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Agenda Item #8
REPORT #JWDC 2011 - 09

**REPORT TO THE JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, 6 SEPTEMBER 2011**

SUBJECT AWARD OF TENDER FOR SUPPLY OF VEHICLE (BACK HOE)

ISSUE

Replacement of the back hoe, Unit FBH004, included in the Vehicle and Equipment Replacement Capital Budget for 2011.

BACKGROUND

This vehicle forms part of the asset base of the Capital Regional District (CRD) and is assigned to Juan de Fuca Water Distribution system, within the Integrated Water Services (IWS) department. An analysis has been completed for this unit. The analysis considers the Go Green requirements, the vehicle replacement cycle, total kilometers / hours, age, and forecasted repairs. The analysis is attached (refer to Attachment 1).

A tender for a back hoe to replace Unit FBH004 was prepared and advertised on the CRD web site, as well as hand delivered to interested parties. \$150,000 was included in the Fleet budget in 2011 from equipment replacement funds to purchase a new back hoe.

Given the CRD goal of being carbon neutral by 2012, each vehicle replacement request is reviewed from the perspective of right sizing the vehicle for the intended use and the carbon foot print of alternatives. Vehicles in this class, heavy equipment, are not tested for Green House Gas (GHG) emissions by government agencies therefore, comparisons are based on manufacturer's claims and anecdotal evidence. In this case, all manufacturers have made significant improvements in engine emissions over the past ten years. This gives the CRD the opportunity to reduce GHG emission through the use of current engine technology.

ALTERNATIVES

Alternative 1 – That the Juan de Fuca Water Distribution Commission award the tender to replace Unit FBH004 to Parker Pacific in the amount of \$106,977.35 and remarket the existing back hoe, Unit FBH004, through BC Auction.

Alternative 2 – That the Juan de Fuca Water Distribution Commission direct staff to retain and maintain the current unit for another year.

IMPLICATIONS

Alternative 1 – The lowest bids from WAJAX for JCB machines did not meet the tender specification of back hoe digging force of 14,500 lb.

The next lowest bid from Parker Pacific for a Case machine met the tender specifications with a 52-day delivery time.

Purchase of the vehicle will be funded from the vehicle and equipment replacement fund, which was included in the 2011 budget.

Vehicle	Supplier	Make & Model	Net Price	DELIVERY, days
FBH004	WAJAX A	2010 JCB 3CX14	\$89,330.00	5
	WAJAX A	2011 JCB 3CX14	\$92,970.00	42
	WAJAX A	2011 JCB 3CX15	\$98,536.48	42
	Parker Pacific	2011 CASE 590 SN	\$106,977.35	52
	BRANDT	2011 John Deere 410J	\$117,521.60	60
	FINNING	2011 Caterpillar 430 E	\$123,099.20	42

Alternative 2 – If this vehicle is not replaced, the costs associated with the operation and maintenance of the vehicle will continue to increase the life cycle cost per hour. The increased down time resulting from higher maintenance needs will jeopardize the ability of the CRD to meet operational needs.


CONCLUSION

The lowest bid from Parker Pacific met the tender specifications.

RECOMMENDATION

That the Juan de Fuca Commission award the tender to replace Unit FBH004 to Parker Pacific in the amount of \$106,977.35 and remarket the existing truck, Unit FBH004, through BC Auction.

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Concurrence



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DG:mm
Attachment: 1

Replacement analysis for Vehicle FBH004 Purchased in 2002

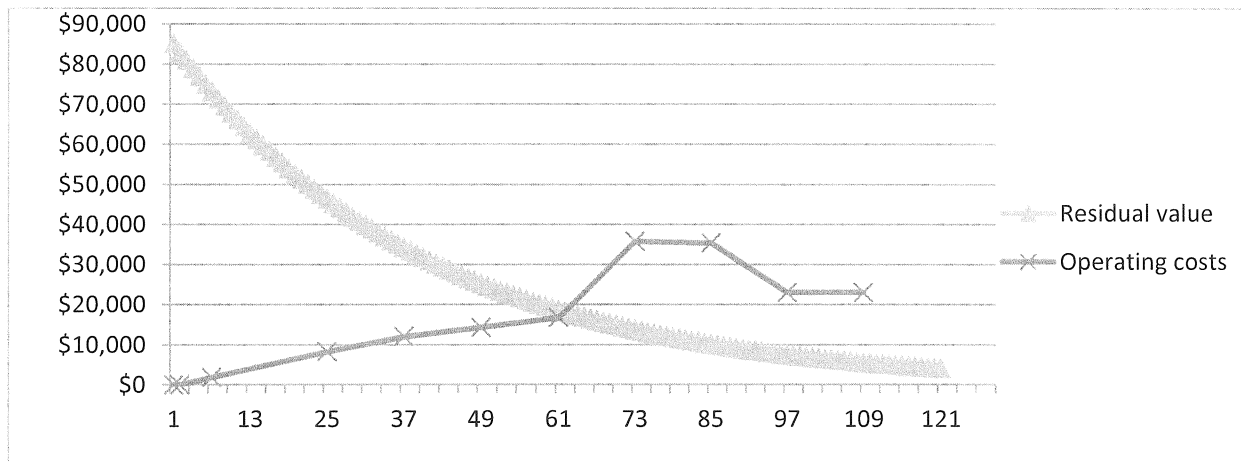
This vehicle is used by Integrated Water Services in the Juan de Fuca Water Distribution system, primarily for water main repair and replacement projects. Throughout the year, under all weather conditions, the vehicle is required to be available to excavate and load material for removal through the western communities of the CRD. The vehicle is operated in the urban area and in the public eye. The hour meter on this vehicle exceeds 8,675 hours which is equivalent to 433,750 km on the engine.

ENVIRONMENTAL

The present 2002 Diesel powered back hoe would be replaced by a comparable diesel engine machine with improved engine technology which has better fuel economy and reduced CO2 output. There is no hybrid vehicle available in this class suitable to this type of duty.

Vehicle replacement cycle is based on data up to the end of December 2010:

The vehicle replacement graph reflects the optimal replacement cycle. Where the two lines cross indicates the optimal replacement point, the lowest life cycle cost per hour.



From the above graph it can be seen that the optimal replacement point for this vehicle was around 62 months in the lifecycle. We are well past that point and the lifecycle cost per hour continues to rise.