



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: April 3, 2012

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

File: 10-6060-04-01/2012-
Vol 01

Re: East Richmond Irrigation and Drainage Update

Staff Recommendation

That the East Richmond Irrigation and Drainage Update staff report be received for information.

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

FOR ORIGINATING DEPARTMENT USE ONLY			
ROUTED TO:	CONCURRENCE		CONCURRENCE OF GENERAL MANAGER
Sewerage and Drainage	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
REVIEWED BY TAG	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	REVIEWED BY CAO
			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Staff Report

Origin

As part of the City's commitment to the preservation of agricultural lands and the continued viability of farm operations, the City continually invests in drainage and irrigation infrastructure in the East Richmond ALR. With Council's support and senior government grant funding, capital funds have been allocated to infrastructure improvements in East Richmond annually since 2006. Improvement projects have generally followed the upgrade program identified in the East Richmond Agricultural Water Supply Study that was completed in 2006.

The ditch, canal and pump station system in East Richmond is designed to provide drainage and irrigation services to East Richmond and allows farmers to draw large quantities of irrigation water from the Fraser River. This is a very efficient system as Metro Vancouver water is treated to a quality much higher than that required for farming and is more expensive to deliver than Fraser River water. Additionally, the quantities of irrigation water required by the farming community would require expensive Metro Vancouver and City pipeline capacity upgrades if it was supplied by the drinking water system. The City's ability to provide adequate quantities of Fraser River water to the farming community is a benefit to the farming community, Metro Vancouver and the City. Therefore, maintaining and improving this system's ability to meet the needs of farmers is important locally and regionally.

The purpose of this report is to update Council on the East Richmond Irrigation and Drainage Improvement program progress to date.

Analysis

The East Richmond Agricultural Water Supply Study (2006) identified a list of prioritized irrigation and drainage improvement projects for implementation in East Richmond and is the basis for the East Richmond Irrigation and Drainage Improvement program. The improvement program was developed in consultation with the Richmond Farmers Institute and includes input from many smaller farming operations as well. Additional projects have been identified and added to the program subsequent to the study, however, the program has generally followed the study's recommendations for improvement. Table 1 identifies \$3.54 million in projects that have been completed as of December 31, 2011.

Table 1: Drainage and Irrigation Projects Completed by December 31, 2011

Year	Capital Project Description	Budget Cost
2007	Granville Alignment Ditch Upgrade (No. 6 Road to Kartner Road)	\$900,000
2008	Westminster Hwy (No. 8 Road to Nelson Road)	\$592,000
2009	Granville Alignment Ditch Upgrade (Nelson Road to Kartner Road), and No. 8 Rd Ditch Upgrade (Westminster Hwy to Granville Alignment)	\$1,700,000
2010	Francis Rd Alignment Ditch Upgrade (Sidaway Rd to No. 6 Rd)	\$300,000
2011	Cambie Road Drainage Culvert #1 (located between No. 6 Rd and No 7 Rd.)	\$48,900
	Total Cost	\$3,540,900

Table 2 identifies \$1.9 million in projects that are currently funded and are in design phase in preparation for implementation.

Table 2. Drainage and irrigation projects planned for completion during the year 2012

Year	Capital Project Description	Budget Cost
2011	No. 8 Road and Granville Avenue Drainage Pump Station (Intersection of No. 8 Road and Granville Avenue).	\$250,000
2011	Granville Avenue Ditch Alignment (Sidaway Rd to No. 6 Rd)	\$300,000
2012	No. 6 Road Ditch Improvement. (No. 6 Road North Pump Station and Highway 91)	\$371,000
2012	No 9 Road Irrigation Pump Station (Adjacent to the existing No. 9 Rd Drainage Pump Station)	\$37,000
2012	Cambie Road Drainage Culvert #2 (located between No. 6 Rd and No 7 Rd.)	\$55,000
2012	No. 3 Road and No. 8 Road Drainage Canal Stabilization (various locations)	\$300,000
2012	East Richmond Agricultural Water Supply Study Update	\$250,000
2012	No 3 Road South and Horseshoe Slough Drainage Pump Station Irrigation Valves	\$100,000
2012	Gilbert South Pump Station Generator	\$100,000
2012	No 6 Road North Pump Station Generator	\$120,000
2012	Fraser River South Arm Salinity Meter Installation (located at the east end of the Steveston Highway)	\$20,000
	Total Budget	\$1,903,000

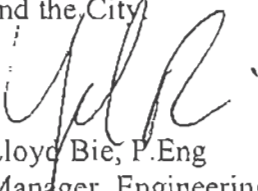
It has been six years since the East Richmond Agricultural Water Supply Study was completed. The East Richmond Agricultural Water Supply Study Update noted in Table 2 will review the impact of improvements to date and incorporate current information from the farming community to revisit the irrigation and drainage needs of the East Richmond ALR, forming a guide for future capital program development. The development of the water supply study update will include broader consultation sessions with the farming community as well as meetings with the Richmond Farmers Institute.

Financial Impact

None at this time.

Conclusion

The City continues to support the needs of Richmond's farming community through implementation of irrigation and drainage upgrades in the East Richmond ALR. The update to the 2006 East Richmond Agricultural Water Supply Study will ensure that future irrigation and drainage upgrades continue to be relevant and are of best value to both the farming community and the City.



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