### CITY OF KELOWNA

# **MEMORANDUM**

Date:

March 13, 2009

File No.:

5370-01

To:

City Manager

From:

Director, Design & Construction Services

Subject:

**Brandt's Creek Tradewaste Treatment Plant improvements** 

#### RECOMMENDATION:

THAT the City of Kelowna initiate Local Area Service Project No. 40 (BCTTP Improvements) to include those properties identified on MAP 'A' as attached to the report of the Director of Design & Construction Services dated March 13, 2009;

AND THAT Council direct staff to take the necessary steps to advise and involve the affected property owners as required by the *Community Charter*,

AND THAT Bylaw No. 10026, Establishment of Local Area Service Project 40 and Bylaw No. 10135, Loan Authorization - Brandt's Creek Tradewaste Treatment Plant, be advanced for reading consideration:

AND THAT the 2009 Financial Plan be amended to include \$4,012,000 for this project in the Wastewater budget, with the understanding that all costs incurred will be recovered from the benefiting Industries;

AND FURTHER THAT the Mayor and City Clerk be authorized to execute the Restrictive Covenant and the Operations Agreement with respect to this transaction.

## **BACKGROUND:**

The original Brandt's Creek Tradewaste Treatment Plant (BCTTP) was constructed in 1973 to treat the very high-strength tradewaste that was discharged from the Calona Wines property and the B.C. Fruit Growers cooperative (now SunRype) property. The discharge was at that time, and remains, much too strong for the City's main Sewage Treatment Plant to treat, and an Agreement was reached in which the City would construct specialized treatment facilities at the Industries cost, and the Industries would also pay for the operation & maintenance costs. The BCTTP was designed to treat the Tradewaste effluent to a level that met the Provincial standards for discharge to the adjacent Brandt's Creek. The BCTTP operated for many years discharging straight to the creek, but over time the Industries grew and discharged more and stronger effluent, and the Treatment Plant could no longer always meet the standards for creek discharge. The City allowed a connection to the local sewer system, to allow the BCTTP to continue to operate when the effluent didn't meet the creek standards. As the flows increased even further, the BCTTP discharge began to overload the local sewer system. The City took some preventative measures to attempt to protect the Industries but limitations still remain. The Plant was upgraded in 1986 and that further extended the life of the

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facility. Under the present circumstances, when Plant capacity is reached, the City has great difficulty in treating the tradewaste and odours result. Over the years, the Provincial regulations on creek discharges have increased, and with the ongoing downstream development around the creek and at the mouth of the creek, the regulations are likely only going to get more restrictive.

The Agreement between the City and the Industries expired in 1998 and over the past 10+ years City staff and Industry representatives attempted to investigate every alternative we could think of to solve the problem caused as a result of the industries out-growing the original capacity of the treatment plant, as well as the fact that many of the components of the Plant are just too old. The City investigated the possibility of re-constructing and upgrading many of the components of the plant, but the Industries did not proceed at that time because they felt it was too much money to invest in an old facility. The City then investigated all the options related to constructing a new facility, using the best available technology to provide a new Treatment Plant to handle the present and potential future flows from the Industries. In July 2002 we negotiated, and City Council approved, a Memorandum of Understanding (MoU) in which the Industries agreed that BCTTP had "reached the end of its effective lifespan" and "lacks adequate treatment capacity required by the Industries". It was agreed that a new pre-treatment facility, implementing a new treatment process, should be constructed. The City prepared Terms of Reference and with the Industries support we subsequently engaged a Consulting Engineering firm to investigate all technologies and recommend the best application to address the Tradewaste Treatment for the Industries. The Consultant provided a pre-design report and cost estimate for a new facility and in 2004 the Industries signed a second MoU agreeing to negotiate a Partnership Agreement that would result in a new pre-treatment facility. The estimated cost to the Industries of constructing the new facilities at that time was approximately \$5.5 Million. On the basis of the MoU, City staff drafted a Partnership Agreement that specified how the Industries would pay for the improvements and how the Facility would be operated by the City in the future. Delays occurred due to changes in senior staff at SunRype and a change in ownership from Calona Wines (Cascadia) to Andrew Peller. The new Industry representatives had to "get up to speed" with the initiative and by the time the Operating Agreement was negotiated, the costs of building the new facilities had skyrocketed to almost \$12 Million. When the labour dispute occurred at SunRype in 2007, the Industries advised that they could no longer proceed with building new facilities. The Industries then engaged a Consulting firm to investigate the feasibility and the cost of updating and improving the present facility and the estimated cost is approximately \$4.0 Million.

The present Treatment Facility is old and causing operational problems and it is overloaded causing odours in the neighbourhood. The on-site basins (ponds) have liners that are failing and many pipes throughout the Plant are rusted through. There is a "temporary" pipe to allow excess effluent into the sewer, because the sewer system adjacent to the site does not have capacity to handle all the flow, and this temporary pipe is suspended through the air across the creek. The upgrade of the facility will result in discharging all of the effluent into the sewer system and eliminate the outlet to Brandt's Creek. A Lift Station (sewer pump station) and forcemain will allow us to pump the effluent into the Ethel Street trunk sewer, which has the capacity to deal with the anticipated flows from the BCTTP, and the cost of this Lift Station and forcemain will be included in the Local Area Service project costs.

We are targeting construction of the Lift Station & Forcemain component this Local Area Service project to commence in the spring of 2009 with the construction work on the Treatment Facility beginning later in the year.

### FINANCIAL/BUDGETARY CONSIDERATIONS:

The affected properties consist of 3 parcels owned by the 2 Industries; 1 parcel owned by SunRype and the other 2 owned by Andrew Peller (Canrim Packaging). The costs have been allocated in accordance with one of the LAS options offered in the Community Charter, which is by "Land Area". The cost of the Treatment Plant improvements and Lift Station & Forcemain work is estimated at approximately \$4,012,000 and the affected properties total 5.327 Hectares, and the costs will be apportioned to the Industries based on their respective Land Area. The entire costs will be recovered from the Industries over a 15-year period. Based on the estimated cost of construction, the Local Area Service project charges including the estimated interest charges will result in an annual payment of approximately \$80,200 per Hectare (The total recovery, from both Industries, is estimated at \$427,225 per year for the 15 year period). The Industries have waived their option to make a one-time lump sum payment (cash commutation) at the completion of the project.

## LEGAL/STATUTORY PROCEDURAL REQUIREMENTS:

Section 25 of the Community Charter states that ... a Council must not provide a grant, benefit, advantage or other form of assistance to a business, including disposing of land or improvements, or any interest or right in or with respect to them, for less than market value; lending money; guaranteeing repayment of borrowing or providing security for borrowing; assistance under a partnering agreement...

#### **EXTERNAL AGENCY/PUBLIC COMMENTS:**

The City presently holds an Operational Certificate required to operate the Brandt's Creek Tradewaste Treatment Plant and discharge the treated water to Brandt's Creek. At the completion of construction, the Plant discharge will all be directed into the sewer system and the City will cancel the Operational Certificate we hold from the Ministry of Environment. This should be received favourably by the MoE.

Considerations that were not applicable to this report:

ALTERNATE RECOMMENDATION:

**COMMUNICATIONS CONSIDERATIONS:** 

PERSONNEL IMPLICATIONS:

INTERNAL CIRCULATION TO:

LEGAL/STATUTORY AUTHORITY:

**EXISTING POLICY:** 

**TECHNICAL REQUIREMENTS:** 

Submitted by:

W.J.Berry, P.Eng.

Director, Design & Construction Services

Approved for Inclusion:

J. Vos., P.Eng. General Manager, Community Services

cc: Director, Financial Services

City Clerk

Revenue Manager Legislative Coordinator

