

### June 27, 2016 Time 9:00 am-10:00am

## COUNCIL CHAMBERS LACOMBE AB

### In Attendance:

**Members:** Mayor Steve Christie, Chairperson, Mayor, City of Lacombe

Mayor Melodie Stol, Vice Chairperson, Mayor, Town of Blackfalds

Councillor Ken Wigmore, Lacombe County

Others: Matthew Goudy, CAO - NRDRWWC

Norma MacQuarrie, CAO, City of Lacombe Myron Thompson, CAO, Town of Blackfalds

Preston Weran, Director of Infrastructure & Property Services, Town of Blackfalds

Terry Hager, County Commissioner, Lacombe County

Keith Boras, Manager of Environmental & Protective Services, Lacombe County

John Van Doesburg, Commission Administrator, C&J Vanco Services Ltd.

**Guests:** Joel Sawatzky, Stantec Consulting Ltd.

Todd Simenson, Stantec Consulting Ltd.

### AGENDA

- 1. Call to Order
- 2. Adoption of Agenda
- 3. Adoption of Previous Minutes

May 24, 2016

- 4. Insurance Quotes
- 5. WCB Registration

6.	Technical	Memo 11	<ul><li>I – Acquisition</li></ul>
----	-----------	---------	-----------------------------------

- 7. Technical Memo 5 Equalization
- 8. Legal Advice
- 9. Engineers Report
- 10. Financial Report
- 11. Next Meeting Date
  - September 26, 2016 at 10:00 AM in the City of Lacombe Council Chambers
- 12. Adjournment

### Attachments:

NRDRWWSC Minutes\_Draft - May 24, 2016

Jubilee Insurance Quote- Program

Workers' Compensation Board Eligibility

NRDRWWSC Technical Memo #11

NRDRWWSC Technical Memo #5

Engineer's Report June 21, 2016



## REGIONAL WASTERWATER MEETING MINUTES May 24, 2016

## COUNCIL CHAMBERS LACOMBE AB

### In Attendance:

**Members:** Mayor Steve Christie, Chairperson, Mayor, City of Lacombe

Mayor Melodie Stol, Vice Chairperson, Mayor, Town of Blackfalds

Councillor Ken Wigmore, Lacombe County

**Others:** Matthew Goudy, CAO - North Red Deer Regional Wastewater Services Commission,

Director of Planning & Operations, City of Lacombe

John Van Doesburg, Commission Administrator, C&J Vanco Services Ltd.

Norma MacQuarrie, CAO, City of Lacombe

Preston Weran, Director of Infrastructure & Property Services, Town of Blackfalds

Denise Bellabono, Recording Secretary, City of Lacombe

**Guests:** Joel Sawatzky, Stantec Consulting Ltd.

**Regrets:** Myron Thompson, CAO, Town of Blackfalds

Keith Boras, Manager of Environmental & Protective Services, Lacombe County

Terry Hager, County Commissioner, Lacombe County

Todd Simenson, Stantec Consulting Ltd.

### 1. Call to Order:

Chairperson Christie called the meeting to order at 9:02am.

### 2. Adoption of the Agenda:

MOVED by Vice Chairperson Stol that the agenda for May 24, 2016 be adopted as presented.

**CARRIED** 

### 3. Adoption of Previous Minutes

**April 18, 2016** 

MOVED by Councillor Wigmore that the minutes for April 18, 2016 be adopted as presented.

**CARRIED** 

### 4. Financial Agreement Revision

Funding for land acquisitions were discussed at the previous meeting, no decisions or motions were presented at the time.

MOVED by Vice Chairperson Stol that the Commission execute the amended North Red Deer Regional Wastewater Services Commission Funding Agreement with the addition of land acquisition as an activity that funds can be utilized for, as attached in this memo.

**CARRIED** 

### 5. Minister Letter and Agreement

The Commission reviewed the agreement from the office of the Minister of Transportation and Infrastructure.

MOVED by Councillor Wigmore that the Commission accept the letter and agreement from the office of the Minister of Transportation and Infrastructure as information.

**CARRIED** 

MOVED by Councillor Wigmore that the Commission enter into a funding agreement with the Province of Alberta for Detailed Design.

**CARRIED** 

### 6. Engineers Report

Mr. Sawatzky updated the Commission with the status of the land acquisitions. There are 64 properties requiring land acquisitions and there will be an open house on June 1, 2016 for the questions and concerns from the landowners.

MOVED by Vice Chairperson Stol that the Commission accept the Engineer's Report of May 18, 2016 as information.

**CARRIED** 

### 7. Next Meeting

The next meetings are scheduled for June 27, 2016 at 9:00 AM and September 19 26, 2016 at 10:00 AM in the City of Lacombe Council Chambers.

### 8. Adjournment:

MOVED by Councillor Wigmore that the North Red Deer Regional Wastewater Commission Regional Sewer meeting of May 24, 2016 be adjourned at 10:00AM.

Chairperson	Administrator	



### AGENDA REPORT

SUBJECT: Insurance

PREPARED BY: John Van Doesburg, Administrator PRESENTED BY: John Van Doesburg, Administrator

DATE: June 19, 2016

### **PURPOSE:**

To provide insurance to the Commission for the following areas:

- -Commercial General Liability- 10,000,000
- -Crime Coverage
- Automobile and non-mobile Coverage

The coverage is required for the operation of the commission and for construction near CP Rail Lines.

The major item in the cost of insurance is the 10,000,000.00 general liability

### BACKGROUND:

To improve the operations and facilitate the construction of the line the insurance coverage is required

**ISSUE ANALYSIS: N/A** 

FINANCIAL IMPLICATIONS: The Commission has received two quotes for the insurance:

AMEC- Annual Premium \$56,230.00 Jubilee insurance – Annual Premium \$34,500,00

**LEGISLATIVE AUTHORITY**: Under the Municipal Government Act the Commission the Commission can obtain insurance for its operations and Board of Directors

STRATEGIC/BUSINESS PLAN REFERENCE: N/A

**ALTERNATIVES:** 

N/A

**ATTACHMENTS**: Insurance Quotes

Agenda Report/Page 1 of 2

ACTION/RECOMMENDATION:				
THAT Commission the Commission award the insurance contract to Jubilee Insurance				

#### JUBILEE INSURANCE PROGRAM - QUOTE

### North Red Deer Regional Wastewater Services Commission 5432 56 Ave, Lacombe AB T4L 1E9

Policy Term: June, 2016 to November 1, 2016

12:01 A.M. Standard Time at the address of the prospective insured

Your application for an insurance quote through Jubilee Insurance has now been processed. Thank you for giving Jubilee Insurance Agencies Ltd the opportunity to quote on your insurance needs.

The following are a summary of Coverages that are applicable to these policies under specified Sections of the Alberta Association of Municipal Districts & Counties (AAMDC)/Jubilee Insurance Program. Policy documents are available for full details of all terms, conditions, limitations and exclusions applicable to the coverage afforded by the policy if the quoted is accepted.

Your proposal is as follows:

### LIABILITY INSURANCE

### Insuring Agreement

In the event that Legal Liability claims for negligence are brought against the Certificate Holder hereunder, Insurers will pay compensatory damages, including legal expenses incurred, subject to the terms, conditions, limitations and exclusions of the respective Sections of the Policy.

Coverage	Combined Limits of Liability
SECTION ONE – COMPREHENSIVE GENERAL LIABILITY (Annual Aggregate: \$5,000,000)	\$ 1,000,000 Per Occurrence
Amlin – Excess to Genesis Reciprocal Insurance Exchange Third Party Bodily Injury and/or Property Damage	\$5,000,000 Per Occurrence Included
Non-Owned Automobile Liability Tenants Legal Liability	\$ 5,000,000 \$ 5,000,000
Sudden and Accidental Pollution (subject to specific discovery/reporting provisions) Legal Liability for Damage to Non-Owned Automobiles	\$5,000,000 \$ 250,000
Employee Benefits Liability Personal Injury (i.e. libel and slander)	\$5,000,000 \$5,000,000
SECTION TWO – ADMINISTRATIVE ERRORS & OMISSIONS LIABILITY	\$ 5,000,000 Claims Made Basis (annual aggregate)
Errors & Omissions Liability	Included

Directors & Officers' Liability

### SECTION THREE - WRONGFUL DISMISSAL LIABILITY

Warranty: Must obtain prior written legal opinion from employment law practitioner

### SECTION FOUR - SEXUAL ABUSE/HARASSMENT LIABILITY

#### Amount to be Deducted Deductibles

### Each and Every Property Damage Claim

Each and Every Bodily Injury Claim Legal Liability for Damage to Non - Owned Automobiles Administrative Liability (E&O, D&O)

Wrongful Dismissal Sexual Harassment \$1,000 Nil \$500 \$1,000 (or \$2500/10% of legal costs if charges laid under specific statutes/regulations are unproven) \$25,000 (min.)

\$ 5,000,000 Claims Made Basis

\$ 5,000,000 Claims Made Basis

included

(annual aggregate)

(annual aggregate)

Annual Premium: \$34,500

Nil



### EXCESS LIABILITY INSURANCE

Annual Premium: Not Quoted

### Insuring Agreement

For legal Liability claims brought against you for bodily injury and / or property damage sustained by third parties, subject to the terms and conditions, limitations and exclusions of the respective policy/policies.

### Applicability of Umbrella Liability Coverage

The Umbrella Limits of Liability stated below for one or more of the Umbrella Policy Layers, and for which a Premium has been specified, are applicable to each occurrence presented against the Certificate Holder under the Underlying Policies stated which are in excess of the Limits of Liability per occurrence provided by such underlying policy(ies)

### **Underlying Polices**

Comprehensive General Liability Automobile Liability Garage Automobile Section A

**Combined Limits of Liability** 

Umbrella (1<sup>st</sup> Layer)

\$5,000,000 - optional

COMPREHENSIVE DISHONESTY, DISAPPEARANCE \$ DESTRUCTION INSURANCE Annual Premium: \$427.00

Coverage

### **BLANKET BOND INSURANCE**

1	Employee Dishonesty Coverage - Form A (subject to :Warranty noted below)	\$100,000
١.	Elliployee Distinctesty Coverage – Form A (subject to :Warranty noted below)	\$100,000

### COMPREHENSIVE CRIME INSURANCES

II.	Loss of Money Inside the Premise Coverage	\$25,000
iii.	Loss of Money Outside the Premise Coverage	\$25,000
iV.	Money Order and Counterfeit Paper Currency Coverage	\$20,000
V.	Telephone Fraud Coverage	Not Quoted

### Warranty

It is warranted that, insofar as the coverage afforded under the Blanket Bond (Employee Dishonesty) Section of the Policy is concerned, the Limit of Liability is reduced to \$5,000.00 if only one of the three conditions noted below exist at the time of the loss.

- (a) A dual cheque signing process is in place:
- (b) Reconciliation of bank statements is being performed by someone other than cheque signing personnel; and
- (c) An annual audit has been completed within 12 months preceding the loss

<u>Deductibles</u>

Amount to be Deducted

Comprehensive Dishonesty, Disappearance and Destruction Nil



PROPERTY INSURANCE (ALL RISKS)

Annual Premium: Not Quotes

Coverage

Property & Contents Limit \$0
Equipment Limit \$0

Property Damage Includes: (up to Value Insured)

Accounts Receivable \$ 1,000,000 Automatic Acquisitions (60 days) Included Building Damage caused by Theft \$ 25,000,000 Debris Removal \$ 5,000,000 Extra Expense \$ 2,000,000 Fire Department Charges & Equipment \$ 500,000 Lawns, Trees and Shrubs and Indoor Plants \$ 100,000 Master Keys \$ 50.000 Personal Effects – any one individual \$ 2,500 Personal Effects – any one loss \$ 100,000

LOSS, if any, payable to the Certificate Holder or as otherwise denoted in endorsements attached hereto

**Deductibles** 

Amount to be Deducted

Each and Every Claim Vacant Properties Earth Movement

**\$ 5,000** \$20,000

Earth Movement Flood

2% of the value of the property or interest

\$25,000

BOILER & MACHINERY INSURANCE

Annual Premium: Not Quoted

Items of Coverage

Direct Damage
Business Interruption (Actual Loss Sustained)

**Hazardous Substances** 

Amount of Insurance

\$100,000,000 \$250,000 \$500,000

Policy Includes:

**Deductibles** 

Direct Damage

**Business Interruption** 

(up to Amount of Insurance)

Extra Expense
Expediting Expenses
Professional Fees
Ammonia Contamination
Water Damage

\$ 250,000 \$ 10,000,000 \$ 1,000,000 \$ 500,000 \$ 500,000 \$ 50,000 Included

Consequential Damage (Refrigeration)
Automatic Acquisitions (up to 365 days)

By – Laws

Included

Amount to be Deducted

\$ 1,000

48 Hour Waiting Period

All other losses involving electrical items of varying horsepower (h.p.)

As per policy wording



### **AUTOMOBILE INSURANCE**

Annual Premium: Not Quoted

Items of Coverage

Limits of Liability

Third Party Liability S.E.F. No. 6b School Bus

\$5,000,000 \$1,000,000

S.E.F. No. 6c Public Passenger Vehicles Accidental Benefits

\$1,000,000

All Perils physical damage

As required by law

Basis of Loss Settlement - Actual Cash Value

6 scheduled vehicles

**Deductibles** 

Amount to be Deducted

Private Passenger and Light Commercial Vehicles (Under 1 Ton)

\$500

All Other Vehicles

\$1,000

Each and Every Bodily Injury Claim

Nil

Total annual premium as quoted above \$36,180.00 with fee and membership included. The above is meant as a coverage summary only and is subject to policy conditions and exclusions.

### All premiums are subject to a 3% Administration Fee

Jubilee Insurance Agencies is a wholly owned subsidiary of the Alberta Association of Municipal Districts and Counties. We first incorporated in 1955 to offer the Association's members the best possible insurance coverages available at reasonable

It is, therefore, a requirement of the AAMD&C that all insureds through Jubilee become members of the Association for an annual fee of \$204.75 including GST.

This quote is valid for 30 days, should you wish to accept this proposal, please advise in writing (e-mail or fax) the specific coverages and the effective date of insurance that you require. If you have any questions, please do not hesitate to contact

> Dayna Johnson Risk Management Advisor Phone: (780) 955-8408

E-mail: dayna.johnson@aamdc.com

### **Special Note:**

Prior to binding coverage we will need the following:

5 Year Claims experience letter from your current insurer Certificate of Incorporation Written acceptance of coverage and effective date coverage will need to be in place. Subject: North Red Deer Wastewater Services Commission

**Date:** Friday, June 17, 2016 4:16:02 PM MT

From: Terra Matter

To: John

Hello John,

Again apologies for the delay to review and provide some details regarding the quotation request for the Commission.

I am able to quote in our system the following coverages:

Commercial General Liability - \$8,750,000 Limit – Premium \$54,492

Crime Coverage - \$250,000 employee dishonestly limit – Premium \$228.00

Non – Owned automobile coverage - \$5,000,000 – Premium \$13.20

Automobile Liability - \$5,000,000 limit – Premium \$536.00 – (This is based on one vehicle and would require additional information on vehicles if there are more, as well as details on the primary vehicle) Excess Liability limit \$1,250,000 to meet the \$10,000,000 requirement – Premium \$961.26

In order to provide a quote for the EIL coverage I do require an additional application completed to obtain a quote.

Currently with the above coverages I have an annual premium of \$56,230, the Environment Impairment liability would be in addition.

I am attaching an application for the EIL and if you are able to complete and send back I will request a quote to confirm that premium. I have attached the municipal application due to being municipally related as well some additional info required for the water operations. With respect to the increased limit of liability I will require the umbrella application completed as well to issue coverage.

In order to proceed with confirming premiums and binding the policy to issue coverage, we will require the AUMA membership application to be completed and approved by the finance department as well. The website can be found here to complete that application. <a href="https://auma.ca/membership/apply-membership">https://auma.ca/membership/apply-membership</a>

Please review and let me know additional questions or concerns that you may have with respect to any of the coverages or applications.

I look forward to hearing from you and hope you have a great weekend. Again please accept my apology for the delay and requirement for additional information.

Thank you,

Terra Matter





ANTARE HE AND THE THE THE CONTROL OF CONTROL

advocate

Terra Matter, CAIB Senior Insurance Consultant D: 780.989.7433 E: tmatter@auma.ca

Alberta Municipal Place 300-8616 51 Ave Edmonton, AB T6E 6E6 Phone: 780.433.4431 Toll-free: 310-AUMA

Fax: 1.866.250.6117

www.auma.ca www.amsc.ca





The information mans mitted in this exhibits intented only for the delating vinding is addressed and they contain confidential and on or registing enactivities as the experience of the manship of the manship of a king or any address the final accounts information by delating or entities the manship and the intented reductions of the manship as a sense of the intented reductions of the manship as a sense of the intented reductions are manship as a considering and the end of the manship as a considering and continued before owners and the end of the same of the environment delate owners and the end of the same of the environment delate owners and the end of the end



Workers' Compensation Board

Customer Service

Alberta

June 17, 2016

9912 - 107 Street PO Box 2415 Edmonton AB T5J 2S5 Phone: 780-498-3999
Fax: 780-498-7999
Website: www.wcb.ab.ca
Toll Free: 1-866-922-9221

NORTH RED DEER REGIONAL WASTE WATER SERVICES COMM. 5432 56 AVE LACOMBE AB T4L 1E9

Account Number: 8146909

Dear Mr. Van Doesburg:

### RE: Eligibility for an Account

I received your account application on June 02, 2016. In your application you have applied for worker coverage only for the business operations of waste water treatment facilities. This letter outlines my decision regarding your eligibility for an account and the industry classification (premium rate) assigned to your WCB coverage.

### **Summary of Your WCB Account**

Your account application has been approved. Please refer to the summary below for important account information:

Number: 8146909Industry: 40400

Worker Start Date: June 01, 2016

Insurable Earnings Estimate: \$100,000.00

Your 2016 premium is \$1,340.00

You will be billed in 2 installment(s) of \$670.00

Your first invoice will be mailed on June 21, 2016 and must be paid within 30 days.

### **Premiums**

A minimum premium of \$200 is charged in a calendar year. This is applied to all accounts to cover the annual costs of providing insurance and is non-refundable and must be paid in order to obtain clearance on the account. To pay your premiums, WCB-Alberta provides a number of payment options. For more information, please refer to the *Payment Options* fact sheet at <a href="https://www.wcb.ab.ca/insurance-and-premiums/pay-premiums.html">https://www.wcb.ab.ca/insurance-and-premiums/pay-premiums.html</a>.

Additionally, please review your reported insurable earnings throughout the calendar year and contact us to make adjustments as required. For more information on reporting, refer to the attached fact sheet, *New Account Holders*.

### **Optional Coverage**

Personal Coverage is optional coverage offered to individuals who are not automatically eligible for workers' compensation benefits. This includes:

Employers and business owners.

ED 0061 6913 1 of 3



Workers' Compensation Board

Customer Service Alberta

June 17, 2016

9912 - 107 Street PO Box 2415 Edmonton AB T5J 2S5 Phone: 780-498-3999
Fax: 780-498-7999
Website: www.wcb.ab.ca
Toll Free: 1-866-922-9221

NORTH RED DEER REGIONAL WASTE WATER SERVICES COMM. 5432 56 AVE LACOMBE AB T4L 1E9

Account Number: 8146909

Dear Mr. Van Doesburg:

### RE: Eligibility for an Account

I received your account application on June 02, 2016. In your application you have applied for worker coverage only for the business operations of waste water treatment facilities. This letter outlines my decision regarding your eligibility for an account and the industry classification (premium rate) assigned to your WCB coverage.

### Summary of Your WCB Account

Your account application has been approved. Please refer to the summary below for important account information:

Number: 8146909Industry: 40400

Worker Start Date: June 01, 2016

Insurable Earnings Estimate: \$100,000.00

Your 2016 premium is \$1,340.00

You will be billed in 2 installment(s) of \$670.00

Your first invoice will be mailed on June 21, 2016 and must be paid within 30 days.

### **Premiums**

A minimum premium of \$200 is charged in a calendar year. This is applied to all accounts to cover the annual costs of providing insurance and is non-refundable and must be paid in order to obtain clearance on the account. To pay your premiums, WCB-Alberta provides a number of payment options. For more information, please refer to the *Payment Options* fact sheet at <a href="https://www.wcb.ab.ca/insurance-and-premiums/pay-premiums.html">https://www.wcb.ab.ca/insurance-and-premiums/pay-premiums.html</a>.

Additionally, please review your reported insurable earnings throughout the calendar year and contact us to make adjustments as required. For more information on reporting, refer to the attached fact sheet. *New Account Holders*.

### **Optional Coverage**

Personal Coverage is optional coverage offered to individuals who are not automatically eligible for workers' compensation benefits. This includes:

Employers and business owners.

ED 0061 6913 1 of 3

Customer Service and Risk Management

Alberta

- Proprietors and partnerships in a business with workers.
- Directors of a corporation or members of a society, board, authority, commission or foundation.

You can receive compensation benefits if you choose to purchase Personal Coverage. For additional information regarding personal coverage, please refer to the attached fact sheet *New Account Holders* or via the website fact sheet for *Personal Coverage* at <a href="https://www.wcb.ab.ca/assets/pdfs/employers/EFS\_Personal\_Coverage.pdf">https://www.wcb.ab.ca/assets/pdfs/employers/EFS\_Personal\_Coverage.pdf</a>.

The information below provides details to my decision on granting your account and the industry classification.

### **Business Details**

In order for me to grant an account under Section 15 and or 16 of the Workers' Compensation Act (application to have the act apply and persons deemed workers) I must be able to determine:

- the existence of a business for a proprietor, partnership or unincorporated entity, or,
- there is existence of an employer of workers or,
- the business is a limited or incorporated entity registered with Corporate Registry.

As part of your application, the following business factors have been provided to confirm the existence of your business:

Municipal Commission

I have confirmed with Alberta Corporate Registries that the company is active.

Additionally, I must determine the appropriate industry classification under Policy 07-01 Part II. The industry classification is used to calculate your rate and resulting premium.

You describe your business operations as waste water treatment facilities. The following business activities were outlined in your application and used to determine the best fit industry classification:

- Transmission of wastewater from Lacombe to the City of Red Deer.
- During our telephone conversation on June 17, 2016, you also confirmed that the
  commission is not currently operating waste water treatment facilities yet. Currently, the
  commission is in the planning and development stages of the construction of the waste
  water transmission lines and related facilities.
- When the commission begins operating waste water treatment facilities you will have to notify the WCB as a new classification will be required.

#### Decision

Based on this information and the above legislation, I am able to grant you an account as a municipal commission. This business will be classified in industry 40400, Industrial – Construction (Project Management) with a rate of \$1.34 per \$100 of insurable earnings.

Please help us serve you better by stating your account number on all correspondence

ED 0061 6913 2 of 3



Workers' Compensation Board

Alberta

Customer Service and Risk Management

### Additional Information

For additional information regarding your responsibilities under the Workers' Compensation Act, such as how to obtain clearance certificates, filing claims, your responsibilities for subcontractors and family members, and annual return reporting requirements please review the attached fact sheet New account holders.

## If you do not understand or agree with my decision, it is important that you contact me.

I may be able to better explain the reasons behind this decision or you may have additional information that I may not be aware of. If, after this discussion, you would like to request a review of the decision, there is a dispute resolution process that you can start within one year of the decision date. You can access more information about the dispute resolution process on our website at: www.wcb.ab.ca or by calling our Contact Centre at 780-498-3999.

Sincerely,

Troy Voong

Employer Account Services E4

encl.

3 of 3



## New account holders

WCB provides no-fault workplace disability insurance that protects both workers and employers against financial loss due to work-related injury and illnesses.

Visit our for more information about services and your responsibilities under the Alberta Workers' Compensation Act.

## industry classification and premiums

Classifying your business is based on your overall operations. Your industry classification determines your premium rate, charged on every \$100 of insurable earnings and personal coverage.

This rate may be adjusted yearly after reviewing the claim costs of your industry and your company. Depending on these over the next three to five year period, you may experience a future discount or surcharge on the industry rate.

Premium rate notices are not mailed to you. Statements are available electronically in mid-December of each year.

A premium invoice will be sent to you. Please review it to confirm your business information as well as your industry rate, the estimate you provided for workers and any personal coverage requested. It will also indicate your installment amounts and dates.

You can pay premiums online using INTERAC, Visa and MasterCard, sign up for pre-authorized debit by completing the online application form.

## Your responsibilities

When you hire workers you must contact our office within 15 days of the workers' start date, or your account will be subject to a late registration penalty. Our definition of "worker" includes:

- Any full-time, part-time, temporary and casual worker.
- Unpaid help, family members.
- Subcontractors operating without their own WCB-Alberta coverage.

For farming and ranching operations, some of the workers listed above do not require coverage. This includes non-waged

workers, such as friends and neighbours, who help out around the farm but do not receive wages for the services they provide.

Coverage is also not required for family members of the business owners, even if they receive a wage for the work they do. More detailed information about who farm and ranch owners need to cover can be found ... You can also contact us at 1-866-922-9221.

WCB-Alberta is a provincial jurisdiction. If you begin operating outside Alberta you must contact the Workers' Compensation Board or Authority in that location to determine if you are required to register there. If not, WCB-Alberta may extend coverage if certain conditions are met.

You must report a work related injury within 72 hours of injury notification. Quick reporting practices will ensure faster benefit decisions for your workers and will lower your claims and disability costs. Your worker will receive treatment quickly and return to the job sooner.

Please ensure you have a copy of our 1-2-3 poster displayed in your workplace. This poster outlines the steps to be taken if an injury occurs and can be downloaded or ordered from our

All employers have a responsibility to promote workplace safety and focus on injury prevention with their employees. If a workplace injury occurs, the employer is responsible for supporting a safe and effective return to work for the injured worker.

This ensures we are achieving the best possible outcome for Alberta's workforce, while affording employers the lowest possible WCB premium.

## Parsonal coverage

Optional personal overage is offered to individuals who are not automatically eligible for workers' compensation benefits.

### This includes:

- Employers and business owners.
- Proprietors and partnerships in a business with workers.

 Directors of a corporation or members of a society, board, authority, commission or foundation.

You can receive compensation benefits if you choose to purchase Personal Coverage. The benefits of personal coverage include:

- Entitlement to workers' compensation benefits in the event of a workplace injury. (e.g. protection against loss of employment income, medical and rehabilitation services.)
- Lawsuit protection from other parties covered by Alberta workers' compensation insurance in the event of a workplace accident for:
  - Directors of a corporation or members of a society, board, authority, commission or foundation.
  - Proprietors or partnerships who do not employ workers and are not considered workers of a principal under the Workers' Compensation Act.

Although personal coverage is optional in Alberta, principals may require it as a condition of contract.

Personal coverage will automatically renew January 1 of the next year at the same amount. If you no longer require personal coverage it is important to contact WCB and terminate your coverage.

You can revise or terminate your personal coverage at any time. Changes or amendments will affect your account on the day you contact our office as they cannot be back-dated.

If you are injured on the job and your claim is accepted, you will need to verify your self-employment earnings through records such as T4 slips, tax returns, income and expense statements or payroll stubs.

If your records do not match the amount of coverage purchased, compensation benefits will be based on the lesser of the amount of coverage purchased, guaranteed coverage amount (if applicable) or verified earnings (minimum \$22,200 to maximum \$98,700 for 2016).

WCB can terminate your personal coverage due to non-payment of premiums. Even if payment is made in full on your overdue account, you must call to reactivate your personal coverage account—it does not re-open automatically.

### **Penalties**

Late filing panelty (40

On or before the last day of February each year, employers are required to report the insurable earnings paid to all workers for the last calendar year.

This also includes an estimate of insurable earnings they expect to pay all workers for the current year. This information is required for each business the employer operates.

Filing your annual return helps ensure you have the correct WCB coverage and accurate premiums. It also informs us of any changes required on your account and whether your business still needs coverage.

An annual return received after the deadline is subject to a LFP. The penalty is 10 per cent of the net premium resulting from the previous year's adjustment and the current year's premium plus daily interest from the reporting deadline to the date we receive the information.

Late redistration penalty Lap

An employer is required to establish an account within 15 days after hiring workers, when operating in an industry to which the Workers' Compensation Act applies. An employer who registers after this grace period is subject to a LRP. The penalty is an amount equal to 10 per cent of the employer's premium, plus daily interest, for each year.

Overdue charges

When an employer's premium payment is overdue 30 or more days after the due date, WCB will add monthly interest to an employer's account. Overdue charges are calculated on each outstanding transaction from its original date, compounding monthly.

Overdue charges are shown as one total for all transactions past due. The interest rate is set annually at Prime + 8 per cent.

Panalties for under-reporting earnings

Check your workers' insurable earnings estimate throughout the year. If your estimate is not accurate, you must revise it before December 31 of the current year to avoid penalties. While we provide you with a 50 per cent margin of error, penalties are assessed on earnings that exceed this margin.

This means that if your actual insurable earnings exceed 150 per cent of your estimate (as of December 31st), a 10 per cent penalty plus interest (based on the bank rate as of January 1, 2015 which carries throughout the year) is levied on the premium portion that exceeds 150 per cent of the estimate.

No penalties or interest apply if your actual is less than your estimate. Revisions to your insurable earnings can be made through myWCB online services.

Your 2015 estimate is originally \$85,000. On October 3, 2015 you revise it to \$100,000. No further revisions occur and on February 15, 2016, you report 2015 actual insurable earnings of \$160,000. The portion of your earnings that exceed your margin of error:

The maximum reportable insurable earnings without penalty or interest is \$100,000 (your last estimate received by us up to December 31, 2015) X 150% = \$150,000)

The excess amount is therefore \$160,000 (actual earnings reported) - \$150,000 (maximum allowed before penalty applies) = \$10,000

Penalty = [\$10,000 x (your premium rate) x 10 per cent] + interest (from Jan 1/16 to Feb 15/16).

On your next invoice, you will be assessed for the earnings that exceed your estimate [(\$60,000) x (your premium rate)], plus the above penalty and interest, with the total being due in one payment.

## **Using our Online Services**

and register for a User ID to access the Visit following Online Services:

- File your annual return (file your payroll (insurable earnings) information every year)
- Maintain your account (revise estimates, update business information, close account)
- Obtain a clearance certificate (confirm subcontractor coverage)
- Obtain your account statistics/industry statistics
- Report an injury online
- Pay your WCB-Alberta premiums (pay premiums online)
- Access return-to-work information from your worker's physician (pink copies)

For more detailed information on these online services visit WCB also provides detailed fact sheets on all WCB procedures. To find Employer fact sheets, click

To obtain information about safety regulations, please visit the



contactcentre@wcb.ab.ca





### **AGENDA REPORT**

SUBJECT: Tech Memo No. 11

PREPARED BY: John Van Doesburg, Administrator PRESENTED BY: John Van Doesburg, Administrator

DATE: June 19, 2016

### **PURPOSE:**

To is to detail the proposed acquisition strategy the Commission will follow during the system design, tendering, and construction. . Specifically, the tech memo addresses the acquisition strategy, pre-selection of major equipment and contractor pre-qualification.

### BACKGROUND:

To improve the design, tendering and construction process the acquisition strategy will right administration and engineering on the process for acquiring services for the regional wastewater line.

### **ISSUE ANALYSIS:**

Tech Memo 11- Provides a process for land acquisition, contractor pre-qualification and prequalification of equipment.

### FINANCIAL IMPLICATIONS: N/A

**LEGISLATIVE AUTHORITY**: MGA provides the power to the Commission the approval of process for Acquisition.

### STRATEGIC/BUSINESS PLAN REFERENCE: N/A

### **ALTERNATIVES:**

The alternative is open process for tendering and contractors, which has resulted in a number of major issues when used by other commission in major projects.

ATTACHMENTS: Tech Memo 11- Acquisition Strategy

### **ACTION/RECOMMENDATION:**

THAT Commission approve Tech Memo 11 Acquisition Strategy and direct staff to flooow the process outlined in the Tech Memo



# FINAL Technical Memorandum No. 11 Acquisition Strategy

To: Matt Goudy, P.Eng., ENV SP., From: Joel Sawatzky, P.Eng., ENV SP.

John Van Doesburg

Todd Simenson, P.Eng., ENV SP.

NRDRWWSC Stantec Consulting Ltd. 5432 - 56 Avenue 1100 4900 50th Street Lacombe, AB T4L 1E9 Red Deer, AB T4N 1X7

File: 113929319-07 Date: June 20, 2016

Reference: North Red Deer Regional Wastewater Services Commission:

Technical Memo 11 - Acquisition Strategy

### 11.1 INTRODUCTION / PURPOSE

The North Red Deer Regional Wastewater Services Commission (NRDRWWSC) is planning to construct a new regional wastewater pipeline from Lacombe to Red Deer with service to Lacombe, Lacombe County, and Blackfalds. The North Red Deer Regional Wastewater System will consist of existing wastewater collections systems, regional lift stations in Lacombe and Blackfalds, an odour management facility, and a forcemain connecting the lift stations to the Red Deer wastewater treatment plant.

The purpose of this memo is to detail the proposed acquisition strategy the Commission will follow during the system design, tendering and construction. Specifically, this memo will address the land acquisition strategy, pre-selection of major equipment and contractor pre-qualification.

### 11.2 LAND ACQUISITION

Stantec's experience with regional pipeline systems has shown land acquisition to be a sensitive and time consuming process. The Commission has engaged Land Solutions through Stantec to complete the land access permission and ultimate land acquisition for this project.

Stantec recommends to generally follow the process developed for the South Red Deer Regional Wastewater System (SRDRWS). In addition, land access permissions will be required for the field investigations (environmental, geotechnical, topo survey and utility locates) in the spring and summer of 2016.

- 1. Create a project information sheet, individual ownership plans (IOP's) and a land access agreement for use by the Land Agent at initial landowner contact;
- 2. Initial contact with the landowners to obtain land access permissions for the field investigations (environmental, geotechnical, topo survey and utility locates);
- Hold a landowner information session to present the general project components and representatives from the Commission Technical Committee, Stantec, and Land Solutions will be available for questions;

### Design with community in mind



June 20, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 2 of 5

### Reference: North Red Deer Regional Wastewater Services Commission – Acquisition Strategy

- 4. Compile landowner concerns and special requests to finalize the preferred alignment;
- 5. Second and subsequent contact with the landowners to commence the acquisition of the required Right-Of-Way (ROW) and Temporary Work Space (TWS) lands.

Supporting documents have been initiated to develop background justification for the land acquisition process. These documents are as follows:

- A cost zone map has been prepared and identifies 4 zones as well as the municipal boundaries and future Intermunicipal Development Plan (IDP) boundaries.
- A land acquisition costing spreadsheet has been developed to identify the costs associated for each zone for ROW, TWS and crop damage costs.
- Various appraisals have been identified and are in the process of being completed along the alignment to support initial cost offer.
- A 'Red Light Green Light' map has been created to track the land access permission and a similar map will be created to track the acquisition.

Land Solutions has completed the initial landowner contact and all landowners along the alignment were contacted by June 10, 2016. The landowner information session was held on June 1, 2016 and although there was only moderate attendance from landowners, the people who did attend were, in general, supporters of the project. The next steps in the land acquisition process will be for the Commission, Land Solutions and Stantec to review the landowner comments and concerns and develop a plan for the second meeting with the landowners which is scheduled to take place in July. Any additional concerns or requests that arise from the second meeting with landowners will be forwarded to the Commission and Stantec for review.

### 11.3 PRE-SELECTION OF MAJOR EQUIPMENT

### 11.3.1 Supplier Pre-Selection for Major Equipment

The pre-selection of major equipment during the design of the project prior to construction can provide many benefits as noted below. Equipment not pre-selected during design can lead to inconsistency of equipment at the various sites and also inconsistency between the North and South legs of the system. Consistency is important for many reasons, some of which include operator familiarity, efficient service contracts and spare part stocking. Pre-selection can also aid in accelerating the construction schedule, prevent overly large inflation and prevent contractors from quoting substandard or inadequate equipment in their bids.



June 20, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 3 of 5

### Reference: North Red Deer Regional Wastewater Services Commission - Acquisition Strategy

The process to pre-select the equipment would be to develop and send out a Request For Qualification (RFQ) document. The RFQ would contain a performance specification and the evaluation would be based on weighting the following criteria:

- Completeness of the equipment proposed to meet the Commission's Objectives;
- Meets requirements of the design basis which varies based on equipment;
- Price quote for 2016 and inflation for future years;
- Proposed delivery time from order date;
- Validity period of the prosed firm quote;
- Warranties provided, spare parts and services during start up and commissioning;
- Operational support and service contracts; and
- References to similar wastewater applications.

Drawing on experience from other projects including the SRDRWS, it is recommended that the RFQ be sent to a minimum of two suppliers for the following major equipment:

- 1. Pumps
- 2. Generators
- 3. Odour control biofilters
- 4. Odour control chemical injection systems
- 5. Packaged automated septage receiving station
- 6. MCC's
- 7. VFD's

In addition to the major equipment listed above being pre-selected through an RFQ process. The manufacturers for the equipment noted below will be hard specified in the tender documents.

- 8. Combination air vacuum valves (CAV's)
- 9. Plug valves
- 10. Check valves
- 11. Flow meters

### Advantages:

- 1. Consistency through the NRDRWWSC System and possibly throughout the greater Central Alberta Regional Wastewater System;
- 2. Potential for schedule acceleration;
- 3. Potential for upfront cost savings and future savings on a multi-year project;
- 4. Reduced risk of contractors carrying substandard equipment in their bid.

### Disadvantages:

1. Risk of further uncertainty of the economy and potentially missing out on cost savings by entering into a cost agreement early in the project.

#### Design with community in mind



June 20, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 4 of 5

Reference: North Red Deer Regional Wastewater Services Commission – Acquisition Strategy

### 11.3.2 Material / Equipment Procurement by Owner

In the current economic environment prices for some materials and equipment are lower than they once were. Two examples of this reduced pricing are HDPE and PVC pipe, which is correlated to the price of oil as they are petroleum based products. Other equipment such as pumps and valves may not see the same reduction in pricing as they are not directly connected to the oil industry and some are from the Unites States which may have even increased the pricing over the last couple years.

The advantage of early procurement of the materials or equipment would be to take advantage of the current economic times and the likelihood of favorable pricing. It is unknown how long the current market conditions will remain favorable for the Owner, however consideration should be given to the project schedule and anticipated tender dates.

The primary drawback of having the Owner procure the materials or equipment is the requirement for a novation agreement when a contractor is selected to perform the work. Furthermore, any unknowns or uncertainties with the quality or storage of the materials or equipment will lead to increased risk pricing from the contractor and possible disputes during commissioning and final acceptance.

For the reasons noted above, the risks associated with the drawbacks likely outweigh the benefits. Should the Owner not procure the materials or equipment for the project, the Contractor will be required to do so as part of the tender specification.

### 11.4 CONTRACTOR PREQUALIFICATION

The pre-qualification of contractors prior to construction can provide many benefits to improve the execution of the construction phase of the project. Contractors with proven experience and results are more likely to achieve success on this project, and on the contrary, contractors with minimal experience and knowledge of specific project requirements, such as handling large sizes of HDPE pipe, are more likely to experience challenges throughout the construction. These challenges may result in schedule delays and cost overruns. Stantec observed that during the South Leg construction, approximately 6 out of 10 contracts that were not pre-qualified resulted in contractors being let go due to insufficient quality of work, unqualified workers, and lagging construction timelines. This resulted in significant project delays and in some cases increased cost.

### Advantages:

- 1. Minimizing inexperienced contractors from bidding projects that they are not capable to complete;
- 2. Improved quality of work;
- 3. Streamlined tender process;
- 4. Reduced risk of schedule overruns;
- 5. Reduced risk of cost overruns;



June 20, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 5 of 5

Reference: North Red Deer Regional Wastewater Services Commission – Acquisition Strategy

Disadvantages:

1. Risk of limiting bid competition and subsequent risk of increased tender prices.

Due to the factors listed above, it is recommended to prequalify contractors for all contracts required to complete the NRDRWWSC project - pipeline, lift stations and the odour management facility.

The process to pre-qualify contractors would be to develop and send out a Request For Qualification (RFQ) document. The RFQ would contain a performance specification and the evaluation would be based on the following weighted criteria:

CRITERIA	WEIGHTING
a) Contractor Experience	15 Points
b) Contractor References	10 Points
c) Superintendent Experience	15 Points
d) Superintendent References	10 Points
Total	50 Points

Other considerations will include disqualifying contractors if they are in a current legal action with any of the member municipalities. It is recommended to prequalify the top 3 contractors for pipeline contracts and the top 3 contractors for Lift Stations/OMF contracts.

### 11.5 NEXT STEPS

Steps forward include the Technical Committee and Commission reviewing and approving this memo to provide Stantec approval to proceed with the pre-selection of major equipment and contractor pregualification as noted above for this project.

Stantec Consulting Ltd.

oel Sawatzky, P. Eng., ENV. SP. Assistant Project Manager

Phone: 403-341-3320

Joel.sawatzky@stantec.com

Todd Simenson, P.Eng., ENV. SP.

Project Manager

Phone: 403-341-3320

Todd.simenson@stantec.com

### Attachments:

- NRDRWWSC Project Information Sheet
- Cost Zone Maps
- Estimated Land Acquisition Cost Summary

- Land Parcel Index Summary
- 'Red Light Green Light' Map Example for Land Access Permissions

c. P. Weran, K. Boras, S. Weninger, S. Larson, C. Gillrie

### Design with community in mind



### North Red Deer Regional Wastewater Project: Fact Sheet

### City of Lacombe to City of Red Deer WWTP

May 2016

## The North Red Deer Regional Wastewater Services Commission (NRDRWWSC)

The North Red Deer Regional Wastewater Services Commission (NRDRWWSC) is comprised of the municipalities of the City of Lacombe, Town of Blackfalds, and Lacombe County.

Formed in 2008, the objective of the NRDRWWSC is to design, construct, and operate a regional wastewater transmission system which will transmit wastewater from the municipalities to the City of Red Deer Wastewater Treatment Plant and discharge into the Red Deer River.

### **NRDRWWSC Project Overview**

The North Red Deer Regional Wastewater System is the second component of the Central Alberta Regional Wastewater (CARWW) System to reach construction.

The CARWW System was first developed at a conceptual level in 2006 and will consist of 3 wastewater transmission legs extending to the south, west, and north of the City of Red Deer using the City of Red Deer Wastewater Treatment Plant as a regional wastewater treatment plant. The objectives of the CARWW System will be to eliminate municipal wastewater discharges into the Red Deer River downstream of Dickson Dam and upstream of the City of Red Deer Water Treatment Plant Intake, as well as to cost effectively deal with the central Alberta communities expanding wastewater treatment needs.

Extending from the City of Lacombe to the City of Red Deer, the North Red Deer Regional Wastewater System will be the north component of the overall CARWW System.

## The following major components will form the North Red Deer Regional Wastewater System:

- ~ 25 km of wastewater forcemain pipeline (Fused jointless pipe, closed system to atmosphere)
- Pipe sizes ranging from 700mm to 900mm
- Two new wastewater pumping stations
- Odour Management Facility in the City of Red Deer
- Odour management strategies will be implemented at the lift stations and air release points on the pipeline prior to air discharge to atmosphere

#### **NRDRWWSC Overview**

The NRDRWWSC Project will include 2 phases. Phase 1 will be from Blackfalds to Red Deer and Phase 2 will be from Lacombe to Blackfalds.

Phase 1 will consist of a regional lift station located at the Blackfalds Lagoon Facility, approximately 8 km of 700mm diameter piping, an odour management facility in Red Deer, and other associated infrastructure and connections; scheduled to be constructed in 2017/2018.

Phase 2 will consist of a regional lift station located at the Lacombe Lagoon Facility, approximately 17 km of 700mm diameter piping, and other associated infrastructure and connections; scheduled to be constructed in 2018/2019.

### **Schedule**

Construction on the Phase 1 section (Blackfalds to Red Deer) is scheduled to start as early as January 2017, with a duration of approximately 12 – 18 months.

Construction on the Phase 2 section (Lacombe to Blackfalds) is scheduled to start mid to late 2017, with a duration of approximately 12-18 months.

### **Landowner Information Session**

A Landowner Information Session will be held on **Wednesday June 1, 2016 from 4:00 – 7:00 PM at the Abbey Center (Program Room) in Blackfalds** located at 4500 Womacks Rd, Blackfalds, AB.

Members of the North Red Deer Regional Wastewater Services Commission, Land Solutions and Stantec Consulting will be in attendance to explain the project in more detail and answer any questions you may have.

### **Contacts**

### **Land Solutions (Land Agent)**

• Shawn Howard – 403-512-1159

### **NRDRWWSC (Owner)**

- John Van Doesburg 403-391-0270
- Matthew Goudy 403-782-1254

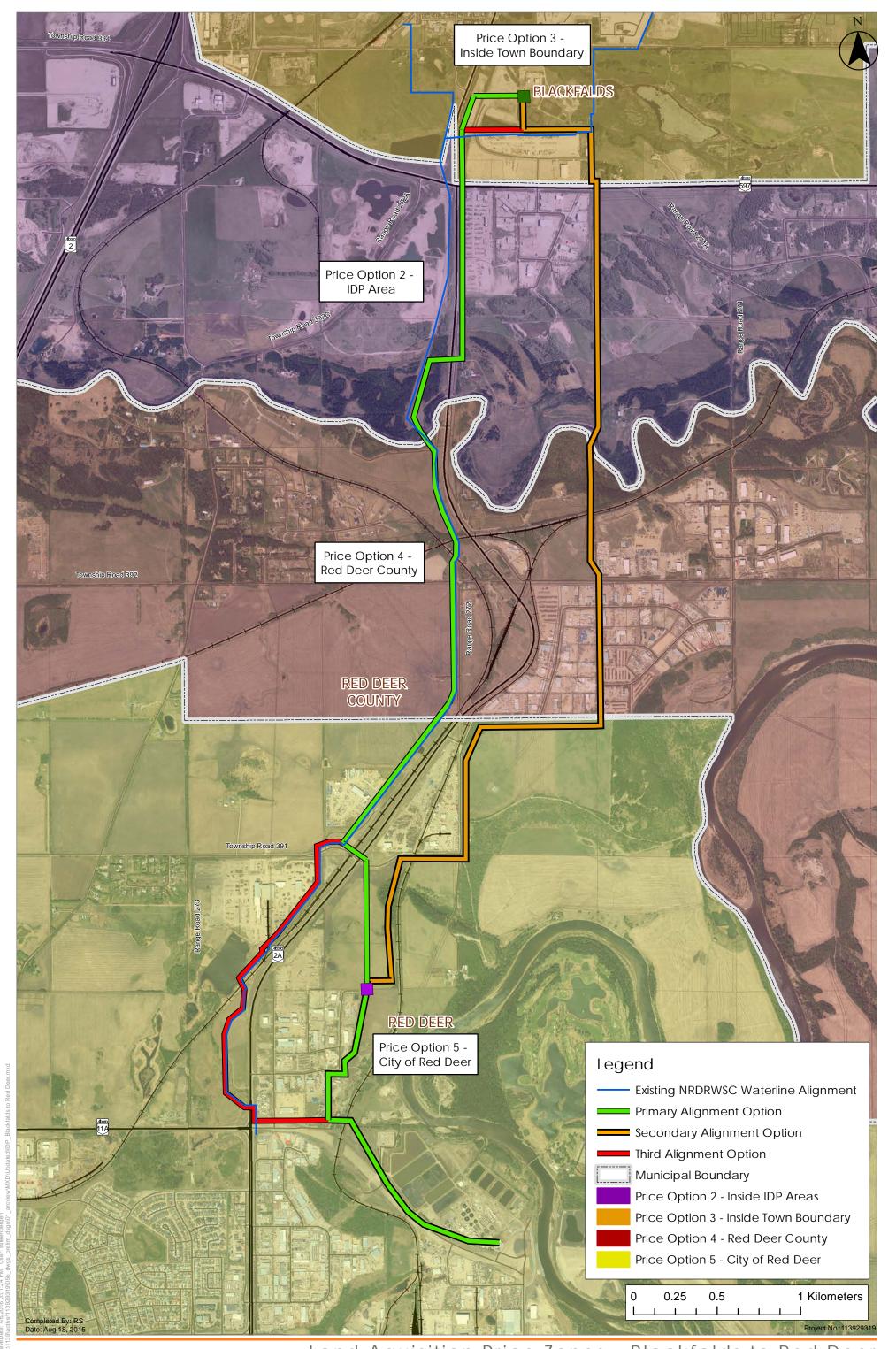
### Stantec (Engineer)

- Cody Gillrie 403-356-3406
- Joel Sawatzky 403-356-3397

### **Unknown (Contractor)**

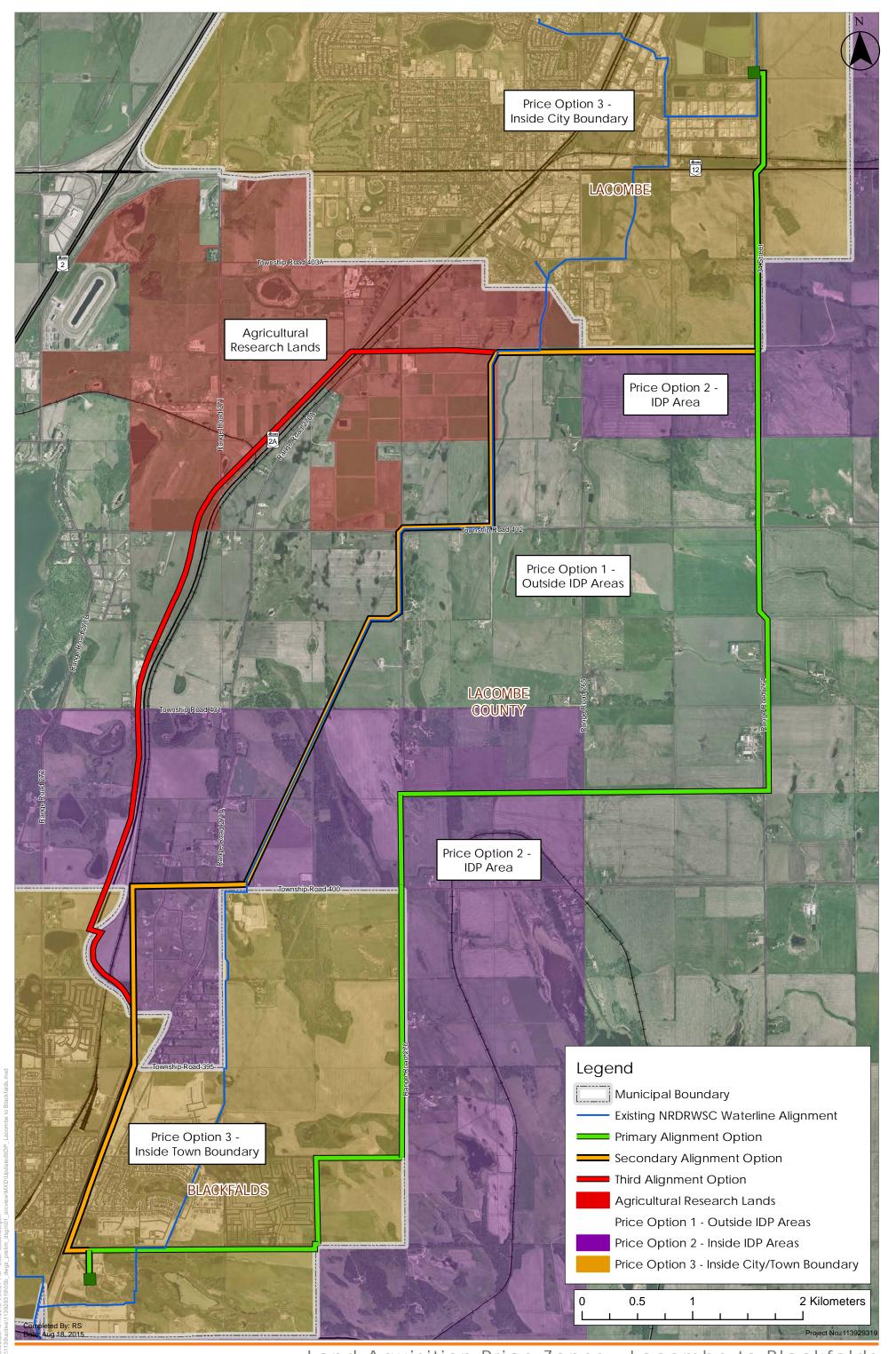
TBD







Land Aquisition Price Zones - Blackfalds to Red Deer





Land Aquisition Price Zones - Lacombe to Blackfalds

## NRD Land Cost Estimate (2yrs)

Permanent ROW Required (Approx.)	96.4 acres	0.39 km2
Temp Work Space Required (Approx.)	128.5 acres	0.52 km2
Crop Loss Compensation	224.9 acres	0.91 km2

2015 Estimate	Cost/acre	width (m)	area (km2)	area (acres)	cost
Permanent ROW - Approx.					
Average \$/acre	20000	15	0.3945	97.5	\$1,949,658
Temporary Work Space	6000	20	0.526	130.0	\$779,863
Crop Loss	600	35	0.812	200.6	\$120,390
				Avg Total	\$2 849 911

Conversion from m2 to acre 0.000247104

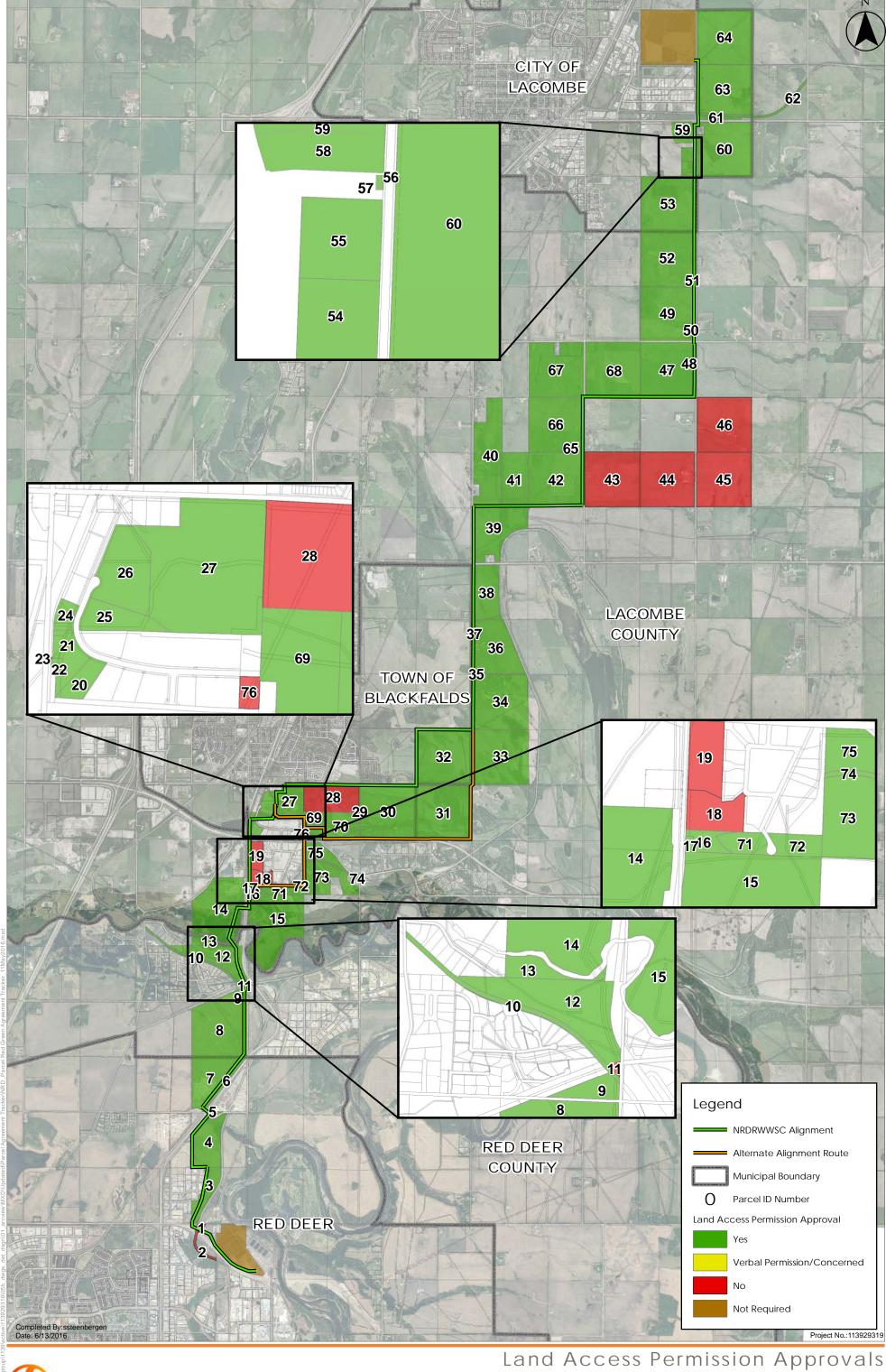
Proposed Costs ± 15% (modify this table as required) - Average Costs Only, Actual Will Vary

Land Location		Permanent ROW Cost/Acre	Temp Work Space Cost/Acre	Crop Loss Compensation Cost /Acre
Pricing Zone 1 - Outside all Planning Areas		\$7,000	\$5,000	\$1,000
Pricing Zone 2 - Inside IDP Area		\$10,000	\$5,000	\$1,000
Pricing Zone 3 - Inside Blackfalds a	nd Lacombe Limit:	\$20,000	\$5,000	\$1,000
Pricing Zone 4 - Blindman River to	CRD Boundary	\$30,000	\$5,000	\$1,000
Pricing Zone 5 - Inside CRD Limits		\$50,000	\$5,000	\$1,000
AVERAGE		\$23,400	\$5,000	\$1,000

### **SUMMARY**

	Permanent ROW Required (acre)			Tem			
		Cost For Land			<b>Cost For Land</b>	Crop Loss	
Land Location	Length (m)	Area (acre)	Required (\$)	Length (m)	Area (acre)	Required (\$)	Compensation
Pricing Zone 1 - Outside all							
Planning Areas	4,828.00	17.90	\$125,267	4,828.00	23.86	\$119,302	\$41,756
Pricing Zone 2 - Inside IDP Area	4,986.00	18.48	\$184,809	4,986.00	24.64	\$123,206	\$43,122
Pricing Zone 3 - Inside Blackfalds							
and Lacombe Limits	9,150.00	33.92	\$678,302	9,150.00	45.22	\$226,101	\$79,135
Pricing Zone 4 - Blindman River to							
CRD Boundary	1,718.00	6.37	\$191,036	1,718.00	8.49	\$42,453	\$14,858
Pricing Zone 5 - Inside CRD Limits	3,235.00	11.99	\$599,537	3,235.00	15.99	\$79,938	\$27,978
TOTALS	23,917.00	88.65	\$1,778,952	23,917.00	118.20	\$591,000	\$206,850
AVERAGES			\$20,067			\$5,000	\$1,000

TOTAL COST	\$2,576,801
Proportioned for 26 Km Length	\$2,801,222





ID	Legal Land Description	Short Legal	Land Title	LINC	Landowner	Approval (Yes/No)
1	NW 33-38-27-4	9123479;RLY;38	922 040 316	0021 530 986	Canadian National Railway Company	
2	NW 33-38-27-4	1813MC;RLY;38	912 305 518	0020 438 693	Canadian National Railway Company	
3	SE 3-39-27-4		022 023 973 +8	0029 177 995	Chiles Development Corporation Ltd.	Yes
4	NE 3-39-27-4	0627204;1;1	072 201 644	0032 057 861	Melcor Developments Ltd.	Yes
5	NE 3-39-27-4	9820250;B	132 302 956	0035 825 596	Her Majesty the Queen in Right of Alberta as Represented by Minister of Transportation	Yes
6	SE 10-39-27-4	CE1;RLY;39	842 200 937 C	0016 347 122	Calgary and Edmonton Railway Company	Yes
7	SE 10-39-27-4		062 183 166	0027 345 314	Precision Drilling Corporation	Yes
8	NE 10-39-27-4		972 219 278	0014 336 895	D. Hazlett Farms Ltd.	Yes
9	SE 15-39-27-4		092 461 725	0010 425 669	Reinhart Equipment Rentals Ltd.	Yes
10	SE 15-39-27-4	CE1;RLY;39	842 200 937 C	0016 347 122	Calgary and Edmonton Railway Company	Yes
11	SE 15-39-27-4		110B37	0022 408 264	The Canadian Northern Western Railway Company	
12	SE 15-39-27-4	0520810;6;1	152 199 283	0030 935 101	115157 Alberta Ltd.	Yes
13	NE 15-39-27-4		152 199 250	0024 289 688	115157 Alberta Ltd.	Yes
14	NE/SE 15-39-27- 4	9320199;OT	932 023 872	0024 289 696	Her Majesty the Queen in Right of Alberta as Represented by the Minister of Transportation and Utilities or Property Services Branch	Yes
15	NW 14-39-27-4	1421975;1;1	142 116 963	0036 130 839	William Roddem Brannen and Kathleen Marie Brannen	Yes
16	SW 23-39-27-4	1620927;1;13	162 067 558	0037 096 740	Ron G Campbell and Laureen Campbell	Yes
17	SW 23-39-27-4	8720627;OT	872 071 212	0010 616 191	The Town of Blackfalds	Yes
18	SW 23-39-27-4	9620559;1;2	112 297 264	0026 652 503	1604904 Alberta Ltd.	No
19	SW 23-39-27-4	8220927; ;1	822 070 114	0011 571 578	524645 Alberta Inc.	Yes
20	NW 23-39-27-4	0825372;4;4	122 361 025 +5	0033 322 686	Durum Properties GP Inc.	Yes
21	NW 23-39-27-4	1521017;4;21	152 065 041 +3	0036 567 411	Durum Properties GP Inc.	Yes
22	NW 23-39-27-4	8720454;OT	872 066 768	0010 610 913	The Town of Blackfalds	Yes
23	NW 23-39-27-4	8166ET;RW;39	152 065 041 +4	0036 567 379	ATCO Gas and Pipelines Ltd.	
24	NW 23-39-27-4	1521017;4;20	152 065 041 +2	0036 567 403	Durum Properties GP Inc.	Yes
25	NW 23-39-27-4	0825372;4;10MR	082 245 387 +4	0033 322 595	The Town of Blackfalds	Yes
26	NW 23-39-27-4	0825372;4;9	122 361 025 +10	0033 322 736	Durum Properties GP Inc.	Yes
27	NW 23-39-27-4	7620836; ;F	762 078 804	0014 763 916	The Town of Blackfalds	Yes
28	NE 23-39-27-4		142 350 359	0020 235 249	Creation Communities Inc.	No
30	OT 39-27-4 NW 24-39-27-4		102 138 096 +2 91G257	0034 305 236 0012 530 870	The Town of Blackfalds William Roddem Brannen and Kathleen Marie Brannen	Yes Yes
31	NE 24-39-27-4	0320195;2;1	032 014 879 +1	0029 747 508	Arnold Clifford Soper and Mary Cathrine Soper	Yes
32	SE 25-39-27-4		982 198 383	0013 642 384	William Roddem Brannen and Kathleen Marie Brannen	Yes
33	SW 30-39-26-4		119D219A	0021 644 489	John Thomas Brannen and Beverly Jeanne Brannen	Yes

ID	Legal Land Description	Short Legal	Land Title	LINC	Landowner	Approval (Yes/No)
34	NW 30-39-26-4		119D219	0018 082 511	John Thomas Brannen and Beverly Jeanne Brannen	Yes
35	SW 31-39-26-4		215D47	0023 078 793	Her Majesty the Queen in Right of Alberta as Represented by the Minister of Public Works	Yes
36	SW 31-39-26-4		092 247 256	0022 094 791	Lorne Zelinka and Thomas Zelinka	Yes
37	SW 31-39-26-4		002 109 732	0023 078 801	Lorne Zelinka	Yes
38	NW 31-39-26-4		022 034 328	0021 704 333	Kenneth R Long and Theodore J Long	Yes
39	SW 6-40-26-4		142 150 588	0035 134 717	Kenneth R Long and Theodore J Long	Yes
40	NW 6-40-26-4	0840056;1;10	082 528 475	0033 636 630	Byron Douglas Graves and Christine Renee Graves	Yes
41	NW 6-40-26-4		972 179 098	0026 055 013	Byron Douglas Graves and Christine Renee Graves	Yes
42	NE 6-40-26-4		052 443 544	0015 423 015	Byron Douglas Graves and Christine Renee Graves	Yes
43	NW 5-40-26-4		152 334 336 +1	0036 920 411	Boxrose Farms Ltd.	No
44	NE 5-40-26-4		152 140 963	0033 604 836	Boxrose Farms Ltd.	No
45	NW 4-40-26-4		852 174 114	0017 303 538	W 5 Holdings Ltd.	
46	SW 9-40-24-4		082 507 420 +2	0033 604 786	Randy Cappis	
47	NE 8-40-26-4		152 143 518	0036 073 245	Scholing's Produce Inc.	Yes
48	NE 8-40-26-4	1421085;1;1	142 067 015	0036 073 253	Karel J Van Giersbergen and Margaretha L Van Giersbergen	Yes
49	SE 17-40-26-4		122 351 929 +1	0035 428 986	Shirley Ann Law	Yes
50	SE 17-40-26-4	1224263;1;1	132 088 671	0035 428 994	Jayson J Huyder and Jennifer Huyder	Yes
51	NE 17-40-26-4		092 231 795	0013 807 599	1470356 Alberta Ltd.	Yes
52	NE 17-40-26-4		102 274 938	0013 807 607	Dean Edward Otto and Lisa Rochelle Otto	Yes
53	SE 20-40-26-4		962 095 550	0023 068 679	Alberta Veenema and Trudy Veenema	Yes
54	NE 20-40-26-4	9523644;1;2	952 231 914	0026 479 006	N Ralph Flewelling and Leeanne T Flewelling	Yes
55	NE 20-40-26-4	9523644;1;1	052 013 983	0026 478 990	Howard Smith and Carrol Smith	Yes
56	NE 20-40-26-4	1521430;3;56PUL	152 089 424 +1	0036 603 884	The City of Lacombe	Yes
57	NE 20-40-26-4	1521430;3;55	152 097 460 +15	0036 604 072	1811789 Alberta Ltd.	Yes
58	NE 20-40-26-4		152 097 462	0036 603 868	1811789 Alberta Ltd.	Yes
59	NE 20-40-26-4	152 1430;1;2	152 089 424	0036 603 876	Pentagon Farm Centre Ltd.	Yes
60	NW 21-40-26-4		962 008 663 +2	0026 619 726	Chad Kanngiesser and Heather Kanngiesser	Yes
61	SW 28-40-26-4	9823616;1;1	072 114 734 +1	0032 276 297	Ben Neumann and E Maridel Neumann	Yes
62	SW 28-40-26-4	CE11;RLY;40	942 104 137 +1	0025 989 625	Calgary and Edmonton Railway Company	Yes
63	SW 28-40-26-4	9823616;1;2	072 329 180	0027 560 086	CLT Contracting Ltd.	Yes
64	NW 28-40-26-4		962 008 663 +1	0013 716 386	Chad Kanngiesser and Heather Kanngiesser	Yes
65	SE 7-40-26-4	9423119;1;1	942 308 961	0026 176 454	David Alan Robbins and Penny Jo Robbins	Yes

ID	Legal Land Description	Short Legal	Land Title	LINC	Landowner	Approval (Yes/No)
66	SE 7-40-26-4		952 083 368	0026 176 446	Gordon W Graves and Nancy J Graves	Yes
67	NE 7-40-26-4		092 053 001 +1	0033 789 538	Christopher M Broadbent and Linda M Broadbent	Yes
68	NW 8-40-26-4		902 119 783	0013 269 071	Daniel Ronald Edward Wright	Yes
69	NE 23-39-27-4	0023207;2;1	002 238 038	0028 504 802	Herbert L Moon and Laurie M Moon	Yes
70	NE 23-39-27-4		022 317 439	0028 504 794	Gerry Seibel	Yes
71	SW 23-39-27-4	1620927;1;14PUL	162 067 558 +1	0037 096 758	Lacombe County	Yes
72	SW 23-39-27-4	1620927;1;15	162 067 558 +2	0037 096 765	Ron G Campbell & Laureen Campbell	Yes
73	SE 23-39-27-4		102 015 983 +1	0034 195 231	Charles Edward Kessler & Jacquelynn G Kessler	Yes
74	SE 23-39-27-4	1971CL;RLY;39	062 283 079 +1	0020 099 610	Charles Edward Kessler & Jacquelynn G Kessler	Yes
75	SE 23-39-27-4		062 142 140	0025 879 065	Chung Woo Lee	Yes



### **AGENDA REPORT**

SUBJECT: Tech Memo No. 5 – Equalization Storage

PREPARED BY: John Van Doesburg, Administrator PRESENTED BY: John Van Doesburg, Administrator

**DATE:** June 19,2016

### **PURPOSE:**

To The tech memo is to detail equalized storage strategy for the wastewater system in case there is an interruption in service or a major weather event.

### BACKGROUND:

To improve the functioning of the regional wastewater system by addressing any interruption in service due to pump failure, break in the line emergency repairs or interruption in service at the Red Deer Wastewater Plant

**ISSUE ANALYSIS:**- Issue is the method of addressing the wastewater issues in each of the members communities and City of Red Deer.

Address the issue of turning the equalization sites to the Commission for a nominal cost. The Province of Alberta will not pay for land that is municipally owned.

**FINANCIAL IMPLICATIONS**: There are financial costs in adapting up the equalization ponds for the commission use.

**LEGISLATIVE AUTHORITY: MGA Act** 

### STRATEGIC/BUSINESS PLAN REFERENCE:

The reference is Tech Memo- 5

### **ALTERNATIVES:**

Alternatives for each community is contained in the Tech memo

ATTACHMENTS: Tech memo - 5

### **ACTION/RECOMMENDATION:**

That the Commission board of directors approve Tech Memo 5 and direct the staff to contact the member communities for the transfer of the lands for the equalization ponds and construction of the appropriate structure for the use as a equalization pond.



# FINAL Technical Memorandum No. 5 Equalization Storage

To: Matt Goudy, P.Eng., ENV SP., From: Joel Sawatzky, P.Eng., ENV SP.

John Van Doesburg Todd Simenson, P.Eng., ENV SP.

NRDRWWSC Stantec Consulting Ltd. 5432 - 56 Avenue 1100 4900 50th Street Lacombe, AB T4L 1E9 Red Deer, AB T4N 1X7

File: 113929319-07 Date: May 16, 2016

Reference: North Red Deer Regional Wastewater Services Commission:

**Technical Memo 5: Equalization Storage** 

# 5.1 <u>INTRODUCTION / PURPOSE</u>

The North Red Deer Regional Wastewater Services Commission (NRDRWWSC) is planning to construct a new regional wastewater pipeline from Lacombe to Red Deer with service to Lacombe, Lacombe County, and Blackfalds. The North Red Deer Regional Wastewater System will consist of existing wastewater collections systems, a regional lift station in Lacombe and Blackfalds, a forcemain connecting to the lift stations and the Red Deer wastewater treatment plant, and equalization storage ponds.

The purpose of this memo is to detail the proposed equalization storage strategy for the system should service be interrupted along the line. The interruption may be caused by a break in the line, pump failure, emergency repairs or an emergency interruption at the City of Red Deer Wastewater Treatment Plant.

# 5.2 STORAGE CAPACITY

There is no quantifiable industry standard for the amount of equalization storage to have readily available in the case of an emergency; however there are factors that we have considered. The two primary factors around the volume of equalization storage is (1) Experience from past projects, namely the South Red Deer Regional Wastewater Commission (SRDRWC) project, and (2) Evaluating the estimated level of risk versus the cost to construct, connect and maintain the storage cells.

For the SRD project, it was mandated by Alberta Environment that equalization storage facilities be provided at each of the contributing communities. The storage facilities are intended to provide temporary storage in the event of a major mechanical failure at the community's pumping facility or some point downstream in the transmission system. With the redundancy proposed for mechanical elements of the system, failures of this kind should be rare, but they must be provided for.

In an effort to keep costs low, and to minimize public objection, the design intent is to use existing facilities whenever practical. The minimum required storage capacity at each contributory location has been suggested to equal to three (3) days wastewater volume during the peak seven day period of the 25 year design horizon. This volume will provide adequate storage to allow time for

#### Design with community in mind



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 2 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

repair of major equipment failures. In general, each facility will be designed to minimize maintenance and cleaning costs, while providing a system that is safe and as acceptable to the public as practical within the allowable project budget.

Another consideration with the equalization storage will be the existing condition of the cell liners and the grading of the cells to provide full drainage back to the regional lift stations. The Commission will need to work closely with the municipalities to verify the condition of the existing lagoons to be used for equalization storage to verify the level of effort required to provide reliable long term equalization storage.

# 5.3 CITY OF LACOMBE

# 5.3.1 Storage Volume

For the City of Lacombe, the 3 day equalization storage volume (peak seven day period of the 25 year design horizon) represents approximately 40,700 m³ of storage capacity. The City of Lacombe presently operates a lagoon facility as the primary means of treating its wastewater. The total lagoon volume is approximately 958,420 m³. There are 5 lagoon cells in close proximity to the current lagoon inlet and the proposed regional lift station site, which cumulatively have approximately the same amount of storage as recommended for the regional system as shown in Appendix A - City of Lacombe Equalization Storage Site Plan. It may be the City's desire to eventually decommission remaining unnecessary lagoon cells and to reclaim the facility in order to facilitate proposed development within the existing 300 m setback zone, or to simply retain the ponds for other storage such as storm water. The use of equalization storage capacity would be rare and therefore if the other cells were decommissioned the City could make a compelling argument for the reduction or elimination of the existing 300 m setback.

# 5.3.2 System Design Options

Currently two forcemains direct the City of Lacombe's wastewater to the Lagoon Facility and the regional system will connect to these forcemains to direct the wastewater in the new regional lift station. While the interconnection between lagoon cells will need to be further explored, there are four initial conceptual options to control and divert flows to the lagoons in an emergency:

- Automated valves on the incoming forcemain could open to the lagoons and close to the
  regional lift station. Automated valves are costly and require an extra level of maintenance,
  space, communications, and power. On the contrary, manual valves will require immediate
  operator attention if an emergency overflow situation is encountered. This option does not
  accommodate potential future gravity trunks that may tie directly into the wet well.
- 2. A high-volume, low-head pump could be incorporated into the regional lift station to pump the flows from the wet well into the equalization storage ponds during an emergency event. This option will ensure any future gravity trunks can tie directly into the wet well and will not back up during an emergency event. This option is also costly, requiring maintenance, space, communications, and power for the equalization storage pump, but would provide automated control of the flows to equalization storage. The three lift stations on the SRDRWC



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 3 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

system that were designed to utilize equalization storage were designed and constructed with a dedicated high-volume, low-head pump to divert flows to equalization storage.

- 3. A variation of option 2 is to use the new regional lift station pumps to direct flow to the lagoons through a newly installed pipe to the ponds. This will require an actuated valve and a pressure reducing valve after a tee on the outgoing line. This tee will lead back to the lagoons. No additional pumps would be required for this option. Some potential issues with this option occur when the regional pumps cannot handle the peak flow. During this situation, the duty pumps should all be functioning to pump down the line, however full flow down the line while bypassing to the equalization storage ponds in not possible with this option. This option is a potential solution for diverting flows if an emergency arises downstream of the lift station and would not work to accommodate peak flows above the system desian.
- 4. A shallow gravity overflow at the manhole immediately prior to the wet well could be used to divert overflow to the ponds. The wet well would back up (and any future gravity lines connecting directly) until the level of wastewater flowed over the weir and into the lagoons. This option would require further investigation of future planned development to ensure the safety of those developments should the sewage be allowed to back up to a shallow overflow elevation. This option also limits the effective volume in the cells to the elevation of the overflow pipe, which may increase the number of required cells.

There are two options to return diverted flows back to the regional lift station:

- 1. Flow back to the wet well could drain by gravity piping operated manually by a valve. This option is anticipated to have the largest capital cost, requiring permanent piping back to the wet well and likely additional lagoon interconnection changes and grading, but will likely be the easiest and lowest cost system to operate. The one lift station on the SRDRWC system that is located close to the existing lagoons was designed to accommodate equalization storage return flows by gravity piping.
- 2. Sewage could be pumped overland from equalization storage ponds back to the wet well using a rented mobile pumping unit (trailer mounted trash pump). This option will not require additional infrastructure, but will have high operating costs and inconveniences.

#### 5.3.3 Recommendations

<u>For diverting flows</u> to the equalization storage ponds, we recommend using Option 2: A high-volume, low-head pump incorporated into the regional lift station to pump the flows from the wet well into the equalization storage ponds during an emergency event.

<u>For returning flows</u> from the storage ponds to the wet well we recommend using Option 1: Flow back to the wet well through gravity piping operated manually by a valve. This reliable option will provide the greatest long term benefit as the operations and maintenance costs would be minimal. Should a more cost effective option be required, Option 2: pumping sewage overland using a rented mobile pumping unit (trash pump), could be implemented until such a time the gravity pipe connection could be installed.



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 4 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

Based on the very low projected frequency of equalization storage of wastewater within the proposed lagoon cells, the continued use of a portion of the existing lagoon cells for the purpose of conversion to equalization storage ponds is recommended. Furthermore, the 300 m development setback from the pond is considered to be unnecessary because:

- 1. The probability of wastewater storage in the pond is considered to be very low in any given year, based on flow monitoring data in City and operational history;
- 2. When wastewater is stored in the pond, it is likely to be drained down within a few days of resumed normal system operations.

We therefore recommend that the Commission proceed with the conversion of a portion of the existing Lacombe lagoon cells for use as an equalization storage facility and that upon decommissioning of unused existing lagoon cells, the City of Lacombe apply to Alberta Environment for the relaxation of the development setback from the equalization storage facility.

# 5.4 TOWN OF BLACKFALDS

# 5.4.1 Storage Volume

The Town of Blackfalds 3 day equalization storage volume (peak seven day period of the 25 year design horizon) represents approximately 38,500 m³ of storage capacity. This volume does not include the regional flows coming from Lacombe as it is intended that the flows are bypassed to storage in Lacombe if there is an issue anywhere along the regional system. The Town of Blackfalds presently operates a lagoon facility to treat its wastewater with a total volume of approximately 44,320 m³. The first three cells can provide a storage volume of 41,900 m³, roughly the amount of storage recommended for the regional system, as shown in Appendix B – Town of Blackfalds Equalization Storage Site Plan. This leaves only one small cell that is not required, however at this time it is not recommended to decommission the remaining lagoon cell.

#### 5.4.2 System Design Options

Currently there are gravity trunks that direct Blackfalds's wastewater to the lagoon facility. At the lagoon facility it enters a diversion chamber already in place and prepared to control the direction of flow to the existing lift station #1 that pumps the Town's flows up to the Lagoons. The regional system will be connected to the existing diversion chamber with flows directed to the new regional lift station.

There are three initial conceptual options to control and divert flows to the lagoons in an emergency:

1. An automated valve could be installed in the existing diversion chamber. This valve would be set up to communicate with a level sensor in the regional lift station wet well to open at a specified water elevation and allow bypass flows to the storage ponds through lift station #1.



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 5 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

This option relies on communications between various instruments and this is not recommended for emergency situations.

- 2. An overflow weir could be constructed in the existing diversion chamber to allow for flow bypass at a fixed elevation. This would require the Town of Blackfalds gravity flows to back-up to the elevation of the weir before overflowing to lift station #1 where it would be pumped to the lagoons. Due to the requirement to back up the Town of Blackfalds gravity wastewater system and the inherent risks associated with that, this option is not recommended.
- 3. Flows could be diverted to the equalization storage ponds by an overflow pipe located in the new inlet chamber attached to the regional lift station. A gravity pipe would convey the flows from the regional lift station to the existing diversion chamber and then to the existing lift station #1 where it would be pumped up to the equalization storage ponds. This option provides a reliable overflow to storage with no back-up to the incoming gravity systems and does not rely on actuated valves and communications. For these reasons, this option is recommended.

Following review of the existing lift station #1 as-built drawings, it was identified that the current capacity of the pumps is 161 l/s. Referencing the regional system design flows, it should be noted that the existing pump capacity will likely require upgrades near the end of the 25 year regional system design horizon to accommodate maximum equalization storage flows.

To direct flows back to the regional lift station, there are three options:

- 1. The lagoons may be emptied into the regional lift station wet well using temporary and portable overland pumping systems (trailer mounted trash pump). This option will not require additional infrastructure, but will have high operating costs and inconveniences.
- 2. The lagoons may be better interconnected to flow to the last existing polishing cell, and from there the wastewater could be pumped back to the regional lift station using the existing outfall pump and temporary overland piping or hoses. This work may require an initial capital cost for interconnecting the cells to allow full drainage to the last cell.
- 3. The lagoons may be better interconnected and re-graded to drain west to allow for gravity drainage back to the regional lift station through a new pipe operated with a manual valve. This option is anticipated to have the largest capital cost, requiring permanent piping back to the wet well and additional lagoon interconnection changes and grading, but will likely be the easiest and lowest cost system to operate. The one lift station on the SRDRWC system that is located close to the existing lagoons was designed to accommodate equalization storage return flows by gravity piping.



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 6 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

#### 5.4.2 Recommendations

<u>For diverting flows</u> to the equalization storage ponds, Option 3 is recommended: installing a dedicated overflow gravity pipe from the new inlet chamber to the existing diversion chamber. From there the wastewater would flow in the existing gravity pipe to lift station #1 to be pumped to the storage ponds. This option is reliable and will allow bypassing flows while still pumping down the regional forcemain should the peak design flows be exceeded in the future.

Further discussion is required to determine if there will be an order of preference in filling the lagoon cells, as newer lined cells may be desired to be utilized first; however some pipe realignment would be required to achieve this.

<u>For returning flows</u> from the storage ponds to the regional system we recommend Option 3: modify the lagoon cells to interconnect and drain west to allow for gravity drainage back to the regional lift station through a new pipe operated with a manual valve. This reliable option will provide the greatest long term benefit as the operations and maintenance costs would be minimal. Should a more cost effective option be required, Option 2: pumping sewage overland using a rented mobile pumping unit (trash pump), could be implemented until such a time the gravity pipe connection could be installed.

Based on the very low projected frequency of equalization storage of wastewater within the proposed lagoon cells, the continued use of the existing lagoon cells for the purpose of conversion to equalization storage ponds is recommended. Furthermore, the 300 m development setback from the pond is considered to be unnecessary because:

- 1. The probability of wastewater storage in the pond is considered to be very low in any given year, based on flow monitoring data in City and operational history;
- 2. When wastewater is stored in the pond, it is likely to be drained down within a few days of resumed normal system operations.

We therefore recommend that the Commission proceed with the conversion of the existing Blackfalds lagoon cells for use as an equalization storage facility and that the Town of Blackfalds apply to Alberta Environment for the relaxation of the development setback from equalization storage facility.



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 7 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

# 5.5 NEXT STEPS

Steps forward include the Technical Committee reviewing and approving this memo to provide Stantec approval to proceed with this information in the detailed design of the project.

Stantec Consulting Ltd

Assistant Project Manager Phone: 403-341-3320

joel.sawatzky@stantec.com

food simenson, P.Eng., ENV SP.

Projec Manager Phone 403-341-3320

todd.simenson@stantec.com

Attachment: Appendix A – City of Lacombe Equalization Storage Site Plan

Appendix B – Town of Blackfalds Equalization Storage Site Plan

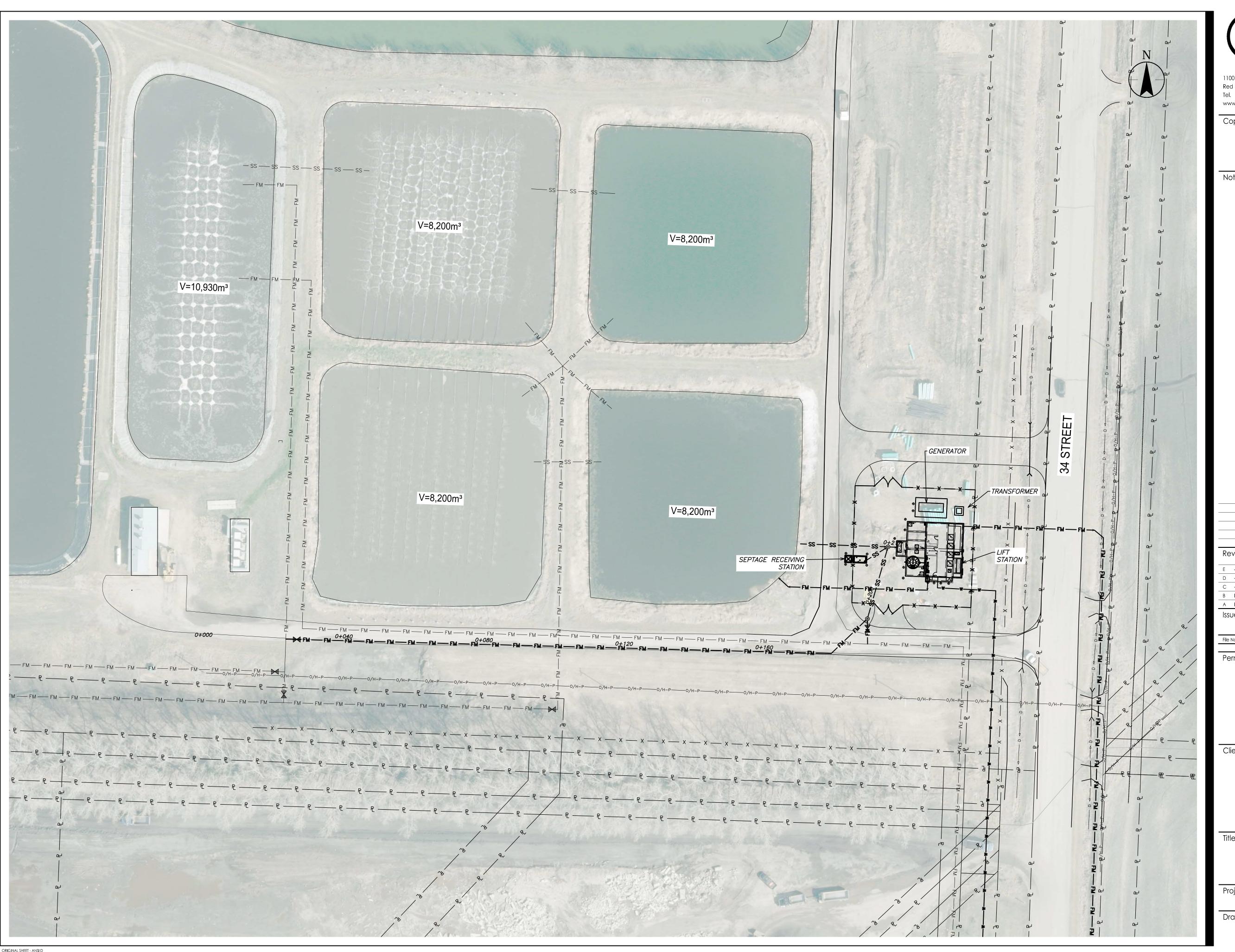
c. P. Weran, K. Boras, S. Weninger. S. Larson



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 8 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

APPENDIX A - CITY OF LACOMBE EQUALIZATION STORAGE SITE PLAN





1100 - 4900 50th Street Red Deer AB Canada T4N 1X7 Tel. 403.341.3320 www.stantec.com

# Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

By Appd. YY.MM.DD 
 MM
 JS
 16.05.16

 MM
 JS
 15.11.06

 By
 Appd.
 YY.MM.DD
 B ISSUED FOR TECH MEMO #5 A ISSUED FOR PRELIM REVIEW MM JS MM 15.10.21

Dwn. Chkd. Dsgn. YY.MM.DD File Name: 29319c-101\_ES.dwg Permit-Seal

Client/Project NRDRWWSC

> NRDRWWSC LACOMBE REGIONAL LIFT STATION

Lacombe, AB

EQUALIZATION STORAGE SITE PLAN

Project No. 113929319 Drawing No.

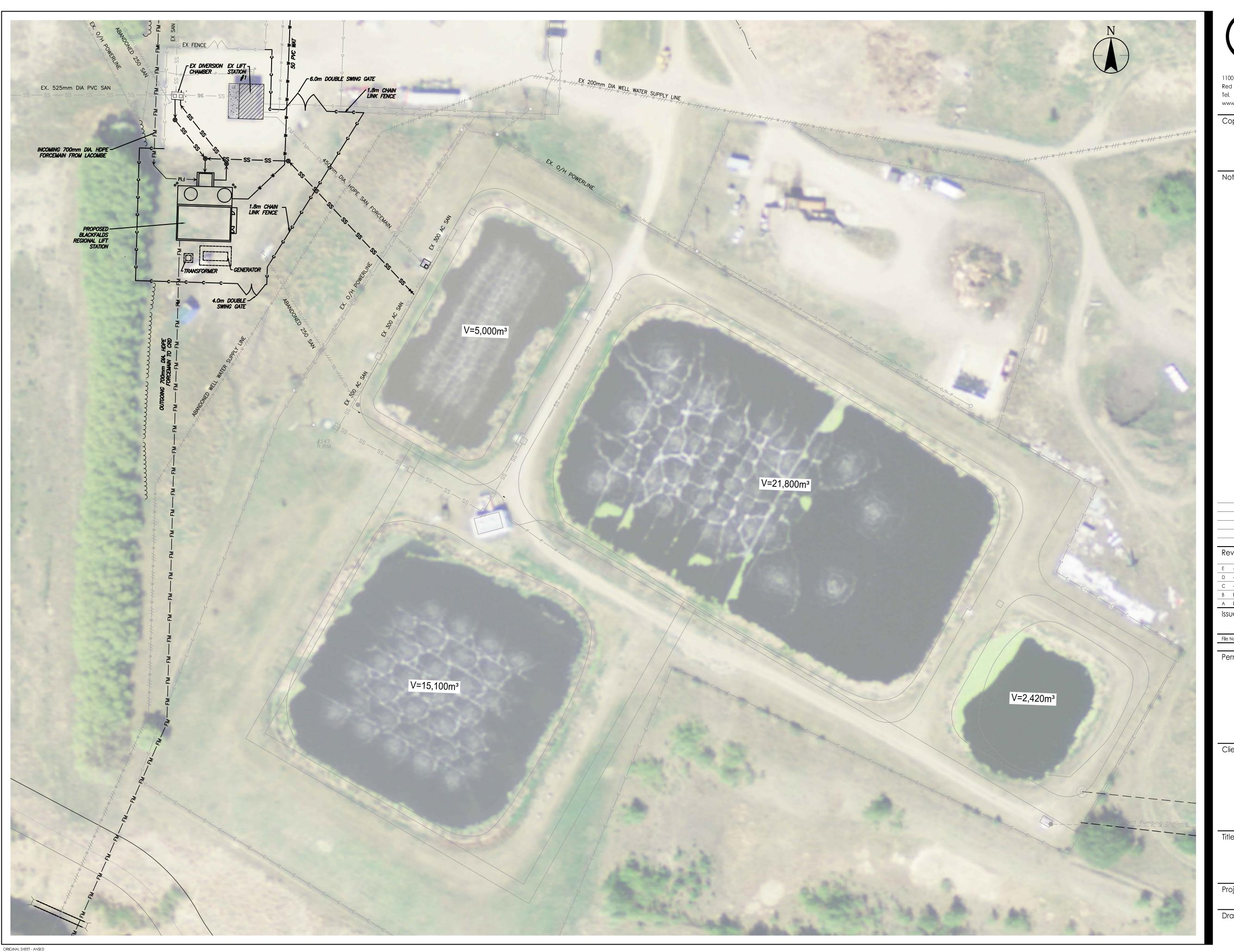
ORIGINAL SHEET - ANSI D



May 16, 2016 Matt Goudy, P.Eng., ENV SP., John Van Doesburg Page 9 of 9

Reference: North Red Deer Regional Wastewater Services Commission: Technical Memo 5 - Equalization Storage

APPENDIX B - TOWN OF BLACKFALDS EQUALIZATION STORAGE SITE PLAN





1100 - 4900 50th Street Red Deer AB Canada T4N 1X7 Tel. 403.341.3320 www.stantec.com

# Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Revision By Appd. YY.MM.DD MM JS 2016.05.16
MM JS 15.11.06
By Appd. YY.MM.DD B ISSUED FOR TECH MEMO #5 A ISSUED FOR PRELIM REVIEW MM JS MM 15.10.21
Dwn. Chkd. Dsgn. YY.MM.DD File Name: 29319c-101\_ES.dwg Permit-Seal

Client/Project NRDRWWSC

> NRDRWWSC BLACKFALDS REGIONAL LIFT STATION

Blackfalds, AB

EQUALIZATION STORAGE SITE PLAN

Project No. 113929319 Drawing No.



# AGENDA REPORT

SUBJECT: Legal Advice

PREPARED BY: John Van Doesburg, Administrator PRESENTED BY: John Van Doesburg, Administrator

DATE: June 21, 2016

#### **PURPOSE:**

To Provide legal advice to the Commission during the land acquisition phase. The Commission will be utilizing legal services for land agreements when negotiating for land. Chapman Riebeek has been providing municipal legal services and land services to local municipalities, especially in the area of expropriation

#### BACKGROUND:

To improve the legality of the agreement there will certain situations where legal service on the requests of land owners will be required when negotiating. Expertise in municipal experience will be an asset for the commission to move forward in the land process

**ISSUE ANALYSIS:**N/A

**FINANCIAL IMPLICATIONS**: Cost of the legal advice will be costs charged to the project.

**LEGISLATIVE AUTHORITY**: the Municipal Government Act authorizes the Commission to acquire and pay for professional services of a lawyer

STRATEGIC/BUSINESS PLAN REFERENCE:N/A

**ALTERNATIVES**:N/A

**ATTACHMENTS**: None

#### **ACTION/RECOMMENDATION:**

THAT Commission appoint Chapman Riebeek as the legal firm to provide advice on legal materials dealing with land acquisition.





# Engineer's Report June 21, 2016 North Red Deer Regional Wastewater Services Commission (NRDRWWSC)

Submitted to: North Red Deer Regional Wastewater Services Commission

Matt Goudy, P.Eng. - CAO

John Van Doesburg – Project Manager

Submitted by: Stantec Consulting Ltd. - Red Deer

Per: Todd Simenson, P.Eng. Joel Sawatzky, P.Eng. Sean Larson, P.Eng.

#### FILE 113929319

# 1. Land Acquisition

- a. A land acquisition strategy has been ongoing for several months.
  - i. Costing zones have been developed and approximate values have been identified as a starting point for negotiations.
  - ii. Various appraisals have been completed to verify land values and the last few will be completed in the coming weeks.
- b. Individual Ownership Plans (IOP's) have been completed for the entire alignment.
  - i. There are a total of 64 landowners along the alignment, including all the railway crossings, municipal lands, etc.
  - ii. A portion of the alignment has been modified due to difficult landowners and additional landowners have been contacted.
- c. The Land Agent, Land Solutions, has completed the initial visit with the landowners and all required access permissions for the field investigations have been obtained.
- d. The next steps in the acquisition process are to initiate the second meeting with the landowners to discuss compensation for the Right-of-Way (ROW) and Temporary Work Space (TWS) in order to secure the land.

# 2. Design Progress

# a. Lift Stations:

- Preliminary design is ongoing with the civil and process design approximately 70% complete and the buildings disciplines (architectural, structural, mechanical and electrical) were engaged in late May.
- ii. Geotechnical investigations, topo survey and private utility locates have been completed.
- iii. Preparation of the Contract Specifications has begun.

# b. Odour Management Facility (OMF):

- i. Preliminary drawings are ongoing with the majority of the progress completed on the civil and process disciplines.
- ii. Topo survey is complete and the geotechnical boreholes for the site will be completed by the end of June.

# c. Pipeline:

- i. Pipeline design has started and the first section to be designed will be from the CRD WWTP to Blackfalds.
- ii. The agreement with the City of Red Deer for pipeline upsizing and cost sharing the pipeline near the City has been presented to the City and a final decision has not yet been made.
- iii. Field investigations (environmental, geotechnical, topo survey and utility locates) have started along the pipeline route and are anticipated to be completed by mid-August.

# 3. Technical Memos

- a. Technical Memo 1: Wastewater Flow Projections
  - i. Adopted by Commission on February 29, 2016.
- b. Technical Memo 2: Pipeline Alignment Options
  - i. Adopted by Commission on February 29, 2016.
- c. Technical Memo 3: Odour
  - i. The final memo was submitted to the Tech Committee on May 17, 2016. The basis of the odour management strategy is as follows:
    - Chemical injection to be located at the Lacombe and Blackfalds Regional Lift Stations to provide liquid phase odour control (mitigation of sulfide generation).

North Red Deer Regional Wastewater Services Commission – Engineer's Report

- A two stage packaged tower biofilter system is to be located at the Blackfalds Regional Lift Station to treat the wet well air before discharging to atmosphere.
- An Odour Management Facility (OMF) will be constructed just north of Chiles Industrial Park. The components of the OMF are as follows:
  - A stripping chamber where course bubble diffusers will strip off the dissolved sulfide to improve the quality of the wastewater discharged to the CRD WWTP.
  - A two stage packaged tower biofilter system to treat the wet well air before discharging to atmosphere.
- d. Technical Memo 4: Lift Stations
  - The final memo was submitted to the Tech Committee on May 17, 2016.
- e. Technical Memo 5: Equalization Storage
  - The final memo was submitted to the Tech Committee on May 17, 2016.
- f. Technical Memo 6: NRD/CRD Shared Infrastructure
  - i. The final memo was submitted to the Technical Committee and the City of Red Deer on May 24, 2016.
  - ii. The shared infrastructure includes a shared pipeline from the OMF down to the CRD WWTP along with a shared tie-in chamber (North Entrance Chamber) that will be joined with to the OMF.
- g. Technical Memo 7: Pipeline Materials
  - The final memo was submitted to the Tech Committee on May 17, 2016.
- h. Technical Memo 8: Opinion of Probable Costs
  - i. The draft memo was submitted to Tech Committee on December 23, 2015.
  - ii. This memo will remain un-finalized, with updates presented to the Tech Committee as necessary.

North Red Deer Regional Wastewater Services Commission - Engineer's Report

- i. Technical Memo 9: Pipeline Hydraulics and Transient Analysis
  - i. This memo will be completed in conjunction with detailed design of the pipeline.
  - ii. We are currently conducting further analysis of probable locations of Combination Air Release Valves (CAV's) along the preferred alignment.
  - iii. Other pipeline efficiencies and cost savings on pressure sustaining valves (PSV's) are being investigated.
- j. Technical Memo 10: System Operation and Communications
  - An initial draft memo outline has been developed and the remainder of the memo will be completed concurrently with the detailed design of the lift stations.
- k. Technical Memo 11: Acquisition Strategy
  - i. The final memo was submitted to the Tech Committee on June 21, 2016.
  - ii. The memo outlines the strategy to:
    - 1. Land Acquisition process
    - Pre-select the major lift station equipment through an RFQ process, and;
    - 3. Prequalify Contractors who can bid on the construction tenders for the project.
- I. Preliminary Design Report
  - i. The preliminary design report will provide an executive summary of the technical memos.
  - ii. The report will be completed following completion of the technical memos.



# AGENDA REPORT

SUBJECT: Updated Financial Statement

PREPARED BY: John Van Doesburg, Administrator PRESENTED BY: John Van Doesburg, Administrator

DATE: June 21, 2016

#### PURPOSE:

To update the board member on the financial status of the Commission operating and capital budgets

# **BACKGROUND**:

The Financial statements are provided to advise the board of Directors on the status of the project engineering costs and revenues

**ISSUE ANALYSIS**: Note to the board members the commission recently received 2,000,000.00 grant from the water for life program

Expenses to date on the capital project are \$430,266.78 Operating expenses are \$9,135.65

FINANCIAL IMPLICATIONS: None at this time

**LEGISLATIVE AUTHORITY**: MGA Act

STRATEGIC/BUSINESS PLAN REFERENCE:N/A

**ALTERNATIVES:** 

N/A

**ATTACHMENTS**: Financial Statements

#### **ACTION/RECOMMENDATION:**

THAT Commission accept the financial statements as information