

**COUNCIL ACTION FORM**

**SUBJECT: REPLACEMENT OF ICE RESURFACING MACHINE FOR THE AMES/ISU ICE ARENA**

**BACKGROUND:**

The FY09/10 Capital Improvement Plan includes **\$100,000** in funding to replace the 2001 Olympia ice resurfer. As of June 30, 2009, this fund totals approximately \$438,000. As a reminder, annually the City and Iowa State University each contribute \$20,000 toward this fund so capital improvements can be made at this facility. ISU officials have indicated their support for the replacement of this machine.

An Olympia brand was bid because the unit is built on a Chevrolet frame and drive-line which makes it easier for Fleet Services to service and maintain, and the dealer is located in Minnesota. The location of this dealer affords the Arena quick response time in the event the unit malfunctions.

The existing resurfer is fueled by compressed natural gas (CNG) and needs to be replaced because it has exceeded its recommended hours of operation. A bid request was sent to Becker Arena Products (in Minnesota) for a CNG Olympia ice resurfer. Becker Arena Products responded that a CNG fueled machine is no longer available. Based on this information, they submitted bid alternates for a liquid propane (LP) fueled machine, and in support of the City's efforts to go green, an electric unit (rechargeable battery) resurfer.

**BID SUMMATION**

<b><u>Bidder</u></b>	<b><u>Make/Model</u></b>	<b><u>Bid</u></b>
Becker Arena Products	Olympia – CNG fueled	No Bid
<b><u>Bidder</u></b>	<b><u>Make/Model</u></b>	<b><u>Bid</u></b>
Becker Arena Products	Olympia – LP fueled	\$ 91,650
	Laser Leveling System	\$ 16,800
	*Trade-In Value           less	<u>\$ 25,000</u>
	<b>Alt #1 Total</b>	<b>\$83,450</b>
Becker Arena Products	Olympia – Electric	\$152,960
	Laser Leveling System	\$ 16,800
	*Trade-In Value           less	<u>\$ 25,000</u>
	<b>Alt #2 Total</b>	<b>\$144,760</b>

**\*Trade-in allowance for the existing resurfer: \$25,000**

The annual operational cost of electricity to charge the battery powered machine is estimated at \$125 per year, compared to the liquid propane machine estimate

of \$1,200 per year. The grid electricity to recharge the battery unit equates to 0 tons of CO2. Using LP as a fuel source equates to 2 tons of CO2 per year.

Concerns with purchasing an electric unit in 2009 include the following factors:

1. The unit would cost an additional \$61,310, or 73% more than a LP machine;
2. An electric machine weighs more (batteries and electric motor) and potentially could crack the 1.5" ice sheet; and
3. Electric machines are fairly new in the market and their dependability has not been established.

### **ALTERNATIVES:**

1. Award the bid to Becker Arena Products, of Savage, Minnesota, for a 2010 Olympia Millennium LP fueled ice resurfacers at a total cost of \$83,450 (\$91,650 for the unit, \$16,800 for a laser leveling system, and accept the trade-in allowance of \$25,000).
2. Reject all bids
3. Report and delay the award of bid

### **CITY MANAGER'S RECOMMENDED ACTION:**

Staff from Purchasing, Fleet Services, Parks and Recreation, and the Manager's Office have thoroughly discussed and reviewed these bid alternatives to determine the best purchase for the Ice Arena.

Even though the annual operating costs were less with an electric unit and they produce no carbon emissions, staff believes that the significantly higher capital cost and the unknown dependability of a battery/electric resurfacers does not warrant this type of vehicle at this time. **Therefore, the City Manager's recommended action is Alternative #1; to award this bid to Becker Arena Products, of Savage, MN, for a 2010 Olympia Millennium LP fueled ice resurfacing machine at a total cost of \$83,450.**

Staff anticipates that when this unit is replaced in approximately eight years the capital costs of electric units may have decreased, technology will improve whereby making the unit lighter in weight, and that numerous rinks may have purchased an electrically powered machine so day-to-day reliability can be assessed.