

**REPORT TO FULFORD WATER SERVICE COMMITTEE  
MEETING OF WEDNESDAY, 21 NOVEMBER 2007**

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**SUBJECT      COMPLETION OF CAPITAL WORKS PROJECT**

**PURPOSE**

To present for the consideration of the Fulford Water Service committee (FWSC) details of a program to complete the capital project such that all expenditures under the Canada BC Infrastructure program grant program may be submitted by 31 March 2008.

**BACKGROUND**

The Capital Regional District (CRD) has been undertaking programmed works to complete the Fulford water system capital program by 31 March 2008 in accordance with the requirements of the Canada BC Infrastructure program grant received for the works. The primary focus has been completion of the water plant and there has been concern that the overall budget may be only adequate to complete the plant works. As the project has now moved on to a stage where only mechanical and electrical works remain and there appears to be ample funds to complete those components on budget, the focus moves to clean up works and other priorities of the committee. To this end, staff has identified a number of projects which can likely be completed within the original budget and wish to place these projects in front of the committee for their consideration.

**Project Completion**

There are a number of works which are required to be completed for the water system to be fully operational including:

1. completion of water plant structure
2. electrical supply and controls
3. mechanical installation of DAF plant, tankage, backwash system
4. interconnection of plant to new watermain system and reservoir
5. service installation, new water main system with meters
6. interconnection new and old water system at Tahouney
7. conversion at booster station
8. pressure reducing valve station, point of use treatment system

Items 1, 4, 5 and 6 are underway or planned for completion by year end. Items 2 and 3 and 8 are currently in design and will be initiated in January but are expected to not be fully completed prior to June of 2008. Once the water plant is operational, the booster station conversion can be completed and the system can go live.

**Cash Flow Projection**

As noted in the table below, there are expenditures for construction of the main project which likely will not be realized prior to the 31 March 2008 deadline for invoices to be submitted under the Canada BC Infrastructure Program. As a consequence the total expenditures eligible for recovery of funds from the program will be less than possible, unless other expenditures such as those identified above, can be completed within the time frame set out in the grant contract. To this end these expenditures are also shown in the cash flow projection. The funds remaining to be expended under the infrastructure program amount to \$339,000. Costs for the water plant, reservoir, and other works to date are considered fully expended for the analysis.

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**Re: Fulford Project Completion**

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Item	Cumulative Expenditures for the Period Ending					
	Dec 31/07	Jan 31/07	Feb 28/07	Mar 30/07	June 30/07	Total
1	complete					
2				\$18,000	\$56,000	\$74,000
3	\$25,000	\$25,000	\$25,000			\$75,000
4	\$30,000					\$30,000
5	\$30,000	\$30,000				\$60,000
6			\$20,000			\$20,000
7		\$30,000				\$30,000
8	\$40,000			\$10,000		\$50,000
Sum	\$135,000	\$85,000	\$45,000	\$18,000	\$56,000	\$339,000
Cum	\$135,000	\$220,000	\$265,000	\$283,000		

While every effort will be made to include as many of the water plant expenditures into the final claim for the project, it is acknowledged that both electrical and mechanical trades practically can not work on the project at the same time and that North Salt Spring Waterworks District staff, who will be carrying out much of the work, have insufficient staff to undertake work at both the Beddis and Fulford site simultaneously. The works for each trade will however be coordinated at the two projects such that mechanical works will be undertaken at one site while electrical contractors work the other site.

The cash projection suggests that cumulative expenditures as of 31 March, 2008 amount to \$283,000 leaving some \$56,000 of work which would need to be done outside of the grant, or for which a claim would not be accepted.

**Metering**

The FWSC has supported the installation of water meters for the community and the Canada BC infrastructure program requires metering, or a commitment to metering, as well as other water conservation initiatives as a condition of the grant process. On this basis it is recommended that metering of all properties in the area be initiated at this time as part of the work program rather than complete the works at a later date as originally contemplated. The unit cost for metering will likely approach \$900 with the cost of the equipment making up some \$400 with the labour and machinery component averaging \$500 per unit. The meters will be electronic reading units. The installation will include double check valves and an isolation valve. It has been assumed that commercial meters will be replaced at the same time, although it may be possible to retrofit these units rather than undertake a full replacement. As some meters are to be installed as a component of the new service lines, with costs already identified, the total number of meters remaining equates to 76 for a total estimated construction cost of \$69,000. Installation of these units at this time will expend the remaining funds available (\$56,000) from the infrastructure program and will require a further commitment of \$13,000 from the reserve fund.

**Funding Project Completion**

To complete the metering portion of the project outside of the infrastructure grant (\$13,000) and to fund the remaining works for the project which incur costs after 31 March 2008, estimated at \$56,000, it will be necessary to increase the total capital project amount by \$69,000 to a total of \$1,613,900. The increased funds required can be sourced from the reserve fund in which there are currently, \$187,044.

### **Further Works**

Within the current water distribution system there are a number of parcels which are not presently serviced by the water distribution system. To ensure all properties have equal opportunity to service from the system, the committee may wish to also reconsider funding the servicing of the last lot on Morningside, requiring a service extension of approximately 90 metres, and to service the last property on Fulford Ganges Road requiring a service extension of approximately 146 metres. The latter extension would also permit correction of a long standing issue for three properties improperly connected to the system and permit meters to be installed for these three properties in concert with the rest of the properties in the area. The estimated construction costs for these works amount to \$80,000 which could also be accommodated within the current reserve funds. There is no requirement for this work to proceed until the overall project is completed but should be scheduled prior to May of 2008 to avoid traffic issues.

### **ALTERNATIVES**

The FWSC could direct staff to proceed with the installation of water meters in advance of completion of the primary construction project as originally proposed, at a cost of \$69,000, with approximately \$56,000 of these funds eligible for funding through the infrastructure grant and the remaining funds generated from the capital reserve fund.

The FWSC could delay this work until a later date, however the expenditures would not be eligible to claim against the infrastructure project.

In either case, minimum expenditures, totaling \$56,000, for the original project will be incurred after the 31 March 2008 deadline for grant expenditures and hence will need to be funded from the capital reserve fund.

### **FINANCIAL IMPLICATIONS**

Owing to delays in completing the construction of the water plant, expenditures totaling \$56,000, may be realized after the deadline for submission of final project costs to the province and hence may not be claimed against the infrastructure project. The FWSC has in past, committed to the installation of metering outside of the capital project to be funded from the reserve fund for the project. While expenditures for the plant may not proceed as planned, it is possible to move up the timing of the metering project to maximize funding under the infrastructure grant at 31 March 2008. The metering and service works, if approved, will increase the capital project from \$1,544,900 to \$1,613,900 and require additional funds totaling \$69,000 from the reserve fund, in which there is currently \$187,044 to facilitate the new schedule.

### **SUMMARY/CONCLUSIONS**

The Fulford water project is entering its last phase for construction. The final works to interconnect the new water system to the existing will be undertaken over the next few months; however there remains a considerable volume of work to be completed to make the water treatment plant operational. While this work is progressing there is some concern that the time to complete these works may extend beyond the final invoice date for the Canada BC Infrastructure project. On the other hand, metering of all properties, originally proposed to be delayed until the completion of the project could proceed at this time to ensure maximum benefit is received from the Canada BC infrastructure project. The scheduling of this other work at this time will increase the total capital budget for the project to \$1,613,900. The increase in expenditures can be supported if the committee approves a transfer of \$69,000 from their reserve fund to the capital project.

RECOMMENDATION

That the Fulford Water Service committee:

1. increase the total capital project for the Fulford water system upgrade to \$1,613,900 to provide for metering and service works; and
2. fund the increase in the capital project equating to \$69,000 from the reserve fund.



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