


**PUBLIC WORKS DEPARTMENT**  
**MEMORANDUM #2011 – 09**

**DATE:** February 24, 2011  
**TO:** Honorable Mayor Joyce Downing and City Council Members  
**FROM:** William A. Simmons, City Manager  
David H. Willett, Director of Public Works   
Norman Bell, Public Works Superintendent  
**SUBJECT:** CR – 26, 2011 Street Sweeper Purchase

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**BACKGROUND**

The Street Division of the Public Works Department operates two street sweepers. These units are an important part of our annual maintenance program and are necessary to meet Regional Air Quality Council clean air standards, stormwater regulations, and remove debris from our arterial and residential streets. One of the sweepers, unit 197 is now 14 years old and is experiencing a number of mechanical problems. The projected maintenance costs are estimated to exceed the value of the sweeper.

On January 13, 2011 staff memorandum described a request to purchase an Elgin Pelican street sweeper based on the pricing from a Colorado Springs Award (Contract # R005071) in the amount of \$166,575. The dealer further reduced pricing based on a reduction of the option package requested by staff. Final purchase price totaled \$166,295. The Elgin Pelican sweepers in the three-wheeled configuration are highly maneuverable particularly around tight radius curves, parked vehicles, and in cul-de-sacs. In addition, our service records show that the Elgin Pelican sweeper has proven to be extremely dependable.

The Council discussion concluded with direction to follow a formal procurement process. Subsequently, staff prepared a Request for Quote (RFQ) for a street sweeper with a three-wheel configuration. On February 4<sup>th</sup>, our procurement team received four bids for the 2011 street sweeper. The two lowest bidders submitted specifications that included the requested three-wheel configuration. Pricing ranged from \$153,969 to \$217,518. The bid summary is attached to this memorandum.

**BUDGET/TIME IMPLICATIONS**

The 2011 adopted Public Works/Street Division budget has allocated a total of \$314,000.00 for vehicle and equipment replacements. \$168,000.00 of this allocation was estimated for the sweeper replacement.

Comparable pricing of the two lowest bidders, including warranty, is as follows: Johnston (Allianz 3000) at \$153,969 + 2<sup>nd</sup> year warranty parts & labor (\$3,900) = **\$157,869** and Elgin (Pelican) with standard 2 year warranty parts and labor at **\$163,805**. The Streets Division currently deploys a 2004 Johnston sweeper and a 1999 Elgin sweeper. Respectively, their annualized repair costs (excluding fuel) are as follows: 2004 Johnston, \$8,639; and the 1999 Elgin \$4,352. A complete maintenance record for each machine is attached to this memorandum.

Staff will also state that the fuel efficiency differed between each machine: Johnston (1.9mpg) and the Elgin (2.8mpg). The sweepers are driven an average of 1650 miles per year.

The bullet points below summarize the purchase price (via bid) and annualize operating costs (per records of machines currently in use) which include repairs and fuel:

- **Johnston – \$156,969, annual operating cost \$10,682**
- **Elgin – \$163,805, annual operating cost \$5,481**

**RECOMMENDATION**

Staff recommends the purchase of the Elgin street sweeper from Faris Machinery at the bid price of \$163,805, plus three additional options. The total purchase price, including bid and options is **\$166,515.00.**

**STAFF REFERENCE**

David H. Willett, P.E., Director of Public Works  
Norman Bell, Public Works Superintendent

[dwillett@northglenn.org](mailto:dwillett@northglenn.org) or 303.450.8783  
[nbell@northglenn.org](mailto:nbell@northglenn.org) or 303.450.4005



CITY OF NORTHGLENN  
FORMAL BID SUMMARY

BID NUMBER IFB 2011-02

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BID NAME 2011 Street Sweeper

DEPARTMENT: Public Works

	O.J. Watson company, Inc.	Faris Machinery company	Macdonald Equipment company	Macdonald Equipment company	
DATE DUE 2/4/2011	BID RECEIVED: DATE: 02/01/2011 TIME: 12:21pm	BID RECEIVED: DATE: 02/04/2011 TIME: 12:53pm	BID RECEIVED: DATE: 02/04/2011 TIME: 1:13pm	BID RECEIVED: DATE: 02/04/2011 TIME: 1:13pm	BID RECEIVED: DATE: TIME:
TIME: 2:00 PM					
Total Price	\$211,477.00	\$163,805.00	\$217,518.00	\$153,969.00	
Model	Schwarze Industries M-6000	Elgin Pelican	Allianz 4000	Allianz 3000	

Kathleen Kwasmuk  
Buyer

Clystee Messick  
City Clerk, Deputy

2/4/2011  
Date

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.2 Cost Per Mile: 5.205  
 Division: Streets Cost Per Hour:

Labor Type	JAN-2001	FEB-2001	MAR-2001	APR-2001	MAY-2001	JUN-2001	JUL-2001	AUG-2001	SEP-2001	OCT-2001	NOV-2001	DEC-2001	All Year
Miles											59	454	513
Engine Hours													
Hours Down						103.00	24.50	28.00	7.50	25.00	4.50	192.50	
Gallons								14.1		36.4	180.2	230.7	
Improvements						390.42							390.42
Labor						450.00	292.50	270.00	236.25	337.50	157.50	1743.75	
Shop Materia						7.50	15.00	7.50	15.00	7.50	7.50	60.00	
Oil & Lubric							4.04		16.50			20.54	
Parts						168.05	23.41	57.90	5.96		23.67	278.99	
Outside Serv													
Tires													
Miscellaneous													
<b>Total W/O \$</b>						1015.97	334.95	335.40	273.71	345.00	188.67	2493.70	
<b>Fuel Cost</b>								12.83		31.15	132.33	176.31	
<b>Total Cost</b>						1015.97	334.95	348.23	273.71	376.15	321.00	2670.01	

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.6 Cost Per Mile: 3.043  
 Division: Streets Cost Per Hour:

Labor Type	JAN-2002	FEB-2002	MAR-2002	APR-2002	MAY-2002	JUN-2002	JUL-2002	AUG-2002	SEP-2002	OCT-2002	NOV-2002	DEC-2002	All Year
Miles	139	70	622	184	28	114	168	44	53	58	464	304	2248
Engine Hours													
Hours Down	102.50	3.50	1.00	6.50		2.50	2.00	96.50	5.00	52.00		1.00	272.50
Gallons	32.2	45.4	257.7	74.8	10.2	45.1	68.5	21.0	21.3	23.1	163.2	104.4	866.9
Improvements													
Labor	517.50	135.00	45.00	270.00		135.00	45.00	202.50	180.00	135.00	11.25	78.75	1755.00
Shop Materia	22.50	7.50	7.50	7.50		7.50	7.50	7.50	7.50	7.50		7.50	90.00
Oil & Lubric				15.45					16.08			.93	32.46
Parts	100.94	40.89	2230.71	60.34		42.31		118.10		1011.11	531.37	121.92	4257.69
Outside Serv							14.00						14.00
Tires													
Miscellaneous													
<b>Total W/O \$</b>	640.94	183.39	2283.21	353.29		184.81	66.50	328.10	203.58	1153.61	542.62	209.10	6149.15
<b>Fuel Cost</b>	19.54	28.34	185.38	59.79	8.36	36.95	51.32	15.73	16.76	22.43	156.53	91.28	692.41
<b>Total Cost</b>	660.48	211.73	2468.59	413.08	8.36	221.76	117.82	343.83	220.34	1176.04	699.15	300.38	6841.56

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 4.1 Cost Per Mile: 1.534  
 Division: Streets Cost Per Hour:

Labor Type	JAN-2003	FEB-2003	MAR-2003	APR-2003	MAY-2003	JUN-2003	JUL-2003	AUG-2003	SEP-2003	OCT-2003	NOV-2003	DEC-2003	All Year
Miles	52	237	210	435		220	643	428	108	59	321	90	2803
Engine Hours													
Hours Down	25.50	4.00		7.50			8.00		21.50	.50	1.00		68.00
Gallons	21.1	80.5	76.5	126.8		46.9	48.8	34.7	40.6	17.2	157.2	27.8	678.1
Improvements													
Labor	382.50	180.00		292.50			315.00		247.50	22.50	45.00		1485.00
Shop Materia	7.50	15.00		7.50					7.50	7.50	7.50		52.50
Oil & Lubric	19.58			19.24			14.28						53.10
Parts	589.58			359.40	875.84		35.65	2.01	31.00	116.19			2009.67
Outside Serv													
Tires													
Miscellaneous													
Total W/O \$	999.16	195.00		678.64	875.84		364.93	2.01	286.00	146.19	52.50		3600.27
Fuel Cost	20.66	78.83	96.54	123.86		41.36	43.52	32.42	42.67	18.08	173.46	27.70	699.10
Total Cost	1019.82	273.83	96.54	802.50	875.84	41.36	408.45	34.43	328.67	164.27	225.96	27.70	4299.37

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.4 Cost Per Mile: 5.784  
Division: Streets Cost Per Hour:

Labor Type	JAN-2004	FEB-2004	MAR-2004	APR-2004	MAY-2004	JUN-2004	JUL-2004	AUG-2004	SEP-2004	OCT-2004	NOV-2004	DEC-2004	All Year
Miles		36		218	106	183	86				167	66	862
Engine Hours													
Hours Down	4.00	32.50	23.50	2.00		29.75	4.00		1.00			7.50	104.25
Gallons		15.0		73.8	38.4	71.1	45.1				70.9	42.6	356.9
Improvements													
Labor	157.50	720.00	112.50	90.00		573.75	247.50		45.00			472.50	2418.75
Shop Materia	7.50	7.50	7.50	15.00		15.00	22.50		7.50			7.50	90.00
Oil & Lubric	1.80					9.20						138.97	149.97
Parts		319.75	32.03	6.38		68.00	105.21				1062.00	92.26	1685.63
Outside Serv							181.50						181.50
Tires													
Miscellaneous													
Total W/O \$	166.80	1047.25	152.03	111.38		665.95	556.71		52.50		1062.00	711.23	4525.85
Fuel Cost		16.13		75.48	51.66	95.53	57.70				101.88	61.21	459.59
Total Cost	166.80	1063.38	152.03	186.86	51.66	761.48	614.41		52.50		1163.88	772.44	4985.44

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.2 Cost Per Mile: 3.454  
 Division: Streets Cost Per Hour: 1.725

Labor Type	JAN-2005	FEB-2005	MAR-2005	APR-2005	MAY-2005	JUN-2005	JUL-2005	AUG-2005	SEP-2005	OCT-2005	NOV-2005	DEC-2005	All Year
Miles	43	84	57			37		35	28		222		506
Engine Hours												1013	1013
Hours Down	27.50	1.50	25.50			1.50		1.00				4.50	61.50
Gallons	21.9	14.5	11.6			11.8		14.9	14.0	32.0	80.6	23.8	225.1
Improvements													
Labor	225.00	45.00	382.50			67.50		45.00				180.00	945.00
Shop Materia	7.50	7.50	7.50			7.50		7.50				7.50	45.00
Oil & Lubric			119.25										119.25
Parts	60.16		10.28										70.44
Outside Serv			73.00										73.00
Tires													
Miscellaneous													
<b>Total W/O \$</b>	292.66	52.50	592.53			75.00		52.50				187.50	1252.69
<b>Fuel Cost</b>	29.23	19.35	19.48			21.09		26.34	33.11	75.68	222.94	47.67	494.89
<b>Total Cost</b>	321.89	71.85	612.01			96.09		78.84	33.11	75.68	222.94	235.17	1747.58



Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.6 Cost Per Mile: 2.675  
 Division: Streets Cost Per Hour:

Labor Type	JAN-2006	FEB-2006	MAR-2006	APR-2006	MAY-2006	JUN-2006	JUL-2006	AUG-2006	SEP-2006	OCT-2006	NOV-2006	DEC-2006	All Year
Miles	254	158	101	73	238	128	38	145		159	117	173	1584
Engine Hours													
Hours Down		5.50	3.50	1.00		23.00		.50	26.50			7.50	67.50
Gallons	25.3	81.2	73.7	27.9	98.0	58.9	15.9	49.9	19.4	64.5	57.1	42.9	614.7
Improvements													
Labor		45.00	135.00	45.00		292.50		22.50	360.00			180.00	1080.00
Shop Materia		7.50	7.50	7.50		15.00		7.50	15.00			15.00	75.00
Oil & Lubric						23.85							23.85
Parts	.19		37.74	62.34		54.07		6.25	106.70	1360.00		47.84	1675.13
Outside Serv													
Tires													
Miscellaneous													
<b>Total W/O \$</b>	.19	52.50	180.24	114.84		385.42		36.25	481.70	1360.00		242.84	<b>2853.98</b>
<b>Fuel Cost</b>	50.68	165.98	149.47	60.15	222.46	143.48	38.73	131.29	51.04	169.70	114.11	85.74	<b>1382.83</b>
<b>Total Cost</b>	50.87	218.48	329.71	174.99	222.46	528.90	38.73	167.54	532.74	1529.70	114.11	328.58	4236.81

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.8 Cost Per Mile: 1.836  
Division: Streets Cost Per Hour:

Labor Type	JAN-2007	FEB-2007	MAR-2007	APR-2007	MAY-2007	JUN-2007	JUL-2007	AUG-2007	SEP-2007	OCT-2007	NOV-2007	DEC-2007	All Year
Miles		215	394	224	586	330	159	52		209	228	194	2591
Engine Hours													
Hours Down		.50	2.00	3.50	1.25	5.00	226.00	1.00	2.50		1.00	35.50	278.25
Gallons		83.4	157.6	87.6	203.2	115.5	46.8	20.0		71.7	77.7	68.5	932.0
Improvements													
Labor		22.50	90.00	180.00	45.00	382.50	607.50	45.00	67.50		45.00	427.50	1912.50
Shop Materia		7.50	7.50	15.00	7.50	22.50	15.00	7.50	7.50		15.00	22.50	127.50
Oil & Lubric						16.88	29.07					7.76	53.71
Parts				37.74		34.89	266.02				.36	72.37	411.38
Outside Serv													
Tires													
Miscellaneous													
<b>Total W/O \$</b>		30.00	97.50	232.74	52.50	456.77	917.59	52.50	75.00		60.36	530.13	2505.09
<b>Fuel Cost</b>		161.26	304.72	219.53	509.22	289.44	115.34	48.87		182.19	218.34	202.14	2251.05
<b>Total Cost</b>		191.26	402.22	452.27	561.72	746.21	1032.93	101.37	75.00	182.19	278.70	732.27	4756.14

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.9 Cost Per Mile: 3.161  
Division: Streets Cost Per Hour:

Labor Type	JAN-2008	FEB-2008	MAR-2008	APR-2008	MAY-2008	JUN-2008	JUL-2008	AUG-2008	SEP-2008	OCT-2008	NOV-2008	DEC-2008	All Year
Miles	118	266	98	179	359		77			38	318	145	1598
Engine Hours													
Hours Down		7.00	79.00	45.00	3.50	16.50			2.00		5.00		158.00
Gallons	40.1	95.1	34.5	65.0	130.5		25.1			15.0	99.7	52.2	557.2
Improvements													
Labor		112.50	315.00	720.00	180.00	45.00			90.00		202.50		1665.00
Shop Materia		7.50	15.00	15.00	15.00	7.50			7.50		22.50		90.00
Oil & Lubric			42.13	4.56	11.64								58.33
Parts	511.12		29.66	698.11	31.49				1.35		.22		1271.95
Outside Serv													
Tires													
Miscellaneous													
<b>Total W/O \$</b>	511.12	120.00	401.79	1437.67	238.13	52.50			98.85		225.22		3085.28
<b>Fuel Cost</b>	114.79	259.71	104.57	234.72	471.23		98.04			61.44	408.37	213.81	1966.68
<b>Total Cost</b>	625.91	379.71	506.36	1672.39	709.36	52.50	98.04		98.85	61.44	633.59	213.81	5051.96

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 3.4 Cost Per Mile: 6.968  
Division: Streets Cost Per Hour:

Labor Type	JAN-2009	FEB-2009	MAR-2009	APR-2009	MAY-2009	JUN-2009	JUL-2009	AUG-2009	SEP-2009	OCT-2009	NOV-2009	DEC-2009	All Year
Miles		52		84	77		69	68	179	305	370	247	1451
Engine Hours													
Hours Down		1.00		315.00	22.50				76.00	19.00	3.50	295.50	732.50
Gallons		21.2		28.1	29.6		17.3	24.8	56.1	67.2	107.2	75.1	426.6
Improvements													
Labor		45.00		742.50	135.00				945.00	135.00	90.00	787.50	2880.00
Shop Materia		7.50		15.00	7.50				22.50	7.50	15.00	15.00	90.00
Oil & Lubric				1078.71							13.98	182.07	1274.76
Parts				53.81					1197.52	387.81		749.95	2389.09
Outside Serv				2473.64	154.00								2627.64
Tires													
Miscellaneous													
<b>Total W/O \$</b>		52.50		4363.66	296.50				2165.02	530.31	118.98	1734.52	9261.49
<b>Fuel Cost</b>		39.77		38.53	40.58		34.18	49.00	115.27	137.91	232.92	161.33	849.49
<b>Total Cost</b>		92.27		4402.19	337.08		34.18	49.00	2280.29	668.22	351.90	1895.85	10110.98

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 2.8 Cost Per Mile: 3.913  
Division: Streets Cost Per Hour:

Labor Type	JAN-2010	FEB-2010	MAR-2010	APR-2010	MAY-2010	JUN-2010	JUL-2010	AUG-2010	SEP-2010	OCT-2010	NOV-2010	DEC-2010	All Year
Miles	186	135	1374									395	2090
Engine Hours													
Hours Down	9.50	45.50		9.00	127.00	22.50	25.50		3.50		6.02	116.00	364.52
Gallons	68.4	59.0	137.9	97.3	20.7	31.2	31.0		44.3	27.4	92.0	126.5	735.7
Improvements													
Labor	562.50	472.50		1237.50	337.50	180.00	292.50		112.50		247.50	337.50	3780.00
Shop Materia	15.00	15.00		15.00	7.50	15.00	15.00		7.50		15.00	15.00	120.00
Oil & Lubric		251.64		16.88			28.65				10.65		307.82
Parts	149.94	53.52		875.39	892.31		73.99		41.42		11.66	146.19	2244.42
Outside Serv													
Tires													
Miscellaneous													
<b>Total W/O \$</b>	727.44	792.66		2144.77	1237.31	195.00	410.14		161.42		284.81	498.69	6452.24
<b>Fuel Cost</b>	145.16	126.63	304.86	233.10	50.54	71.16	70.71		108.80	67.29	230.55	316.99	1725.79
<b>Total Cost</b>	872.60	919.29	304.86	2377.87	1287.85	266.16	480.85		270.22	67.29	515.36	815.68	8178.03

Northglenn Fleet Maintenance System  
Units In Service History

Vehicle: 000189 1997 ELGIN SWEEPER Miles Per Gallon: 3.0 Cost Per Mile: 3.187  
Division: Streets Cost Per Hour:

Labor Type	MAR-2010	APR-2010	MAY-2010	JUN-2010	JUL-2010	AUG-2010	SEP-2010	OCT-2010	NOV-2010	DEC-2010	JAN-2011	FEB-2011	All Year
Miles	1374									395	328		2097
Engine Hours													
Hours Down		9.00	127.00	22.50	25.50		3.50		6.02	116.00	1.00		310.52
Gallons	137.9	97.3	20.7	31.2	31.0		44.3	27.4	92.0	126.5	99.0		707.3
Improvements													
Labor		1237.50	337.50	180.00	292.50		112.50		247.50	337.50	22.50		2767.50
Shop Materia		15.00	7.50	15.00	15.00		7.50		15.00	15.00	7.50		97.50
Oil & Lubric		16.88			28.65				10.65				56.18
Parts		875.39	892.31		73.99		41.42		11.66	146.19	.33	7.98	2049.27
Outside Serv													
Tires													
Miscellaneous													
<b>Total W/O \$</b>		2144.77	1237.31	195.00	410.14		161.42		284.81	498.69	30.33	7.98	4970.45
<b>Fuel Cost</b>	304.86	233.10	50.54	71.16	70.71		108.80	67.29	230.55	316.99	259.47		1713.47
<b>Total Cost</b>	304.86	2377.87	1287.85	266.16	480.85		270.22	67.29	515.36	815.68	289.80	7.98	6683.92

**LENGTH OF SERVICE 9.7 YRS.**  
**TOTAL OPERATING COST (MAINT + FUEL) = \$ 53,175**  
**AVG. MAINT. COST/YR. = \$ 4,352**  
**AVG. FUEL COST/YR. = \$ 1,129**  
**AVG. OPERATING COST/YR. = \$ 5,481**

SPONSORED BY: MAYOR DOWNING

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-26  
Series of 2011

\_\_\_\_\_  
Series of 2011

A RESOLUTION TO AUTHORIZE THE CITY MANAGER TO ISSUE A PURCHASE ORDER TO FARIS MACHINERY COMPANY IN AN AMOUNT NOT TO EXCEED \$166,515.00 FOR THE PURCHASE OF ONE STREET SWEEPER

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The City Manager is hereby authorized to issue a Purchase Order to Faris Machinery Company in an amount not to exceed \$166,515.00 for the purchase of one Elgin Pelican street sweeper.

DATED at Northglenn, Colorado, this \_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
JOYCE DOWNING  
Mayor

ATTEST:

\_\_\_\_\_  
JOHANNA SMALL, CMC  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
COREY Y. HOFFMANN  
City Attorney