



City of Richmond

Report to Committee

To: General Purposes Committee

From: John Irving, P.Eng. MPA
Director, Engineering

Re: **Updated Design Concept
No. 2 Road South Drainage Pump Station**

Date: November 27, 2017

File: 10-6340-20-
P.16309/Vol 01

Staff Recommendation

That the updated design concept for the No. 2 Road South Drainage Pump Station Upgrade as detailed in Attachment 1 of the staff report titled, "Updated Design Concept No. 2 Road South Drainage Pump Station," be endorsed.

John Irving, P.Eng. MPA
Director, Engineering
(604-276-4140)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Parks Services	<input checked="" type="checkbox"/>	
Sewerage & Drainage	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

At the June 21, 2017 Public Works and Transportation Committee Meeting, preliminary design concepts for the architectural features of the No. 2 Road South Drainage Pump Station Upgrade were presented by staff. The committee queried whether the exterior façade of the station could reflect the ferry building that was once near this site.

The purpose of this report is to provide Council with an updated pump station architectural concept that reflects upon the historic usage of the site as a ferry terminal.

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.

Analysis

In the mid 1950's, Bowditch wharf at the south foot of No. 2 Road was used by Coast Ferries to operate the ferry Lady Rose. The Lady Rose carried passengers and one automobile from Steveston to Galiano, Mayne and Saturna Islands. The Coast Ferries office and waiting room were located on the wharf.

The preliminary design concepts for the No. 2 Road South Drainage Pump Station have been revised to pay homage to the old waiting room. The revised concept is effectively a replica of the original office and waiting room as interpreted from photographs of the original building.

The building size was estimated based on the architectural features contained in the photographs. This building has a similar footprint to the original concept and will be just large enough to house the backup generator and maintenance access to the underground portion of the pump station. The proposed building is not large enough to accommodate public entry, but interpretive panels will be placed outside.

The previous design concept included a rooftop public viewing area. However, due to the shape of the roof of the historic building, the viewing area has been removed from the updated concept as it would significantly alter the look of the building. Also, since the historic building was located on the wharf outside of the dike, the new building will be placed in a different location farther inland.

Subject to Council's endorsement, staff anticipate that detailed design for No. 2 Road South Drainage Pump Station will be completed by Spring 2018, with construction to follow thereafter. As with all capital projects, staff will be implementing a communication program with local residents and businesses through the detailed design and construction phases.

Financial Impact

Funding to complete the No. 2 Road South Drainage Pump Station upgrade has been approved by Council as part of the 2016 Capital Program. The estimated cost of the No. 2 Road South Drainage Pump Station is \$7.7M.

This project is included in the 2016 Flood Protection Program. The Province of British Columbia is providing the City with \$16.63M for the replacement of 4 drainage pump stations and approximately 1.2km of dike upgrades. The provincial funding is based on a 2/3 to 1/3 provincial to municipal share of eligible costs.

Conclusion

The No. 2 Road South Drainage Pump Station was approved in the 2016 Capital Program. An updated design concept has been prepared that reflects upon the historic use of the site. Subject to Council's support, work will continue on advancing the design concept to a full detailed design.



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Project Engineer
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Milton Chan, P.Eng.
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MC:mc

Att. 1: Updated Concept - No. 2 Road South Drainage Pump Station

**NO 2 ROAD SOUTH PUMP STATION
OPTION 1 INTERPRETATION OF HISTORIC WAITING ROOM**



Proposed Pump Station Building:

- Interpretation of historic waiting room building as seen in photo collected from Richmond archives;
- Architecture has been estimated in size and shape from the photo, with no true understanding of door or window placement;
- Assumption of exterior material finish applies to the unseen elevations;
- The proposed Genset building deviates from the photo with the addition of double doors required for the generator access + louvres in the upper wall areas on the north and south;
- No opportunity for interior room for visitors as size does not permit;
- No lookout;
- Access into Genset Building on north side, MCC room housed in basement of building.

Alternative Architectural Facade Treatment:

- Ghosted Version of Waiting Room building with shingles made of frosted laminated glass, including roof to allow building to glow at night.

No.2 ROAD SOUTH PUMP STATION | PRELIMINARY SITE DESIGN
2017-11-15

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**NO 2 ROAD SOUTH PUMP STATION
OPTION 1 INTERPRETATION OF HISTORIC WAITING ROOM**



VIEW 2 - LOOMING SOUTH FROM NO 2 ROAD



HISTORIC PHOTO OF THE WAITING ROOM



BLUEPRINT OF HISTORICAL BARNYARD



HISTORIC WAITING ROOM WHARF

No.2 ROAD SOUTH PUMP STATION | PRELIMINARY SITE DESIGN
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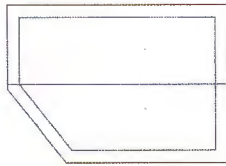
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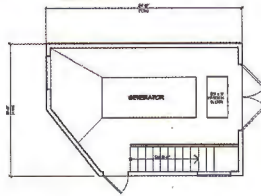
**NO 2 ROAD SOUTH PUMP STATION
OPTION 1 ARCHITECTURAL PLANS**



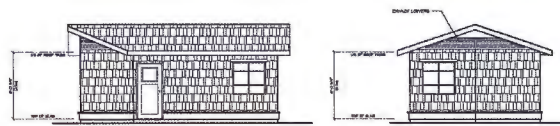
NOTE: BUILDING MODEL AND PLANS
MAY VARY SLIGHTLY



ROOF PLAN
SCALE: 1/8" = 1'-0"



FLOOR PLAN
SCALE: 1/8" = 1'-0"

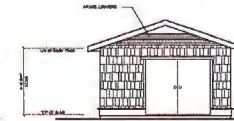


FRONT ELEVATION
SCALE: 1/8" = 1'-0"

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



REAR ELEVATION
SCALE: 1/8" = 1'-0"



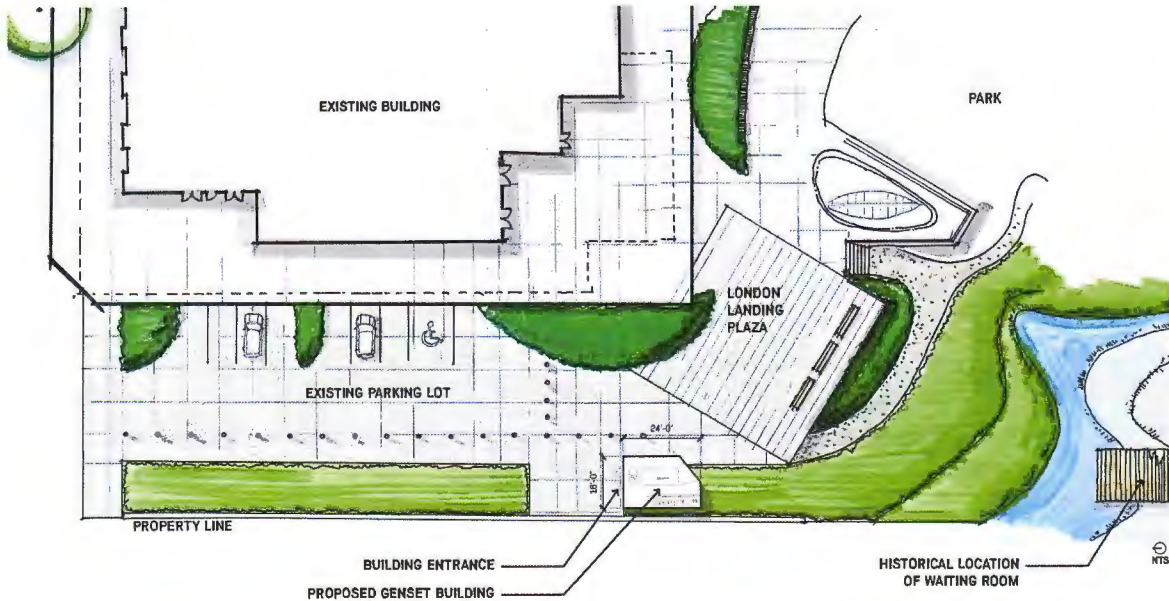
RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

NOT TO SCALE

NO 2 ROAD SOUTH PUMP STATION | PRELIMINARY SITE DESIGN
2017-11-15

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**NO 2 ROAD SOUTH PUMP STATION
OPTION 1 SITE PLAN**



NO 2 ROAD SOUTH PUMP STATION | PRELIMINARY SITE DESIGN
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NO 2 ROAD SOUTH PUMP STATION SITE DESIGN PRINCIPLES

ENVELOPE IN A LANDSCAPE SETTING

Placing the pump station within the new park takes advantage of recent park and residential improvements to the river's edge, and sites the building in a waterfront setting with new planting, seating and dyke trail connectivity.

IMPROVE PHYSICAL AND VISUAL ACCESS TO THE WATER

Locate the pump station to accommodate physical access to the dyke for both pedestrians and maintenance needs, while also framing views to the water's edge southwards from No. 2 Road. Use the pump house to gain a higher view towards the water while not compromising privacy or security.

TELL A STORY OF THE SITE

Commemorate and honour the MV Lady Rose, and the connection it provided between Staveston, London's Landing and the Gulf Islands. Relate the story of the vessel by interpreting its route and map it for visitors and dyke users.

USE AUTHENTIC MATERIALS AND FORM

Employ materials that are relevant to the context of the park and history of the site, including the use of metal and wood (cedar). Deploy these materials authentically and as they might be used historically: wood for decking and structures, metal for cladding and protection.



No.2 ROAD SOUTH PUMP STATION | PRELIMINARY SITE DESIGN
2017-11-15

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