MEMORANDUM



Date: May 09, 2013

To: Sheila Kitz, CAO, County of St. Paul

cc:

From: Matthew Brassard 3144.0003.02

Subject: Project Summary – Estimated Costs to Complete

Sheila,

As discussed, please find below a summary of the estimated costs to complete the Ashmont water treatment plant and the Ashmont / Lottie Lake transmission line projects. These costs are based on limited amount of work remaining to commission the transmission line as well as our Class A cost estimate on the WTP.

In addition to the transmission line and WTP we have also included a new backup well as required by Alberta Environment as part of the regional hub system. You will recall that we had proposed to trade the County's observation well, which is not suitable from a quantity perspective for a backup well, with Alberta Environment's observation well, located roughly 75 west of the County's well, in order to save costs, but the Province did not consider this approach viable. The Province's observation well is suitable to service the County's raw water needs.

The following table briefly summarizes the projected funds required to complete the Ashmont Water Treatment Plant and associated components for the regional hub system. More detailed cost estimates and backup information are included for reference.

Component	Estimated Cost
WTP (Class A estimate) ¹	\$2,860,000
New Backup Supply Well	\$145,000
Transmission Line	\$295,000
Total =	\$3,300,000
Approved Funding	\$4,600,000
Spent to Date	\$3,110,000
Funding Remaining =	\$1,490,000
Additional Funding Required =	\$1,810,000
Total Projected Project Cost (2013)	\$6,410,000
Associated Engineering Estimate (2009) ²	\$6,500,000
Projected Difference =	(\$90,000)

^{1 –} Includes optional items in the contract, most notably \$185,000 for a backup generator at the WTP.

^{2 –} The \$6.5M estimate is based on \$2.2M for the transmission line and \$4.3M for the Ashmont WTP as a regional hub.

MEMORANDUM

Date: May 09, 2013 File: 3144.0003.02

Subject: Project Summary – Estimated Costs to Complete

Page: 2 of 2



At this time we are prepared to tender the water treatment plant design package and suggest a May 16, 2013 tender date providing both Alberta Transportation and the County of St. Paul approve the additional funding. We believe that by tendering the design, the Province and the County will have a much better sense of actual costs to complete and are still able to cancel the tender should the tendered costs exceed reasonable expectations. The County and Province could tender the project in late 2013 for a 2014 construction period, assuming provincial funding would be available in 2014.

We recommend that the County tender the project May 16, 2013 to confirm pricing and make a final decision on construction once the tender period has closed.

URBAN SYSTEMS LTD.

Matthew Brassard, P.Eng Branch Leader, Principal

/mbr

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County of St. Paul - WTP and Regional Supply Line Cost to Complete

New Backup Well		
New Well	\$	145,000

WTP			
Detailed Design Fee	s to Complete	9	
Urban Systems		\$	36,561
Specialist Consultan	ts	\$	35,065
Estimated Construct	tion		
WTP		\$	2,417,500
Contingency (5%)		\$	120,900
Construction Fees (5	5%)	\$	127,000
General Requireme	nts (5%)	\$	120,900
SubTotal		\$	2,786,300
			•
V	VTP TOTAL =	\$	2,857,926

Transmission Line			
Construction/Record	\$	13,335	
Outstanding Constru	uction	\$	74,019
Builders Lien Holdba	ack (10%)	\$	203,070
Transmission Line TOTAL =			290,423

Spent to date		\$ 3,109,780
Approved Project Va	alue	\$ 4,600,000

Project Funding Deficiency = -\$ 1,803,129 Includes new backup well, emergency generator @WTP

Estimated Total Project Cost = \$ 6,403,129

Note: This value assumes that the Ashmont WTP will be

AE (2009) Estimated Cost = \$ 6,500,000 a 'hub' for the region.

County of St. Paul - Ashmont Water Treatment Plant Upgrade DIRECT FILTRATION WITH RO MEMBRANES

Date <u>29-Apr-13</u>

ASHMONT WTP CAPITAL CONSTRUCTION COSTS - CLASS A FSTIMATE

Project Number: 3144.0003.02

	ASHMONT WTP CAPITAL CONSTRUCTION COSTS - CLASS A ESTIMATE									
C'	Description of the Control of the Co		0		Material or E	quipment Costs	- - 0 O	TOTAL COCTC		
Section	Description	Unit	Quantity		Unit Price	Total Price	Labour & Overhead (1,2)	TOTAL COSTS		
		1		1						
1.0	CITE MODIZA AND MADD DIDING									
	SITE WORKS AND YARD PIPING Site Excavation Trenching and Backfill, onsite disposal	m^2	10	\$	15	\$ 270	¢	200		
	Building Excavation and backfill and disposal	m^3 m^3	18 400	\$	55	\$ 22,000	\$ - \$ -	300 22,000		
1.3	100mm topsoil	m^2	460	\$	55	\$ 22,000	\$ -	2,300		
1.4		m^2	460	\$	3	\$ 2,300	\$ -	1,400		
1.4	Hydroseeding Granular base	IIIZ	400	Þ	3	\$ 1,380	-	1,400		
1.6	- Base (300mm Thickness)	m^2	170	\$	40	\$ 6,800	¢	6,800		
1.7	- Sub base (250mm Minus)	_	170	\$	35	\$ 5,950	\$ -	6,000		
1.7	- sub dase (250mm Minus) Yard Piping	m^2	170	Þ	30	\$ 5,950	-	0,000		
1.9	Cathodic Protection and Testing Station	LS	1	\$	2.000	\$ 2,000	\$ 1,000.00	3,000		
1.10	Pipe locates	each	3	\$	500	\$ 2,000 \$ 1,500	\$ 1,000.00	1,500		
	Raw water Tie-in	eacn	3	Þ	500	\$ 1,500	-	1,500		
			2	ф.	300	r (00	<u></u>	/00		
1.12	- Transmission Coupling - 100mm	each	2	\$		\$ 600	\$ -	600		
1.13	- HXF Gate Valve - 100mm	each	1	\$	750	\$ 750 \$ 750	\$ -	800 800		
1.14	- FXF gate Valve - 100mm	each	1	\$	750		\$ -			
1.15	- 22.5 Bend - 100mm	each	2	\$	300	\$ 600	-	600		
1.16	- 45 Bend - 100mm	each	1 20	\$	300	\$ 300	\$ -	300 4,500		
1.17	- 100mm PVC Pipe DR 25	m	30	2	150	\$ 4,500	\$ -	4,500		
1.18	Potable Water Line		F0		75	A 0.750		2.000		
-	- 50mm PVC Series 160	m	50	\$	75	\$ 3,750	\$ -	3,800		
-	- 45 Bend - 50mm	each	2	\$	200	\$ 400	-	400		
1.10	- 90 bend - 50mm	each	2	\$	200	\$ 400	-	400		
1.19	Core into Reservoir and seal around pipe	LS	ı	\$	1,500	\$ 1,500	\$ -	1,500		
1.20	Sanitary				100	A		400		
4.04	75mm PVC SDR26	m	4	\$	100	\$ 400	\$ -	400		
1.21	1200 mm X 3m deep manhole, C/W base, riser and cover	each	1	\$	3,500	\$ 3,500	\$ 1,750.00	5,300		
	1200 mm manhole upgrades - Raise by 112mm	LS	1	\$	750	\$ 750	\$ -	800		
1.23	1200 mm manhole for pressure transmitter - well site	LS	1	\$	3,500	\$ 3,500	\$ 1,750.00	5,300		
1.24	Install new gas line and meter	LS	1	\$	5,000	\$ 5,000	\$ -	5,000		
1.25	Remove retaining wall	LS	1	\$	1,500	\$ 1,500	\$ -	1,500		
1.26	Remove gas line	LS	1	\$	1,500	\$ 1,500	\$ -	1,500		
1.27	Remove and dispose of the septic tank	LS	- 1	\$	10,000	\$ 10,000	\$ -	10,000		
				<u> </u>		Cubtotal	Cita Warks And Vard Dining	0/ 00/		
		1	ı	1	-	Subtotal	- Site Works And Yard Piping	86,800		
2.0	DEMOLITION AND CONSTRUCTION REQUIREMENTS									
2.1	Domelition suisting filter removal nining companents repairs etc.	10	1		20,000	¢ 20.000	¢	20.000		
	Demolition, existing filter removal, piping, components, repairs, etc.	LS	1	\$	20,000	\$ 20,000	\$ -	20,000		
2.2	50mm Potable Mainline Relocation, Heat Trace and Insulation System	LS	1	\$	2,500	\$ 2,500	\$ -	2,500		
2.3	Relocate Existing Potable Water Main within Existing Facility	LS	1	\$	1,500	\$ 1,500	\$ -	1,500		
2.4	Install Heat Trace and Insulation System on Potable Water Penetration	LS	1	\$	2,250	\$ 2,250	\$ -	2,300		
2.5	Temporary Connection to Existing Raw Water Piping (Incl. restrained flange adapter)	LS	1	\$	2,250	\$ 2,250	\$ -	2,300		
				<u> </u>		Cubtotal Eviating W-+-	r Treatment Diant Dem-Uti	20.700		
		1	16	1		Subtotal - Existing Wate	r Treatment Plant Demolition	28,600		
			10							
	WTP BUILDING									
3.1	Building			!						
	- Superstructure and Exterior Enclosure	m ²	334	\$	1,000	\$ 334,000	\$ -	334,000		
	- Building Electrical and Power Distribution (includes 3Phase power Pole, security, lighting etc.)	m ²	334	\$	902	\$ 301,252	\$ -	301,300		
	- Building Mechanical (HVAC / Plumbing)	m ²	334	\$	534	\$ 178,356	\$ -	178,400		
	- Gratings	LS	1	\$	10,000	\$ 10,000	\$ -	10,000		
	· · · · · · · · · ·	m^3	160		1,200	\$ 192,000		192,000		

County of St. Paul - Ashmont Water Treatment Plant Upgrade

DIRECT FILTRATION WITH RO MEMBRANES

Date <u>29-Apr-13</u>

ASHMONT WTP CAPITAL CONSTRUCTION COSTS - CLASS A ESTIMATE

Project Number: 3144.0003.02

ASHMONT WTP CAPITAL CONSTRUCTION COSTS - CLASS A ESTIMATE									
					Material or E	quipment Costs		TOTAL 000T0	
Section	Description	Unit	Quantity		Unit Price	Total Price	Labour & Overhead (1,2)	TOTAL COSTS	
3.3	Concrete Piling	each	20	\$	2,000	\$ 40,000	\$ -	40,000	
3.4	Control Room Loose furniture allowance	ls	1	\$	1,000	\$ 1,000		1,000	
3.10	Safety Equipment								
	- Shower/eyewash system	each	1	\$	1,400	\$ 1,400	\$ 700	2,100	
	- Thermostatic mixing valve	each	1	\$	2,500	\$ 2,500	\$ 1,250	3,800	
	- Hot water tanks	each	2	\$	900	\$ 1,800	\$ 900	2,700	
3.12	Lifting Hoist								
	- Lifting hoist and trolley	each	1	\$	1,200	\$ 1,200	\$ 600	1,80	
	- Structural rails	each	4	\$	500	\$ 2,000	\$ 1,000	3,00	
						0.1	LIL MATERIAL COLLEGE	1 070 10	
						Sun	total - WTP Building Subtotal	1,070,10	
4.0	PROCESS RELATED COMPONENTS AND MATERIALS								
4.1	Water piping, valves and fittings	LS	1	\$	202,283	\$ 202,283	\$ -	202,30	
4.2	Chemical piping, valves and fittings	LS	1	\$	17,888	\$ 17,888	\$ -	17,90	
4.3	Process Instrumentation	LS	1	\$	4,050	\$ 4,050	\$ -	4,10	
4.4	Static Mixers	each	4	\$	1,500	\$ 6,000	\$ 1,500	7,50	
				<u> </u>					
				1		Subtotal - Process Relate	d Components And Materials	231,80	
5.0	REVERSE OSMOSIS FILTRATION EQUIPMENT								
5.1	Complete RO Skid Package	LS	1	\$	328,781	\$ 328,781	\$ 16,439	345,30	
	- Membrane Filters Package - 2 trains. C/w cartridge filters			1					
	- PLC control panel, and Color Touchscreen Operator Interface			4					
	- CIP Skid Package - CIP chemical feed skid			+					
	- CIP Chemical reed skid - Antiscalaant metering pumps			1					
	- Artiscalaant metering pumps - VFDs per train	each	2	\$	8,750	\$ 17,500	\$ 8.750	26,30	
	- pH Probe for the CIP return	each	1	\$	3,000	\$ 3,000		3,80	
	printed to the on rotain	546.1		Ť	0,000	\$, , , ,	0,00	
						Subtotal - Reverse	Osmosis Filtration Equipment	375,40	
				T					
6.0	VERTICAL INLINE PUMPS								
6.1	Booster Pumps 15HP Grundfos	each	2	¢	8,500	\$ 17,000	\$ 8,500	25,50	
0.1	booster rumps form Grundios	eacii		a a	0,500	\$ 17,000	\$ 6,500	23,30	
						Su	ibtotal - Vertical Inline Pumps	25,50	
				T				20,00	
7.0	CHEMICAL STORAGE AND DOSING EQUIPMENT								
7.0	Antiscalant Secondary Containment Pallett	LS	2	¢	250.00	\$ 500.00	\$ 125.00	70	
7.1	Sodium Hypochlorite Storage Totes	each	3	\$	500.00	\$ 1,500.00		1,90	
7.3	Sodium Hypochlorite Scondary Containment Pallet	each	2	\$	1,200.00	\$ 2,400.00		3,00	
7.4	Sodium Hydroxide Storage Day Tank	each	1	\$	800.00	\$ 800.00		1,00	
7.5	Sodium Hydroxide Secondary Containment Pallet	each	1	\$	400.00	\$ 400.00		50	
7.6	Sulfuric Acid IBC Totes	each	3	\$	600.00	\$ 1,800.00	\$ 450.00	2,30	
7.7	Sodium Hypochlorite Duplex Metering Skid - Complete	each	1	\$	20,000.00	\$ 20,000.00	\$ 1,000.00	21,00	
7.8	Sodium Hydroxide Duplex Metering Skid - Complete	each	1	\$	20,000.00	\$ 20,000.00	\$ 1,000.00	21,00	
7.9	Sulfuric Acid Duplex Metering Skid - Complete	each	1	\$	20,000.00	\$ 20,000.00	\$ 1,000.00	21,00	
7.10	Portable Chemical Trasfer Pump	each	2	\$	2,000.00	\$ 4,000.00	\$ 200.00	4,20	
								•	
						Subtotal - Chemical Sto	orage and Dosing Equipment's	76,60	
				1_					
				丄					

County of St. Paul - Ashmont Water Treatment Plant Upgrade DIRECT FILTRATION WITH RO MEMBRANES

Date <u>29-Apr-13</u>

ASHMONT WTP CAPITAL CONSTRUCTION COSTS - CLASS A ESTIMATE

Project Number: 3144.0003.02

	ASHIVION 1 WTP CAPITAL CONSTRUCTION COSTS - CLASS A ESTIMATE Material or Equipment Costs							
Section	Description	Unit	Quantity				Labour & Overhead (1,2)	TOTAL COSTS
00011011	2000.1911011	01.11	additity		Unit Price	Total Price	200001 0 0 00111000 (1/2)	101712 00010
0.0	ELECTRICAL, CONTROLS AND INSTRUMENTATION							
	Electrical, Controls and Instrumentation - all process equipment and instrumentations	LS	1	\$	227,816.70	\$ 227,816.70	ż	227,900
	PLC Programming and Integration	LS	1	\$	85,000.00			85,000
8.2	PLC Programming and integration	L3	<u> </u>	Þ	85,000.00		Controls and Instrumentation	312,900
		1	1	1		Subtotal - Electrical	Controls and instrumentation	312,900
		1					 	
	EMERGENCY GENERATOR							
9.1	Emergency Generator	LS	1	\$	115,000.00	\$ 115,000.00	\$ 20,750.00	135,800
		1						
						Su	btotal - Emergency Generator	135,800
		1		₩			ļ	
							<u> </u>	
10	WELL PUMP UPGRADES							
10.1	Remove existing well pump and salvage to County (Piping, Valving, etc. Included in Section 4)	LS	1	\$	1,500	\$ 1,500	\$ -	1,500
	30HP well pump	each	1	\$	10,000	\$ 10,000	\$ 2,500	12,500
10.3	Well Pump MCC including VFD	LS	1	\$	40,000	\$ 40,000	\$ -	40,000
						Si	ubtotal - Well Pump Upgrades	54,000
11.0	FORKLIFT							
	Purchase Used Forklift	LS	1	\$	20,000	\$ 20,000	\$ -	20,000
	Taronaso oscar orani.		· ·	Ť	20,000	\$ 20,000	ľ	20,000
							Subtotal - Forklift	20,000
				I				
							1	
		•					Grand Subtotal	\$ 2,417,500
							Contingencies (5%)	\$ 120,900
						Construction Fe	ees (5% of WTP Capital Costs)	\$ 127,000
							General Requirements (5%)	\$ 120,875
					Total W	later Treatment Plant Ca	pital Cost (not including GST)	\$ 2,786,300
					10tai 11	rater reatment riant oa	pital oost (not including oor)	Ψ 2,700,500
Notes								
	A Labour and Overhead multiplier of 50% of the supply cost has been used for the majority of component and ec	uinment sunr	nly costs	1			1	
1.0	A Labour and Overhead multiplier of 25% has been used for equipment where installation effort is deemed mini		I costs.	1				
	A Labour and Overhead multiplier of 5% has been used for equipment where plumbing into the system was added		ests for electrica	al and	nrocess nining are	including elsewhere	+	
	Labour and overhead set to zero when costs includes labour and overhead	Juli otrici co	Joseph Ciccurica	Tana	process piping are	moldaring cisewhere		
	and		1	1			†	
			1	1				



Email: AHingston@CanadianConsultingGroup.com

Phone: (780) 470-5916 Fax: (780) 459-1208

April 18, 2013

Urban Systems Suite 1250, 13401-108th Ave Surrey, British Columbia, V3T 5T3

Attention: Cristina Fonseca, Ph.D., P.Eng., P.E.

RE: Ashmont Water Treatment Plant Upgrades Control System Configuration Proposal

We are pleased to provide a price in the amount of \$85,000 for the control system configuration for the Ashmont Water Treatment Plant Upgrades. Our pricing is based on the contract documents and in general terms, consists of the following scope of work.

- Development of a detailed control narrative for all equipment and instrumentation
- Detailed PLC I/O drawings for all PLC cards and I/O
- Detailed motor starter drawings for all motor starters
- Detailed wiring diagrams for all PLC controlled instruments and valves
- PLC configuration and programming for all plant controlled equipment and instruments
- HMI setup and configuration for all computers
- Network set-up of equipment as per the network diagram
- I/O wiring checks with the contractor
- Site acceptance testing and system integration for control system
- Onsite testing and commissioning of control system
- Warranty support of the control system

We require a minimum of 30 days notice before a programmer is required onsite from the contractor.

Price is exclusive of GST.

Please call if you require additional information or clarifications.

Yours truly,

Andrew Hingston, E.I.T.

5/01/13 12:46:07	Costing System	
(C003100)	Detail by Activity Report	Y - T - D

			Accounting	Control	Service	Encumbrance		
Entity 5C115	ASHMONT LOTTIE LAKE	Activity CONT CONTRACTORS ON COUNTY PR	Date 0 2011/11/15	Units	Units	Amount		Description HAUL WATER
			2012/02/22				1,030.00	DEMO WATER HAUL RENEGADE PLUMBING
			2012/03/06				7,196.72	THURBER ENGINEERING LTD.
			2012/03/14				6,816.41	ZELTEC SYSTEMS
			2012/07/11				261,038.70	TO MAY 31, 2012 BERETTA PIPELINE CONSTRUCTION
			2012/08/08				360,579.50	BERETTA PIPELINE CONSTRUCTION
			2012/09/12				408,689.64	BERETTA PIPELINE CONSTRUCTION
			2012/10/02				294,030.00	BERETTA PIPELINE CONSTRUCTION
			2012/12/31				208,370.00	BERETTA PIPELINE CONSTRUCTION
			2012/12/31				10,418.50	BERETTA PIPELINE CONSTRUCTION
			2012/12/31				10,418.50	-X**** CANCELLED INVOICE ****X BERETTA PIPELINE CONSTRUCTION
			2013/02/26				87,890.64	BERETTA PIPELINE CONSTRUCTION
			2013/04/02				67,249.00	BERETTA PIPELINE CONSTRUCTION
			2013/04/16				40,162.50	BERETTA PIPELINE CONSTRUCTION
		** Totals for Activity CON	Т				1,746,953.11	Count 14
		ERW EASEMENT RIGHT OF WAY	2012/12/18				50.00	SIGNING ROEDER, ELROY
			2012/12/18				413.31	LAND .171 HA @ 2417.00 ROEDER, ELROY
			2012/12/18				50.00	SIGNING ROEDER, SUSAN
			2012/12/18				79.76	LAND .033 HA @ 2417.00 ROEDER, SUSAN
			2012/12/18				50.00	SIGNING ROEDER, KEVIN & NATALIE

5/01/13 12:46:07	Costing System	Page: 2

(C003100)			Detail by Acti	vity Report		2003/01/01	- 2013/12/3	31 Y-T-D
Entity 5C115	ASHMONT LOTTIE LAKE	Activity ERW EASEMENT RIGHT OF WAY	Accounting	Control Units	Service Units	Encumbrance Amount	974.05	Description LAND .403 HA @ 2417.00 ROEDER, KEVIN & NATALIE
			2012/12/18 2012/12/18				400.00	CROP DAMAGE 1 ACRE CAPP, GEORGE & MIKE JR. CROP DAMAGE 2 ACRES CAPP, GEORGE & MIKE JR.
			2012/12/18 2012/12/18					EASEMENT - SIGNING MURRAY, PHILLIP H. LAND199 HA @ 2417.00 MURRAY, PHILLIP H.
			2012/12/18 2012/12/18					SIGNING MURRAY, SHANE P. LAND .403 HA @ 2417.00 MURRAY, SHANE P.
			2012/12/18 2012/12/18					LANDSCAPE BORROW 2 ACRES OSTAPOVICH, GEORGE & RUSSEL CROP DAMAGE 2 ACRES
			2012/12/18					OSTAPOVICH, GEORGE & RUSSEL SIGNING STAROSIELSKI CATTLE INC. LAND .403 HA @ 2417.00
			2012/12/18				•	STAROSIELSKI CATTLE INC. CROP DAMAGE 5 ACRES STAROSIELSKI CATTLE INC. CROP DAMAGE 1 ACRE
			2012/12/18				200.00	STAROSIELSKI CATTLE INC. CROP DAMAGE 1 ACRE STAROSIELSKI CATTLE INC.
		** Totals for Activity ERW	2012/12/19				6,996.20	-RIGHT OF WAY EASEMENTS ASHMONT LOTTIE LAKE WFLG Count 20
		FENC Fencing	2012/05/05	21.0000			570.57	PAYROLL POSTING BATCH #0016026 REGULAR - HOURLY
			2012/05/05 2012/05/05	26.0000				PAYROLL POSTING BATCH #0016026 REGULAR - HOURLY PAYROLL POSTING BATCH #0016026
			2012/05/05				47.58	PUBLIC WORKS - STEP PAYROLL POSTING BATCH #0016026 PUBLIC WORKS - STEP

5/01/13 (C003100)	12:46:07		Costing Detail by Act			2003/01/01	- 2013/12/31 Y-T-D
Entity 5C115	ASHMONT LOTTIE LAKE	Activity FENC Fencing	Accounting Date 2012/05/05	Control Units	Service Units	Encumbrance Amount	Amount Description 67.46 PAYROLL POSTING BATCH #0016026 PUBLIC WORKS - LAPP 54.08 PAYROLL POSTING BATCH #0016026
			2012/05/05				PUBLIC WORKS - C.P.P. 29.92 PAYROLL POSTING BATCH #0016026 PUBLIC WORKS - U.I.C.
			2012/05/05				19.17 PAYROLL POSTING BATCH #0016026 PUBLIC WORKS - W.C.B.
			2012/12/18				1,500.00 FENCING CAPP, GEORGE & MIKE JR.
			2012/12/19				1,500.00-RIGHT OF WAY FENCING ASHMONT LOTTIE LAKE WFLG
			2012/12/31				1,339.12-WAGE FROM 5C115 TO 5C124 ASHMONT LOTTIE LAKE WFLG
		** Totals for Activity	FENC	47.0000			Count 11
		GRAV Gravel Material	2012/08/15	20.0000			46.00 ST. LINA NORTH – NW 34-62 CRUSHED GRAVEL
			2012/08/31	20.0000-			46.00-ST. LINA NORTH - NW 34-62 CRUSHED GRAVEL
		** Totals for Activity	GRAV				Count 2
		HGRV Hauling Gravel	2012/08/15	33.0000	20.0000		161.60 MARK'S TRUCKING MARK MILLER
			2012/08/31	33.0000-	20.0000-		161.60-MARK'S TRUCKING MARK MILLER
		** Totals for Activity	HGRV				Count 2
		INSR INSURANCE	2012/06/11				1,843.70 CONSTRUCTION INSURANCE JUBILEE INSURANCE AGENCIES LTD
			2012/06/11				1,083.56 BUILDERS RISK JUBILEE INSURANCE AGENCIES LTD
			2012/10/02				932.15 BUILDERS RISK JUBILEE INSURANCE AGENCIES LTD
			2012/10/02				481.01 WRAP UP LIABILITY JUBILEE INSURANCE AGENCIES LTD

5/01/13 12:46:07	Costing System	Page: 4

5/01/13 12:46:07 (C003100)			System tivity Report		2003/01/01	- 2013/12/31 Y-T-D	Pag
Entity	Activity	Accounting Date	Control Units	Service Units	Encumbrance Amount	Amount Description	
5C115 ASHMONT LOTTIE LAKE	INSR INSURANCE	2012/12/07	0111 63	011103	Aillouitt	497.49 JUBILEE INSURANCE AGENCIES LTD)
		2012/12/19				4,837.91-INSURANCE – WATERLINE CONST BERETTA	
		2012/12/31	1.0000			4,837.91-CONSTRUCTION INSURANCE BERETTA PIPELINE CONSTRUCTION	
		2012/12/31				4,837.91 INSURANCE DOUBLE JE ENTRY	
	** Totals for Activity	INSR	1.0000			Count 8	
	OPR operator	2012/03/24	48.0000			10,608.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # CT-01	3
		2012/03/24	4.0000			368.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # CT-03	3
		2012/03/24	33.0000			6,006.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # CT-05	3
		2012/03/24	4.5000			765.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # MG-03B	
		2012/03/24	5.0000			1,690.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # MS-03	
		2012/03/24	17.0000			2,601.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # RT-01	
		2012/03/24	18.0000			3,060.00 PAYROLL POSTING BATCH #0015938 FOR EQUIPMENT # RT-02	3
		2012/04/07	24.0000			5,304.00 PAYROLL POSTING BATCH #0015967 FOR EQUIPMENT # CT-01	7
		2012/12/31				30,402.00-5C115 TO 5C124 OPR TRANSFER	
	** Totals for Activity	OPR	153.5000			Count 9	
	OTHR OTHER - GENERAL	2011/12/22				1,200.00 SPEEDCODE 483AU UNIVERSITY OF ALBERTA	
		2012/02/14				1,972.33 CLEARTECH INDUSTRIES INC.	
		2012/02/14				3,900.00 NORTHERN LIGHTS WELDING	
		2012/02/14				213.72 B & R ECKEL'S TRANSPORT LTD.	

5/01/13 (C003100)	12:46:07		Costing Detail by Acti			2003/01/01	- 2013/12/31	Y - T - D		Page:	5
Entity 5C115	ASHMONT LOTTIE LAKE	Activity OTHR OTHER - GENERAL	Accounting Date 2012/03/06	Control Units	Service Units	Encumbrance Amount	Amount De 92.19 CL	scription EARTECH INDUST	TRIES INC.		
			2012/03/14				38.61 PU	ROLATOR COURIE	ER LTD.		
			2012/03/14				99.03 PU	ROLATOR COURIE	ER LTD.		
		** Totals for Activity OTHR	ı				7,515.88 Co	unt 7			
		RENT RENT OF EQUIPMENT FOR PRO	2012/03/22				10,000.00 WI	GEN COMPANIES	INC.		
			2012/05/08				2,210.50 WI	GEN COMPANIES	INC.		
		** Totals for Activity RENT					12,210.50 Co	unt 2			
		SUP SUPPLIES/MATERIALS	2012/03/22						BER & BUILDING BER & BUILDING		
			2012/03/22					EARTECH INDUST			
			2012/04/04				25.52 PO	122657 . PAUL FOUNDRY	/ ITN		
			2012/06/06					ROLATOR COURIE			
		** Totals for Activity SUP					982.06 Co	unt 4			
		SURV SURVEYING & ENGINEERING	2011/09/01				•	HMONT WATER PE			
			2011/09/01				256.96 AS	& J VANCO SERN			
			2011/10/05				25,977.40 PL	OVA CANADA INC ANT & PIPELINE	UPGRADES		
			2011/10/05				32,127.35 PL	BAN SYSTEMS LT ANT & PIPELINE	UPGRADES		
			2011/10/12					BAN SYSTEMS LT OVA CANADA INC			
			2011/10/12				256.96 EX	OVA CANADA INC	2.		

Costing	System		
Detail by Act	ivity Report 2003/01/01	- 2013/12/31	Y - T - D

5/01/13 12:46:07

(C003100)

Entity 5C115	ASHMONT LOTTIE LAKE	Activity SURV SURVEYING & ENGINEERING	Accounting Date 2011/10/12	Control Units	Service Units	Encumbrance Amount		Description EXOVA CANADA INC.
			2011/10/12				359.00	EXOVA CANADA INC.
			2011/10/12				256.96	EXOVA CANADA INC.
			2011/11/02				3,000.00	DWG PROCESS SUPPLY LTD.
			2011/11/09				34,385.25	ASH/LOTTIE LAKE URBAN SYSTEMS LTD.
			2011/11/22				263.76	EXOVA CANADA INC.
			2011/11/22				312.52	EXOVA CANADA INC.
			2011/12/31				71,939.04	URBAN SYSTEMS LTD.
			2011/12/31				321.15	EXOVA CANADA INC.
			2011/12/31				321.15	EXOVA CANADA INC.
			2011/12/31				31,134.00	-THURBER ENGINEERING INV 25475
			2011/12/31				72,050.64	URBAN SYSTEMS INV 108582
			2011/12/31				31,134.00	REVERSE JE 73 THURBER INV 25475
			2011/12/31				31,134.00	
			2011/12/31				16,638.67	THURBER ENGINEERING INV 25124
			2011/12/31				25,963.03	THURBER ENGINEERING INV 25713
			2012/03/06				769.50	EXOVA CANADA INC.
			2012/03/06				86,373.65	URBAN SYSTEMS LTD.
			2012/03/14				1,426.85	EXOVA CANADA INC.
			2012/03/22				38,541.98	URBAN SYSTEMS LTD.
			2012/04/04				2,191.84	URBAN SYSTEMS LTD.

5/01/13 12:46:07	Costing System	
(C003100)	Detail by Activity Report	2003/01/01 - 2013/12/31 Y-T-D

			Accounting	Control	Service	Encumbrance		
Entity 5C115	ASHMONT LOTTIE LAKE	Activity SURV SURVEYING & ENGINEERING	Date 2012/04/16	Units	Units	Amount	Amount 79.80	
			2012/04/16				621.60	
			2012/04/16				41.20	EXOVA CANADA INC. 5C115
			2012/05/08				4.710.50	EXOVA CANADA INC. URBAN SYSTEMS LTD.
			2012/05/16					THURBER ENGINEERING LTD.
			2012/06/06				·	URBAN SYSTEMS LTD.
			2012/06/11				3,1/5.00	RACHYNSKI LAND SURVEYS (1998)
			2012/07/02				78,472.13	UPGRADE URBAN SYSTEMS LTD.
			2012/07/02				25,050.00	TRANSMISSION LINE
			2012/08/08				40,842.50	URBAN SYSTEMS LTD. URBAN SYSTEMS LTD.
			2012/09/12				39,520.00	URBAN SYSTEMS LTD.
			2012/09/12				1,590.84	THURBER ENGINEERING LTD.
			2012/10/02				36,875.00	TRANSMISSION LINE CONSTRUCTION
			2012/11/01				380.00	URBAN SYSTEMS LTD. RACHYNSKI LAND SURVEYS (1998)
			2012/11/06				18,437.50	URBAN SYSTEMS LTD.
			2012/11/19				826.74	THURBER ENGINEERING LTD.
			2012/11/29				0 557 50	LINE CONSTRUCTION
			2012/11/29				0,337.30	URBAN SYSTEMS LTD.
			2012/12/31				9,218.75	LINE CONSTRUCTION URBAN SYSTEMS LTD.
			2012/12/31				4,084.25	LINE CONSTRUCTION
			2012/12/31				2,850.00	URBAN SYSTEMS LTD. CANADIAN CONSULTING GROUP
			2012/12/31				1 800 50	INV PM00063 CANADIAN CONSULTING GROUP
			C017/17/31				1,009.30	INV PM 00065

(C003100)			Detail by Acti	vity Report		2003/01/01	- 2013/12/3	31 Y-T-D
Entity 5C115	ASHMONT LOTTIE LAKE	Activity SURV SURVEYING & ENGINEERING	Accounting Date 2012/12/31	Control Units	Service Units	Encumbrance Amount	7,590.00	Description CANADIAN CONSULTING GROUP INV PM 00064
			2013/02/26				3,423.00	LINE CONSTRUCTION URBAN SYSTEMS LTD.
		** Totals for Activity SURV					748,942.97	Count 50
		TEST TESTING/ANALYSIS	2012/06/20				62.40	EXOVA CANADA INC.
		** Totals for Activity TEST					62.40	Count 1
		WAGE COUNTY WAGES FOR PROJECTS	2012/03/24	184.0000			5,843.88	PAYROLL POSTING BATCH #0015938 REGULAR - HOURLY
			2012/03/24				609.82	PAYROLL POSTING BATCH #0015938 REGULAR - HOURLY
			2012/03/24					PAYROLL POSTING BATCH #0015938 PUBLIC WORKS - LAPP
			2012/03/24					PAYROLL POSTING BATCH #0015938 PUBLIC WORKS - DENTAL
			2012/03/24					PAYROLL POSTING BATCH #0015938 PUBLIC WORKS - C.P.P. PAYROLL POSTING BATCH #0015938
			2012/03/24					PUBLIC WORKS - U.I.C. PAYROLL POSTING BATCH #0015938
			2012/03/24				133.70	PUBLIC WORKS - W.C.B. PAYROLL POSTING BATCH #0015938
			2012/03/24				71.69	PUBLIC WORKS - BLUE CROSS PAYROLL POSTING BATCH #0015938 PUBLIC WORKS - LIFE INSURANCE
			2012/03/24				152.31	PAYROLL POSTING BATCH #0015938 PUBLIC WORKS - LONG TERM DIS.
			2012/03/24				14.92	PAYROLL POSTING BATCH #0015938 PUBLIC WORKS - E.A.P.
			2012/04/07	30.0000				PAYROLL POSTING BATCH #0015967 REGULAR - HOURLY
			2012/04/07					PAYROLL POSTING BATCH #0015967 REGULAR - HOURLY
			2012/04/0/				124.5/	PAYROLL POSTING BATCH #0015967 PUBLIC WORKS – LAPP

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Entity 5C115	ASHMONT LOTTIE LAKE	Accounting Activity Date WAGE COUNTY WAGES FOR PROJECTS 2012/04/07	Control Units	Service Units	Encumbrance Amount		Description PAYROLL POSTING BATCH #0015967
		2012/04/07				28.39	PUBLIC WORKS - C.P.P. PAYROLL POSTING BATCH #0015967 PUBLIC WORKS - U.I.C.
		2012/04/07				18.18	PAYROLL POSTING BATCH #0015967 PUBLIC WORKS - W.C.B.
		2012/04/21	4.0000			118.68	PAYROLL POSTING BATCH #0015989 REGULAR - HOURLY
		2012/04/21				11.95	PAYROLL POSTING BATCH #0015989 REGULAR - HOURLY
		2012/04/21					PAYROLL POSTING BATCH #0015989 PUBLIC WORKS - LAPP
		2012/04/21					PAYROLL POSTING BATCH #0015989 PUBLIC WORKS - DENTAL
		2012/04/21					PAYROLL POSTING BATCH #0015989 PUBLIC WORKS - C.P.P.
		2012/04/21 2012/04/21					PAYROLL POSTING BATCH #0015989 PUBLIC WORKS - U.I.C. PAYROLL POSTING BATCH #0015989
		2012/04/21					PUBLIC WORKS - W.C.B. PAYROLL POSTING BATCH #0015989
		2012/04/21					PUBLIC WORKS - BLUE CROSS PAYROLL POSTING BATCH #0015989
		2012/04/21					PUBLIC WORKS - LIFE INSURANCE PAYROLL POSTING BATCH #0015989
		2012/04/21				.32	PUBLIC WORKS - LONG TERM DIS. PAYROLL POSTING BATCH #0015989
		2012/05/19	30.5000			822.38	PUBLIC WORKS - E.A.P. PAYROLL POSTING BATCH #0016065
		2012/05/19				79.01	REGULAR - HOURLY PAYROLL POSTING BATCH #0016065
		2012/05/19	20.5000			390.73	REGULAR - HOURLY PAYROLL POSTING BATCH #0016065 PUBLIC WORKS - STEP
		2012/05/19				37.51	PAYROLL POSTING BATCH #0016065 PUBLIC WORKS - STEP
		2012/05/19				82.96	PAYROLL POSTING BATCH #0016065 PUBLIC WORKS - LAPP
		2012/05/19				61.98	PAYROLL POSTING BATCH #0016065 PUBLIC WORKS - C.P.P.
		2012/05/19				34.10	PAYROLL POSTING BATCH #0016065 PUBLIC WORKS - U.I.C.

5/01/13 12:46:07	Costing System		
(C003100)	Detail by Activity Report	2003/01/01 - 2013/12/31	Y - T - D

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Entity 5C115	ASHMONT LOTTIE LAKE	Accou Activity WAGE COUNTY WAGES FOR PROJECTS 2012/	unting Date /05/19	Control Units	Service Units	Encumbrance Amount			POSTING BATCH	#0016065
		2012/	/06/30	5.0000			135.85		ORKS - W.C.B. POSTING BATCH	#0016179
		2012/	/06/30				13.12		POSTING BATCH	#0016179
		2012/	/06/30	5.0000			95.30	PAYROLL	POSTING BATCH ORKS - STEP	#0016179
		2012/	/06/30				9.70	PAYROLL	POSTING BATCH ORKS – STEP	#0016179
		2012/	/06/30				16.36	PAYROLL	POSTING BATCH ORKS - LAPP	#0016179
		2012/	/06/30				2.23	PAYROLL	POSTING BATCH ORKS – DENTAL	#0016179
		2012/	/06/30				12.15	PAYROLL	POSTING BATCH ORKS - C.P.P.	#0016179
		2012/	/06/30				6.68	PAYROLL	POSTING BATCH ORKS - U.I.C.	#0016179
		2012/	/06/30				4.29	PAYROLL	POSTING BATCH ORKS - W.C.B.	#0016179
		2012/	/06/30				2.10	PAYROLL	POSTING BATCH ORKS – BLUE CR	
		2012/	/06/30				.96	PAYROLL	POSTING BATCH ORKS – LIFE IN	#0016179
		2012/	/06/30				.37	PAYROLL	POSTING BATCH ORKS - E.A.P.	
		2012/	/12/31				11,599.52	-WAGE FRO	M 5C115 TO 5C1 LOTTIE LAKE WF	
		** Totals for Activity WAGE		279.0000				Count	49	
		** Totals for Entity 5C115		480.5000		2	,516,666.92	Count	179	
5C116	ASHMONT PLANT - WFLG	CONT CONTRACTORS ON COUNTY PRO 2012/	/07/02				147.50	UPGRADE	DI IIMP THO	
		2012/	/07/11				560.00	ZELTEC S	PLUMBING YSTEMS	
		2012/	/10/15				1,455.00	RENEGADE	PLUMBING	

5/01/13 12:46:07	Costing System		
(C003100)	Detail by Activity Report	2003/01/01 - 2013/12/31	Y-T-D

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Entity	Activity		Accounting Date	Control Units	Service Units	Encumbrance Amount	Amount	Descripti	on	
	** Totals for Activi	ty CONT					2,162.50	Count	3	
	OTHR OTHER - GENERAL		2012/09/11				391.00	CLEARTECH	INDUSTRIES INC.	
			2012/09/11				99.00	CLEARTECH	INDUSTRIES INC.	
			2012/09/11				1,347.67	CLEARTECH	INDUSTRIES INC.	
			2012/11/29				32,285.00		ONENT ERON PUMP SOLUTIONS	
			2012/12/17				89.00	CLEARTECH	INDUSTRIES INC.	
			2013/02/26				160.44		FOUNDRY LTD.	
	** Totals for Activi	ty OTHR					34,372.11	Count	6	
	SUP SUPPLIES/MATERIALS	S	2012/06/20				1,313.63	CLEARTECH	INDUSTRIES INC.	
			2012/09/18				497.60	HACH SALE	S & SERVICE CANADA LT	
			2012/11/06				2,513.43	ALBERTA A	SSOCIATION OF	
			2012/11/13				119.34	PO 122705	FOUNDRY LTD.	
			2012/11/13				196.34	PO 122703		
			2012/11/13				112.80	PO 122703		
			2012/11/13				68.30	PO 122704		
			2012/11/13				57.41	PO 122704		
			2012/11/13				60.04		FOUNDRY LTD. FOUNDRY LTD.	
			2012/11/13				38.11	PO 122707		
			2012/11/13				181.98		FOUNDRY LTD. FOUNDRY LTD.	

5/01/13 12:46:07	Costing System	
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(C003100)	12:40:07		Detail by Acti			2003/01/01	- 2013/12/3	31 Y-T-D
Entity 5C116	ASHMONT PLANT - WFLG	Activity SUP SUPPLIES/MATERIALS	Accounting Date 2012/11/13	Control Units	Service Units	Encumbrance Amount		Description ST. PAUL FOUNDRY LTD.
			2012/11/13				174.02	A. AMYOTTE & SON & WELDING LTD
			2012/11/19				73.70	ST. PAUL & DISTRICT CO-OP
			2012/12/17				12.39	ST. PAUL & DISTRICT CO-OP
			2013/04/02					MEMBRANES - PLANT DWG PROCESS SUPPLY LTD.
		** Totals for Activity SUP					72,190.91	Count 16
		SURV SURVEYING & ENGINEERING	2012/08/08				32,875.50	URBAN SYSTEMS LTD.
			2012/09/12				72,937.00	URBAN SYSTEMS LTD.
			2012/10/02					ASHMONT/LOTTIE LAKE WTP URBAN SYSTEMS LTD.
			2012/11/06					URBAN SYSTEMS LTD.
			2012/11/29					ASHMONT WTP URBAN SYSTEMS LTD.
			2012/12/31				26,170.00	ASHMONT PLANT URBAN SYSTEMS LTD.
			2012/12/31				22,716.00	PLANT UPGRADE URBAN SYSTEMS LTD.
			2013/02/26				46,305.00	ASHMONT WTP URBAN SYSTEMS LTD.
			2013/02/26					THURBER ENGINEERING LTD.
			2013/03/06				1,746.90	THURBER ENGINEERING LTD.
			2013/03/26				61,155.00	URBAN SYSTEMS LTD.
			2013/04/09				2,198.88	THURBER ENGINEERING LTD.
			2013/04/30				42,068.00	URBAN SYSTEMS LTD.
			2013/04/30				10,511.00	THURBER ENGINEERING LTD.

Costing System		
Detail by Activity Report	2003/01/01	- 2013/12/31

Y - T - D

Entity	Activity ** Totals for Activity SUR	Accounting Date	Control Units	Service Units	Encumbrance Amount	Amount 437,030.18	Description Count 14
	TEST TESTING/ANALYSIS	2012/07/02				63.77	PUROLATOR COURIER LTD.
		2012/07/02				129.70	PLANT UPGRADE CLEARTECH INDUSTRIES INC.
		2012/07/02				382.40	EXOVA CANADA INC.
		2012/07/02				79.80	EXOVA CANADA INC.
		2012/07/02				1,546.05	ASHMONT PLANT EXOVA CANADA INC.
		2012/07/10				10,716.00	WIGEN COMPANIES INC.
		2012/08/01				45.85	PUROLATOR COURIER LTD.
		2012/08/01				51.55	PUROLATOR COURIER LTD.
		2012/08/01				258.33	PUROLATOR COURIER LTD.
		2012/08/01				25.36	PUROLATOR COURIER LTD.
		2012/08/01				138.60	EXOVA CANADA INC.
		2012/08/01				382.40	EXOVA CANADA INC.
		2012/08/01				62.20	EXOVA CANADA INC.
		2012/08/01				1,640.25	EXOVA CANADA INC.
		2012/08/01				101.40	EXOVA CANADA INC.
		2012/08/14				477.00	MAXXAM
		2012/08/21				2,500.00	CU CREDIT MASTERCARD WIGEN COMPANIES INC.
		2012/09/18				544.60	EXOVA CANADA INC.
		2012/09/26				35.19	PUROLATOR COURIER LTD.

5/01/13 12:46:07

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5/01/13 12:46:07	Costing System
(C003100)	Detail by Activity Report

(C003) 2003/01/01 - 2013/12/31 Y-T-D Accounting Control Service Encumbrance Entity Activity Units Date Units Amount Amount Description 5C116 ASHMONT PLANT - WFLG TEST TESTING/ANALYSIS 31.76 PUROLATOR COURIER LTD. 2012/09/26 2012/10/02 2.500.00 WIGEN COMPANIES INC. 2012/10/15 71.20 EXOVA CANADA INC. 2012/10/19 2,500.00 WIGEN COMPANIES INC. 2012/11/13 231.19 PUROLATOR COURIER LTD. 2012/11/13 2,785.15 EXOVA CANADA INC. 2012/11/13 231.00 EXOVA CANADA INC. 2012/11/29 30.09 EXOVA GREYHOUND COURIER EXPRESS 2012/11/29 79.56 PUROLATOR COURIER LTD. 2012/11/29 65.90 PUROLATOR COURIER LTD. 2012/11/29 2,218.80 EXOVA CANADA INC. 2012/11/29 133.00 EXOVA CANADA INC. 2012/11/29 17.60 EXOVA CANADA INC. 2012/11/29 62.40 EXOVA CANADA INC. 2012/11/29 513.40 EXOVA CANADA INC. 2012/11/29 133.00 EXOVA CANADA INC. 2012/11/29 70.40 EXOVA CANADA INC. 2012/12/03 85.83 PUROLATOR COURIER LTD. 2012/12/11 2,309.20 EXOVA CANADA INC. 2012/12/11 554.40 EXOVA CANADA INC. 2012/12/11 133.00 EXOVA CANADA INC.

5/01/13 (C003100)	12:46:07			System tivity Report		2003/01/01	- 2013/12/31 Y-	T-D	Page:	15
Entity 5C116	ASHMONT PLANT - WFLG	Activity TEST TESTING/ANALYSIS	Accounting Date 2012/12/31	Control Units	Service Units	Encumbrance Amount	Amount Descri 74.82 PUROLA	ption TOR COURIER LTD.		
			2012/12/31				27.44 PUROLA	TOR COURIER LTD.		
			2012/12/31				21.49 EXOVA	UND COURTER EVEREGO		
			2012/12/31				71.20 EXOVA	UND COURIER EXPRESS CANADA INC.		
			2013/02/03				11,080.81 FINAL			
			2013/03/06				869.00 EXOVA	COMPANIES INC. CANADA INC.		
			2013/04/30				41.99 PUROLA	TOR COURIER LTD.		
			2013/04/30				1,233.22 EXOVA	CANADA INC.		
		** Totals for Activity TES	Т				47,357.30 Count	48		
		** Totals for Entity 5C116					593,113.00 Count	87		
		** Totals for The Report		480.5000			3,109,779.92 Count	266		

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