \$4.4 - \$6.2 Million (including temporary relocating the float at Imperial Landing or constructing a new one for Garry Point Park). Estimates are also subject to further engineering and structural investigation.

Option 2: Permanent Legacy Pier and Float at Garry Point Park

RECOMMENDED

This option (Attachment 4) would take advantage of the strategic location at Garry Point Park and involve the installation of a permanent steel and timber pier structure connecting the two easternmost mounts at the man-made Garry Point Park western beach area. The resulting pier would be a significant recreational amenity and legacy addition to the park site. Taking advantage of the existing steel piles, the permanent pier can facilitate water access to a temporary or permanent float, permitting large vessels with deep drafts a safe and secure deep water moorage which is not available anywhere else in the Steveston Cannery Channel.

As in the year 2000 when the City partnered with the Steveston Harbour Authority and Small Craft Harbours to construct permanent piers along Bayview Street over the Fraser River, this proposed installation at Garry Point Park would be located at the entrance to the Steveston Cannery Channel and would become an instant tourist destination as a new amenity that is safe and publicly accessible at Garry Point Park for water viewing, tall ship or other vessel moorage and would also serve as a unique fishing pier.

Estimated costs for installation of a permanent pier and float in 2016: \$5.0M. The architectural and marine engineering consultants have provided a preliminary cost estimate of \$5.0 million. This estimate would serve as the total upset figure for future detailed design and construction.

Option 3: New Steel and Timber Float

This option would involve the construction of a new set of 600 foot steel and timber floats, new gangways and approach floats (Attachment 5) identical to the current system located at Imperial Landing. Given the exposed area at the Garry Point Park location, it would not be suitable to keep only ramps and floats at the Garry Point location year round due to seasonal weather and wave tidal action.

If this option were selected, the floats could be utilized at Garry Point Park only during maritime events and would then need to be towed into the Steveston Cannery Channel, at a cost to be safely connected, to be used as an extension to the Britannia Shiyards, the Imperial Landing floats or at the No. 3 Road pier when not required at Garry Point Park. This option does not satisfy the request from Committee to have a permanent pier and float but is presented as an alternative for consideration.

Estimated costs for the construction of new steel and timber floats in 2016: \$1.5M.

Option 4: No Legacy Pier Improvements

If neither the permanent legacy pier nor float alternatives presented above are selected, the existing steel piles would remain at the Garry Point Park location but would only be used for moorage if the current float at Imperial Landing is temporarily relocated there, or rented barges, which are difficult to secure and are cost prohibitive, are tied up temporarily to simulate a floating pier.

Next Steps

If a legacy pier project is approved, detail design along with permitting requirements from our Federal partners would need to be submitted for approval. Scheduling for the project from design to completion suggest a minimum 15 month timeline. The summary scope of work includes:

- Detail design and engineering;
- Topographical depth soundings survey;
- Permit applications to Port Metro Vancouver, Environment Canada, Canadian Coast Guard and the Department of Fisheries and Oceans Canada;
- Tender process to start in January 2016;
- Construction would be targeted for May 2016 commencement; and
- Installation targeted for completion by March 2017.

Financial Impact

Consideration of a legacy pier structure at Garry Point is not considered as part of the ongoing Community Services facilities master planning process as it is not a building but instead a park and outdoor amenity. It is presented for consideration as a capital initiative in response to P.R.C.S. Committee's May 26, 2015 referral. A Capital submission has been made for 2016 should Council wish to proceed with the legacy pier installation. It is proposed that the Council Community Initiatives funding of up to \$1.5M be considered as one of the funding sources in 2016 given the legacy of Canada's 150th birthday in 2017. It is also proposed that up to \$3.5M from the Capital Revolving Fund be considered as the other funding source in 2016.

A capital submission in the amount of up to \$5M for the legacy pier proposal would be subject to approval as part of the 2016 Capital Budget process.

Conclusion

This report is in response to the request from the May 26, 2015, Parks Recreation and Cultural Services Committee meeting. Four options have been presented for consideration. Each legacy pier option strategically maximizes the location at Garry Point Park and would utilize the existing steel pile infrastructure that was installed in 2011 for future maritime activities.

The recommended option is Option 2 for the Permanent Legacy Pier and Float at Garry Point Park to celebrate and commemorate Canada's 150th anniversary in Richmond. The proposed project

supports Council's term goals and the Steveston Waterfront Strategy vision of becoming a world class waterfront community.



Mike Redpath
Senior Manager, Parks
(604-247-4942)



Marcus Liu
Parks Project Technologist
(604-233-3313)

- Att. 1: Garry Point Park Float Installation in 2011
- 2: Imperial Landing Float (Current Location)
- 3: Option 1 – Installation of Repurposed Washington State Highway Pontoons
- 4: Option 2 – Permanent Legacy Pier and Float at Garry Point Park (Recommended)
- 5: Option 3 – New Steel and Timber Float

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Attachment 1 – Garry Point Park Float Installation in 2011



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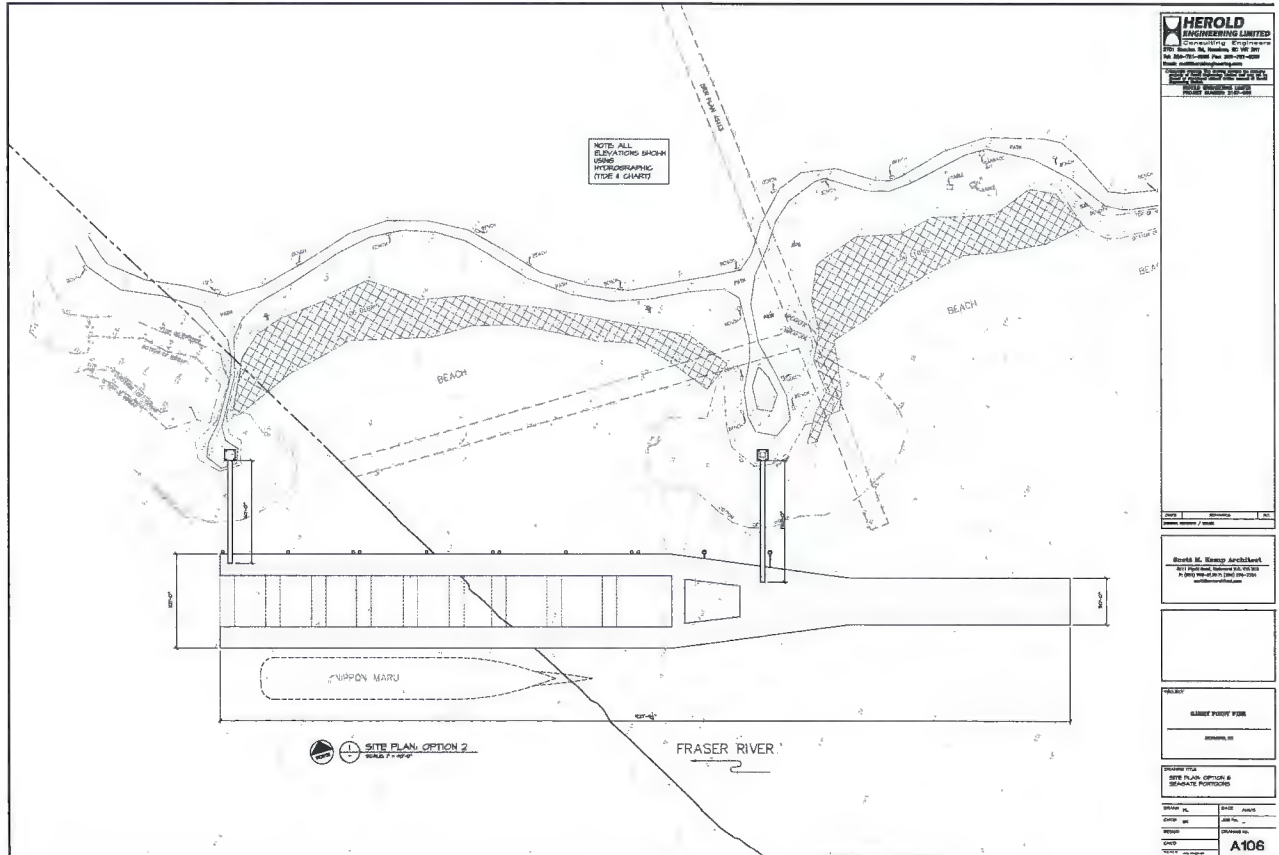
Attachment 2 – Imperial Landing Float (Current Location)



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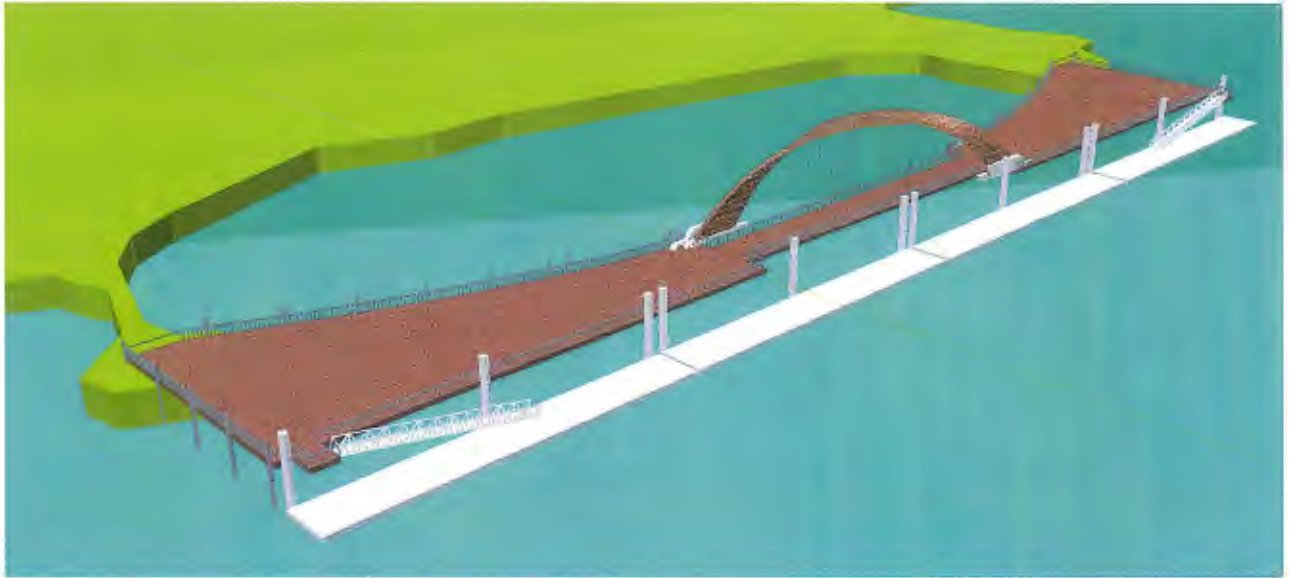
Attachment 3 – Option 1 – Installation of Repurposed Washington State Highway Pontoons



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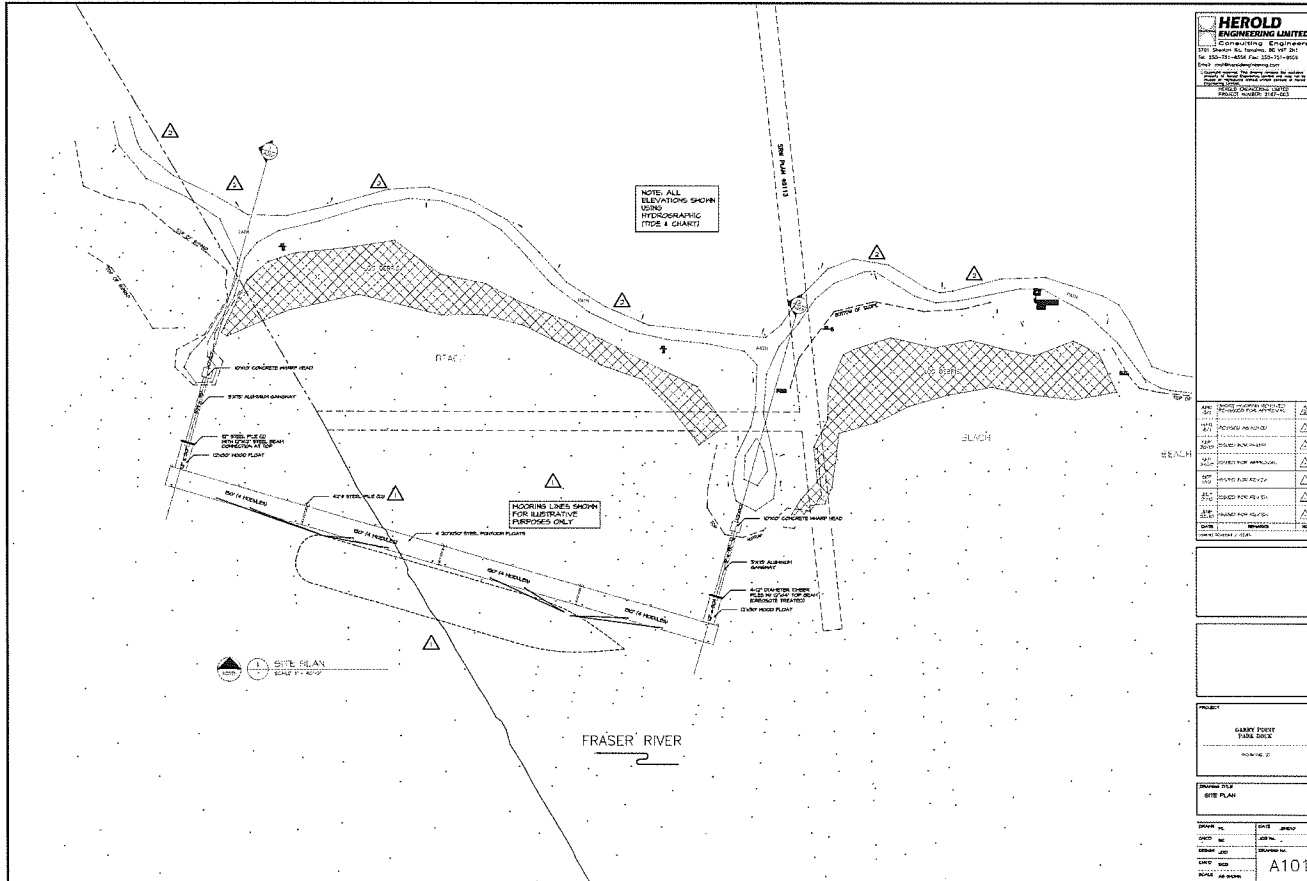
Attachment 4 – Option 2– Permanent Legacy Pier and Float at Garry Point Park (Recommended)



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Attachment 5 – Option 3 – New Steel and Timber Float



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