Off-Site Levies Bylaw Update For Joint Economic Area West of Blackfalds

Issued for Approval



Prepared for: Lacombe County

Prepared by: Stantec Consulting Ltd.

February 26, 2016

## Sign-off Sheet

This document entitled Off-Site Levies Bylaw Update For Joint Economic Area West of Blackfalds was prepared by Stantec Consulting Ltd. ("Stantec") for the account of Lacombe County (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by		
	(signature)	
Brad Vander Heyden		
Reviewed by		
	(signature)	
Todd Simenson		



## **Table of Contents**

EXEC	UTIVE SUMMARY	. 1
1.0	INTRODUCTION	1
1.1	BACKGROUND AND STUDY AREA	
1.2	IMPOSITION OF OFF-SITE LEVIES	
1.3	methodology and assumptions	. 3
2.0	WATER AND WASTEWATER INFRASTRUCTURE	. 5
2.1	PREVIOUS IMPROVEMENTS	. 5
2.2	FUTURE IMPROVEMENTS	6
3.0	SUMMARY OF OFF-SITE LEVIES	7

#### LIST OF TABLES

TABLE 2.1: PREVIOUS IMPROVEMENT COSTS
TABLE 2.2: FUTURE IMPROVEMENT COSTS
TABLE 3.0: SUMMARY OF OFF-SITE LEVIES UPDATE

#### LIST OF FIGURES

FIGURE 1.0: LAND USE AND DEVELOPMENT PLAN FIGURE 2.1: FUTURE WASTEWATER SERVICING PLAN FIGURE 2.2: FUTURE WATER SERVICING PLAN

## **APPENDICES**

APPENDIX A – HISTORICAL COSTS
APPENDIX B – OPINION OF PROBABLE FUTURE COSTS



## **Executive Summary**

Stantec Consulting Ltd. was retained by Lacombe County to update the off-site levies rates for the Joint Economic Area West of Blackfalds (Bylaw No.1178/13). In accordance with the Municipal Government Act, the purpose of this update is to summarize in a transparent manner the costs and levies recovered to date and provide recommendations for an off-site levy rate for the remainder of the future development.

The Joint Economic Area is designated for industrial development over an area of 611 Hectares (374 developable Hectares). In 2012 & 2013, Stantec completed the report entitled "Lacombe County- Water & Wastewater Servicing Study for Joint Economic Area West of Blackfalds". The primary focus of that report was to provide recommendations for extending the water and wastewater servicing from the Town of Blackfalds into the Joint Economic Area. As part of the servicing study, order of magnitude cost estimates were completed and used to establish a recommended off-site levy rate of \$80,000/Ha.

Prior to 2013, the Aspelund Industrial Park and McLevin's subdivision were the only completed developments and were not serviced with municipal water and wastewater utilities. From 2013 to 2015, utility trunk servicing valuing over \$11M has been extended into four developments - the original Aspelund Industrial Park, McLevin's, Aspelund North (TES), and Aspelund South (Pidherney's). A wastewater lift station was also constructed as part of these servicing. The amount of area developed over that time increased from 59 to 111 Hectares.

The historic costs and levies recovered to date have been summarized in this report. Costs for the remaining future infrastructure have been updated to reflect current industry pricing. In general, the costs for all water and wastewater trunk servicing, including a wastewater lift station and a future water booster station and reservoir, are projected to be within the estimated costs developed in the original report. In addition to the utility servicing, a proposed Aspelund Road Twinning Project will be included in the levy amounts for the remaining development. Based on the total projected future costs and development area, it is recommended that the off-site levy rate be increased to \$95,000/Ha for the remaining development.



Introduction February 26, 2016

## 1.0 INTRODUCTION

Stantec Consulting Ltd. (Stantec) was commissioned by Lacombe County to update the existing Off-site Levies Bylaw for the Joint Economic Area (JEA) West of Blackfalds (Bylaw No. 1178/13). The purpose of this report is to update the future off-site levies rate to reflect the development completed to date and projected future growth and infrastructure within the JEA. In particular, the Municipal Government Act (MGA) Alberta Regulation 28/2004 Principles and Criterial for Off-Site Regulations outlines the following principles and criteria:

- (1) In determining the levy costs, the municipality is to retain the flexibility to negotiate the levy in good faith and in a manner that recognizes the unique or special circumstances of the municipality.
- (2) There is to be full and open disclosure of all levy costs and payments.
- (3) There is a shared responsibility between the municipality and developers for addressing and defining existing and future infrastructure requirements and all beneficiaries of development are to be given the opportunity to participate in the cost of providing and installing infrastructure in the municipality on an equitable basis related to the degree of benefit.
- (4) Where necessary and practicable, the municipality is to coordinate infrastructure provisions and services with neighbouring municipalities.
- (5) There is to be a correlation between the levy and the impacts of new development.
- (6) The methodology for determining the levy is to be consistent across the municipality, while recognizing variations among infrastructure types.
- (7) The method of calculation for the levy is to be clear.
- (8) The information used to calculate the levy is to be kept current.
- (9) The calculation of the levy is to include, but is not limited to,
  - i. a description of the specific infrastructure facilities,
  - ii. a description of the benefiting areas.
  - iii. supporting technical data and analysis, and
  - iv. estimated costs and mechanisms to address cost increases over time.
- (10) Calculation of the levy is to be determined in consultation with affected landowners and developers.
- (11) The levy is subject to annual reporting requirements.

## 1.1 BACKGROUND AND STUDY AREA

In 2012, Stantec completed the Lacombe County – Water and Wastewater Servicing Study for the Joint Economic Area. The study included analysis and recommendations for the extensions of the Town of Blackfalds' water distribution and wastewater collection systems in to the Joint Economic Area.

The Joint Economic Area encompasses 611 Ha in total area (374 of which is estimated to be developable) covering approximately 10 quarter sections and partial quarter sections. At the time of the servicing study in 2012, the original Aspelund Industrial and McLevin's subdivisions were built out to include 59 Hectares of development. In 2014 and 2015, the Aspelund North

Introduction February 26, 2016

(TES) and the Aspelund South subdivisions were built out to 15 and 37 Hectares, respectively, increasing the total JEA buildout to 111 Hectares. Figure 1.0 at the end of this section illustrates the overall study area as well as the status of the development completed to date and planned for in the future. It should be noted that the development concept was updated from the 2012 Servicing Study report to reflect a network consistent with what has been established on existing developments.



Current Buildout of Joint Economic Area West of Blackfalds (Fall, 2015)

As part of the Study, an Off-Site Levy rate of \$80,000/Ha was estimated based on the developable area and order of magnitude cost estimates for the water and wastewater systems, including the wastewater lift station, future water reservoir, major trunks, and the connections to the Town of Blackfalds.

## 1.2 IMPOSITION OF OFF-SITE LEVIES

An off-site levy is a tool intended to assist a Municipality in the recovery of capital costs incurred for infrastructure improvements undertaken to accommodate new development. Off-site levies can only be imposed once on a parcel of land and cannot be imposed on existing development unless a redevelopment levy in accordance with the MGA is applicable.

Section 648 of the *Province of Alberta Municipal Government Act*, dated December 17, 2014 allows for the imposition of an off-site levy in respect of land to be developed to pay for all or part of the capital cost for new or expanded facilities in one or more of the following categories:

Introduction February 26, 2016

- (1) New or expanded facilities for the storage, transmission, treatment or supplying of water:
- (2) New or expanded facilities for the treatment, movement or disposal of sanitary sewage;
- (3) New or expanded storm sewer drainage facilities (not included in the JEA);
- (4) New or expanded roads required for or impacted by a subdivision or development; and
- (5) Land required for or in connection with any facilities described in clauses.

In order for the cost of such facilities to be recoverable through off-site levies, the facilities must be "new or expanded." The Municipal Government Act does not state specify the length of time for which a completed new facility or facility expansion may be considered "new" or "expanded."

## 1.3 METHODOLOGY AND ASSUMPTIONS

The approach to calculating the off-site levies rates for the Joint Economic Area West of Blackfalds includes the following steps and assumptions:

• The off-site levies rate was established and will be applied to the net developable area.
The gross and net developable areas are noted on Figure 1.0.

Net Developable Area = Gross Area - MR - ER - Road R/W

Assessed Levy = Net Area x Levy Rate

- The off-site levies rate will be equal among all developments as per the rates outlined in the current bylaw.
- All developments will typically be provided a minimum of 800m of sanitary trunk and water trunk. McLevin's, which is too low in elevation to be serviced by gravity main and had to be serviced with a low pressure force main system, did not require a sanitary trunk.
- Water and wastewater trunks include costs for all pipe, trenching, manholes, valves, etc. that are within the County's right-of-way.
- Costs for lot services are borne by the developer.
- Historic infrastructure costs were established using actual information to date, as
  described in Section 2.0. It should be noted that actual costs were not available for
  Aspelund South and as such, the known quantities and typical construction rates within
  other parts of the Joint Economic Area were applied.

#### February 26, 2016

- Future costs for the water and wastewater trunks were established at an order of magnitude level and were based on the servicing networks shown in the Figures in Section 2.0.
- Costs for non-trunk lines are not included and shall be the developers' responsibility.
- Professional services for engineering are included.
- Contingency is included for future developments.
- Financing costs of debentures or other sources of borrowing have been included.

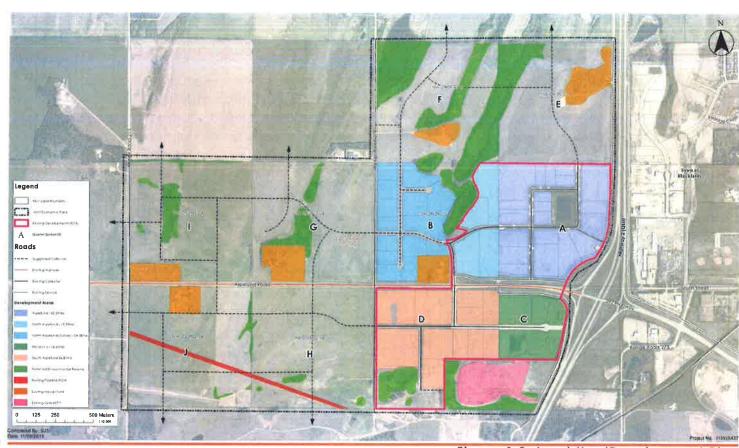






Figure 1.0: Land Use/Development Plan Lacombe County Joint Economic Area

Offsite Levies Update

Water and wastewater infrastructure February 26, 2016

## 2.0 WATER AND WASTEWATER INFRASTRUCTURE

From 2013 to 2015, much of the water and wastewater infrastructure installation has been completed. Figures 2.1 and 2.2 at the end of this section illustrate the amount of wastewater and water infrastructure completed to date and what has to be completed in the future. The connection cost to the Town of Blackfalds, which is \$9,350/Ha is not shown in the tables below, but has been included in the overall summary Table 3.0.

## 2.1 PREVIOUS IMPROVEMENTS

The previously completed improvements are included within four development areas that are identified in the Joint Economic Area (JEA) as shown in Figure 1.0. The completed improvements for each development area along with the year of completion and the improvement costs are shown in Table 2.1 below. Details for the breakdown of the costs are included in Appendix A.

**Table 2.1: Previous Improvement Costs** 

Quarter Section ID	Area	Year Completed	Improvement Cost (\$)
	Aspelund Industrial Park		
	QEII Highway Water and Wastewater Crossings	2013	\$682,060
	Lift Station (including Land)	2014	\$2,057,789
A	Water Trunks	2013	\$694,276
	Wastewater Trunks	2013	\$833,931
	General/Misc. Site Work	2013	\$650,000
	Aspelund North (TES)		
В	Water Trunks	2013	\$282,041
, and the second	Wastewater Trunks	2013	\$561,696
	General/Misc. Site Work	2013	\$24,785
	McLevin's		
С	Water Trunks	2013	\$347,738
, i	Wastewater Trunks	2013	\$62,115
	General/Misc. Site Work	2013	\$67,830
	Aspelund South		
D	Water Trunks	2014/2015	\$406,505
	Wastewater Trunks	2014/2015	\$438,359
	General/Misc. Site Work	2014/2015	\$50,692

Water and wastewater infrastructure February 26, 2016

## 2.2 FUTURE IMPROVEMENTS

Of the ten identified development areas in the Joint Economic Area, eight are yet to be completed. Table 2.2 below summarizes the future improvements, by development area. Detailed breakdowns of the future improvements costs are included in Appendix B. The calculation costs to debenture the booster station and reservoir are included in Appendix C.

Table 2.2: Future Improvement Costs

Quarter Section ID	Item and Area	Improvement Cost (\$)
	Aspelund Industrial Park	
A	Future QEII Water Crossing for Looping	\$377,500
	Aspelund North (TES)	
В	Water Trunks	\$323,625
	Wastewater Trunks	\$850,430
	Aspelund South	
D	Aspelund Road Twinning	\$4,031,500
	NE28-39-27-4	
E	Water Trunks	\$321,500
	Wastewater Trunks	\$369,740
	NW28-39-27-4	
F	Water Trunks	\$404,250
	Wastewater Trunks	\$253,330
	SE29-39-27-4	
	Water Trunks	\$594,250
G	Booster Station and Reservoir	\$6,785,000
	Debenture (See Appendix C)	\$2,584,733
	Wastewater Trunks	\$266,380
	NE20-39-27-4	
н	Water Trunks	\$489,125
	Wastewater Trunks	\$244,200
	SW29-39-27-4	
f	Water Trunks	\$404,250
	Wastewater Trunks	\$192,960
	NW20-39-27-4	
J	Water Trunks	\$407,250
	Wastewater Trunks	\$198,920

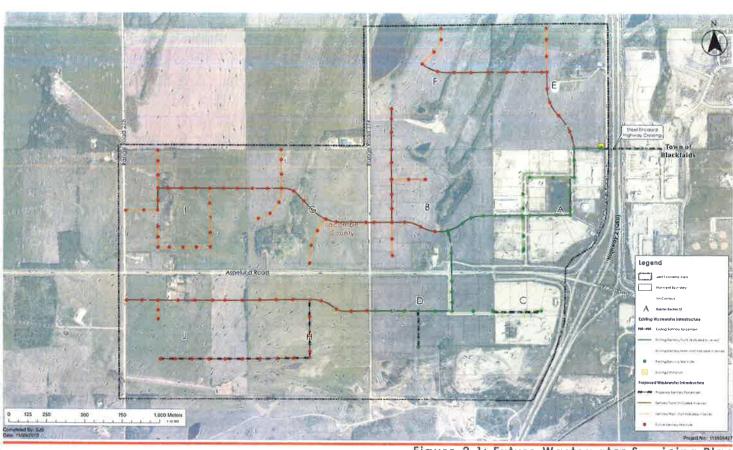






Figure 2.1: Future Wastewater Servicing Plan
Lacombe County Joint Economic Area

Offsite Levies Update

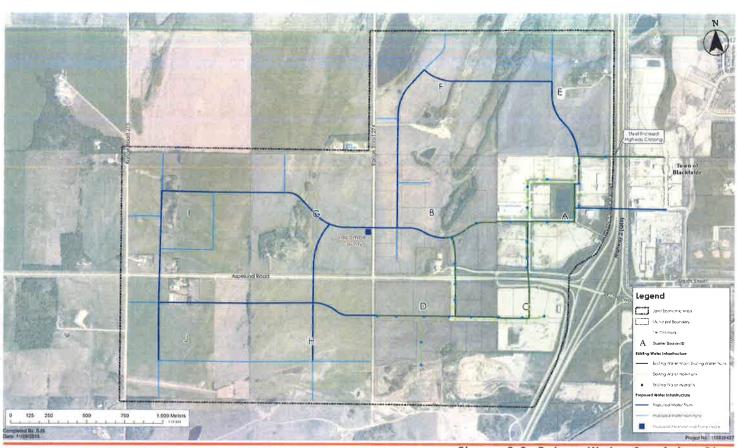






Figure 2.2: Future Water Servicing Plan
Lacombe County
Joint Economic Area
Offsite Levies Update

Summary of Off-Site Levies February 26, 2016

## 3.0 SUMMARY OF OFF-SITE LEVIES

The historic and future costs of the infrastructure summarized in Section 2.0 were assigned to their respective benefiting areas and were based on the Servicing Study as shown on Figures 2.1 and 2.2. Table 3.0 on the following page demonstrates, in detail, the historical and future infrastructure costs, the levies received to date, and the future levy requirements based on the remaining development to be completed and infrastructure to be constructed. The key summaries and considerations for the levies are as follows:

- To date \$9,303,364 of levy recoverable infrastructure and other associated costs has been incurred over 111 Ha of Development.
- At \$80,000/Ha for the servicing levies and \$5,159/Ha for the Aspelund Road Twinning levies, the levy recoveries to date amount to \$9,452,677.
- For future construction work, a 30% mark-up has been included for professional services and contingency.
- The future Aspelund Road Twinning Project, which has an estimated value of \$4,031,500, has been added to the overall off-site levies.
- Overall, the water and wastewater trunk servicing costs are projected to be completed below the 2012 estimates. However, with the addition of the Aspelund Road Twinning project and the debenture costs for the Booster Station and Reservoir, it is recommended that the off-site levies rate for the remaining development be increased to \$95,000/ Ha.



#### Table 3.0 - Summary of Off-Site Levies Update Lacombe County - Joint Economic Area West of Blackfalds 113929427 February 26, 2016

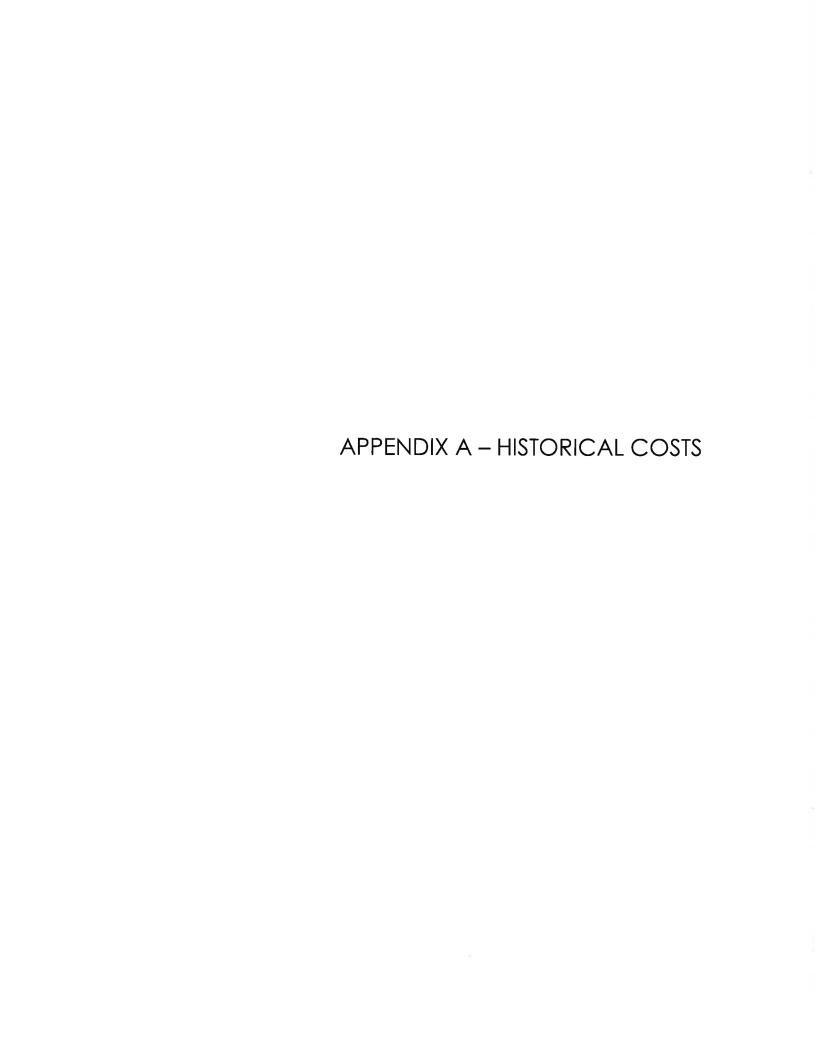


Costs to Date	s	9.313.649
Levies Recovered to Date	5	9,537,836
Current Balance	\$	224,187

Perod	OH-	Sta Levies Rojes
2014 - 2015	5	80,000
2016+	5	95,000

	0	ingoing and Comple					Future De	velopments			
	A		C	D	t.	1	G	н		1	
Inhastructure Herni	Aspeland Industrial Park	Aspelvnd North (TES)	McLevin's	Aspelund South	NE28-39-27-4	NW28-39-27-4	SE29-39-27-4	NE20-39-27-4	SW29-39-27-4	NW20-39-27-4	Total
Gross Area (Ha)	64	64	40	64	59	64	64	54	64	64	611
Developable Area as per the Original Report(Ha)	40	32	17	38	30	19	45	51	5)	51	374
Historia	cal Costs, By Loc	ation						60 60			
Town of Blackfolds Water and Wastewater Connections	\$ 392,700	\$ 140,750	\$ 158,950	\$ 355,300							1.047.20
QEIL Highway Water and Wastewater Crossings	\$ 694,529	\$ 4	5 ×	\$	1						\$ 694.52
Ult Station	\$ 2,057,789	5 -		3 .	1						\$ 2,057,78
Water Trunks	\$ 694,274	\$ 282,041	\$ 347,738	\$ 406,505	1		HISTORICAL COST	S NOT APPLICABLE			\$ 1,230.56
Wastewater Ituriks	\$ 833,931	\$ 561,696	\$ 62.115	\$ 438,359	1						\$ 1,896,09
General/Misc. Sile Work	\$ 650,000	\$ 24,785	67,830	\$ 50,692	1						\$ 793.30
Professional Services	\$ 799,372	\$ 100,877	\$ 68,530	\$ 125,086	1						\$ 1,094,16
Total Historical Casts	\$ 6,122,596	5 1,107,647	5 705,443	\$ 1,375,941	5 .	15 .	13 .	3 .	15 .	15 .	5 9,313,44
			Pro	piecled Future C	asts. By Lacation				5		
Town of Blackfolds Water and Wastewater Connections	3	\$ 233,750	5	3	\$ 390,500	\$ 177.650	\$ 420,750	\$ 476,850	1 478.850	\$ 476,850	15 2,543.20
Booster Station and Reservoir	,	-			- 1	2.0	\$ 6,875,000		1		\$ 6,875,00
Future QEI Water Crossing for Looping	\$ 377,500										\$ 327,50
Water Inurks	5	5 323,625		\$ .	\$ 321,500	\$ 404,250	\$ 461,250	5 489,125	\$ 404,250	\$ 407,250	
Wastewater trunks	5	5 650,430		5 .	5 349.740		\$ 266,980	\$ 244,200			\$ 2,376,56
Aspelund Road Twinning (Three Intersections)*	1	\$ 444,175	5 +	\$ 644,175	3 .	3 -	\$ 585,000	\$ 585,000			\$ 3,620,38
Cost of Financing (Debenture for Booster Station and Reservoir	.6	6	40	1	- 5	7.0	\$ 2,584,733				\$ 2,584,73
Professional Services & Conlingency (30% Construction)	\$ 113,250	\$ 545,469		\$ 193,253	\$ 207,372	\$ 197,274	\$ 2,456,469	\$ 395,498	\$ 354,663	\$ 357,351	\$ 4,830,59
Total Projected Future Casts	\$ 490,750	\$ 2,597,449	\$ e	5 637,428	5 1,179,112	5 1,032,504	\$ 15,450,182	\$ 2,190,473	\$ 2,013,723	5 2,025,371	
		-		Sumn	nary						A
Total Historical and hytere Costs (\$)	\$ (6,610,345)	\$ (3,707,074)	\$ (705,463)	\$ (2,213,368)	\$ (1,179,112)	\$ (1,032,504)	\$ (13,650,182)	\$ 72,190,673	\$ (2.013,723)	\$ 17,025,371	\$ (35,330,84
Completed Development Area (Ha)	42	15	17.	38	0	0	0	0		0	Ti.
Future Development Area (Ha)	0	25	0	0	30	19	45	- 51	51	51	27
General Levies Received to Date (2014 - 2015, \$80,000/Ha)	\$ 3,360,000	5 1,200,000	1,350,000	\$ 3,040,000	3 -	\$	5	5 +	\$	3	\$ 8,960,00
Aspelund Road Twinning Levies Received to Date	\$ 216,667	\$ 77,389	\$ 87,707	\$ 196,052	T- 2				1	***	\$ 577,83
Future Levies (2016 + , \$93.500)	\$	\$ 2,375,000	2	1	\$ 2,850,000	\$ 1,805,000	\$ 4,275,000	\$ 4,845,000	\$ 4,845,000	\$ 4,845,000	
Net Projected Recovery	5 (3.034.458)	\$ (54,709)	742,244	5 1,022,683	5 1,670,888	5 772,474					

"Note - amounts shown reflect 10% Lacombe County benefit and contribution



NO.	ITEM OF WORK	UNIT	CONTRACT QUANTITY	CONTRACT AMOUNT	UNIT PRICE	TOTAL ACTUAL COST	COST IN LEVIES	COST NOT IN LEVIES
SCHEDU	LE A: SITE SERVICING				-11//2-2/13-			
	LIZATION / DEMOBILIZATION	L.S.	1	80,000,00	80,000,00	80,000,00	56,000.00	24,000.
	TOTAL ITEM A	1,500			00,000,00			
				80,000.00		80,000,00	56,000,00	24,000
B. SITE	WORK							
0.1	Traffic Accommodation, Detouring, and Signage	L,S,	1	6,700.00	6,700.00	6,700.00	3,350.00	3,350,0
0.2	Paved Access Restoration							
	a) Saw Cut, Removal and Disposal of Asphalt	m <sup>3</sup>	1800	12,150.00	6.75	7,087.50	3,543.75	3,543.
	b) Remove, Temporarily Stockpile, and Replace Granular Base	m <sup>2</sup>	1800	15,300.00	8.50	8,925.00	4,462.50	4,462.
	c) Woven Geotextile (Provisional)	m²	1800	1,800,00	1.00			
	d) Additional 20mm Crushed Granular Base (Provisional)	m³.	200	7,000.00	35.00	4,550.00	2,275.00	2,275.0
	e) Hot mix Asphaltic Concrete Pavement - 125mm Thickness	m <sup>2</sup>	1800	106,200.00	59.00	61,950.00	30,975,00	30,975.0
0.3	Remove and Replace 500mm dia, Culverts	m	210	33,810.00	161.00	33,810,00	16,905.00	16,905.0
0,4	Remove and Replace Signs	each	10	4,500.00	450.00	4,500.00	2,250,00	2,250.0
0.5	Erosion Control (Provisional)							
	a) Temporary Silt Fence	m	200	2,800.00	14,00	2,520.00	1,512.00	1,008.0
	b) Straw Bales Change Order 9 Line 2: Re Schedule A Item B 0.5b							
	Straw Bales: Decrease Contract quantity from 50 to 0.	each	0	-	70.00			
	Remove Existing Barbed Wire Fence on Lift Station Site	LS		700.00	700.00	700,00	700.00	
0,7	Chain Link Fence - 8' height c/w triple barbed wire strands along top	m	130	11,700,00	90.00	11,700.00	11,700.00	
8,0	Chain Link Fence Gates - Dual 10' Long Swing Gates (8' Height), c/w triple barbed wire strands along lop	LS	1	2,500.00	2,500.00	2,500.00	2,500.00	
	TOTAL ITEM B			205,160.00		144,942,50	80,173,25	64,769,2
LIETE	TATION EARTHWORKS AND GRAVEL ROADWAY							
0.1	Topsoil Stripping - Excavation, Hauling, and Stockpiling.							
	a) Lift Station Site	m²	6000	25,500.00	4.25	25,500.00	25,500.00	
	b) Borrow Source - Top Horizon	m³	5000	5,000.00	1.00	5,000.00	5,000.00	
	c) Borrow Source - Bottom Horizon	m²	5000	5,000.00	1.00	5,000.00	5,000.00	
0.2	Common Excavation - Excavation, Hauling, Placing and Compaction to 97% S.P.D.	m³	1000	6,000.00	6.00	6,000.00	6,000.00	
	Import Excavation from Designated Borrow Source - Excavation, Hauling, Placing and Compaction to 97% S.P.D.: Change Order 6 line 1: Increase quantity from 5000 to 6000. Change Order 7 line 1:							
	Increase quantity from 6000 to 8113	m³	8113	146,034.00	18.00	146,034.00	146,034.00	
	20mm Minus Granular Base (100mm Depth)	m²	2500	23,750.00	9.50	23,750.00	23,750.00	
0.5	Topsoil Replacement - Minimum 150mm Depth							
	a) Lift Station Site	m²	4800	20,400.00	4.25	20,400.00	20,400.00	
	b) Borrow Source - Top Horizon	.m²	5000	5,000.00	1.00	5,000.00	5,000.00	
	c) Borrow Source - Bottom Horizon	m²	5000	5,000 00	1.00	5,000 00	5,000.00	
	TOTAL ITEM C			241,684.00		241,684.00	241,684.00	
. SANITA	ARY MAINS							
0.1	Trench excavation, backfill, and compaction to 95% S.P.D.							
	a) 3.0m - 4.0m Depth- Change Order 4 Line 2: Decrease quantity from 495 to 478: Change Order 5 line 1: Decrease quantity from 478 to 234	m	234	43.056.00	184.00	43,056.00		43,056.00
	b) 4.0m - 5.0m Depth - Change Order 5 Line 2: Decrease quantity			-5,000.00	707.00	10,000.00		43,030.01
	from 960 to 740  c) 5.0m - 6.0m Depth - Change Order 5 Line 3: Increase quantity	m	740	179,820.00	243.00	179,820.00	96,228.00	83,592.0
	from 370 to 686	m	686	315,560,00	460.00	315,580.00	315,560.00	
-	Screened gravel to replace unsuitable material (Provisional) - Change Order 5 line 4: Decrease from 700 to 0	m³	0	:=	36,00			
0.3	Sanitary Pipe PVC SDR 35 c/w Bedding							
	a) 250mm Dia-Change Order 4 Line 1: Reducing quantity from 720 to 703	m	703	29,526.00	42.00	25,410.00		25,410.00
	b) 300mm Dia	m.	15	915.00	61.00	610.00		610.00
	c) 450mm Dia	m	900	105,300.00	117.00	100,971.00	100,971.00	
	d) 525mm Dia	m	182	29,120.00	160.00	29,120.00	29,120.00	7.
	Sanitary Pipe HDPE DR 32.5 c/w Bedding						- MINOR -	
	a) 500mm Dia	m	8	12,200.00	1,525.00	12,200.00	12,200.00	
		10/57			- Internet			

ITEM NO.	ITEM OF WORK	UNIT	CONTRACT	CONTRACT	UNIT PRICE	TOTAL ACTUAL COST	COST IN LEVIES	COST NOT IN LEVIES
0.4	Road Crossings:							
	Alternative B: Directional Drilled Crossing							
	a) Supply and Directional Drill Fusible PVC DR 25 Pipe or Approved Equivalent							
	i) 250mm Dia - Change Order 2 line 10: extend calculation so line item value forms a part of the contract, Change Order 4 Line 3: Increase quantity from 30 to 50	m	50	46,500.00	930.00	46,500.00	46,500.00	
	ii) 450mm Dia- Change Order 2 line 11: extend calculation so line item value forms a part of the contract. Change Order 5: Increase from 90 to 91	m	91	91,455.00	1,005.00	91,455,00	91,455.00	
	b) PVC DR35 / Fusible PVC Connections- Change Order 2 line 12: extend calculation so line item value forms a part of the contract.	each	8	3,600.00	450.00	3,600,00	3,600.00	
0,5	1200 mm Dia. Manhole type 5A (25): Change Order 6 line 2: Increase quantity from 110 to 114.9	v,m.	114.09	159,726.00	1,400.00	159,726,00	109,942.00	49,784.00
0,6	Plugs:							
	a) 300mm Dia	each	110	300.00	300.00	300.00	300.00	
	b) 450mm Dia	each	15	450.00	450:00	450.00	450.00	
0,7	500mm Plug Valve	each	(1)	19,500.00	19,500.00	19,500.00	19,500.00	
0.8	Flush & Video Inspection	m	1900	17,100,00	9.00	16,209.00	8,104.50	8,104.50
302	TOTAL ITEM D			1,054,128.00		1,044,487.00	833,930.50	210,556.50
E. WATE	DIMAINS							
.0,1	Trench excavalion, backfill, and compaction to 95% S.P.D. 3.0m - 4.0m Depth	m	2000	340,000.00	170.00	327,420.00	243,100,00	84,320.00
0.2	Watermain PVC SDR18							
	a) 150mm Dia c/w 'B' bedding	m	90	3,510.00	39.00	1,638.00	1,404.00	234.00
	b) 250mm Dia c/w 'B' bedding - Change Order 5 line 6: Increase quantity from 440 to 490	m	490	37,730,00	77.00	37,730.00	E v	37,730,0
	c) 300mm Dia c/w 'B' bedding - Change Order 5 line 7: Increase quantity from 310 to 321	m	321	34,668.00	108.00	34,668.00	34,568.00	
	d) 350mm Dia c/w 'B' bedding - Change Order 5 line 8: Decrease quantity from 960 to 876	m	876	127,896,00	146.00	127,896 00	127,896,00	
	e) 400mm Dia c/w 'B' bedding	m	200	37,200.00	186.00	36,642.00	36,642.00	
0.3	Screened rock to replace unsuitable material (Provisional) - Change Order 5 line 9: Decrease from 675 to 50	m³	50	1,800.00	36.00	1,800.00	1,400.00	400.0
0.4	Road Crossings:							
	Alternative B: Directional Drilled Crossing							
	a) Supply and Directional Drill Fusible PVC DR 18 Pipe or Approved Equivalent							
	i) 150mm Dia	m	90	33,750.00	375.00	21,750.00	21,750.00	
	ii) 250mm Dia - Change Order 2 line 21: extend calculation so line item value forms part of the contract Change Order 5 line 14: Reduce from 120 to 65	m	65	42,250.00	650.00	42,250.00	42,250.00	
	iii) 350mm Dia - Change Order 2 line 22: extend calculation so line item value forms part of the contract Change Order 5 line							
	15: Increase from 60 to 83	m	83	60,175.00				
	Connect to Existing Stubs - 400mm Dia	each	11	3,000.00	3,000.00	3,000.00	3,000.00	
0.6	Hydrants, Valves and Fittings							
	150mm Gate Valve	each	17	28,475.00	1,675.00	21,775.00	11,725.00	10,050.0
	250mm Gate Valve	each	2	6,150.00	3,075.00	6,150.00		6,150.0
	300mm Gale Valve - Change Order 5 line 10: Increase from 2 to 3	each	3	11,475.00	3,825.00	11,475.00		11,475.0
	350mm Butterfly Valve - Change Order 5 line 11: Increase from 2 to 4	each	4	19,900.00	4,975.00	19,900.00	19,900.00	
	400mm Sutterfly Valve	each	1	5,250.00	5,250.00	5,250.00	5,250.00	
	Tee 400mm x 300mm	each	1	2,820.00	2,820.00	2,820.00	2,820.00	
	Tee 350mm x 350mm	each	3	7,659.00	2,553.00	5,106.00	5,106.00	
	Tee 350mm x 150mm	each	7.	16,660.00	2,380.00	16,660.00	16,660,00	
	Tee 300mm x 150mm	each	4	5,800.00	1,450.00	2,900.00		2,900.0
	Tee 250mm x 150mm	each	4	5,080.00	1,270.00	5,080.00		5,080.0
	599.276.00.07.00.00.00						0.400.00	3,000.0
	Reducer 400mmx350mm  Reducer 350mmx250mm	each	1 2	2,190.00	2,190,00	2,190.00	2,190.00	
	Reducer 350mmx300mm - Change Order 5 line 12: Reduce		- 5			.1		
-	from 2 to 1	each	1	1,590.00	1,590.00	1,590.00	1,590,00	

NO.	ITEM OF WORK	UNIT	CONTRACT	CONTRACT AMOUNT	UNIT PRICE	TOTAL ACTUAL COST	COST IN LEVIES	COST NOT IN LEVIES
	Reducer 350mmx150mm - Change Order 5 line 13: Reduce from 2 to 0	each	0	2	1,475.00			
	350mm Cross	each	1	3,550.00	3,550.00	3,550.00	2,550.00	1,000
	Fire Hydrants	each	15	108,000.00	7,200.00	86,400.00	50,400.00	36,000
	Water Plug - 300mm	each	2	900.00	450.00	900,00		900
	Water Plug - 350mm	each	1	900.00	900,00	900,00	900.00	
	Water Plug - 150mm with 50mm tap connection	each	3	6,900.00	2,300.00	6,900.00		6.900
	TOTAL IYEM E			958,178.00		897,415.00	694,276.00	203,139
LOTS	ERVICES - CHANGE ORDER 1 LINE 2, ADD TO THE CONTRACT THE	FOLL OWA	IG (CCN #1)					
	Trenched Services	CLLOW	I CONTAIN					
	a) Trench excavation, backfill, and compaction to 95% S.P.D.							
_	i) Sanitary Trench (11 Services): Change Order 6 line 11:							
	Decrease quantity from 200 to 152.9	m	152.9	27,522.00	180.00	27,522.00		27,52
	ii) Water Trench (13 Services): Change Order 6 line 3: Decrease quantily from 260 to 236.6	m	236.6	42,588.00	180 00	42,588.00	- *	42,58
	b) Screened Rock to Replace Unsuitable Material (Provisional)	m3	100	3,600.00	36,00	34		
	c) Service Pipe c/w Plugs and Marker Posts							
	i) 200mm PVC SDR26 Sanitary: Change Order 6 line 12: Decrease quantity from 200 to 152.9 (10 Services).	m	152.9	6,268.90	41.00	6,268.90		6,26
	ii) 50mm PE 4710 Water Service: Change Order 6 line 4: Decrease quantity from 185 to 166,1 (9 Services)	m	166_1	6,644.00	40.00	6,644.00		6,64
	iii) 150mm PVC SDR18 Water Services (4 Services)	m	75	3,600.00	48.00	3,384.00	141	3,38
	d) Connections to Mains							
	i) 200mm Sanitary Connection to Manhole: Change Order 6 line							
	5: Decrease quantity from 7 to 6	each	6	600.00	100.00	600.00		60
	ii) 200mm Sanitary Service Tee	each	4	600,00	150.00	600.00		600
	iii) 50mm Water Tee: Change Order 6 line 13: Decrease quantity from 9 to 8	each	8	2,080.00	260.00	2,080.00	fail	2,08
	iv) 150mm Water Tee	each	4	9,520.00	2,380.00	9,520.00	20	9,520
	e) Water Service Valves							
	i) 50mm cc Valve: Change Order 6 line 14: Decrease quantity from 9 to 8	each	8	6 000 00	750.00	2 222 22		
	ii) 150mm Gate Valve	each	4	6,000.00	750.00 1,675.00	6,000.00		6,00
0.2	Directional Drilled Services	Cacii		0,700.00	7,073.00	0,700.00		0,70
	a) Supply and Directional Drill Services							
	i) 50mm Dia PE Water (5 Services): Change Order 6 line 6:							
	Increase quantity from 230 to 339.1	m	339.1	65,107.20	192.00	65,107.20		65,10
	ii) 150mm Dia DR11 Water (3 Services): Change Order 6 line 7: Decrease quantily from 210 to 86	m	86	19,350.00	225.00	19,350.00		19,35
	iii) 200mm Dia Fusible PVC SDR 25 Sanitary Pipe(White) (9 Services): Change Order 6 line 8: Increase quantity from 465 to 537.5	m	537.5	135,450.00	252.00	135,450,00	4	135,450
	b) Connections to Mains							
	i) 200mm Sanitary Connection to Manhole: Change Order 6 line 9: Decrease quantity from 5 to 4	each	4	2,600.00	650.00	2,600.00		2,60
	ii) 200mm Sanitary Service Tee: Change Order 6 line 10: Increase quantity from 4 to 6	each	6	4,800.00	800.00	4,800.00	1.	4,800
	iii) 50mm Water Tee: Change Order 6 line 15: Increase quantity from 5 to 6	each	6	1,560.00	260.00	1,560.00		1,560
	iv) 150mm Water Tee	each	3	7,140.00	2,380.00	7,140.00		7,140
	c) Water Service Valves c/w trenching and backfill to 95% S.P.D.							
	i) 50mm cc Valve: Change Order 6 line 16: Increase quantity from 5 to 6	each	6	4,500.00	750.00	4,500.00		4,500
	ii) 150mm Gale Valve	each	3	5,025,00	1,675.00	5,025.00		5,025
	TOTAL ITEM F			361,255.10		357,439.10		357,439.
LANDS	CAPING							
	Import Topsoil from TES Stockpile, Place, and Fine Grade (Minimum	,						
- Carte	150mm Depth)	m <sub>3</sub>	5000	70,000.00	14.00	70,000.00	70,000.00	
	Nilex C125 Erosion Matting or Approved Equivalent (Provisional)	m²	4000	16,800.00	4.20	16,800.00	16,800.00	
0,3	Seed and Fertilize Topsoil Change Order 8 Line 3: Increase quantity from 33600 to 35050	m²	35050	43,812.50	1.25	43,812.50	43,812.50	

ITEM NO.	ITEM OF WORK	UNIT	CONTRACT QUANTITY	CONTRACT AMOUNT	UNIT PRICE	TOTAL ACTUAL COST	COST IN LEVIES	COST NOT IN LEVIES
0.4	Temporarily Relocate Trees to Designated Site Around Storm Pond							
0,4	Change Order 7 Line 3: Decrease quantity from 75 to 46	Each	46	5,520.00	120.00	5,520.00	5,520.00	
0.5	Relocate Trees to Original Location Change Order 7 Line 4: Decrease							
0.6	quantity from 75 to 0	Each	0		120.00		-	
0.6	Supply and Install New Trees to Replace Potentially Lost Dead Trees							
	(Provisional) Change order 7 Line 2: Increase quantity from 30 to 46 TOTAL ITEM G	Each	46	32,200.00	700.00	32,200.00	32,200.00	
				168,332.50		168,332.50	168,332.50	•
	ELLANEOUS							
0.000	Hydrovacing	Hours	300	90,000.00	300.00	88,050.00	61,635.00	26,415.00
0.2	Materials Testing	P.C.S.	_1_	15,000.00	15,000,00	12,584.00	8,808.00	3,776.00
	TOTAL ITEM H			105,000.00		100,634.00	70,443.00	30,191.00
	UND ROAD WATER CROSSING (DELETABLE)							
0_1	300mm Dia C905 PVC Case Bored Auger Crossing c/w 600mm Dia_ Steel Casing (9 5mm Thick), spacers, etc.	m	135	DO NOT EXTEND	1,825 00	( e:		- 1
	TOTAL ITEM I			DO NOT EXTEND		981		50
	SCHEDULE A CONTINGENCY (SEE BOTTOM OF SHEET)			N/A	N/A	103 840 70	102 010 70	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			N/A	N/A	103,810.70	103,810.70	
	TOTAL SCHEDULE A			2,812,482.50		3,138,744.80	2,248,649.95	890,094.85
SCHEDU	LE B - SANITARY LIFT STATION							
3.1	DIVISION 1 - MOBILIZATION AND DEMOBILIZATION	l.s.	1	240,000.00	240,000.00	240,000.00	240,000.00	3
	SUBTOTAL ITEM 3.1			240,000.00		240,000.00	240,000.00	- 14/
3.2	DIVISION 2 – CIVIL							
3.2a	Site Work	ls.	1	18,000.00	18,000.00	18,000,00	18,000.00	
3.2b	Piles	1.5.	1	80,000.00	80,000,00	80,000,00	80,000.00	
	SUBTOTAL ITEM 3.2			98,000.00		98,000.00	98,000.00	13
3.3	DIVISION 3 - DIVISION 16							
3.3.1	DIVISION 3 - CONCRETE							
3.3.1a	Lift Station Building	ls.	1	267,851.00	267,851.00	267,851.00	267,851.00	
3.3.1b	Lift Station Wet Well	1.5.	,	165,000.00	165,000.00	165,000.00	165,000.00	
	SUBTOTAL ITEM 3.3.1			432,851.00		432,851.00	432,851.00	
3.3,2	DIVISION 5 - METALS							
3.3.2a	Lift Station	l.s.	1	26,000.00	26,000.00	26,000.00	26,000.00	
	SUBTOTAL ITEM 3.3.2			26,000.00		26,000.00	26,000.00	
3.3.3	DIVISION 7 – THERMAL AND MOISTURE PROTECTION							
3 3 3a	Lift Station	l.s.		43,000.00	43,000.00	43,000.00	43,000.00	
	SUBTOTAL ITEM 3.3.3			43,000.00	13,000.50	43,000.00	43,000.00	
3.3.4	DIVISION 11 – PROCESS					40,000.00	45,000.00	
3,3,4a	Lift Station	l.s.	1	134,000.00	134,000.00	134,000.00	134,000.00	
3.3.4b	Lift Station Pumps	is.	1	87,000.00	87,000.00	87,000.00	87,000.00	
	SUBTOTAL ITEM 3.3.4			221,000.00	87,000.00	221,000.00		
3.3.5	DIVISION 13 – INSTRUMENTATION			221,000.00		221,000.00	221,000.00	
3.3.5a	Lift Station			(00,000,00				
9.3.38	SUBTOTAL ITEM 3.3.5	l.s.	1	103,000.00	103,000.00	103,000.00	103,000.00	
3.3.6	DIVISION 15 - MECHANICAL			103,000.00		103,000.00	103,000.00	
3.3.6a					122.222.22	2022022		
3.3.0a	Lift Station SUBTOTAL ITEM 3.3.6	l.s.	1	182,000.00	182,000.00	182,000.00	182,000.00	-
				182,000.00		182,000.00	182,000.00	
3.3.7	DIVISION 16 - ELECTRICAL							
3,3,7a	Lift Station	l.s.	24	210,000.00	210,000.00	210,000.00	210,000.00	
	SUBTOTAL ITEM 3.3.7			210,000.00		210,000.00	210,000,00	
3.4	COMMISSIONING AND STARTUP							
3 4a	Lift Station	ls.	1	26,000.00	26,000.00	26,000,00	26,000.00	
	SUBTOTAL ITEM 3,4			26,000.00		26,000.00	26,000.00	
3.5	PRIME COST SUMS							

#### Appendix A - Historical Costs Aspelund Industrial Park and McLevin's

ITEM NO.	ITEM OF WORK	LINET	CONTRACT	CONTRACT		TOTAL ACTUAL	OBSERVATORS	COST NOT IN
140	TIEW OF WORK	UNIT	QUANTITY	AMOUNT	UNIT PRICE	COST	COST IN LEVIES	LEVIES
3.5b	Utility Locates	I.s.	1 1	10,000.00	10,000.00	*:		
	SUBTOTAL ITEM 3.5			20,000.00		F 8	-	*
3.6	MISCELLANEOUS							
3.6.1	Change Order 7 line 6: Supply and install meter chamber on the 400mm water main adjacent to the lift station (CCN#4 Alternative A: Corix Design)	ls	1	152,900.00	152,900.00	152,900.00	152,900.00	
3.6.2	Change Order 9 Line 1: Custom sign above doorway (CCN #05)	ls.	1	1,754.50	1,754,50	1,754.50	1,754.60	34
	SUBTOTAL ITEM 3.6			154,654.50		154,654.50	154,654.50	- 3
3.6.3	Aspelund Lift Station Land Costs	is	1	32,500.00	32,500.00	32,500.00	32,500.00	
	SCHEDULE B CONTINGENCY (SEE BOTTOM OF SHEET)			N/A	N/A	47,099.01	47,099.01	
	TOTAL SCHEDULE B			1,756,505.50		1,816,104.51	1,816,104.51	

NO.	ITEM OF WORK	UNIT	QUANTITY	CONTRACT AMOUNT	UNIT PRICE	COST	COST IN LEVIES	COST NOT IN LEVIES
MCLEVIN'S SE	ERVICING AND ASPELUND ROAD WATER TRUNK CROSSING							
A. MOBILIZAT	TION / DEMOBILIZATION							
1 Mobi	oilization and Demobilization	LS.	1	30,000.00	30,000.00	30,000.00	30,000.00	
тот	TAL ITEM A			30,000.00		30,000.00	30,000.00	13
SANITARY	MAINS							
0.1 Tren	nch excavation, backfill, and compaction to 95% S.P.D.							
a) 3	0m - 4.0m Depth	m	335	45,560.00	136,00	45,152,00	45,152.00	
0.2 Scre	eened gravel to replace unsuitable material (Provisional)	m3	100	4,000.00	40,00		-	
0.3 80m	nm Dia. HDPE DR21 Pipe	m	335	5,025.00	15,00	4,980.00	4,980.00	
0.4 1200	0 mm Dia, Manholes c/w Frame and Cover - Type 5A (1)	v.m.	4	6,600.00	1,650.00	5,032.50	5,032.50	
0,5	ilan Firebert Manhala Condada Consultan and Man Consultan							
	ilary Flushout Manhole, Cardlock Connection, and Wye Connection	LS	1	6,950.00	6,950.00	6,950.00	6,950.00	
				68,135.00		62,114.50	62,114.50	
. WATERMA	AINS							
	nch excavation, backfill, and compaction to 95% S.P.D. n - 4.0m Depth	m	555	72,705.00	131.00	72,312.00	72,312.00	
0.2 Wate	termain PVC SDR18							
a) 15	50mm Dia c/w 'B' bedding	m	10	390.00	39.00	312.00	312 00	
b) 30	00mm Dia c/w 'B' bedding	m	545	57,770.00	106.00	57,664.00	57,664.00	
0.3 Scre	eened rock to replace unsulfable material (Provisional)	m3	150	6,000.00	40.00			
0.4 Conr	nect to Existing Stubs - 300mm Dia	each	2	4,000.00	2,000.00	2,000,00	2,000.00	
0.5 Hydr	frants, Volves and Fittings:							
150n	mm Gate Valve	each	4	5,500.00	1,375.00	5,500.00	5,500.00	
300n	mm Gate Valve	each	4	12,800 00	3,200.00	9,600.00	9,600.00	
Tee	300mm x 300mm	each	1	1,990.00	1,990.00	1,990,00	1,990.00	
Tee	300mm x 150mm	each	4	4,760.00	1,190.00	4,760,00	4,780.00	
300n	mm Plug c/w Tapped 50mm Service Connection	each	1	2,250.00	2,250.00	2,250.00	2 250 00	
Fire I	Hydrants	each	4	27,740.00	6,935,00	27,740.00	27,740.00	
0,6 Direc	ctional Drilled 400mm Dia. HDPE DR 11 Highway 597 Crossing	m	136	163,608.00	1,203.00	163,608.00	163,608.00	
0.7 400n	mm Dia HDPE DR11 x 300mm Dia PVC SDR16 Coupling Adaptors	each	2	2,00	1,00	2.00	2.00	
тот	TAL ITEM C			359,515.00		347,738.00	347,738.00	
D. LOT SERVI	ICES							
0.1 Tren	nched Services (3 Lots)							
	rench excavation, backfill, and compaction to 95% S.P.D.:							
	i) Shared Water/Sanitary Trench							
	(2 Services)	m	44	8,580.00	195 00	8,580.00	-	8,580.
	ii) Single Water Trench (1 Service)	m	20	3,600.00	180.00	3,600.00	-	3,600.
	iii) Single Sanitary Trench (1 Service)	m	22	3,960.00	180.00	3,760.00		3,780.
	creened Rock to Replace Unsuitable Material (Provisional)	m3	25	1,000,00	40.00	3	7-1	
c) Se	ervice Pipe							
	ii) 200mm Dia PVC SDR35 (1 Service)	m	22	902.00	41,00	861.00	-	861.
	ii) 50mm PE 4710 Water Service (3 Services)	m	60	360.00	6.00	360,00	747	360.
	iii) 50mm PE 4710 Waler Service (2 Services)	m	44	264.00	6.00	264.00		264
d) 50	0mm Service Valves	each	6	4,800.00	800,00	4,800.00	340	4,800.
0.2 Direc	ctional Onlied Services (3 Lots)							
a) Su	upply and Directional Drill Services							
	i) 50mm Dia PE Water (3 Services)	m	105	21,525.00	205.00	21,320.00		21,320,0
	ii) 50mm Dia PE Sanitary (3 Services)	m	110	22,550.00	205.00	20,090.00	- 30	20,090.
b) 50 Come	Omm Water Service Valves, Including Trenching, Backfill, and opaction to 95% S.P.D.	each	6	4,800.00	800 00	4,800.00	- W	4,800
тотл	ALITEM D			72,341.00		68,455.00	:33	68,455.
LANDSCAP	PING							
0.1 Rem	nove and Replace Topsoil	m2	4000	11,000.00	2.75	11,000.00	11,000.00	
	d and Fertilize Topsoil	m2	4000	1,200.00	0.30			

NO.	ITEM OF WORK	UNIT	CONTRACT	CONTRACT AMOUNT	UNIT PRICE	TOTAL ACTUAL COST	COST IN LEVIES	COST NOT IN LEVIES
	TOTAL ITEM E			12,200.00		11,000.00	11,000.00	
MISCE	LLANEOUS	_						
	Hydrovacing	Hours	20	6,000.00	300.00	4 200 00	4 222 22	
				1,000,000		4,200.00	4,200.00	
	Materials Testing	P.C.S.	1	10,000.00	10,000.00			
	ACP & gravel rehab	m2	160	12,640.00	79.00	12,640.00	-	12,640,0
	Change Order 9 Line 3: Straw Bales: Increase Contract quantity from 0 to 60.	each	60	4,200.00	70.00	4,200.00	4,200,00	9
0.5	Change Order 10 Line 1: Install and Paint three bollards	ls	1	3,700 00	3,700.00			
	TOTAL ITEM F			36,540.00		21,040.00	8,400.00	12,640.0
	SCHEDULE C CONTINGENCY (SEE BOTTOM OF SHEET)			N/A	N/A	18,430.30	18,430.30	
	TOTAL SCHEDULE C			578,731.00		558,777.80		
				460,440.55				
ONTING	ENCY							
	SCHEDULE A - ASPELUND NORTH CIVIL Change Order 5 line 16: Removal of Concrete Piles from Borrow Site (							
	FA#13913RL-001)				3,245.53	3,245.53	3,245.53	
	Change Order 6 line 17: Complete conduit work ( Pidherney's FA#13913-002)				15,882.10	15,882.10	15,882.10	25
7	Change Order 6 line 18: Relocate Water Service Tee to Eagle Builders lot due to redesign (Pidherney's FA# 13913RL-004)				10,311.29	10,311.29	10,311.29	2
8	Change Order 6 line 19: Fence Repair (Pidherney's FA#13913RL-003)				1,447.16	1,447.16	1,447,16	
	Change Order 7 line 5: Re Schedule A Site Work, FA #13913RL-007 additional ditch work on the west side of Force Pile Lot as per field				.,,447.70	1,447.10	1,441,10	
	memo Sep 24lh	ls	1		274.30	274.30	274.30	-
	Change Order 8 line 1: Additional Landscape work completed (Pidhemey's FA# 13913RL-009)	İs	011		65,720.43	65,720.43	65,720.43	2
- 1	Change order 8 line 2: Install one Approach as per design supplied by Shunda and relocate the existing approach. Cost of one approach							
	covered by the County and the other by Shunda TOTAL SCHEDULE A CONTINGENCY		1		6,929.89	6,929.89 103.810.70	6,929.89 103,810.70	
	SCHEDULE B - LIFT STATION					,		
20	Change Order 10 Line 1: Cost to supply, install and paint three bollards							
-	to the lift station including 4 inch reflective yellow tape on the bollard tops. Transfer to Schedule C Line F 0.5	ls	1	(3,700.00)	3,700.00	3,700.00	3,700.00	- 0
	Change Order 8 Line 4: Labour, Materials and Supervision for additional masonry on interior walls along concrete base footing (PCN			***************************************				
	#1) Change Order 11 Line 1: Cost to supply two ipads with SIM cards, ofter	ls	-3-1		3,339.60	3,339,60	3,339.60	- 16
1	box and invisishield (see CCN#8) - Change Order 13 line 1, reversed as line item was not approved	ls			3,404.98	3,404.98	2 404 00	
22	Change Order 11 Line 2: Cost to supply communications lower as	15	- 0		3,404,90	3,404.96	3,404.98	
	specified in CCN #9R - Change Order 13 line 2, reversed as line ilem was not approved	ls	0		26,824.88	26,824.88	26,824.88	
	Change Order 13 line 3: Extra backflow preventer (PCN 4.1) Change Order 13 line 4: Additional control panel (PCN 4.3)	ls ls	- 1		1,412.07 3,046.78	1,412.07 3,046.78	1,412.07 3,046.78	
26	Change Order 13 line 5: 8 port data switch (PCN 6)  Change Order 13 line 7: Occupied/Unoccupied switch (PCN 5)	ls ls	-1-		790.74 375.95	790.74 375.95	790.74 375.95	
29	Change Order 13 Line 8: TT-903 Analog Input Card, wring and piping		6					*
	(including markup) (PCN #8) TOTAL SCHEDULE B CONTINGENCY	lg.	-1		4,204.01	4,204.01 47,099.01	4,204,01 47,099.01	- :
	SCHEDULE C - McLEVIN'S							
13	Change Order 7 line 7: Re Schedule C Watermains FA #13913RL-008				T I			
ļi,	install out of service markers on hydrants, install hydrant extensions				40.005.00	45.005.00	40.000.00	
23	and install culvert in front of hydrant as per field memo dated Oct 22 Change Order 12 Line 1: Supply and install a 1" bleeder and valve in	ls	1		10,065.30	10,065.30	10,065.30	
	the Aspelund South Subdivision. TOTAL SCHEDULE C CONTINGENCY	ls	1		8,365.00	8,365.00 18,430.30	8,365.00 18,430.30	
	NOT APPLICABLE TO LEVIES							
	Change Order 1 lines 1 and 2: Re Schedule A, net effect of change order is to transfer from contingency to Part F Lot Services			(50,557,00)				
2	Change Order 3 line 2: Add Schedule C Contingency to the Contract.							
3 (	Change Order 4: Net effect is to transfer from contingency to schedule			57,083.10		-		-
4 (	A section D Change Order 5 lines 1-15: Net effect is to transfer to Contingency from			(14,758.00)		#		
9 0	Schedule A Change Order 6 lines 1-17: Net effect is to decrease contingency and			16,757.00				14
	ransfer to Schedule A Change Order 7 Lines 1-4: Net effect is to decrease contingency and			(20,516.10)				12
	ransfer to Schedule A Change Order 7 line 6: transfer from contingency to Schedule B line			(36,754.00)		===1		
	3.6.1			(152,900.00)				
	Change Order 8 Line 3: Re Line item Section G 0.3 Seed and Fertilize Topsoil; Increase quantity from 33600 to 35050			(1,812.50)				
3	Change Order 9 Line 1: Transfer from contingencey to Schedule B line			(1,754.50)				
	Change Order 9 Line 2 & 3: Net effect is to decrease contingency and ransfer to Schedule C			(700.00)				
27 (	Change Order 14 Line 1: Cost to supply and install a Vault Hatch Safety	ls	1	(,00.00)	(15,000.00)	(15,000.00)		(15,000.00
Jul		is	1		3,185.93			
	Netting including Pidhemey's 10% mark up ( see PCN #12)	18			0,100.00			

NO.	ITEM OF WORK	UNIT	CONTRACT	CONTRACT AMOUNT	UNIT PRICE	COSTS COSTS	COSTS IN LEVIES	COSTS NOT IN LEVIES
	LIZATION A. Trunk Work Mobilization c/w Traffic Accommodation	l.s.	1	24,785.00	24,785.00	24,785.00	24,785.00	
	B Sile Works Mobilization	l.s.	1	9,315.00	9,315,00	9,315.00		9,315,00
	TOTAL ITEM A			34,100.00		34,100.00	24,785.00	9,315.00
3. SANI	TARY TRUNKS							
0,1	Trench excavation, backfill and compaction.							
	a) 3.0m - 4.0m Depth	m	0	*	136.00		161	
	b) 4.0m - 5:0m Depth	m	100	17,000.00	170.00	14,450.00	14,450.00	
	c) 5.0m - 6.0m Depth	m	330	101,970.00	309.00	101,970.00	101,970.00	-
	d) 5.0m - 6.0m Depth c/w roadway removal and reconstruction with base course	m	11	5,269.00	479,00			
	e) 6.0m - 7.0m Depth	m	185	99,900.00	540.00	99,900.00	99,900.00	
	f) Credit for Not using Native Sand Bedbing material	m			(7.00)	(3,920.00)	(3,920.00)	-
0.2	Screened gravel to replace unsuitable material.	m3	250	12,500.00	50.00	87,000.00	87,000.00	- 3
0,3	Sanitary Pipe PVC SDR 35, Bedding and connection to existing stubs							
	a) 375mm Dia	m	70	5,600.00	80.00	3,520.00	3,520.00	-
	b) 450mm Dia	m	558	63,384.00	114.00	62,130.00	62,130.00	
	1200 mm Dia, Manhole type 5A c/w Frame and Cover(6)	v.m.	31.5	51,975,00	1,650.00	50,820,00	50,820,00	
0.5	Plugs a) 375mm Dia	each	1	263.00	263.00	263.00	263.00	
	b) 450mm Dia	each	1	363.00	363,00	363,00	363.00	
0.6	Supply and Install Safety Platform	each	- 1	1,850.00	1,850.00	1,850.00	1,850.00	
0.7	FA 90SOW001 - Well Point	ls			7,766.50	7,766.50	7,766.50	
0.8	FA 905DW002 - Trenching Extra	is			131,796.20	131,796.20	131,796.20	-
0.9	FA 905DW003 - Excess Excavation	ls			3,787.00	3,787.00	3,787.00	
	TOTAL ITEM B			360,074.00		561,695.70	561,695.70	
. WAT	ERMAIN TRUNKS			300,074.00		301,030.70	001,030.70	
	Trench excavation, backfill, and compaction.							
	a) 0.0m - 4.0m Depth	m	614	74,294 00	121.00	66,429.00	66,429.00	
	b) 3.0m - 4.0m Depth c/w roadway removal and reconstruction with base course	m	11_	3,201.00	291.00		12.	
0.3	Watermain PVC DR18 CLASS 150					130000000		
	300mm Dia c/w 'B' bedding	m	230	24,380.00	106.00	23,214.00	23,214.00	-
	350 Dia c/w 'B' bedding	m	395	54,905.00	139.00	54,210.00	54,210.00	
0.4	Hydrants, Valves and Fittings 350mm Butterfly Valve	each	2	7,340.00	3,670.00	7,340.00	7,340.00	
	350mm 35 degree bend	each	2	3,300.00	1,650.00	3,300.00	3,300.00	
	300mm Gate Valve	each		3,225.00	3,225.00	3,225.00	3,225,00	
	Tee 350 x 300	each	- 1	2,084.00	2,084.00	2,084.00	2,084.00	101
	350mm -Plug	each	1	560 00	560.00	560.00	560,00	
	Flushing Point	each	1	3,075.00	3,075.00	3,075.00	3,075.00	
0.5	Screened rock to replace unsuitable material	m3	175	8,750.00	50.00	16,600.00	16,600.00	
0.6	FA 9050W004 - Trenching Extra	ls	1	46,819.00	46,819.00	46,819.00	46,819.00	
	TOTAL ITEM C			231,933.00		225,856.00	226,856.00	
D. WAT	ERMAIN SITE WORK							
0.1	Trench excavation, backfill, and compaction.  0.0m - 4.0m Depth	m	12	1,452.00	121.00	1,452.00	1,452.00	
0.3	Watermain PVC DR18 CLASS 150							
	150mm Dia c/w 'B' bedding	m	12	468.00	39.00	468.00	468.00	
0.4	Hydrants, Valves and Fittings 350mm Butterfly Valve	each	3	11,010.00	3,670.00	11,010.00	11,010.00	
	300mm Gate Valve	each	2	6,400.00	3,200.00	6,400.00	6,400.00	
	150mm Gate Valve	each	3	4,125.00	1,375.00	4,125.00	4,125.00	
	Cross 350x150	each	1	2,225.00	2,225.00	2,225.00	2,225.00	
	Tee 350 x 150	each	2	3,820.00	1,910.00	3,820.00	3,820.00	
	Tee 300 x 150	each	2	2,380.00	1,190.00	2,360.00	2,380.00	
					6,935.00	20,805.00	20,805.00	
	Hydrant (3.8 v.m. gr. fl. to inv.)	each	3	20,805.00	0,033,00	20,000,00	20,005.00	
0,5	Hydrant (3.8 v.m. gr. fl. to inv.) Screened rock to replace unsuitable material	each m3	3 50	20,805.00	50.00	2,500.00	2,500.00	

NO.	ITEM OF WORK	UNIT	CONTRACT QUANTITY	CONTRACT AMOUNT	UNIT PRICE	TOTAL ACTUAL COSTS	COSTS IN LEVIES	COSTS NOT IN LEVIES
0,1	Trenching, excavation, backfill and compaction for combined trench							
	for two services.	m	72	9,720.00	135.00	9,720.00		9,720.00
0.2	Screened rock to replace unsuitable material.	m3	50	2,500.00	50.00	2,500.00		2,500.00
0,3	250mm PVC SDR35 Sanitary service includes all fittings, connections, and plugs(3)	m	72	2,592.00	36.00	2,592.00	27	2,592.00
0.4	150mm PVC DR18 Class 150 water service includes all fittings, connections, and plugs(3)	m	70	2,800.00	40.00	2,800.00		2,800.00
0.5	Water Service Fittings 150mm 45* Bend	each	1	125.00	125.00	125.00	E	125.00
0.6	150mm Gate Valve	each	3	3,525.00	1,175.00	3,525.00	161	3,525.00
	TOTAL ITEM E			21,262.00		21,262.00		21,262.00
F, UTILI	ITY DUCTS							
0.1	Utility Ducts PVC DB2							
	250mm Dia	m	0	(a)	44.00	1,892.00	- 12	1,892.00
	150mm Dia	m	30	840.00	28.00			
	100mm Dia	m	120	1,560.00	13.00	12,558.00		12,558.00
0.2	Trenching, excavation, backfill and compaction for utility ducts.	m	60	4,800.00	80.00	18,160.00		18,160,00
0.3	FA 905DW004 - Trenching Extra	LS			15,469.00	15,469.00		15,469.00
	TOTAL ITEM F			7,200.00		48,079.00	390	48,079.00
G. LOT	1/Block 6 ADDITIONAL SERVICE							
	Hydrants, valves and Fittings							
	350mm Butterfly Valve	each	1	3,670.00	3,670.00	3,670.00	100	3,670.00
	Tee 350x 150	each	1	1,910.00	1,910.00	1,910.00		1,910.00
0.2	Trenching, excavation,backfill and compaction for combined trench for two services.	m	45	6,075.00	135.00	6,075.00		6,075.00
0,3	Screened rock to replace unsuitable material,	m3	10	500.00	50.00	500.00	74.0	500.00
	250mm PVC SDR35 Sanitary service inculdes all fittings, connections and plugs (1)	m	43	1,548.00	36.00	1,548.00		1,548.00
0.5	150mm PVC DR18 Class 150 water service includes all fittings, connections and plugs (1)		45	4 202 22	40.00			
		m		1,800.00	40.00	1,800.00		1,800.00
	Water Service Fittings 150mm 45 degree bend	each	1	125.00	125.00	125.00	:4/	125.00
	150mm Gate Valve	each	1	1,175.00	1,175.00	1,175.00		1,175.00
	TOTAL ITEM G			16,803.00		16,803.00	•	16,803.00
1.TOPS	SOIL AND DITCH GRADING							
0.1	FA905DW007	ls			1.00	3,789.00	===	3,789.00
0.2	FA905DW008	ls			1.00	6,639.00	34	6,639.00
0.3	FA905DW009	ls			1,00	11,647.00	- 0	11,647.00
0.4	FA905DW0010	ls			1.00	9,972.00	-	9,972.00
0.5	FA905DW0011	İs			1.00	7,279.90		7,279.90
-	FA905DW0012	is			1.00	13,236.00		13,236.00
0,220	FA905DW0013	ls			1.00	10,014.00	12	10,014.00
233119	FA905DW0014	ls			1.00	8,428.00	8	8,428.00
	FA905DW0015	ls ls			1.00	6,835.00	g g	6,835.00
	TOTAL ITEM f				1,00	77,839.90		77,839.90
								// X39.90

ITEM NO.	ITEM OF WORK	UNIT	CONTRACT QUANTITY	UNIT PRICE	CURRENT AMOUNT	TOTAL ACTUAL COSTS	COST IN LEVIES
A. GE	NERAL						
0.1	Mobilization/Demobilization	Lump Sum	1	25,935.31		25,935.31	25,935,31
0.2	Traffic Accommodation Strategy	Lump Sum	1	5,000.00		5,000.00	
0.3	Survey Layout and Asbuilts	Prime Cost	1	15,000.00	2,058.00	7,301.25	15,000.00
0.4	Hydrovacing Shallow Utility Locates (Provisional)	Hours	16	325.00		4,225.00	5,200.00
	TOTAL ITEM A				2,058.00	42,461.56	46,135.31
B. SA	NITARY SEWER						
0.1	Trench excavation, backfill and compaction to 97% S.P.D 0.0m to 3.0m Depth						
	a) 0.0m - 3.0m Depth	lin.m.	8	96.27		770.16	770.16
	b) 3.0m - 4.0m Depth	lin.m.	162	106.96		17,327.52	17,327.52
	c) 4.0m - 5.0m Depth	lin.m.	51	141.57		7,220.07	7,220.07
0.2	Screened gravel to replace unsuitable material (Provisional)	m³	75	36.80		i.	2,760.00
0.3	Supply and Installation of 300mm PVC DR18 sanitary forcemain	m	223	117.85		26,280.55	26,280.55
0.4	350mm Dia. HDPE Case Bored Auger Crossing	lin.m.	133	1,566.82		208,387.06	208,387.06
0.5	Type 5A 1200mm dia. manhole c/w F-49 frame and cover (1)	v.m.	4	1,325.17		5,300.68	5,300.68
0.6	Connect to Existing Stub	each	1	1,462.68		1,462.68	1,462.68
0.7	300mm Plug and Marker Post	each	1	2,804.31		2,804.31	2,804.31
8.0	Pipeline Crossing Signs	each	2	500.00		1,000.00	1,000.00
	TOTAL ITEM B					270,553.03	273,313.03
C. WA	TER MAINS						
0.1	Trench excavation, backfill, and compaction to 97% S.P.D.						
	3.0m - 4.0m Depth	m	224	309.43		69,312.32	69,312.32
0.2	Screened gravel to replace unsuitable material (Provisional)	m <sup>3</sup>	75	36.80			2,760.00
0.3	Supply and Install 400mm C905 PVC DR-18 waterline	lin.m.	224	188.84		42,300.16	42,300.16
0.4	400mm Dia C905 PVC Case Bored Auger Crossing	lin.m.	133	1,879.34		249,952.22	249,952.22
0.5	Connect to Existing Stub	each	1	3,205.49		3,205.49	3,205.49
0.6	400mm Plug and Marker Post	each	2	3,275.04		3,275.04	6,550.08
0.7	Pipeline Crossing Signs	each	2	500.00		1,000.00	1,000.00
	TOTAL ITEM C					369,045.23	375,080.27

	0,:113929427						
NO.	ITEM OF WORK	UNIT	CONTRACT QUANTITY	CONTRACT AMOUNT	UNIT PRICE	TOTAL ACTUAL COSTS	COSTS IN LEVIES
A. MOB	ILIZATION  A. Trunk Work Mobilization c/w Traffic Accommodation	l.s.	1	50,691,81	50,691,81	50,691.81	50,691.81
	TOTAL ITEM A	1.0.		50,691.81	00,031.01	50,691.81	50,691.81
				30,031.01		30,031.81	50,051.0
	TARY TRUNKS						
0,1	Trench excavation, backfill and compaction. a) 3.0m - 4.0m Depth	m	320	43,520,00	136.00	43,520.00	43,520.00
	b) 4,0m - 5,0m Depth	m	160	27,200.00	170.00	27,200.00	27,200.0
	c) 5,0m - 6,0m Depth	m	128	39,552.00	309.00	39,552.00	39,552.0
	e) 6.0m - 7.0m Depth	m	60	32,400.00	540.00	32,400,00	32,400.00
	f) 7,0m - 8,0m Depth	m	115	110,400.00	960.00	110,400.00	110,400.00
0.2	Screened gravel to replace unsuitable material.	m3	200	10,000.00	50.00	10,000.00	10,000.00
0,3							
	Sanitary Pipe PVC SDR 35, Bedding and connection to existing stubs a) 450mm Dia	m	767.72	87,520.08	114.00	87,520.08	87,520.08
	b) 375mm Dia	m	0		80,00		*
0.4	1200 mm Dia. Manhole type 5A c/w Frame and Cover(6)	v,m,	48,487	80,003.55	1,650.00	80,003.55	80,003.5
0.5	Plugs b) 375mm Dia	a a a b		202.00	000.00	7770 00	200.0
-		each	1	363.00	363.00	363.00	363.0
0,6	Supply and Install Safety Platform	each	4	7,400.00	1,850.00	7,400.00	7,400.00
	TOTAL ITEM B			438,358.63			438,358.63
C. WAT	ERMAIN TRUNKS						
0.1	Trench excavation, backfill, and compaction. a) 0.0m - 4.0m Depth		4040 504	100 000 10	101.00	100 000 10	100.000.10
		m	1046.524	126,629.40	121.00	126,629.40	126,629.40
0.2	Watermain PVC SR18 CLASS 150 300mm Dia c/w 'B' bedding	m	1018	107,908.00	106.00	107,908.00	107,908.00
0.3	Watermain PVC SR18 CLASS 150						
	150mm Dia c/w 'B' bedding	m	28.524	1,112.44	39.00	1,112.44	1,112.44
0.4	Hydrants, Valves and Fittings 300mm Gate Valve						
		each	20	64,500.00	3,225.00	64,500.00	64,500.00
	150mm Gate Valve	each	13	17,875.00	1,375.00	17,875.00	17,875.00
	Tee 300 x 150	each	10	11,900.00	1,190.00	11,900.00	11,900.00
_	Tee 300 x 300	each	1	1,390.00	1,390.00	1,390.00	1,390.00
	Cross 300 x 250	each	2	4,710.00	2,355.00	4,710.00	4,710.00
	Cross 300 x 150	each	5	11,125.00	2,225.00	11,125.00	11,125.00
	150 mm 45 Degree Bend	each	2	250.00	125.00	250.00	250.00
	350mm -Plug	each	1	560.00	560.00	560.00	560.00
0.5	Screened rock to replace unsuitable material	m3	200	10,000.00	50.00	10,000.00	10,000.00
0.6	Fire Hydrants	each	7	48,545.00	6,935.00	48,545.00	48,545.00
	TOTAL ITEM C			406,504.84		406,504,84	406,504.84

Lacombe County Off-Site Levies Update Project No.: 113929427

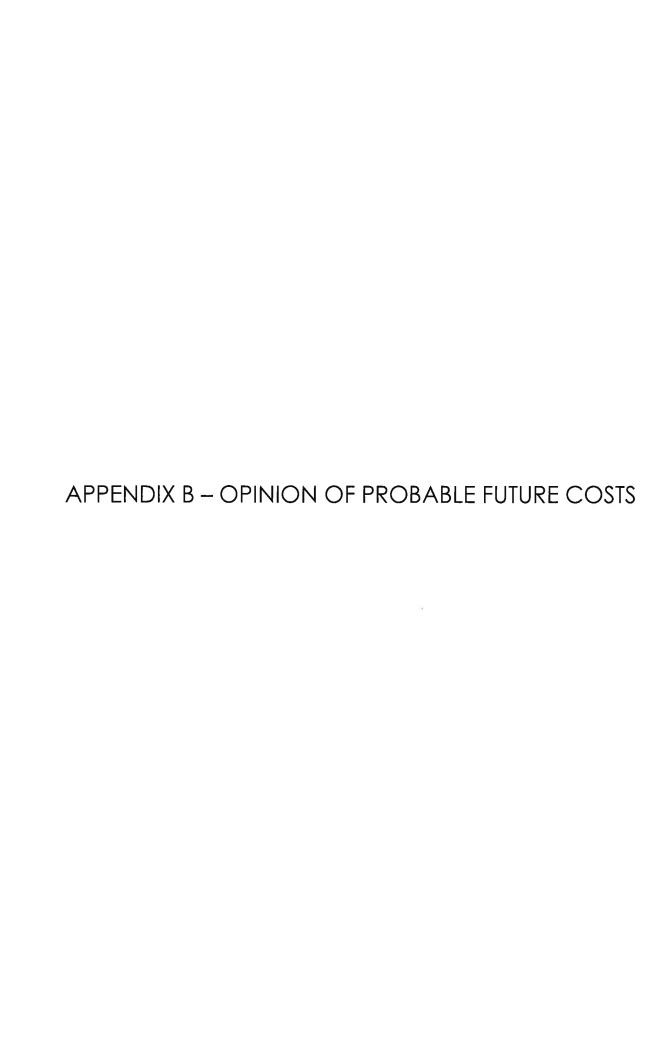
# Appendix A - Historical Costs Aspelund Industrial Park and McLevin's

## **Professional Services Cost - Aspelund Industrial Park**

ITEM NO.	ITEM OF WORK	TO <sup>-</sup>	TAL COSTS
A. Project Manage	ement and Servicing Study		
0.1	Project Administration	\$	12,150
0.2	Servicing Study	\$	54,800
B. QE II Water and	d Sanitary Trunk Crossings		
0.1	Trunk Crossing	\$	72,950
0.2	Pre-Construction	\$	3,458
0.3	Construction Management	\$	49,244
0.4	Geotechnical Service	\$	1,427
0.5	Post-Construction	\$	7,421
C. Aspelund North			
0.1	Aspelund PrelimDesi	\$	57,411
0.2	Aspelund DD	\$	220,448
0.3	Aspelunde Tendering	\$	19,145
0.4	Aspelund Construction	\$	241,409
0.5	Aspelund Post-Construction	\$	59,509
	Total Cost	\$	799,372

#### **Professional Services Cost - McLevin's**

ITEM NO.	ITEM OF WORK	TOTAL COSTS
A.	Project Administration	\$ 4,851
В.	Detailed Design	\$ 22,593
C.	Construction Management	\$ 2,754
D.	Construction Procurement	\$ 32,854
E.	Post-Construction	\$ 5,778
	Total Cost	\$ 68,830



Item No.	Item of Work	Unit	Unit Price	Total Quantity	Total Cost
QUARTER	SECTION A- Aspelund Industrial Park				
A. WATER	TRUNKS				
0.1	300 mm watermain PVC DR18 c/w trench excavation to 3.0 m	m	\$300.00	425	\$127,500.0
0.2	Hydrants including leads	each	\$9,875.00	0	\$0.00
0.3	Future QE2	I.s.	\$250,000.00	1	\$250,000.0
	Total Cost				\$377,500.0
QUARTER S	SECTION B - Aspelund North (TES)				Ψονν,σοσ.σ
A. WATER					
	300 mm watermain PVC DR18 c/w trench excavation to 3.0 m	m	\$300.00	980	\$294,000.0
	Hydrants including leads				
	Total Cost	each	\$9,875.00	3	\$29,625.00
NAVAGEE					\$323,625.0
	VATER TRUNKS				
0.1	Sanitary pipe PVC SDR 35 c/w bedding a) 300 mm Dia	m	\$60.00	490	\$29,400.00
	b) 375 mm Dia	m	\$80.00	490	\$39,200.00
0.2	Trench excavation, backfill, and compaction to 95% S.P.D. □ a) 3.0 m - 4.0 m Depth	m	\$120.00	160	£10,200,00
	b) 4.0 m - 5.0 m Depth	m	\$180.00	0	\$19,200.00 \$0.00
	c) 5.0 m - 6.0 m Depth	m	\$319.00	150	\$47,850.00
	d) 6.0 m - 7.0 m Depth	m	\$550.00	670	\$368,500.00
0.3	1200 mm Dia. Manhole type 5A c/w frame & cover	v.m	\$1,660.00	58	\$96,280.00
0.4	Well Pointing	l.s.	\$250,000.00	1	\$250,000.00
	Total Cost				\$850,430.00
QUARTER S	ECTION E ( NE 28-39-27-4)				
. WATER T	TRUNKS				
	300 mm watermain PVC DR18 c/w trench excavation to 3.0 m				
0.1	depth,valves and fittings.	m	\$300.00	940	\$282,000.00
0.2	Hydrants including leads	each	\$9,875.00	4	\$39,500.00
	Total Cost				\$321,500.00
. WASTEW	ATER TRUNKS				
	Sanitary pipe PVC SDR 35 c/w bedding				
	a) 300 mm Dia b) 375 mm Dia	m m	\$60.00 \$80.00	940	\$56,400.00 \$0.00
0.2	Trench excavation, backfill, and compaction to 95% S.P.D.□				70.00
	a) 3.0 m - 4.0 m Depth	m	\$120.00	140	\$16,800.00
	b) 4.0 m - 5.0 m Depth	m	\$180.00	240	\$43,200.00

Project No.: 113929427

f Work	Unit	Unit Price	Total	Total Cost
	m	\$319.00	Quantity 560	\$178,640.0
w frame & cover	v.m	\$1,660.00	45	\$74,700.00
				\$369,740.0
v trench excavation to 3.0 m	m	\$300.00	1150	\$345,000.0
	each	\$9,875,00	6	\$59,250.00
				\$404,250.0
dding				
a a my	m	\$60.00	750	\$45,000.00
	m	\$80.00	0	\$0.00
mpaction to 95% S.P.D.⊡		0400.00	050	
	m	\$120.00 \$180.00	250 390	\$30,000.0 \$70,200.0
	m m	\$319.00	110	\$35,090.0
w frame & cover	v.m	\$1,660.00	44	\$73,040.00
		41,000.00		\$253,330.0
				\$200,000.00
trench excavation to 3.0 m	m	\$300.00	1340	\$402,000.0
	each	\$9,875.00	6	\$59,250.00
				\$461,250.00
dding				
	m	\$60.00	240	\$14,400.00
	m	\$80.00	675	\$54,000.00
mpaction to 95% S.P.D.□				
	m	\$120.00	625	\$75,000.00
	m	\$180.00	290	\$52,200.00
	m	\$319.00	0	\$0.00
v frame & cover	v.m	\$1,660.00	43	\$71,380.00
				\$266,980.0

Item No.	Item of Work	Unit	Unit Price	Total Quantity	Total Cost
0.1	300 mm watermain PVC DR18 c/w trench excavation to 3.0 m depth, valves and fittings.	m	\$300.00	1400	\$420,000.00
0.2	Hydrants including leads	each	\$9,875.00		\$69,125.00
	Total Cost				\$489,125.00
B. WASTE	NATER TRUNKS				
0.1	Sanitary pipe PVC SDR 35 c/w bedding				
	a) 300 mm Dia	m	\$60.00	425	\$25,500.00
	b) 375 mm Dia	m	\$80.00	425	\$34,000.00
0.0	T				
0.2	Trench excavation, backfill, and compaction to 95% S.P.D.				
	a) 3.0 m - 4.0 m Depth	m	\$120.00	440	\$52,800.00
	b) 4.0 m - 5.0 m Depth	m	\$180.00	410	\$73,800.00
	c) 5.0 m - 6.0 m Depth	m	\$319.00	0	\$0.00
0.3	1200 mm Dia. Manhole type 5A c/w frame & cover	v.m	\$1,660.00	35	\$58,100.00
	Total Cost				\$244,200.00
JUARTER :	 SECTION I ( SW 29-39-27-4)				
A. WATER	TRUNKS I				
	300 mm watermain PVC DR18 c/w trench excavation to 3.0 m				
0.1	depth,valves and fittings.	m	\$300.00	1150	\$345,000.00
0.2	Hydrants including leads	each	\$9,875.00	6	\$59,250.00
	Total Cost				\$404,250.00
B. WASTEV	 VATER TRUNKS				
0.1	Sanitary pipe PVC SDR 35 c/w bedding				
	a) 300 mm Dia	m	\$60.00	740	\$44,400.00
	b) 375 mm Dia	m	\$80.00	0	\$0.00
0.2	Trench excavation, backfill, and compaction to 95% S.P.D.				
	a) 3.0 m - 4.0 m Depth	m	\$120.00	740	\$88,800.00
	b) 4.0 m - 5.0 m Depth	m	\$180.00	0	\$0.00
	c) 5.0 m - 6.0 m Depth	m	\$319.00	0	\$0.00
0.3	1200 com Die Manhele trait 5A atu farma 0				\$0.00
0.3	1200 mm Dia. Manhole type 5A c/w frame & cover	v.m	\$1,660.00	36	\$59,760.00
	Total Cost				\$192,960.00
	ECTION J (NW 20-39-27-4)				
QUARTER	SECTION 3 (NW 20-39-27-4)				
	TRUNKS				
A. WATER		m	\$300.00	1160	\$348,000.00
A. WATER	TRUNKS  300 mm watermain PVC DR18 e/w transh every attent to 2.0 m	m each	\$300.00 \$9,875.00	1160	\$348,000.00 \$59,250.00
A. WATER 0.1	TRUNKS  300 mm watermain PVC DR18 c/w trench excavation to 3.0 m depth,valves and fittings.				

Lacombe County Off-Site Levies Update Project No.: 113929427

#### Appendix B - Future Water and Wastewater Trunk Costs

January 29, 2016

Total Item No. Item of Work Unit **Unit Price Total Cost** Quantity 0.1 Sanitary pipe PVC SDR 35 c/w bedding a) 300 mm Dia \$60.00 810 \$48,600.00 m b) 375 mm Dia \$80.00 m 0 \$0.00 0.2 Trench excavation, backfill, and compaction to 95% S.P.D. a) 3.0 m - 4.0 m Depth \$120.00 810 \$97,200.00 m b) 4.0 m - 5.0 m Depth \$180.00 m 0 \$0.00 c) 5.0 m - 6.0 m Depth \$319.00 0 \$0.00 m 0.3 1200 mm Dia. Manhole type 5A c/w frame & cover \$1,660.00 32 v.m \$53,120.00 Total Cost \$198,920.00



## **Loan Calculator**

Print

Recalculation options Type

Blended Amortization

Term 20

Deferment

NA

Recalculate Loan

## Calculations based on:

Principal is \$8,000,000.00

Term is 20 Years	Loan Type is	Blended	Deferred payments NA	Interest rate of 2.885 %
Payment #	Payment	Principal	Interest	Balance
1	\$264,618.33	\$149,218.33	\$115,400.00	\$7,850,781.67
2	\$264,618.33	\$151,370.80	\$113,247.53	\$7,699,410.87
3	\$264,618.33	\$153,554.33	\$111,064.00	\$7,545,856.54
4	\$264,618.33	\$155,769.35	\$108,848.98	\$7,390,087.19
5	\$264,618.33	\$158,016.32	\$106,602.01	\$7,232,070.87
6	\$264,618.33	\$160,295.71	\$104,322.62	\$7,071,775.16
7	\$264,618.33	\$162,607.97	\$102,010.36	\$6,909,167.19
8	\$264,618.33	\$164,953.59	\$99,664.74	\$6,744,213.60
9	\$264,618.33	\$167,333.05	\$97,285.28	\$6,576,880.55
10	\$264,618.33	\$169,746.83	\$94,871.50	\$6,407,133.72
11	\$264,618.33	\$172,195.43	\$92,422.90	\$6,234,938.29
12	\$264,618.33	\$174,679.35	\$89,938.98	\$6,060,258.94
13	\$264,618.33	\$177,199.09	\$87,419.24	\$5,883,059.85
14	\$264,618.33	\$179,755.19	\$84,863.14	\$5,703,304.66
15	\$264,618.33	\$182,348.16	\$82,270.17	\$5,520,956.50
16	\$264,618.33	\$184,978.53	\$79,639.80	\$5,335,977.97
17	\$264,618.33	\$187,646.85	\$76,971.48	\$5,148,331.12
18	\$264,618.33	\$190,353.65	\$74,264.68	\$4,957,977.47
19	\$264,618.33	\$193,099.50	\$71,518.83	\$4,764,877.97
20	\$264,618.33	\$195,884.97	\$68,733.36	\$4,568,993.00
21	\$264,618.33	\$198,710.61	\$65,907.72	\$4,370,282.39
22	\$264,618.33	\$201,577.01	\$63,041.32	\$4,168,705.38
23	\$264,618.33	\$204,484.75	\$60,133.58	\$3,964,220.63
24	\$264,618.33	\$207,434.45	\$57,183.88	\$3,756,786.18
25	\$264,618.33	\$210,426.69	\$54,191.64	\$3,546,359.49
26	\$264,618.33	\$213,462.09	\$51,156.24	\$3,332,897.40
27	\$264,618.33	\$216,541.29	\$48,077.04	\$3,116,356.11
28	\$264,618.33	\$219,664.89	\$44,953.44	\$2,896,691.22
29	\$264,618.33	\$222,833.56	\$41,784.77	\$2,673,857.66
30	\$264,618.33	\$226,047.93	\$38,570.40	\$2,447,809.73
31	\$264,618.33	\$229,308.67	\$35,309.66	\$2,218,501.06
32	\$264,618.33	\$232,616.45	\$32,001.88	\$1,985,884.61
33	\$264,618.33	\$235,971.94	\$28,646.39	\$1,749,912.67
34	\$264,618.33	\$239,375.84	\$25,242.49	\$1,510,536.83

## Calculate Loan

<b>Totals:</b>	\$10,584,733.20	\$8,000,000.00	\$2,584,733.20	
40	\$264,618.33	\$260,855.65	\$3,762.68	\$0.00
39	\$264,618.33	\$257,146.15	\$7,472.18	\$260,855.65
38	\$264,618.33	\$253,489.57	\$11,128.76	\$518,001.80
37	\$264,618.33	\$249,884.98	\$14,733.35	\$771,491.37
36	\$264,618.33	\$246,331.64	\$18,286.69	\$1,021,376.35
35	\$264,618.33	\$242,828.84	\$21,789.49	\$1,267,707.99