



Corporation of the Municipality of South Huron
Agenda - Regular Council Meeting

Monday, March 19, 2018, 6:00 p.m.

Council Chambers - Olde Town Hall

Accessibility of Documents:

Documents are available in alternate formats upon request. If you require an accessible format or communication support, please contact the Clerk's Department at 519-235 -0310 or by email at clerk@southhuron.ca to discuss how best we can meet your needs.

Pages

1. Meeting Called To Order

Welcome & O Canada

2. Public Meeting

Recommendation:

That South Huron Council adjourn at p.m. for the purpose of a Public Meeting pursuant to Section 34 of the Planning Act for proposed zoning amendments.

3. Amendments to the Agenda, as Distributed and Approved by Council

Recommendation:

That South Huron Council approves the Agenda as presented.

4. Disclosure of Pecuniary Interest and the General Nature Thereof

5. Delegations

5.1 Avon Maitland District School Board - Annual Update on Highlights and Challenges

1

Recommendation:

That South Huron Council receives the delegation as presented from Avon Maitland District School Board by Randy Wagler, Chair and Lisa Walsh, Director of Education.

5.2 Drainage Act - Meeting to Consider the Engineer's Report

5.2.1 Allen Municipal Drain 2018

14

5.2.2 Ford-Neeb Municipal Drain 2018

57

5.2.3	Khiva Municipal Drain 2018	103
5.2.4	Rowe-Rasenberg Municipal Drain 2018	149

Recommendation:

That South Huron Council receives the delegation as prepared and presented by by Mr. W. Dietrich, P. Eng.; and

That South Huron Council authorizes staff to initiate the tender process, if required, to be considered by Council following the Court of Revision for the new drainage systems known as:

- **Allen Municipal Drain 2018;**
- **Ford-Neeb Municipal Drain 2018;**
- **Khiva Municipal Drain 2018; and**
- **Rowe-Rasenberg Municipal Drain 2018.**

6. Minutes

6.1	Minutes of the Regular Council Meeting of March 5, 2018	190
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Recommendation:

That South Huron Council adopts the minutes of the Regular Council Meeting of March 5, 2018, as printed and circulated.

6.2	Minutes of the Public Meeting of March 5, 2018	205
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Recommendation:

That South Huron Council adopts the minutes of the Public Meeting of March 5, 2018, as printed and circulated.

6.3	Minutes of Committee of the Whole of March 6, 2018	208
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Recommendation:

That South Huron Council adopts the minutes of the Committee of the Whole Meeting of March 6, 2018, as printed and circulated.

7. Councillor Board and Committee Reports

7.1	Minutes of the Police Services Board Meeting - February 13, 2018	211
7.2	Minutes of the Communities in Bloom - February 7, 2018	216

7.3	Minutes of Community Hub/Recreation Project Steering Advisory Committee - February 27, 2018	220
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Recommendation:

That the minutes of the following committees and / or boards be received as presented to Council:

- **Police Services Board of February 13, 2018;**
- **Communities in Bloom of February 7, 2018; and**
- **Community Hub/Recreation Project Steering Advisory Committee of February 27, 2018.**

7.4	2018 Budget - Upper Thames River Conservation Authority	224
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Full document available upon request from S. Becker, Treasurer.

Recommendation:

That South Huron Council receives the 2018 Budget from the Upper Thames River Conservation Authority.

8. Staff Reports

8.1 Planning

8.2 Financial Services

8.2.1	S. Becker, Financial Services Manager/Treasurer - Fourth Quarter (Draft) Operating Variance Report	226
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Recommendation:

That South Huron Council receives the report from S. Becker, Financial Services Manager/Treasurer re: Fourth Quarter (Draft) Operating Variances for information only.

8.3 Environmental Services

8.3.1	D. Giberson, ESD Director - 2017 Annual Performance Assessment Summary Report for the Exeter Wastewater Treatment Facility	239
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Recommendation:

That South Huron Council receive the report from D. Giberson, ESD Director RE: 2017 Annual Performance Assessment Summary Report for the Exeter Wastewater Treatment Facility.

- 8.3.2 D. Giberson, ESD Director - 2017 Annual Report for South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility 244

Recommendation:

That South Huron Council receive the report from D. Giberson, ESD Director RE: 2017 Annual Report for South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility.

- 8.3.3 D. Giberson, ESD Director - Tender Results - 2018 Provision of Crushed Granular "M" for Road Maintenance 300

Recommendation:

That South Huron Council receive the report from Don Giberson, Environmental Services Director RE: Tender Results - 2018 Provision of Crushed Granular "M" for Road Maintenance; and

That South Huron Council accept the tender received from Jennison Construction Ltd and award a contract for the supply Crushed Granular "M" at \$9.20 per tonne for a total cost of \$304,704.00 plus HST.

- 8.3.4 D. Giberson, ESD Director - Tender Results - 2018 Supply and Application of Dust Suppressant on Gravel Roads 304

Recommendation:

That South Huron Council receive the report from D. Giberson, Environmental Services Director RE: Tender Results - 2018 Supply and Application of Dust Suppressant on Gravel Roads; and

That South Huron Council accept the tender received from 552976 Ontario Limited o/a Cliff Holland Trucking and award a contract for the supply and application of 364 flake tonnes of dust suppressant at \$212.00 per tonne for a total cost of \$77,168.00 plus HST.

- 8.3.5 D. Giberson, ESD Director - Tender Results – Repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 308

Recommendation:

That South Huron Council receive the report from D. Giberson, Environmental Services Director RE: Tender Results – Repairs to McTaggart Line Bridge Structures #3037, #3038, #3039; and

That South Huron Council accepts the tender received from Weathertech Restoration Services Inc. and award a contract for the Repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 for a total cost of \$588,253.00 plus HST.

- 8.3.6 D. Giberson, ESD Director - South Huron Landfill Site Grounds Maintenance Contract Extension 315

Recommendation:

That South Huron Council receive the report from D. Giberson, Environmental Services Director RE: South Huron Landfill Site Grounds Maintenance Contract Extension; and

That South Huron Council authorize a one year extension of the existing South Huron Landfill Site Grounds Maintenance Contract with N.C. Jones and Sons Ltd.

8.4 Transportation Services

8.5 Community Services

- 8.5.1 J. Fields, Community Services Manager - Results of Request for Tender for the Provision of Municipal Flower Purchase 318

Recommendation:

That South Huron Council receives the report from J. Fields, Community Services Manager re: Results of Request for Tender for the Provision of Municipal Flower Purchase SH-18-RS-03.

- 8.5.2 J. Fields, Community Services Manager - Results of Request for Tender for the provision of Grass Cutting and Trimming Tender

321

Recommendation:

That South Huron Council receives the report from J.Fields, Community Services Manager re: Results of Tender for Grass Cutting and Trimming SH-18-RS-02; and

That Council awards the tender as follows:

- **Area A and B to Honeydo Property Maintenance in the amount of \$8,394.00 plus HST,**
- **Area C and D to Sunrise Lawn Care (2224737 Ontario Inc.) in the amount of \$5,296.00 plus HST**
- **Area E to Vandebussche Property Services in the amount of \$6,160.00 plus HST.**

8.6 Development Services

8.7 Emergency Services

8.8 Corporate Services

8.8.1 R. Msuya-Collison, Clerk - Appoint Members to Court of Revision 325

Recommendation:

That South Huron Council receives the report from R. Msuya-Collison, Clerk, re: Appoint Members to Court of Revision for the following Municipal Drains:

- Ford-Neeb Municipal Drain;
- Allen Municipal Drain;
- Rowe-Rasenberg Municipal Drain; and
- Khiva Municipal Drain; and

That South Huron Council hereby appoints the following members to the Court of Revision for above Municipal Drains to be held on April 16, 2018 at 5:00 p.m., prior to the regularly scheduled Council meeting:

That be appointed Chair.

8.9 Administration

9. Deferred Business

10. Notices of Motion

11. Mayor & Councillor Comments and Announcements

12. Communications

12.1	Ministry of Municipal Affairs - Planning Act Regulations	328
12.2	AMO - Cannabis Implementation - Municipal Funding	330
12.3	AMO - Draft Fire Regulations Comments	332
	Full document available upon request	
12.4	AMO - Municipal Investment Powers	335

12.5	AMO -Community Energy Planning	337
	Full document available upon request	
12.6	MPP Dufferin-Caledon, Sylvia Jones - Newly Released Requirements for Asset Management Plans for Municipal Infrastructure	340
12.7	OSUM - Nomination for OSUM Executive Committee	341
12.8	United Way Perth-Huron, Chad Alberico - Invitation to the Spirit of Community Celebration in Stratford - March 29, 2018	342
12.9	Huron County Municipal Officers' Association - Annual Meeting Agenda for April 20, 2018	343
12.10	Grand Bend Community Foundation Announcement - New Executive Director	346
12.11	City of Stratford - 2018 National Public Works Week	347
12.12	City of Hamilton - Support of Municipalities being Offered School Properties	350
12.13	Town of Essex - User Pay Childcare Services at AMO and FCM Conferences	351
12.14	County of Renfrew - Proposed Amendments to the Endangered Species Act	353

Recommendation:

That South Huron Council receive communication items not otherwise dealt with.

13. Closed Session

Recommendation:

That South Huron Council proceeds in Closed Session at _____ for the purpose of addressing:

- a proposed or pending acquisition or disposition of land by the municipality or local board; (disposition)

14. Report From Closed Session

15. By-Laws

- 15.1 By-Law No. 22-2018 - Hayter Zoning By-Law 355
Third and Final Reading
Recommendation:
That the South Huron Council gives third and final reading to By-Law #22-2018, being a by-law to amend By-Law #12-1984, being the Zoning By-Law for the former Township of Stephen for lands known as Conc N BDY N PT Lot 25, Stephen Ward, Municipality of South Huron.
- 15.2 By-Law No. 26-2018 - Allen Municipal Drain 2018 356
Provisional Approval - 1st and 2nd reading
Recommendation:
That the South Huron Council gives first and second reading to By-Law #26-2018, being a by-law to provide for the Allen Municipal Drain 2018 in the Municipality of South Huron.
- 15.3 By-Law No. 27-2018 - Ford-Neeb Municipal Drain 358
Provisional Approval - 1st and 2nd reading
Recommendation:
That the South Huron Council gives first and second reading to By-Law #27-2018, being a by-law to provide for the Ford-Neeb Municipal Drain 2018 in the Municipality of South Huron.
- 15.4 By-Law No. 28-2018 - Khiva Municipal Drain 360
Provisional Approval - 1st and 2nd reading
Recommendation:
That the South Huron Council gives first and second reading to By-Law #28-2018, being a by-law to provide for the Khiva Municipal Drain 2018 in the Municipality of South Huron.
- 15.5 By-Law No. 29-2018 - Rowe-Rasenberg Municipal Drain 362
Provisional - 1st and 2nd reading
Recommendation:
That the South Huron Council gives first and second reading to By-Law #29-2018, being a by-law to provide for the Rowe-Rasenberg Municipal Drain 2018 in the Municipality of South Huron.

- 15.6 By-Law No. 30-2018 - Adopt 2018 Tax Rates 364

Recommendation:

That the South Huron Council gives first, second and third and final reading to By-Law #30-2018, being a by-law to provide for the adoption of the 2018 tax rates and to further provide for penalty and interest in default of payment thereof.

- 15.7 By-Law No. 31-2018 - Glazier Zoning By-Law 368

Recommendation:

That the South Huron Council gives first and second reading to By-Law #31-2018, being a by-law to amend By-Law #12-84, being the Zoning By-Law for the former Township of Stephen for lands known as Conc N BDY E PT Lot 35, Stephen Ward, Municipality of South Huron.

- 15.8 By-Law No. 32-2018 - West Corner Farms (McLean) Zoning By-Law 373

Recommendation:

That the South Huron Council gives first, second and third and final reading to By-Law 32-2018, being a by-law to amend By-Law #12-84, being the Zoning By-Law for the former Township of Stephen for lands known as Lot 9, Concession 20, Stephen Ward, Municipality of South Huron.

- 15.9 By-Law No. 33-2018 - Oakwood (Forrester) Zoning By-Law 377

Recommendation:

That the South Huron Council gives first, second and third and final reading to By-Law 33-2018, being a by-law to amend By-Law #12-1984, being the Zoning By-Law for the former Township of Stephen for lands known as Stephen Con LRW Pt Lots 2; and 3 Plan 125 PT Lots 143; to 145 187 188 196 to 200; Plan 127 PT BLK C Plan 129; PT BLK a RP 22R2797 Parts 3, Stephen Ward, Municipality of South Huron.

- 15.10 By-Law No. 34-2018 - Housekeeping Second Units By-Law 381

Recommendation:

That the South Huron Council gives first, second and third and final reading to By-Law 34-2018, being a by-law to amend By-Law #30-78, being the Zoning By-Law for the former Town of Exeter, Municipality of South Huron.

16. Confirming By-Law

16.1 By-Law No. 35-2018 – Confirming By-Law

385

Recommendation:

That the South Huron Council gives first, second and third and final reading to By-Law #35-2018, being a by-law to confirm matters addressed at the March 19, 2018 Council meeting.

17. Adjournment

Recommendation:

That South Huron Council hereby adjourns at _____ p.m., to meet again on April 3, 2018 at 6:00 p.m. or at the Call of the Chair.



Avon Maitland District School Board
Engage, Inspire, Innovate ...Always Learning

AMDSB Municipal Update 2018

Randy Wagler, Chair
Lisa Walsh, Director of Education

Outline

- **Our District by the Numbers**
- **Strategic Plan**
- **Our System Focus – Image of Our Successful Graduate**
- **BIPSAW**
- **Student Accommodation**
- **Equity and Inclusion**
- **Pathways to Success**
- **International Education**
- **Looking Ahead**

Our District by the Numbers

- **15,512 students (increasing!)**
 - **10,167 Elementary**
 - **5,345 Secondary**
- **Over 2,400 full and part-time staff**
- **2017-2018 Operating Budget: \$210M**
- **30 Elementary Schools**
- **10 Secondary Schools**
 - **7 are Grades 7 to 12**
 - **2 are Grades 9 to 12**
 - **1 E-Learning School**



2016-2020 Strategic Plan

- **Strategic Plan for 2016-2020 approved in June 2016**

We Will

Create Positive, Inclusive Learning Environments

And

Maximize Outcomes for Students

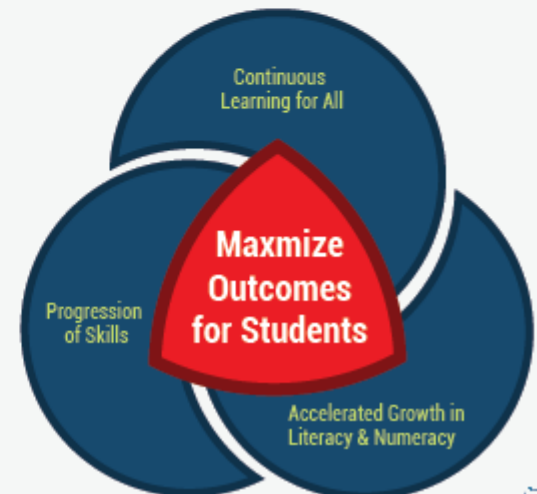
By

Engaging our students, staff, families, communities and our world

Inspiring with evidence-informed teaching and learning

Innovating through the creative potential of emerging technologies

Guided by the Principles of Equity, Character, & Stewardship



Our System Focus

Image of Our Successful Graduate

<ul style="list-style-type: none"> • Students who leave AMDSB will be ... 	<ul style="list-style-type: none"> • Prepared for their next step and ... 	<ul style="list-style-type: none"> • Prepared for a changing world and ...
	<ul style="list-style-type: none"> • Understand themselves as learners and advocate for their own needs • Be literate • Be numerate 	<ul style="list-style-type: none"> • Confident and curious learners • Resilient and flexible thinkers who demonstrate global competencies (communication, critical thinking, creativity, collaboration and problem solving) • Positive and principled engagement in society

BIPSAW

Board Improvement Plan for Student Achievement & Wellbeing

Literacy and Numeracy

- Goal: Improved achievement in literacy and numeracy for all students

Intellectual Engagement

- Goal: Improved emotional and cognitive investment in learning for all students

Social and Institutional Engagement

- Goal: Increased sense of belonging for all students and participation in the formal requirements of schooling

Student Accommodation

- **Significant provincial and local consultation in the past year, with positive results:**
- **Rural and Northern Education Fund (RNEF)**
 - 29 AMDSB schools met the Ministry eligibility
 - AMDSB received \$838,666 of the RNEF allocation
 - Used for: enhanced funding for small rural schools, additional after-school bussing, videoconferencing to connect schools, additional mental health & behavioural supports, distance education improvements
- **Draft Pupil Accommodation Review Guidelines**

Equity and Inclusion

- **Recognized by the Canadian Association for Community Living with the Inclusive Education Award**



- **Partner Board on the Ministry's Identity-Based Data Pilot Project**
- **AMDSB seen as a champion of inclusive education to School Boards**
- **On-going research to assess and improve**

Pathways to success

- **We believe:**
 - All students can be successful
 - Success comes in many forms
 - There are many pathways to success
- Students now begin education & career planning in elementary school
- We continue to be proactive in all pathways and a provincial leader in providing opportunities to explore different pathways:
 - Co-op
 - College Dual-credits
 - Ontario Youth Apprenticeship Program (OYAP)
 - Specialist High Skills Major programs
 - **Agricultural Pilot Program “Farm, Refine, Dine”**
 - Experiential Learning Lead (ELL)



High Skills Majors

- **CHSS – Health & Wellness, Information & Com. Tech, Manufacturing**
- **FEMSS – Health & Wellness, Construction**
- **GDCI – Environment, Hospitality & Tourism**
- **LDSS – Construction, Health & Wellness, Manufacturing**
- **MDHS – Agriculture, Hospitality & Tourism**
- **SHDHS – Transportation**
- **St. Mary's DCVI – Environment**
- **SCSS – Arts & Culture, Information & Com. Tech**
- **SNSS – Energy, Health & Wellness, Hospitality & Tourism, Manufacturing, Transportation**

International Education 2017-2018

- 250+ international students this school year, 900+ since launch
- Students from Belgium, Brazil, China, Denmark, Finland, France, Germany, Italy, Japan, Korea, Mexico, Netherlands, Spain, Switzerland, Taiwan, Thailand, Vietnam.
- Students placed at every high school and some elementary schools.
- Internationalization includes travel opportunities for our students to countries including Taiwan, Italy, St. Maarten and Berlin.
- International student summer program – **Capture Canada**. Up to 50 international students to attend a 2 or 3 week program.
- Seeking ongoing commitments from international partners



Looking Ahead

- **Recruitment and Retention – work together with our municipalities to help bring people to our community; looking for ways to showcase our communities**
- **International Education is continuing to grow and provide more opportunities for our students**
- **We continue to seek innovative ways to deliver high quality education and promote the great education we provide**
- **AMDSB promotional video:**





Avon Maitland District School Board
Engage, Inspire, Innovate ...Always Learning

Thank You

Municipality of South Huron
322 Main Street South
PO Box 759
Exeter ON N0M 1S6

Notice of Meeting to Consider the Engineer's Report

Drainage Act, R.S.O. 1990, c. D.17, s. 42

To:

Enter Name and Current Address of Property Owner

In accordance with section 42 of the *Drainage Act*, you as an owner of land affected by the proposed drainage works for the

Allen Municipal Drain

(Name of drain)

are requested to attend a council meeting to consider the final report filed with the **Municipality**

of South Huron

for this drainage works.

The meeting will take place:

Date (yyyy/mm/dd)

2018/03/19

Time

6:00 p.m

Location

South Huron Council Chambers

If the share of the project cost assessed to your property is more than \$100, a copy of the report is included with this notice.

Name of Clerk (Last Name, First Name)

Msuya-Collison, Rebekah

Name of Municipality

Municipality of South Huron

Signature of Clerk



Date (yyyy/mm/dd)

2018/03/02

Failure to attend meeting: If you do not attend the meeting, it will proceed in your absence. If you are affected or assessed by this proposed project, you will continue to receive notification as required by the *Drainage Act*.

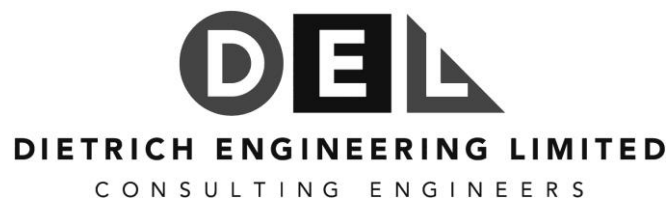
Activities at the meeting to consider the report:

- Usually the engineer will present a summary of the report to council
- For drains initiated by petition:
 - Petitioners will be given an opportunity to withdraw their name from the petition
 - Other owners that benefit from the drain will be given an opportunity to add their name to the petition
- Council must decide whether or not to proceed with the project by provisionally adopting the engineer's report by by-law; they also have the option to refer the report back to the engineer for modifications.
- All property owners affected by the drain will have an opportunity to influence council's decision
- There is no right to appeal assessments or other aspects of the engineer's report at this meeting; these appeal rights will be made available later in the procedure. *Drainage Act, R.S.O. 1990, c. D.17, s. 47 - 54.*

Petitioners: After the meeting to consider the final report, if the petition does not comply with section 4, the project is terminated and the original petitioners are responsible for the costs in shares proportional to their assessment in the engineer's report. *Drainage Act, R.S.O. 1990, c. D. 17 s. 43.*



**Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)**



Reference No. 1749

February 20, 2018

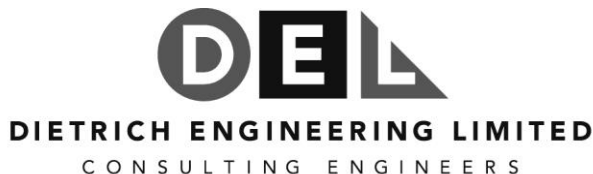
Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

Contents

Introduction	1
History	1
On-Site Meeting	1
Information Meeting	2
Findings	2
Recommendations	2
Summary of Proposed Works	2
Working Area	2
Watershed Characteristics	3
Allowances	3
Estimated Construction Costs	4
Summary of Construction Costs	6
Summary of Costs	6
Assessment	7
Maintenance	7
Schedule of Assessment for Construction – Main Drain	8
Schedule of Assessment for Construction – Branch ‘A’	9
Schedule of Net Assessment for Construction	10
Schedule of Assessment for Maintenance	11

Specifications for the Construction of Municipal Drainage Works

DIVISION A-General Conditions
DIVISION B-Specification for Open Drains
DIVISION C-Specification for Tile Drains
DIVISION H-Special Provisions



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Waterloo, Ontario

February 20, 2018

**Allen Municipal Drain 2017
Municipality of South Huron
(Usborne Ward)**

**To the Mayor and Council
of the Municipality of South Huron**

Members of Council:

Introduction

We are pleased to present our report on the “Allen Municipal Drain 2018”, serving parts of Lots 14 to 16, Concession 9 in the Municipality of South Huron, Usborne Ward, County of Huron.

Authority to prepare this report was obtained by a resolution of the Municipality of South Huron Council at its Tuesday, September 5, 2017 meeting to appoint Dietrich Engineering Limited to prepare an Engineer’s Report.

In accordance with your instructions pursuant to a request received by Council under Section 78 of the Drainage Act, R.S.O. 1990, we have made an examination and survey of the affected area and submit herewith our Report which includes Plan, Profiles and Specifications for this work.

The attached Plan and Profiles, Drawing No’s 1 & 2, Reference No. 1749, Specifications and the Instructions to Tenderers form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected

History

The existing Allen Municipal Drain was originally constructed under the authority of a report prepared by Spriet Associates London Ltd., dated November 28, 1977.

The outlet for this drain is the ‘A’ Drain of the Elimville Municipal Drain.

On-Site Meeting

In accordance with Section 9(1) of the Drainage Act, R.S.O. 1990, an on-site meeting was held on Tuesday, November 14, 2017. The place of meeting was on Huron Street adjacent to Lot 16, Concession 9 in the municipality of South Huron, Usborne Ward. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Jason Parr	Transportation Services Manager, Municipality of South Huron
Doug McBride	Landowner
Jamie McBride	Landowner

Information Meeting

An information meeting was held on Wednesday, February 14, 2018 at the Municipality of South Huron Municipal Office. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Doug McBride	Landowner
Jamie McBride	Landowner
Jeff Prance	Landowner

The information provided proposed upgrading the Allen Municipal Drain. This meeting provided a review of the design of the proposed drainage system, the estimated costs of the project and proposed assessments.

Findings

We have made an examination of the drainage area and have found the following:

1. The existing Allen Municipal Drain is neither of sufficient capacity nor depth to drain the surrounding and upstream lands within the watershed at today's standards of drainage.

Recommendations

It is our recommendation that:

1. A new tile drainage system be constructed to replace the Main Drain and Branch 'A' of the Allen Municipal Drain.
2. The new tile drainage system includes the construction of the Main Drain which consists of the installation of 562 metres of 300mm to 400mm diameter tile, and the construction of Branch 'A' which consists of the installation of 182 metres of 250mm diameter tile.
3. The existing tile drain constructed under the authority of the report prepared by Spriet Associates London Ltd, dated November 28, 1977, shall be abandoned.
4. The drainage coefficient design standard used for this drain is 38mm of rainfall per 24 hours.
5. Approximately 457 metres of 'A' Drain of the Elimville Municipal Drain be cleaned out.
6. This new drainage system shall be known as the "Allen Municipal Drain 2018".

Summary of Proposed Works

The proposed work consists of approximately 457 metres of open ditch excavation; the installation of approximately 744 metres of 250mm to 450mm diameter concrete field tile and High Density Polyethylene (HDPE) pipes; the installation of four (4) concrete catch basins and one (1) concrete junction.

Working Area

Open Work

The working area for construction and maintenance purposes shall be a width of ten (10) metres on the side of the drain where the excavated material is to be placed and levelled. Each landowner shall designate access to and from the working area.

;

Closed Work

The working area for construction and shall be a width of twenty (20) metres centered on the proposed tile drain. The working area for maintenance purposes shall be a width of ten (10) metres centered on the proposed tile drain. Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area.

Watershed Characteristics

The Drainage Area comprises approximately 19 hectares. Land use within the watershed is primarily agricultural.

Allowances

In accordance with Section 30 of the Drainage Act, R.S.O. 1990, we determine the allowances payable to Owners entitled thereto as follows.

Lot or Part	Con.	Owner	Roll No.	Damages to Lands and Crops (Section 30)	Total Allowances
<u>Main Drain</u>					
Pt 14 & 15	9	WF. & J. Prance	9-031	\$4,870	\$4,870
N Pt 15	9	Rollinlea Farms Ltd	9-032	\$2,290	\$2,290
Pt 16	9	Rasenberg Investments Ltd	9-033	\$400	\$400
Total Allowances, Main Drain				\$7,560	\$7,560
<u>Branch 'A'</u>					
Pt 14 & 15	9	WF. & J Prance	9-031	\$1,450	\$1,450
N Pt 15	9	Rollinlea Farms Ltd	9-032	\$400	\$400
Total Allowances, Branch 'A'				\$1,850	\$1,850
<u>Total Allowances</u>				<u>\$9,410</u>	<u>\$9,410</u>

Total Allowances, under Sections 30 of the Drainage Act, R.S.O. 1990;
Allen Municipal Drain 2018.

\$9,410

Estimated Construction Costs

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

Labour, Equipment, and Materials

A) MAIN DRAIN

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Open ditch excavation including levelling excavated material	457 m	\$ 6.00	\$ 2,742.00
2)	Supply 1 - 6m length of 450mm diameter, H.D.P.E. outlet pipe complete with rodent grate (320kPa)	6 m	\$ 58.00	\$ 348.00
	Installation of 6 metres of 450mm diameter, H.D.P.E. outlet pipe complete with quarry stone rip-rap protection and geotextile filter material (Mirafi 180N or equivalent) (approximately 40m ²) (Sta. 0+000 to Sta. 0+006)	I.s.		\$ 2,000.00
3)	Supply 400mm diameter concrete field tile (1500D)	99 m	\$ 24.00	\$ 2,376.00
	Installation by means of a wheel trencher (Sta. 0+006 to Sta. 0+105)	99 m	\$ 22.00	\$ 2,178.00
4)	Supply 350mm diameter concrete field tile (1500D)	213 m	\$ 20.00	\$ 4,260.00
	Installation by means of a wheel trencher (Sta. 0+105 to Sta. 0+318)	213 m	\$ 22.00	\$ 4,686.00
5)	Supply 300mm diameter concrete field tile (1500D)	224 m	\$ 16.00	\$ 3,584.00
	Installation by means of a wheel trencher (Sta. 0+318 to Sta. 0+542)	224 m	\$ 20.00	\$ 4,480.00
6)	Supply & install 600mm x 600mm concrete catch basin at Sta. 0+318 (inline type)	1 ea	\$ 1,800.00	\$ 1,800.00
7)	Supply & install 900mm x 1200mm concrete junction box at Sta. 0+105	1 ea	\$ 2,200.00	\$ 2,200.00
8)	Tile Connections	I.s		<u>\$ 746.00</u>
	Sub-Total			<u>\$ 31,400.00</u>

<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
9) Work to be done on the Huron Street Road Allowance (Sta. 0+542 to Sta. 0+562)			
a) Supply 300mm diameter H.D.P.E. pipe (320 kPa) Solid Pipe Installation of 300mm diameter H.D.P.E. including granular base and backfill (open cut method) (Sta. 0+542 to Sta. 0+562)	20 m l.s	\$ 30.00 	\$ 600.00 \$ 4,500.00
b) Supply & install 600mm x 600mm concrete ditch inlet catch basin at Sta. 0+542 (inline type)	1 ea	\$ 1,800.00	\$ 1,800.00
c) Supply & install 600mm x 600mm concrete catch basin at Sta. 0+562 (inline type)	1 ea	\$ 1,800.00	\$ 1,800.00
d) Supply 450mm diameter H.D.P.E. pipe (320 kPa) Solid Pipe Installation of Road Culvert (surface culvert) (Sta. 0+544 to Sta. 0+560)	16 m l.s	\$ 50.00 	\$ 800.00 \$ 1,000.00
Sub-Total			\$ 10,500.00
TOTAL ESTIMATED CONSTRUCTION COSTS MAIN DRAIN			\$ 41,900.00
<u>B) BRANCH 'A'</u>			
1) Supply 250mm diameter concrete field tile (1500D) Installation by means of a wheel trencher (Sta. 0+000 to Sta. 0+182)	182 m 182 m	\$ 15.00 \$ 20.00	\$ 2,730.00 \$ 3,640.00
2) Supply & install 600mm x 600mm concrete catch basin at Sta. 0+182 (inline type)	1 ea	\$ 1,800.00	\$ 1,800.00
TOTAL ESTIMATED CONSTRUCTION COSTS BRANCH 'A'			\$ 8,170.00

Summary of Construction Costs

A) Total Estimated Construction Costs – Main Drain	\$ 41,900
B) Total Estimated Construction Costs – Branch ‘A’	\$ 8,170
TOTAL ESTIMATED CONSTRUCTION COSTS	<u>\$ 50,070</u>
<hr/>	
Total Estimated Materials	\$ 14,698
Total Estimated Labour and Equipment	\$ 35,372
TOTAL ESTIMATED CONSTRUCTION COSTS	<u>\$ 50,070</u>

Summary of Costs

Allowances under Section 30 of the Drainage Act, R.S.O. 1990	\$ 9,410
Total Estimated Construction Costs	\$ 50,070
Meetings, survey, design, preparation of preliminary cost estimates and reports, preparation of final drainage report, consideration of report and court of revision	\$ 12,900
Preparation of contract documents, contract administration, supervision and inspection of construction	\$ 7,500
Contingencies, Interest, and net H.S.T.	<u>\$ 3,020</u>
TOTAL ESTIMATED COSTS	
ALLEN MUNICIPAL DRAIN 2018	<u>\$ 82,900</u>

The estimated cost of the work in the Municipality of South Huron is \$ 82,900.

Assessment

We assess the cost of this work against the lands and roads liable for assessment for benefit and outlet as shown on the annexed Schedules of Assessment. We have determined that there is no injuring liability assessment involved.

The existing Allen Municipal Drain constructed under the report of Spriet Associates London Ltd dated November 28, 1977 shall be abandoned and cease to be a municipal drain after the Allen Municipal Drain 2018 is constructed. The ownership of the existing tile drains shall be reverted to the landowners for that portion of the drain which is situated on their respective properties.

Whether or not the Municipality of South Huron elects to do the work on their property, Huron Street, Main Drain, Sta. 0+542 to Sta. 0+562, they shall be assessed the actual increased costs to the drainage works due to the construction and operation of the road as a Special Assessment in addition to any benefit and outlet assessments. The Special Assessment shall be made up of the actual construction costs plus an allowance for administration costs.

Maintenance

After completion, this drain shall be maintained by the Municipality of South Huron at the expense of all the lands and roads assessed in the attached Schedules of Assessment for Maintenance and in the same relative proportions until such time as the assessment is changed under the Drainage Act, except for the portion of the drain constructed within the Municipality of South Huron road allowance, Main Drain (Huron Street). This portion of the drain shall be maintained at the expense of the road authority having jurisdiction over said road.

Respectfully submitted,

DIETRICH ENGINEERING LIMITED



W. J. Dietrich, P.Eng.

WJD:ch



SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR PART	CON.	AFFECTED HECTARES	APPROX.	ROLL NO.	OWNER	(SEC. 22)		(SEC. 23)		(SEC. 26)		LESS 1/3		NET
						BENEFIT	OUTLET	LIABILITY	SPECIAL	TOTAL	GOV'T	ALLOWANCES	ASSESSMENT	
MAIN DRAIN														
Pt 14 & 15	9	5.7			C., F. & J. Prance	\$15,600	\$3,125			\$18,725	\$6,242	\$4,870		\$7,613
N Pt 15	9	6.9			Rollinlea Farms Ltd.	\$10,400	\$7,406			\$17,806	\$5,935	\$2,290		\$9,581
Pt 16	9	4.0			Rasenberg Invesments Ltd.	\$3,000	\$7,984			\$10,984	\$3,661	\$400		\$6,923
Total Assessment on Lands						\$29,000	\$18,515			\$47,515	\$15,838	\$7,560		\$24,117
Huron Street		0.8			Municipality of South Huron	\$3,000	\$4,280		\$14,505	\$21,785				\$21,785
Total Assessment on Roads						\$3,000	\$4,280		\$14,505	\$21,785				\$21,785
Total Assessment on Lands and Roads, Allen Municipal Drain 2018 (Main Drain)						\$32,000	\$22,795		\$14,505	\$69,300	\$15,838	\$7,560		\$45,902

- NOTES: 1. All the above lands are eligible for ADIP grants
2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.



SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR		CON.	APPROX. HECTARES	OWNER	ROLL NO.	(SEC. 22)		(SEC. 23)		LESS 1/3		
PART						BENEFIT	OUTLET	TOTAL	GOV'T	LESS	NET	
<u>BRANCH "A"</u>												
Pt 14 & 15	9	2.0	C., F. & J. Prance	(9-031)	\$4,700	\$1,609	\$6,309	\$2,103	\$1,450	\$2,756		
N Pt 15	9	3.6	Rollinlea Farms Ltd.	(9-032)	\$1,500	\$5,791	\$7,291	\$2,430	\$400	\$4,461		
Total Assessment on Lands					\$6,200	\$7,400	\$13,600	\$4,533	\$1,850	\$7,217		
Total Assessment on Lands, Allen Municipal Drain 2018 (Branch "A")					\$6,200	\$7,400	\$13,600	\$4,533	\$1,850	\$7,217		

- NOTES: 1. All the above lands are eligible for ADIP grants
2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.



SCHEDULE OF NET ASSESSMENT FOR CONSTRUCTION
Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR PART	CON.	OWNER	ROLL NO.	MAIN DRAIN	BRANCH "A" ASSESSMENT	LESS 1/3			NET
						TOTAL	GOV'T GRANT	LESS ALLOWANCES	
Pt 14 & 15	9	C., F. & J. Prance	(9-031)	\$18,725	\$6,309	\$25,034	\$8,345	\$6,320	\$10,369
N Pt 15	9	Rollinlea Farms Ltd.	(9-032)	\$17,806	\$7,291	\$25,097	\$8,366	\$2,690	\$14,041
Pt 16	9	Rasenber Investments Ltd.	(9-033)	\$10,984		\$10,984	\$3,661	\$400	\$6,923
Total Assessment on Lands				<u>\$47,515</u>	<u>\$13,600</u>	<u>\$61,115</u>	<u>\$20,372</u>	<u>\$9,410</u>	<u>\$31,333</u>
Huron Street		Municipality of South Huron		<u>\$21,785</u>		<u>\$21,785</u>			<u>\$21,785</u>
Total Assessment on Roads				<u>\$21,785</u>		<u>\$21,785</u>			<u>\$21,785</u>
Total Assessment on Lands and Roads, Allen Municipal Drain 2018				<u><u>\$69,300</u></u>	<u><u>\$13,600</u></u>	<u><u>\$82,900</u></u>	<u><u>\$20,372</u></u>	<u><u>\$9,410</u></u>	<u><u>\$53,118</u></u>

- NOTES: 1. All the above lands are eligible for ADIP grants.
2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<u>MAIN DRAIN</u>					
Pt 14 & 15	9	5.7	C., F. & J. Prance	(9-031)	29.6%
N Pt 15	9	6.9	Rollinlea Farms Ltd.	(9-032)	35.9%
Pt 16	9	4.0	Rasenberg Invesments Ltd.	(9-033)	<u>21.2%</u>
Total Assessment on Lands					<u>86.7%</u>
Huron Street		0.8	Municipality of South Huron		<u>13.3%</u>
Total Assessment on Roads					<u>13.3%</u>
Total Assessment for Maintenance, Allen Municipal Drain 2018 (Main Drain)					<u><u>100.0%</u></u>

SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Allen Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<u>BRANCH "A"</u>					
Pt 14 & 15	9	2.0	C., F. & J. Prance	(9-031)	35.7%
N Pt 15	9	3.6	Rollinlea Farms Ltd.	(9-032)	<u>64.3%</u>
Total Assessment on Lands					<u>100.0%</u>
Total Assessment for Maintenance, Allen Municipal Drain 2018 (Branch "A")					<u><u>100.0%</u></u>

SPECIFICATIONS FOR THE CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

DIVISION A – General Conditions

DIVISION B – Specification for Open Drains

DIVISION C – Specification for Tile Drains

DIVISION H – Special Provisions

DIVISION A

GENERAL CONDITIONS

<u>A</u>	<u>CONTENT</u>	<u>PAGE</u>
A.1	SCOPE	1
A.2	TENDERS	1
A.3	EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS	1
A.4	PAYMENT	2
A.5	CONTRACTOR'S LIABILITY INSURANCE	2
A.6	LOSSES DUE TO ACTS OF NATURE, ETC.	2
A.7	COMMENCEMENT AND COMPLETION OF WORK	3
A.8	WORKING AREA AND ACCESS	3
A.9	SUB-CONTRACTORS	3
A.10	PERMITS, NOTICES, LAWS AND RULES	3
A.11	RAILWAYS, HIGHWAYS AND UTILITIES	4
A.12	ERRORS AND UNUSUAL CONDITIONS	4
A.13	ALTERATIONS AND ADDITIONS	4
A.14	SUPERVISION	4
A.15	FIELD MEETINGS	4
A.16	PERIODIC AND FINAL INSPECTIONS	5
A.17	ACCEPTANCE BY THE MUNICIPALITY	5
A.18	WARRANTY	5
A.19	TERMINATION OF CONTRACT BY THE MUNICIPALITY	5
A.20	TESTS	6
A.21	POLLUTION	6
A.22	SPECIES AT RISK	6
A.23	ROAD CROSSINGS	6
A.24	LANEWAYS	7
A.25	FENCES	8
A.26	LIVESTOCK	8
A.27	STANDING CROPS	9
A.28	SURPLUS GRAVEL	9
A.29	IRON BARS	9
A.30	RIP-RAP	9
A.31	CLEARING, GRUBBING AND BRUSHING	9
A.32	RESTORATION OF LAWNS	9

DIVISION A

GENERAL CONDITIONS

A.1 SCOPE

The work to be done under this contract consists of supplying all labour, equipment and materials to construct the drainage work as outlined in the Scope of Work, Drawings, General Conditions and other Specifications.

A.2 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as instructed by the Municipality. The Scope of Work must be completed and submitted with the Form of Tender and Agreement. A certified cheque is required as Tender Security, payable to the Treasurer of the Municipality.

All certified cheques, except that of the bidder to whom the work is awarded will be returned within ten (10) days of the time the Contract is awarded. The certified cheque of the bidder to whom the work is awarded will be retained as Contract Security and returned when the Municipality receives a Completion Certificate for the work.

A certified cheque is not required if the Contractor provides an alternate form of Contract Security such as a Performance Bond for 100% of the amount of the Tender or other satisfactory security, if required/permitted by the Municipality. A Performance Bond may also be required to insure maintenance of the work for a period of one (1) year after the date of the Completion Certificate.

A.3 EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS

The Tenderer must examine the premises and site to compare them with the Drawings and Specifications in order to satisfy himself of the existing conditions and extent of the work to be done before submission of his Tender. No allowance shall subsequently be made on behalf of the Contractor by reason of any error on his part. Any estimates of quantities shown or indicated on the Drawings, or elsewhere are provided for the convenience of the Tenderer. Any use made of these quantities by the Tenderer in calculating his Tender shall be done at his own risk. The Tenderer for his own protection should check these quantities for accuracy.

The standard specifications (Divisions B through G) shall be considered complementary and where a project is controlled under one of the Divisions, the remaining Divisions will apply for miscellaneous works.



In case of any inconsistency or conflict between the Drawings and Specifications, the following order of precedence shall apply:

- Direction of the Engineer
- Special Provisions (Division H)
- Scope of Work
- Contract Drawings
- Standard Specifications (Divisions B through G)
- General Conditions (Division A)

A.4 PAYMENT

Progress payments equal to 87±% of the value of work completed and materials incorporated in the work will be made to the Contractor monthly. An additional ten per cent (10±%) will be paid 45 days after the final acceptance by the Engineer, and three per cent (3±%) of the Contract price may be reserved by the Municipality as a maintenance holdback for a one (1) year period from the date of the Completion Certificate. A greater percentage of the Contract price may be reserved by the Municipality for the same one (1) year period if in the opinion of the Engineer, particular conditions of the Contract requires such greater holdback.

After the completion of the work, any part of this reserve may be used to correct defects developed within that time from faulty workmanship and materials, provided that notice shall first be given to the Contractor and that he may promptly make good such defects.

A.5 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of any work, the Contractor shall file with the Municipality evidence of compliance with all Municipality insurance requirements (Liability Insurance, WSIB, etc.) for no less than the minimum amounts as stated in the Purchasing Procedures of the Municipality. All insurance coverage shall remain in force for the entire contract period including the warranty period which expires one year after the date of the Completion Certificate.

The following are to be named as co-insured: Successful Contractor
Sub-Contractor
Municipality
Dietrich Engineering Ltd.

A.6 LOSSES DUE TO ACTS OF NATURE, ETC.

All damage, loss, expense and delay incurred or experienced by the Contractor in the performance of the work, by reason of unanticipated difficulties, bad weather, strikes, acts of nature, or other mischances shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.



A.7 COMMENCEMENT AND COMPLETION OF WORK

The work must commence as specified in the Form of Tender and Agreement. If conditions are unsuitable due to poor weather, the Contractor may be required, at the discretion of the Engineer to postpone or halt work until conditions become acceptable and shall not be subject of a claim for additional compensation.

The Contractor shall give the Engineer a minimum of 48 hours notice before commencement of work. The Contractor shall then arrange a meeting to be held on the site with Contractor, Engineer, and affected Landowners to review in detail the construction scheduling and other details of the work.

If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Municipality a minimum of 24 hours notice prior to returning to the project. If any work is commenced without notice to the Engineer, the Contractor shall be fully responsible for all such work undertaken prior to such notification.

The work must proceed in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the Form of Tender and Agreement.

A.8 WORKING AREA AND ACCESS

Where any part of the drain is on a road allowance, the road allowance shall be the working area. For all other areas, the working area available to the Contractor to construct the drain is specified in the Special Provisions (Division H).

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately. Where the Contractor exceeds the specified working widths without authorization, he shall be held responsible for the costs of all additional damages.

If access off an adjacent road allowance is not possible, each Landowner on whose property the drainage works is to be constructed, shall designate access to and from the working area. The Contractor shall not enter any other lands without permission of the Landowner and he shall compensate the Landowner for damage caused by such entry.

A.9 SUB-CONTRACTORS

The Contractor shall not sublet the whole or part of this Contract without the approval of the Engineer.

A.10 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall obtain and pay for all necessary permits or licenses required for the execution of the work (but this shall not include MTO encroachment permits, County Road permits permanent easement or rights of servitude). The Contractor shall give all necessary notices and pay for all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health and safety.



A.11 RAILWAYS, HIGHWAYS AND UTILITIES

A minimum of 72 hours' notice to the Railway or Highways, exclusive of Saturdays, Sundays, and Statutory Holidays, is required by the Contractor prior to any work activities on or affecting the applicable property. In the case of affected Utilities, a minimum of 48 hours' notice to the utility owner is required.

A.12 ERRORS AND UNUSUAL CONDITIONS

The Contractor shall notify the Engineer immediately of any error or unusual conditions which may be found. Any attempt by the Contractor to correct the error on his own shall be done at his own risk. Any additional cost incurred by the Contractor to remedy the wrong decision on his part shall be borne by the Contractor. The Engineer shall make the alterations necessary to correct errors or to adjust for unusual conditions during which time it will be the Contractor's responsibility to keep his men and equipment gainfully employed elsewhere on the project.

The Contract amount shall be adjusted in accordance with a fair evaluation of the work added or deleted.

A.13 ALTERATIONS AND ADDITIONS

The Engineer shall have the power to make alterations in the work shown or described in the Drawings and Specifications and the Contractor shall proceed to make such changes without causing delay. In every such case, the price agreed to be paid for the work under the Contract shall be increased or decreased as the case may require according to a fair and reasonable evaluation of the work added or deleted. The valuation shall be determined as a result of negotiations between the Contractor and the Engineer, but in all cases the Engineer shall maintain the final responsibility for the decision. Such alterations and variations shall in no way render the Contract void. No claims for a variation or alteration in the increased or decreased price shall be valid unless done in pursuance of an order from the Engineer and notice of such claims made in writing before commencement of such work. In no such case shall the Contractor commence work which he considers to be extra before receiving the Engineer's approval.

A.14 SUPERVISION

The Contractor shall give the work his constant supervision and shall keep a competent foreman in charge at the site.

A.15 FIELD MEETINGS

At the discretion of the Engineer, a field meeting with the Contractor or his representative, the Engineer and with those others that the Engineer deems to be affected, shall be held at the location and time specified by the Engineer.



A.16 PERIODIC AND FINAL INSPECTIONS

Periodic inspections by the Engineer will be made during the performance of the work. If ordered by the Engineer, the Contractor shall expose the drain as needed to facilitate inspection by the Engineer.

Final inspection by the Engineer will be made within twenty (20) days after he has received notice from the Contractor that the work is complete.

A.17 ACCEPTANCE BY THE MUNICIPALITY

Before any work shall be accepted by the Municipality, the Contractor shall correct all deficiencies identified by the Engineer and the Contractor shall leave the site neat and presentable.

A.18 WARRANTY

The Contractor shall repair and make good any damages or faults in the drain that may appear within one (1) year after its completion (as dated on the Completion Certificate) as the result of the imperfect or defective work done or materials furnished if certified by the Engineer as being due to one or both of these causes; but nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the Country, Province or Locality in which the work is being done. Neither the Completion Certificate nor any payment there under, nor any provision in the Contract Documents shall relieve the Contractor from his responsibility.

A.19 TERMINATION OF CONTRACT BY THE MUNICIPALITY

If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days notice in writing from the Engineer to supply additional workmen or materials to commence or complete the works, or if he should fail to make prompt payment to Sub-Contractors, or for material, or labour, or persistently disregards laws, ordinances, or the instruction of the Engineer, or otherwise be guilty of a substantial violation of the provisions of the Contract, then the Municipality, upon the certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, by giving the Contractor written notice, terminate the employment of the Contractor and take possession of the premises, and of all materials, tools and appliances thereon, and may finish the work by whatever method the Engineer may deem expedient but without delay or expense. In such a case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price will exceed the expense of finishing the work including compensation to the Engineer for his additional services and including the other damages of every name and nature, such excess shall be paid by the Contractor. If such expense will exceed such unpaid balance, the Contractor shall pay the difference to the Municipality. The expense incurred by the Municipality, as herein provided, shall be certified by the Engineer.



If the Contract is terminated by the Municipality due to the Contractor's failure to properly commence the works, the Contractor shall forfeit the certified cheque bid deposit and furthermore shall pay to the Municipality an amount to cover the increased costs, if any, associated with a new Tender for the Contract being terminated.

If any unpaid balance and the certified cheque do not match the monies owed by the Contractor upon termination of the Contract, the Municipality may also charge such expense against any money which may thereafter be due to the Contractor from the Municipality.

A.20 TESTS

The cost for the testing of materials supplied to the job by the Contractor shall be borne by the Contractor. The Engineer reserves the right to subject any lengths of any tile or pipe to a competent testing laboratory to ensure the adequacy of the tile or pipe. If any tile supplied by the Contractor is determined to be inadequate to meet the applicable A.S.T.M. standards, the Contractor shall bear full responsibility to remove and/or replace all such inadequate tile in the Contract with tile capable of meeting the A.S.T.M. Standards.

A.21 POLLUTION

The Contractor shall keep their equipment in good repair. The Contractor shall refuel or repair equipment away from open water.

If polluted material from construction materials or equipment is caused to flow into the drain, the Contractor shall immediately notify the Ministry of the Environment, and proceed with the Ministry's protocols in place to address the situation.

A.22 SPECIES AT RISK

If a Contractor encounters a known Species at Risk as designated by the MNR or DFO, the Contractor shall notify the Engineer immediately and follow the Ministry's guidelines to deal with the species.

A.23 ROAD CROSSINGS

This specification applies to all road crossings (Municipality, County, Regional, or Highway) where no specific detail is provided on the drawings or in the standard specifications. This specification in no way limits the Road Authority's regulations governing the construction of drains on their Road Allowance.

A.23.1 Road Occupancy Permit

Where applicable, the Contractor must submit an application for a road occupancy permit to the Road Authority and allow a minimum of five (5) working days for its review and issuance.



A.23.2 Road Closure Request and Construction Notification

The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority and the Engineer for review and approval a minimum of five (5) working days prior to proceeding with any work on the road allowance. The Contractor shall be responsible for notifying all applicable emergency services, schools, etc. of the road closure or construction taking place.

A.23.3 Traffic Control

The Contractor shall supply flagmen, and warning signs and ensure that detour routes are adequately signed in accordance with no less than the minimum standards as set out in the Ontario Traffic Manual's Book 7.

A.23.4 Weather

No construction shall take place during inclement weather or periods of poor visibility.

A.23.5 Equipment

No construction material and/or equipment is to be left within three (3) metres of the travelled portion of the road overnight or during periods of inclement weather.

If not stated on the drawings, the road crossing shall be constructed by open cut method. Backfill from the top of the cover material over the subsurface pipe or culvert to the under side of the road base shall be Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm. Granular road base materials shall be thoroughly compacted to 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing HL-8 Hot Mix Asphalt patch at a thickness of 50mm or of the same thickness as the existing pavement structure. The asphalt patch shall be flush with the existing roadway on each side and without overlap.

Excavated material from the trench beyond 1.25 metres from the travelled portion or beyond the outside edge of the gravel shoulder may be used as backfill in the trench in the case of covered drains. The material shall be compacted in lifts not exceeding 300mm.

A.24 LANEWAYS

All pipes crossing laneways shall be backfilled with material that is clean, free of foreign material or frozen particles and readily tamped or compacted in place unless otherwise specified. Laneway culverts on open ditch projects shall be backfilled with material that is not easily erodible. All backfill material shall be thoroughly compacted as directed by the Engineer.



Culverts shall be bedded with a minimum of 300mm of granular material. Granular material shall be placed simultaneously on each side of the culvert in lifts not exceeding 150mm in thickness and compacted to 95% Standard Proctor Density. Culverts shall be installed a minimum of 10% of the culvert diameter below design grade with a minimum of 450mm of cover over the pipe unless otherwise noted on the Drawings.

The backfill over culverts and subsurface pipes at all existing laneways that have granular surfaces on open ditch and closed drainage projects shall be surfaced with a minimum of 300mm of Granular "B" material and 150mm of Granular "A" material. All backfill shall be thoroughly compacted as directed by the Engineer. All granular material shall be placed to the full width of the travelled portion.

Any settling of backfilled material shall be repaired by or at the expense of the Contractor during the warranty period of the project and as soon as required.

A.25 FENCES

No earth is to be placed against fences and all fences removed by the Contractor shall be replaced by him in as good a condition as found. Where practical the Contractor shall take down existing fences in good condition at the nearest anchor post and roll it back rather than cutting the fence and attempting to patch it. The replacement of the fences shall be done to the satisfaction of the Engineer. Any fences found in such poor condition where the fence is not salvageable, shall be noted and verified with the Engineer prior to commencement of work.

Fences damaged beyond repair by the Contractor's negligence shall be replaced with new materials, similar to those materials of the existing fence, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the Landowner and the Engineer.

Any fences paralleling an open ditch that are not line fences that hinder the proper working of the excavating machinery, shall be removed and rebuilt by the Landowner at his own expense.

The Contractor shall not leave fences open when he is not at work in the immediate vicinity.

A.26 LIVESTOCK

The Contractor shall provide each landowner with 48 hours notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the Landowner shall be responsible to keep all livestock clear of the construction areas until further notified. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock where the Contractor failed to notify the Landowner, or through negligence or carelessness on the part of the Contractor.



A.27 STANDING CROPS

The Contractor shall be responsible for damages to standing crops which are ready to be harvested or salvaged along the course of the drain and access routes if the Contractor has failed to notify the Landowners 48 hours prior to commencement of the work on that portion of the drain.

A.28 SURPLUS GRAVEL

If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used, the Contractor shall haul away such surplus material.

A.29 IRON BARS

The Contractor is responsible for the cost of an Ontario Land Surveyor to replace any iron bars that are altered or destroyed during the course of the construction.

A.30 RIP-RAP

Rip-rap shall be quarry stone rip-rap material and shall be the sizes specified in the Special Provisions. Broken concrete shall not be used as rip-rap unless otherwise specified.

A.31 CLEARING, GRUBBING AND BRUSHING

This specification applies to all brushing where no specific detail is provided on the drawings or in the Special Provisions.

The Contractor shall clear, brush and stump trees from within the working area that interfere with the installation of the drainage system.

All trees, limbs and brush less than 150mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and neatly stacked in piles designated by the Landowners.

A.32 RESTORATION OF LAWNS

This specification applies to all lawn restoration where no specific detail is provided on the drawings or in the Special Provisions and no allowance for damages has been provided under Section 30 of the Drainage Act RSO 1990 to the affected property.

The Contractor shall supply "high quality grass seed" and the seed shall be broadcast by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of broadcast to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the Landowner to maintain the area in a manner so as to promote growth.

DIVISION B

SPECIFICATIONS FOR OPEN DRAINS

<u>B</u>	<u>CONTENT</u>	<u>PAGE</u>
B.1	ALIGNMENT	1
B.2	PROFILE	1
B.3	EXCAVATION	1
B.4	EXCAVATED MATERIAL	2
B.5	EXCAVATION AT EXISTING BRIDGE AND CULVERT SITES	2
B.6	PIPE CULVERTS	2
B.7	RIP-RAP PROTECTION FOR CULVERTS	3
B.8	CLEARING, GRUBBING AND MULCHING	3
B.9	TRIBUTARY TILE OUTLETS	3
B.10	SEEDING	3
B.11	COMPLETION	4

DIVISION B

SPECIFICATIONS FOR OPEN DRAINS

B.1 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless noted on the drawings. Where there are unnecessary bends or irregularities on the existing course of the drain, the Contractor shall contact the Engineer before commencing work to verify the manner in which such irregularities or bends may be removed from the drain. All curves shall be made with a minimum radius of fifteen (15) metres from the centre line of the drain.

B.2 PROFILE

The Profile Drawing shows the depth of cuts from the top of the bank to the final invert of the ditch in metres and decimals of a metre, and also the approximate depth of excavated material from the bottom of the existing ditch to the final invert of the ditch. These cuts are established for the convenience of the Contractor; however, bench marks (established along the course of the drain) will govern the final elevation of the drain. The location and elevation of the bench marks are given on the Profile Drawing. Accurate grade control must be maintained by the Contractor during ditch excavation.

B.3 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the drawings. If the channel cross-section is not specified it shall be a one metre bottom width with 1.5(h):1(v) side slopes. At locations along the drain where the cross section dimensions change, there shall be a transitional length of not less than 10:1 (five metre length to 0.5 metre width differential). Where the width of the bottom of the existing ditch is sufficient to construct the design width, then construction shall proceed without disturbing the existing banks.

Where existing side slopes become unstable, the Contractor shall immediately notify the Engineer. Alternative methods of construction and/or methods of protection will then be determined prior to continuing work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.

An approved hydraulic excavator shall be used to carry out the excavation of the open ditch unless otherwise directed by the Engineer.



B.4 EXCAVATED MATERIAL

Excavated material shall be placed on the low side of the drain or opposite trees and fences. The Contractor shall contact all Landowners before proceeding with the work to verify the location to place and level the excavated material.

No excavated material shall be placed in tributary drains, depressions, or low areas which direct water behind the spoil bank. The excavated material shall be placed and levelled to a maximum depth of 200 mm, unless instructed otherwise and commence a minimum of one (1) metre from the top of the bank. The edge of the spoil bank away from the ditch shall be feathered down to the existing ground; the edge of the spoil bank nearest the ditch shall have a maximum slope of 2(h):1(v). The material shall be levelled such that it may be cultivated with ordinary farm equipment without causing undue hardship to the farm machinery and farm personnel. No excavated material shall cover any logs, brush, etc. of any kind.

Any stones or boulders which exceed 300mm in diameter shall be removed and disposed of in a location specified by the Landowner.

Where it is necessary to straighten any unnecessary bends or irregularities in the alignment of the ditch or to relocate any portion or all of an existing ditch, the excavated material from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and the old ditch, no extra compensation will be allowed for this work and must be included in the Contractor's lump sum price for the open work.

B.5 EXCAVATION AT EXISITING BRIDGE AND CULVERT SITES

The Contractor shall excavate the drain to the full specified depth under all bridges and to the full width of the structure. Temporary bridges may be carefully removed and left on the bank of the drain but shall be replaced by the Contractor when the excavation is complete. Permanent bridges must, if at all possible, be left intact. All necessary care and precautions shall be taken to protect the structure. The Contractor shall notify the Landowner if excavation will expose the footings or otherwise compromise the structural integrity of the structure.

The Contractor shall clean through all pipe culverts to the grade and width specified on the profile.

B.6 PIPE CULVERTS

All pipe culverts shall be installed in accordance with the standard detail drawings. If couplers are required, five corrugation couplers shall be used for up to and including 1200mm diameter pipes and 10 corrugation couplers for greater than 1200mm diameter pipes.

When an existing crossing is being replaced, the Contractor may backfill the new culvert with the existing native material that is free of large rocks and stones. The Contractor is responsible for any damage to a culvert pipe that is a result of rocks or stones in the backfill.



B.7 RIP-RAP PROTECTION FOR CULVERTS

Quarry stone rip-rap shall be used as end treatment for new culverts and placed on geotextile filter material (Mirafi 160N or approved equal). The rip-rap shall be adequately keyed in along the bottom of the slope, and shall extend to the top of the pipe or as directed on the drawings. The maximum slope for rip-rap shall be 1(h):1(v) or as directed by the Engineer.

The Contractor shall be responsible for any defects or damages that may develop in the rip-rap or the earth behind the rip-rap that the Engineer deems to have been fully or partially caused by faulty workmanship or materials.

B.8 CLEARING, GRUBBING AND MULCHING

Prior to excavation, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with the slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the side slopes shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the Landowner.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched. Clearing, grubbing and mulching shall be carried out as a separate operation from the excavation of the ditch, and shall not be completed simultaneously at the same location.

B.9 TRIBUTARY TILE OUTLETS

All tile outlets in existing ditches shall be marked by the Landowner prior to excavation. The Contractor shall guard against damaging the outlets of tributary drains. Any tile drain outlets that were marked or noted on the drawings and are subsequently damaged by the Contractor shall be repaired by the Contractor at his expense. The Landowner shall be responsible for repairs to damaged tile outlets that were not marked.

B.10 SEEDING

The side slopes where disturbed shall be seeded using an approved grass seed mixture. The grass seed shall be applied the same day as the excavation of the open ditch.

Grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO and composed of the following varieties mixed in the proportion by weight as follows:

- 55% Creeping Red Fescue
- 40% Perennial Rye Grass
- 5% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

**B.11 HYDRO SEEDING**

The areas specified in the contract document shall be hydro seeded and mulched upon completion of construction in accordance with O.P.S.S. 572.

B.12 HAND SEEDING

Placement of the seed shall be of means of an approved mechanical spreader.

B.13 COMPLETION

At the time of completion and final inspection, all work in the Contract shall have the full dimensions and cross-sections specified without any allowance for caving of banks or sediment in the ditch bottom.

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

<u>C</u>	<u>CONTENT</u>	<u>PAGE</u>
C.1	PIPE MATERIALS	1
C.2	ALIGNMENT	1
C.3	PROFILE	2
C.4	EXCAVATION	2
C.5	INSTALLATION	2
C.6	TRENCH CROSSINGS	3
C.7	OUTLET PROTECTION	4
C.8	CATCH BASINS AND JUNCTION BOXES	4
C.9	TRIBUTARY DRAINS	5
C.10	CLEARING, GRUBBING AND MULCHING	5
C.11	ROADS AND LANEWAY SUB-SURFACE CROSSINGS	6
C.12	FILLING IN EXISTING DITCHES	6
C.13	CONSTRUCTION OF GRASSED WATERWAYS	6
C.14	UNSTABLE SOIL	6
C.15	ROCKS	6
C.16	BROKEN OR DAMAGED TILE	7
C.17	RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS	7

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

C.1 PIPE MATERIALS

C.1.1 Concrete Tile

Concrete drain tile shall conform to the requirements of the most recent A.S.T.M. specification for Heavy-Duty Extra Quality drain tile. All tile with diameters less than 600mm shall have a pipe strength of 1500D. All tile with diameters 600mm or larger shall have a pipe strength of 2000D.

All tile furnished shall be subject to the approval of the Engineer. All rejected tile are to be immediately removed from the site.

C.1.2 High Density Polyethylene (HDPE) Pipe

All HDPE pipe shall be dual-wall corrugated drainage pipe with a smooth inner wall. HDPE pipe shall have a minimum stiffness of 320 kPa at 5% deflection.

Unless otherwise noted, all sealed HDPE pipe shall have a water tight gasketed bell and spigot joining system meeting the minimum requirements of CSA B182.8. Perforated HDPE pipe shall have a soil tight joining system, and shall be enveloped in non-woven geotextile filter sock.

C.2 ALIGNMENT

The Contractor shall contact the Engineer to establish the course of the drain. Where an existing drain is to be removed and replaced by the new drain, or where the new drain is to be installed parallel to an existing drain, the Contractor shall locate the existing drain (including repairing damaged tile caused by locating) at intervals along the course of the drain. The costs of locating shall be included in the tender price.

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other watercourses or at sharp corners, it shall run on a curve of at least 15 metres radius. The new tile drain shall be constructed at an offset from and parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water.

The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and existing tile act together to provide the necessary capacity. Where any such existing drain is disturbed or damaged, the Contractor shall perform the necessary repair at his expense.



C.3 PROFILE

Benchmarks have been established along the course of the drain which are to govern the elevations of the drain. The location and elevations of the benchmarks are shown on the drawings. Tile is to be installed to the elevation and grade shown on the profiles. Accurate grade control must be maintained by the Contractor at all times.

When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made.

C.4 EXCAVATION

C.4.1 Wheel machine

Unless otherwise specified, all trenching shall be carried out with a wheel machine approved by the Engineer. The wheel machine shall shape the bottom of the trench to conform to the outside diameter of the pipe. The minimum trench width shall be equal to the outside diameter of the pipe plus 100mm on each side of the pipe, unless otherwise specified. The maximum trench width shall be equal to the outside diameter of the pipe plus 300mm on each side of the pipe, unless otherwise specified.

C.4.2 Scalping

Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capability of the Contractor's wheel machine, he shall lower the surface grade in order that the wheel machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of the topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.

C.4.3 Excavator

Where the use of an excavator is used in-lieu of a wheel machine, the topsoil shall be stripped and replaced in accordance with Item C.4.2. All tile shall be installed on 19mm clear crushed stone bedding placed to a minimum depth of 150mm which has been shaped to conform to the bottom of the pipe. The Contractor shall include the costs of this work in his tender price.

C.5 INSTALLATION

C.5.1 Concrete Tile

The tile is to be laid with close joints and in regular grade and alignment in accordance with the drawings. The tiles are to be bevelled, if necessary to ensure close joints. The inside of the tile is to be kept clear when laid. The sides of the tile are to be supported by partial filling of the trench



(blinding) prior to inspection by the Engineer. No tile shall be backfilled until inspected by the Engineer unless otherwise permitted by the Engineer. The tile shall be backfilled such that a sufficient mound of backfill is placed over the trench to ensure that no depression remains after settling occurs in the backfill.

Where a tile connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a tile drain passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

The Contractor shall supply and wrap all concrete tile joints with Mirafi 160N geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.
- 500mm wide for tile sizes larger than 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be.

C.5.2 HDPE Pipe

HDPE pipe shall be installed using compacted Granular 'A' bedding or 19mm clear crushed stone bedding from 150mm below the pipe to 300mm above the pipe. All granular material shall be compacted using a suitable mechanical vibratory compactor. Granular bedding and backfill shall be placed in lifts not exceeding 300mm and compacted to at least 95% Standard Proctor Maximum Dry Density (SPMDD).

Where a pipe connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a pipe passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

As determined by the Engineer, unsuitable backfill material must be hauled off-site by the Contractor and Granular "B" shall be used as replacement backfill material.

C.6 TRENCH CROSSINGS

The Contractor shall not cross the backfilled trench with any construction equipment or vehicles, except by one designated crossing location on each property. The Contractor shall ensure that the bedding and backfill material at this designated crossing location is properly placed and compacted so as to adequately support the equipment and vehicles that may cross the trench.



The Contractor may undertake any other approved work to ensure the integrity of the tile at the crossing location. The Contractor shall ensure that no equipment or vehicles travel along the length of the trench. The Contractor shall be responsible for any damage to the new tile caused by the construction of the drain.

C.7 OUTLET PROTECTION

A tile drain outlet into a ditch shall be either HDPE pipe or corrugated steel pipe and shall include a hinged grate for rodent protection. The maximum spacing between bars on the rodent grate shall be 40mm. All corrugated steel outlet pipes shall be bevelled at the end to generally conform to the slope of the ditch bank.

Quarry stone rock rip-rap protection and geotextile filter material (Mirafi 160N), shall be installed around the outlet pipe and extended downstream a minimum distance of three metres, unless otherwise specified. The protection shall extend to the top of the backfilled trench and below the pipe to 300 mm under the streambed. The protection shall also extend 600mm into undisturbed soil on either side of the backfilled trench. In some locations, rip-rap may be required on the bank opposite the outlet.

Where the outlet occurs at the upper end of an open ditch, the rip-rap protection will extend all around the end of the ditch and to a point 800mm downstream on either side. Where heavy overflow is likely to occur, sufficient additional rip-rap and filter material shall be placed as directed by the Engineer to prevent the water cutting around the protection.

C.8 CATCH BASINS AND JUNCTION BOXES

Unless otherwise noted, catch basins shall be in accordance with OPSD 705.010 and 705.030. The catch basin grate shall be a "Birdcage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catch basin with bolts into the concrete. Spacing of bars on grates for use on 600mmX600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmX600mm shall be 90mm.

All catch basins shall be backfilled with compacted Granular 'A' or 19mm clear crushed stone placed to a minimum width of 300mm on all sides. If settling occurs after construction, the Contractor shall supply and place sufficient granular material to maintain the backfill level flush with adjacent ground. The riser sections of the catch basin shall be wrapped with filter cloth.

Quarry stone rip-rap protection shall be placed around all catch basins and shall extend a minimum distance of one (1) metre away from the outer edge of each side of the catch basin, and shall be placed so that the finished surface of the rip-rap is flush with the existing ground.

If there are no existing drains to be connected to the catch basin at the top end of the drain, a plugged tile shall be placed in the upstream wall with the same elevations as the outlet tile.

Junction boxes shall have a minimum cover over the lid of 450mm.



The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. The top of the spill way of the earth berm shall be the same elevation as the high wall of the ditch inlet catch basin. The earth berm shall be covered with 100mm depth of topsoil and seeded with an approved green seed mixture. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 metres each way from all catch basins.

The Contractor shall clean all catch basin sumps after completion of the drain installation. Catch basin markers shall be placed beside each catch basin.

C.9 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain is to be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary drains encountered are clean or reasonably clean, they shall be connected into the new drain in accordance with the typical tile drain connection detail. Tributary tile drain connections into the new drain shall be made using high density polyethylene agricultural drain tubing installed on and backfilled with 19mm clear crushed stone. All tile drain connections into the new drain shall be either a cored hole with an insert coupler or a manufactured tee.

Where the existing drains are full of sediment, the decision to connect the tributary drain to the new drain shall be left to the Engineer. The Contractor shall be paid for each tributary drain connection as outlined in the Form of Tender and Agreement.

The Contractor shall be responsible for all tributary tile connections for a period of one year from the date of the Completion Certificate. After construction, any missed tile connections required to be made into the new drain shall be paid at the same rate as defined in the Form of Tender and Agreement. The Contractor will have the option to make any subsequent tile connections or have the Municipality make the required connections and have the cost of which deducted from the holdback.

Where an open ditch is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain.

Where the Contractor is required to connect an existing tile which is not encountered in the course of the drain, the cost of such work shall constitute an extra to the contract.

C.10 CLEARING, GRUBBING AND MULCHING

The Contractor shall clear, brush and stump trees from within the working area.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched.

Clearing, grubbing and mulching shall be carried out as a separate operation from installing the drain, and shall not be completed simultaneously at the same location.



C.11 ROADS AND LANEWAY SUB-SURFACE CROSSINGS

All roads and laneway crossings may be made with an open cut. The Contractor may use original ground as backfill to within 600mm of finished grade only if adequate compaction and if the use of the original ground backfill has been approved beforehand by the Engineer.

C.12 FILLING IN EXISTING DITCHES

The Contractor shall backfill the ditch sufficiently for traversing by farm equipment. If sufficient material is available on-site to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled waterway. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period.

C.13 CONSTRUCTION OF GRASSED WATERWAYS

Where the Contractor is required to construct a grassed waterway, the existing waterway shall be filled in, regraded, shaped and a seed bed prepared prior to applying the grass seed. The grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO.

- 55% Creeping Red Fescue
- 15% Perennial Rye Grass
- 27% Kentucky Bluegrass
- 3% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

C.14 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer if unstable soil is encountered. The Engineer shall, after consultation with the Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

C.15 ROCKS

The Contractor shall immediately contact the Engineer if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a wheel machine. The Engineer shall determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

If only scattered large stone or boulders are removed on any project, the Contractor shall either excavate a hole to bury same adjacent to the drain, or he shall haul the stones or boulders to a location designated by the Landowner.



C.16 BROKEN OR DAMAGED TILE

The Contractor shall remove and dispose of all broken (existing or new), damaged or excess tile off site.

C.17 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS

Drainage Guide for Ontario, Ministry of Agriculture, Food and Rural Affairs, Publication 29 and its amendments, dealing with the construction of Subsurface Drainage Systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other Specifications of the Contract.

DIVISION H

SPECIAL PROVISIONS

Allen Municipal Drain 2018
Municipality of South Huron

Reference No. 1749

Special provisions means special directions containing requirements peculiar to the work not adequately provided for by the standard or supplemental Specifications. Special provisions shall take precedence and govern any standard or supplemental Specifications.

The following special provisions shall apply to this project:

1. The Contractor shall notify the Owners and the Engineer forty-eight (48) hours prior to construction and arrange a pre-construction meeting
2. The Contractor shall verify the location of the new tile drains with the Engineer and the Owners prior to construction. The Contractor shall locate the existing tile drains in several places before installing the new drains.
3. The working area shall be twenty (20) metres centered on the proposed tile drain. Each landowner on whose property the drainage works is to be constructed shall designate access to and from the working area.
4. All utilities shall be located and uncovered in the affected areas by the Contractor prior to construction.
5. All catch basins shall be precast concrete catch basins (Coldstream Concrete Ltd. or approved equal). Knockouts shall be provided in the catch basins.
6. The catch basin grate elevations shall be set to the satisfaction of the Engineer.
7. Stone rip-rap protection and geo-textile material (Mirafi 180N) shall be placed around all catch basins as part of this contract.
8. All catch basin grates shall be birdcage grates (Coldstream Concrete Ltd. or approved equal). The grates shall be hot dipped galvanized.
9. All catch basin grates shall be fastened to the new catch basins.
10. All stone rip-rap material shall be quarry stone 150mm to 300mm dia. and placed to a depth of 400mm.
11. The Contractor shall supply all necessary materials to complete the connections of any existing drains to the new drain.
12. The Contractor shall be responsible for all trench settlement.
13. The Contractor shall supply and install catch basin markers beside all catch basins.
14. All concrete tile shall be Heavy-Duty Extra Quality Concrete Drain Tile: 1500D.



15. The Contractor shall supply and wrap all concrete tile joints with geotextile filter material as part of this contract.

The width of the filter material should be:

300mm wide for tile sizes 150mm diameter to 350mm diameter.

400mm wide for tile sizes 400mm diameter to 750mm diameter.

500mm wide for tile sizes larger than 750mm diameter.

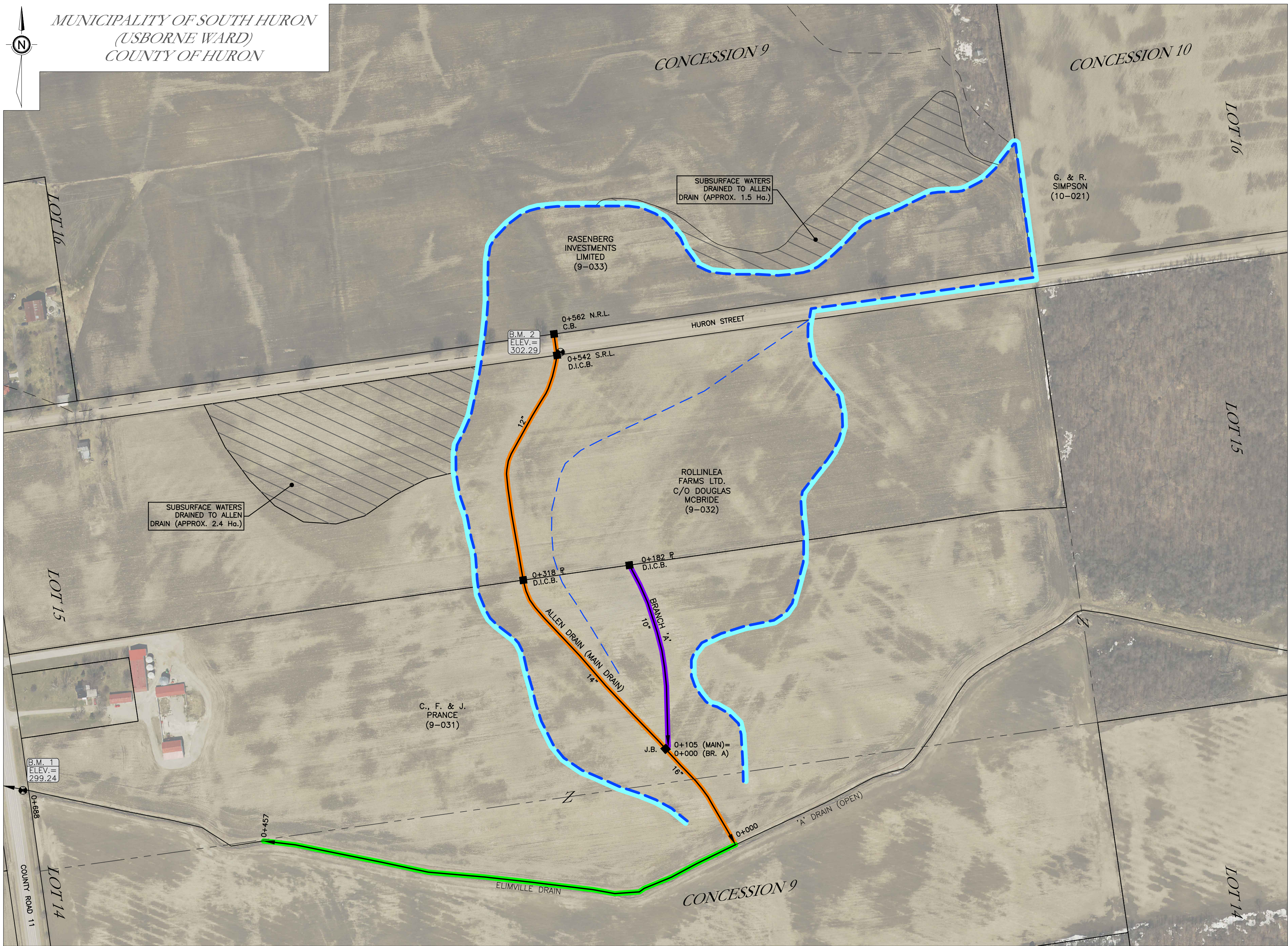
The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be Mirafi 140NC for clay or loam soil conditions and Mirafi 160N for sandy or silty soil conditions.

16. An approved ditching machine (wheel trencher) shall be used to install the concrete tile.
17. The Contractor shall strip the topsoil for a width of 4.0 metres centered on the drain before installing the tile drain. The Contractor shall strip the topsoil in the locations where the drain is being installed with an excavator for the full top width of the trench. The topsoil shall be later spread over the backfilled trench.
18. All HDPE pipe shall have a stiffness of 320kPa. All HDPE pipe shall be BOSS 2000 pipe (or equivalent).
19. Any areas disturbed within the Municipal Right-Of-Way during construction shall be top soiled and seeded with an approved grass seed mixture.
20. The roadside ditches shall be graded to the catch basins.
21. All existing catch basins removal shall be disposed of offsite.
22. Tile Connections

Existing private tile drains shall be connected at the catch basins where possible. Otherwise, connections shall be made into the municipal tile drain in accordance with the Typical Tile Connection Detail.

The Contractor shall be responsible for all tile connections for a period of one year after the issuance of the completion certificate. The tile connections required to be made within the warranty period shall be made at the same rate as defined on the Form of Tender and Agreement. After construction, the Contractor will be given the option to make any subsequent tile connections or have the Municipality make said connections and have the costs of which deducted from the Contractor's holdback.

The Contractor shall supply all necessary materials to complete the connections of the existing drains to the new drain. The type of materials used to make the tributary tile drain connections shall be verified by the Engineer.



PLAN

PLAN SCALE



NOTES:

1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.
2. ALL PERFORATED HIGH DENSITY POLYETHYLENE PIPE SHALL BE EXTERNAL SPLIT COUPLER JOINING SYSTEMS UNLESS OTHERWISE NOTED.

BENCHMARK No. 1 ELEV.=299.24
TOP CENTRE UPSTREAM END OF CONCRETE BOX CULVERT
AT STA. 0+689 (OPEN DITCH)

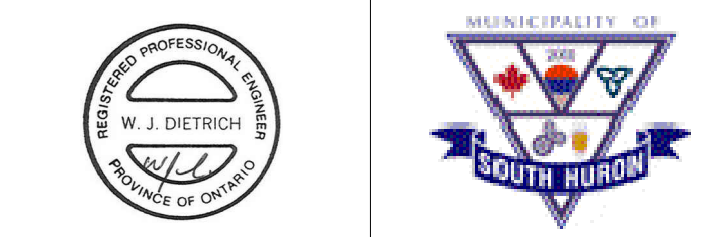
BENCHMARK No. 2 ELEV.=302.29
TOP CENTRE NORTH WEST CORNER OF CONCRETE CATCH
BASIN AT STA. 0+544 (MAIN)

LEGEND:

- DRAIN NAME → EXISTING MUNICIPAL DRAIN
--- INTERIOR/EXTERIOR WATERSHED BOUNDARY
--- PROPERTY BOUNDARY
--- LOT OR CONCESSION BOUNDARY
--- TOWNSHIP BOUNDARY

- DRAIN NAME → MUNICIPAL DRAIN (AREA OF WORK)
--- WATERSHED BOUNDARY
--- PROPOSED CATCH BASIN OR JUNCTION BOX
■ BENCHMARK LOCATION
B.M. 1 ELEV.= 50.00
BENCHMARK No.
BENCHMARK ELEVATION

3.	REPORT SUBMISSION	2018-02-20	DEL
2.	INFORMATION MEETING	2018-02-14	DEL
1.	ON-SITE MEETING	2017-11-14	DEL
No.	ISSUES AND REVISIONS	DATE	BY



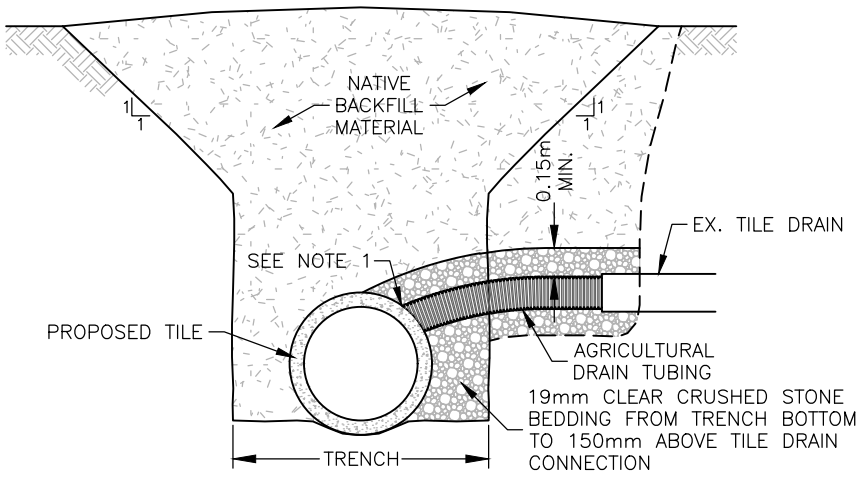
PROJECT: ALLEN MUNICIPAL DRAIN 2018

DRAWING: Plan

DEL
DIETRICH ENGINEERING LIMITED
CONSULTING ENGINEERS
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR:	W.J.D.	DESIGNED BY:	G.C.	DRAWN BY:	G.C.	CHECKED BY:	W.J.D.
DRAWING SCALE:	AS NOTED	DATE:	FEB 20, 2018	PROJECT No.	1749	DRAWING No.	1 of 2

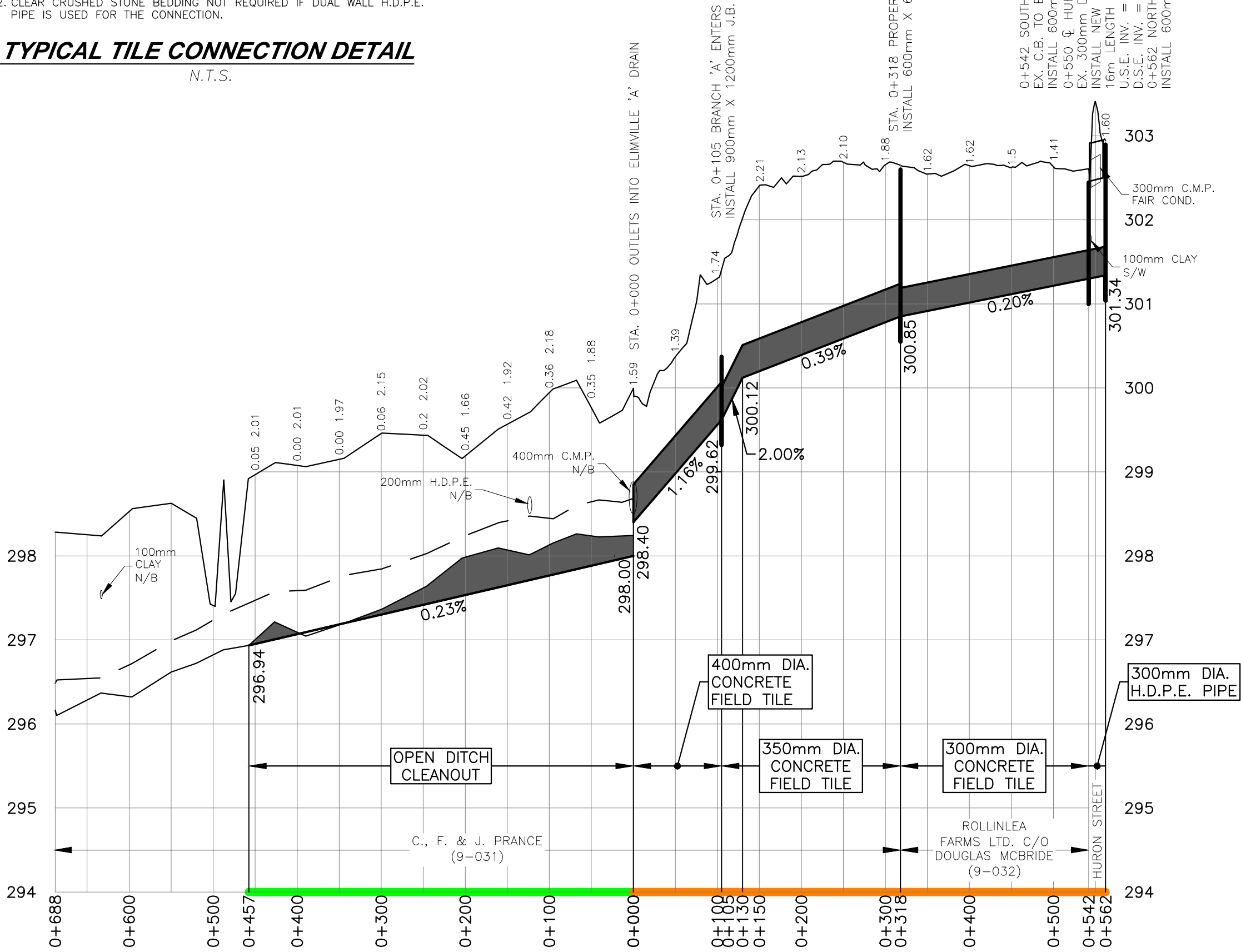
- NOTES:
1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.
 2. ALL PERFORATED HIGH DENSITY POLYETHYLENE PIPE SHALL BE EXTERNAL SPLIT COUPLER JOINING SYSTEMS UNLESS OTHERWISE NOTED.



- NOTE:
1. ALL TILE CONNECTIONS TO BE EITHER A CORED HOLE WITH AN INSERT COUPLER, OR A MANUFACTURED TEE.
 2. CLEAR CRUSHED STONE BEDDING NOT REQUIRED IF DUAL WALL H.D.P.E. PIPE IS USED FOR THE CONNECTION.

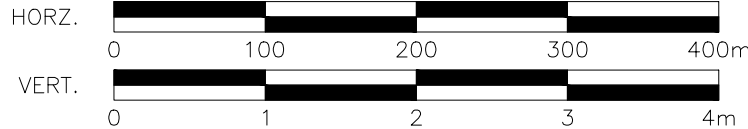
TYPICAL TILE CONNECTION DETAIL

N.T.S.



MAIN DRAIN PROFILE

PROFILE SCALES



BOTTOM WIDTH

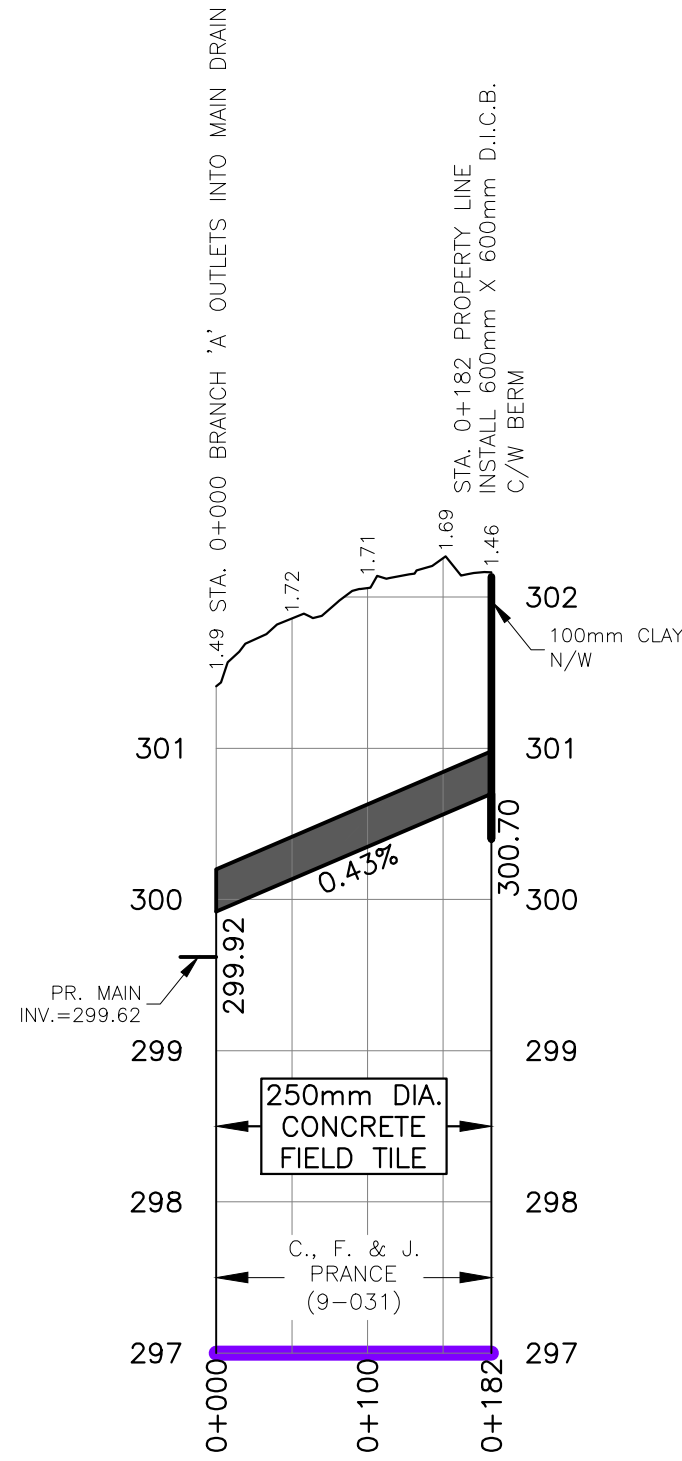
0.9m

SIDE SLOPES

1.5:1

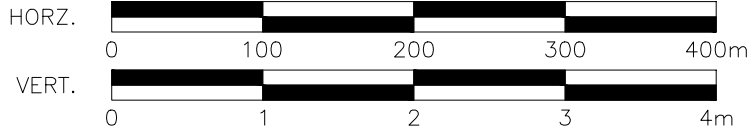
TILE SIZES

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE OUTLET PIPE	450	0+000 - 0+006	6
2.	CONCRETE FIELD TILE	400	0+006 - 0+105	99
3.	CONCRETE FIELD TILE	350	0+105 - 0+318	213
3.	CONCRETE FIELD TILE	300	0+318 - 0+542	224
4.	HIGH DENSITY POLYETHYLENE PIPE	300	0+542 - 0+562	20




BRANCH 'A' PROFILE

PROFILE SCALES



TILE SIZES

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	CONCRETE FIELD TILE	250	0+000 - 0+182	182

3. REPORT SUBMISSION		2018-02-20	DEL
2. INFORMATION MEETING		2018-02-14	DEL
1. ON-SITE MEETING		2017-11-14	DEL
No.	ISSUES AND REVISIONS	DATE	BY
			
PROJECT: ALLEN MUNICIPAL DRAIN 2018			
DRAWING: Profiles			
			
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7			
PROJ. MGR: W.J.D.	DESIGNED BY: G.C.	DRAWN BY: G.C.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE: FEB 20, 2018	PROJECT No. 1749	DRAWING No. 2 of 2

Municipality of South Huron
322 Main Street South
PO Box 759
Exeter ON N0M 1S6

Notice of Meeting to Consider the Engineer's Report

Drainage Act, R.S.O. 1990, c. D.17, s. 42

To:

Enter Name and Current Address of Property Owner

*See attached
mailing list*

In accordance with section 42 of the *Drainage Act*, you as an owner of land affected by the proposed drainage works for the

Ford-Neeb Municipal Drain

(Name of drain)

are requested to attend a council meeting to consider the final report filed with the **Municipality**

of South Huron

for this drainage works.

The meeting will take place:

Date (yyyy/mm/dd)

2018/03/19

Time

6:00 p.m

Location

South Huron Council Chambers

If the share of the project cost assessed to your property is more than \$100, a copy of the report is included with this notice.

Name of Clerk (Last Name, First Name)

Msuya-Collison, Rebekah

Name of Municipality

Municipality of South Huron

Signature of Clerk

Date (yyyy/mm/dd)

2018/03/02

Failure to attend meeting: If you do not attend the meeting, it will proceed in your absence. If you are affected or assessed by this proposed project, you will continue to receive notification as required by the *Drainage Act*.

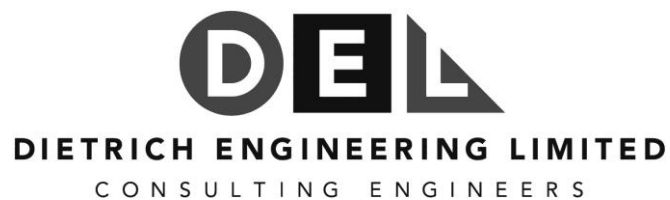
Activities at the meeting to consider the report:

- Usually the engineer will present a summary of the report to council
- For drains initiated by petition:
 - Petitioners will be given an opportunity to withdraw their name from the petition
 - Other owners that benefit from the drain will be given an opportunity to add their name to the petition
- Council must decide whether or not to proceed with the project by provisionally adopting the engineer's report by by-law; they also have the option to refer the report back to the engineer for modifications.
- All property owners affected by the drain will have an opportunity to influence council's decision
- There is no right to appeal assessments or other aspects of the engineer's report at this meeting; these appeal rights will be made available later in the procedure. *Drainage Act*, R.S.O. 1990, c. D.17, s. 47 - 54.

Petitioners: After the meeting to consider the final report, if the petition does not comply with section 4, the project is terminated and the original petitioners are responsible for the costs in shares proportional to their assessment in the engineer's report. *Drainage Act*, R.S.O. 1990, c. D. 17 s. 43.



**Ford-Neeb Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)**



Reference No. 1457

February 20, 2018

Ford-Neeb Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

Contents

Introduction	1
History	1
On-Site Meeting	2
Information Meeting No. 1	2
Information Meeting No. 2	2
Recommendations	3
Summary of Proposed Works	3
Working Area	3
Watershed Characteristics	3
Allowances	4
Estimated Construction Costs	5
Summary of Costs	7
Assessment	7
Maintenance	7
Schedule of Assessment for Construction	9
Schedule of Assessment for Maintenance	10

Specifications for the Construction of Municipal Drainage Works

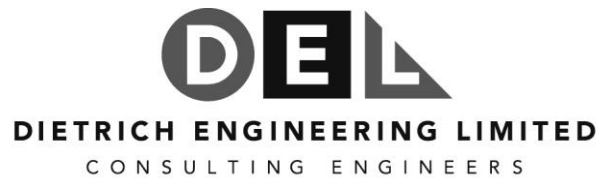
DIVISION A-General Conditions

DIVISION B-Specification for Open Drains

DIVISION C-Specification for Tile Drains

DIVISION E-Specification for Drainage Crossings by the Boring Method

DIVISION H-Special Provisions



515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7 | T: (519) 880-2708 | F: (519) 880-2709 | E: mail@dietricheng.com

Waterloo, Ontario

February 20, 2018

**Ford-Neeb Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)**

**To the Mayor and Council
of the Municipality of South Huron**

Members of Council:

Introduction

We are pleased to present our report on the "Ford-Neeb Municipal Drain 2018", serving parts of Lots 18 to 20, Concession 10, parts of Lots 18 to 20, Concession 11, and part of Lot 19, Concession 12 in the Municipality of South Huron, Stephen Ward, County of Huron.

Authority to prepare this report was obtained by a resolution of the Municipality of South Huron Council at its September 23, 2014 meeting to appoint Dietrich Engineering Limited to prepare an Engineer's Report.

In accordance with your instructions pursuant to a petition received by Council under Section 4 of the Drainage Act, R.S.O. 1990, we have made an examination and survey of the affected area and submit herewith our Report which includes Plan, Profile and Specifications for this work.

The area requiring drainage is part of Lot 20, Concession 10. The petition is valid in compliance with Section 4(1)(a) of the Drainage Act, R.S.O. 1990.

The attached Plan and Profile, Drawing No.'s 1 and 2, Reference No. 1457, Specifications and the Instructions to Tenderers form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

History

The drainage basin for the proposed municipal drain is presently being served by a private drainage system.

On-Site Meeting

In accordance with Section 9(1) of the Drainage Act, R.S.O. 1990, an on-site meeting was held on December 23, 2015. The place of meeting was at the Municipality of South Huron Municipal Office in Exeter. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Dwight Kinsman	Municipality of South Huron, Road Department
Curtis Neeb	Landowner
Doug Ford	Landowner
Chuck Ford	Landowner
Dennis Dietrich	Landowner
John Leibold	Landowner

Information Meeting No. 1

An information meeting was held on February 10, 2017 at the Municipality of South Huron Municipal Office. The information provided proposed constructing a municipal drainage system from the easterly side of Goshen Line adjacent to Lot 20, Concession 10 to an outlet in the existing ditch at the properly line between Concessions 11 and 12, Lot 20, in Municipality of South Huron, (Stephen Ward).

This meeting provided a review of the design of the proposed drainage system, the estimated costs of the project and proposed assessments. The total estimated cost of the proposed Municipal Drain is \$134,400.

Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Jason Parr	Municipality of South Huron, Road Superintendent
Curtis Neeb	Landowner
Marlene Mitton	Landowner

Information Meeting No. 2

An information meeting was held on February 14, 2018 at the Municipality of South Huron Municipal Office. This meeting provided a review of changes to the location of the proposed municipal drainage system. The revised estimated costs and proposed assessments were presented at this meeting. The total estimated costs of this proposal is \$142,500.

Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Curtis Neeb	Landowner
Chuck Ford	Landowner
John Leibold	Landowner
Samantha Hurman	Landowner

Recommendations

It is our recommendation that:

1. A new tile drainage system be constructed from the easterly side of the Goshen Line adjacent to Lot 20, Concession 10 to an outlet in the existing open ditch in Lot 20, Concession 11. Approximately 77 metres of the open ditch be incorporated and cleaned out.
2. This new tile drainage system includes the installation of 1138 metres of 300mm to 450mm diameter tile.
3. This new drainage system shall be known as the "Ford-Neeb Municipal Drain 2018".
4. The drainage coefficient design standard used for this drain is 38mm of rainfall per 24 hours.

Summary of Proposed Works

The proposed work consists of approximately 77 metres of open ditch excavation; the installation of approximately 1122 metres of 300mm to 450mm diameter concrete field tile and HDPE pipes; the installation of five (5) concrete catch basins; the installation of one (1) concrete junction box; and the installation of 16 metres of 400mm O.D. smooth wall steel casing by the Boring Method.

Working Area

Closed Work

The working area for construction purposes shall be a width of twenty (20) metres centered on the proposed tile drain (Sta. 0+000 to Sta. 0+900) and a width of twenty five (25) meters (Sta. 0+900 to Sta 1+138). The working area for maintenance purposes shall be a width of ten (10) metres centered on the proposed tile drain. Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area.

Open Work

The working area for construction and maintenance purposes shall be a width of ten (10) metres on the side of the drain where the excavated material is to be placed and levelled. Each landowner shall designate access to and from the working area.

Watershed Characteristics

The Drainage Area comprises approximately 79.3 hectares. Land use within the watershed is primarily agricultural.

Allowances

In accordance with Sections 29, 30, and 31 of the Drainage Act, R.S.O. 1990, we determine the allowances payable to Owners entitled thereto as follows.

Lot or Part	Con.	Owner	Roll No.	Right-of-Way (Section 29)	Damages to Lands and Crops (Section 30)	Existing Drain (Section 31)	Total Allowances
<u>Ford-Neeb Municipal Drain 2018</u>							
Pt 20	10	C. & R. Neeb	10-024	\$700	\$1,200		\$1,900
19	11	Frank Regier Farms Ltd.	11-018		\$300		\$300
Pt 20	11	Ford Agra Ltd.	11-019	\$12,480	\$9,490	\$770	\$22,740
Pt 20	11	K. & K. Hurman	11-019-05		\$300		\$300
<u>Total Allowances</u>				<u>\$13,180</u>	<u>\$11,290</u>	<u>\$770</u>	<u>\$25,240</u>

Total Allowances, under Sections 29, 30 and 31 of the Drainage Act, R.S.O. 1990;
Ford-Neeb Municipal Drain 2018.

\$25,240

The land values used for calculating allowances for Right-of-Way was \$40,000/ha.

The allowances for Right-of-Way under Section 29 of the Drainage Act, R.S.O. 1990 were calculated based on 25% of the land value for a 10 metre Right-of-Way.

Estimated Construction Costs

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

Labour, Equipment, and Materials

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	77 metres of open ditch excavation and levelling excavated material	l.s		\$ 1,200.00
2)	Clearing and grubbing	l.s		\$ 1,000.00
3)	Supply 468 metres of 300mm diameter concrete field tile	468 m	\$ 18.00	\$ 8,424.00
	Installation	468 m	\$ 24.00	\$ 11,232.00
4)	Supply 350 metres of 350mm diameter concrete field tile	350 m	\$ 20.00	\$ 7,000.00
	Installation	350 m	\$ 24.00	\$ 8,400.00
5)	Supply 294 metres of 450mm diameter concrete field tile	294 m	\$ 29.00	\$ 8,526.00
	Installation	294 m	\$ 26.00	\$ 7,644.00
6)	Supply 6 metres of 450mm diameter HPE outlet pipe complete with rodent grate	l.s		\$ 400.00
	Installation of 6m of 450mm diameter outlet pipe complete with quarry stone rip-rap protection and geotextile filter material (30m ²)	l.s		\$ 2,000.00
7)	Supply and install 1 standard 600mm x 600mm concrete ditch inlet catch basin at Sta. 1+138 (inline type)	l.s		\$ 2,000.00
8)	Supply and install 1 standard 600mm x 600mm concrete ditch inlet catch basin offset 18metres south of Sta. 0+300 (inline type)	l.s		\$ 1,800.00
9)	Supply 18m of 300mm diameter HDPE pipe (BOSS 2000 or equivalent)	18 m	\$ 25.00	\$ 450.00
	Installation of 18 meters of 300mm diameter HDPE pipe (offset catch basin connection at Sta. 0+300)	l.s		\$ 500.00
10)	Supply and install 1 standard 900mm X 1200mm concrete junction box at Sta. 0+300	1 ea.		\$ 2,500.00
11)	Supply and install 1 standard 600mm X 600mm concrete ditch inlet catch basin offset 16 metres north of Sta. 0+900	1 ea.		\$ 1,800.00



12) Supply 16m of 200mm HDPE pipe (BOSS 2000 or equivalent)	I.s.		\$	500.00
Installation 16m of 200mm HDPE pipe (offset ditch inlet catchbasin connection at Sta. 0+900)	16 m	\$	18.75	\$ 300.00
13) Supply and install 1-300mm X 200mm HDPE tee at Sta 0+900	1 ea		\$	250.00
14) Tile connections	I.s.		\$	<u>1,486.00</u>
Sub-Total			\$	<u>67,412.00</u>

15) Work to be done on the Municipality of South Huron Road Allowance, Goshen Line (Sta. 1+048 to Sta. 1+068)

a) Supply 16 metres of 400mm O.D. smooth wall steel casing, 9.53mm wall thickness	16 m	\$	200.00	\$ 3,200.00
Installation of 16 metres of 400mm O.D. smooth wall steel casing by the Boring Method (Sta. 1+052 to Sta. 1+068)	16 m	\$	438.00	\$ 7,008.00
b) Supply 4 metres of 375mm diameter HDPE Pipe	4 m	\$	50.00	\$ 200.00
Installation of 4 metres of 400mm diameter HDPE Pipe Sta. 1+048 to Sta. 1+052	4 m	\$	50.00	\$ 200.00
c) Supply and install 1 standard 600mm X 600mm concrete catchbasin at Sta. 1+048 (inline type)	1 ea.		\$	2,000.00
d) Supply and install 1 standard 600mm X 600mm concrete ditch inlet catch basin at Sta. 1+068 (inline type)	1 ea.		\$	2,000.00
e) Supply and install 1-600mm X 600mm concrete catch basin offset 60 metres south of Sta. 1+068	1 ea.		\$	1,500.00
f) Supply 60 meters of 200mm diameter HDPE pipe (BOSS 2000 or equivalent)	60 m	\$	15.00	\$ 900.00
Installation of 60 metres of 200mm diameter HDPE pipe (offset catch basin connection at Sta. 1+068)	1 ea.		\$	<u>1,200.00</u>
Sub-Total			\$	<u>18,208.00</u>

TOTAL ESTIMATED CONSTRUCTION COSTS **\$ 85,620.00**

Total Estimated Materials	\$ 29,400.00
Total Estimated Labour and Equipment	\$ <u>56,220.00</u>

TOTAL ESTIMATED CONSTRUCTION COSTS **\$ 85,620.00**

Summary of Costs

Allowances under Sections 29, 30 and 31 of the Drainage Act, R.S.O. 1990	\$ 25,240
Total Estimated Construction Costs	\$ 85,620
Meetings, survey, design, preparation of preliminary cost estimates and reports, preparation of final drainage report, consideration of report and court of revision	\$ 18,500
Preparation of contract documents, contract administration, supervision and inspection of construction	\$ 11,900
Contingencies, Interest, open ditch repairs, tile connections and net H.S.T.	\$ 4,840
TOTAL ESTIMATED COSTS	
FORD-NEEB MUNICIPAL DRAIN 2018	\$ 146,100

The estimated cost of the work in the Municipality of South Huron is \$146,100.

Assessment

We assess the cost of this work against the lands and roads liable for assessment for benefit and outlet as shown on the annexed Schedule of Assessment. We have determined that there is no injuring liability assessment involved.

Whether or not the Municipality of South Huron elects to do the work on their property, Goshen Line, Sta. 1+048 to Sta. 1+068, they shall be assessed the actual increased costs to the drainage works due to the construction and operation of the road as a Special Assessment in addition to any benefit and outlet assessments. The Special Assessment shall be made up of the actual construction costs plus an allowance for administration costs less normal costs.

Maintenance

After completion, this drain shall be maintained by the Municipality of South Huron at the expense of all the lands and roads assessed in the attached Schedule of Assessment for Maintenance and in the same relative proportions until such time as the assessment is changed under the Drainage Act, except for the portion of the drain constructed within the South Huron road allowance (Goshen Line). This portion of the drain shall be maintained at the expense of the road authority having jurisdiction over said road.

Respectfully submitted,

DIETRICH ENGINEERING LIMITED


W. J. Dietrich, P.Eng.

WJD:ch



SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Ford-Neeb Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	(SEC. 22) BENEFIT	(SEC. 23) OUTLET LIABILITY	(SEC. 26) SPECIAL ASSESSMENT	TOTAL ASSESSMENT	LESS 1/3 GOV'T GRANT	LESS ALLOWANCES	NET ASSESSMENT
Pt. 18 & 19	10	3.4	Regier Family Holdings Inc.	10-020		\$3,975		\$3,975	\$1,325		\$2,650
Pt. 20	10	9.3	C. & R. Neeb	10-024	\$8,000	\$11,275		\$19,275	\$6,425	\$1,900	\$10,950
Pt. 18	11	4.3	Frank Regier Farms Ltd.	11-017		\$1,387		\$1,387	\$462		\$925
* Pt. 18	11	0.6	G. Kuhn	11-017-25		\$181		\$181			\$181
19	11	22.3	Frank Regier Farms Ltd.	11-018	\$10,000	\$6,707		\$16,707	\$5,569	\$300	\$10,838
Pt. 20	11	32.4	Ford Agra Ltd.	11-019	\$45,000	\$11,907		\$56,907	\$18,969	\$22,740	\$15,198
* Pt. 20	11	2.6	K. & K. Hurman	11-019-05	\$500	\$2,557		\$3,057		\$300	\$2,757
* Pt. 20	11	0.4	D. & M. Mitton	11-020		\$392		\$392			\$392
19	12	0.6	D. & J. Dietrich	12-019		\$40		\$40	\$13		\$27
Total Assessment on Lands					\$63,500	\$38,421		\$101,921	\$32,763	\$25,240	\$43,918
Goshen Line		2.4	Municipality of South Huron		\$7,500	\$11,495	\$23,240	\$42,235			\$42,235
Huron Street		1.0	Municipality of South Huron			\$1,944		\$1,944			\$1,944
Total Assessment on Roads					\$7,500	\$13,439	\$23,240	\$44,179			\$44,179
Total Assessment on Lands and Roads, Ford-Neeb Municipal Drain 2018					\$71,000	\$51,860	\$23,240	\$146,100	\$32,763	\$25,240	\$88,097

NOTES: 1. * Denotes lands not eligible for ADIP grants.
2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.



SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Ford-Neeb Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
Pt. 18 & 19	10	3.4	Regier Family Holdings Inc.	10-020	3.9%
Pt. 20	10	9.3	C. & R. Neeb	10-024	10.5%
Pt. 18	11	4.3	Frank Regier Farms Ltd.	11-017	4.8%
* Pt. 18	11	0.6	G. Kuhn	11-017-25	0.6%
19	11	22.3	Frank Regier Farms Ltd.	11-018	25.1%
Pt. 20	11	32.4	Ford Agra Ltd.	11-019	36.5%
* Pt. 20	11	2.6	K. & K. Hurman	11-019-05	3.0%
* Pt. 20	11	0.4	D. & M. Mitton	11-020	0.5%
19	12	0.6	D. & J. Dietrich	12-019	0.7%
Total Assessment on Lands					<u>85.6%</u>
Goshen Line		2.4	Municipality of South Huron		11.0%
Huron Street		1.0	Municipality of South Huron		<u>3.4%</u>
Total Assessment on Roads					<u>14.4%</u>
Total Assessment for Maintenance, Ford-Neeb Municipal Drain 2018					<u>100.0%</u>

NOTES: 1. * Denotes lands not eligible for ADIP grants.

SPECIFICATIONS FOR THE CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

DIVISION A – General Conditions

DIVISION B – Specification for Open Drains

DIVISION C – Specification for Tile Drains

**DIVISION E – Specification for Drainage
Crossings by the Boring Method**

DIVISION H – Special Provisions

DIVISION A

GENERAL CONDITIONS

<u>A</u>	<u>CONTENT</u>	<u>PAGE</u>
A.1	SCOPE	1
A.2	TENDERS	1
A.3	EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS	1
A.4	PAYMENT	2
A.5	CONTRACTOR'S LIABILITY INSURANCE	2
A.6	LOSSES DUE TO ACTS OF NATURE, ETC.	2
A.7	COMMENCEMENT AND COMPLETION OF WORK	3
A.8	WORKING AREA AND ACCESS	3
A.9	SUB-CONTRACTORS	3
A.10	PERMITS, NOTICES, LAWS AND RULES	3
A.11	RAILWAYS, HIGHWAYS AND UTILITIES	4
A.12	ERRORS AND UNUSUAL CONDITIONS	4
A.13	ALTERATIONS AND ADDITIONS	4
A.14	SUPERVISION	4
A.15	FIELD MEETINGS	4
A.16	PERIODIC AND FINAL INSPECTIONS	5
A.17	ACCEPTANCE BY THE MUNICIPALITY	5
A.18	WARRANTY	5
A.19	TERMINATION OF CONTRACT BY THE MUNICIPALITY	5
A.20	TESTS	6
A.21	POLLUTION	6
A.22	SPECIES AT RISK	6
A.23	ROAD CROSSINGS	6
A.24	LANEWAYS	7
A.25	FENCES	8
A.26	LIVESTOCK	8
A.27	STANDING CROPS	9
A.28	SURPLUS GRAVEL	9
A.29	IRON BARS	9
A.30	RIP-RAP	9
A.31	CLEARING, GRUBBING AND BRUSHING	9
A.32	RESTORATION OF LAWNS	9

DIVISION A

GENERAL CONDITIONS

A.1 SCOPE

The work to be done under this contract consists of supplying all labour, equipment and materials to construct the drainage work as outlined in the Scope of Work, Drawings, General Conditions and other Specifications.

A.2 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as instructed by the Municipality. The Scope of Work must be completed and submitted with the Form of Tender and Agreement. A certified cheque is required as Tender Security, payable to the Treasurer of the Municipality.

All certified cheques, except that of the bidder to whom the work is awarded will be returned within ten (10) days of the time the Contract is awarded. The certified cheque of the bidder to whom the work is awarded will be retained as Contract Security and returned when the Municipality receives a Completion Certificate for the work.

A certified cheque is not required if the Contractor provides an alternate form of Contract Security such as a Performance Bond for 100% of the amount of the Tender or other satisfactory security, if required/permitted by the Municipality. A Performance Bond may also be required to insure maintenance of the work for a period of one (1) year after the date of the Completion Certificate.

A.3 EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS

The Tenderer must examine the premises and site to compare them with the Drawings and Specifications in order to satisfy himself of the existing conditions and extent of the work to be done before submission of his Tender. No allowance shall subsequently be made on behalf of the Contractor by reason of any error on his part. Any estimates of quantities shown or indicated on the Drawings, or elsewhere are provided for the convenience of the Tenderer. Any use made of these quantities by the Tenderer in calculating his Tender shall be done at his own risk. The Tenderer for his own protection should check these quantities for accuracy.

The standard specifications (Divisions B through G) shall be considered complementary and where a project is controlled under one of the Divisions, the remaining Divisions will apply for miscellaneous works.



In case of any inconsistency or conflict between the Drawings and Specifications, the following order of precedence shall apply:

- Direction of the Engineer
- Special Provisions (Division H)
- Scope of Work
- Contract Drawings
- Standard Specifications (Divisions B through G)
- General Conditions (Division A)

A.4 PAYMENT

Progress payments equal to 87±% of the value of work completed and materials incorporated in the work will be made to the Contractor monthly. An additional ten per cent (10±%) will be paid 45 days after the final acceptance by the Engineer, and three per cent (3±%) of the Contract price may be reserved by the Municipality as a maintenance holdback for a one (1) year period from the date of the Completion Certificate. A greater percentage of the Contract price may be reserved by the Municipality for the same one (1) year period if in the opinion of the Engineer, particular conditions of the Contract requires such greater holdback.

After the completion of the work, any part of this reserve may be used to correct defects developed within that time from faulty workmanship and materials, provided that notice shall first be given to the Contractor and that he may promptly make good such defects.

A.5 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of any work, the Contractor shall file with the Municipality evidence of compliance with all Municipality insurance requirements (Liability Insurance, WSIB, etc.) for no less than the minimum amounts as stated in the Purchasing Procedures of the Municipality. All insurance coverage shall remain in force for the entire contract period including the warranty period which expires one year after the date of the Completion Certificate.

The following are to be named as co-insured: Successful Contractor
Sub-Contractor
Municipality
Dietrich Engineering Ltd.

A.6 LOSSES DUE TO ACTS OF NATURE, ETC.

All damage, loss, expense and delay incurred or experienced by the Contractor in the performance of the work, by reason of unanticipated difficulties, bad weather, strikes, acts of nature, or other mischances shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.



A.7 COMMENCEMENT AND COMPLETION OF WORK

The work must commence as specified in the Form of Tender and Agreement. If conditions are unsuitable due to poor weather, the Contractor may be required, at the discretion of the Engineer to postpone or halt work until conditions become acceptable and shall not be subject of a claim for additional compensation.

The Contractor shall give the Engineer a minimum of 48 hours notice before commencement of work. The Contractor shall then arrange a meeting to be held on the site with Contractor, Engineer, and affected Landowners to review in detail the construction scheduling and other details of the work.

If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Municipality a minimum of 24 hours notice prior to returning to the project. If any work is commenced without notice to the Engineer, the Contractor shall be fully responsible for all such work undertaken prior to such notification.

The work must proceed in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the Form of Tender and Agreement.

A.8 WORKING AREA AND ACCESS

Where any part of the drain is on a road allowance, the road allowance shall be the working area. For all other areas, the working area available to the Contractor to construct the drain is specified in the Special Provisions (Division H).

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately. Where the Contractor exceeds the specified working widths without authorization, he shall be held responsible for the costs of all additional damages.

If access off an adjacent road allowance is not possible, each Landowner on whose property the drainage works is to be constructed, shall designate access to and from the working area. The Contractor shall not enter any other lands without permission of the Landowner and he shall compensate the Landowner for damage caused by such entry.

A.9 SUB-CONTRACTORS

The Contractor shall not sublet the whole or part of this Contract without the approval of the Engineer.

A.10 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall obtain and pay for all necessary permits or licenses required for the execution of the work (but this shall not include MTO encroachment permits, County Road permits permanent easement or rights of servitude). The Contractor shall give all necessary notices and pay for all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health and safety.



A.11 RAILWAYS, HIGHWAYS AND UTILITIES

A minimum of 72 hours' notice to the Railway or Highways, exclusive of Saturdays, Sundays, and Statutory Holidays, is required by the Contractor prior to any work activities on or affecting the applicable property. In the case of affected Utilities, a minimum of 48 hours' notice to the utility owner is required.

A.12 ERRORS AND UNUSUAL CONDITIONS

The Contractor shall notify the Engineer immediately of any error or unusual conditions which may be found. Any attempt by the Contractor to correct the error on his own shall be done at his own risk. Any additional cost incurred by the Contractor to remedy the wrong decision on his part shall be borne by the Contractor. The Engineer shall make the alterations necessary to correct errors or to adjust for unusual conditions during which time it will be the Contractor's responsibility to keep his men and equipment gainfully employed elsewhere on the project.

The Contract amount shall be adjusted in accordance with a fair evaluation of the work added or deleted.

A.13 ALTERATIONS AND ADDITIONS

The Engineer shall have the power to make alterations in the work shown or described in the Drawings and Specifications and the Contractor shall proceed to make such changes without causing delay. In every such case, the price agreed to be paid for the work under the Contract shall be increased or decreased as the case may require according to a fair and reasonable evaluation of the work added or deleted. The valuation shall be determined as a result of negotiations between the Contractor and the Engineer, but in all cases the Engineer shall maintain the final responsibility for the decision. Such alterations and variations shall in no way render the Contract void. No claims for a variation or alteration in the increased or decreased price shall be valid unless done in pursuance of an order from the Engineer and notice of such claims made in writing before commencement of such work. In no such case shall the Contractor commence work which he considers to be extra before receiving the Engineer's approval.

A.14 SUPERVISION

The Contractor shall give the work his constant supervision and shall keep a competent foreman in charge at the site.

A.15 FIELD MEETINGS

At the discretion of the Engineer, a field meeting with the Contractor or his representative, the Engineer and with those others that the Engineer deems to be affected, shall be held at the location and time specified by the Engineer.



A.16 PERIODIC AND FINAL INSPECTIONS

Periodic inspections by the Engineer will be made during the performance of the work. If ordered by the Engineer, the Contractor shall expose the drain as needed to facilitate inspection by the Engineer.

Final inspection by the Engineer will be made within twenty (20) days after he has received notice from the Contractor that the work is complete.

A.17 ACCEPTANCE BY THE MUNICIPALITY

Before any work shall be accepted by the Municipality, the Contractor shall correct all deficiencies identified by the Engineer and the Contractor shall leave the site neat and presentable.

A.18 WARRANTY

The Contractor shall repair and make good any damages or faults in the drain that may appear within one (1) year after its completion (as dated on the Completion Certificate) as the result of the imperfect or defective work done or materials furnished if certified by the Engineer as being due to one or both of these causes; but nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the Country, Province or Locality in which the work is being done. Neither the Completion Certificate nor any payment there under, nor any provision in the Contract Documents shall relieve the Contractor from his responsibility.

A.19 TERMINATION OF CONTRACT BY THE MUNICIPALITY

If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days notice in writing from the Engineer to supply additional workmen or materials to commence or complete the works, or if he should fail to make prompt payment to Sub-Contractors, or for material, or labour, or persistently disregards laws, ordinances, or the instruction of the Engineer, or otherwise be guilty of a substantial violation of the provisions of the Contract, then the Municipality, upon the certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, by giving the Contractor written notice, terminate the employment of the Contractor and take possession of the premises, and of all materials, tools and appliances thereon, and may finish the work by whatever method the Engineer may deem expedient but without delay or expense. In such a case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price will exceed the expense of finishing the work including compensation to the Engineer for his additional services and including the other damages of every name and nature, such excess shall be paid by the Contractor. If such expense will exceed such unpaid balance, the Contractor shall pay the difference to the Municipality. The expense incurred by the Municipality, as herein provided, shall be certified by the Engineer.



If the Contract is terminated by the Municipality due to the Contractor's failure to properly commence the works, the Contractor shall forfeit the certified cheque bid deposit and furthermore shall pay to the Municipality an amount to cover the increased costs, if any, associated with a new Tender for the Contract being terminated.

If any unpaid balance and the certified cheque do not match the monies owed by the Contractor upon termination of the Contract, the Municipality may also charge such expense against any money which may thereafter be due to the Contractor from the Municipality.

A.20 TESTS

The cost for the testing of materials supplied to the job by the Contractor shall be borne by the Contractor. The Engineer reserves the right to subject any lengths of any tile or pipe to a competent testing laboratory to ensure the adequacy of the tile or pipe. If any tile supplied by the Contractor is determined to be inadequate to meet the applicable A.S.T.M. standards, the Contractor shall bear full responsibility to remove and/or replace all such inadequate tile in the Contract with tile capable of meeting the A.S.T.M. Standards.

A.21 POLLUTION

The Contractor shall keep their equipment in good repair. The Contractor shall refuel or repair equipment away from open water.

If polluted material from construction materials or equipment is caused to flow into the drain, the Contractor shall immediately notify the Ministry of the Environment, and proceed with the Ministry's protocols in place to address the situation.

A.22 SPECIES AT RISK

If a Contractor encounters a known Species at Risk as designated by the MNR or DFO, the Contractor shall notify the Engineer immediately and follow the Ministry's guidelines to deal with the species.

A.23 ROAD CROSSINGS

This specification applies to all road crossings (Municipality, County, Regional, or Highway) where no specific detail is provided on the drawings or in the standard specifications. This specification in no way limits the Road Authority's regulations governing the construction of drains on their Road Allowance.

A.23.1 Road Occupancy Permit

Where applicable, the Contractor must submit an application for a road occupancy permit to the Road Authority and allow a minimum of five (5) working days for its review and issuance.



A.23.2 Road Closure Request and Construction Notification

The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority and the Engineer for review and approval a minimum of five (5) working days prior to proceeding with any work on the road allowance. The Contractor shall be responsible for notifying all applicable emergency services, schools, etc. of the road closure or construction taking place.

A.23.3 Traffic Control

The Contractor shall supply flagmen, and warning signs and ensure that detour routes are adequately signed in accordance with no less than the minimum standards as set out in the Ontario Traffic Manual's Book 7.

A.23.4 Weather

No construction shall take place during inclement weather or periods of poor visibility.

A.23.5 Equipment

No construction material and/or equipment is to be left within three (3) metres of the travelled portion of the road overnight or during periods of inclement weather.

If not stated on the drawings, the road crossing shall be constructed by open cut method. Backfill from the top of the cover material over the subsurface pipe or culvert to the under side of the road base shall be Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm. Granular road base materials shall be thoroughly compacted to 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing HL-8 Hot Mix Asphalt patch at a thickness of 50mm or of the same thickness as the existing pavement structure. The asphalt patch shall be flush with the existing roadway on each side and without overlap.

Excavated material from the trench beyond 1.25 metres from the travelled portion or beyond the outside edge of the gravel shoulder may be used as backfill in the trench in the case of covered drains. The material shall be compacted in lifts not exceeding 300mm.

A.24 LANEWAYS

All pipes crossing laneways shall be backfilled with material that is clean, free of foreign material or frozen particles and readily tamped or compacted in place unless otherwise specified. Laneway culverts on open ditch projects shall be backfilled with material that is not easily erodible. All backfill material shall be thoroughly compacted as directed by the Engineer.



Culverts shall be bedded with a minimum of 300mm of granular material. Granular material shall be placed simultaneously on each side of the culvert in lifts not exceeding 150mm in thickness and compacted to 95% Standard Proctor Density. Culverts shall be installed a minimum of 10% of the culvert diameter below design grade with a minimum of 450mm of cover over the pipe unless otherwise noted on the Drawings.

The backfill over culverts and subsurface pipes at all existing laneways that have granular surfaces on open ditch and closed drainage projects shall be surfaced with a minimum of 300mm of Granular "B" material and 150mm of Granular "A" material. All backfill shall be thoroughly compacted as directed by the Engineer. All granular material shall be placed to the full width of the travelled portion.

Any settling of backfilled material shall be repaired by or at the expense of the Contractor during the warranty period of the project and as soon as required.

A.25 FENCES

No earth is to be placed against fences and all fences removed by the Contractor shall be replaced by him in as good a condition as found. Where practical the Contractor shall take down existing fences in good condition at the nearest anchor post and roll it back rather than cutting the fence and attempting to patch it. The replacement of the fences shall be done to the satisfaction of the Engineer. Any fences found in such poor condition where the fence is not salvageable, shall be noted and verified with the Engineer prior to commencement of work.

Fences damaged beyond repair by the Contractor's negligence shall be replaced with new materials, similar to those materials of the existing fence, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the Landowner and the Engineer.

Any fences paralleling an open ditch that are not line fences that hinder the proper working of the excavating machinery, shall be removed and rebuilt by the Landowner at his own expense.

The Contractor shall not leave fences open when he is not at work in the immediate vicinity.

A.26 LIVESTOCK

The Contractor shall provide each landowner with 48 hours notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the Landowner shall be responsible to keep all livestock clear of the construction areas until further notified. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock where the Contractor failed to notify the Landowner, or through negligence or carelessness on the part of the Contractor.



A.27 STANDING CROPS

The Contractor shall be responsible for damages to standing crops which are ready to be harvested or salvaged along the course of the drain and access routes if the Contractor has failed to notify the Landowners 48 hours prior to commencement of the work on that portion of the drain.

A.28 SURPLUS GRAVEL

If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used, the Contractor shall haul away such surplus material.

A.29 IRON BARS

The Contractor is responsible for the cost of an Ontario Land Surveyor to replace any iron bars that are altered or destroyed during the course of the construction.

A.30 RIP-RAP

Rip-rap shall be quarry stone rip-rap material and shall be the sizes specified in the Special Provisions. Broken concrete shall not be used as rip-rap unless otherwise specified.

A.31 CLEARING, GRUBBING AND BRUSHING

This specification applies to all brushing where no specific detail is provided on the drawings or in the Special Provisions.

The Contractor shall clear, brush and stump trees from within the working area that interfere with the installation of the drainage system.

All trees, limbs and brush less than 150mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and neatly stacked in piles designated by the Landowners.

A.32 RESTORATION OF LAWNS

This specification applies to all lawn restoration where no specific detail is provided on the drawings or in the Special Provisions and no allowance for damages has been provided under Section 30 of the Drainage Act RSO 1990 to the affected property.

The Contractor shall supply "high quality grass seed" and the seed shall be broadcast by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of broadcast to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the Landowner to maintain the area in a manner so as to promote growth.

DIVISION B

SPECIFICATIONS FOR OPEN DRAINS

<u>B</u>	<u>CONTENT</u>	<u>PAGE</u>
B.1	ALIGNMENT	1
B.2	PROFILE	1
B.3	EXCAVATION	1
B.4	EXCAVATED MATERIAL	2
B.5	EXCAVATION AT EXISTING BRIDGE AND CULVERT SITES	2
B.6	PIPE CULVERTS	2
B.7	RIP-RAP PROTECTION FOR CULVERTS	3
B.8	CLEARING, GRUBBING AND MULCHING	3
B.9	TRIBUTARY TILE OUTLETS	3
B.10	SEEDING	3
B.11	COMPLETION	4

DIVISION B

SPECIFICATIONS FOR OPEN DRAINS

B.1 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless noted on the drawings. Where there are unnecessary bends or irregularities on the existing course of the drain, the Contractor shall contact the Engineer before commencing work to verify the manner in which such irregularities or bends may be removed from the drain. All curves shall be made with a minimum radius of fifteen (15) metres from the centre line of the drain.

B.2 PROFILE

The Profile Drawing shows the depth of cuts from the top of the bank to the final invert of the ditch in metres and decimals of a metre, and also the approximate depth of excavated material from the bottom of the existing ditch to the final invert of the ditch. These cuts are established for the convenience of the Contractor; however, bench marks (established along the course of the drain) will govern the final elevation of the drain. The location and elevation of the bench marks are given on the Profile Drawing. Accurate grade control must be maintained by the Contractor during ditch excavation.

B.3 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the drawings. If the channel cross-section is not specified it shall be a one metre bottom width with 1.5(h):1(v) side slopes. At locations along the drain where the cross section dimensions change, there shall be a transitional length of not less than 10:1 (five metre length to 0.5 metre width differential). Where the width of the bottom of the existing ditch is sufficient to construct the design width, then construction shall proceed without disturbing the existing banks.

Where existing side slopes become unstable, the Contractor shall immediately notify the Engineer. Alternative methods of construction and/or methods of protection will then be determined prior to continuing work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.

An approved hydraulic excavator shall be used to carry out the excavation of the open ditch unless otherwise directed by the Engineer.



B.4 EXCAVATED MATERIAL

Excavated material shall be placed on the low side of the drain or opposite trees and fences. The Contractor shall contact all Landowners before proceeding with the work to verify the location to place and level the excavated material.

No excavated material shall be placed in tributary drains, depressions, or low areas which direct water behind the spoil bank. The excavated material shall be placed and levelled to a maximum depth of 200 mm, unless instructed otherwise and commence a minimum of one (1) metre from the top of the bank. The edge of the spoil bank away from the ditch shall be feathered down to the existing ground; the edge of the spoil bank nearest the ditch shall have a maximum slope of 2(h):1(v). The material shall be levelled such that it may be cultivated with ordinary farm equipment without causing undue hardship to the farm machinery and farm personnel. No excavated material shall cover any logs, brush, etc. of any kind.

Any stones or boulders which exceed 300mm in diameter shall be removed and disposed of in a location specified by the Landowner.

Where it is necessary to straighten any unnecessary bends or irregularities in the alignment of the ditch or to relocate any portion or all of an existing ditch, the excavated material from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and the old ditch, no extra compensation will be allowed for this work and must be included in the Contractor's lump sum price for the open work.

B.5 EXCAVATION AT EXISITING BRIDGE AND CULVERT SITES

The Contractor shall excavate the drain to the full specified depth under all bridges and to the full width of the structure. Temporary bridges may be carefully removed and left on the bank of the drain but shall be replaced by the Contractor when the excavation is complete. Permanent bridges must, if at all possible, be left intact. All necessary care and precautions shall be taken to protect the structure. The Contractor shall notify the Landowner if excavation will expose the footings or otherwise compromise the structural integrity of the structure.

The Contractor shall clean through all pipe culverts to the grade and width specified on the profile.

B.6 PIPE CULVERTS

All pipe culverts shall be installed in accordance with the standard detail drawings. If couplers are required, five corrugation couplers shall be used for up to and including 1200mm diameter pipes and 10 corrugation couplers for greater than 1200mm diameter pipes.

When an existing crossing is being replaced, the Contractor may backfill the new culvert with the existing native material that is free of large rocks and stones. The Contractor is responsible for any damage to a culvert pipe that is a result of rocks or stones in the backfill.



B.7 RIP-RAP PROTECTION FOR CULVERTS

Quarry stone rip-rap shall be used as end treatment for new culverts and placed on geotextile filter material (Mirafi 160N or approved equal). The rip-rap shall be adequately keyed in along the bottom of the slope, and shall extend to the top of the pipe or as directed on the drawings. The maximum slope for rip-rap shall be 1(h):1(v) or as directed by the Engineer.

The Contractor shall be responsible for any defects or damages that may develop in the rip-rap or the earth behind the rip-rap that the Engineer deems to have been fully or partially caused by faulty workmanship or materials.

B.8 CLEARING, GRUBBING AND MULCHING

Prior to excavation, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with the slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the side slopes shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the Landowner.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched. Clearing, grubbing and mulching shall be carried out as a separate operation from the excavation of the ditch, and shall not be completed simultaneously at the same location.

B.9 TRIBUTARY TILE OUTLETS

All tile outlets in existing ditches shall be marked by the Landowner prior to excavation. The Contractor shall guard against damaging the outlets of tributary drains. Any tile drain outlets that were marked or noted on the drawings and are subsequently damaged by the Contractor shall be repaired by the Contractor at his expense. The Landowner shall be responsible for repairs to damaged tile outlets that were not marked.

B.10 SEEDING

The side slopes where disturbed shall be seeded using an approved grass seed mixture. The grass seed shall be applied the same day as the excavation of the open ditch.

Grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO and composed of the following varieties mixed in the proportion by weight as follows:

- 55% Creeping Red Fescue
- 40% Perennial Rye Grass
- 5% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

**B.11 HYDRO SEEDING**

The areas specified in the contract document shall be hydro seeded and mulched upon completion of construction in accordance with O.P.S.S. 572.

B.12 HAND SEEDING

Placement of the seed shall be of means of an approved mechanical spreader.

B.13 COMPLETION

At the time of completion and final inspection, all work in the Contract shall have the full dimensions and cross-sections specified without any allowance for caving of banks or sediment in the ditch bottom.

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

<u>C</u>	<u>CONTENT</u>	<u>PAGE</u>
C.1	PIPE MATERIALS	1
C.2	ALIGNMENT	1
C.3	PROFILE	2
C.4	EXCAVATION	2
C.5	INSTALLATION	2
C.6	TRENCH CROSSINGS	3
C.7	OUTLET PROTECTION	4
C.8	CATCH BASINS AND JUNCTION BOXES	4
C.9	TRIBUTARY DRAINS	5
C.10	CLEARING, GRUBBING AND MULCHING	5
C.11	ROADS AND LANEWAY SUB-SURFACE CROSSINGS	6
C.12	FILLING IN EXISTING DITCHES	6
C.13	CONSTRUCTION OF GRASSED WATERWAYS	6
C.14	UNSTABLE SOIL	6
C.15	ROCKS	6
C.16	BROKEN OR DAMAGED TILE	7
C.17	RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS	7

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

C.1 PIPE MATERIALS

C.1.1 Concrete Tile

Concrete drain tile shall conform to the requirements of the most recent A.S.T.M. specification for Heavy-Duty Extra Quality drain tile. All tile with diameters less than 600mm shall have a pipe strength of 1500D. All tile with diameters 600mm or larger shall have a pipe strength of 2000D.

All tile furnished shall be subject to the approval of the Engineer. All rejected tile are to be immediately removed from the site.

C.1.2 High Density Polyethylene (HDPE) Pipe

All HDPE pipe shall be dual-wall corrugated drainage pipe with a smooth inner wall. HDPE pipe shall have a minimum stiffness of 320 kPa at 5% deflection.

Unless otherwise noted, all sealed HDPE pipe shall have a water tight gasketed bell and spigot joining system meeting the minimum requirements of CSA B182.8. Perforated HDPE pipe shall have a soil tight joining system, and shall be enveloped in non-woven geotextile filter sock.

C.2 ALIGNMENT

The Contractor shall contact the Engineer to establish the course of the drain. Where an existing drain is to be removed and replaced by the new drain, or where the new drain is to be installed parallel to an existing drain, the Contractor shall locate the existing drain (including repairing damaged tile caused by locating) at intervals along the course of the drain. The costs of locating shall be included in the tender price.

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other watercourses or at sharp corners, it shall run on a curve of at least 15 metres radius. The new tile drain shall be constructed at an offset from and parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water.

The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and existing tile act together to provide the necessary capacity. Where any such existing drain is disturbed or damaged, the Contractor shall perform the necessary repair at his expense.



C.3 PROFILE

Benchmarks have been established along the course of the drain which are to govern the elevations of the drain. The location and elevations of the benchmarks are shown on the drawings. Tile is to be installed to the elevation and grade shown on the profiles. Accurate grade control must be maintained by the Contractor at all times.

When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made.

C.4 EXCAVATION

C.4.1 Wheel machine

Unless otherwise specified, all trenching shall be carried out with a wheel machine approved by the Engineer. The wheel machine shall shape the bottom of the trench to conform to the outside diameter of the pipe. The minimum trench width shall be equal to the outside diameter of the pipe plus 100mm on each side of the pipe, unless otherwise specified. The maximum trench width shall be equal to the outside diameter of the pipe plus 300mm on each side of the pipe, unless otherwise specified.

C.4.2 Scalping

Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capability of the Contractor's wheel machine, he shall lower the surface grade in order that the wheel machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of the topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.

C.4.3 Excavator

Where the use of an excavator is used in-lieu of a wheel machine, the topsoil shall be stripped and replaced in accordance with Item C.4.2. All tile shall be installed on 19mm clear crushed stone bedding placed to a minimum depth of 150mm which has been shaped to conform to the bottom of the pipe. The Contractor shall include the costs of this work in his tender price.

C.5 INSTALLATION

C.5.1 Concrete Tile

The tile is to be laid with close joints and in regular grade and alignment in accordance with the drawings. The tiles are to be bevelled, if necessary to ensure close joints. The inside of the tile is to be kept clear when laid. The sides of the tile are to be supported by partial filling of the trench



(blinding) prior to inspection by the Engineer. No tile shall be backfilled until inspected by the Engineer unless otherwise permitted by the Engineer. The tile shall be backfilled such that a sufficient mound of backfill is placed over the trench to ensure that no depression remains after settling occurs in the backfill.

Where a tile connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a tile drain passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

The Contractor shall supply and wrap all concrete tile joints with Mirafi 160N geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.
- 500mm wide for tile sizes larger than 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be.

C.5.2 HDPE Pipe

HDPE pipe shall be installed using compacted Granular 'A' bedding or 19mm clear crushed stone bedding from 150mm below the pipe to 300mm above the pipe. All granular material shall be compacted using a suitable mechanical vibratory compactor. Granular bedding and backfill shall be placed in lifts not exceeding 300mm and compacted to at least 95% Standard Proctor Maximum Dry Density (SPMDD).

Where a pipe connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a pipe passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

As determined by the Engineer, unsuitable backfill material must be hauled off-site by the Contractor and Granular "B" shall be used as replacement backfill material.

C.6 TRENCH CROSSINGS

The Contractor shall not cross the backfilled trench with any construction equipment or vehicles, except by one designated crossing location on each property. The Contractor shall ensure that the bedding and backfill material at this designated crossing location is properly placed and compacted so as to adequately support the equipment and vehicles that may cross the trench.



The Contractor may undertake any other approved work to ensure the integrity of the tile at the crossing location. The Contractor shall ensure that no equipment or vehicles travel along the length of the trench. The Contractor shall be responsible for any damage to the new tile caused by the construction of the drain.

C.7 OUTLET PROTECTION

A tile drain outlet into a ditch shall be either HDPE pipe or corrugated steel pipe and shall include a hinged grate for rodent protection. The maximum spacing between bars on the rodent grate shall be 40mm. All corrugated steel outlet pipes shall be bevelled at the end to generally conform to the slope of the ditch bank.

Quarry stone rock rip-rap protection and geotextile filter material (Mirafi 160N), shall be installed around the outlet pipe and extended downstream a minimum distance of three metres, unless otherwise specified. The protection shall extend to the top of the backfilled trench and below the pipe to 300 mm under the streambed. The protection shall also extend 600mm into undisturbed soil on either side of the backfilled trench. In some locations, rip-rap may be required on the bank opposite the outlet.

Where the outlet occurs at the upper end of an open ditch, the rip-rap protection will extend all around the end of the ditch and to a point 800mm downstream on either side. Where heavy overflow is likely to occur, sufficient additional rip-rap and filter material shall be placed as directed by the Engineer to prevent the water cutting around the protection.

C.8 CATCH BASINS AND JUNCTION BOXES

Unless otherwise noted, catch basins shall be in accordance with OPSD 705.010 and 705.030. The catch basin grate shall be a "Birdcage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catch basin with bolts into the concrete. Spacing of bars on grates for use on 600mmX600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmX600mm shall be 90mm.

All catch basins shall be backfilled with compacted Granular 'A' or 19mm clear crushed stone placed to a minimum width of 300mm on all sides. If settling occurs after construction, the Contractor shall supply and place sufficient granular material to maintain the backfill level flush with adjacent ground. The riser sections of the catch basin shall be wrapped with filter cloth.

Quarry stone rip-rap protection shall be placed around all catch basins and shall extend a minimum distance of one (1) metre away from the outer edge of each side of the catch basin, and shall be placed so that the finished surface of the rip-rap is flush with the existing ground.

If there are no existing drains to be connected to the catch basin at the top end of the drain, a plugged tile shall be placed in the upstream wall with the same elevations as the outlet tile.

Junction boxes shall have a minimum cover over the lid of 450mm.



The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. The top of the spill way of the earth berm shall be the same elevation as the high wall of the ditch inlet catch basin. The earth berm shall be covered with 100mm depth of topsoil and seeded with an approved green seed mixture. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 metres each way from all catch basins.

The Contractor shall clean all catch basin sumps after completion of the drain installation. Catch basin markers shall be placed beside each catch basin.

C.9 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain is to be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary drains encountered are clean or reasonably clean, they shall be connected into the new drain in accordance with the typical tile drain connection detail. Tributary tile drain connections into the new drain shall be made using high density polyethylene agricultural drain tubing installed on and backfilled with 19mm clear crushed stone. All tile drain connections into the new drain shall be either a cored hole with an insert coupler or a manufactured tee.

Where the existing drains are full of sediment, the decision to connect the tributary drain to the new drain shall be left to the Engineer. The Contractor shall be paid for each tributary drain connection as outlined in the Form of Tender and Agreement.

The Contractor shall be responsible for all tributary tile connections for a period of one year from the date of the Completion Certificate. After construction, any missed tile connections required to be made into the new drain shall be paid at the same rate as defined in the Form of Tender and Agreement. The Contractor will have the option to make any subsequent tile connections or have the Municipality make the required connections and have the cost of which deducted from the holdback.

Where an open ditch is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain.

Where the Contractor is required to connect an existing tile which is not encountered in the course of the drain, the cost of such work shall constitute an extra to the contract.

C.10 CLEARING, GRUBBING AND MULCHING

The Contractor shall clear, brush and stump trees from within the working area.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched.

Clearing, grubbing and mulching shall be carried out as a separate operation from installing the drain, and shall not be completed simultaneously at the same location.



C.11 ROADS AND LANEWAY SUB-SURFACE CROSSINGS

All roads and laneway crossings may be made with an open cut. The Contractor may use original ground as backfill to within 600mm of finished grade only if adequate compaction and if the use of the original ground backfill has been approved beforehand by the Engineer.

C.12 FILLING IN EXISTING DITCHES

The Contractor shall backfill the ditch sufficiently for traversing by farm equipment. If sufficient material is available on-site to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled waterway. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period.

C.13 CONSTRUCTION OF GRASSED WATERWAYS

Where the Contractor is required to construct a grassed waterway, the existing waterway shall be filled in, regraded, shaped and a seed bed prepared prior to applying the grass seed. The grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO.

- 55% Creeping Red Fescue
- 15% Perennial Rye Grass
- 27% Kentucky Bluegrass
- 3% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

C.14 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer if unstable soil is encountered. The Engineer shall, after consultation with the Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

C.15 ROCKS

The Contractor shall immediately contact the Engineer if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a wheel machine. The Engineer shall determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

If only scattered large stone or boulders are removed on any project, the Contractor shall either excavate a hole to bury same adjacent to the drain, or he shall haul the stones or boulders to a location designated by the Landowner.



C.16 BROKEN OR DAMAGED TILE

The Contractor shall remove and dispose of all broken (existing or new), damaged or excess tile off site.

C.17 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS

Drainage Guide for Ontario, Ministry of Agriculture, Food and Rural Affairs, Publication 29 and its amendments, dealing with the construction of Subsurface Drainage Systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other Specifications of the Contract.

DIVISION E

SPECIFICATIONS FOR DRAINAGE CROSSINGS BY THE BORING METHOD

<u>E</u>	<u>CONTENT</u>	<u>PAGE</u>
E.1	GENERAL REQUIREMENTS	1
E.2	NOTIFICATION	1
E.3	PIPE	1
E.4	INSTALLATION	1
E.5	AUGER PIT	2
E.6	CONSTRUCTION	2
E.7	ACCEPTANCE	2

DIVISION E

SPECIFICATIONS FOR DRAINAGE CROSSINGS BY THE BORING METHOD

E.1 GENERAL REQUIREMENTS

When a drainage crossing of a Roadway, Railway, etc. is to be carried out by the Boring Method, the following Specifications for this work shall apply. The Authority having jurisdiction over the lands involved with the crossing will supply no labour, equipment or materials for the construction of the crossing unless otherwise specified.

The Contractor shall be fully responsible for availing himself of, and satisfying any further Specifications that may apply to borings affecting the Authority having jurisdiction over the lands involved with the crossing.

E.2 NOTIFICATION

The Contractor shall give the Authority responsible for the lands being crossed at least five (5) days notice before he commences any work on the crossing.

E.3 PIPE

The pipe or casing used in the crossing shall be smooth wall welded steel pipe with a minimum wall thickness as specified on the Plan and Profile. All pipe shall be new and manufactured from weldable steel having a minimum yield strength of 241 MPa. Pipe ends shall be bevel edged in the intrude to an angle of thirty (30) degrees for butt weld splicing. The name or trademark of the manufacturer and the heat number shall be clearly marked in the inside of the section of the pipe.

The pipe shall be of sufficient length so that during placement, no part of any excavation shall be closer than three (3) metres to the edge of a pavement and the slope of the excavation from the edge of shoulder, or other point as specified to the invert of the pipe shall be no less than one (1) metre vertical to one (1) metre horizontal (1:1) [See item E.5 "Auger Pit"].

E.4 INSTALLATION

The pipe or casing shall be placed by means of continuous flight augering inside the casing and simultaneous jacking to advance the casing immediately behind the tip of the auger. Complete augering of a tunnel slightly larger than the pipe and placing the entire length by pulling or jacking after completion of the tunnel will not be acceptable unless the method to be adopted is approved in advance by both the Engineer and the Authority responsible for the lands being crossed.



E.5 AUGER PIT

The pit excavated to accommodate the boring machine shall be so constructed so that the top edge of the pit shall not be closer than three (3) metres to the edge of the pavement. The slope of the pit from the top edge at the shoulder to the bottom of the pit shall not be steeper than one (1) metre vertical to one (1) metre horizontal (1:1). Shoring, sheeting, etc. shall be in accordance with the applicable and most recent Provincial Statutes.

The pit shall be left open for an absolute minimum of time, and if at all possible work shall be so scheduled so that excavation, placement of pipe and backfilling take place in one (1) working day. If this is not possible, every effort should be made to schedule the work so that the pit is not left open for more than one (1) day before and one (1) day after the boring operation.

E.6 CONSTRUCTION

During excavation, every effort should be made to place the top 300 mm of spoil (topsoil) in a separate pile for replacement on top on completion of the backfill operation. If this is not possible or practical, the Contractor shall import and place a minimum of 150 mm of good quality topsoil over the excavated and backfilled area. The finished work shall be left in a clean and orderly condition flush or slightly higher than the adjacent ground so that after settlement, it will conform to the surrounding ground. Excess earth (if any) shall be disposed of as directed by the Engineer and no additional payment will be allotted for such work.

The Contractor shall at his expense supply, erect and maintain suitable and adequate barricades, flashing lights, warning signs and/or flagmen to the satisfaction of the Engineer to adequately warn and protect the motoring public.

Any areas disturbed within the Right-of-Way of a County Road or King's Highway during construction, shall be covered with a minimum of 75 mm of topsoil, fertilized and seeded with an approved grass seed mixture.

E.7 ACCEPTANCE

All work undertaken by the Contractor shall be to the satisfaction of the Engineer.

DIVISION H

SPECIAL PROVISIONS

<u>H</u>	<u>CONTENT</u>	<u>PAGE</u>
H.1	GENERAL	1
H.2	UTILITIES	1
H.3	WORKING AREA AND ACCESS	1
H.4	CLEARING AND GRUBBING	2
H.5	TOPSOIL	2
H.6	RIP-RAP	2
H.7	EXISTING DRAINS/TILE CONNECTIONS	2
H.8	PIPE, INSTALLATION, BEDDING & BACKFILL	3
H.9	CATCH BASINS & MANHOLES	4

DIVISION H

SPECIAL PROVISIONS

Ford-Neeb Municipal Drain 2018
Municipality of South Huron

Reference No. 1457

Special provisions means special directions containing requirements particular to the work not adequately provided for by the standard or supplemental Specifications. Special provisions shall take precedence and govern any standard or supplemental Specifications.

H.1 GENERAL

The Contractor shall notify the Landowners, and the Engineer forty-eight (48) hours prior to construction, and arrange a pre-construction meeting.

The Contractor shall verify the location of the new drainage system with the Engineer and the owners prior to construction. The Contractor shall locate the existing tile drain in several locations before installing the new drain.

The Contractor shall check and verify all dimensions and elevations and report any discrepancies to the Engineer prior to proceeding with the work.

The Contractor shall be responsible to arrange all traffic control signals, signs and devices that are required for safe and proper traffic management during the installation of the drainage system.

The Contractor must maintain access to all driveways along the route of the drain as well as maintain access for all emergency vehicles at all times during construction.

The Contractor shall be responsible for all trench settlement.

H.2 UTILITIES

All utilities shall be located and uncovered in the affected areas by the Contractor prior to construction. The contractor shall uncover the existing waterline and fibre optic cable on the Goshen Line road allowance.

The locations and elevations of all utilities shown on the drawings are approximate locations. Actual locations and elevations of all utilities must be verified by the Contractor prior to construction.

The Contractor shall arrange to have a representative of the utility owner on site during construction if it is a requirement by the utility owner.

H.3 WORKING AREA AND ACCESS

H.3.1 Open Work



The working area for construction purposes shall be a width of ten (10) metres on the side of the drain where the excavated material is to be placed and levelled. The contractor shall supply five (5) hours of excavator time and three (3) truck loads of quarry stone riprap to repair eroded ditch banks (Lot 20, Concession 12) as additional cost to the contract.

H.3.2 Closed Work

The working area for construction purposes shall be a width of twenty (20) metres centered on the proposed tile drain (Sta 0+000 to Sta. 0+900) and a width of twenty five (25) meters (Sta 0+900 to Sta. 1+138). Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area.

H.4 CLEARING AND GRUBBING

The Contractor shall clear, brush and stump trees from within the working area that interfere with the installation of the drainage system.

All trees, limbs and brush less than 150mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and placed in piles designated by the Landowners.

H.5 TOPSOIL

Where the drain is to be installed by means of an approved wheel trencher, the Contractor shall strip the topsoil for a width of 4 metres centred on the proposed drain. Where the drain is to be installed by means of an approved hydraulic excavator, the Contractor shall strip the topsoil for a width equal to the trench width.

H.6 RIP-RAP

All stone rip-rap material shall be quarry stone 150 mm to 300 mm dia. and placed to a depth of 450 mm. All rip-rap material shall be placed on geo-textile filter material (Mirafi 180N).

H.7 EXISTING DRAINS/TILE CONNECTIONS

The Contractor shall make all tributary tile drain connections in accordance with the Typical Tile Connection Detail on drawing 2 of 2.

The Contractor shall be responsible for all tile connections for a period of one year after the issuance of the completion certificate. The tile connections required to be made within this warranty period shall be made at the same rate as defined on the Form of Tender and Agreement. After construction, the Contractor will be given the option to make any subsequent tile connections or have the Municipality make said connections and have the costs of which deducted from the holdback.



If an existing drain is cut off during the installation of the new drainage system, the Contractor, with the approval of the Engineer, shall plug the downstream end using appropriate materials. The upstream ends shall be connected to the new drainage system by the Contractor, who shall supply all necessary materials to complete the connections of the existing drains to the new drain. The type of materials used to make the tributary tile drain connections shall be verified with the Engineer.

All existing drains cut off during the installation of the new drainage system that will be connected to the new drainage system shall be flagged or marked by the Contractor prior to the connection being made.

The existing 150mm diameter drain 60 meters south of Sta. 1+068 shall be connected to the offset catch basin.

H.8 PIPE, INSTALLATION, BEDDING & BACKFILL

H.8.1 Concrete Field Tile

An approved wheel trencher shall be used to install the concrete field tile.

All concrete tile with diameters less than 600mm shall be Heavy-Duty Extra Quality Concrete Drain Tile 1500D. All concrete tile with diameters 600mm or greater shall be Heavy-Duty Extra Quality Concrete Drain Tile 2000D.

All concrete field tile shall be backfilled using native material. The backfill shall not be compacted but a sufficient mound shall be left over the trench by the Contractor to allow for settlement flush with adjacent lands. The Contractor shall be responsible for all trench settlement.

The Contractor shall supply and wrap all concrete tile joints with geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.
- 500mm wide for tile sizes larger than 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be Mirafi 140NC for clay or loam soil conditions and Mirafi 160N for sandy or silty soil conditions.

H.8.2 High Density Polyethylene Pipe (H.D.P.E.)

An approved hydraulic excavator shall be used for the installation of all H.D.P.E. pipe.

All H.D.P.E. pipe shall be BOSS 2000 (or equivalent) CSA B182.8-02/320 KPa.

All H.D.P.E. pipe shall be installed using 19mm (3/4") crushed stone bedding from 150mm below the pipe to the spring line of the pipe. Suitable native material shall be used as backfill from the spring line to the underside of the topsoil.



H.9 CATCH BASINS & MANHOLES

All catch basins shall be precast concrete catch basins (Coldstream Concrete Ltd. or approved equal).

All existing catch basins and manholes that are to be removed shall be disposed of off-site by the Contractor.

All catch basins to have 300mm sumps.

The catch basin grate elevations shall be set to the satisfaction of the Engineer.

All catch basin grates shall be fastened to the new catch basins.

All catch basins shall have not dipped galvanized bird cage grates.

Knockouts shall be provided in all catch basins.

All catch basins and manholes structures shall be installed on 150mm crushed stone bedding.

Structures within the road allowances shall have 300mm minimum M.T.O. Granular 'B' backfill around all sides up to the underside of the topsoil layer.

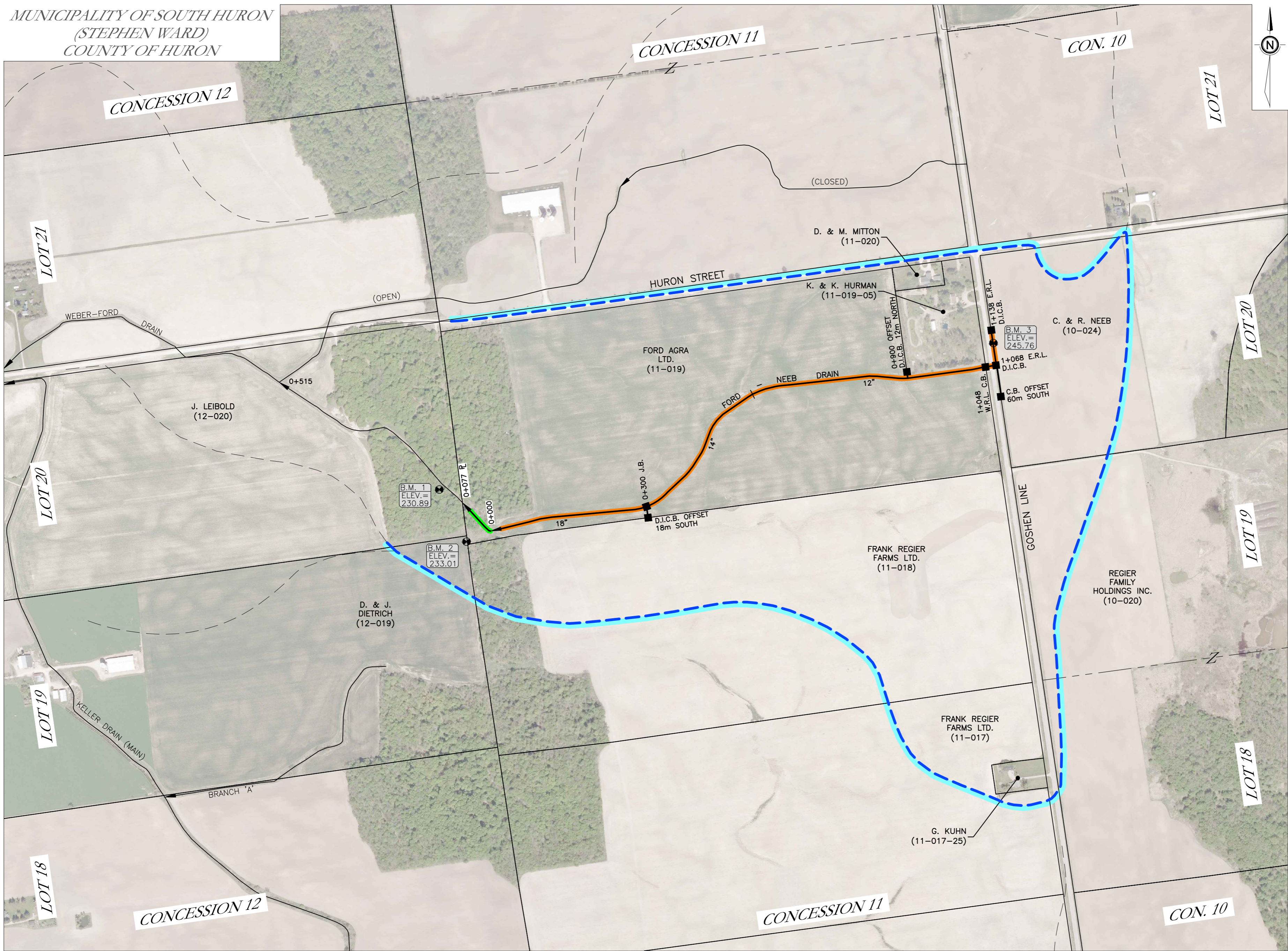
Structures on private property shall be backfilled using approved native material up to the underside of the topsoil layer.

All backfill material shall be placed and thoroughly compacted evenly around each structure in lifts not exceeding 300mm so as to minimize settlement around the structures.

The Contractor shall place quarry stone rip-rap material around all sides of the catch basins for a width of 1m and shall be placed on an approved geo-textile filter material.

All existing catch basins and manholes to be removed shall be disposed of off-site by the Contractor.

MUNICIPALITY OF SOUTH HURON
(STEPHEN WARD)
COUNTY OF HURON



NOTES:

1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.
2. ALL PERFORATED HIGH DENSITY POLYETHYLENE PIPE SHALL BE EXTERNAL SPLIT COUPLER JOINING SYSTEMS UNLESS OTHERWISE NOTED.

BENCHMARK No. 1 ELEV.=230.89
NAIL IN EAST FACE OF 450mm DIA. TREE 7 METRES WEST OF STA. 0+129 (OPEN DRAIN)

BENCHMARK No. 2 ELEV.=233.01
NAIL IN EAST FACE OF HYDRO POLE 43 METRES WEST OF STA. 0+000

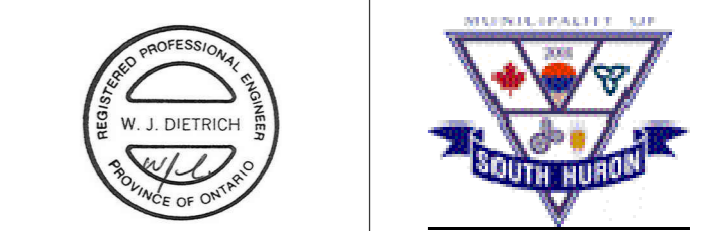
BENCHMARK No. 3 ELEV.=245.76
NAIL IN NORTH FACE OF HYDRO POLE AT STA. 1+110 (CLOSED DRAIN)

LEGEND:

- DRAIN NAME —→ EXISTING MUNICIPAL DRAIN
- - - - - INTERIOR/EXTERIOR WATERSHED BOUNDARY
- - - - - PROPERTY BOUNDARY
- - - - - LOT OR CONCESSION BOUNDARY
- - - - - TOWNSHIP BOUNDARY
□ EXISTING CATCH BASIN OR JUNCTION BOX
○ EXISTING MANHOLE

- DRAIN NAME —→ MUNICIPAL DRAIN (AREA OF WORK)
- - - - - WATERSHED BOUNDARY
- - - - - PROPOSED CATCH BASIN OR JUNCTION BOX
- - - - - PROPOSED MANHOLE
● BENCHMARK LOCATION
● B.M. 1 ELEV.= 50.00
● BENCHMARK ELEVATION

No.	ISSUES AND REVISIONS	DATE	BY
4.	REPORT SUBMISSION	2018-02-20	DEL
3.	INFORMATION MEETING NO. 2	2018-02-14	DEL
2.	INFORMATION MEETING	2017-02-10	DEL
1.	ON-SITE MEETING	2015-12-23	DEL

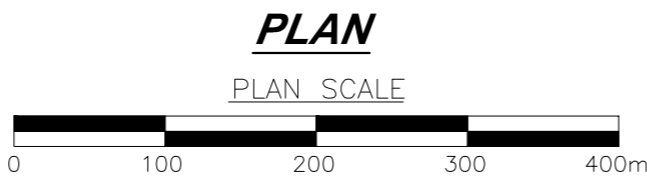


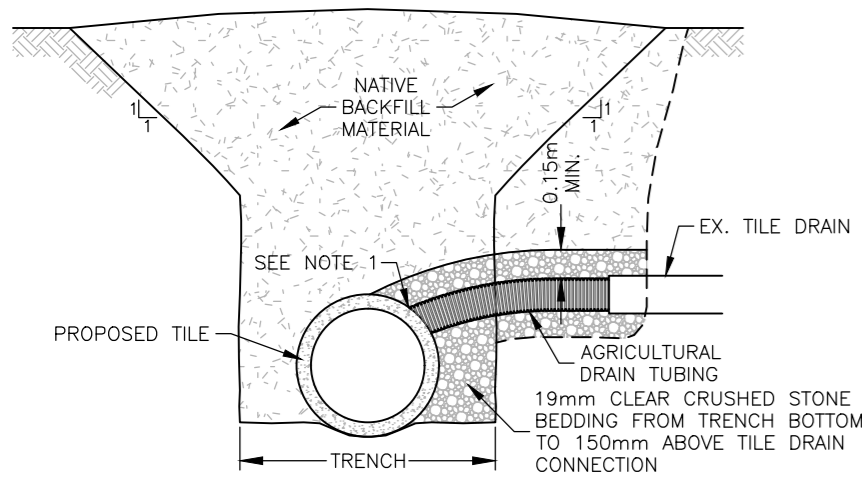
PROJECT: FORD-NEEB MUNICIPAL DRAIN 2018

DRAWING:

Plan
DEL
DIETRICH ENGINEERING LIMITED
CONSULTING ENGINEERS
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

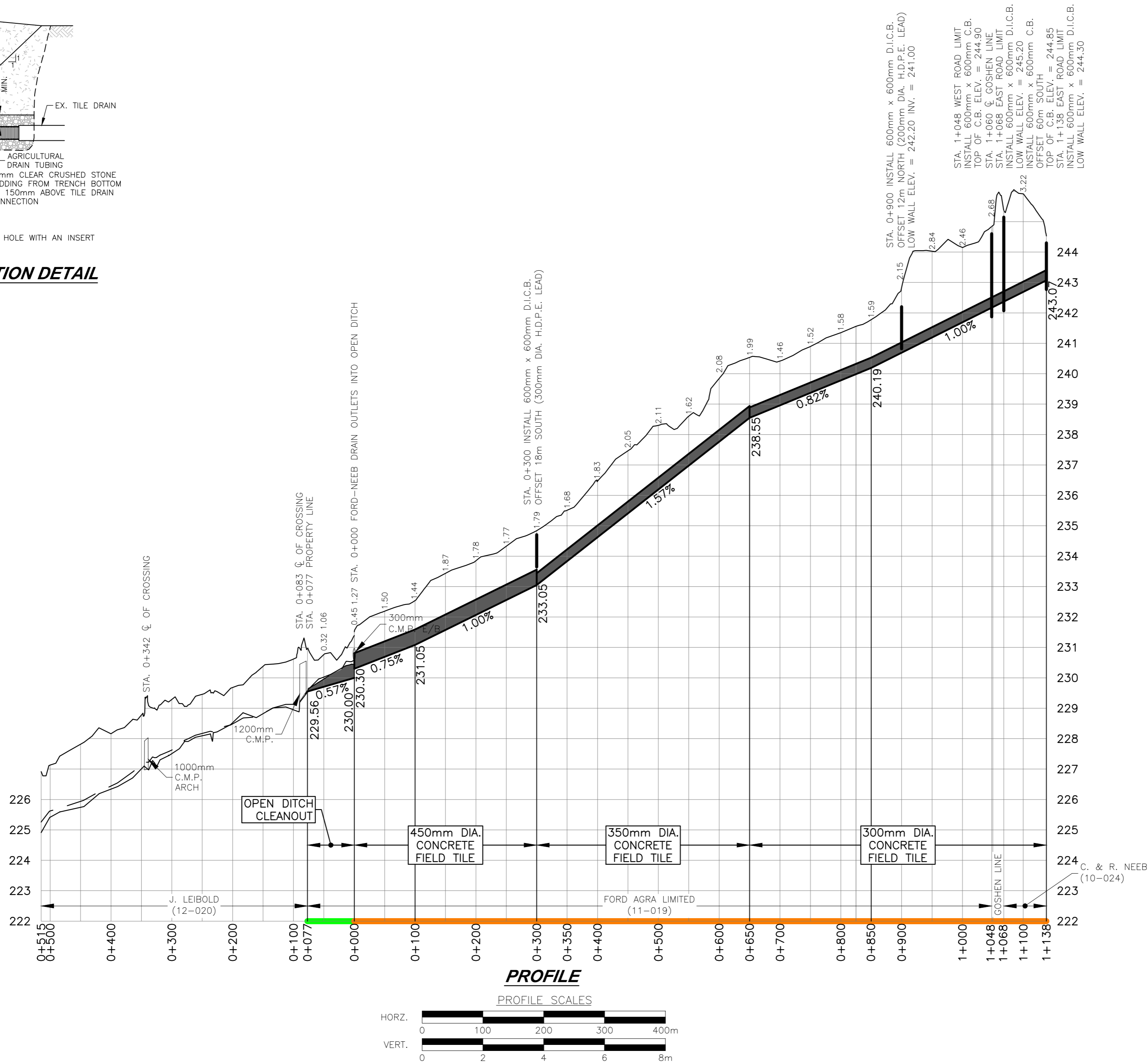
PROJ. MGR: W.J.D.	DESIGNED BY: W.J.D.	DRAWN BY: G.C.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE: FEB. 20, 2018	PROJECT No. 1457	DRAWING No. 1 of 2





NOTE:
1. ALL TILE CONNECTIONS TO BE EITHER A CORED HOLE WITH AN INSERT COUPLER, OR A MANUFACTURED TEE

TYPICAL TILE CONNECTION DETAIL
N.T.S.



BOTTOM WIDTH
0.9m
SIDE SLOPES
1.5:1

TILE SIZES		PROFILE SCALES		
No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE OUTLET PIPE	450	0+000 - 0+006	6
2.	CONCRETE FIELD TILE	450	0+006 - 0+300	294
3.	CONCRETE FIELD TILE	350	0+300 - 0+650	350
4.	CONCRETE FIELD TILE	300	0+650 - 1+048	398
5.	SMOOTH WALL STEEL CASING	400 O.D.	1+048 - 1+064	16
6.	HIGH DENSITY POLYETHYLENE PIPE	375	1+064 - 1+068	4
7.	CONCRETE FIELD TILE	300	1+068 - 1+138	70

<div><div><div>REGISTERED PROFESSIONAL ENGINEER W. J. DIETRICH PROVINCE OF ONTARIO</div><div><div>MUNICIPALITY OF SOUTH HURON</div><div>2018</div></div></div></div>			
PROJECT: FORD-NEEB MUNICIPAL DRAIN 2018			
DRAWING:			
<div>Profile</div> <div><div>DEL</div><div>DIETRICH ENGINEERING LIMITED CONSULTING ENGINEERS</div></div>			
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7			
PROJ. MGR: W.J.D.	DESIGNED BY: W.J.D.	DRAWN BY: G.C.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE: FEB. 20, 2018	PROJECT No. 1457	DRAWING No. 2 of 2

Municipality of South Huron
322 Main Street South
PO Box 759
Exeter ON N0M 1S6

Notice of Meeting to Consider the Engineer's Report

Drainage Act, R.S.O. 1990, c. D.17, s. 42

To:

Enter Name and Current Address of Property Owner

See attached mailing labels

In accordance with section 42 of the *Drainage Act*, you as an owner of land affected by the proposed drainage works for the

Khiva Municipal Drain

(Name of drain)

are requested to attend a council meeting to consider the final report filed with the **Municipality**

of South Huron

for this drainage works.

The meeting will take place:

Date (yyyy/mm/dd)

2018/03/19

Time

6:00 p.m

Location

South Huron Council Chambers

If the share of the project cost assessed to your property is more than \$100, a copy of the report is included with this notice.

Name of Clerk (Last Name, First Name)

Msuya-Collison, Rebekah

Name of Municipality

Municipality of South Huron

Signature of Clerk

[Signature]

Date (yyyy/mm/dd)

2018/03/02

Failure to attend meeting: If you do not attend the meeting, it will proceed in your absence. If you are affected or assessed by this proposed project, you will continue to receive notification as required by *the Drainage Act*.

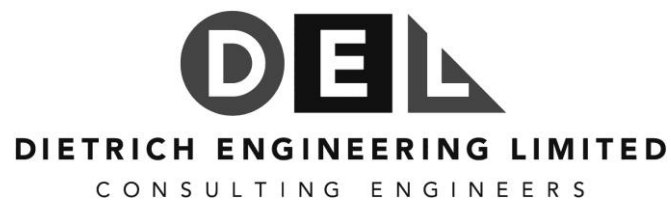
Activities at the meeting to consider the report:

- Usually the engineer will present a summary of the report to council
- For drains initiated by petition:
 - Petitioners will be given an opportunity to withdraw their name from the petition
 - Other owners that benefit from the drain will be given an opportunity to add their name to the petition
- Council must decide whether or not to proceed with the project by provisionally adopting the engineer's report by by-law; they also have the option to refer the report back to the engineer for modifications.
- All property owners affected by the drain will have an opportunity to influence council's decision
- There is no right to appeal assessments or other aspects of the engineer's report at this meeting; these appeal rights will be made available later in the procedure. *Drainage Act, R.S.O. 1990, c. D.17, s. 47 - 54.*

Petitioners: After the meeting to consider the final report, if the petition does not comply with section 4, the project is terminated and the original petitioners are responsible for the costs in shares proportional to their assessment in the engineer's report. *Drainage Act, R.S.O. 1990, c. D. 17 s. 43.*



**Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)**



Reference No. 1634

February 20, 2018

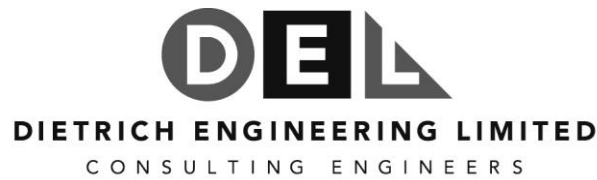
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

Contents

Introduction	1
History	1
On-Site Meeting	2
Information Meeting No. 1	2
Information Meeting No. 2	2
Findings	3
Recommendations	3
Summary of Proposed Works	3
Working Area	3
Watershed Characteristics	3
Allowances	4
Estimated Construction Costs	5
Summary of Costs	7
Assessment	7
Maintenance	8
Schedule of Assessment for Construction Main Drain	9
Schedule of Assessment for Construction Branch 'A'	10
Schedule of Assessment for Construction Branch 'B'	11
Schedule of Net Assessment for Construction	12
Schedule of Assessment for Main Drain Maintenance	13
Schedule of Assessment for Branch 'A' and Branch 'B' Maintenance	14

Specifications for the Construction of Municipal Drainage Works

DIVISION A-General Conditions
DIVISION B-Specification for Open Drains
DIVISION C-Specification for Tile Drains
DIVISION H-Special Provisions



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Waterloo, Ontario

February 20, 2018

**Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)**

**To the Mayor and Council
of the Municipality of South Huron**

Members of Council:

Introduction

We are pleased to present our report on the “Khiva Municipal Drain 2018”, serving parts of Lot 5 to 9, Concession 11 and parts of Lots 8 to 10 Concession 12 in the Municipality of South Huron, Stephen Ward, County of Huron.

Authority to prepare this report was obtained by a resolution of the Municipality of South Huron Council at its July 4, 2016, meeting to appoint Dietrich Engineering Limited to prepare an Engineer’s Report.

In accordance with your instructions pursuant to a request received by Council under Sections 4 and 78 of the Drainage Act, R.S.O. 1990, we have made an examination and survey of the affected area and submit herewith our Report which includes Plan, Profiles and Specifications for this work.

The area requiring drainage is part of Lot 9, Concessions 11 and 12. The petition is valid in compliance with Section 4(1)(a) of the Drainage Act, R.S.O. 1990.

The attached Plan and Profiles, Drawing No.’s 1 to 3 , Reference No. 1634, Specifications and the Instructions to Tenderers form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected

History

The existing Khiva Municipal Drain was originally constructed under the authority of a report prepared by C.P. Corbett and Co. Ltd., Consulting Engineers, dated February 15, 1978. This report provided for the installation of 3,661 feet of 14” to 18” dia. tile and the excavation of 3,075 feet of open ditch.

On-Site Meeting

In accordance with Section 9(1) of the Drainage Act, R.S.O. 1990, an on-site meeting was held on August 4, 2016. The place of meeting was held on the Huron County Road 2 road allowance adjacent to the north part of Lot 9, Concession 12. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Ed McCann	Landowner
Larry Ratz	Landowner
Mark Ryan	Landowner
Andy Kester	Landowner

Information Meeting No. 1

An information meeting was held on March 3, 2017 at the Municipality of South Huron Municipal Office. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Jason Parr	Road Superintendent, Municipality of South Huron
Alyssa Keller	Roads Employee
Larry Ratz	Landowner
Arnold and Andy Kester	Landowner
Ed McCann	Landowner

The information provided proposed upgrading the Khiva Municipal Drain from the outlet in the open ditch in Lot 10, Concession 12 upstream to the property line between Lots 7 and 8, Concession 11 and a clean out of 200 metres of the open ditch in Lot 10, Concession 12, Municipality of South Huron, (Stephen Ward). This meeting provided a review of the design of the proposed drainage system, the estimated costs of the project and proposed assessments. The estimated cost of this proposal is \$134,300.

Information Meeting No. 2

An information meeting was held on February 14, 2018 at the Municipality of South Huron Municipal Office. This meeting provided a review of changes to the proposed municipal drainage system. The revised estimated costs and proposed assessments were presented at this meeting. The total estimated cost of this proposal is \$163,000. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Ed McCann	Landowner
Larry Ratz	Landowner
Arnold Kester	Landowner
Representing Andy Kester	
Pat O'Rourke	Landowner

Findings

We have made an examination of the drainage area and have found the following:

1. The existing Khiva Municipal Drain (Main Drain, Closed) is neither of sufficient capacity nor depth to drain the surrounding and upstream lands within the watershed at today's standards of drainage.

Recommendations

It is our recommendation that:

1. A new tile drainage system be constructed from the outlet in Lot 10, Concession 12 approximately 1,131 metres to the property line between Lots 7 and 8, Concession 11.
2. This new tile drainage system includes the installation of 1,131 metres of 400mm to 600mm diameter tile.
3. The existing tile drain constructed under the authority of the report prepared by C.P. Corbett and Co. Ltd., dated February 15, 1978, shall be abandoned.
4. Approximately 187 metres of the open ditch in Lot 10, Concession 12 be cleaned out.
5. The drainage coefficient design standard used for this tile drain is 38mm of rainfall per 24 hours.
6. This new drainage system shall be known as the "Khiva Municipal Drain 2018".

Summary of Proposed Works

The proposed work consists of approximately 187 metres of open ditch excavation; the installation of approximately 1,386 metres of 150mm to 600mm diameter concrete field tile and H.D.P.E. pipes and the installation of six (6) concrete catch basins.

Working Area

Open Work

The working area for construction and maintenance purposes shall be a width of ten (10) metres on the side of the drain where the excavated material is to be placed and levelled.

Closed Work

The working area for construction purposes shall be a width of twenty (20) metres centered on the proposed tile drain. The working area for maintenance purposes shall be a width of ten (10) metres centered on the proposed tile drain. The owner of the N. Pt Lot 9, Concession 12 shall designate access to and from the working area.

Watershed Characteristics

The Drainage Area comprises approximately 98.1 hectares. Land use within the watershed is agricultural.

Allowances

In accordance with Sections 29 and 30 of the Drainage Act, R.S.O. 1990, we determine the allowances payable to Owners entitled thereto as follows.

Lot or Part	Con.	Owner	Roll No.	Right-of-Way (Section 29)	Damages to Lands and Crops (Section 30)	Total Allowances
<u>Main Drain</u>						
7	11	Goshen Farms Inc.	11-004		\$500	\$500
8	11	Eilers Farms (Ontario) Inc.	11-005	\$5,440	\$4,350	\$9,790
9	11	Frank Reiger Farms Ltd.	11-006	\$2,110	\$1,690	\$3,800
S Pt. 9	12	E. McCann	12-007	\$890	\$710	\$1,600
N Pt. 9	12	A. Kester	12-008	\$2,520	\$2,655	\$5,175
10	12	P. & G. O'Rourke	12-009	\$350	\$800	\$1,150
Total Allowances, Main Drain				\$11,310	\$10,705	\$22,015
<u>Branch 'A'</u>						
9	11	Frank Reiger Farms Ltd.	11-006		\$300	\$300
N Pt. 9	12	A. Kester	12-008	\$1,660	\$1,330	\$2,990
Total Allowances, Branch 'A'				\$1,660	\$1,630	\$3,290
<u>Branch 'B'</u>						
9	11	Frank Reiger Farms Ltd.	11-006		\$300	\$300
N Pt. 9	12	A. Kester	12-008	\$890	\$710	\$1,600
Total Allowances, Branch 'B'				\$890	\$1,010	\$1,900
<u>Total Allowances</u>				<u>\$13, 860</u>	<u>\$13,345</u>	<u>\$27,205</u>

Total Allowances, under Sections 29 and 30 of the Drainage Act, R.S.O. 1990;
Khiva Municipal Drain 2018.

\$27,205

The land values used for calculating allowances for Right-of-Way was \$40,000/ha.

The allowances for Right-of-Way under Section 29 of the Drainage Act, R.S.O. 1990 were calculated based on 25% of the land value for a 10 metre Right-of-Way.

Allowances for Right-of-Way were not provided in the report prepared by C.P. Corbett and Co. Ltd., dated February 15, 1978 which authorized the construction of the existing Main Drain (Closed) portion of the Khiva Municipal Drain.

Estimated Construction Costs

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

Labour, Equipment, and Materials

A) Main Drain

1) 187 metres of open ditch excavation including levelling excavated material.	\$	1,300
2) Clearing and grubbing	\$	500
3) Fill in eroded areas and place quarry stone rip-rap protection and geotextile filter material on sideslopes (approx. 50m ²)		
Sta. 0+013 and Sta. 0+090	\$	2,000
4) Supply 288 metres of 400mm diameter concrete field tile	\$	6,625
Installation	\$	6,335
5) Supply 343 metres of 450mm diameter concrete field tile	\$	9,605
Installation	\$	8,230
6) Supply 213 metres of 525mm diameter concrete field tile	\$	7,240
Installation	\$	5,325
7) Supply 275 metres of 600mm diameter concrete field tile	\$	13,200
Installation	\$	7,425
8) Supply 12 metres of 450mm diameter HDPE outlet pipe complete with rodent grate	\$	900
(Remove existing 525mm diameter C.M.P. outlet pipe and Install 12 metres of 450mm diameter outlet pipe complete with quarry stone rip-rap protection and geotextile filter material (20m ²)	\$	1,500
9) Supply 12 metres of 600mm diameter H.D.P.E. outlet pipe complete with rodent grate	\$	1,300
Installation of 12 metres of 600mm diameter outlet pipe complete with quarry stone rip-rap protection and geotextile filter material (30m ²)	\$	2,000



10) Supply and install 1 standard 900mm x 1200mm concrete catch basin at Sta. 0+376 (inline type)	\$ 2,300
11) Supply and install 3 standard 900mm x 1200mm concrete ditch inlet catch basins at Sta. 0+287, Sta. 0+587 and Sta. 1+131 (inline type)	\$ 7,500
12) Tile connections	\$ 4,985

**TOTAL ESTIMATED CONSTRUCTION COSTS
MAIN DRAIN**

\$ 88,270

B) Branch 'A'

1) Supply 166 metres of 150mm diameter H.D.P.E. perforated pipe complete with filter sock	\$ 2,160
Installation	\$ 2,990
2) Supply and install 1 standard 600mm x 600mm concrete catch basin at Sta. 0+166 (inline type)	\$ 1,800

**TOTAL ESTIMATED CONSTRUCTION COSTS
Branch 'A'**

\$ 6,950

C) Branch 'B'

1) Supply 89 metres of 150mm diameter H.D.P.E. perforated pipe complete with filter sock	\$ 1,160
Installation	\$ 1,600
2) Supply and install 1 standard 600mm x 600mm concrete ditch inlet catch basin at Sta. 0+089 (inline type)	\$ 1,800

**TOTAL ESTIMATED CONSTRUCTION COSTS
Branch 'B'**

\$ 4,760

Summary of Construction Costs

A) Total Estimated Construction Costs – Main Drain	\$ 88,270
B) Total Estimated Construction Costs – Branch ‘A’	\$ 6,950
C) Total Estimated Construction Costs – Branch ‘B’	\$ 4,760
TOTAL ESTIMATED CONSTRUCTION COSTS	<u>\$ 99,980</u>

Summary of Costs

Allowances under Sections 29 and 30 of the Drainage Act, R.S.O. 1990	\$ 27,205
Total Estimated Construction Costs	\$ 99,980
Meetings, survey, design, preparation of preliminary cost estimates and reports, preparation of final drainage report, consideration of report and court of revision	\$ 19,600
Preparation of contract documents, contract administration, supervision and inspection of construction	\$ 10,700
Contingencies, Interest, and net H.S.T.	\$ 5,515
TOTAL ESTIMATED COSTS KHIVA MUNICIPAL DRAIN 2018	<u>\$ 163,000</u>

The estimated cost of the work in the Municipality of South Huron is \$163,000.

Assessment

We assess the cost of this work against the lands and roads liable for assessment for benefit and outlet as shown on the annexed Schedules of Assessment. We have determined that there is no injuring liability assessment involved.

The existing Khiva Municipal Drain (Closed Portion) constructed under the report of C.P. Corbett and Co. Ltd. Consulting Engineers, dated February 15, 1978 shall be abandoned and cease to be a municipal drain after the Khiva Municipal Drain 2018 is constructed. The ownership of the existing tile drain shall be reverted to the landowners for that portion of the drain which is situated on their respective properties.

Maintenance

After completion, this drain shall be maintained by the Municipality of South Huron at the expense of all the lands and roads assessed in the attached Schedules of Assessment for Maintenance and in the same relative proportions until such time as the assessment is changed under the Drainage Act.

Respectfully submitted,

DIETRICH ENGINEERING LIMITED



W. J. Dietrich, P.Eng.

WJD: g.c.



SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	(SEC. 22)		(SEC. 23)		LESS 1/3		NET	
					BENEFIT	LIABILITY	OUTLET	ASSESSMENT	GOV'T GRANT	ALLOWANCES		
Main Drain												
5	11	5.7	T. Ryan	11-003		\$2,451		\$2,451	\$817		\$1,634	
6	11	13.8	Goshen Farms Inc.	11-004-01		\$11,906		\$11,906	\$3,969		\$7,937	
7	11	13.0	Goshen Farms Inc.	11-004	\$5,000	\$11,206		\$16,206	\$5,402	\$500	\$10,304	
8	11	24.3	Eilers Farms (Ontario) Inc.	11-005	\$33,000	\$13,694		\$46,694	\$15,565	\$9,790	\$21,339	
9	11	25.1	Frank Regier Farms Ltd.	11-006	\$19,800	\$9,773		\$29,573	\$9,858	\$3,800	\$15,915	
8	12	0.8	E. McCann	12-006		\$272		\$272	\$91		\$181	
S. Pt. 9	12	7.7	E. McCann	12-007	\$7,500	\$2,080		\$9,580	\$3,193	\$1,600	\$4,787	
N. Pt. 9	12	6.9	A. Kester	12-008	\$19,700	\$1,316		\$21,016	\$7,005	\$5,175	\$8,836	
10	12		P. & G. O'Rourke	12-009	\$1,500			\$1,500	\$500	\$1,150	-\$150	
Total Assessment on Lands					\$86,500	\$52,698		\$139,198	\$46,400	\$22,015	\$70,783	
South Road						\$2,102		\$2,102			\$2,102	
Total Assessment on Roads						\$2,102		\$2,102			\$2,102	
Total Assessment on Lands and Roads, Khiva Municipal Drain 2018 (Main Drain)					\$86,500	\$54,800		\$141,300	\$46,400	\$22,015	\$72,885	

NOTES: 1. All the above lands are eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	(SEC. 22) BENEFIT	(SEC. 23) OUTLET LIABILITY	TOTAL ASSESSMENT	LESS 1/3 GOV'T GRANT	LESS ALLOWANCES	NET ASSESSMENT
<u>Branch 'A'</u>										
9	11	0.8	Frank Regier Farms Ltd.	11-006	\$700	\$3,260	\$3,960	\$1,320	\$300	\$2,340
N. Pt. 9	12	0.8	A. Kester	12-008	\$9,000	\$240	\$9,240	\$3,080	\$2,990	\$3,170
Total Assessment on Lands					\$9,700	\$3,500	\$13,200	\$4,400	\$3,290	\$5,510
Total Assessment on Lands,										
Khiva Municipal Drain 2018 (Branch 'A')										
					\$9,700	\$3,500	\$13,200	\$4,400	\$3,290	\$5,510

NOTES: 1. All the above lands are eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.

3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	(SEC. 22) BENEFIT	(SEC. 23) OUTLET LIABILITY	TOTAL ASSESSMENT	LESS 1/3 GOV'T GRANT	LESS ALLOWANCES	NET
<u>Branch 'B'</u>										
9	11	1.2	Frank Regier Farms Ltd.	11-006	\$700	\$1,800	\$2,500	\$833	\$300	\$1,367
N. Pt. 9	12	0.8	A. Kester	12-008	\$5,800	\$200	\$6,000	\$2,000	\$1,600	\$2,400
Total Assessment on Lands					\$6,500	\$2,000	\$8,500	\$2,833	\$1,900	\$3,767
Total Assessment on Lands,										
Khiva Municipal Drain 2018 (Branch 'B')										
					\$6,500	\$2,000	\$8,500	\$2,833	\$1,900	\$3,767

NOTES: 1. All the above lands are eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF NET ASSESSMENT FOR CONSTRUCTION
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	OWNER	ROLL NO.	MAIN DRAIN	BRANCH 'A'	BRANCH 'B'	TOTAL ASSESSMENT	LESS 1/3			NET ASSESSMENT
								GOV'T GRANT	ALLOWANCES		
5	11	T. Ryan	11-003	\$2,451			\$2,451	\$817			\$1,634
6	11	Goshen Farms Inc.	11-004-01	\$11,906			\$11,906	\$3,969			\$7,937
7	11	Goshen Farms Inc.	11-004	\$16,206			\$16,206	\$5,402	\$500		\$10,304
8	11	Eilers Farms (Ontario) Inc.	11-005	\$46,694			\$46,694	\$15,565	\$9,790		\$21,339
9	11	Frank Regier Farms Ltd.	11-006	\$29,573	\$3,960	\$2,500	\$36,033	\$12,011	\$4,400		\$19,622
8	12	E. McCann	12-006	\$272			\$272	\$91			\$181
S. Pt. 9	12	E. McCann	12-007	\$9,580			\$9,580	\$3,193	\$1,600		\$4,787
N. Pt. 9	12	A. Kester	12-008	\$21,016	\$9,240	\$6,000	\$36,256	\$12,085	\$9,765		\$14,406
10	12	P. & G. O'Rourke	12-009	\$1,500			\$1,500	\$500	\$1,150		-\$150
Total Assessment on Lands				\$139,198	\$13,200	\$8,500	\$160,898	\$53,633	\$27,205		\$80,060
South Road				\$2,102			\$2,102				\$2,102
Total Assessment on Roads				\$2,102			\$2,102				\$2,102
Total Assessment on Lands and Roads, Khiva Municipal Drain 2018				\$141,300	\$13,200	\$8,500	\$163,000	\$53,633	\$27,205		\$82,162

NOTES: 1. All the above lands are eligible for ADIP grants.
2. The NET ASSESSMENT is the total estimated assessment less a
3. The NET ASSESSMENT is provided for information purposes only.



SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<u>Main Drain</u>					
5	11	5.7	T. Ryan	11-003	2.9%
6	11	13.8	Goshen Farms Inc.	11-004-01	14.2%
7	11	13.0	Goshen Farms Inc.	11-004	13.4%
8	11	24.3	Eilers Farms (Ontario) Inc.	11-005	25.1%
9	11	25.1	Frank Regier Farms Ltd.	11-006	25.9%
8	12	0.8	E. McCann	12-006	1.0%
S. Pt. 9	12	7.7	E. McCann	12-007	7.9%
N. Pt. 9	12	6.9	A. Kester	12-008	7.1%
Total Assessment on Lands					97.5%
South Road		0.8	Municipality of South Huron		2.5%
Total Assessment on Roads					2.5%
Khiva Municipal Drain 2018 (Main Drain)					100.0%

NOTES: 1. All the above lands are eligible for ADIP grants.



SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Khiva Municipal Drain 2018
Municipality of South Huron
(Stephen Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<u>Branch 'A'</u>					
9	11	0.8	Frank Regier Farms Ltd.	11-006	50.0%
N. Pt. 9	12	0.8	A. Kester	12-008	50.0%
Total Assessment on Lands					100.0%
Total Assessment for Maintenance, Khiva Municipal Drain 2018 (Branch 'A')					100.0%

NOTES: 1. All the above lands are eligible for ADIP grants.

Branch 'B'

N. Pt. 9	12	0.8	A. Kester	12-008	100.0%
Total Assessment on Lands, Khiva Municipal Drain 2018 (Branch 'B')					100.0%

NOTES: 1. All the above lands are eligible for ADIP grants.

SPECIFICATIONS FOR THE CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

DIVISION A – General Conditions

DIVISION B – Specification for Open Drains

DIVISION C – Specification for Tile Drains

DIVISION H – Special Provisions

DIVISION A

GENERAL CONDITIONS

<u>A</u>	<u>CONTENT</u>	<u>PAGE</u>
A.1	SCOPE	1
A.2	TENDERS	1
A.3	EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS	1
A.4	PAYMENT	2
A.5	CONTRACTOR'S LIABILITY INSURANCE	2
A.6	LOSSES DUE TO ACTS OF NATURE, ETC.	2
A.7	COMMENCEMENT AND COMPLETION OF WORK	3
A.8	WORKING AREA AND ACCESS	3
A.9	SUB-CONTRACTORS	3
A.10	PERMITS, NOTICES, LAWS AND RULES	3
A.11	RAILWAYS, HIGHWAYS AND UTILITIES	4
A.12	ERRORS AND UNUSUAL CONDITIONS	4
A.13	ALTERATIONS AND ADDITIONS	4
A.14	SUPERVISION	4
A.15	FIELD MEETINGS	4
A.16	PERIODIC AND FINAL INSPECTIONS	5
A.17	ACCEPTANCE BY THE MUNICIPALITY	5
A.18	WARRANTY	5
A.19	TERMINATION OF CONTRACT BY THE MUNICIPALITY	5
A.20	TESTS	6
A.21	POLLUTION	6
A.22	SPECIES AT RISK	6
A.23	ROAD CROSSINGS	6
A.24	LANEWAYS	7
A.25	FENCES	8
A.26	LIVESTOCK	8
A.27	STANDING CROPS	9
A.28	SURPLUS GRAVEL	9
A.29	IRON BARS	9
A.30	RIP-RAP	9
A.31	CLEARING, GRUBBING AND BRUSHING	9
A.32	RESTORATION OF LAWNS	9

DIVISION A

GENERAL CONDITIONS

A.1 SCOPE

The work to be done under this contract consists of supplying all labour, equipment and materials to construct the drainage work as outlined in the Scope of Work, Drawings, General Conditions and other Specifications.

A.2 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as instructed by the Municipality. The Scope of Work must be completed and submitted with the Form of Tender and Agreement. A certified cheque is required as Tender Security, payable to the Treasurer of the Municipality.

All certified cheques, except that of the bidder to whom the work is awarded will be returned within ten (10) days of the time the Contract is awarded. The certified cheque of the bidder to whom the work is awarded will be retained as Contract Security and returned when the Municipality receives a Completion Certificate for the work.

A certified cheque is not required if the Contractor provides an alternate form of Contract Security such as a Performance Bond for 100% of the amount of the Tender or other satisfactory security, if required/permitted by the Municipality. A Performance Bond may also be required to insure maintenance of the work for a period of one (1) year after the date of the Completion Certificate.

A.3 EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS

The Tenderer must examine the premises and site to compare them with the Drawings and Specifications in order to satisfy himself of the existing conditions and extent of the work to be done before submission of his Tender. No allowance shall subsequently be made on behalf of the Contractor by reason of any error on his part. Any estimates of quantities shown or indicated on the Drawings, or elsewhere are provided for the convenience of the Tenderer. Any use made of these quantities by the Tenderer in calculating his Tender shall be done at his own risk. The Tenderer for his own protection should check these quantities for accuracy.

The standard specifications (Divisions B through G) shall be considered complementary and where a project is controlled under one of the Divisions, the remaining Divisions will apply for miscellaneous works.



In case of any inconsistency or conflict between the Drawings and Specifications, the following order of precedence shall apply:

- Direction of the Engineer
- Special Provisions (Division H)
- Scope of Work
- Contract Drawings
- Standard Specifications (Divisions B through G)
- General Conditions (Division A)

A.4 PAYMENT

Progress payments equal to 87±% of the value of work completed and materials incorporated in the work will be made to the Contractor monthly. An additional ten per cent (10±%) will be paid 45 days after the final acceptance by the Engineer, and three per cent (3±%) of the Contract price may be reserved by the Municipality as a maintenance holdback for a one (1) year period from the date of the Completion Certificate. A greater percentage of the Contract price may be reserved by the Municipality for the same one (1) year period if in the opinion of the Engineer, particular conditions of the Contract requires such greater holdback.

After the completion of the work, any part of this reserve may be used to correct defects developed within that time from faulty workmanship and materials, provided that notice shall first be given to the Contractor and that he may promptly make good such defects.

A.5 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of any work, the Contractor shall file with the Municipality evidence of compliance with all Municipality insurance requirements (Liability Insurance, WSIB, etc.) for no less than the minimum amounts as stated in the Purchasing Procedures of the Municipality. All insurance coverage shall remain in force for the entire contract period including the warranty period which expires one year after the date of the Completion Certificate.

The following are to be named as co-insured: Successful Contractor
 Sub-Contractor
 Municipality
 Dietrich Engineering Ltd.

A.6 LOSSES DUE TO ACTS OF NATURE, ETC.

All damage, loss, expense and delay incurred or experienced by the Contractor in the performance of the work, by reason of unanticipated difficulties, bad weather, strikes, acts of nature, or other mischances shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.



A.7 COMMENCEMENT AND COMPLETION OF WORK

The work must commence as specified in the Form of Tender and Agreement. If conditions are unsuitable due to poor weather, the Contractor may be required, at the discretion of the Engineer to postpone or halt work until conditions become acceptable and shall not be subject of a claim for additional compensation.

The Contractor shall give the Engineer a minimum of 48 hours notice before commencement of work. The Contractor shall then arrange a meeting to be held on the site with Contractor, Engineer, and affected Landowners to review in detail the construction scheduling and other details of the work.

If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Municipality a minimum of 24 hours notice prior to returning to the project. If any work is commenced without notice to the Engineer, the Contractor shall be fully responsible for all such work undertaken prior to such notification.

The work must proceed in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the Form of Tender and Agreement.

A.8 WORKING AREA AND ACCESS

Where any part of the drain is on a road allowance, the road allowance shall be the working area. For all other areas, the working area available to the Contractor to construct the drain is specified in the Special Provisions (Division H).

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately. Where the Contractor exceeds the specified working widths without authorization, he shall be held responsible for the costs of all additional damages.

If access off an adjacent road allowance is not possible, each Landowner on whose property the drainage works is to be constructed, shall designate access to and from the working area. The Contractor shall not enter any other lands without permission of the Landowner and he shall compensate the Landowner for damage caused by such entry.

A.9 SUB-CONTRACTORS

The Contractor shall not sublet the whole or part of this Contract without the approval of the Engineer.

A.10 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall obtain and pay for all necessary permits or licenses required for the execution of the work (but this shall not include MTO encroachment permits, County Road permits permanent easement or rights of servitude). The Contractor shall give all necessary notices and pay for all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health and safety.



A.11 RAILWAYS, HIGHWAYS AND UTILITIES

A minimum of 72 hours' notice to the Railway or Highways, exclusive of Saturdays, Sundays, and Statutory Holidays, is required by the Contractor prior to any work activities on or affecting the applicable property. In the case of affected Utilities, a minimum of 48 hours' notice to the utility owner is required.

A.12 ERRORS AND UNUSUAL CONDITIONS

The Contractor shall notify the Engineer immediately of any error or unusual conditions which may be found. Any attempt by the Contractor to correct the error on his own shall be done at his own risk. Any additional cost incurred by the Contractor to remedy the wrong decision on his part shall be borne by the Contractor. The Engineer shall make the alterations necessary to correct errors or to adjust for unusual conditions during which time it will be the Contractor's responsibility to keep his men and equipment gainfully employed elsewhere on the project.

The Contract amount shall be adjusted in accordance with a fair evaluation of the work added or deleted.

A.13 ALTERATIONS AND ADDITIONS

The Engineer shall have the power to make alterations in the work shown or described in the Drawings and Specifications and the Contractor shall proceed to make such changes without causing delay. In every such case, the price agreed to be paid for the work under the Contract shall be increased or decreased as the case may require according to a fair and reasonable evaluation of the work added or deleted. The valuation shall be determined as a result of negotiations between the Contractor and the Engineer, but in all cases the Engineer shall maintain the final responsibility for the decision. Such alterations and variations shall in no way render the Contract void. No claims for a variation or alteration in the increased or decreased price shall be valid unless done in pursuance of an order from the Engineer and notice of such claims made in writing before commencement of such work. In no such case shall the Contractor commence work which he considers to be extra before receiving the Engineer's approval.

A.14 SUPERVISION

The Contractor shall give the work his constant supervision and shall keep a competent foreman in charge at the site.

A.15 FIELD MEETINGS

At the discretion of the Engineer, a field meeting with the Contractor or his representative, the Engineer and with those others that the Engineer deems to be affected, shall be held at the location and time specified by the Engineer.



A.16 PERIODIC AND FINAL INSPECTIONS

Periodic inspections by the Engineer will be made during the performance of the work. If ordered by the Engineer, the Contractor shall expose the drain as needed to facilitate inspection by the Engineer.

Final inspection by the Engineer will be made within twenty (20) days after he has received notice from the Contractor that the work is complete.

A.17 ACCEPTANCE BY THE MUNICIPALITY

Before any work shall be accepted by the Municipality, the Contractor shall correct all deficiencies identified by the Engineer and the Contractor shall leave the site neat and presentable.

A.18 WARRANTY

The Contractor shall repair and make good any damages or faults in the drain that may appear within one (1) year after its completion (as dated on the Completion Certificate) as the result of the imperfect or defective work done or materials furnished if certified by the Engineer as being due to one or both of these causes; but nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the Country, Province or Locality in which the work is being done. Neither the Completion Certificate nor any payment there under, nor any provision in the Contract Documents shall relieve the Contractor from his responsibility.

A.19 TERMINATION OF CONTRACT BY THE MUNICIPALITY

If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days notice in writing from the Engineer to supply additional workmen or materials to commence or complete the works, or if he should fail to make prompt payment to Sub-Contractors, or for material, or labour, or persistently disregards laws, ordinances, or the instruction of the Engineer, or otherwise be guilty of a substantial violation of the provisions of the Contract, then the Municipality, upon the certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, by giving the Contractor written notice, terminate the employment of the Contractor and take possession of the premises, and of all materials, tools and appliances thereon, and may finish the work by whatever method the Engineer may deem expedient but without delay or expense. In such a case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price will exceed the expense of finishing the work including compensation to the Engineer for his additional services and including the other damages of every name and nature, such excess shall be paid by the Contractor. If such expense will exceed such unpaid balance, the Contractor shall pay the difference to the Municipality. The expense incurred by the Municipality, as herein provided, shall be certified by the Engineer.



If the Contract is terminated by the Municipality due to the Contractor's failure to properly commence the works, the Contractor shall forfeit the certified cheque bid deposit and furthermore shall pay to the Municipality an amount to cover the increased costs, if any, associated with a new Tender for the Contract being terminated.

If any unpaid balance and the certified cheque do not match the monies owed by the Contractor upon termination of the Contract, the Municipality may also charge such expense against any money which may thereafter be due to the Contractor from the Municipality.

A.20 TESTS

The cost for the testing of materials supplied to the job by the Contractor shall be borne by the Contractor. The Engineer reserves the right to subject any lengths of any tile or pipe to a competent testing laboratory to ensure the adequacy of the tile or pipe. If any tile supplied by the Contractor is determined to be inadequate to meet the applicable A.S.T.M. standards, the Contractor shall bear full responsibility to remove and/or replace all such inadequate tile in the Contract with tile capable of meeting the A.S.T.M. Standards.

A.21 POLLUTION

The Contractor shall keep their equipment in good repair. The Contractor shall refuel or repair equipment away from open water.

If polluted material from construction materials or equipment is caused to flow into the drain, the Contractor shall immediately notify the Ministry of the Environment, and proceed with the Ministry's protocols in place to address the situation.

A.22 SPECIES AT RISK

If a Contractor encounters a known Species at Risk as designated by the MNR or DFO, the Contractor shall notify the Engineer immediately and follow the Ministry's guidelines to deal with the species.

A.23 ROAD CROSSINGS

This specification applies to all road crossings (Municipality, County, Regional, or Highway) where no specific detail is provided on the drawings or in the standard specifications. This specification in no way limits the Road Authority's regulations governing the construction of drains on their Road Allowance.

A.23.1 Road Occupancy Permit

Where applicable, the Contractor must submit an application for a road occupancy permit to the Road Authority and allow a minimum of five (5) working days for its review and issuance.



A.23.2 Road Closure Request and Construction Notification

The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority and the Engineer for review and approval a minimum of five (5) working days prior to proceeding with any work on the road allowance. The Contractor shall be responsible for notifying all applicable emergency services, schools, etc. of the road closure or construction taking place.

A.23.3 Traffic Control

The Contractor shall supply flagmen, and warning signs and ensure that detour routes are adequately signed in accordance with no less than the minimum standards as set out in the Ontario Traffic Manual's Book 7.

A.23.4 Weather

No construction shall take place during inclement weather or periods of poor visibility.

A.23.5 Equipment

No construction material and/or equipment is to be left within three (3) metres of the travelled portion of the road overnight or during periods of inclement weather.

If not stated on the drawings, the road crossing shall be constructed by open cut method. Backfill from the top of the cover material over the subsurface pipe or culvert to the under side of the road base shall be Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm. Granular road base materials shall be thoroughly compacted to 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing HL-8 Hot Mix Asphalt patch at a thickness of 50mm or of the same thickness as the existing pavement structure. The asphalt patch shall be flush with the existing roadway on each side and without overlap.

Excavated material from the trench beyond 1.25 metres from the travelled portion or beyond the outside edge of the gravel shoulder may be used as backfill in the trench in the case of covered drains. The material shall be compacted in lifts not exceeding 300mm.

A.24 LANEWAYS

All pipes crossing laneways shall be backfilled with material that is clean, free of foreign material or frozen particles and readily tamped or compacted in place unless otherwise specified. Laneway culverts on open ditch projects shall be backfilled with material that is not easily erodible. All backfill material shall be thoroughly compacted as directed by the Engineer.



Culverts shall be bedded with a minimum of 300mm of granular material. Granular material shall be placed simultaneously on each side of the culvert in lifts not exceeding 150mm in thickness and compacted to 95% Standard Proctor Density. Culverts shall be installed a minimum of 10% of the culvert diameter below design grade with a minimum of 450mm of cover over the pipe unless otherwise noted on the Drawings.

The backfill over culverts and subsurface pipes at all existing laneways that have granular surfaces on open ditch and closed drainage projects shall be surfaced with a minimum of 300mm of Granular "B" material and 150mm of Granular "A" material. All backfill shall be thoroughly compacted as directed by the Engineer. All granular material shall be placed to the full width of the travelled portion.

Any settling of backfilled material shall be repaired by or at the expense of the Contractor during the warranty period of the project and as soon as required.

A.25 FENCES

No earth is to be placed against fences and all fences removed by the Contractor shall be replaced by him in as good a condition as found. Where practical the Contractor shall take down existing fences in good condition at the nearest anchor post and roll it back rather than cutting the fence and attempting to patch it. The replacement of the fences shall be done to the satisfaction of the Engineer. Any fences found in such poor condition where the fence is not salvageable, shall be noted and verified with the Engineer prior to commencement of work.

Fences damaged beyond repair by the Contractor's negligence shall be replaced with new materials, similar to those materials of the existing fence, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the Landowner and the Engineer.

Any fences paralleling an open ditch that are not line fences that hinder the proper working of the excavating machinery, shall be removed and rebuilt by the Landowner at his own expense.

The Contractor shall not leave fences open when he is not at work in the immediate vicinity.

A.26 LIVESTOCK

The Contractor shall provide each landowner with 48 hours notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the Landowner shall be responsible to keep all livestock clear of the construction areas until further notified. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock where the Contractor failed to notify the Landowner, or through negligence or carelessness on the part of the Contractor.



A.27 STANDING CROPS

The Contractor shall be responsible for damages to standing crops which are ready to be harvested or salvaged along the course of the drain and access routes if the Contractor has failed to notify the Landowners 48 hours prior to commencement of the work on that portion of the drain.

A.28 SURPLUS GRAVEL

If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used, the Contractor shall haul away such surplus material.

A.29 IRON BARS

The Contractor is responsible for the cost of an Ontario Land Surveyor to replace any iron bars that are altered or destroyed during the course of the construction.

A.30 RIP-RAP

Rip-rap shall be quarry stone rip-rap material and shall be the sizes specified in the Special Provisions. Broken concrete shall not be used as rip-rap unless otherwise specified.

A.31 CLEARING, GRUBBING AND BRUSHING

This specification applies to all brushing where no specific detail is provided on the drawings or in the Special Provisions.

The Contractor shall clear, brush and stump trees from within the working area that interfere with the installation of the drainage system.

All trees, limbs and brush less than 150mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and neatly stacked in piles designated by the Landowners.

A.32 RESTORATION OF LAWNS

This specification applies to all lawn restoration where no specific detail is provided on the drawings or in the Special Provisions and no allowance for damages has been provided under Section 30 of the Drainage Act RSO 1990 to the affected property.

The Contractor shall supply "high quality grass seed" and the seed shall be broadcast by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of broadcast to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the Landowner to maintain the area in a manner so as to promote growth.

DIVISION B

SPECIFICATIONS FOR OPEN DRAINS

<u>B</u>	<u>CONTENT</u>	<u>PAGE</u>
B.1	ALIGNMENT	1
B.2	PROFILE	1
B.3	EXCAVATION	1
B.4	EXCAVATED MATERIAL	2
B.5	EXCAVATION AT EXISTING BRIDGE AND CULVERT SITES	2
B.6	PIPE CULVERTS	2
B.7	RIP-RAP PROTECTION FOR CULVERTS	3
B.8	CLEARING, GRUBBING AND MULCHING	3
B.9	TRIBUTARY TILE OUTLETS	3
B.10	SEEDING	3
B.11	COMPLETION	4

DIVISION B

SPECIFICATIONS FOR OPEN DRAINS

B.1 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless noted on the drawings. Where there are unnecessary bends or irregularities on the existing course of the drain, the Contractor shall contact the Engineer before commencing work to verify the manner in which such irregularities or bends may be removed from the drain. All curves shall be made with a minimum radius of fifteen (15) metres from the centre line of the drain.

B.2 PROFILE

The Profile Drawing shows the depth of cuts from the top of the bank to the final invert of the ditch in metres and decimals of a metre, and also the approximate depth of excavated material from the bottom of the existing ditch to the final invert of the ditch. These cuts are established for the convenience of the Contractor; however, bench marks (established along the course of the drain) will govern the final elevation of the drain. The location and elevation of the bench marks are given on the Profile Drawing. Accurate grade control must be maintained by the Contractor during ditch excavation.

B.3 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the drawings. If the channel cross-section is not specified it shall be a one metre bottom width with 1.5(h):1(v) side slopes. At locations along the drain where the cross section dimensions change, there shall be a transitional length of not less than 10:1 (five metre length to 0.5 metre width differential). Where the width of the bottom of the existing ditch is sufficient to construct the design width, then construction shall proceed without disturbing the existing banks.

Where existing side slopes become unstable, the Contractor shall immediately notify the Engineer. Alternative methods of construction and/or methods of protection will then be determined prior to continuing work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.

An approved hydraulic excavator shall be used to carry out the excavation of the open ditch unless otherwise directed by the Engineer.



B.4 EXCAVATED MATERIAL

Excavated material shall be placed on the low side of the drain or opposite trees and fences. The Contractor shall contact all Landowners before proceeding with the work to verify the location to place and level the excavated material.

No excavated material shall be placed in tributary drains, depressions, or low areas which direct water behind the spoil bank. The excavated material shall be placed and levelled to a maximum depth of 200 mm, unless instructed otherwise and commence a minimum of one (1) metre from the top of the bank. The edge of the spoil bank away from the ditch shall be feathered down to the existing ground; the edge of the spoil bank nearest the ditch shall have a maximum slope of 2(h):1(v). The material shall be levelled such that it may be cultivated with ordinary farm equipment without causing undue hardship to the farm machinery and farm personnel. No excavated material shall cover any logs, brush, etc. of any kind.

Any stones or boulders which exceed 300mm in diameter shall be removed and disposed of in a location specified by the Landowner.

Where it is necessary to straighten any unnecessary bends or irregularities in the alignment of the ditch or to relocate any portion or all of an existing ditch, the excavated material from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and the old ditch, no extra compensation will be allowed for this work and must be included in the Contractor's lump sum price for the open work.

B.5 EXCAVATION AT EXISITING BRIDGE AND CULVERT SITES

The Contractor shall excavate the drain to the full specified depth under all bridges and to the full width of the structure. Temporary bridges may be carefully removed and left on the bank of the drain but shall be replaced by the Contractor when the excavation is complete. Permanent bridges must, if at all possible, be left intact. All necessary care and precautions shall be taken to protect the structure. The Contractor shall notify the Landowner if excavation will expose the footings or otherwise compromise the structural integrity of the structure.

The Contractor shall clean through all pipe culverts to the grade and width specified on the profile.

B.6 PIPE CULVERTS

All pipe culverts shall be installed in accordance with the standard detail drawings. If couplers are required, five corrugation couplers shall be used for up to and including 1200mm diameter pipes and 10 corrugation couplers for greater than 1200mm diameter pipes.

When an existing crossing is being replaced, the Contractor may backfill the new culvert with the existing native material that is free of large rocks and stones. The Contractor is responsible for any damage to a culvert pipe that is a result of rocks or stones in the backfill.



B.7 RIP-RAP PROTECTION FOR CULVERTS

Quarry stone rip-rap shall be used as end treatment for new culverts and placed on geotextile filter material (Mirafi 160N or approved equal). The rip-rap shall be adequately keyed in along the bottom of the slope, and shall extend to the top of the pipe or as directed on the drawings. The maximum slope for rip-rap shall be 1(h):1(v) or as directed by the Engineer.

The Contractor shall be responsible for any defects or damages that may develop in the rip-rap or the earth behind the rip-rap that the Engineer deems to have been fully or partially caused by faulty workmanship or materials.

B.8 CLEARING, GRUBBING AND MULCHING

Prior to excavation, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with the slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the side slopes shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the Landowner.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched. Clearing, grubbing and mulching shall be carried out as a separate operation from the excavation of the ditch, and shall not be completed simultaneously at the same location.

B.9 TRIBUTARY TILE OUTLETS

All tile outlets in existing ditches shall be marked by the Landowner prior to excavation. The Contractor shall guard against damaging the outlets of tributary drains. Any tile drain outlets that were marked or noted on the drawings and are subsequently damaged by the Contractor shall be repaired by the Contractor at his expense. The Landowner shall be responsible for repairs to damaged tile outlets that were not marked.

B.10 SEEDING

The side slopes where disturbed shall be seeded using an approved grass seed mixture. The grass seed shall be applied the same day as the excavation of the open ditch.

Grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO and composed of the following varieties mixed in the proportion by weight as follows:

- 55% Creeping Red Fescue
- 40% Perennial Rye Grass
- 5% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

**B.11 HYDRO SEEDING**

The areas specified in the contract document shall be hydro seeded and mulched upon completion of construction in accordance with O.P.S.S. 572.

B.12 HAND SEEDING

Placement of the seed shall be of means of an approved mechanical spreader.

B.13 COMPLETION

At the time of completion and final inspection, all work in the Contract shall have the full dimensions and cross-sections specified without any allowance for caving of banks or sediment in the ditch bottom.

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

<u>C</u>	<u>CONTENT</u>	<u>PAGE</u>
C.1	PIPE MATERIALS	1
C.2	ALIGNMENT	1
C.3	PROFILE	2
C.4	EXCAVATION	2
C.5	INSTALLATION	2
C.6	TRENCH CROSSINGS	3
C.7	OUTLET PROTECTION	4
C.8	CATCH BASINS AND JUNCTION BOXES	4
C.9	TRIBUTARY DRAINS	5
C.10	CLEARING, GRUBBING AND MULCHING	5
C.11	ROADS AND LANEWAY SUB-SURFACE CROSSINGS	6
C.12	FILLING IN EXISTING DITCHES	6
C.13	CONSTRUCTION OF GRASSED WATERWAYS	6
C.14	UNSTABLE SOIL	6
C.15	ROCKS	6
C.16	BROKEN OR DAMAGED TILE	7
C.17	RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS	7

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

C.1 PIPE MATERIALS

C.1.1 Concrete Tile

Concrete drain tile shall conform to the requirements of the most recent A.S.T.M. specification for Heavy-Duty Extra Quality drain tile. All tile with diameters less than 600mm shall have a pipe strength of 1500D. All tile with diameters 600mm or larger shall have a pipe strength of 2000D.

All tile furnished shall be subject to the approval of the Engineer. All rejected tile are to be immediately removed from the site.

C.1.2 High Density Polyethylene (HDPE) Pipe

All HDPE pipe shall be dual-wall corrugated drainage pipe with a smooth inner wall. HDPE pipe shall have a minimum stiffness of 320 kPa at 5% deflection.

Unless otherwise noted, all sealed HDPE pipe shall have a water tight gasketed bell and spigot joining system meeting the minimum requirements of CSA B182.8. Perforated HDPE pipe shall have a soil tight joining system, and shall be enveloped in non-woven geotextile filter sock.

C.2 ALIGNMENT

The Contractor shall contact the Engineer to establish the course of the drain. Where an existing drain is to be removed and replaced by the new drain, or where the new drain is to be installed parallel to an existing drain, the Contractor shall locate the existing drain (including repairing damaged tile caused by locating) at intervals along the course of the drain. The costs of locating shall be included in the tender price.

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other watercourses or at sharp corners, it shall run on a curve of at least 15 metres radius. The new tile drain shall be constructed at an offset from and parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water.

The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and existing tile act together to provide the necessary capacity. Where any such existing drain is disturbed or damaged, the Contractor shall perform the necessary repair at his expense.



C.3 PROFILE

Benchmarks have been established along the course of the drain which are to govern the elevations of the drain. The location and elevations of the benchmarks are shown on the drawings. Tile is to be installed to the elevation and grade shown on the profiles. Accurate grade control must be maintained by the Contractor at all times.

When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made.

C.4 EXCAVATION

C.4.1 Wheel machine

Unless otherwise specified, all trenching shall be carried out with a wheel machine approved by the Engineer. The wheel machine shall shape the bottom of the trench to conform to the outside diameter of the pipe. The minimum trench width shall be equal to the outside diameter of the pipe plus 100mm on each side of the pipe, unless otherwise specified. The maximum trench width shall be equal to the outside diameter of the pipe plus 300mm on each side of the pipe, unless otherwise specified.

C.4.2 Scalping

Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capability of the Contractor's wheel machine, he shall lower the surface grade in order that the wheel machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of the topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.

C.4.3 Excavator

Where the use of an excavator is used in-lieu of a wheel machine, the topsoil shall be stripped and replaced in accordance with Item C.4.2. All tile shall be installed on 19mm clear crushed stone bedding placed to a minimum depth of 150mm which has been shaped to conform to the bottom of the pipe. The Contractor shall include the costs of this work in his tender price.

C.5 INSTALLATION

C.5.1 Concrete Tile

The tile is to be laid with close joints and in regular grade and alignment in accordance with the drawings. The tiles are to be bevelled, if necessary to ensure close joints. The inside of the tile is to be kept clear when laid. The sides of the tile are to be supported by partial filling of the trench



(blinding) prior to inspection by the Engineer. No tile shall be backfilled until inspected by the Engineer unless otherwise permitted by the Engineer. The tile shall be backfilled such that a sufficient mound of backfill is placed over the trench to ensure that no depression remains after settling occurs in the backfill.

Where a tile connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a tile drain passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

The Contractor shall supply and wrap all concrete tile joints with Mirafi 160N geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.
- 500mm wide for tile sizes larger than 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be.

C.5.2 HDPE Pipe

HDPE pipe shall be installed using compacted Granular 'A' bedding or 19mm clear crushed stone bedding from 150mm below the pipe to 300mm above the pipe. All granular material shall be compacted using a suitable mechanical vibratory compactor. Granular bedding and backfill shall be placed in lifts not exceeding 300mm and compacted to at least 95% Standard Proctor Maximum Dry Density (SPMDD).

Where a pipe connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a pipe passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

As determined by the Engineer, unsuitable backfill material must be hauled off-site by the Contractor and Granular "B" shall be used as replacement backfill material.

C.6 TRENCH CROSSINGS

The Contractor shall not cross the backfilled trench with any construction equipment or vehicles, except by one designated crossing location on each property. The Contractor shall ensure that the bedding and backfill material at this designated crossing location is properly placed and compacted so as to adequately support the equipment and vehicles that may cross the trench.



The Contractor may undertake any other approved work to ensure the integrity of the tile at the crossing location. The Contractor shall ensure that no equipment or vehicles travel along the length of the trench. The Contractor shall be responsible for any damage to the new tile caused by the construction of the drain.

C.7 OUTLET PROTECTION

A tile drain outlet into a ditch shall be either HDPE pipe or corrugated steel pipe and shall include a hinged grate for rodent protection. The maximum spacing between bars on the rodent grate shall be 40mm. All corrugated steel outlet pipes shall be bevelled at the end to generally conform to the slope of the ditch bank.

Quarry stone rock rip-rap protection and geotextile filter material (Mirafi 160N), shall be installed around the outlet pipe and extended downstream a minimum distance of three metres, unless otherwise specified. The protection shall extend to the top of the backfilled trench and below the pipe to 300 mm under the streambed. The protection shall also extend 600mm into undisturbed soil on either side of the backfilled trench. In some locations, rip-rap may be required on the bank opposite the outlet.

Where the outlet occurs at the upper end of an open ditch, the rip-rap protection will extend all around the end of the ditch and to a point 800mm downstream on either side. Where heavy overflow is likely to occur, sufficient additional rip-rap and filter material shall be placed as directed by the Engineer to prevent the water cutting around the protection.

C.8 CATCH BASINS AND JUNCTION BOXES

Unless otherwise noted, catch basins shall be in accordance with OPSD 705.010 and 705.030. The catch basin grate shall be a "Birdcage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catch basin with bolts into the concrete. Spacing of bars on grates for use on 600mmX600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmX600mm shall be 90mm.

All catch basins shall be backfilled with compacted Granular 'A' or 19mm clear crushed stone placed to a minimum width of 300mm on all sides. If settling occurs after construction, the Contractor shall supply and place sufficient granular material to maintain the backfill level flush with adjacent ground. The riser sections of the catch basin shall be wrapped with filter cloth.

Quarry stone rip-rap protection shall be placed around all catch basins and shall extend a minimum distance of one (1) metre away from the outer edge of each side of the catch basin, and shall be placed so that the finished surface of the rip-rap is flush with the existing ground.

If there are no existing drains to be connected to the catch basin at the top end of the drain, a plugged tile shall be placed in the upstream wall with the same elevations as the outlet tile.

Junction boxes shall have a minimum cover over the lid of 450mm.



The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. The top of the spill way of the earth berm shall be the same elevation as the high wall of the ditch inlet catch basin. The earth berm shall be covered with 100mm depth of topsoil and seeded with an approved green seed mixture. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 metres each way from all catch basins.

The Contractor shall clean all catch basin sumps after completion of the drain installation. Catch basin markers shall be placed beside each catch basin.

C.9 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain is to be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary drains encountered are clean or reasonably clean, they shall be connected into the new drain in accordance with the typical tile drain connection detail. Tributary tile drain connections into the new drain shall be made using high density polyethylene agricultural drain tubing installed on and backfilled with 19mm clear crushed stone. All tile drain connections into the new drain shall be either a cored hole with an insert coupler or a manufactured tee.

Where the existing drains are full of sediment, the decision to connect the tributary drain to the new drain shall be left to the Engineer. The Contractor shall be paid for each tributary drain connection as outlined in the Form of Tender and Agreement.

The Contractor shall be responsible for all tributary tile connections for a period of one year from the date of the Completion Certificate. After construction, any missed tile connections required to be made into the new drain shall be paid at the same rate as defined in the Form of Tender and Agreement. The Contractor will have the option to make any subsequent tile connections or have the Municipality make the required connections and have the cost of which deducted from the holdback.

Where an open ditch is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain.

Where the Contractor is required to connect an existing tile which is not encountered in the course of the drain, the cost of such work shall constitute an extra to the contract.

C.10 CLEARING, GRUBBING AND MULCHING

The Contractor shall clear, brush and stump trees from within the working area.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched.

Clearing, grubbing and mulching shall be carried out as a separate operation from installing the drain, and shall not be completed simultaneously at the same location.



C.11 ROADS AND LANEWAY SUB-SURFACE CROSSINGS

All roads and laneway crossings may be made with an open cut. The Contractor may use original ground as backfill to within 600mm of finished grade only if adequate compaction and if the use of the original ground backfill has been approved beforehand by the Engineer.

C.12 FILLING IN EXISTING DITCHES

The Contractor shall backfill the ditch sufficiently for traversing by farm equipment. If sufficient material is available on-site to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled waterway. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period.

C.13 CONSTRUCTION OF GRASSED WATERWAYS

Where the Contractor is required to construct a grassed waterway, the existing waterway shall be filled in, regraded, shaped and a seed bed prepared prior to applying the grass seed. The grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO.

- 55% Creeping Red Fescue
- 15% Perennial Rye Grass
- 27% Kentucky Bluegrass
- 3% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

C.14 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer if unstable soil is encountered. The Engineer shall, after consultation with the Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

C.15 ROCKS

The Contractor shall immediately contact the Engineer if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a wheel machine. The Engineer shall determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

If only scattered large stone or boulders are removed on any project, the Contractor shall either excavate a hole to bury same adjacent to the drain, or he shall haul the stones or boulders to a location designated by the Landowner.



C.16 BROKEN OR DAMAGED TILE

The Contractor shall remove and dispose of all broken (existing or new), damaged or excess tile off site.

C.17 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS

Drainage Guide for Ontario, Ministry of Agriculture, Food and Rural Affairs, Publication 29 and its amendments, dealing with the construction of Subsurface Drainage Systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other Specifications of the Contract.

DIVISION H

SPECIAL PROVISIONS

Khiva Municipal Drain 2018
Municipality of South Huron

Reference No. 1634

Special provisions means special directions containing requirements peculiar to the work not adequately provided for by the standard or supplemental Specifications. Special provisions shall take precedence and govern any standard or supplemental Specifications.

The following special provisions shall apply to this project:

1. The Contractor shall notify the Owners and the Engineer forty-eight (48) hours prior to construction.
2. The Contractor shall verify the location of the new tile drains with the Engineer and the Owners prior to construction. The Contractor shall locate the existing tile drains in several places before installing the new drains. The new Main Drain shall be installed parallel to the existing 1978 Main Drain
3. The working area shall be twenty (20) metres centered on the proposed tile drain. The owner of the N. Pt. Lot 9, Concession 12 shall designate access to and from the working area.
4. All utilities shall be located and uncovered in the affected areas by the Contractor prior to construction.
5. All catch basins shall be precast concrete catch basins (Coldstream Concrete Ltd. or approved equal). Knockouts shall be provided in the catch basins.
6. The catch basin grate elevations shall be set to the satisfaction of the Engineer. The Contractor shall install berms behind all catch basins.
7. Stone rip-rap protection and geo-textile material (Mirafi 180N) shall be placed around all catch basins as part of this contract.
8. All catch basin grates shall be birdcage grates (Coldstream Concrete Ltd. or approved equal). The grates shall be hot dipped galvanized.
9. All catch basin grates shall be fastened to the new catch basins.
10. All stone rip-rap material shall be quarry stone 150mm to 300mm dia. and placed to a depth of 400mm.
11. The Contractor shall supply all necessary materials to complete the connections of any existing drains to the new drain.
12. The Contractor shall be responsible for all trench settlement.
13. The Contractor shall supply and install catch basin markers beside all catch basins.
14. All 600mm diameter concrete tile shall be Heavy-Duty Extra Quality Concrete Drain Tile: 2000D. All other concrete tile shall be Heavy-Duty Extra Quality Concrete Drain Tile: 1500D.

15. The Contractor shall supply and wrap all concrete tile joints with geotextile filter material as part of this contract.

The width of the filter material should be:

300mm wide for tile sizes 150mm diameter to 350mm diameter.

400mm wide for tile sizes 400mm diameter to 750mm diameter.

500mm wide for tile sizes larger than 750mm diameter.

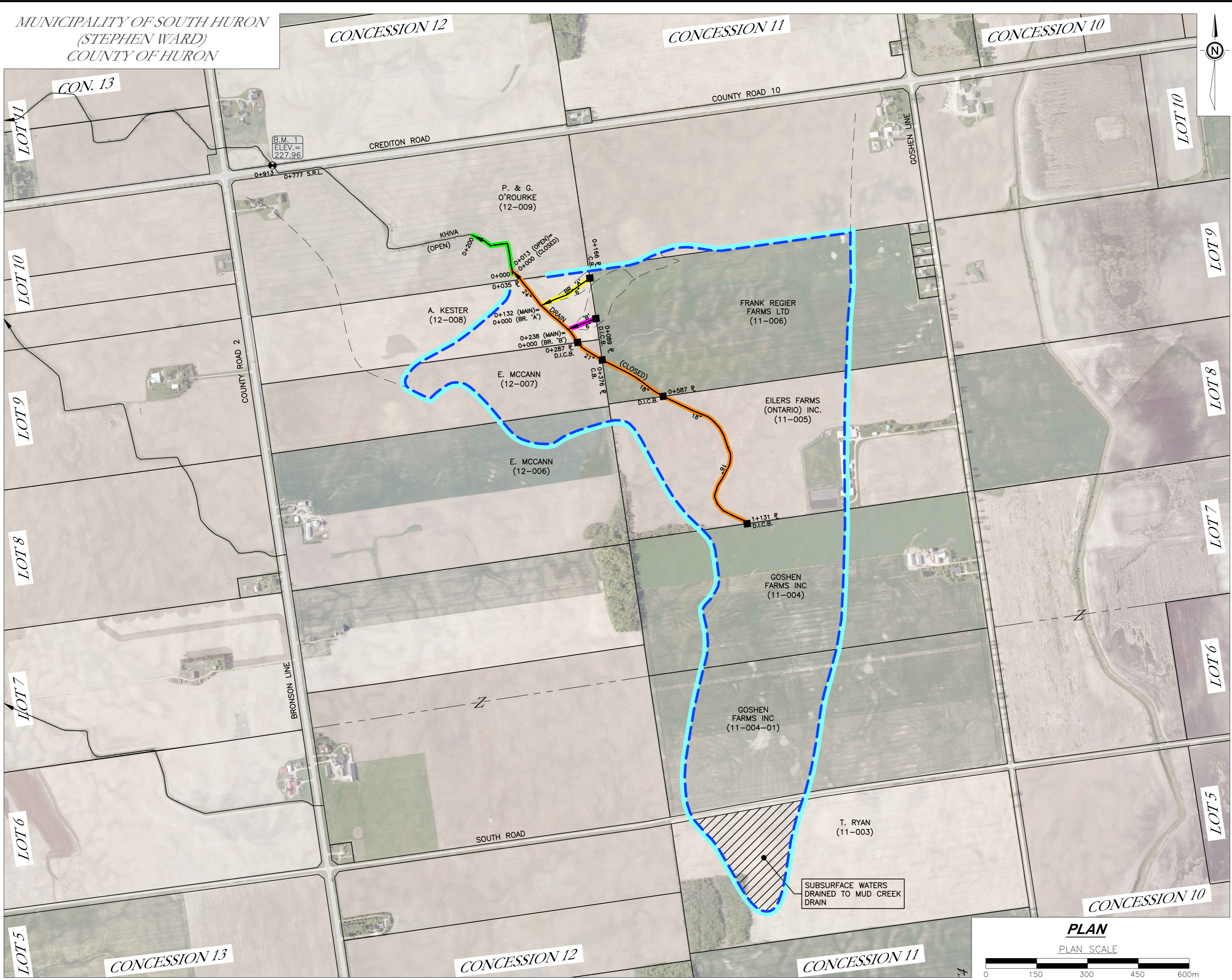
The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be Mirafi 140NC for clay or loam soil conditions and Mirafi 160N for sandy or silty soil conditions.

16. An approved ditching machine (wheel trencher) shall be used to install the concrete tile.
17. The Contractor shall strip the topsoil for a width of 4.0 metres centered on the drain before installing the tile drain. The Contractor shall strip the topsoil in the locations where the drain is being installed with an excavator for the full top width of the trench. The topsoil shall be later spread over the backfilled trench.
18. All HDPE pipe shall have a stiffness of 320kPa. All HDPE pipe shall be BOSS 2000 pipe (or equivalent).
19. All existing catch basins removal shall be disposed of offsite.
20. Tile Connections

Existing private tile drains shall be connected at the catch basins where possible. Otherwise, connections shall be made into the municipal tile drain in accordance with the Typical Tile Connection Detail.

The Contractor shall be responsible for all tile connections for a period of one year after the issuance of the completion certificate. The tile connections required to be made within the warranty period shall be made at the same rate as defined on the Form of Tender and Agreement. After construction, the Contractor will be given the option to make any subsequent tile connections or have the Municipality make said connections and have the costs of which deducted from the Contractor's holdback.

The Contractor shall supply all necessary materials to complete the connections of the existing drains to the new drain. The type of materials used to make the tributary tile drain connections shall be verified by the Engineer.



NOTES:

BENCHMARK No. 1 ELEV.=227.96
TOP CENTRE DOWNSTREAM END OF CONCRETE BOX CULVERT
22 METRES NORTH OF STA. 0+913 (OPEN)

LEGEND:

	DRAIN NAME	EXISTING MUNICIPAL DRAIN
		INTERIOR/EXTERIOR WATERSHED BOUNDARY
		PROPERTY BOUNDARY
		LOT OR CONCESSION BOUNDARY
		TOWNSHIP BOUNDARY
		EXISTING CATCH BASIN OR JUNCTION BOX
		EXISTING MANHOLE
	DRAIN NAME	MUNICIPAL DRAIN (AREA OF WORK)
		WATERSHED BOUNDARY
		PROPOSED CATCH BASIN OR JUNCTION BOX
		PROPOSED MANHOLE
	BENCHMARK LOCATION	BENCHMARK No. 1 ELEV. = 50.00 BENCHMARK ELEVATION

No.	ISSUES AND REVISIONS	DATE	BY
4.	REPORT SUBMISSION	2018-02-20	DEL
3.	INFORMATION MEETING NO. 2	2018-02-14	DEL
2.	INFORMATION MEETING	2017-03-03	DEL
1.	ON-SITE MEETING	2016-08-04	DEL

PROJECT: KHIVA MUNICIPAL DRAIN 2018

DRAWING: Plan

DIETRICH ENGINEERING LIMITED
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR: W.J.D.	DESIGNED BY: W.J.D.	DRAWN BY: A.H.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE: FEB. 20, 2018	PROJECT No. 1634	DRAWING No. 1 of 3

MAIN DRAIN OPEN

BOTTOM WIDTH

0.9m

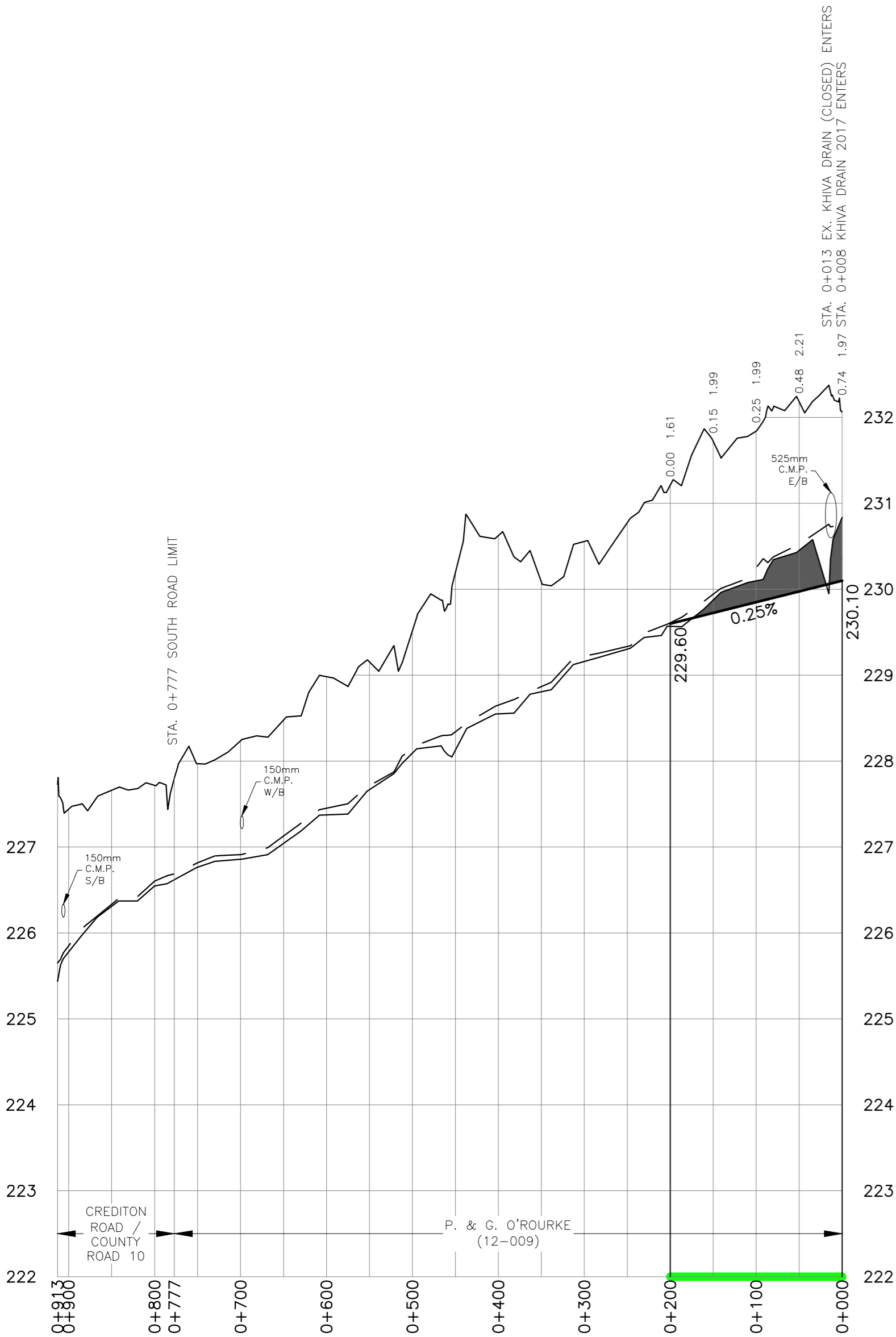
SIDE SLOPES

1.5:1

MAIN DRAIN CLOSED

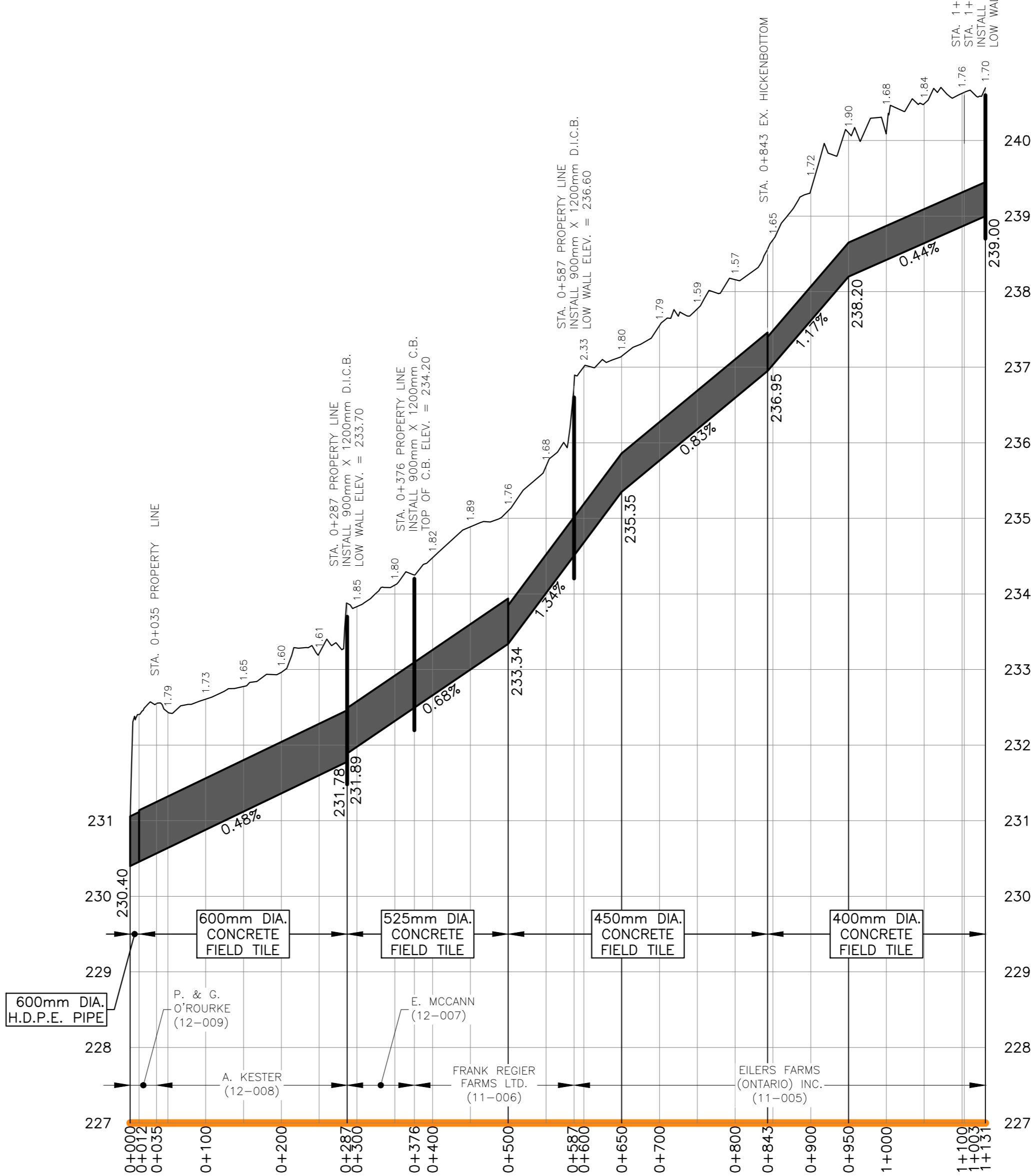
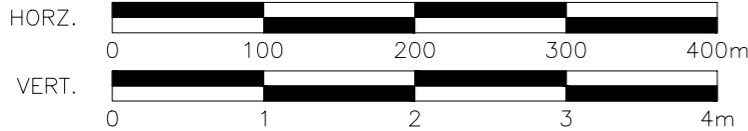
TILE SIZES

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE PIPE	600	0+000 - 0+012	12
2.	CONCRETE FIELD TILE	600	0+012 - 0+287	275
3.	CONCRETE FIELD TILE	525	0+287 - 0+500	213
4.	CONCRETE FIELD TILE	450	0+500 - 0+843	343
5.	CONCRETE FIELD TILE	400	0+843 - 1+131	288



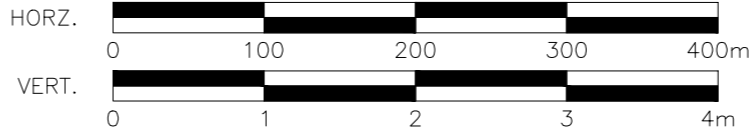
MAIN DRAIN OPEN PROFILE

PROFILE SCALES



MAIN DRAIN CLOSED PROFILE

PROFILE SCALES



NOTES:

1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.

LEGEND:

No.	ISSUES AND REVISIONS	DATE	BY
4.	REPORT SUBMISSION	2018-02-20	DEL
3.	INFORMATION MEETING NO. 2	2018-02-14	DEL
2.	INFORMATION MEETING	2017-03-03	DEL
1.	ON-SITE MEETING	2016-08-04	DEL



PROJECT: KHIVA MUNICIPAL DRAIN 2018

DRAWING: Main Drain Profiles

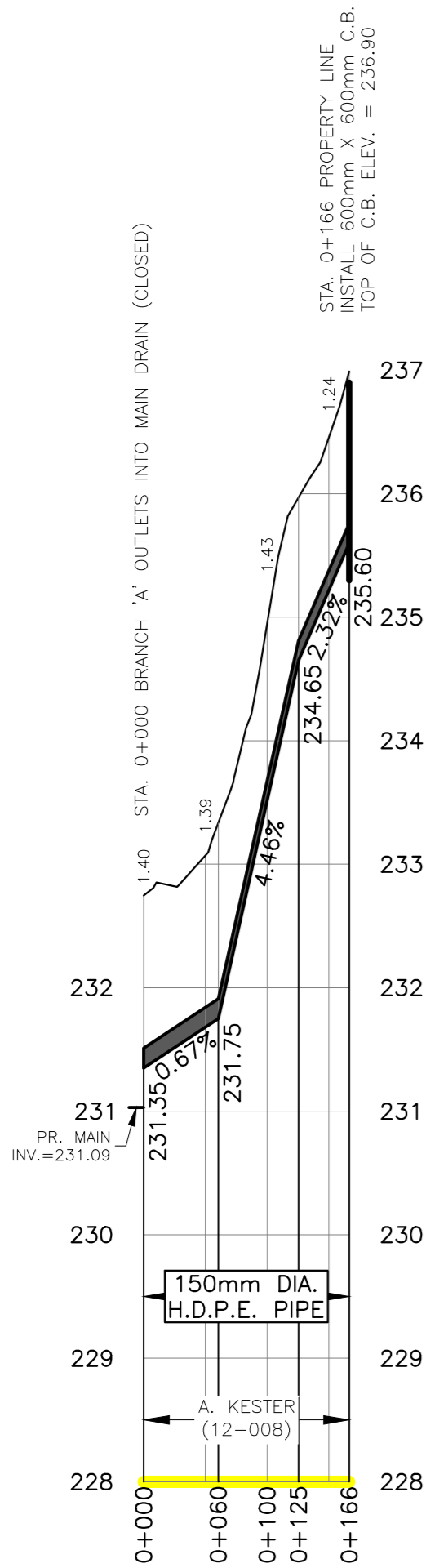


DIETRICH ENGINEERING LIMITED
CONSULTING ENGINEERS

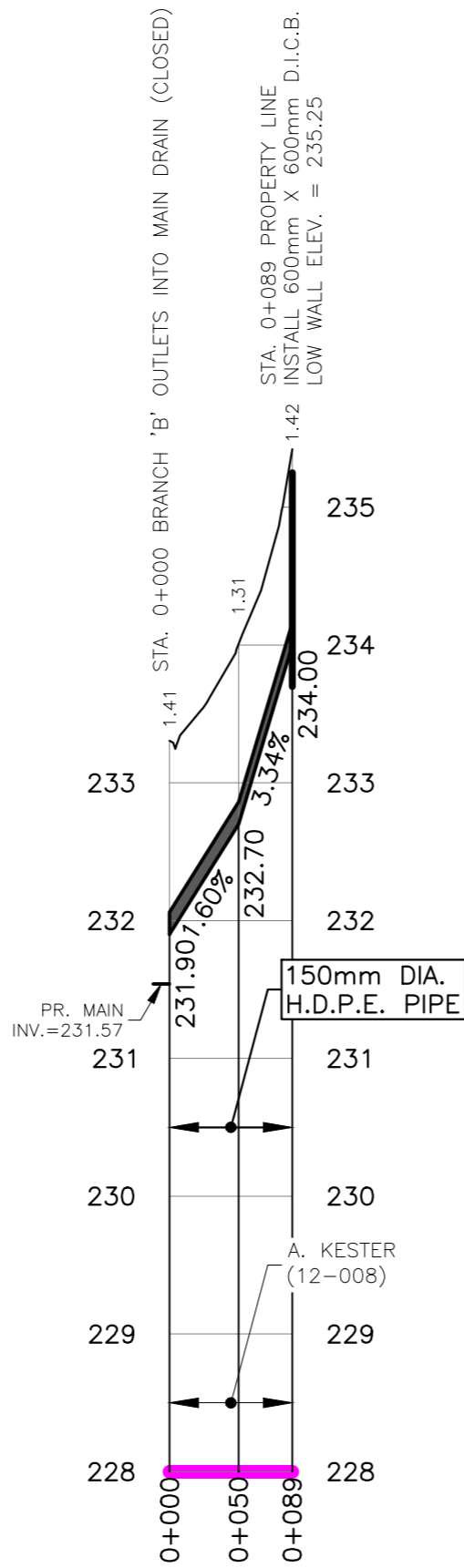
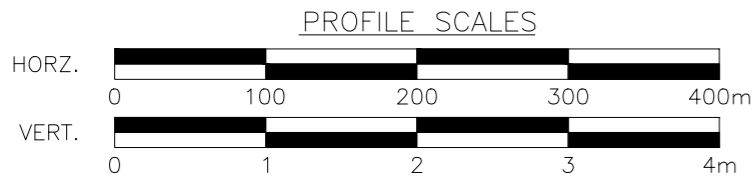
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR: W.J.D.	DESIGNED BY: W.J.D.	DRAWN BY: A.H.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE: FEB. 20, 2018	PROJECT No. 1634	DRAWING No. 2 of 3

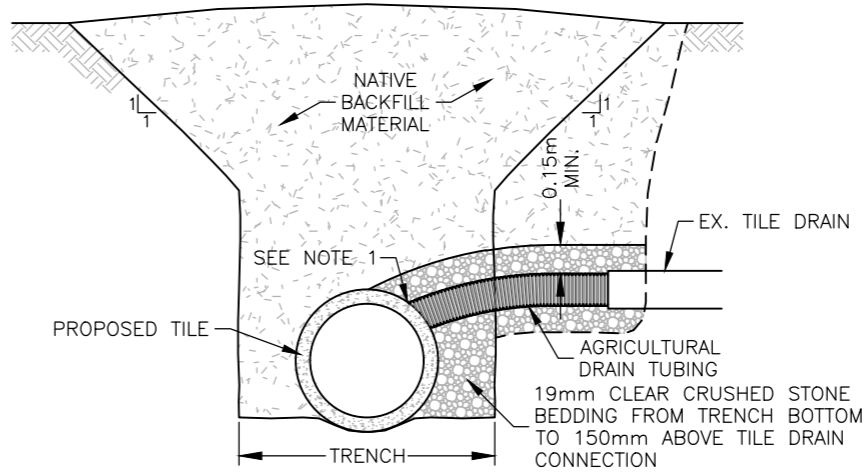
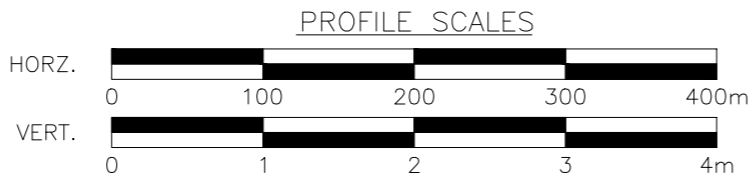
- NOTES:
1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.



BRANCH 'A' PROFILE



BRANCH 'B' PROFILE



- NOTE:
1. ALL TILE CONNECTIONS TO BE EITHER A CORED HOLE WITH AN INSERT COUPLER, OR A MANUFACTURED TEE.
 2. CLEAR CRUSHED STONE BEDDING NOT REQUIRED IF DUAL WALL H.D.P.E. PIPE IS USED FOR THE CONNECTION.

TYPICAL TILE CONNECTION DETAIL

N.T.S.

TILE SIZES

BRANCH 'A'

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE PIPE	150	0+000 - 0+166	166

BRANCH 'B'

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE PIPE	150	0+000 - 0+089	89

LEGEND:

No.	ISSUES AND REVISIONS	DATE	BY
4.	REPORT SUBMISSION	2018-02-20	DEL
3.	INFORMATION MEETING NO. 2	2018-02-14	DEL
2.	INFORMATION MEETING	2017-03-03	DEL
1.	ON-SITE MEETING	2016-08-04	DEL



PROJECT: KHIVA MUNICIPAL DRAIN 2018

DRAWING: Branches 'A' and 'B' Profiles



DIETRICH ENGINEERING LIMITED
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR: W.J.D.	DESIGNED BY: W.J.D.	DRAWN BY: A.H.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE: FEB. 20, 2018	PROJECT No. 1634	DRAWING No. 3 of 3

Municipality of South Huron
322 Main Street South
PO Box 759
Exeter ON N0M 1S6

Notice of Meeting to Consider the Engineer's Report

Drainage Act, R.S.O. 1990, c. D.17, s. 42

To:

Enter Name and Current Address of Property Owner

*See Attached
mailing label.*

In accordance with section 42 of the *Drainage Act*, you as an owner of land affected by the proposed drainage works for the

Rowe-Rasenberg Municipal Drain

(Name of drain)

are requested to attend a council meeting to consider the final report filed with the Municipality

of South Huron

for this drainage works.

The meeting will take place:

Date (yyyy/mm/dd)

2018/03/19

Time

6:00 p.m

Location

South Huron Council Chambers

If the share of the project cost assessed to your property is more than \$100, a copy of the report is included with this notice.

Name of Clerk (Last Name, First Name)

Msuya-Collison, Rebekah

Name of Municipality

Municipality of South Huron

Signature of Clerk

Rebekah Collison

Date (yyyy/mm/dd)

2018/03/02

Failure to attend meeting: If you do not attend the meeting, it will proceed in your absence. If you are affected or assessed by this proposed project, you will continue to receive notification as required by the *Drainage Act*.

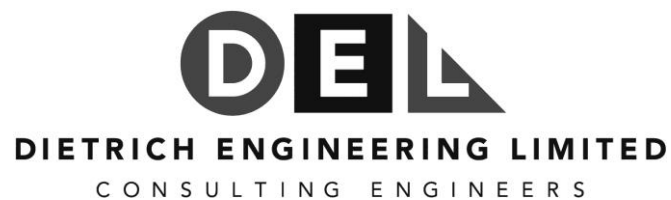
Activities at the meeting to consider the report:

- Usually the engineer will present a summary of the report to council
- For drains initiated by petition:
 - Petitioners will be given an opportunity to withdraw their name from the petition
 - Other owners that benefit from the drain will be given an opportunity to add their name to the petition
- Council must decide whether or not to proceed with the project by provisionally adopting the engineer's report by by-law; they also have the option to refer the report back to the engineer for modifications.
- All property owners affected by the drain will have an opportunity to influence council's decision
- There is no right to appeal assessments or other aspects of the engineer's report at this meeting; these appeal rights will be made available later in the procedure. *Drainage Act*, R.S.O. 1990, c. D.17, s. 47 - 54.

Petitioners: After the meeting to consider the final report, if the petition does not comply with section 4, the project is terminated and the original petitioners are responsible for the costs in shares proportional to their assessment in the engineer's report. *Drainage Act*, R.S.O. 1990, c. D. 17 s. 43.



**Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)**



Reference No. 1750

February 20, 2018

Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

Contents

Introduction	1
History	1
On-Site Meeting	1
Information Meeting	2
Findings	2
Recommendations	2
Summary of Proposed Works	2
Working Area	3
Watershed Characteristics	3
Allowances	3
Estimated Construction Costs	4
Summary of Costs	6
Assessment	7
Maintenance	7
Schedule of Assessment for Construction – Main Drain	8
Schedule of Assessment for Construction – Branch ‘A’	9
Schedule of Net Assessment for Construction	10
Schedule of Assessment for Maintenance	11

Specifications for the Construction of Municipal Drainage Works

DIVISION A-General Conditions

DIVISION C-Specification for Tile Drains

DIVISION E-Specification for Drainage Crossings by the Boring Method

DIVISION H-Special Provisions

Waterloo, Ontario

February 20, 2018

**Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)**

**To the Mayor and Council
of the Municipality of South Huron**

Members of Council:

Introduction

We are pleased to present our report on the “Rowe-Rasenberg Municipal Drain 2018”, serving parts of Lots 16 and 17, Concessions 8 and 9 in the Municipality of South Huron, Usborne Ward, County of Huron.

Authority to prepare this report was obtained by a resolution of the Municipality of South Huron Council at its September 5, 2017 meeting to appoint Dietrich Engineering Limited to prepare an Engineer’s Report.

In accordance with your instructions pursuant to a petition received by Council under Section 4 of the Drainage Act, R.S.O. 1990, we have made an examination and survey of the affected area and submit herewith our Report which includes Plan, Profiles and Specifications for this work.

The area requiring drainage is parts of Lots 16 and 17, Concession 9. The petition is valid in compliance with Section 4(1)(a) of the Drainage Act, R.S.O. 1990.

The attached Plan and Profiles, Drawing No.’s 1 and 2, Reference No. 1750, Specifications and the Instructions to Tenderers form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected

History

The lands and roads within the watershed for this proposed municipal drain are presently being served by a private drainage system.

The outlet for this drain is Elmville Municipal Drain.

On-Site Meeting

In accordance with Section 9(1) of the Drainage Act, R.S.O. 1990, an on-site meeting was held on November 14, 2017. The place of meeting was on Huron Street adjacent to Lot 16, Concession 9. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Imran Khalid	Huron County Engineer, Road Superintendent
Jason Parr	Transportation Services – Manager, Municipality of South Huron

George & Jim Poortinga	Landowners
Dan Coward	Landowner
Wayne Rowe	Landowner

Information Meeting

An information meeting was held on February 14, 2018 at the Municipality of South Huron Municipal Office. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
George Poortinga	Landowner
Wayne Rowe	Landowner

This meeting provided a review of the design of the proposed drainage system, the estimated costs of the project and proposed assessments.

Findings

We have made an examination of the drainage area and have found the following:

1. The existing private drainage system is in a poor state of repair and is neither of sufficient capacity nor depth to drain the surrounding and upstream lands within the watershed at today's standards of drainage.

Recommendations

It is our recommendation that:

1. A new tile drainage system be constructed consisting of the Main Drain and Branch 'A'.
2. The Main Drain includes the installation of 834 metres of 450mm to 525mm diameter tile from an outlet in the Elimville Municipal Drain in Lot 17, Concession 8 upstream to the property line between Lots 16 and 17, Concession 9.
3. Branch 'A' includes the installation of 147 metres of 200mm diameter HDPE pipe from an outlet in the Main Drain upstream to the County Road 11/ D. & J. Coward property Line, Lot 16, Concession 9.
4. The drainage coefficient design standard used for this drain is 38mm of rainfall per 24 hours.
5. This new drainage system shall be known as the "Rowe-Rasenberg Municipal Drain 2018".

Summary of Proposed Works

The proposed work consists of filling in approximately 158 metres of open ditch; the installation of approximately 951 metres of 200mm to 525mm diameter concrete field tile and HDPE pipes; the installation of five (5) concrete catch basins; and the installation of 30 metres of 600mm O.D. smooth wall steel casing by the Boring Method.

Working Area

The working area for construction shall be a width of twenty (20) metres centered on the proposed tile drain. The working area for maintenance purposes shall be a width of ten (10) metres centered on the proposed tile drain. Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area.

Watershed Characteristics

The Drainage Area comprises approximately 59.7 hectares. Land use within the watershed is primarily agricultural.

Allowances

In accordance with Sections 29 and 30 of the Drainage Act, R.S.O. 1990, we determine the allowances payable to Owners entitled thereto as follows.

Lot or Part	Con.	Owner	Roll No.	Right-of-Way (Section 29)	Damages to Lands and Crops (Section 30)	Total Allowances
<u>Rowe-Rasenberg Municipal Drain 2018</u>						
<u>Main Drain</u>						
16	8	J. & H. Poortinga	8-042	\$1,620	\$1,800	\$3,420
17	8	W. Rowe	8-043	\$4,850	\$4,380	\$9,230
Pt 16	9	Rasenberg Investments Ltd.	9-033	\$1,570	\$1,760	\$3,330
17	9	W. & J. Rowe	9-034		\$400	\$400
Total Allowances, Main Drain				\$8,040	\$8,340	\$16,380
<u>Branch 'A'</u>						
Pt 16	9	Rasenberg Investments Ltd.	9-033	\$1,030	\$1,600	\$2,630
Pt 16	9	D. & J. Coward	9-033	\$440	\$650	\$1,090
Total Allowances, Branch 'A'				\$1,470	\$2,250	\$3,720
<u>Total Allowances</u>				<u>\$9,510</u>	<u>\$10,590</u>	<u>\$20,100</u>

Total Allowances, under Sections 29 and 30 of the Drainage Act, R.S.O. 1990;
Rowe-Rasenberg Municipal Drain 2018.

\$20,100

The land values used for calculating allowances for Right-of-Way was \$40,000/ha.

The allowances for Right-of-Way under Section 29 of the Drainage Act, R.S.O. 1990 were calculated based on 25% of the land value for a 10 metre Right-of-Way.

Estimated Construction Costs

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

Labour, Equipment and Materials

A) Main Drain

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Supply 1-6 metre length of 525mm diameter, H.D.P.E. outlet pipe complete with rodent grate (320 kPa) Solid Pipe	6 m	\$ 95.00	\$ 570.00
	Installation of 6 metres of 525mm diameter, H.D.P.E. outlet pipe complete with quarry stone rip-rap protection and geotextile filter material (Mirafi 180N or equivalent) (approximately 40m ²) (Sta. 0+000 to Sta.0+006)	I.s.		\$ 2,000.00
2)	Filling in existing ditch from Sta. 0+000 to Sta. 0+158			
a)	Clean out existing ditch of available topsoil			\$ 500.00
b)	Fill in existing ditch with imported fill and existing spoil including spreading available topsoil over backfilled waterway (approx 500m ³)			\$ 2,500.00
3)	Supply 525mm diameter concrete field tile (2000D)	641 m	\$ 34.00	\$ 21,794.00
	Installation of 525mm diameter concrete field tile by means of a wheel trencher (Sta. 0+006 to Sta.0+647)	641 m	\$ 25.00	\$ 16,025.00
4)	Supply 450mm diameter concrete field tile (2000D)	157 m	\$ 29.00	\$ 4,553.00
	Installation of 450mm diameter concrete field tile by means of a wheel trencher (Sta. 0+677 to Sta.0+834)	157 m	\$ 24.00	\$ 3,768.00
5)	Supply & install 900mm x 1200mm concrete ditch inlet catch basin at (Sta. 0+485) inline type	1 ea.	\$ 2,500.00	\$ 2,500.00
6)	Supply & install 900mm x 1200mm concrete catch basin at (Sta. 0+834) inline type	1 ea.	\$ 2,200.00	\$ 2,200.00
7)	Tile Connections	I.s.		\$ 1,000.00
	Sub-Total			\$ 57,410.00

8) Work to be done on the Huron County Road 11
Road Allowance, Hern Line (Sta. 0+647 to Sta. 0+677)

a)	Supply 600 mm O.D. smooth wall steel casing 9.5mm (0.37") wall thickness	30 m	\$ 100.00	\$ 3,000.00
	Installation of 600mm O.D. smooth wall steel casing by jack & bore method (Sta. 0+647 to Sta.0+677)	30 m	\$ 240.00	\$ 7,200.00
b)	Supply & install 900mm x 1200mm concrete ditch inlet catch basin at (Sta. 0+677) inline type	1 ea.	\$ 2,500.00	\$ 2,500.00
c)	Supply & install 600mm x 600mm concrete catch basin Offset 5m south of Sta. 0+647	1 ea.	\$ 1,500.00	\$ 1,500.00
d)	Supply 250mm diameter H.D.P.E. pipe (320 kPa) Solid Pipe	5 m	\$ 22.00	\$ 110.00
	Installation (offset DICB connection at Sta. 0+647)			\$ 300.00
e)	Supply and install 1 - 525mm X 250mm HDPE Tee (Sta. 0+647)	1 ea.		\$ 300.00
Sub-Total				\$ 14,910.00

**TOTAL ESTIMATED CONSTRUCTION COSTS
MAIN DRAIN**

\$72,320.00

B) Branch 'A'

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Supply 200mm diameter perforated H.D.P.E. pipe c/w filter sock	147 m	\$ 15.00	\$ 2,205.00
	Installation of 200mm diameter H.D.P.E. pipe by means of a wheel trencher (Sta. 0+000 to Sta.0+147)	147 m	\$ 20.00	\$ 2,940.00
2)	Supply & install 600mm x 600mm concrete ditch inlet catch basin at (Sta. 0+147) inline type	1 ea.	\$ 1,800.00	\$ 1,800.00

**TOTAL ESTIMATED CONSTRUCTION COSTS
BRANCH 'A'**

\$6,945.00

Summary of Construction Costs

A) Total Estimated Construction Costs – Main Drain	\$ 72,320
B) Total Estimated Construction Costs – Branch 'A'	\$ 6,945
TOTAL ESTIMATED CONSTRUCTION COSTS	\$ 79,265

Total Estimated Materials	\$ 32,232
Total Estimated Labour and Equipment	\$ 47,033
TOTAL ESTIMATED CONSTRUCTION COSTS	\$ 79,265

Summary of Costs

Allowances under Sections 29 and 30 of the Drainage Act, R.S.O. 1990	\$ 20,100
Total Estimated Construction Costs	\$ 79,265
Meetings, survey, design, preparation of preliminary cost estimates and reports, preparation of final drainage report, consideration of report and court of revision	\$ 19,500
Preparation of contract documents, contract administration, supervision and inspection of construction	\$ 9,800
Contingencies, Interest, and tile repairs and net H.S.T.	\$ 5,035
TOTAL ESTIMATED COSTS	
ROWE-RASENBERG MUNICIPAL DRAIN 2018	\$ 133,700

The estimated cost of the work in the Municipality of South Huron is \$133,700.

Assessment

We assess the cost of this work against the lands and roads liable for assessment for benefit and outlet as shown on the annexed Schedules of Assessment. We have determined that there is no injuring liability assessment involved.

Whether or not the County of Huron elects to do the work on their property, Hern Line, Sta. 0+647 to Sta.0+677, Main Drain, they shall be assessed the actual increased costs to the drainage works due to the construction and operation of the road as a Special Assessment in addition to any benefit and outlet assessments. The Special Assessment shall be made up of the actual construction costs plus an allowance for administration costs.

Maintenance

After completion, this drain shall be maintained by the Municipality of South Huron at the expense of all the lands and roads assessed in the attached Schedules of Assessment for Maintenance and in the same relative proportions until such time as the assessment is changed under the Drainage Act except for the portion of the drain constructed within the County of Huron road allowance, Main Drain (Hern Line). This portion of the drain shall be maintained at the expense of the road authority having jurisdiction over said road.

Respectfully submitted,

DIETRICH ENGINEERING LIMITED


W. J. Dietrich, P.Eng.

WJD:rd



SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

APPROX.		OWNER	ROLL NO.	(SEC. 22)	(SEC. 23)	(SEC. 26)	LESS 1/3		NET		
LOT OR PART	CON. AFFECTED HECTARES			BENEFIT	OUTLET LIABILITY	SPECIAL ASSESSMENT	TOTAL	GOV'T GRANT		LESS ALLOWANCES	
MAIN DRAIN											
16	8	4.5	J. & H. Poortinga	(8-042)	\$11,700	\$1,917		\$13,617	\$4,539	\$3,420	\$5,658
17	8	9.3	W. Rowe	(8-043)	\$24,200	\$2,004		\$26,204	\$8,735	\$9,230	\$8,239
Pt. 16	9	30.6	Rasenberg Investments Ltd.	(9-033)	\$13,200	\$21,889		\$35,089	\$11,696	\$3,330	\$20,063
* Pt. 16	9	1.6	D. & J. Coward	(9-033-05)		\$941		\$941			\$941
17	9	11.9	W. & J. Rowe	(9-034)	\$4,000	\$8,569		\$12,569	\$4,190	\$400	\$7,979
Total Assessment on Lands					\$53,100	\$35,320		\$88,420	\$29,160	\$16,380	\$42,880
County Road 11	1.4	County of Huron			\$8,000	\$3,294	\$19,280	\$30,574			\$30,574
Huron Street	0.4	Municipality of South Huron				\$706		\$706			\$706
Total Assessment on Roads					\$8,000	\$4,000	\$19,280	\$31,280			\$31,280
Total Assessment on Lands and Roads,											
Rowe-Rasenberg Municipal Drain 2018 (Main Drain)					\$61,100	\$39,320	\$19,280	\$119,700	\$29,160	\$16,380	\$74,160

- NOTES: 1. * Denotes lands not eligible for ADIP grants.
2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF ASSESSMENT FOR CONSTRUCTION
Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

APPROX.					(SEC. 23)		LESS 1/3						
LOT OR	HECTARES	ROLL	(SEC. 22)	OUTLET	TOTAL	GOV'T	NET						
PART	CON. AFFECTED	OWNER	BENEFIT	LIABILITY	ASSESSMENT	GRANT	ALLOWANCES ASSESSMENT						
<u>BRANCH 'A'</u>													
Pt. 16	9	1.2	Rasenberg Investments Ltd.	(9-033)	\$4,000	\$918	\$4,918	\$1,639	\$2,630	\$649			
* Pt. 16	9	1.6	D. & J. Coward	(9-033-05)	\$1,000	\$2,041	\$3,041		\$1,090	\$1,951			
Total Assessment on Lands					\$5,000	\$2,959	\$7,959	\$1,639	\$3,720	\$2,600			
County Road 11					\$4,000	\$2,041	\$6,041			\$6,041			
Total Assessment on Roads					\$4,000	\$2,041	\$6,041			\$6,041			
Total Assessment on Lands and Roads,													
Rowe-Rasenberg Municipal Drain 2018 (Branch 'A')								\$9,000	\$5,000	\$14,000	\$1,639	\$3,720	\$8,641

NOTES: 1. * Denotes lands not eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.

3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF NET ASSESSMENT FOR CONSTRUCTION
Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LESS 1/3									
LOT OR	OWNER		ROLL	MAIN	BRANCH 'A' ASSESSMENT	TOTAL	GOV'T	LESS	NET
PART	CON.		NO.	DRAIN			GRANT	ALLOWANCES	ASSESSMENT
16	8	J. & H. Poortinga	(8-042)	\$13,617		\$13,617	\$4,539	\$3,420	\$5,658
17	8	W. Rowe	(8-043)	\$26,204		\$26,204	\$8,735	\$9,230	\$8,239
Pt. 16	9	Rasenberg Investments Ltd.	(9-033)	\$35,089	\$4,918	\$40,007	\$13,336	\$5,960	\$20,711
* Pt. 16	9	D. & J. Coward	(9-033-05)	\$941	\$3,041	\$3,982		\$1,090	\$2,892
17	9	W. & J. Rowe	(9-034)	\$12,569		\$12,569	\$4,190	\$400	\$7,979
Total Assessment on Lands							\$30,800	\$20,100	\$45,479
County Road 11		County of Huron		\$30,574	\$6,041	\$36,615			\$36,615
Huron Street		Municipality of South Huron		\$706		\$706			\$706
Total Assessment on Roads									\$37,321
Total Assessment on Lands and Roads,									
Rowe-Rasenberg Municipal Drain 2018							\$30,800	\$20,100	\$82,800

NOTES: 1. * Denotes lands not eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
3. The NET ASSESSMENT is provided for information purposes only.

SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<u>MAIN DRAIN</u>					
16	8	4.5	J. & H. Poortinga	(8-042)	6.9%
17	8	9.3	W. Rowe	(8-043)	14.4%
Pt. 16	9	30.6	Rasenberg Investments Ltd.	(9-033)	47.3%
* Pt. 16	9	1.6	D. & J. Coward	(9-033-05)	2.5%
17	9	11.9	W. & J. Rowe	(9-034)	<u>18.4%</u>
Total Assessment on Lands					<u>89.5%</u>
County Road 11		1.4	County of Huron		8.6%
Huron Street		0.4	Municipality of South Huron		<u>1.9%</u>
Total Assessment on Roads					<u>10.5%</u>
Total Assessment for Maintenance,					
Rowe-Rasenberg Municipal Drain 2018 (Main Drain)					<u>100.0%</u>

Note: *Denotes lands not eligible for ADIP grants

SCHEDULE OF ASSESSMENT FOR MAINTENANCE
Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron
(Usborne Ward)

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<u>BRANCH 'A'</u>					
Pt. 16	9	1.2	Rasenberg Investments Ltd.	(9-033)	26.3%
* Pt. 16	9	1.6	D. & J. Coward	(9-033-05)	39.8%
Total Assessment on Lands					66.1%
County Road 11		0.4	County of Huron		33.9%
Total Assessment on Roads					33.9%
Total Assessment for Maintenance,					
Rowe-Rasenberg Municipal Drain 2018 (Branch 'A')					100.0%

Note: *Denotes lands not eligible for ADIP grants

SPECIFICATIONS FOR THE CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

DIVISION A – General Conditions

DIVISION C – Specification for Tile Drains

**DIVISION E – Specification for Drainage
Crossings by the Boring Method**

DIVISION H – Special Provisions

DIVISION A

GENERAL CONDITIONS

<u>A</u>	<u>CONTENT</u>	<u>PAGE</u>
A.1	SCOPE	1
A.2	TENDERS	1
A.3	EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS	1
A.4	PAYMENT	2
A.5	CONTRACTOR'S LIABILITY INSURANCE	2
A.6	LOSSES DUE TO ACTS OF NATURE, ETC.	2
A.7	COMMENCEMENT AND COMPLETION OF WORK	3
A.8	WORKING AREA AND ACCESS	3
A.9	SUB-CONTRACTORS	3
A.10	PERMITS, NOTICES, LAWS AND RULES	3
A.11	RAILWAYS, HIGHWAYS AND UTILITIES	4
A.12	ERRORS AND UNUSUAL CONDITIONS	4
A.13	ALTERATIONS AND ADDITIONS	4
A.14	SUPERVISION	4
A.15	FIELD MEETINGS	4
A.16	PERIODIC AND FINAL INSPECTIONS	5
A.17	ACCEPTANCE BY THE MUNICIPALITY	5
A.18	WARRANTY	5
A.19	TERMINATION OF CONTRACT BY THE MUNICIPALITY	5
A.20	TESTS	6
A.21	POLLUTION	6
A.22	SPECIES AT RISK	6
A.23	ROAD CROSSINGS	6
A.24	LANEWAYS	7
A.25	FENCES	8
A.26	LIVESTOCK	8
A.27	STANDING CROPS	9
A.28	SURPLUS GRAVEL	9
A.29	IRON BARS	9
A.30	RIP-RAP	9
A.31	CLEARING, GRUBBING AND BRUSHING	9
A.32	RESTORATION OF LAWNS	9

DIVISION A

GENERAL CONDITIONS

A.1 SCOPE

The work to be done under this contract consists of supplying all labour, equipment and materials to construct the drainage work as outlined in the Scope of Work, Drawings, General Conditions and other Specifications.

A.2 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as instructed by the Municipality. The Scope of Work must be completed and submitted with the Form of Tender and Agreement. A certified cheque is required as Tender Security, payable to the Treasurer of the Municipality.

All certified cheques, except that of the bidder to whom the work is awarded will be returned within ten (10) days of the time the Contract is awarded. The certified cheque of the bidder to whom the work is awarded will be retained as Contract Security and returned when the Municipality receives a Completion Certificate for the work.

A certified cheque is not required if the Contractor provides an alternate form of Contract Security such as a Performance Bond for 100% of the amount of the Tender or other satisfactory security, if required/permitted by the Municipality. A Performance Bond may also be required to insure maintenance of the work for a period of one (1) year after the date of the Completion Certificate.

A.3 EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS

The Tenderer must examine the premises and site to compare them with the Drawings and Specifications in order to satisfy himself of the existing conditions and extent of the work to be done before submission of his Tender. No allowance shall subsequently be made on behalf of the Contractor by reason of any error on his part. Any estimates of quantities shown or indicated on the Drawings, or elsewhere are provided for the convenience of the Tenderer. Any use made of these quantities by the Tenderer in calculating his Tender shall be done at his own risk. The Tenderer for his own protection should check these quantities for accuracy.

The standard specifications (Divisions B through G) shall be considered complementary and where a project is controlled under one of the Divisions, the remaining Divisions will apply for miscellaneous works.



In case of any inconsistency or conflict between the Drawings and Specifications, the following order of precedence shall apply:

- Direction of the Engineer
- Special Provisions (Division H)
- Scope of Work
- Contract Drawings
- Standard Specifications (Divisions B through G)
- General Conditions (Division A)

A.4 PAYMENT

Progress payments equal to 87±% of the value of work completed and materials incorporated in the work will be made to the Contractor monthly. An additional ten per cent (10±%) will be paid 45 days after the final acceptance by the Engineer, and three per cent (3±%) of the Contract price may be reserved by the Municipality as a maintenance holdback for a one (1) year period from the date of the Completion Certificate. A greater percentage of the Contract price may be reserved by the Municipality for the same one (1) year period if in the opinion of the Engineer, particular conditions of the Contract requires such greater holdback.

After the completion of the work, any part of this reserve may be used to correct defects developed within that time from faulty workmanship and materials, provided that notice shall first be given to the Contractor and that he may promptly make good such defects.

A.5 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of any work, the Contractor shall file with the Municipality evidence of compliance with all Municipality insurance requirements (Liability Insurance, WSIB, etc.) for no less than the minimum amounts as stated in the Purchasing Procedures of the Municipality. All insurance coverage shall remain in force for the entire contract period including the warranty period which expires one year after the date of the Completion Certificate.

The following are to be named as co-insured: Successful Contractor
Sub-Contractor
Municipality
Dietrich Engineering Ltd.

A.6 LOSSES DUE TO ACTS OF NATURE, ETC.

All damage, loss, expense and delay incurred or experienced by the Contractor in the performance of the work, by reason of unanticipated difficulties, bad weather, strikes, acts of nature, or other mischances shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.



A.7 COMMENCEMENT AND COMPLETION OF WORK

The work must commence as specified in the Form of Tender and Agreement. If conditions are unsuitable due to poor weather, the Contractor may be required, at the discretion of the Engineer to postpone or halt work until conditions become acceptable and shall not be subject of a claim for additional compensation.

The Contractor shall give the Engineer a minimum of 48 hours notice before commencement of work. The Contractor shall then arrange a meeting to be held on the site with Contractor, Engineer, and affected Landowners to review in detail the construction scheduling and other details of the work.

If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Municipality a minimum of 24 hours notice prior to returning to the project. If any work is commenced without notice to the Engineer, the Contractor shall be fully responsible for all such work undertaken prior to such notification.

The work must proceed in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the Form of Tender and Agreement.

A.8 WORKING AREA AND ACCESS

Where any part of the drain is on a road allowance, the road allowance shall be the working area. For all other areas, the working area available to the Contractor to construct the drain is specified in the Special Provisions (Division H).

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately. Where the Contractor exceeds the specified working widths without authorization, he shall be held responsible for the costs of all additional damages.

If access off an adjacent road allowance is not possible, each Landowner on whose property the drainage works is to be constructed, shall designate access to and from the working area. The Contractor shall not enter any other lands without permission of the Landowner and he shall compensate the Landowner for damage caused by such entry.

A.9 SUB-CONTRACTORS

The Contractor shall not sublet the whole or part of this Contract without the approval of the Engineer.

A.10 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall obtain and pay for all necessary permits or licenses required for the execution of the work (but this shall not include MTO encroachment permits, County Road permits permanent easement or rights of servitude). The Contractor shall give all necessary notices and pay for all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health and safety.



A.11 RAILWAYS, HIGHWAYS AND UTILITIES

A minimum of 72 hours' notice to the Railway or Highways, exclusive of Saturdays, Sundays, and Statutory Holidays, is required by the Contractor prior to any work activities on or affecting the applicable property. In the case of affected Utilities, a minimum of 48 hours' notice to the utility owner is required.

A.12 ERRORS AND UNUSUAL CONDITIONS

The Contractor shall notify the Engineer immediately of any error or unusual conditions which may be found. Any attempt by the Contractor to correct the error on his own shall be done at his own risk. Any additional cost incurred by the Contractor to remedy the wrong decision on his part shall be borne by the Contractor. The Engineer shall make the alterations necessary to correct errors or to adjust for unusual conditions during which time it will be the Contractor's responsibility to keep his men and equipment gainfully employed elsewhere on the project.

The Contract amount shall be adjusted in accordance with a fair evaluation of the work added or deleted.

A.13 ALTERATIONS AND ADDITIONS

The Engineer shall have the power to make alterations in the work shown or described in the Drawings and Specifications and the Contractor shall proceed to make such changes without causing delay. In every such case, the price agreed to be paid for the work under the Contract shall be increased or decreased as the case may require according to a fair and reasonable evaluation of the work added or deleted. The valuation shall be determined as a result of negotiations between the Contractor and the Engineer, but in all cases the Engineer shall maintain the final responsibility for the decision. Such alterations and variations shall in no way render the Contract void. No claims for a variation or alteration in the increased or decreased price shall be valid unless done in pursuance of an order from the Engineer and notice of such claims made in writing before commencement of such work. In no such case shall the Contractor commence work which he considers to be extra before receiving the Engineer's approval.

A.14 SUPERVISION

The Contractor shall give the work his constant supervision and shall keep a competent foreman in charge at the site.

A.15 FIELD MEETINGS

At the discretion of the Engineer, a field meeting with the Contractor or his representative, the Engineer and with those others that the Engineer deems to be affected, shall be held at the location and time specified by the Engineer.



A.16 PERIODIC AND FINAL INSPECTIONS

Periodic inspections by the Engineer will be made during the performance of the work. If ordered by the Engineer, the Contractor shall expose the drain as needed to facilitate inspection by the Engineer.

Final inspection by the Engineer will be made within twenty (20) days after he has received notice from the Contractor that the work is complete.

A.17 ACCEPTANCE BY THE MUNICIPALITY

Before any work shall be accepted by the Municipality, the Contractor shall correct all deficiencies identified by the Engineer and the Contractor shall leave the site neat and presentable.

A.18 WARRANTY

The Contractor shall repair and make good any damages or faults in the drain that may appear within one (1) year after its completion (as dated on the Completion Certificate) as the result of the imperfect or defective work done or materials furnished if certified by the Engineer as being due to one or both of these causes; but nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the Country, Province or Locality in which the work is being done. Neither the Completion Certificate nor any payment there under, nor any provision in the Contract Documents shall relieve the Contractor from his responsibility.

A.19 TERMINATION OF CONTRACT BY THE MUNICIPALITY

If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days notice in writing from the Engineer to supply additional workmen or materials to commence or complete the works, or if he should fail to make prompt payment to Sub-Contractors, or for material, or labour, or persistently disregards laws, ordinances, or the instruction of the Engineer, or otherwise be guilty of a substantial violation of the provisions of the Contract, then the Municipality, upon the certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, by giving the Contractor written notice, terminate the employment of the Contractor and take possession of the premises, and of all materials, tools and appliances thereon, and may finish the work by whatever method the Engineer may deem expedient but without delay or expense. In such a case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price will exceed the expense of finishing the work including compensation to the Engineer for his additional services and including the other damages of every name and nature, such excess shall be paid by the Contractor. If such expense will exceed such unpaid balance, the Contractor shall pay the difference to the Municipality. The expense incurred by the Municipality, as herein provided, shall be certified by the Engineer.



If the Contract is terminated by the Municipality due to the Contractor's failure to properly commence the works, the Contractor shall forfeit the certified cheque bid deposit and furthermore shall pay to the Municipality an amount to cover the increased costs, if any, associated with a new Tender for the Contract being terminated.

If any unpaid balance and the certified cheque do not match the monies owed by the Contractor upon termination of the Contract, the Municipality may also charge such expense against any money which may thereafter be due to the Contractor from the Municipality.

A.20 TESTS

The cost for the testing of materials supplied to the job by the Contractor shall be borne by the Contractor. The Engineer reserves the right to subject any lengths of any tile or pipe to a competent testing laboratory to ensure the adequacy of the tile or pipe. If any tile supplied by the Contractor is determined to be inadequate to meet the applicable A.S.T.M. standards, the Contractor shall bear full responsibility to remove and/or replace all such inadequate tile in the Contract with tile capable of meeting the A.S.T.M. Standards.

A.21 POLLUTION

The Contractor shall keep their equipment in good repair. The Contractor shall refuel or repair equipment away from open water.

If polluted material from construction materials or equipment is caused to flow into the drain, the Contractor shall immediately notify the Ministry of the Environment, and proceed with the Ministry's protocols in place to address the situation.

A.22 SPECIES AT RISK

If a Contractor encounters a known Species at Risk as designated by the MNR or DFO, the Contractor shall notify the Engineer immediately and follow the Ministry's guidelines to deal with the species.

A.23 ROAD CROSSINGS

This specification applies to all road crossings (Municipality, County, Regional, or Highway) where no specific detail is provided on the drawings or in the standard specifications. This specification in no way limits the Road Authority's regulations governing the construction of drains on their Road Allowance.

A.23.1 Road Occupancy Permit

Where applicable, the Contractor must submit an application for a road occupancy permit to the Road Authority and allow a minimum of five (5) working days for its review and issuance.



A.23.2 Road Closure Request and Construction Notification

The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority and the Engineer for review and approval a minimum of five (5) working days prior to proceeding with any work on the road allowance. The Contractor shall be responsible for notifying all applicable emergency services, schools, etc. of the road closure or construction taking place.

A.23.3 Traffic Control

The Contractor shall supply flagmen, and warning signs and ensure that detour routes are adequately signed in accordance with no less than the minimum standards as set out in the Ontario Traffic Manual's Book 7.

A.23.4 Weather

No construction shall take place during inclement weather or periods of poor visibility.

A.23.5 Equipment

No construction material and/or equipment is to be left within three (3) metres of the travelled portion of the road overnight or during periods of inclement weather.

If not stated on the drawings, the road crossing shall be constructed by open cut method. Backfill from the top of the cover material over the subsurface pipe or culvert to the under side of the road base shall be Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm. Granular road base materials shall be thoroughly compacted to 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing HL-8 Hot Mix Asphalt patch at a thickness of 50mm or of the same thickness as the existing pavement structure. The asphalt patch shall be flush with the existing roadway on each side and without overlap.

Excavated material from the trench beyond 1.25 metres from the travelled portion or beyond the outside edge of the gravel shoulder may be used as backfill in the trench in the case of covered drains. The material shall be compacted in lifts not exceeding 300mm.

A.24 LANEWAYS

All pipes crossing laneways shall be backfilled with material that is clean, free of foreign material or frozen particles and readily tamped or compacted in place unless otherwise specified. Laneway culverts on open ditch projects shall be backfilled with material that is not easily erodible. All backfill material shall be thoroughly compacted as directed by the Engineer.



Culverts shall be bedded with a minimum of 300mm of granular material. Granular material shall be placed simultaneously on each side of the culvert in lifts not exceeding 150mm in thickness and compacted to 95% Standard Proctor Density. Culverts shall be installed a minimum of 10% of the culvert diameter below design grade with a minimum of 450mm of cover over the pipe unless otherwise noted on the Drawings.

The backfill over culverts and subsurface pipes at all existing laneways that have granular surfaces on open ditch and closed drainage projects shall be surfaced with a minimum of 300mm of Granular "B" material and 150mm of Granular "A" material. All backfill shall be thoroughly compacted as directed by the Engineer. All granular material shall be placed to the full width of the travelled portion.

Any settling of backfilled material shall be repaired by or at the expense of the Contractor during the warranty period of the project and as soon as required.

A.25 FENCES

No earth is to be placed against fences and all fences removed by the Contractor shall be replaced by him in as good a condition as found. Where practical the Contractor shall take down existing fences in good condition at the nearest anchor post and roll it back rather than cutting the fence and attempting to patch it. The replacement of the fences shall be done to the satisfaction of the Engineer. Any fences found in such poor condition where the fence is not salvageable, shall be noted and verified with the Engineer prior to commencement of work.

Fences damaged beyond repair by the Contractor's negligence shall be replaced with new materials, similar to those materials of the existing fence, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the Landowner and the Engineer.

Any fences paralleling an open ditch that are not line fences that hinder the proper working of the excavating machinery, shall be removed and rebuilt by the Landowner at his own expense.

The Contractor shall not leave fences open when he is not at work in the immediate vicinity.

A.26 LIVESTOCK

The Contractor shall provide each landowner with 48 hours notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the Landowner shall be responsible to keep all livestock clear of the construction areas until further notified. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock where the Contractor failed to notify the Landowner, or through negligence or carelessness on the part of the Contractor.



A.27 STANDING CROPS

The Contractor shall be responsible for damages to standing crops which are ready to be harvested or salvaged along the course of the drain and access routes if the Contractor has failed to notify the Landowners 48 hours prior to commencement of the work on that portion of the drain.

A.28 SURPLUS GRAVEL

If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used, the Contractor shall haul away such surplus material.

A.29 IRON BARS

The Contractor is responsible for the cost of an Ontario Land Surveyor to replace any iron bars that are altered or destroyed during the course of the construction.

A.30 RIP-RAP

Rip-rap shall be quarry stone rip-rap material and shall be the sizes specified in the Special Provisions. Broken concrete shall not be used as rip-rap unless otherwise specified.

A.31 CLEARING, GRUBBING AND BRUSHING

This specification applies to all brushing where no specific detail is provided on the drawings or in the Special Provisions.

The Contractor shall clear, brush and stump trees from within the working area that interfere with the installation of the drainage system.

All trees, limbs and brush less than 150mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and neatly stacked in piles designated by the Landowners.

A.32 RESTORATION OF LAWNS

This specification applies to all lawn restoration where no specific detail is provided on the drawings or in the Special Provisions and no allowance for damages has been provided under Section 30 of the Drainage Act RSO 1990 to the affected property.

The Contractor shall supply "high quality grass seed" and the seed shall be broadcast by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of broadcast to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the Landowner to maintain the area in a manner so as to promote growth.

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

<u>C</u>	<u>CONTENT</u>	<u>PAGE</u>
C.1	PIPE MATERIALS	1
C.2	ALIGNMENT	1
C.3	PROFILE	2
C.4	EXCAVATION	2
C.5	INSTALLATION	2
C.6	TRENCH CROSSINGS	3
C.7	OUTLET PROTECTION	4
C.8	CATCH BASINS AND JUNCTION BOXES	4
C.9	TRIBUTARY DRAINS	5
C.10	CLEARING, GRUBBING AND MULCHING	5
C.11	ROADS AND LANEWAY SUB-SURFACE CROSSINGS	6
C.12	FILLING IN EXISTING DITCHES	6
C.13	CONSTRUCTION OF GRASSED WATERWAYS	6
C.14	UNSTABLE SOIL	6
C.15	ROCKS	6
C.16	BROKEN OR DAMAGED TILE	7
C.17	RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS	7

DIVISION C

SPECIFICATIONS FOR TILE DRAINS

C.1 PIPE MATERIALS

C.1.1 Concrete Tile

Concrete drain tile shall conform to the requirements of the most recent A.S.T.M. specification for Heavy-Duty Extra Quality drain tile. All tile with diameters less than 600mm shall have a pipe strength of 1500D. All tile with diameters 600mm or larger shall have a pipe strength of 2000D.

All tile furnished shall be subject to the approval of the Engineer. All rejected tile are to be immediately removed from the site.

C.1.2 High Density Polyethylene (HDPE) Pipe

All HDPE pipe shall be dual-wall corrugated drainage pipe with a smooth inner wall. HDPE pipe shall have a minimum stiffness of 320 kPa at 5% deflection.

Unless otherwise noted, all sealed HDPE pipe shall have a water tight gasketed bell and spigot joining system meeting the minimum requirements of CSA B182.8. Perforated HDPE pipe shall have a soil tight joining system, and shall be enveloped in non-woven geotextile filter sock.

C.2 ALIGNMENT

The Contractor shall contact the Engineer to establish the course of the drain. Where an existing drain is to be removed and replaced by the new drain, or where the new drain is to be installed parallel to an existing drain, the Contractor shall locate the existing drain (including repairing damaged tile caused by locating) at intervals along the course of the drain. The costs of locating shall be included in the tender price.

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other watercourses or at sharp corners, it shall run on a curve of at least 15 metres radius. The new tile drain shall be constructed at an offset from and parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water.

The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and existing tile act together to provide the necessary capacity. Where any such existing drain is disturbed or damaged, the Contractor shall perform the necessary repair at his expense.



C.3 PROFILE

Benchmarks have been established along the course of the drain which are to govern the elevations of the drain. The location and elevations of the benchmarks are shown on the drawings. Tile is to be installed to the elevation and grade shown on the profiles. Accurate grade control must be maintained by the Contractor at all times.

When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made.

C.4 EXCAVATION

C.4.1 Wheel machine

Unless otherwise specified, all trenching shall be carried out with a wheel machine approved by the Engineer. The wheel machine shall shape the bottom of the trench to conform to the outside diameter of the pipe. The minimum trench width shall be equal to the outside diameter of the pipe plus 100mm on each side of the pipe, unless otherwise specified. The maximum trench width shall be equal to the outside diameter of the pipe plus 300mm on each side of the pipe, unless otherwise specified.

C.4.2 Scalping

Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capability of the Contractor's wheel machine, he shall lower the surface grade in order that the wheel machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of the topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.

C.4.3 Excavator

Where the use of an excavator is used in-lieu of a wheel machine, the topsoil shall be stripped and replaced in accordance with Item C.4.2. All tile shall be installed on 19mm clear crushed stone bedding placed to a minimum depth of 150mm which has been shaped to conform to the bottom of the pipe. The Contractor shall include the costs of this work in his tender price.

C.5 INSTALLATION

C.5.1 Concrete Tile

The tile is to be laid with close joints and in regular grade and alignment in accordance with the drawings. The tiles are to be bevelled, if necessary to ensure close joints. The inside of the tile is to be kept clear when laid. The sides of the tile are to be supported by partial filling of the trench



(blinding) prior to inspection by the Engineer. No tile shall be backfilled until inspected by the Engineer unless otherwise permitted by the Engineer. The tile shall be backfilled such that a sufficient mound of backfill is placed over the trench to ensure that no depression remains after settling occurs in the backfill.

Where a tile connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a tile drain passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

The Contractor shall supply and wrap all concrete tile joints with Mirafi 160N geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.
- 500mm wide for tile sizes larger than 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be.

C.5.2 HDPE Pipe

HDPE pipe shall be installed using compacted Granular 'A' bedding or 19mm clear crushed stone bedding from 150mm below the pipe to 300mm above the pipe. All granular material shall be compacted using a suitable mechanical vibratory compactor. Granular bedding and backfill shall be placed in lifts not exceeding 300mm and compacted to at least 95% Standard Proctor Maximum Dry Density (SPMDD).

Where a pipe connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a pipe passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

As determined by the Engineer, unsuitable backfill material must be hauled off-site by the Contractor and Granular "B" shall be used as replacement backfill material.

C.6 TRENCH CROSSINGS

The Contractor shall not cross the backfilled trench with any construction equipment or vehicles, except by one designated crossing location on each property. The Contractor shall ensure that the bedding and backfill material at this designated crossing location is properly placed and compacted so as to adequately support the equipment and vehicles that may cross the trench.



The Contractor may undertake any other approved work to ensure the integrity of the tile at the crossing location. The Contractor shall ensure that no equipment or vehicles travel along the length of the trench. The Contractor shall be responsible for any damage to the new tile caused by the construction of the drain.

C.7 OUTLET PROTECTION

A tile drain outlet into a ditch shall be either HDPE pipe or corrugated steel pipe and shall include a hinged grate for rodent protection. The maximum spacing between bars on the rodent grate shall be 40mm. All corrugated steel outlet pipes shall be bevelled at the end to generally conform to the slope of the ditch bank.

Quarry stone rock rip-rap protection and geotextile filter material (Mirafi 160N), shall be installed around the outlet pipe and extended downstream a minimum distance of three metres, unless otherwise specified. The protection shall extend to the top of the backfilled trench and below the pipe to 300 mm under the streambed. The protection shall also extend 600mm into undisturbed soil on either side of the backfilled trench. In some locations, rip-rap may be required on the bank opposite the outlet.

Where the outlet occurs at the upper end of an open ditch, the rip-rap protection will extend all around the end of the ditch and to a point 800mm downstream on either side. Where heavy overflow is likely to occur, sufficient additional rip-rap and filter material shall be placed as directed by the Engineer to prevent the water cutting around the protection.

C.8 CATCH BASINS AND JUNCTION BOXES

Unless otherwise noted, catch basins shall be in accordance with OPSD 705.010 and 705.030. The catch basin grate shall be a "Birdcage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catch basin with bolts into the concrete. Spacing of bars on grates for use on 600mmX600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmX600mm shall be 90mm.

All catch basins shall be backfilled with compacted Granular 'A' or 19mm clear crushed stone placed to a minimum width of 300mm on all sides. If settling occurs after construction, the Contractor shall supply and place sufficient granular material to maintain the backfill level flush with adjacent ground. The riser sections of the catch basin shall be wrapped with filter cloth.

Quarry stone rip-rap protection shall be placed around all catch basins and shall extend a minimum distance of one (1) metre away from the outer edge of each side of the catch basin, and shall be placed so that the finished surface of the rip-rap is flush with the existing ground.

If there are no existing drains to be connected to the catch basin at the top end of the drain, a plugged tile shall be placed in the upstream wall with the same elevations as the outlet tile.

Junction boxes shall have a minimum cover over the lid of 450mm.



The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. The top of the spill way of the earth berm shall be the same elevation as the high wall of the ditch inlet catch basin. The earth berm shall be covered with 100mm depth of topsoil and seeded with an approved green seed mixture. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 metres each way from all catch basins.

The Contractor shall clean all catch basin sumps after completion of the drain installation. Catch basin markers shall be placed beside each catch basin.

C.9 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain is to be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary drains encountered are clean or reasonably clean, they shall be connected into the new drain in accordance with the typical tile drain connection detail. Tributary tile drain connections into the new drain shall be made using high density polyethylene agricultural drain tubing installed on and backfilled with 19mm clear crushed stone. All tile drain connections into the new drain shall be either a cored hole with an insert coupler or a manufactured tee.

Where the existing drains are full of sediment, the decision to connect the tributary drain to the new drain shall be left to the Engineer. The Contractor shall be paid for each tributary drain connection as outlined in the Form of Tender and Agreement.

The Contractor shall be responsible for all tributary tile connections for a period of one year from the date of the Completion Certificate. After construction, any missed tile connections required to be made into the new drain shall be paid at the same rate as defined in the Form of Tender and Agreement. The Contractor will have the option to make any subsequent tile connections or have the Municipality make the required connections and have the cost of which deducted from the holdback.

Where an open ditch is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain.

Where the Contractor is required to connect an existing tile which is not encountered in the course of the drain, the cost of such work shall constitute an extra to the contract.

C.10 CLEARING, GRUBBING AND MULCHING

The Contractor shall clear, brush and stump trees from within the working area.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched.

Clearing, grubbing and mulching shall be carried out as a separate operation from installing the drain, and shall not be completed simultaneously at the same location.



C.11 ROADS AND LANEWAY SUB-SURFACE CROSSINGS

All roads and laneway crossings may be made with an open cut. The Contractor may use original ground as backfill to within 600mm of finished grade only if adequate compaction and if the use of the original ground backfill has been approved beforehand by the Engineer.

C.12 FILLING IN EXISTING DITCHES

The Contractor shall backfill the ditch sufficiently for traversing by farm equipment. If sufficient material is available on-site to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled waterway. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period.

C.13 CONSTRUCTION OF GRASSED WATERWAYS

Where the Contractor is required to construct a grassed waterway, the existing waterway shall be filled in, regraded, shaped and a seed bed prepared prior to applying the grass seed. The grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO.

- 55% Creeping Red Fescue
- 15% Perennial Rye Grass
- 27% Kentucky Bluegrass
- 3% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

C.14 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer if unstable soil is encountered. The Engineer shall, after consultation with the Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

C.15 ROCKS

The Contractor shall immediately contact the Engineer if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a wheel machine. The Engineer shall determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

If only scattered large stone or boulders are removed on any project, the Contractor shall either excavate a hole to bury same adjacent to the drain, or he shall haul the stones or boulders to a location designated by the Landowner.



C.16 BROKEN OR DAMAGED TILE

The Contractor shall remove and dispose of all broken (existing or new), damaged or excess tile off site.

C.17 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS

Drainage Guide for Ontario, Ministry of Agriculture, Food and Rural Affairs, Publication 29 and its amendments, dealing with the construction of Subsurface Drainage Systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other Specifications of the Contract.

DIVISION E

SPECIFICATIONS FOR DRAINAGE CROSSINGS BY THE BORING METHOD

<u>E</u>	<u>CONTENT</u>	<u>PAGE</u>
E.1	GENERAL REQUIREMENTS	1
E.2	NOTIFICATION	1
E.3	PIPE	1
E.4	INSTALLATION	1
E.5	AUGER PIT	2
E.6	CONSTRUCTION	2
E.7	ACCEPTANCE	2

DIVISION E

SPECIFICATIONS FOR DRAINAGE CROSSINGS BY THE BORING METHOD

E.1 GENERAL REQUIREMENTS

When a drainage crossing of a Roadway, Railway, etc. is to be carried out by the Boring Method, the following Specifications for this work shall apply. The Authority having jurisdiction over the lands involved with the crossing will supply no labour, equipment or materials for the construction of the crossing unless otherwise specified.

The Contractor shall be fully responsible for availing himself of, and satisfying any further Specifications that may apply to borings affecting the Authority having jurisdiction over the lands involved with the crossing.

E.2 NOTIFICATION

The Contractor shall give the Authority responsible for the lands being crossed at least five (5) days notice before he commences any work on the crossing.

E.3 PIPE

The pipe or casing used in the crossing shall be smooth wall welded steel pipe with a minimum wall thickness as specified on the Plan and Profile. All pipe shall be new and manufactured from weldable steel having a minimum yield strength of 241 MPa. Pipe ends shall be bevel edged in the intrude to an angle of thirty (30) degrees for butt weld splicing. The name or trademark of the manufacturer and the heat number shall be clearly marked in the inside of the section of the pipe.

The pipe shall be of sufficient length so that during placement, no part of any excavation shall be closer than three (3) metres to the edge of a pavement and the slope of the excavation from the edge of shoulder, or other point as specified to the invert of the pipe shall be no less than one (1) metre vertical to one (1) metre horizontal (1:1) [See item E.5 "Auger Pit"].

E.4 INSTALLATION

The pipe or casing shall be placed by means of continuous flight augering inside the casing and simultaneous jacking to advance the casing immediately behind the tip of the auger. Complete augering of a tunnel slightly larger than the pipe and placing the entire length by pulling or jacking after completion of the tunnel will not be acceptable unless the method to be adopted is approved in advance by both the Engineer and the Authority responsible for the lands being crossed.



E.5 AUGER PIT

The pit excavated to accommodate the boring machine shall be so constructed so that the top edge of the pit shall not be closer than three (3) metres to the edge of the pavement. The slope of the pit from the top edge at the shoulder to the bottom of the pit shall not be steeper than one (1) metre vertical to one (1) metre horizontal (1:1). Shoring, sheeting, etc. shall be in accordance with the applicable and most recent Provincial Statutes.

The pit shall be left open for an absolute minimum of time, and if at all possible work shall be so scheduled so that excavation, placement of pipe and backfilling take place in one (1) working day. If this is not possible, every effort should be made to schedule the work so that the pit is not left open for more than one (1) day before and one (1) day after the boring operation.

E.6 CONSTRUCTION

During excavation, every effort should be made to place the top 300 mm of spoil (topsoil) in a separate pile for replacement on top on completion of the backfill operation. If this is not possible or practical, the Contractor shall import and place a minimum of 150 mm of good quality topsoil over the excavated and backfilled area. The finished work shall be left in a clean and orderly condition flush or slightly higher than the adjacent ground so that after settlement, it will conform to the surrounding ground. Excess earth (if any) shall be disposed of as directed by the Engineer and no additional payment will be allotted for such work.

The Contractor shall at his expense supply, erect and maintain suitable and adequate barricades, flashing lights, warning signs and/or flagmen to the satisfaction of the Engineer to adequately warn and protect the motoring public.

Any areas disturbed within the Right-of-Way of a County Road or King's Highway during construction, shall be covered with a minimum of 75 mm of topsoil, fertilized and seeded with an approved grass seed mixture.

E.7 ACCEPTANCE

All work undertaken by the Contractor shall be to the satisfaction of the Engineer.

DIVISION H

SPECIAL PROVISIONS

Rowe-Rasenberg Municipal Drain 2018
Municipality of South Huron

Reference No. 1750

Special provisions means special directions containing requirements peculiar to the work not adequately provided for by the standard or supplemental Specifications. Special provisions shall take precedence and govern any standard or supplemental Specifications.

The following special provisions shall apply to this project:

1. The Contractor shall notify the Owners and the Engineer forty-eight (48) hours prior to construction and arrange a pre-construction meeting
2. The Contractor shall verify the location of the new tile drains with the Engineer and the Owners prior to construction. The Contractor shall locate the existing tile drains in several places before installing the new drains.
3. The working area shall be twenty (20) metres centered on the proposed tile drain. Each landowner on whose property the drainage works is to be constructed shall designate access to and from the working area.
4. All utilities shall be located and uncovered in the affected areas by the Contractor prior to construction.
5. All catch basins shall be precast concrete catch basins (Coldstream Concrete Ltd. or approved equal). Knockouts shall be provided in the catch basins.
6. The catch basin grate elevations shall be set to the satisfaction of the Engineer.
7. Stone rip-rap protection and geo-textile material (Mirafi 180N) shall be placed around all catch basins as part of this contract.
8. All catch basin grates shall be birdcage grates (Coldstream Concrete Ltd. or approved equal). The grates shall be hot dipped galvanized.
9. All catch basin grates shall be fastened to the new catch basins.
10. All stone rip-rap material shall be quarry stone 150mm to 300mm dia. and placed to a depth of 400mm.
11. The Contractor shall supply all necessary materials to complete the connections of any existing drains to the new drain.
12. The Contractor shall be responsible for all trench settlement.
13. The Contractor shall supply and install catch basin markers beside all catch basins.
14. All concrete tile shall be Heavy-Duty Extra Quality Concrete Drain Tile: 2000D.

15. The Contractor shall supply and wrap all concrete tile joints with geotextile filter material as part of this contract.

The width of the filter material should be:

300mm wide for tile sizes 150mm diameter to 350mm diameter.

400mm wide for tile sizes 400mm diameter to 750mm diameter.

500mm wide for tile sizes larger than 750mm diameter.

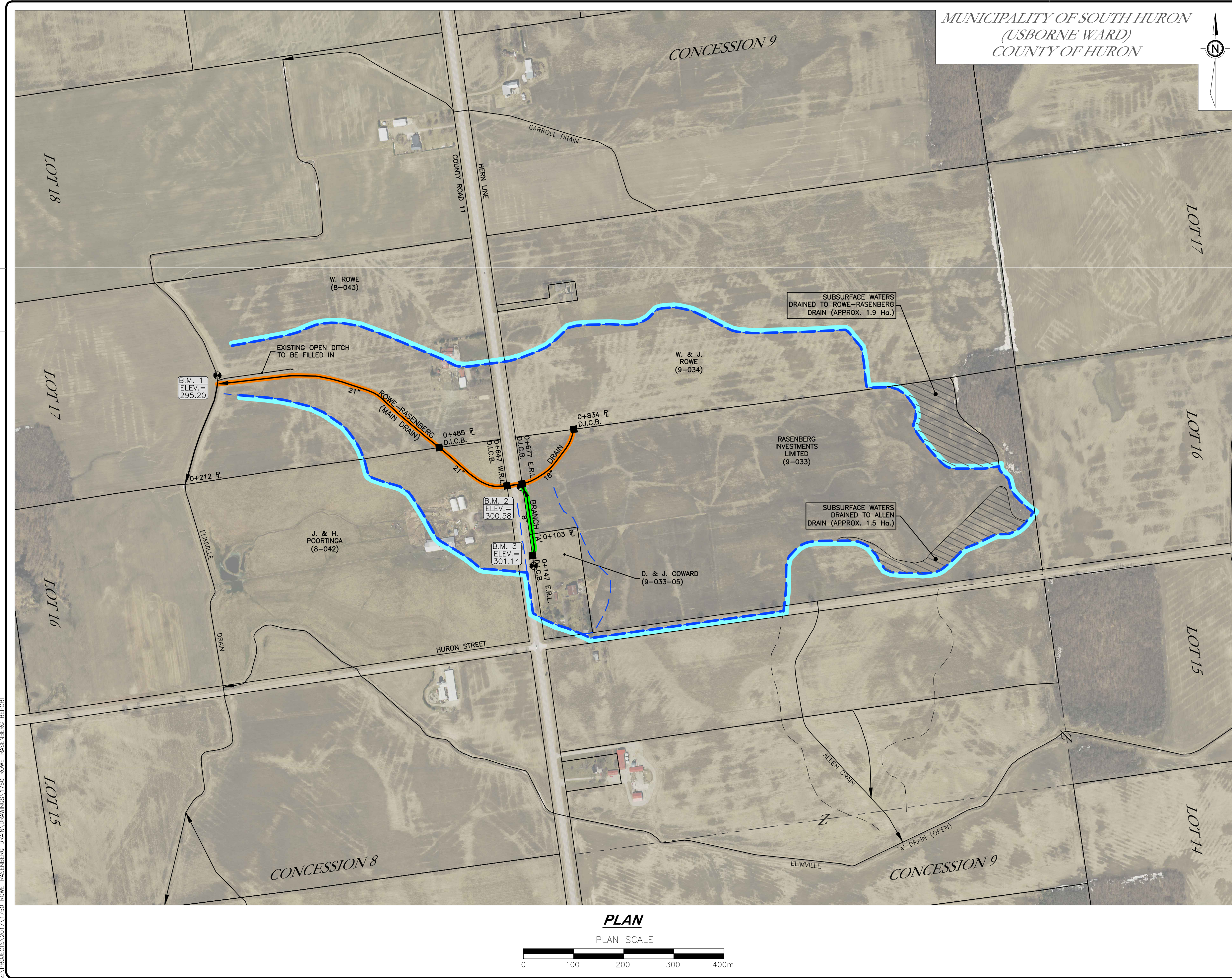
The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be Mirafi 140NC for clay or loam soil conditions and Mirafi 160N for sandy or silty soil conditions.

16. An approved ditching machine (wheel trencher) shall be used to install the concrete tile.
17. The Contractor shall strip the topsoil for a width of 4.0 metres centered on the drain before installing the tile drain. The Contractor shall strip the topsoil in the locations where the drain is being installed with an excavator for the full top width of the trench. The topsoil shall be later spread over the backfilled trench.
18. All HDPE pipe shall have a stiffness of 320kPa. All HDPE pipe shall be BOSS 2000 pipe (or equivalent).
19. Any areas disturbed within the Municipal Right-Of-Way during construction shall be top soiled and seeded with an approved grass seed mixture.
20. The roadside ditches shall be graded to the catch basins.
21. All existing catch basins removal shall be disposed of offsite.
22. Tile Connections

Existing private tile drains shall be connected at the catch basins where possible. Otherwise, connections shall be made into the municipal tile drain in accordance with the Typical Tile Connection Detail.

The Contractor shall be responsible for all tile connections for a period of one year after the issuance of the completion certificate. The tile connections required to be made within the warranty period shall be made at the same rate as defined on the Form of Tender and Agreement. After construction, the Contractor will be given the option to make any subsequent tile connections or have the Municipality make said connections and have the costs of which deducted from the Contractor's holdback.

The Contractor shall supply all necessary materials to complete the connections of the existing drains to the new drain. The type of materials used to make the tributary tile drain connections shall be verified by the Engineer.



NOTES:

1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.
2. ALL PERFORATED HIGH DENSITY POLYETHYLENE PIPE SHALL BE EXTERNAL SPLIT COUPLER JOINING SYSTEMS UNLESS OTHERWISE NOTED.

BENCHMARK No. 1 ELEV.=295.20
TOP CENTRE UPSTREAM END OF C.M.P. CULVERT 17 METRES NORTH OF STA. 0+000

BENCHMARK No. 2 ELEV.=300.58
TOP CENTRE UPSTREAM END OF C.M.P. CULVERT AT STA. 0+674

BENCHMARK No. 3 ELEV.=301.14
NAIL IN EAST FACE OF FENCE POST 21 METRES SOUTH OF STA. 0+147 (BRANCH 1)

LEGEND:

— DRAIN NAME —→	EXISTING MUNICIPAL DRAIN
- - - - -	INTERIOR/EXTERIOR WATERSHED BOUNDARY
— — — — —	PROPERTY BOUNDARY
— — — — —	LOT OR CONCESSION BOUNDARY
— — — — —	TOWNSHIP BOUNDARY
□	EXISTING CATCH BASIN OR JUNCTION BOX
○	EXISTING MANHOLE
— DRAIN NAME —→	MUNICIPAL DRAIN (AREA OF WORK)
- - - - -	WATERSHED BOUNDARY
■	PROPOSED CATCH BASIN OR JUNCTION BOX
●	PROPOSED MANHOLE
●	BENCHMARK No.
●	BENCHMARK ELEVATION

3.	REPORT SUBMISSION	2018-02-20	DEL
2.	INFORMATION MEETING	2018-02-14	DEL
1.	ON-SITE MEETING	2017-11-14	DEL
No.	ISSUES AND REVISIONS	DATE	BY

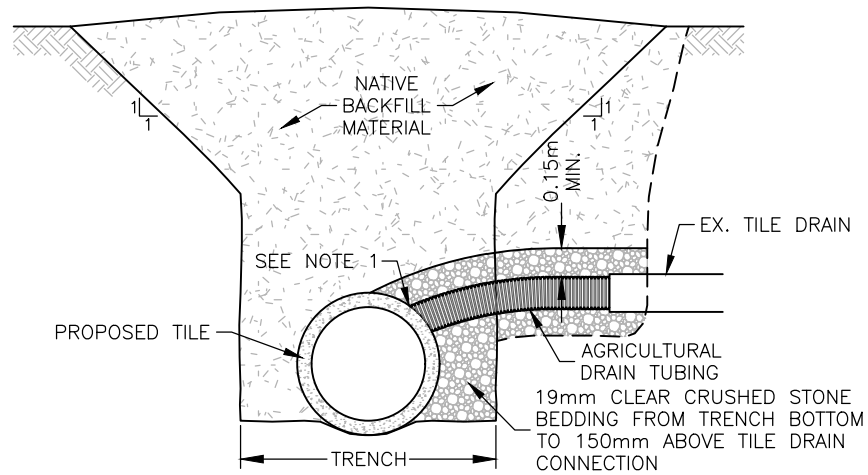
PROJECT: ROWE-RASENBERG MUNICIPAL DRAIN 2018

DRAWING: Plan

DEL
DIETRICH ENGINEERING LIMITED
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR:	W.J.D.	DESIGNED BY:	G.C.	DRAWN BY:	G.C.	CHECKED BY:	W.J.D.
DRAWING SCALE:	AS NOTED	DATE:	FEB, 20, 2018	PROJECT No.	1750	DRAWING No.	1 of 2

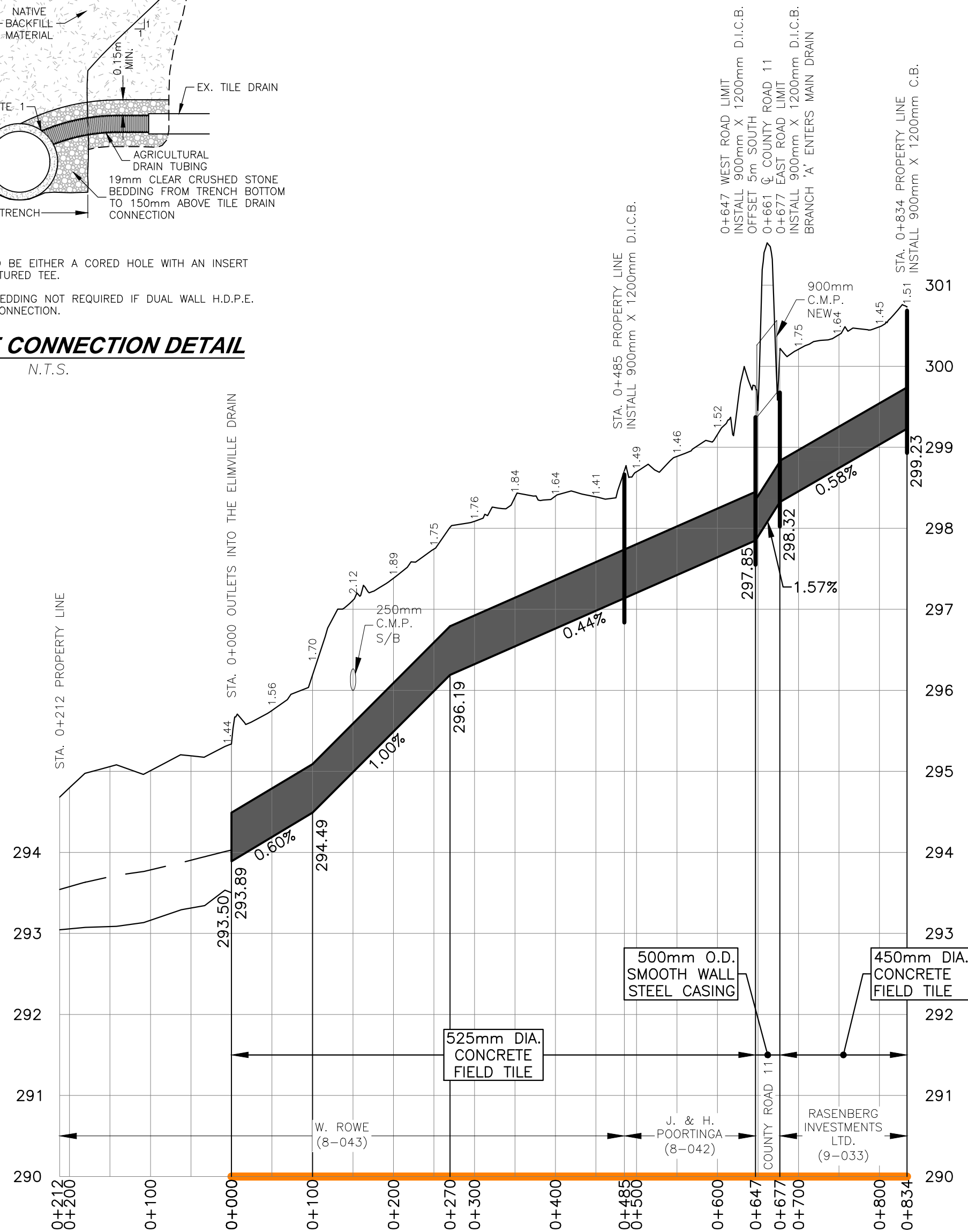


NOTE:

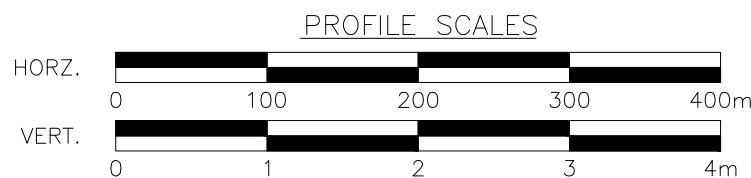
1. ALL TILE CONNECTIONS TO BE EITHER A CORED HOLE WITH AN INSERT COUPLER, OR A MANUFACTURED TEE.
2. CLEAR CRUSHED STONE BEDDING NOT REQUIRED IF DUAL WALL H.D.P.E. PIPE IS USED FOR THE CONNECTION.

TYPICAL TILE CONNECTION DETAIL

N.T.S.

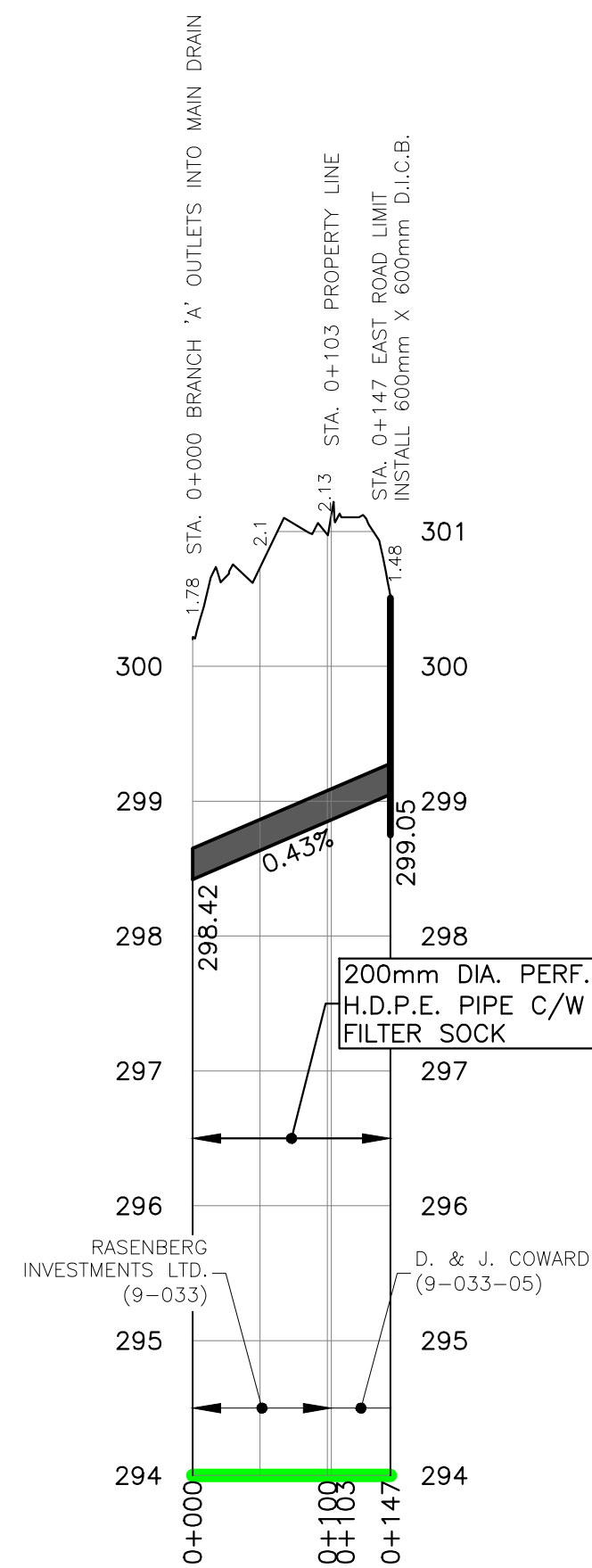


MAIN DRAIN PROFILE

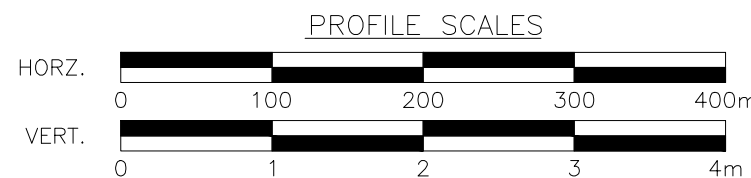


TILE SIZES

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE OUTLET PIPE	525	0+000 - 0+006	6
2.	CONCRETE FIELD TILE	525	0+006 - 0+647	641
3.	SMOOTH WALL STEEL CASING	500 O.D.	0+647 - 0+677	30
4.	CONCRETE FIELD TILE	450	0+677 - 0+834	157



BRANCH 'A' PROFILE



TILE SIZES

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)
1.	HIGH DENSITY POLYETHYLENE PIPE (PERF.)	200	0+000 - 0+147	147

NOTES:

1. ALL SOLID HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 UNLESS OTHERWISE NOTED.
2. ALL PERFORATED HIGH DENSITY POLYETHYLENE PIPE SHALL BE EXTERNAL SPLIT COUPLER JOINING SYSTEMS UNLESS OTHERWISE NOTED.

<div><div><div>REGISTERED PROFESSIONAL ENGINEER W. J. DIETRICH PROVINCE OF ONTARIO</div><div><div>MUNICIPALITY OF SOUTH HURON</div><div>2018</div></div></div></div>		
PROJECT: ROWE-RASENBERG MUNICIPAL DRAIN 2018		
DRAWING:		
<div><div>Profiles</div><div><div>DEL</div><div>DIETRICH ENGINEERING LIMITED CONSULTING ENGINEERS</div></div></div>		
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7		
PROJ. MGR: W.J.D.	DESIGNED BY: G.C.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE:	DRAWING No. 2 of 2



Corporation of the Municipality of South Huron

Minutes for the Regular Council Meeting

Monday, March 5, 2018, 6:00 p.m.

Council Chambers - Olde Town Hall

Members Present: Maureen Cole - Mayor
Dave Frayne - Deputy Mayor
Tom Tomes - Councillor - Ward 1
Marissa Vaughan - Councillor - Ward 1
Craig Hebert - Councillor - Ward 2
Ted Oke - Councillor - Ward 3

Member Regrets: Wayne DeLuca - Councillor - Ward 2

Staff Present: Dan Best, CAO
Don Giberson, Environmental Services Director
Sarah Smith, Huron County Planner
Rebekah Msuya-Collison, Clerk

1. Notice - Amendment to Budget
2. Meeting Called To Order

Mayor Cole called the meeting to order at 6:00 p.m.

Following the singing of O Canada, a moment of silence was held for Dave Urlin, former Deputy Mayor of South Huron.

3. Public Meeting

Motion: 83-2018

Moved: T. Oke

Seconded: T. Tomes

That South Huron Council adjourn at 6:07 p.m. for the purpose of a Public Meeting pursuant to Section 34 of the Planning Act for proposed zoning amendments.

Disposition: Carried

4. Amendments to the Agenda, as Distributed and Approved by Council

Council amended the agenda as follows:

1. Addition of 13.12 Correspondence
2. Addition of 16.5 By-law
3. Moved item 8.4 to item 7.3
4. Moved item 9.9.2 to item 7.3

Motion: 84-2018

Moved: M. Vaughan

Seconded: C. Hebert

That South Huron Council approves the Agenda as amended.

Disposition: Carried

5. Disclosure of Pecuniary Interest and the General Nature Thereof

None

6. Delegations

7. Minutes

7.1 Minutes of the Regular Council Meeting of February 20, 2018

Motion: 85-2018

Moved: C. Hebert

Seconded: T. Tomes

That South Huron Council adopts the minutes of the Regular Council Meeting of February 20, 2018, as printed and circulated.

Disposition: Carried

7.2 Minutes of the Public Meeting of February 20, 2018

Motion: 86-2018

Moved: D. Frayne

Seconded: M. Vaughan

That South Huron Council adopts the minutes of the Public Meeting of February 20, 2018, as printed and circulated.

Disposition: Carried

7.3 Minutes of the Committee of the Whole of February 21, 2018

7.3.1 Community Hub/Recreation Project Steering Advisory Committee -
Motion brought forward from February 27 meeting

7.3.2 CAO Best - YMCA Community Development Services Proposal

The amended agenda includes items 8.4 and 9.9.2 in the discussion of 7.3, specifically the recommendation from the Committee of the Whole and the YMCA proposal.

Council discussed the YMCA Development Services Proposal and clarified that the proposal is for engagement in the process to determine the demand and interest of the Community Hub/Recreation Centre project and support the Project Steering Committee in their mandate.

Mr. Sean Dillon, Senior Manager Business Development YMCAs across Southwestern Ontario was in attendance.

Motion: 87-2018

Moved: T. Oke

Seconded: D. Frayne

That South Huron Council accept the recommendation of the Committee of the Whole that the Project Steering Committee review, comment and make recommendations to Council with respect to the YMCA proposal; and

That staff be directed to prepare a report including a SWOT evaluation of the YMCA proposal in coordination with the Project Steering Committee; and

That South Huron Council accept the recommendation of the Community Hub/Recreation Project Steering Advisory Committee that Council engage the YMCA as outlined in their proposal to provide community development services; and

That the report of D. Best, Chief Administrative Officer dated March 5, 2018 regarding the YMCA Community Development Proposal be received; and

That South Huron Council authorize Staff to enter into an Agreement with the YMCA to proceed with the proposed actions outlined in the Community Development Proposal to:

- **Support the Community Hub/Recreation Centre Project Steering Committee**
- **Develop preliminary and final Operating Pro- forma**
- **Lead the development of Terms of Reference for consultant selection**
- **Provide Pre -Architectural Development Services**

Disposition: Carried

Motion: 88-2018

Moved: T. Tomes

Seconded: D. Frayne

That South Huron Council accept the recommendation of the Committee of the Whole that Administration be directed to prepare a report analyzing By-law 67-2004 (Hawkers, Peddlers, Transient Traders and Refreshment Vehicles By-Law) and compare it to other municipalities, review the fee and deposit and bring a report back to Council.

Disposition: Carried

Motion: 89-2018

Moved: C. Hebert

Seconded: T. Oke

That South Huron Council accept the Committee of the Whole that the draft animal control By-law is forwarded to Council for consideration and approval.

Disposition: Carried

Motion: 90-2018

Moved: T. Oke

Seconded: M. Vaughan

That South Huron Council adopts the minutes of the Committee of the Whole Meeting of February 21, 2018, as printed and circulated.

Disposition: Carried

8. Councillor Board and Committee Reports

- 8.1 Dashwood Community Centre Advisory Committee - Minutes of November 28, 2017
- 8.2 Upper Thames River CA - Minutes of January 23, 2018
- 8.3 Community Hub/Recreation Project Steering Advisory Committee - Minutes of February 15, 2018

Councillor Vaughan provided a verbal report on the Lake Huron Primary Water Supply System board meeting held Thursday March 1, 2018.

Motion: 91-2018

Moved: C. Hebert

Seconded: M. Vaughan

That the minutes of the following committees and/or boards be received as presented to Council:

- **Minutes of Dashwood Community Centre Advisory Committee of November 28, 2017;**
- **Minutes of Upper Thames River CA of January 23, 2018;**
- **Minutes of Community Hub/Recreation Project Steering Committee of February 15, 2018.**

Disposition: Carried

9. Staff Reports

9.1 Planning

- 9.1.1 S. Smith, Huron County Planner re Severance Application B95-2017 Scatcherd

Motion: 92-2018

Moved: D. Frayne

Seconded: M. Vaughan

That South Huron Council recommends to Huron County Council that Consent for file B95-2017 be granted with conditions as set out in the Planner's report dated February 23, 2018.

Disposition: Carried

- 9.1.2 S. Smith, Huron County Planner re Severance Application B05-2018 Hayter

Planner Smith noted that this consent application correlates with Item 16.3 By Law 22-2018.

Motion: 93-2018

Moved: C. Hebert

Seconded: T. Tomes

That South Huron Council recommends to Huron County Council that Consent for file B05-2018 be granted with conditions as set out in the Planner's report dated February 23, 2018.

Disposition: Carried

9.2 Financial Services

9.3 Environmental Services

9.3.1 D. Giberson, ESD Director - Results of the 2017 DWQMS System Audit by NSF-ISR International

Motion: 94-2018

Moved: T. Oke

Seconded: M. Vaughan

That South Huron Council receive the report from D. Giberson, ESD Director re: Results of the 2017 DWQMS System Audit by NSF-ISR International.

Disposition: Carried

9.3.2 D. Giberson, ESD Director - 2017 Annual Report for the South Huron Drinking Water System

ESD Director Giberson explained that the higher averages for flows in November and December correlate with the Exeter Water Tower System being offline for upgrades.

Motion: 95-2018

Moved: C. Hebert

Seconded: D. Frayne

That South Huron Council receive the report from D. Giberson, ESD Director re: 2017 Annual Report for the South Huron Drinking Water System.

Disposition: Carried

- 9.3.3 D. Giberson, ESD Director - 2017 Drinking Water System Annual Compliance Report to the Ministry of the Environment and Climate Change

Motion: 96-2018

Moved: T. Oke

Seconded: M. Vaughan

That South Huron Council receive the report from D. Giberson, ESD Director re: 2017 Drinking Water System Annual Compliance Report to the Ministry of the Environment and Climate Change.

Disposition: Carried

- 9.3.4 D. Giberson, ESD Director - 2017 Mandatory reporting of Commercial and Industrial water consumption information to the MOECC

Motion: 97-2018

Moved: C. Hebert

Seconded: D. Frayne

That South Huron Council receive the report from D. Giberson, ESD Director re: 2017 Mandatory reporting of Commercial and Industrial water consumption information to the Ministry of the Environment and Climate Change.

Disposition: Carried

- 9.3.5 D. Giberson, ESD Director - 2017 Annual Kirkton Landfill (Closed) Status Report

Motion: 98-2018

Moved: T. Tomes

Seconded: T. Oke

That South Huron Council receive the report from D. Giberson, ESD Director re: 2017 Annual Kirkton Landfill (Closed) Status Report.

Disposition: Carried

Mayor Cole left the chair and Deputy Mayor Frayne assumed the chair for this discussion.

9.3.6 D. Giberson, ESD Director - Unsuccessful 2017 OCIF Top-Up Grant Funding Application for Huron Street East Reconstruction Project

ESD Director Giberson gave council a copy of the Municipality of South Huron - 2017 Reserve Activity worksheet, which is attached to these minutes as Schedule "A".

Deputy Mayor Frayne called the question.

Motion: 99-2018

Moved: D. Frayne

Seconded: M. Vaughan

That South Huron Council receive the report from D. Giberson, ESD Director re: Unsuccessful 2017 OCIF Top-Up Grant Funding Application for Huron Street East Reconstruction project.

Disposition: Carried

Motion: 100-2018

Moved: T. Oke

Seconded: C. Hebert

That South Huron Council authorizes a 2018 budget amendment to transfer an additional amount of \$437,889 from the Transportation Capital Replacement Reserve; \$262,733 from the Water Capital Replacement Reserve and \$175,156 from the Sewer Capital Replacement Reserve to offset the loss the OCIF grant funding for the Huron Street East Reconstruction project.

Disposition: Carried

CAO Best advised that a reconciliation report for the record will be brought forward to Council.

Acting Chair Frayne called for a recess at 7:30 p.m.

The meeting reconvened at 7:42 p.m.

Motion: 101-2018

Moved: M. Cole

Seconded: M. Vaughan

That South Huron Council direct staff to provide a report to Council that identifies the money in reserves December 2014 until December 2017 and the estimated amount for December 31, 2018 with the Huron Street East project included; and

That the estimated amount to Dec 31 2018 and the investment by the municipality allocated to reserves be identified as well as the expenditures, prior to the end of April 2018 for the same period.

Disposition: Carried

Mayor Cole resumed the chair at 7:45 p.m.

9.4 Transportation Services

9.5 Community Services

9.6 Development Services

9.7 Emergency Services

9.8 Corporate Services

9.9 Administration

9.9.1 CAO Best - Dashwood Community Centre Update 2

CAO Best advised that an application for minor variance is required in connection with the project.

Motion: 102-2018

Moved: C. Hebert

Seconded: D. Frayne

That the report of D..Best dated March 5, 2018 regarding Update #2 on the Dashwood Community Centre Construction project be received.

Disposition: Carried10. Deferred Business11. Notices of Motion12. Mayor & Councillor Comments and Announcements

Mayor Cole attended the Huron County Federation of Agriculture Annual MP/MPP Local Politician Day on February 23, 2018.

Mayor Cole updated Council on OGRA workshops and presentations that she felt had value to South Huron initiatives.

Councillor Oke advised Council that the FCC AgriSpirit Fund for enhancing rural communities is now open and is accepting applications for a total of \$1.5 million in funding this year and will send link to council.

CAO Best updated council on the Community Transportation Grant Program submission.

13. Communications

13.1 Municipal Affairs - Proclamation of Bill 139

13.2 AMCTO - 2018 Federal Budget Update

13.3 AMO - OMAFRA Announcement to Support Municipal Main Street Revitalization

13.4 AMO Policy Update - Public Reporting for Fire Department Response Times

13.5 BRA - February 18, 2018 Board Meeting Highlights

13.6 Lake Huron Primary Water Supply System-2017 Annual Report

13.7 CHIP - Winter Newsletter

13.8 Lake Huron Coastal Centre - Conference

Councillor Vaughan will follow up with more information.

13.9 Huron County Accessibility Advisory Committee - Committee Member Vacancy

Council requested that this vacancy be posted on municipal website and social media.

13.10 Huron Elgin London Project - Invitation

13.11 Legion Ladies Auxiliary Parade - Request for Parade Road Closure

Motion: 103-2018

Moved: D. Frayne

Seconded: T. Tomes

That South Huron Council receive the request from the Legion Ladies Auxiliary and approve the parade temporary road closure for the Zone Convention Parade on April 29, 2018.

Disposition: Carried

Council directed the Clerk to send a letter to the Legion Ladies Auxiliary.

13.12 Allen Plant - Request re Event

Council clarified that the donation request was tied to arena staff and rental of the arena floor.

Motion: 104-2018

Moved: C. Hebert

Seconded: T. Oke

That South Huron Council contribute \$1000 through discretionary fund.

Disposition: Carried

Councillor Hebert advised Council that MPP Ernie Hardeman is moving forward with a private members bill for landfill project approval which was supported by South Huron Council resolution #515-2017.

Motion: 105-2018

Moved: C. Hebert

Seconded: T. Oke

That South Huron Council receive communication items not otherwise dealt with.

Disposition: Carried

14. Closed Session

15. Report From Closed Session

16. By-Laws

16.1 By-Law No. 20-2018 - Development Agreement - Kulack B58-2017

Motion: 106-2018

Moved: M. Vaughan

Seconded: C. Hebert

That the South Huron Council gives first, second and third and final reading to By-Law #20-2018, being a by-law to authorize the execution of a Development Agreement between the Municipality of South Huron and Lindsay Kuiack and Andrew Kuiack.

Disposition: Carried

16.2 By-Law No. 21-2018 - Animal Control

Council agreed to amend the draft by-law by adding "and cat" under section 10.1.

Motion: 107-2018

Moved: C. Hebert

Seconded: M. Vaughan

That the South Huron Council gives first, second and third and final reading to By-Law #21-2018, as amended, being a by-law to put in place regulations associated with the control, licencing and registration of animals within the Municipality of South Huron.

Disposition: Carried

16.3 By-Law No. 22-2018 - Hayter - First & Second Reading only

Motion: 108-2018

Moved: C. Hebert

Seconded: D. Frayne

That the South Huron Council gives first and second reading to By-Law #22-2018, being a by-law to amend By-Law #12-1984, being the

Zoning By-Law for the former Township of Stephen for lands known as Conc N BDY N PT Lot 25, Stephen Ward, Municipality of South Huron.

Disposition: Carried

16.4 By-Law No. 23-2018 - Turnbull

Motion: 109-2018

Moved: M. Vaughan

Seconded: T. Oke

That the South Huron Council gives first, second and third and final reading to By-Law #23-2018, being a by-law to amend By-Law #12-1984, being the Zoning By-Law for the former Township of Stephen for lands known as Lot 2, Concession B, Pt Lot 17, Concession 19, Stephen Ward, Municipality of South Huron.

Disposition: Carried

16.5 By-Law No. 24-2018 - BRA Agreement

Motion: 110-2018

Moved: T. Oke

Seconded: C. Hebert

That the South Huron Council gives first, second and third and final reading to By-Law #24-2018, being a By-Law to authorize entering into an Agreement with Bluewater Recycling Association for Waste and Recyclable Co-collection Program Services.

Disposition: Carried

17. Confirming By-Law

17.1 By-Law No.25-2018 – Confirming By-Law

Motion: 111-2018

Moved: T. Tomes

Seconded: M. Vaughan

That the South Huron Council gives first, second and third and final reading to By-Law #25-2018, being a by-law to confirm matters addressed at the March 5, 2018 Council meeting.

Disposition: Carried

18. Adjournment

Motion: 112-2018

Moved: D. Frayne

Seconded: M. Vaughan

That South Huron Council hereby adjourns at 8:27 p.m., to meet again on March 19, 2018 at 6:00 p.m. or at the Call of the Chair.

Disposition: Carried

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

MUNICIPALITY OF SOUTH HURON - 2017 RESERVE ACTIVITY

<u>RESERVES</u>	ACCOUNT NUMBER	BALANCE DEC. 31, 2016	Transfers In			Transfers Out		BALANCE DEC.31,2017	2018 Estimate	
			Contributed from General	Interest Earned	Contr from Capital	Transfer to General	Transfer to Capital		Estimated Amounts Committed to Projects(Contribution)	ESTIMATED BALANCE DEC. 31, 2018
Sewers Capital Replacement Reserve	0410-33-0000-9000	(2,237,608.23)	(468,584.16)				588,042.78	(2,118,149.61)	1,574,182.00	(543,967.61)
GB Sewers Capital Replacement Reserve	0412-33-0000-9000	(227,061.00)	-					(227,061.00)	227,061.00	-
Water Capital Replacement Reserve	0430-33-0000-9000	(4,495,167.08)	(800,000.04)					(5,295,167.12)	755,800.00	(4,539,367.12)
Transportation Capital Replacement Reserve	0310-33-0000-9000	(1,790,615.89)	(787,552.45)				522,666.77	(2,055,501.57)	(233,591.00)	(2,289,092.57)



Corporation of the Municipality of South Huron

Minutes-Public Meeting

Monday, March 5, 2018, 6:00 p.m.

Council Chambers - Olde Town Hall

Members Present: Maureen Cole - Mayor
 Dave Frayne - Deputy Mayor
 Tom Tomes - Councillor - Ward 1
 Marissa Vaughan - Councillor - Ward 1
 Craig Hebert - Councillor - Ward 2
 Ted Oke - Councillor - Ward 3

Member Regrets: Wayne DeLuca - Councillor - Ward 2

Staff Present: Dan Best, CAO
 Don Giberson, Environmental Services Director
 Sarah Smith, Huron County Planner
 Rebekah Msuya-Collison, Clerk

3. Purpose of Public Meeting

The Clerk advised that the purpose of this Public Meeting is to review applications for proposed zoning by-law amendments and to allow interested members of the public the opportunity to ask questions or offer comments with regard to the applications.

It was noted that Council will not make a decision at this meeting. Based on recommendations and information received at this meeting amending by-laws will be presented for approval at the regular Council meeting.

A Public Registry is available, if any member of the public would like to be notified in writing of the decision on any of the applications they are required to provide their name and mailing address on the applicable registry. A person or public body may appeal the decision if they have made an oral submission at this Public Meeting or a written submission to Council prior to the passing of the by-law.

4. Application for D14-04/18 Hayter

4.2 S. Smith, Huron County Planner - Report #D14-04/18

Planner Smith reviewed her report noting the purpose of this application is to change the portion of land to be severed from AG4 (Agricultural Small Holding) to AG2 (Restricted Agriculture. Ms. Smith recommended that this rezoning application be approved and receive first and second reading only at this time. Third and final reading should not be given to the corresponding By-law until after the approval authority, Huron County, has made a decision on Consent Application file #B05/2018. The zoning application and the consent application were submitted concurrently.

Motion: PL#6-2018

Moved: T. Oke

Seconded: D. Frayne

That South Huron Council receives the report from S. Smith, Huron County Planner re: Zoning By-Law Amendment D14-04/2018 - Hayter

Disposition: Carried

4.3 Written Comments Received

None

4.4 Comments-Council; Public in Attendance

None

5. Application for D14-06/18 - Turnbull

5.2 S. Smith, Huron County Planner - Report #D14-06/18

Ms. Smith reviewed her report noting the purpose of this application is to change the zoning on the severed parcel from General Agriculture (AG1) to Agriculture Small Holding (AG4) to recognize a residential use in the agricultural area. The retained lands require a rezoning from General Agriculture (AG1) to General Agriculture Special Provisions (AG1-1) in order to prohibit construction of a new residence as required by the Provincial Policy Statement and the South Huron Official Plan. This zoning by-law amendment is a condition of consent #B70/17.

Motion: PL#7-2018

Moved: T. Tomes

Seconded: C. Hebert

That South Huron Council receives the report from S. Smith, Huron County Planner re: Zoning By-Law Amendment D14-06/2018 - Turnbull

Disposition: Carried

5.3 Written Comments Received

None.

5.4 Comments - Council; Public in Attendance

None

6. Close Public Meeting

Motion: PL#8-2018

Moved: M. Vaughan

Seconded: T. Oke

That South Huron Council now closes this Public Meeting at 6:13 p.m. and reconvenes the Regular Council meeting.

Disposition: Carried

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk



Corporation of the Municipality of South Huron
Committee of the Whole
Minutes

Tuesday, March 6, 2018, 6:00 p.m.
Olde Town Hall-Carling Room

Members Present: Maureen Cole - Member
 Dave Frayne - Member
 Tom Tomes - Member
 Marissa Vaughan - Chair
 Craig Hebert - Member
 Ted Oke - Member

Member Regrets: Wayne DeLuca - Member

Staff Present: Dan Best, CAO
 Rebekah Msuya-Collison, Clerk

1. Meeting Called to Order

Mayor Cole called the meeting to order at 6:02 p.m.

Member Frayne nominated Member Vaughan for Chair. Member Vaughan accepted the Chair position for the meeting.

2. Amendments to the Agenda, as Distributed and Approved by Council

No resolution was passed to amend the agenda.

3. Disclosure of Pecuniary Interest and the General Nature Thereof

None.

4. Reports

4.1 Cat Control - Follow Up

The Committee reviewed the current status of the Animal Control By-Law and discussed the next steps which included the development of an animal control tribunal and terms of reference. The Committee suggested three public members to be appointed to the Animal Control Tribunal. The Committee requested a report with draft terms of reference for the Animal Control Tribunal.

The Committee discussed next steps and options for a cat control program, including partnership opportunities that could be explored with the voucher program. The Committee discussed in detail the possible terms and budget for a voucher program and directed Administration to take a report on a draft voucher program to Council.

4.2 Review of Council Priorities - Updated Workplan

CAO Best asked the Committee to review and re-identify governance priorities that had been established. The Committee then identified additional governance items that they felt should be on the updated workplan. CAO Best advised he will process the results, prioritize and take to council for direction.

7:52 p.m. The Committee noted the time. The Committee agreed to defer Item 4.3 Communication Policy, Item 4.4.2 Special Events By-Law and Item 4.5 Recreation Update until the next Committee of the Whole meeting.

Motion: CW#8-2018

Moved: T. Oke

Seconded: M. Cole

That South Huron Committee of the Whole extend meeting up to one hour.

Disposition: Carried

4.3 Communications Policy

4.4 By-Laws for Review and Direction

4.4.1 Tree By-Law

Motion: CW#9-2018

Moved: M. Cole

Seconded: D. Frayne

That South Huron Committee of the Whole recommend that South Huron Council accept the policy and have the necessary by-law forwarded to Council for approval.

Disposition: Carried

Motion: CW#10-2018

Moved: M. Cole

Seconded: C. Hebert

That South Huron Committee of the Whole recommend to South Huron Council that staff prepare and bring back an all-encompassing tree enhancement and tree protection program.

Disposition: Carried

4.4.2 Special Events By-Law

4.5 Recreation Update

CAO gave the Committee a copy of the South Huron draft communication policy.

5. Adjournment

Motion: CW#11-2018

Moved: T. Oke

Seconded: D. Frayne

That South Huron Committee of the Whole does now adjourn at 8:31 p.m.

Disposition: Carried

Marissa Vaughan, Chair

Rebekah Msuya-Collison, Clerk



SOUTH HURON POLICE SERVICES BOARD

South Huron Municipal Office – Verity Room
Tuesday, February 13, 2018 – 4:05 pm

Members Present

Chair	Jim Dietrich
Vice Chair	Mark Hartman
Member	Maureen Cole
OPP	Inspector Jason Younan Staff Sgt Wendy Burrows
Administration	Jo-Anne Fields

1. Call to Order & Welcome

Chair, Jim Dietrich welcomed the members to the meeting and thanked them for their commitment to policing in South Huron.

2. Election of Officers – Chair/Vice Chair

Position - Chair

Member Cole noted that at the January meeting, the Chair deferred Election of Officers to the February meeting as not all members were in attendance. She questioned if the Board followed the By-law in this regard.

Recording Secretary Jo-Anne Fields called for nominations for the position of Chair for the South Huron Police Services Board for the first time. Mark Hartman nominated Jim Dietrich for the position of Chair.

J. Fields called for nominations for the position of Chair for the South Huron Police Services Board for the second time. J. Fields called for nominations for the position of Chair for the South Huron Police Services Board for the third and final time. There were no further nominations.

Position – Vice Chair

Recording Secretary Jo-Anne Fields called for nominations for the position of Vice Chair for the South Huron Police Services Board for the first time. Jim Dietrich nominated Mark Hartman for the position of Vice Chair.

J. Fields called for nominations for the position of Vice Chair for the South Huron Police Services Board for the second time. J. Fields called for nominations for the position of Vice Chair for the South Huron Police Services Board for the third and final time. There were no further nominations.

Motion - 06/02/18

Moved: Mark Hartman
Seconded: Jim Dietrich

**“THAT we now close nominations and declare the officers positions filled as follows:
 Chair – Jim Dietrich
 Vice Chair – Mark Hartman ”**

Disposition: Carried

3. Conflict of Interest and General Nature Thereof

- No Conflict of Interest declared

4. Changes/Additions to the Agenda

- Date for regular South Huron Police Services Board meetings – Second Tuesday of the month – post on the Municipal website
- Customarily the Board takes one month in the summer off – proper notice can be provided if this transpires
- OAPSB Spring Conference

5. Approval of the Agenda**Motion – 07/02/18**

Moved by: Mark Hartman
Seconded by: Maureen Cole

“THAT the Agenda be approved as amended.”

Disposition: Carried

6. Approval of the Minutes

Motion – 08/02/17

Moved by: Mark Hartman
 Seconded by: Maureen Cole

“THAT the minutes of January 9, 2018 meeting be approved as circulated.”

Disposition: Carried

7. Business arising from the Minutes

- No business arising from the Minutes

8. O.P.P. Report

- Detailed reports were distributed prior to the meeting for review and to allow for effective discussion at the Board meeting
- Reviewed the Crime and Traffic reports for the month of January
- Inspector Younan provided an overview and explanation of the reports with the Board
- Noted that there have been numerous gas drive offs with several being at one location – video surveillance is most helpful in a situation such as this – an arrest has been made
- Canada Revenue Agency – be aware of the scam phone calls and emails
- Criminal Record checks – tracking mechanism in place now to provide stats from year to year
- Have been conducting RIDE Program specific to snow machines
- RIDE program- OPP charged 587 drivers with impaired driving during its annual Festive Reduced Impaired Driving Everywhere (RIDE) campaign from November 24, 2017 to January 2, 2018. Four drivers were charged with Impaired Driving offences in Huron County
- An additional 366 drivers were issued a warning – 1 driver in Huron County was served a Warn Range Suspension
- 9,830 RIDE events were conducted throughout the Province compared to 7,343 the previous festive season
- Huron County OPP led all West Region detachments with 234 RIDE events during the campaign
- Huron County OPP and Huron County Paramedic Services announce the launch to Project Lifesaver – Wednesday, January 17, 2018 – primary goal is to provide a timely response to save lives and reduce the potential for injury for adults and children who may wander due to Alzheimer’s, Autism, Down syndrome, Acquired Brain injury and other cognitive conditions
- Project Lifesaver Huron uses radio frequency technology to assist in locating individuals who may wander off. Pre-registered clients wear a one ounce transmitter, similar to a wristwatch that emits a signal every second. If the person goes missing their caregiver

calls 9-1-1 and indicates that they are registered with Project Lifesaver Huron. Trained OPP officers respond to the client's last known location and begin searching for the lost client. Each transmitter has its own unique frequency. The technology is proven to be very reliable and very effective. Worldwide Project Lifesaver has assisted in over 3,300 rescues

- There is a one-time set up fee of \$400 per unit and a monthly fee of \$10. It is because of the generosity of corporate partners such as Bruce Power & Goderich Place that the fees are nominal
- If you are interested in Project Lifesaver Huron please contact Joanne Hickey, Community Paramedicine Coordinator at (519) 524-8394 extension 3331 or visit www.projectlifesaver.org
- In response to a request at the January meeting regarding managing the complaint process, Inspector Younan provided the Board membership with a pamphlet outlining the details – Office of the Independent Police Review Director (OIPRD)
- The OIPRD makes sure that public complaints against police in Ontario are dealt with in a manner that is transparent, fair, efficient and effective
- For more information on OIPRD, please visit 222.oiprd.on.ca
- Member Hartman Mark questioned if the OPP own snowmobiles – Inspector Younan noted there are two machines in Huron County – in operation, when conditions are acceptable and when resources are available

Motion – 09/02/18

Moved by: Maureen Cole

Seconded by: Mark Hartman

“THAT the O.P.P. Report be received as presented.”

Disposition: Carried

9. Correspondence

- Correspondence is forwarded to Board members as received

10. New Business

- OAPSB Zone 5 Spring Conference – May 23, 24, 25, 2018
- Member Cole will not be attending
- Please advise Secretary as quickly as possible to enable rooms to be reserved
- At the January meeting Secretary was requested to contact other Boards in the OAPSB Zone 5 membership and request their communication Protocol – 25 Boards were contacted with the majority noting that their process mirrors South Huron's – Minutes of the Meeting are provided to Council as information through the Agenda package – Council representative responds to inquiries at Council – only one written protocol was received

- At the training session, one Council member attending suggested that the OPP package be provided to Council – in future, Board Secretary will forward the OPP Report package to the Clerk to be posted on Municipal website
- Reminder that the next OAPSB Zone 5 meeting will be held in Guelph on March 6, 2018
- Jim Dietrich is presently the Chair of the OAPSB Zone 5 and has indicated that he will remain in this position for another year

11. Unfinished Business

- Review and discussion of minutes from November 14, 2017
- Member Cole noted that there was discussion regarding internal and external concerns with communication – feels that this matter has been resolved through the training exercise
- Member Cole inquired if the Chair or Inspector Younan followed up with the Ministry regarding comments that were made at the November meeting
- Inspector Younan noted that he did contact the Ministry, however his conversation surrounded the Role of Section 10 Boards – Chair Dietrich did not contact the Ministry
- Streamline communication
- Lengthy discussion regarding communication protocol and information sharing to and from Council and to and from the CAO

12. Date of Next Meeting

- Next meeting regular will be held at the South Huron Municipal Office on Tuesday, March 13, 2018 at 4:05 pm or sooner at the call of the Chair.

14. Adjournment

Motion – 10/02/18

Moved by: Maureen Cole
Seconded by: Mark Hartman

“THAT the meeting be adjourned at 4:46 pm.”

Disposition: Carried

Chair – J. Dietrich

Recording Secretary – J. Fields

Date



South Huron Communities in Bloom Committee Minutes

**Wednesday, February 7, 2018 – 6:30 p.m.
Verity Room, Olde Town Hall**

Members Present:

Dorothy Henderson, Vice Chair
Glen Nicholson
Beth Cooper
George Wilson
Debbie Mountenay

Staff:

Dave Atthill

1. Meeting Called to Order

Dorothy Henderson, Vice Chair, called the meeting to order at 6:31 p.m. in the Verity Room at the Olde Town Hall.

2. Agenda Update

Calendar

3. Disclosure of Pecuniary Interest and the General Nature Thereof

None

4. Approval of Minutes

4.1 Minutes of the South Huron Communities in Bloom Committee Meeting of January 10, 2018.

Motion: 4-2018
Moved: Debbie Mountenay
Seconded: George Wilson

That the minutes of the January 10, 2018 meeting are hereby approved as presented.

Disposition: Carried

5. Discussion

5.1 **Home and Leisure Show**

The date is set for April 6th and 7th, 2018.

Dorothy talked to Denomme Leyton about doing the pumpkin information session on Friday night.

5.2 **Tree Flyer**

Tree flyer is complete. Print off 50 copies for distribution at next meeting.

5.3 **Facebook**

Debbie has volunteered to be administrator of the Facebook page.

Discussion on promotion of Communities in Bloom on social media and in all Communities in Bloom promotional material should include "follow us on Facebook".

5.4 **Pumpkin Contest**

Dorothy has lined up supplier Denomme Leyton for 200 pumpkin seeds at no cost. The pumpkin seed supplier will do a presentation at the Home and Leisure Show. Participants must be 14 and under in age.

5.5 **Memorial Garden at Huron Village**

Design is being worked on by a volunteer. Design to be completed and approved by Committee/Council. George has people lined up to do watering, if needed.

5.6 **Profile Book**

Bonnie Sitter is not interested in writing the profile book. Dorothy was putting together examples of profile books from other Municipalities that have more pictures and a little less written information. This information would be sent to Dan Best for review and input.

The profile book is not included in the scoring system as part the Judging for Communities in Bloom. The profile book is to give the judges a look at the community before they arrive. We can focus on more pictures of new activities in South Huron.

5.7 **Back Yard Oasis Landscape Area**

After review of the contest rules, The Back Yard Oasis is for non-commercial landscape areas.

5.8 **Communities in Bloom Pamphlet**

100 pamphlets were printed and distributed.

5.9 **Tree Video**

The tree video, *Call of the Forest*, is to be promoted for 14 years and older. The viewing will be held Monday, April 23 at the Exeter Library.

Viewing rights cost \$150. Will search for sponsor or charge fee for the showing. Also, we will need to develop a flyer and promote event on Facebook.

5.10 Barn Quilt Update

George is doing two Barn Quilts that are 2 feet x 2 feet with the CIB logo on the sign.

Dave is to verify that South Huron Communities in Bloom can use the National Communities in Bloom logo.

Bonnie Sitter is to take pictures of Barn Quilts.

The Barn Quilt brochure will be on two pages do to the increased numbers. Pictures and write ups can be made larger.

Discussion on completing the Barn Quilt brochure with the Barn Quilts participants that are complete. It is necessary to have time to set up brochure layout and printing in order to be completed before Home & Leisure Show.

Motion: 5-2018
Moved: Dorothy Henderson
Seconded: Beth Cooper

That the South Huron Communities in Bloom Committee moves forward with completion of the Barn Quilt brochure.

Disposition: Carried

5.11 Downtown Clean Up

Dorothy is to draft a letter supporting all the efforts of the downtown businesses for keeping the downtown core looking clean and pleasant year round.

6. Communications

Community in Bloom National sent information on Youth Green Jobs Funding Opportunity.

Funding for the Youth Green Jobs Funding Opportunity Program is being made possible by the Canadian Parks and Recreation Association (CPRA) and the Government of Canada initiative to hire Youth for Green Jobs. More detailed information on grant requirements expected in mid – February.

7. New Business

Dave Atthill brought forward information he received from Canadian Parks and Recreation Association.

The Canadian Parks and Recreation Association (CPRA), recently members of Parks Recreation Ontario (PRO), are conducting a survey asking for feedback on The Framework for Recreation in Canada.

Municipalities are utilizing the framework to ensure their recreation programs, facilities, spaces, and community associations are aligning with the five goals. The 5 goals are:

1. Active Living
2. Inclusion & Access
3. Connecting people and nature
4. Supportive Environments
5. Recreation Capacity

Although the framework is for the recreation and parks field, it does have some of the same visions as Communities in Bloom which are individual wellbeing, Community wellbeing and wellbeing of our natural and built environments.

CIB members will be sent the link and review - The Framework for Recreation in Canada - and discuss at the next meeting.

Beth Cooper confirmed the Judges' Supper BBQ will be hosted at Thames Road. Dave Atthill confirmed that there is \$10,000 in the tree replacement reserve from Goshen Wind Turbine Project.

8. Adjournment

Motion: 6-2018
Moved: Beth Cooper
Seconded: Glen Nicholson

That the South Huron Communities in Bloom Committee hereby adjourns at 7:46 p.m., to meet again on March 7, 2018 at 6:30 p.m. in the Verity Room, Olde Town Hall or at the Call of the Chair.

Disposition: Carried

Dorothy Henderson, Vice Chair

David Atthill, Recording Secretary



**Corporation of the Municipality of South Huron
Community Hub/Recreation Project Steering Advisory Committee**

Agenda

February, 27 2018

6:00 PM – 8:00 PM

Carling Room

Members:

Councillor Craig Hebert
Councillor Ted Oke
Craig Ivatts
Peter Hrudka
Mike Ondrejicka
Ron Mayer
Dawn Rasenberg
Robert Oud

Regrets:

Brandon Babbage
Mayor Maureen Cole Ex-Officio

Staff:

Dan Best, CAO
Megan Goss, Recording Secretary

1. Call To Order

The Chair called the meeting to order at: 6:01 PM.

2. Agenda

Motion: 6-2018

Moved: Ondrejicka

Second: Ivatts

Disposition: Carried

That the Agenda for February 27, 2018 be approved, as presented

3. Disclosure of Pecuniary Interest and the General Nature Thereof

None

4. Minutes

Motion: 7-2018

Moved: Oud

Second: Hrudka

Disposition: Carried

That the minutes for February 15, 2018 be approved, as amended to include Nancy Orr of MACORR Holdings as a visitor and presenter for item 4.6.

5. Business Arising

5.1 Item 4.6 from the February 15th meeting.

Staff, in consultation with Nancy Orr discussed going out the public to capture feedback and it was the recommendation of the consultant that it may be premature to go to the public at this time as the Committee has not yet established key messaging yet to make recommendations to Council.

6. Business to be Discussed:

6.1 Team Building

6.1.1 Introduction

Introductions were led by the Chair.

6.1.2 Mission

6.1.3 Vision

6.1.4 Values

The Chair led a discussion noting consistent themes in source documents such as the 2014-2018 Council Strategic Plan, and the Committee Terms of Reference. Consistent themes are captured in the chart below:

Mission	Vision	Values
Committee Purpose	Existing Vision	Understanding
Committee Interests Represented	Adopted From Strategic Plan	Unity
Sustainable		Community Based
Green		Fiscal Responsibility
Innovative		Quality
Diversity		Inclusive
Advocacy/Champion		Age friendly
		Informed
		Collaborate

6.1.5 Project Scope

Re-affirming the project scope at this time as approved by Council to move forward through Feasibility (Feasibilities Study):

- It may include a single pad – with the potential to add a second pad
- It may include an indoor pool
- It will be energy efficient
- Council has committed \$7.5 million through the levy
- \$5 million must be raised through fundraising and sponsorship
- The Community Hub has yet to be defined
- A feasibility study(studies) must be completed

Motion: 8-2018

Moved: Oud

Second: Ondrejicka

Disposition: Carried

That staff work with the chair to draft a Mission, Vision and Values for the Project Steering Committee's review at the next meeting.

Committee expressed interest in visiting other complexes in our area and speaking with staff.

The committee agreed to bring back a list of items they would like to see in or be a good idea for the facility.

An agenda item for the next meeting will be precedence, how the committee is going to move forward with collecting information on precedence.

High School Engagement method could be a design competition for the facility.

7. Correspondence:

7.1 Proposal for YMCA Community Development Services

7.2 YMCA Partnership Brochure

Motion: 9-2018

Moved: Ondrejicka

Second: Ivatts

Disposition: Carried

That the Community Hub/Recreation Project Steering Advisory Committee recommends that: Council engage the YMCA as outlined in their proposal to provide community development services.

8. Adjournment

Motion: 10-2018

Moved: Hebert

Second: Mayer

Disposition: Carried

That the Community Hub/Recreation Project Steering Advisory Committee hereby adjourn at 8:20 PM to meet again on March 13 at 6:00 pm or at the Call of the Chair.

Dawn Rasenberg, Chair

Megan Goss, Recording Secretary

**UPPER THAMES RIVER
CONSERVATION AUTHORITY**

"Inspiring a Healthy Environment"

The Thames
A Canadian
Heritage River



March 9, 2018

South Huron
322 Main Street, South
Box 759
Exeter, ON N0M 1S6

RECEIVED
RM 1318D

Attention: Rebekah Msuya-Collison, Clerk

Dear Ms. Msuya-Collison:

The Upper Thames River Conservation Authority (UTRCA) hosted its Annual General Meeting on February 22, 2018. As part of this meeting the Board of Directors approved the 2018 Budget which includes revenue generated from municipal levy as authorized under the *Conservation Authorities Act*. This notice and levy invoice is being provided via registered mail to the Clerk of each member municipality and stipulates the amount of levy owing for 2018 along with the basis for levy apportionment.

Conservation Authority levies are apportioned to their member municipalities based on relative benefits received. Apportionment of the municipal levy for 2018 has been established in accordance with the formula set forth in Ontario Regulation 670/00 which assesses benefit pursuant to the modified current value assessment (CVA) of each municipality. A second method of apportionment is used for much of the flood control section of the levy which considers benefits received from the flood control structure itself (e.g., Wildwood Dam) rather than using current value assessment. Apportionment values are detailed in the 2018 UTRCA Municipal Levy table at the back of the budget document.

The UTRCA's Board of Directors approved two resolutions regarding the budget (see below). The first approves an overall operating budget of nearly \$15 million. The second approves capital expenditures of nearly \$6.5 million. Note that municipal levy is only a portion of these total amounts:

- 1. That the UTRCA Board of Directors approve the 2018 Draft Operating Budget under Section 27 of the *Conservation Authorities Act* in the amount of \$14,929,033 and that staff be directed to circulate the Approved Budget to member municipalities as part of the required 30 day review period. Please note the levy component of the operating budget of \$4,988,777 will be apportioned to member municipalities based on a general levy formula as developed by the Ontario Ministry of Natural Resources and Forestry using Current Value Assessment data from the Municipal Property Assessment Corporation.**
- 2. That the UTRCA Board of Directors approve the 2018 Capital Budget under Section 26 of the *Conservation Authorities Act* in two parts:**
 - a) The amount of \$5,998,704 to support the Authority's 20 year Flood Control Capital Plan. Apportionment of the flood control portion of the capital levy of**

\$2,130,933 is based on Special Benefiting Percentages, by structure, as presented in the 2018 Draft Budget. It is noted this levy amount has been set based on cooperative discussions with participating municipalities and assumes that the majority of the works will receive a matching funding contribution through the provincial Water and Erosion Control Infrastructure Program (WECI).

- b) The amount of \$479,500 to support the Authority's other (non-flood control) capital spending needs. The municipal levy share of this capital amount is \$168,324 and will be apportioned to member municipalities based on a general levy formula as developed by the Ontario Ministry of Natural Resources and Forestry using Current Value Assessment data from the Municipal Property Assessment Corporation.**

A bound copy of the 2018 Approved Budget is attached for your reference.

This letter and attachments have been forwarded to your municipal clerk by registered mail as required by the *Conservation Authorities Act* and triggers the beginning of the thirty day notice period, during which time municipalities have the right to consider an appeal of the levy.

Should you have any questions regarding the UTRCA's Approved Budget please contact the undersigned.

Yours truly
UPPER THAMES RIVER CONSERVATION AUTHORITY



Ian Wilcox
General Manager/ Secretary Treasurer

Attachments:

1. UTRCA 2018 Approved Operating Budget
2. Levy Invoice

cc: Dan Best, CAO



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Sandy Becker, Financial Services
Manager/Treasurer**
Date: March 19 2018
Report: FIN.18.05 Q4 Operating Budget Variance Report
Subject: Fourth Quarter (Draft) Operating Variance Report

Recommendations:

That South Huron Council receives the report from S. Becker, Financial Services Manager/Treasurer re: Fourth Quarter (Draft) Operating Variances for information only.

Purpose:

The purpose of this report is to update South Huron Council regarding the (draft) operating performance as of December 31, 2017.

Background and Analysis:

The department managers are accountable to monitor their departmental revenues and expenditures and project to the end of the fiscal period to ensure that they remain within the approved budget.

The quarterly financial report represents the municipal financial activity for the period ending December 31, 2017 on a basis consistent with that of the budget adopted by Council.

Fourth quarter highlights are provided per department on the respective statements attached and are expressed as draft (unaudited) figures.

Operational Considerations:

As this report is being presented for information purposes only, no alternatives are presented.

South Huron's Strategic Plan:

The recommendation(s) included in this Staff Report support the following goals identified in the 2015-2019 Strategic Plan:

Administrative Efficiency and Fiscal ResponsibilityTransparent, Accountable and Collaborative Governance

The quarterly variance reporting framework assists managers in identifying emerging issues along with steps or processes required to adjust activities to stay within the budget or to respond to those emerging issues.

The consistency of providing these accountability and information reports assist council in better understanding the operational and budgetary issues facing various costing centres.

Financial Impact:

The figures expressed in this report are unaudited, and therefore, draft variances for the fiscal year ended December 31, 2017. Appendix A contains the operational variance analysis by department. As a result of year end procedures and audit processes there may be transactions between the date of this report and the release of the audited financial statements.

At this time it is expected that the levy based budgets will realize an overall tax surplus for the 2017 fiscal year, resulting in no adverse financial impacts. A final report will be forwarded to Council post-audit. The user fee based budgets reflect an operating surplus overall.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

Budget Development and Financial Reporting Policy & Procedure

Reserves and Reserves Fund Policy & Procedure

Consultation:

The following department managers provided an update on each of their respective areas of responsibility;

Dwayne McNab, Development Services Manager
 Andrew Baird, Emergency Services Manager/Fire Chief
 Jo-Anne Fields, Community Services Manager
 Don Giberson, Environmental Services Director

Related Documents:

Appendix A – Actual vs Budget Year to Date by Department for the year ended December 31, 2017

Respectfully submitted,

Sandy Becker, Financial Services Manager/Treasurer

Appendix A: Actual vs Budget Year to Date by Department

For the year ended December 31, 2017 – Unaudited Figures

Building & Development Services

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Fines/Penalties¹	5,500	1,300	(4,200)	23.64%
Other Revenue²	35,000	5,068	(29,932)	14.48%
Permits/Licenses	199,730	277,575	77,845	138.97%

¹ Fines and penalties were lower than anticipated.

² Variable revenues are budgeted based on historical averages and depend on public requests. Includes rebilling for professional services which were not required and is offset by lower contracted services expenses.

Transfer from Reserves³	44,456	0	(44,456)	0.00%
User Fees/Charges⁴	26,500	42,957	16,457	162.10%
Total Revenue	311,186	326,900	15,714	105.05%
Expense:				
Contracted Services⁵	102,182	30,502	(71,680)	29.85%
Materials⁶	75,691	29,775	(45,915)	39.34%
Transfer to Reserves⁷	3,230	90,162	86,932	2,791.39%
Wages & Benefits⁸	290,318	232,409	(57,909)	80.05%
Total Expense	471,421	382,849	(88,572)	81.21%
Net Total	(160,235)	(55,949)	104,286	34.92%

Cemetery Services

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Cemetery	88,300	84,789	(3,511)	96.02%
Donations/Fundraising	350	1,195	845	341.29%
Grant Revenues	0	0	0	0.00%
Investment Income⁹	17,400	13,812	(3,588)	79.38%

³ No transfer was required for the building department as the user fees and other revenues sustained the associated expenses.

⁴ Another variable revenue source that is driven by public demand and building demands.

⁵ Contracted services are correlated with other revenues as rebills for professional services would be seen here. Fewer professional services were required in 2017.

⁶ A software upgrade and recertification was delayed due to staffing changes and turnover. Moreover, training and conferences that were planned were not attended due to the staffing as well.

⁷ The building department ended up with an operational surplus and this amount, as per legislation, must be transferred to reserve for future use if/when necessary.

⁸ Staffing changes and turnover resulted in lower than anticipated wages and benefits.

⁹ The variance in the investment income is correlated to the increase in interest rates. Cemetery investments include a bond portfolio and when interest rates rise the market value of bonds decrease in the short term. This is due to the fact that if the bond was sold before maturity it would be sold at a discount to compensate for the new bonds issued with higher rates of return. Since we hold the bonds until maturity the returns and principal are still guaranteed. It is important to note that

	Total Revenue	106,050	99,796	(6,254)	94.10%
	Expense:				
	Contracted Services	4,839	4,623	(216)	95.54%
	Materials	49,495	42,640	(6,855)	86.15%
	Transfer to Reserves¹⁰	10,080	7,126	(2,954)	70.69%
	Wages & Benefits¹¹	83,101	85,573	2,472	102.97%
	Total Expense	147,516	139,962	(7,553)	94.88%
	Net Total	(41,466)	(40,166)	1,299	96.87%

Emergency Services

		Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
	Revenue:				
	Donations/Fundraising¹²	22,700	12,169	(10,531)	53.61%
	Grant Revenues¹³	25,000	34,120	9,120	136.48%
	Other Revenue¹⁴	4,000	7,845	3,845	196.13%
	User Fees/Charges¹⁵	18,941	43,422	24,480	229.24%
	Total Revenue	70,641	97,556	26,914	138.10%
	Expense:				

Municipalities are governed by strict investment regulations and the bond funds are managed by OneFund (LAS) and include only highly rated companies from a pre-approved (legal) list.

¹⁰ A portion of the transfer to reserves is a percentage of niche sales, year end reserve transfer yet to be finalized. The capital replacement reserve transfer was on par with the budget.

¹¹ Summer student was unable to finish season, therefore full time staffing resources were used.

¹² Donations are offset by a matching purchasing expense under materials. They are an estimate from the Fire Association and dependent on their fundraising outcomes during the year. Since donations are slightly less than expected materials follows suit.

¹³ These are variable revenues from other municipalities as per the Fire Agreement and are dependent on number and location of emergency calls.

¹⁴ This is the sale of the ladder truck for the 2016 replacement.

¹⁵ Budgeted based on historical averages and are dependent on emergency calls.

Contracted Services¹⁶	100,860	79,289	(21,571)	78.61%
Materials¹⁷	239,753	222,056	(17,696)	92.62%
Transfer to Reserves	169,686	172,417	2,731	101.61%
Wages & Benefits¹⁸	430,709	410,959	(19,751)	95.41%
Total Expense	941,008	884,720	(56,288)	94.02%
Net Total	(870,366)	(787,165)	83,202	90.44%

General Administration

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Fines/Penalties	193,230	190,793	(2,437)	98.74%
Grant Revenues	1,373,013	1,371,392	(1,621)	99.88%
Investment Income¹⁹	70,000	107,456	37,456	153.51%
Other Revenue²⁰	2,500	14,900	12,400	595.99%
Permits/Licenses	12,200	9,156	(3,044)	75.05%
Taxation Levy	8,010,330	8,077,779	67,449	100.84%
Transfer from Reserves²¹	120,767	53,641	(67,126)	44.42%
User Fees/Charges	21,400	26,902	5,502	125.71%
Total Revenue	9,803,440	9,852,018	48,578	100.50%

¹⁶ The contracted services represent dispatch and snow removal. Snow removal costs appear less than anticipated due to the mild winter in early 2017.

¹⁷ Materials is slightly less than expected due to reduced donations that offset this expense as some planned purchases are dependent on the Association's funding. A few other purchases had quotes that came in over budget and were postponed.

¹⁸ Volunteer staffing costs are dependent on calls and responses and are based on historical averages. Slight variation from budget is expected.

¹⁹ In 2017 the Bank of Canada increased rates twice. On average South Huron was earning approximately \$7,000 monthly up to \$15,000 for December. This increase is a combination of favourable interest rates as well as timing of cash outlays affecting average monthly balance.

²⁰ This includes a one time revenue from Scotiabank for the banking implementation in 2017.

²¹ The reserve transfer was not required due to work being carried forward into 2018. The website RFP was completed in early 2018 and the brick work on Town Hall was tendered in 2018 due to no bids when it was tendered in 2017.

Expense:				
Contracted Services	1,997,274	1,983,993	(13,281)	99.34%
External Transfers	272,772	272,700	(72)	99.97%
Grant Expenses	67,784	58,730	(9,054)	86.64%
Materials²²	317,840	240,280	(77,559)	75.60%
Transfer to Reserves²³	51,287	97,556	46,269	190.22%
Wages & Benefits²⁴	1,006,250	1,046,416	40,166	103.99%
Total Expense	3,713,206	3,699,675	(13,531)	99.64%
Net Total	6,090,234	6,152,343	62,109	101.02%

Recreation and Cultural Services

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Donations/Fundraising²⁵	18,800	49,435	30,635	262.95%
Grant Revenues²⁶	23,088	46,016	22,928	199.31%
Other Revenue²⁷	10,378	25,707	15,329	247.71%
User Fees/Charges²⁸	716,085	662,644	(53,441)	92.54%
Total Revenue	768,351	783,802	15,451	102.01%
Expense:				

²² \$20,000 in brick pointing has been carried into 2018 along with the financial software purchase awaiting further detailed analysis to ensure effectiveness and efficiency.

²³ Transfers to reserve are in excess due to the carryforward projects identified above.

²⁴ Change in position allocation from Building/Planning to General Admin was not known at the time of the budget preparation.

²⁵ Increased advertising in the arenas has been successful. This line also includes donation from Healthy Kids (Huron County) for bottle filling stations. Approximately \$24,000 was raised for the rodeo in total.

²⁶ A \$40,000 contribution from the Municipality of Bluewater was received to offset prior year underfunding of the Dashwood Community Centre.

²⁷ A grant from Farm Credit Canada in the amount of \$10,000 was received for the Washrooms at McNaughton Park. The application was submitted by the Optimist club and is included in the transfer to reserve figure.

²⁸ User fee revenues are under budget related to reduction in hall rentals overall and ice rental rebates for minor sports programs approved after budget was adopted.

Contracted Services²⁹	98,330	79,555	(18,775)	80.91%
Debt - Interest Payments	31,609	31,609	0	100.00%
Debt - Principal payments	33,132	33,132	(0)	100.00%
Grant Expenses	30,591	30,591	0	100.00%
Materials³⁰	755,886	801,104	45,218	105.98%
Transfer to Reserves³¹	104,204	127,168	22,964	122.04%
Wages & Benefits	986,092	953,698	(32,394)	96.71%
Total Expense	2,039,844	2,056,857	17,013	100.83%
Net Total	(1,271,493)	(1,273,055)	(1,562)	100.12%

Transportation Services

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Grant Revenues³²	41,777	38,592	(3,185)	92.38%
Other Revenue³³	40,000	109,618	69,618	274.04%
Permits/Licenses	0	600	600	0.00%
User Fees/Charges	14,476	14,476	0	100.00%
Total Revenue	96,253	163,286	67,033	169.64%
Expense:				
Contracted Services³⁴	28,856	22,772	(6,084)	78.92%

²⁹ Staff completed some of the tasks initially budgeted for under contracted services and the costs are carried in wages/benefits and materials. Example: some plumbing and general facility maintenance at the SHRC.

³⁰ Utilities were higher than predicted due mainly to arenas as the ice was put in by mid-August with August and September being unusually warm months requiring the compressors to work overtime. Supplies and services contained IPM charges that were not initially included in the budget and two bottle filling stations that were offset by an increase in revenues for \$10,000 from Healthy Kids. This was in addition to the budget.

³¹ Includes the \$10,000 FCC grant for the washrooms and the rodeo surplus for future use.

³² These revenues total 50% of the grant expenses and are for the drainage superintendant.

³³ This represents rebills, public service requests, sale of tangible capital assets and additional revenues from Goshen Wind for road repairs and tree replacement. An offsetting reserve transfer for the sale of assets as well as tree replacement.

³⁴ Contracted services is slightly low due to the relatively mild winter of 2016/2017 and the bulk of the winter for 2017/2018 arrived mid-late December.

Debt - Interest Payments	1,989	1,989	0	100.00%
Debt - Principal payments	40,937	40,937	0	100.00%
Grant Expenses	83,555	77,185	(6,370)	92.38%
Materials	1,205,581	1,146,294	(59,287)	95.08%
Transfer to Reserves³⁵	690,497	776,541	86,044	112.46%
Wages & Benefits	912,003	844,648	(67,355)	92.61%
Total Expense	2,963,418	2,910,365	(53,053)	98.21%
Net Total	(2,867,165)	(2,747,079)	120,086	95.81%

Sewer Services

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Fines/Penalties	0	2,942	2,942	>100%
Other Revenue³⁶	30,000	26,313	(3,687)	87.71%
User Fees/Charges³⁷	1,963,518	1,814,991	(148,527)	92.44%
Total Revenue	1,993,518	1,844,246	(149,272)	92.51%
Expense:				
Contracted Services	286,155	282,130	(4,025)	98.59%
Debt - Interest Payments	419,675	403,018	(16,657)	96.03%
Debt - Principal payments	322,291	303,848	(18,443)	94.28%

³⁵ As a result of lower than expected winter control costs in 2017 a surplus of \$43,209 was transferred to reserve for use in future per reserve policy.

³⁶ The items included in this budget line are all dependent on public service requests and prepared based on average historical collections. The amount has a high degree of volatility. Other revenue would include items such as frontage costs, rebills and service requests.

³⁷ The budget was prepared for user fees by calculating the consumption from the four previous quarters and quantified using the 2017 Council approved rates. Water/sewer consumption is variable and increasingly volatile for large scale users.

Materials³⁸	287,606	357,831	70,225	124.42%
Transfer to Reserves	468,584	468,584	0	100.00%
Wages & Benefits³⁹	185,015	207,303	22,289	112.05%
Total Expense	1,969,326	2,022,714	53,389	102.71%
Net Total	24,192	(178,468)⁴⁰	(202,661)	-737.70%

Solid Waste Services (Landfill)

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Other Revenue⁴¹	34,000	23,509	(10,491)	69.14%
Transfer from Reserves⁴²	0	71,179	71,179	>100.00%
User Fees/Charges	1,133,326	1,153,352	20,026	101.77%
Total Revenue	1,167,326	1,248,040	80,714	106.91%
Expense:				
Contracted Services	557,781	556,553	(1,229)	99.78%
Materials⁴³	362,557	409,764	47,208	113.02%

³⁸ Utilities were greater than expected due to having to run two blowers at the pumping station. The aeration upgrades capital project will address the issue and is expected to have a positive impact on future utility costs. Repairs and maintenance was also over budget due to unforeseen pump repair costs.

³⁹ Water and Sewer departments share staffing resources and although sewer contains an unfavourable variance the water department contains an offsetting favourable variance.

⁴⁰ This is an unfunded deficit that will be addressed through the water/sewer rates study in 2018.

⁴¹ Other revenues are generally figures that are volatile and based on historical averages.

⁴² During operations in 2017 there were some unanticipated expenses, like the taxation structure (below). As a full cost recovered department there is a reserve in which surplus funds are added when available and drawn upon when necessary.

⁴³ This account includes a change in tax structure (MPAC) for landfill sites that occurred in 2017. At the time of the budget preparation there were no impact estimates available. There was a substantial increase in property taxes paid to the Municipality of Bluewater as a result. Additionally, vehicle expenses were high due to in-house completion of some of the landfill entrance roadwork.

Transfer to Reserves⁴⁴	124,063	107,286	(16,777)	86.48%
Wages & Benefits	174,232	174,438	206	100.12%
Total Expense	1,218,632	1,248,040	29,408	102.41%
Net Total	(51,306)	(0)	51,306	0.00%

Streetlighting

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
General Revenue	161,579	161,188	(391)	99.76%
Transfer from Reserves⁴⁵	0	46,193	46,193	0.00%
Total Revenue	161,579	207,382	45,803	128.35%
Expense:				
Materials⁴⁶	138,000	89,239	(48,761)	64.67%
Transfer to Reserves⁴⁷	23,580	118,066	94,486	500.70%
Wages & Benefits⁴⁸	0	77	77	0.00%
Total Expense	161,580	207,382	45,801	128.35%

⁴⁴ The perpetual care transfer to reserve is based on tonnage during the year. This was lower than expected resulting in a lower reserve transfer required for perpetual care of the landfill.

⁴⁵ Transfer from reserve to balance streetlight. This transfer was funded from prior year operating surpluses with those funds restricted for use on streetlighting.

⁴⁶ The budget was prepared on historical data with limited information about the potential savings realized through the LED Conversion project. Future budgets will be more accurate as better information becomes available.

⁴⁷ There is an \$86,405 transfer to reserve for the repayment of the internal loan from the Transportation Capital Replacement Reserve. The internal loan payment was not initially included in the budget due to the ambiguity surrounding final costs and that it is an internal accounting entry between reserves. The remainder is area specific surpluses in operations transferred to the respective reserves for future use.

⁴⁸ Staff time for work completed on Exeter Streetlights. This was not a budgeted item and was not covered under the RealTerm Energy Contract.

Net Total	(1)	0	1	0.00%
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Water Services

	Budget	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:				
Fines/Penalties⁴⁹	18,000	16,701	(1,299)	92.78%
Other Revenue⁵⁰	50,000	63,338	13,338	126.68%
Transfer from Reserves⁵¹	25,000	11,893	(13,107)	47.57%
User Fees/Charges	3,797,470	3,753,003	(44,468)	98.83%
Total Revenue	3,890,470	3,844,934	(45,536)	98.83%
Expense:				
Contracted Services⁵²	88,500	44,922	(43,578)	50.76%
Debt - Interest Payments	557,249	556,945	(304)	99.95%
Debt - Principal payments	421,847	422,151	304	100.07%
Materials⁵³	999,475	930,967	(68,509)	93.15%
Transfer to Reserves⁵⁴	800,000	804,815	4,815	100.60%
Wages & Benefits⁵⁵	545,045	527,736	(17,308)	96.82%
Total Expense	3,412,116	3,287,537	(124,579)	96.35%
Net Total	478,354	557,397	79,043	116.52%

⁴⁹ This figure is based on historical figures as well and is subject to volatility.

⁵⁰ This contains approximately \$30,000 in interest on general investments allocated to water services.

⁵¹ The transfer is the amount of Development Charges actually collected for water services as per the DC study.

⁵² A water/sewer rates study was included in the budget and has since been tendered in early 2018.

⁵³ Utilities were slightly lower than expected as well as repairs and maintenance.

⁵⁴ Operating carryforward amounts were transferred to reserve as per Resolution #508.

⁵⁵ Water and Sewer departments share staffing resources and although sewer contains an unfavourable variance the water department contains an offsetting favourable variance.



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Don Giberson, Environmental Services Director**
Date: March 19 2018
Report: ESD.18.07
Subject: 2017 Annual Performance Assessment Summary Report for the Exeter Wastewater Treatment Facility

Recommendations:

That South Huron Council receive the report from D. Giberson, ESD Director
RE: 2017 Annual Performance Assessment Summary Report for the Exeter Wastewater Treatment Facility.

Purpose:

The purpose of this report is to notify Council of regulatory compliance with respect to the submission to the Ministry of the Exeter Wastewater Treatment Facility Annual Performance Assessment Report.

Background and Analysis:

The Owners of a Wastewater Treatment Facility (WWTF) are required to annually report analytical results of sewage sampling to the Ministry of the Environment and Climate Change (MOECC) in accordance with the Environmental Compliance Approval (ECA). The ECA for the Exeter Wastewater Treatment Facility requires the Owner to prepare and submit to the MOECC Sarnia and Windsor District Office an Annual Performance Assessment Summary Report for the facility within ninety (90) calendar days of the end of the year being reported on.

Municipal facilities that discharge wastewater into an open water course must ensure the quality and quantity of wastewater complies with the

Environmental Compliance Approval (ECA), applicable legislation, policies and guidelines for sampling wastewater discharge; shall analyze the wastewater discharge samples and regularly report the results to the MOECC.

Raw sewage and final effluent are sampled and monitored at frequencies required under the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)". Raw sewage is sampled monthly for BOD5, Suspended Solids, TKN and Total Phosphorus. When discharging final effluent is sampled weekly for BOD5, Suspended Solids, Ammonia + Ammonium, TKN and Total Phosphorus. Any exceedances are immediately reported to the MOECC Sarnia and Windsor District Office.

Sewage by-passes are reported immediately to the MOECC Spills Action Centre (SAC) with follow up documentation/sampling provided to the MOECC Sarnia and Windsor District Office. Sampling results, flows and any bypasses are summarized on a monthly basis and reported to the MOECC Sarnia and Windsor District Office on a quarterly basis throughout the year under the Municipal Utility Monitoring Program (MUMP).

The 2017 Annual Performance Assessment Summary Report for the Exeter Wastewater Treatment Facility was prepared and submitted by email to the MOECC Sarnia and Windsor District Office on March 5, 2018.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

Informing Council of regulatory compliance, reduces liability and results in efficient use of time/resources.

Increased Communications and Municipal Leadership

Communicating information to Council related to performance of the Exeter Wastewater Treatment Facility, keeps Members of Council informed and assists Council in making informed decisions.

Transparent, Accountable and Collaborative Governance

Public reporting of the Exeter Wastewater Treatment Facility Annual Performance Assessment Summary Report, demonstrates commitment to transparent, accountable and collaborative governance.

Dedicated Economic Development Effort

Informing Council of regulatory compliance, results in increased public confidence; retention/attraction of businesses and economic development opportunities.

Financial Impact:

There are no financial implications for the Corporation resulting from the proposed recommendation.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Ontario Water Resources Act, R.S.O. 1990, c. O.40
2. Ontario Water Resources Act, R.S.O. 1990, c. O.40
3. Exeter Wastewater Treatment Facility ECA - NUMBER 6088-9FEREP
4. MOECC Sampling Procedure F-10-1

Consultation:

Water/Sewer Foreman and Wastewater System “Over-All-Responsible Operator” complied the information and submitted the report to the Ministry.

Related Documents:

1. 2017 Annual Performance Assessment Summary Report for the Exeter Wastewater Treatment Facility

Respectfully submitted,

A handwritten signature in black ink, enclosed within a faint rectangular border. The signature is stylized, with a large loop at the top and several vertical strokes in the middle.

Don Giberson, Environmental Services Director

MUNICIPALITY OF SOUTH HURON
Performance Assessment Report - Wastewater Treatment Plant

Project: Exeter Lagoons

Project Number:

Works Number: 110000221

Description:

Year: 2017

Receiver: Ausable River

Design Avg Day Flow(m3): 7051

Raw Flow Group Selected:

Effluent Group Selected:

Month	Flows				BioChemical O2 Demand				Suspended Solids				Phosphorus				Nitrogen Series				<-E.Coli -> Ave Eff Geo. Mean per 100ml
	Total Flow m3	Avg Day m3	Max Day m3	Effluent	Avg Raw BOD mg/L	Avg Eff CBOD mg/L	BOD Loading kg/d	Percent Removal	Avg Raw SS mg/L	Avg Eff SS mg/L	SS Loading kg/d	Percent Removal	Avg Raw Phos. mg/L	Avg Eff Phos. mg/L	Phos. Loading kg/d	Percent Removal	Avg Eff NH3+NH4 mg/L	NH3+NH4 Loading kg/d	Avg Eff Nitrate mg/L	Avg Eff Nitrite mg/L	
JAN	180,296	7,839	54,144		52.7				74.3				1.3								
FEB	128,584	4,592	8,781	203,524	116.3	7.5	69.38	94%	73.6	6.3	58.28	91%	2.7	0.24	2.22	91%	8.13	75.21	0.59	0.07	458.00
MAR	133,492	4,603	15,907		123.7				132.0				3.2								
APR	153,285	5,933	14,351	177,992	87.7	4.0	37.47	95%	68.3	2.0	18.74	97%	1.9	0.40	3.74	79%	0.13	1.21	5.75	0.06	2.88
MAY	170,583	5,502	21,312	207,662	60.3	4.0	26.79	93%	17.3	2.0	13.39	88%	0.5	0.28	1.87	44%	0.10	0.67	6.56	0.03	3.17
JUN	72,114	2,403	5,012	188,108	136.0	4.0	25.08	97%	99.0	2.0	12.54	98%	3.7	0.24	1.50	94%	0.10	0.62	4.97	0.03	6.07
JUL	59,913	1,932	9,168	214,983	98.6	4.0	27.74	96%	42.7	2.5	17.33	94%	1.9	0.28	2.01	85%	0.10	0.69	2.52	0.03	2.63
AUG	51,600	1,664	2,718	243,450	221.3	4.0	31.41	98%	211.6	2.0	15.70	99%	5.6	0.27	2.12	95%	0.18	1.41	4.96	0.09	35.93
SEP	55,110	1,837	5,520	185,125	99.7	4.0	25.53	96%	97.3	2.0	12.34	98%	3.4	0.25	1.54	93%	0.58	3.58	2.59	0.09	44.60
OCT	60,791	1,961	3,797		48.0				42.3				1.6								
NOV	114,499	3,816	9,414		130.3				285.7				3.8								
DEC	84,694	2,732	6,206		71.7				46.7				2.2								
Total Annual:	1,264,961	44,814	156,330	1,420,844	1,246.3	31.5	243.40		1,190.8	18.8	148.32		31.80	1.96	15.00		9.32	83.39	28	0.40	553.28
AVG:	105,413	3,735	13,028	202,978	103.86	4.5	34.77	96%	99.2	2.7	21.18	95%	2.65	0.28	2.14	93%	1.33	11.91	3.99	0.06	79.04
MAX:	180,296	7,839	54,144	243,450	221.3	7.5	69.28	98%	285.7	6.3	58.28	99%	5.6	0.40	3.74	95%	8.13	75.21	6.56	0.09	458.00
Criteria:																					

NOTE:

ECA Limit Exceedance Reported to MOECC

Winter Discharge from Feb 1 - Feb 22 2017

Summer Discharge From April 11 - Sept 29 2017

No Effluent discharge from WWTP

LEGEND:

Raw =	Untreated raw sewage entering the lagoon
Total Flow =	Total sewage flow in any given month
Avg Day =	Total monthly sewage flow divided by the number of days in the month.
Max. Day =	Maximum sewage flow on any given day during the month.
Effluent =	Treated sewage discharged from the lagoon
CBOD =	Carbonaceous Biochemical Oxygen Demand is the amount of dissolved oxygen needed by aerobic biological organisms in wastewater, necessary to break down organic material.
Loading =	Loading is the contribution of each wastewater constituent measured in units of mass per time (kg/day) and may be calculated as the product of flow times concentration.
SS =	Suspended Solids is the total small particulate matter which remains in suspension in sewage.
Phos. =	Phosphorus is an allotropic nonmetallic element occurring in phosphates and living matter. It is an essential constituent of protoplasm and is commonly used in fertilizers.
NH3 =	Ammonia (NH3) is a compound of nitrogen and hydrogen.
NH4 =	Ammonium (NH4) is derived from ammonia and found in a wide variety of organic and inorganic compounds.
Nitrate =	Nitrate (NO3) is a nitrogen-oxygen chemical unit which combine with various organic and inorganic compounds. The most common use is for plant fertilizer.
Nitrite =	Nitrite (NO2) is a nitrogen-oxygen chemical unit which combine with various organic and inorganic compounds. Once taken into the body, <u>nitrites</u> are converted to <u>nitrites</u> .
E.Coli =	Escherichia coli. A bacterium that is commonly found in the lower intestine of warm-blooded organisms. Most are harmless but some strains can cause serious illness.
Geo. Mean =	Geometric mean is a type of mean or average, which indicates the central tendency or typical value of a set of numbers by using the product of their values (as opposed to the Arithmetic mean which uses their sum).
mg/L =	milligrams per litre
kg/d =	kilograms per day



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Don Giberson, Environmental Services Director**
Date: March 19 2018
Report: ESD.18.08
Subject: 2017 Annual Report for South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility

Recommendations:

That South Huron Council receive the report from D. Giberson, ESD Director
RE: 2017 Annual Report for South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility.

Purpose:

The purpose of this report is to notify Council that a comprehensive annual report has been prepared for the South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility.

Background and Analysis:

The Environmental Compliance Approval (ECA) for the Exeter Wastewater Treatment Plant requires the Owner to prepare and submit an annual performance report to the Ministry of the Environment for this facility, within ninety (90) days following the end of the period being reported upon. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;

- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6.
- (g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- (h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (i) a summary of all Bypass, spill or abnormal discharge events;
- (j) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule 'A', Section 1, with a status report on the implementation of each modification;
- (k) a report summarizing all modifications completed as a result of Schedule 'A', Section 3; and
- (l) any other information the Water Supervisor requires from time to time.

Accordingly, the 2017 Annual Report for the South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility was prepared that includes all of the required elements and a copy will be forwarded to the Sarnia – Windsor District Office of the MOECC after Council's review.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

Informing Council of regulatory compliance and performance of the South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility, reduces liability and results in efficient use of time/resources.

Increased Communications and Municipal Leadership

Communicating information to Council related to wastewater collection and treatment, keeps Members of Council informed and assists in making informed decisions, resulting in good stewardship of the South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility.

Reports to Council assists to keep the public informed of the performance of the wastewater collection system and wastewater treatment facility.

Transparent, Accountable and Collaborative Governance

Public reporting of the performance of the South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility, demonstrates commitment to transparent, accountable and collaborative governance.

Dedicated Economic Development Effort

Informing Council of regulatory compliance and performance of the wastewater collection system and wastewater treatment facility results in increased public confidence; retention/attraction of businesses and economic development opportunities.

Financial Impact:

There are no financial implications for the Corporation resulting from the proposed recommendation.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Ontario Water Resources Act, R.S.O. 1990, c. O.40
2. Exeter Wastewater Treatment Facility ECA - NUMBER 6088-9FEREP

Consultation:

Water/Sewer Foreman and Wastewater System "Over-All-Responsible Operator" provided information in this report.

Related Documents:

2017 Annual Report for South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Don Giberson', is enclosed within a faint rectangular box.

Don Giberson, Environmental Services Director



South Huron Wastewater Collection System and Exeter Wastewater Treatment Facility

2017 Annual Report to Council

March 19, 2018

2017 Annual Wastewater Systems Report to Council

TABLE OF CONTENTS

- I. Description of Exeter Wastewater Treatment Facility and South Huron Wastewater Collection System
- II. MOE Inspection, Orders and Compliance issues
- III. Summary of Wastewater Quantities, Flows & Capacity
- IV. Summary of Effluent Quality Analytical Data
- V. Operating Problems and Corrective Actions
- VI. Summary of Major Maintenance, Upgrades and Alterations
- VII. Summary of Effluent Quality Assurance Taken
- VIII. Summary of Calibration of Monitoring Equipment
- IX. Summary of Effluent Quality Objectives Results
- X. Sludge Generation and Sludge Handling
- XI. Summary of Complaints and Actions Taken
- XII. Summary of By-passes, Overflows and Spills
- XIII. Notices submitted to MOE under Schedule 'A' of the ECA
- XIV. Modifications completed under Schedule 'A' of the ECA
- XV. Federal Wastewater Systems Effluent Regulation

2017 Annual Wastewater Systems Report to Council

APPENDICIES

- A.** Owner's reporting requirements set out in the Exeter Wastewater Treatment Facility Environmental Compliance Approval
- B.** Regulations pertaining to the Operation of Wastewater Systems
- C.** Exeter Wastewater Treatment Facility Environmental Compliance Approval No. 2395-9QDPQW
- D.** 2017 Exeter Sewage Lagoons Annual Performance Assessment Report to the MOECC

I. DESCRIPTION OF EXETER WASTEWATER TREATMENT FACILITY AND SOUTH HURON WASTEWATER COLLECTION SYSTEM

System Overview

The Exeter wastewater treatment facility and South Huron wastewater collection system provides service to approximately 5,000 residents in Crediton, Centralia, Huron Park and Exeter. The Grand Bend area is serviced by a wastewater collection system and two sanitary pumping stations. Wastewater in Grand Bend is treated at the jointly owned Grand Bend Area Wastewater Treatment Facility operated by CH2MHill and administered by Lambton Shores on behalf of the Grand Bend Area Joint Sewage board.

The Exeter wastewater treatment facility is an aerated sewage lagoon with intermittent sand filters. The wastewater collection system consists of sanitary sewers, forcemains and four sanitary pumping stations that convey wastewater to a wastewater treatment facility in Exeter. The system is continuously monitored by a computerized Supervisory, Control and Data Acquisition system. The receiving water course for the wastewater treatment facility is the Ausable River.

Detailed System Description

Exeter Wastewater Treatment Facility

The Exeter Wastewater Treatment Facility is located in the northwest area of Exeter at 71042 Airport Line. The facility is a sewage lagoon, with an aeration system, intermittent sand filters and has a rated capacity of 2,573,718m³ per year.

Raw sewage is collected at the William Street and Snider Crescent Sanitary Sewage Pumping Stations in Exeter; at the Huron Park and Crediton Sanitary Sewage Pumping Stations; then pumped to the Wastewater Treatment Facility (WWTF) in Exeter. Treatment at the WWTF consists of a 3-cell lagoon system with phosphorus removal. Raw sewage flows into the first cell with assisted aeration and an effective storage volume of 313,000m³. The second cell is for additional storage (pre or post treatment) with an effective volume of 343,500m³. The third "L-shaped" cell has a total storage volume of 751,000m³. Effluent from this third cell is directed to a 4-bed, intermittent sand filtration system with an average hydraulic loading rate of 475 L/s. Continuous liquid aluminum sulfate (alum) is used for phosphorus removal. Effluent can be discharged directly from the lagoon system to the receiving water course during winter months to a maximum volume of 283,200m³ when the receiving river temperature is less than 5 degrees Celsius; or via one of the four the sand filters to the receiving water course during the summer months when the receiving river temperature is above 5 degrees Celsius for a maximum volume of 2,290,518m³.

South Huron Wastewater Collection System

The South Huron wastewater collection system consists of approximately 67 km of sanitary sewers and forcemains conveying wastewater from Crediton, Centralia, Huron Park and Exeter to the South Huron wastewater treatment facility. Sewers and

2017 Annual Wastewater Systems Report to Council

forcemains range in size from 100mm to 600mm diameter. The pipe material consists of concrete, asbestos-cement, polyethylene and polyvinylchloride (PVC).

Prior to 1960 some of the older areas of Exeter were serviced by combined sewers that discharged directly to the Ausable River. A sanitary pumping station located at the intersection of John and Marlborough Streets pumped combined sewage to the Ausable River via the William Street sewer. The majority of Exeter was serviced by private on-site septic systems and cess pools until the early 1960s. The current municipal wastewater collection system in Exeter was commissioned in 1963 and consisted of sanitary sewers, the William Street Sanitary Pumping Station, a forcemain, and a 2-cell oxidation pond on the current lagoon site. Combined sewers were gradually separated over the years and the wastewater collection system was expanded to serve new subdivisions in the 1970s and 1980s. The Snider Crescent Sanitary Sewage Pumping Station was constructed in 1991 to serve growth in the southwest area of Exeter. The John Street Sanitary Sewage Pumping Station became redundant and was decommissioned after the construction of the Snider Crescent Sanitary Sewage Pumping Station.

Huron Park is the oldest wastewater collection system in the Municipality. It was constructed in the early 1940's by the RCAF as part of the Airforce Station Centralia. The Base closed in 1967 and the ownership of the system was transferred to the former Stephen Township in 1983. The Huron Park Wastewater Treatment Facility was decommissioned in 2000 and sewage pumped to Exeter via a forcemain that approximately follows the Goderich-Exeter Railway line. The entire wastewater collection system in the Huron Park Residential Area was replaced in 2006 and the wastewater collection on Canada Avenue in the Industrial area was replaced in 2010.

A municipal wastewater collection system was installed in Cridton and Centralia in 2008. A Sanitary Sewage Pumping Station was constructed at the east end of Cridton near the Ausable River and sewage is pumped via a forcemain to Exeter. The Centralia wastewater collection system is connected by gravity to the Huron Park residential area wastewater collection system, sewage then flows through a trunk sewer to the Industrial area where it is pumped to Exeter via an upgraded Huron Park Sanitary Sewage Pumping Station.

Sanitary Sewage Pumping Stations

William Street Sanitary Sewage Pumping Station

The William Street SPS was originally constructed in 1962 and was upgraded in 1999 when the pumps and emergency generator were replaced. It is located in the William Street R.O.W. north of Church Street and south of the Ausable River; it is a wetwell/drywell type sewage lift station with all process equipment housed in an above grade structure on top of the wetwell. The pump arrangement is a wetwell/drywell configuration with one motor directly coupled to pump #1 and two other motors coupled to pumps #2 and pump #3 via shaft extensions. The pumps are driven by variable frequency drives and discharge into a common 250 mm diameter header. Flow is measured by a magnetic flow meter before exiting the station and entering the 350 mm forcemain to the South Huron WWTF. The pumping

2017 Annual Wastewater Systems Report to Council

station is equipped with a 175 kW standby diesel generator set, power distribution equipment and control and monitoring devices.

Snider Crescent Sanitary Sewage Pumping Station

The Snider Crescent SPS was constructed in 1992. It is located at 31 Snider Crescent; it is a wetwell/drywell type sewage lift station with all process equipment housed in an above grade structure. The wetwell is a separate structure outside the generator/control building. The three sewage pumps are fixed speed submersible units discharging into a common header in the lower level of the generator/control building. The generator/control building also houses a 125 kW diesel generator set, power distribution equipment, and control and monitoring devices.

The 300 mm diameter forcemain is approximately 1480 m long and follows a 6.1 m wide easement to the WWTF. The rate of flow is measured by a magnetic flow meter in the meter chamber at the treatment facility.

Huron Park Sanitary Sewage Pumping Station

The Huron Park SPS was constructed in 1999 and upgraded in 2007 with new VFD's and controls as part of the expansion of the wastewater collection system to service Centralia. It is located at 389 Canada Avenue in the Huron Park Industrial Area; it is a wetwell/drywell type sewage lift station with all process equipment housed in an above grade structure. The wetwell is a separate structure outside the generator/control building. The two sewage pumps are submersible units, driven by variable frequency drives, discharging into a common header in the lower level of the generator/control building. The generator/control building also houses a 150 kW diesel generator set, power distribution equipment, and control and monitoring devices.

The 300mm diameter forcemain from the Huron Park SPS follows an easement to Airport Line, north on Airport Line to the Crediton Road; east on Crediton Road to the Goderich-Exeter Railway line, then along the GEXTR right of way to the South Huron WWTF. The rate of flow is measured by a magnetic flow meter in the meter chamber at the treatment facility.

Crediton Sanitary Sewage Pumping Station

The Crediton SPS was constructed in 2007. It is located at 250 Victoria Street East, Crediton; it is a wetwell/drywell type sewage lift station with all process equipment housed in an above grade structure. The wetwell is a separate structure outside the Generator Building. The two sewage pumps are fixed speed submersible units discharging into a common header in the lower level of the Generator Building. The Generator Building also houses a 160 kW diesel generator set, power distribution equipment, and control and monitoring devices.

The 200mm diameter forcemain from the Crediton SPS is located in the Crediton Road right of way and is connected to the 300mm forcemain from Huron Park at the intersection of Crediton Road and Airport Line. The rate of flow is measured by a magnetic flow meter in the meter chamber at the treatment facility.

2017 Annual Wastewater Systems Report to Council

Grand Bend Wastewater Area Collection System

The Grand Bend wastewater collection system was originally constructed in 1980 to service the Village of Grand Bend (now Lambton Shores) and Grand Cove Estates and Green Forest Estates in the former Stephen Township (now South Huron). In 1980 the Huron Country Playhouse septic system failed and approval was obtained from the MOE to connect directly to the newly constructed Grand Bend Area Sewage Lagoon. The Playhouse has a private sewage pumping station discharging to a 100mm forcemain on B-Line, Grand Bend Line and Mollard Line to the Grand Bend Area Sewage Lagoons.

In 1992, an annexation agreement was made between the Village of Grand Bend, Stephen Township and Bosanquet Township regarding adjustments to their boundaries. As part of the annexation negotiations there was an understanding amongst the municipalities regarding rights to access the Sewage Treatment Facility in Grand Bend; however, this did not form part of the Annexation Agreement. A subsequent agreement between the three municipalities included a clause to *"continue inter-municipal cooperation through the functioning of the Tri-Municipal Committee to provide joint servicing arrangements to the people of the Greater Grand Bend Area."*

Accordingly, in 1994 the former Stephen Township obtained approval to expand the Grand Bend wastewater collection system to include Oakwood Inn, remaining lands in Grand Cove Estates, Grand Bend Airport property (proposed Industrial subdivision, Motorplex and POG). In 2000 the Provincial Government transferred jointly to Village of Grand Bend (now Lambton Shores) and Stephen Township (now South Huron) the Grand Bend Sewage Lagoons, Main Pumping Station and forcemain between these facilities. The Grand Bend wastewater collection system was further expanded in 2006 to provide service to Oakwood Links Condominiums.

In 2014 the Grand Bend Area Joint Sewage Board was created to provide Ownership oversight for the jointly owned wastewater assets and the expansion/upgrade of the Wastewater Treatment Facility. Construction of a new mechanical wastewater treatment facility and upgrades to the Main pumping station in Grand Bend were completed and became fully operational on March 31, 2016.

Sanitary Sewage Pumping Stations in the South Huron Grand Bend System**Oakwood Area Sanitary Sewage Pumping Station**

The Oakwood Area SPS was constructed in 2006. It is located at 70773 Bluewater Highway; it's a wetwell/drywell type sewage lift station with all process equipment housed in an above grade structure. The wetwell is a separate structure outside the Generator Building. The two sewage pumps are submersible units, driven by variable frequency drives, discharging into a common header in the lower level of the Generator Building. The Generator Building also houses a 25 kW diesel generator set, power distribution equipment, and control and monitoring devices.

The 100mm diameter forcemain from the Oakwood Area SPS is located in an easement on private property along the west side of the Bluewater Highway (MTO Hwy #21) right of way. This forcemain is connected to the Lambton Shores gravity

2017 Annual Wastewater Systems Report to Council

wastewater collection system on Ontario Street North and eventually flows to the Main Pumping Station in Grand Bend. Wastewater is conveyed to the Grand Bend Area Wastewater Treatment Facility via a 350mm forcemain on Main Street East and Mollard Line. The rate of flow is measured by a magnetic flow meter in a meter chamber at the municipal boundary.

POG Sanitary Sewage Pumping Station

The POG SPS was constructed in 1999. It is located at 70244 Grand Bend Line; it's a wetwell type sewage lift station with all process equipment housed in above grade pole mounted enclosures. The two sewage pumps are fixed speed submersible units discharging into a common header. There is no emergency generator and no flow metering at this pumping station.

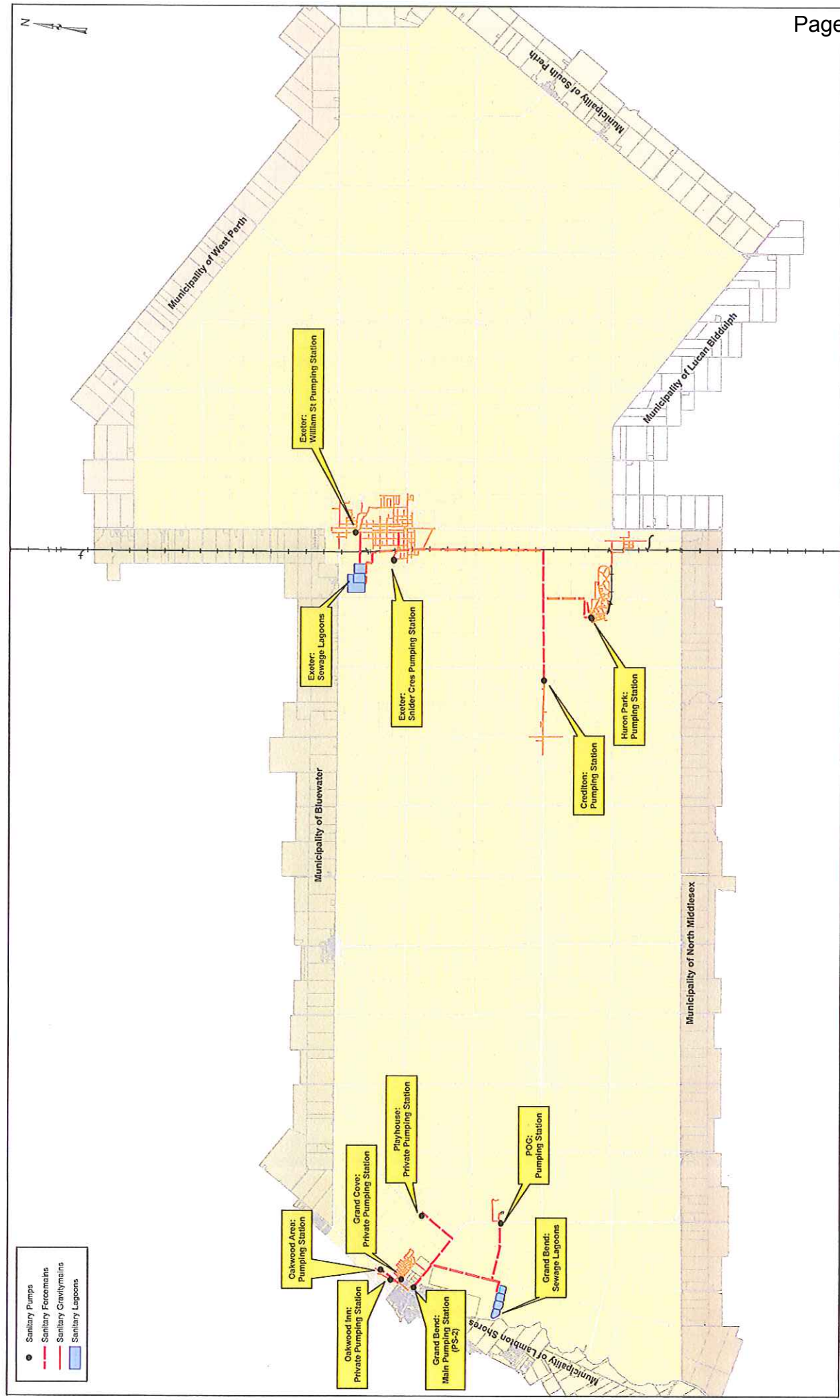
The 100mm diameter forcemain from the POG SPS is located in an easement across private property directly west of the pumping station, then south in the Mollard Line right-of-way to the Grand Bend Area Sewage Treatment Facility.

Control System

The South Huron Wastewater Collection system is controlled by a PLC based Supervisory, Control and Data Acquisition system (SCADA) located at the Water/Sewer Operations Centre, 82 Nelson Street, Exeter. Remote processing units (RPUs) are located at the William Street SPS, Snider Crescent SPS, Huron Park SPS, Crediton SPS, Ausable River Stream Gauge Building, in the Blower Building and Filter Building at the Exeter Wastewater Treatment Facility. The PLC's communicate with the central SCADA PC at the Environmental Services Operations Centre and this allows monitoring of all operational parameters, annunciating and forwarding of alarms, control of set points, duty sequences, and other operating parameters, and recording and print out of alarms and data collected from the remote sites.

In the South Huron Grand Bend wastewater system, only the Oakwood Area SPS is fully monitored and controlled by the SCADA system. This system communicates wirelessly through the Hay Communications system back to Exeter, where it is monitored and controlled at the Environmental Services Operations Centre, 82 Nelson Street. There is very limited SCADA capabilities at the POG SPS with monitoring of pump run times and wetwell levels only.

The new Grand Bend Area Sewage Treatment Facility and upgraded Main Pumping Station have SCADA control systems monitoring all parameters. These SCADA systems are maintained and operated by the Lambton Shores contract operator CH2MHill.



Municipality of South Huron - Wastewater System



2017 Annual Wastewater Systems Report to Council

II. M. O. E. INSPECTION, ORDERS AND COMPLIANCE ISSUES***MOE Inspection***

There was no MOE inspection of the South Huron Sewage Treatment Facility in 2017. The previous MOE inspection was carried out on February 21, 2012 and the Sewage Treatment Facility was in full regulatory compliance at that time.

Compliance issues and Orders

There were no Ministry Orders issued for the South Huron Wastewater Treatment Facility or Wastewater Collection System in 2017. There was one effluent quality exceedance (E-coli) during the winter discharge that was reported to the MOECC Sarnia and Windsor District Office. No corrective action was required. There were a total of four (4) raw sewage by-passes at sewage pumping stations in 2017. At the William Street Sanitary Pumping Station there were (2) wet weather sewage bypasses. At the Huron Park Sanitary Sewage Pumping Station there was one (1) wet weather sewage bypass. At the Snider Crescent Sanitary Pumping Station there was one (1) wet weather sewage bypass.

All by-pass events were reported to the Spills Action Centre and to the MOECC Sarnia and Windsor District Office.

III SUMMARY OF WASTEWATER QUANTITIES, FLOWS AND CAPACITY

The South Huron Wastewater Treatment Facility has a design capacity of an average daily flow (ADF) of 7,051m³/day; a maximum annual discharge of 2,573,718m³, including an allowable winter discharge of 283,200 m³. In 2017 the average daily effluent flow was 7,362m³/day. The 2017 summer effluent discharge was 1,217,320m³ or 53% of the allowable summer discharge. The 2017 winter effluent discharge was 203,524m³ or 72% of the allowable winter discharge. The 2017 total annual discharge was 1,420,844m³ or 55% of the total allowable discharge.

A review of the 2017 flow data indicates that there may be inflow and infiltration issues in the wastewater collection system. Staff will continue to address inflow and infiltration by implementing mitigation measures, such as capping abandoned sewers in the Huron Park Industrial area. In Exeter, sanitary sewers continue to be replaced in conjunction with street reconstruction projects as part of an overall asset management program and to reduce inflow and infiltration. Staff continue to investigate and undertake measures and initiatives to identify, quantify, and reduce inflow/infiltration in the wastewater collection system.

In summary all flows to the South Huron Wastewater Treatment Facility in 2017 were within the design capacities in the Environmental Compliance Approval (ECA). The total annual effluent discharge in 2017 of 55% of the rated capacity is confirmation of sufficient sewage treatment capacity in the Exeter Wastewater Treatment Facility.

2017 Annual Wastewater Systems Report to Council

The following chart is a summary of the monthly wastewater flows:

EXETER WASTEWATER TREATMENT FACILITY**2017 MONTHLY FLOWS**

MONTH	INFLOW (M3)	EFFLUENT (M3)	A/B
JAN	180,296		
FEB	128,584	203,524	
MAR	133,492		(B)
APR	153,285	177,992	
MAY	170,583	207,662	(A)
JUN	72,114	188,108	(A)
JUL	59,913	214,983	(A)
AUG	51,600	243,450	(A)
SEP	55,110	185,125	
OCT	60,791		
NOV	114,499		
DEC	84,694		
TOTAL	1,264,961	1,420,844	
(A) TOTALS		1,217,320	
(B) TOTALS		203,524	
ADF	3,466 (365 days)	7,362 (193 days)	

C of A	ALLOWABLE DISCHARGE (M3)	ACTUAL DISCHARGE (m3)	PERCENTAGE DISCHARGED
(A)	2,290,518	1,217,320	53%
(B)	283,200	203,524	72%
TOTAL	2,573,718	1,420,844	55%

(A) Filtered Discharge when river temperatures are greater than 5 degrees Celsius.
 (B) Unfiltered Winter Discharge when river temperatures are less than or equal to 5 degrees Celsius.

INFLOW	DISCHARGE	DIFFERENCE	% of INFLOW
1,264,961	1,420,844	155,883	112 %

Opinion of Available Sewage Treatment Capacity

In March 2014 BM Ross Engineers evaluated the capacity of the South Huron Wastewater Treatment Facility and the following is a summary of their opinion of the estimated life expectancy of the WWTF:

MOE Procedure D-5-1 suggests using a 3 to 5 year average as a basis to determine the current available capacity. Using the slightly higher 3 year average of 3,360m³/d the total current reserve capacity is 3,691m³/d (ie. 7,051m³/d - 3,360m³/d).

2017 Annual Wastewater Systems Report to Council

A projected annual growth rate of 0.5% would generate an annual increase of approximately 17m³/d. At this growth rate the available reserve capacity would be adequate for over 200 years. (ie. 3,691m³/d ÷ 17m³/d).

The Exeter WWTP is, with the exception of only random, occasional events, meeting required treatment levels. It is currently operating at approximately 48% of its rated hydraulic capacity. At a projected growth rate of 0.5% per year there is adequate total reserve capacity for more than 200 years.

In October 2017 GMBLuePlan Engineers reviewed the Intermittent Sand Filters after declining performance in recent years. GMBLuePlan confirmed that rehabilitation of the sand filters was required to restore their original design flows and to maintain treatment capacity. Rehabilitation of the sand filters will ensure that the rate of summer discharge and winter storage are sufficient to meet future growth and development demands.

IV. SUMMARY OF EFFLUENT QUALITY ANALYTICAL DATA

The Exeter Wastewater Treatment Facility Effluent Limits for discharges are set out in the Environmental Compliance Approval (ECA) and are based on the stream temperature of the receiving water course. Discharges can be made during the summer months (through the sand filters) if the river temperatures are greater than 5° C and during the winter months (directly to the receiving water course) if river temperatures are less than or equal to 5° C. These parameters are also limited by Annual Average loading. The following chart is a summary of the effluent quality criteria:

EXETER WASTEWATER TREATMENT FACILITY
ENVIRONMENTAL COMPLIANCE APPROVAL FINAL EFFLUENT QUALITY
LIMITS

	MONTHLY AVERAGE CONCENTRATION (mg/L)	ANNUAL AVERAGE LOADING
CBOD ₅ (a)	10.0	22,905
CBOD ₅ (b)	25.0	7,080
Suspended Solids (a)	10.0	22,905
Suspended Solids (b)	25.0	7,080
Total Phosphorus (a)	0.60	1,374
Total Phosphorus (b)	1.0	283
Total Ammonia Nitrogen (a)	4.0	9,162
Unionized Ammonia (a)	0.10 (IN STREAM)	28.3
Unionized Ammonia (b)	0.15 (IN STREAM)	-
Dissolved Oxygen (a)(b)	5.0	-
E. Coli (monthly geometric mean density)	200/100mL	-

(a) Filtered Discharge when river temperatures are greater than 5 degrees Celsius.

(b) Unfiltered Winter Discharge when river temperatures are less than or equal to 5 degrees Celsius.

2017 Annual Wastewater Systems Report to Council

EXETER WASTEWATER TREATMENT FACILITY 2017 MONTHLY EFFLUENT SUMMARY										
MONTH / Days of Effluent Discharge	CBOD (MG/L)	LOADING	SS	LOADING	TP	LOADING	ANNUAL AMMONIA	LOADING	DO	E COLI GM.
	mg/L	kg/d	mg/L	kg/d	mg/L	kg/d	mg/L	kg/d	(mg/l)	gm/100mL
JAN										
FEB / 22 (B)	7.5	69.38	6.3	58.28	.24	2.22	0.02	0.21	9.36	458
MAR										
ANNUAL AVERAGE (B)		1318.22		1107.32		42.18		4.07	9.36	458
Winter Effluent : Monthly Average Concentration / Annual Average Limit	25	7,080	25	7,080	1	283	0.1 IN STREAM	28.3 IN STREAM	5>	200/100ml
% IN COMPLIANCE	100%	100%	100%	100%	100%	100%	100%	100%	100%	REPORTED
APRIL / 19 (A)	4	37.47	2.0	18.74	0.40	3.74	0.13	1.21	9.49	2.88
MAY / 31 (A)	4	26.79	2.0	13.39	0.28	1.87	0.10	0.67	8.55	3.17
JUNE / 30 (A)	4	25.08	2.0	12.54	0.24	1.50	0.10	0.62	7.75	6.07
JULY / 31 (A)	4	27.74	2.5	17.33	0.28	2.01	0.10	0.69	7.25	2.63
AUG / 31 (A)	4	31.41	2	15.70	0.27	2.12	0.18	1.41	6.06	35.93
SEPT / 29 (A)	4	25.53	2	12.34	0.25	1.54	0.58	3.58	5.76	44.60
OCT										
NOV										
DEC										
ANNUAL AVERAGE		4598.84		2529.14		346.72		231.28	7.48	79.04
Summer Effluent : Monthly Average Concentration / Annual Average Limit	10	22,905	10	22,905	0.6	1,374	4	9,162	5>	200/100 ml
% IN COMPLIANCE	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
(A) = FILTERED DISCHARGE +5 FEGREES CELSIUS RIVER TEMPERATURE										
(B) = UNFILTERED WINTER DISCHARGE -5 DEGREES CELSIUS RIVER TEMPERATURE										
Note**- Winter and Summer Criteria is based on a monthly average concentration for effluent parameter and an annual average for loading										

A review of the actual 2017 effluent quality analytical data confirmed that the Exeter Wastewater Treatment Facility met all effluent quality parameters for summer discharge. All winter discharge met the effluent quality parameters, except for the E-coli

2017 Annual Wastewater Systems Report to Council

geometric mean; which exceeded the ECA limit. This exceedance was reported to the MOE Sarnia and Windsor District Office and no follow up action was required.

This review confirmed that the wastewater treatment process was adequate for the influent treated at this facility. The Exeter Sewage Treatment Facility has consistently achieved the effluent quality requirements in the Environmental Compliance Approval (ECA), especially the summer discharge through the sand filters.

V. OPERATING PROBLEMS AND CORRECTIVE ACTIONS

The most common operating issue encountered in 2017 was clogged sewage pumps. The corrective action was to remove the pump from service and manually unclog the pump. The longer term corrective action is to improve/upgrade the pumping station influent screens.

The following is a summary of operating issues and corrective action taken:

2017 Operating Issues and Correction Actions			
Date	Location	Description	Corrective action
Feb 13	William St Pumping Station	Pump #2 Volute damaged	Pump taken out of service & repaired
Feb 27	William St Pumping Station	Pump #2 Clogged	Removed obstruction
Apr 3	William St Pumping Station	Pump # 2 Clogged	Removed obstruction
Apr 6	POG	Pump # 1 relay failure	Replaced relay
Apr 11	William St Pumping Station	Pump # 2 Clogged	Removed obstruction
Apr 12	Crediton SPS	Pump # 2 Rebuild	New Impeller and / Volute
Apr 20	William St Pumping Station	Pump # 2 Clogged	Removed obstruction
May 2	William St Pumping Station	Pump # 1 Airlock	Removed Air
May 4	William St Pumping Station	Pump # 1 Electrical box	Repaired exposed wires
May 26	William St Pumping Station	Pump # 2 Clogged	Removed obstruction
May 30	William St Pumping Station	Pump # 3 Driveshaft damaged	Replaced bearing on Pump #3 Driveshaft
June 14	William St Pumping Station	Pump # 2 Driveshaft damaged	Replaced bearing on Pump #2 Driveshaft
July 6	William St Pumping Station	Pump # 1 Check Valve broken	Replaced Check Valve
July13	William St Pumping Station	Pump 2 & 3 Plugged	Removed obstructions
Nov 16	William St Pumping Station	Pump # 3 Clogged	Removed obstruction
Dec12	Blower Building WWTP	Blower 2&3 seized	Oiled and rotated blowers

VI. SUMMARY OF MAJOR MAINTENANCE, UPGRADES AND ALTERATIONS

The following is a summary of all maintenance carried out in 2017 on any major structure, equipment, apparatus, mechanism or thing forming a part of the works:

2017 Annual Wastewater Systems Report to Council

1. Sanitary Sewer replacement on Simcoe Street (Main to Andrew Street, Exeter).
2. Sanitary Sewer replacement on James Street (Main to Albert Street, Exeter).
3. Lagoon Aeration System Upgrade.
4. Engineering for future replacement/rehabilitation options for Lagoon Sand Filters.
5. Engineering for future sewer replacement on Huron Street (Edward to town limit).
6. Engineering for replacement/upgrade William Street Sanitary Pumping Station

The following is a summary of alterations, extensions or replacements in the process or operation of the works which are considered for implementation over the next reporting period (2018 to 2022), which require approval under the Ontario Water Resources Act:

2018

1. Sanitary sewer replacement on Huron Street East (Edward to East town limit).
2. William Street Sanitary Pumping Station replacement/upgrade.
3. Upgrades to 350mm forcemain on Mollard Line
4. Engineering for future sewer replacement on Waterloo Street (Main to RR)
5. Engineering for rehabilitation Lagoon Sand Filters

2019

1. Rehabilitation of cell#1 of Lagoon Sand Filters
2. Snider Crescent Sewage Pumping Station Upgrades (Phase 1)
3. Engineering for future sewer replacement on Sherwood Crescent.
4. Engineering for future sewer replacement on William St (Anne to Sanders)
5. Engineering for future sewer replacement on William St (Nelson to Church)
6. Engineering for future sewer replacement on Thomas St (Marlborough to Carling)

2020

1. Sanitary sewer replacement on Waterloo Street (Main to RR)
2. Rehabilitation of cell#2 of Lagoon Sand Filters
3. Snider Crescent Sewage Pumping Station Upgrades (Phase 2)
4. Engineering for future sewer replacement on Victoria St E (Main to Arena)

2021

1. Sanitary sewer replacement on Sherwood Crescent.
2. Sanitary sewer replacement on William St (Anne to Sanders)
3. Sanitary sewer replacement on William St (Nelson to Church)
4. Sanitary sewer replacement on Thomas St (Marlborough to Carling)
5. Rehabilitation of cell#3 of Lagoon Sand Filters
6. Engineering for future sanitary sewer replacement on Kingscourt Crescent

2022

1. Sanitary sewer replacement on Victoria St E (Main to Arena)
2. Sanitary sewer replacement on Kingscourt Crescent (Pryde to end).
3. Rehabilitation of cell#4 of Lagoon Sand Filters
4. Sludge removal from Exeter Sewage Lagoons.
5. Engineering for future sewer replacement on Church St (William to Main).

2017 Annual Wastewater Systems Report to Council

VII. SUMMARY OF EFFLUENT QUALITY ASSURANCE TAKEN

There were no additional effluent quality assurance or control measures undertaken in 2017, other than flow monitoring and effluent quality sampling already noted.

VIII. SUMMARY of CALIBRATION

All meters that measure sewage flows in the wastewater collection system are maintained as recommended by the manufacturer and calibrated by a third party on an annual basis. Date of last calibration of the effluent flow meters was April 25, 2018. Flows are measured at each pumping station and the lagoon discharge. Flows to the filter building are measured by a v-notch weir. The Snider Crescent SPS and Huron Park SPS magmeters are located in the blower building. Calibrations are also performed at the stream gauge building located at the Ausable River and Airport Line.

The Stream Gauge was fully operational for this reporting year and all data is stored on the main server at the Municipal Offices, 322 Main Street South, Exeter. The data at the Stream Gauge Building is taken continuously and spot stream flow measurements are taken annually to verify the calibration curve of the selected gauge.

IX. SUMMARY OF EFFLUENT QUALITY OBJECTIVES RESULTS

The Exeter Wastewater Treatment Facility Effluent Quality Objectives for discharges are set out in the Environmental Compliance Approval (ECA) and are based on the stream temperature of the receiving water course. Summer discharges are through the sand filters when river temperature is greater than 5° C and winter discharges are directly to the receiving water course when river temperature is less than or equal to 5° C. The following chart is a summary of the effluent quality objectives:

EXETER WASTEWATER TREATMENT FACILITY
ENVIRONMENTAL COMPLIANCE APPROVAL EFFLUENT QUALITY OBJECTIVES

Effluent Parameter	Concentration Objective (mg/L)
CBOD ₅ (a)	5.0
CBOD ₅ (b)	15.0
Suspended Solids (a)	5.0
Suspended Solids (b)	15.0
Total Phosphorus (a)	0.50
Total Phosphorus (b)	0.80
Total Ammonia Nitrogen (a)(*)	1.0
Unionized Ammonia (a)	>5:1 dilution
Dissolved Oxygen (a)(b)	5.0
E. Coli (monthly geometric mean density)	<150 organisms/100mL

(a) Filtered Summer Discharge when river temperatures are greater than 5 degrees Celsius.

(b) Unfiltered Winter Discharge when river temperatures are less than or equal to 5 degrees Celsius.

2017 Annual Wastewater Systems Report to Council

The sand filter beds were tilled several times in 2017 to ensure that final filtering of the effluent discharged, achieved the effluent quality objectives. Blowers were operated continuously throughout the year to ensure that the effluent quality objectives for Dissolved Oxygen were achieved. Blowers were

A review of the actual 2017 effluent quality analytical data confirmed that the Exeter Wastewater Treatment Facility met all effluent quality objectives for summer and winter discharge, except for one winter discharge parameter in March. The E-coli geometric mean for March exceeded the winter discharge effluent quality objective of <150 organisms/100mL.

The historically good effluent quality results are an indication that the Exeter Wastewater Treatment Facility is providing adequate level of wastewater treatment.

X. SLUDGE GENERATION AND SLUDGE HANDLING

Sludge was removed from the South Huron Wastewater Treatment Facility as part of the 1999 upgrade. The sludge removed in 1999 was stock piled on site at the west end of the Lagoon property to compost. The sludge has been tested and found to have composted to the point where it can be used as future topsoil cover at the South Huron landfill site. The composted sludge will be used for this purpose until fully exhausted.

During the summer of 2012 lagoon Cell #3 was drained and allowed to dry, so that an assessment of the accumulated sludge could be carried out. The following is a summary of the BM Ross Engineers report (Dated September 7, 2012):

“Sludge Accumulation in Cell 3:

The depth of sludge varies considerably over the cell bottom. In some locations, particularly near the cell inlet at the southwest corner, the top of sludge was well above the water level in other areas of the cell, and some of the static diffusers were completely covered with sludge. Toward the north/northeast area of the cell, the sludge depth in places was almost negligible. The volume of accumulated sludge within Cell 3 is approximately 25,000 m³ or the equivalent of 4,500 tonnes of dry weight.

Sludge Removal Options:

- *Plastics observed in the sludge can complicate land application and may require the sludge to be partially dried and screened on site prior to land application.*
- *Sludge removal will require temporary removal of at least the fine pore aeration equipment. The static aerators and laterals could likely remain in place.*
- *Sludge around the cell perimeter could be removed by an excavator because of the relatively high solids content in the sludge. Following removal of this material, sludge within the cell could be pushed onto the cell berms and allowed to naturally dewater.*

2017 Annual Wastewater Systems Report to Council

- *If Cell 3 could be drained each year for 2 or 3 consecutive years, sludge removal work could be carried out incrementally. This would allow the costs to be spread of over a longer period.*

Land application of sludge is one of the more economical options for disposal. Area farmers are generally willing to accept sludge material for agricultural purposes. There are a number of variables; however, the probable cost for sludge removal from Cell 3 and off-site disposal in 2012 is in the order of \$600,000 to \$800,000.

The potential to stockpile/compost the removed sludge on site was reviewed and not recommended. The previous practice of stockpiling sludge at the WWTP site was somewhat reluctantly approved by the MOE as an emergency measure. The sludge is relatively inert, therefore stockpiling and allowing it to compost may provide little benefit. Double handling of the sludge would be more expensive than hauling directly from the lagoons to the final disposal site."

In a follow up memo B.M. Ross clarified that removal of sludge was not an immediate issue. In their opinion the work could be deferred for 3 to 4 years, with periodic inspections to confirm conditions are not getting worse. The alternative is to consider removing sludge in phases as budgets permit.

The aeration system upgrade work is currently proposed with no offsite sludge removal. Sludge accumulation will be monitored annually and off site planned beyond five years.

XI. SUMMARY OF COMPLAINTS AND ACTIONS TAKEN

The following is a summary of all wastewater related complaints received in 2016 and the steps taken to address the complaints:

2017 Customer Complaints and Action Taken			
Date	Location	Description	Action Taken
August 10, 2017	322 Eastern Ave, Exeter	PDC backup	CCTV drain, confirmed no blockage in PDC, customers' plumber corrected plumbing issue.
August 11, 2017	457 William Street, Exeter	PDC concern	CCTV drain, confirmed no blockage in PDC but pipe in poor condition. Recommended replacement of PDC
Sept 13, 2017	217 Victoria Ave East, Crediton	PDC backup	CCTV drain, confirmed roots at cleanout. Excavated, removed roots and repaired PDC.
Sept 13, 2017	141 Sanders Street East, Exeter	PDC backup	CCTV drain, confirmed blockage is private & recommended customer contact a plumber to repair
Sept 19, 2017	418 William Street, Exeter	PDC backup	Unable to CCTV drain
Sept 21, 2017	442 Albert Street, Exeter	PDC backup	CCTV drain, confirmed blockage is private & recommended customer contact a plumber to repair
Oct 13, 2017	Huron Street East, Exeter	PDC concern	CCTV drain, confirmed no blockage in PDC

2017 Annual Wastewater Systems Report to Council

Nov 21, 2017	36 William Street, Exeter	PDC backup	CCTV drain, confirmed no blockage in PDC, customer's plumber corrected plumbing issue.
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XII. SUMMARY of BY-PASSES, OVERFLOWS and SPILLS

In 2017 there were four (4) sewage by-pass events; one (1) at the Huron Park Sanitary Pumping Station; two (2) at the William Street Sanitary Pumping; and one (1) at the Snider Crescent Sanitary Pumping Station. There were no by-passes in 2017 at the Crediton Sanitary Pumping Station. There were no spills at the Exeter Wastewater Treatment Facility or at any sanitary sewage pumping station in 2017.

At the William Street Sanitary Pumping Station there were (2) wet weather sewage bypasses. At the Huron Park Sanitary Sewage Pumping Station there was one (1) wet weather sewage bypass. At the Snider Crescent Sanitary Pumping Station there was one (1) wet weather sewage bypass.

Wet weather by-passes may be an indication of inflow and infiltration issues within the wastewater collection system. In Exeter there are a number of roof water leaders and foundation drains connected to the sanitary sewage system. In the Huron Park Industrial Area there is a number of demolished buildings, old and abandoned sewers on private property and private roads. Inflow and infiltration impacts the wastewater collection system ability to convey sewage and WWTF to treat wastewater. This may also result in untreated wastewater discharges to the open environment.

Records are kept of all bypasses at sanitary pumping stations. A "Sewage By-pass Reporting Record" includes the following information:

- (a) the date of the Event
- (b) the measured or estimated volume of the Event
- (c) the duration of the Event
- (d) the location of the Event
- (e) the reason for the Event
- (f) the level of treatment the Bypass received and disinfection status of same.
- (g) the time of the bypass Event
- (h) the name/time of the call to SAC, HCHU, MOE and name of person contacted
- (i) the date/time of follow up call to HCHU, MOE, and name of person contacted
- (j) the date when sample results were sent.

A "Monthly By-pass Report" includes the facility name, date of the by-pass event, type of pumping station, duration, volume, reason for the by-pass and the sample results. Best efforts are used to take at least two grab sample of every by-pass event and sampled for BOD₅, suspended solids, total phosphorus and E-coli.

At the William Street, Snider Crescent and Crediton Sanitary Pumping Stations the volume of any by-pass event is measured by a sewage meter. By-passes are estimated at the Huron Park Sanitary Pumping Station. The following mitigative measures were taken in 2017:

2017 Annual Wastewater Systems Report to Council

1. Work continued on the wastewater collection system in Huron Park Industrial area to reduce inflow and infiltration.
2. Completed sanitary sewer replacement on James Street (Main to Albert), Simcoe Street (Main to Andrew) and William Street (Huron to Anne).
3. Engineering for future sewer replacement on Huron Street (Edward to town limit).

Sanitary sewers will continue to be replaced as part of an overall asset management program, to reduce inflow and infiltration. When urban road reconstruction projects are planned, the wastewater collection system will be evaluated by CCTV inspection. Sanitary sewers will be replaced as necessary and any cross-connections removed. Although there is sufficient capacity to treat excess flows during heavy rainfall or snow melt events, the sanitary pumping stations are vulnerable to by-passes. Efforts will continue to investigate and undertake measures and initiatives to identify, quantify and reduce by-pass overflows at sanitary pumping stations.

The following is a summary of 2017 wastewater by-pass events:

SOUTH HURON WASTEWATER TREATMENT FACILITY
SUMMARY of 2017 BYPASSES, AND/OR OVERFLOWS

<u>Sanitary Pumping Station Overflow</u>	
Total number of events.	4
Total duration of events. (Hours)	9.08
Of the total number of events, how many are dry-weather events.	0
Total quantity with no treatment. (1000 m3)	1.204
Total quantity with only disinfection. (1000 m3)	0
Total quantity with other treatment. (1000 m3)	0
Are any overflow(s) at combined sewer locations (Yes/No)	No
What is the reason for event	Heavy Precipitation & snow melt
What is the name of the receiving water	Ausable River
Name the most important type of sensitive receptor.	receiving water
What is the approximate distance to the sensitive receptor (km)	0.1

2017 Annual Wastewater Systems Report to Council

Date	Location	Type P/S	Start Time	Duration (hrs)	Volume 1,000m ³	Disinfect Y/N/U	Reason Code	SAMPLE RESULTS			
								BOD mg/l	SS mg/l	TP mg/l	E Coli /100ml
Jan 12	Huron Park	P	00:43	3hrs 55mins	493	N	1&2	18	77	0.28	160,000
Jan 12	William	P	00:54	3hrs 40mins	348	N	1&2	17	52	0.29	170,000
Jan 12	Snider	P	00:43	N/A	226	N	1&2	12	27	0.26	79,000
May 1	William	P	12:20	1hr 30 mins	137	N	1	<40	55	0.30	360,000

P= PRIMARY
S= SECONDARY

REASON CODES

- 1 - HEAVY PRECIPITATION
- 2 - SNOW MELT
- 3 - EQUIPMENT FAILURE
- 4 - EQUIPMENT MAINTENANCE
- 5 - SEWER PROBLEMS
- 6 - POWER FAILURE
- 7 - EXCEED DESIGN CAPACITY

XIII. Notices submitted to MOECC under Schedule 'A' of the ECA

Under the new Environmental Compliance Approval, certain modifications/upgrades to the existing treatment facility, pumping stations and collection system piping are approved under "Limited Operational Flexibility". However, a "Notice of Modifications to Sewage Works" form is required to be completed for any work under Schedule 'A' with a declaration by a Professional Engineer and the Owner.

No "Notice of Modifications to Sewage Works" forms were submitted to the MOECC in 2017.

XIV. Modifications completed under Schedule 'A' of the ECA

No modifications were made to sewage works in 2017 using the Limited Operational Flexibility provision of the ECA.

XV. Federal Wastewater Systems Effluent Regulation

The following is information regarding the mandatory reporting under the Federal (Environment Canada) Wastewater Systems Effluent Regulations SOR/2012-139. This reporting is in addition to the effluent quality and reporting requirements of the ECA.

2017 Annual Wastewater Systems Report to Council

The Exeter Wastewater Treatment Facility is registered with Environment Canada, as a continuous discharge type sewage lagoon and the following are the applicable Effluent Quality Standards.

CBOD	SS	TRC	NH ₃
Average	Average	Average	Maximum
≤ 25 mg/L	≤ 25 mg/L	≤ 0.02 mg/L	< 1.25 mg/L

Sampling Requirements for Continuous Systems with HRT ≥ 5 days

Annual Average Daily Volume (m ³)	Type of Sample	Minimum Sampling Frequency	Averaging Period	Monitoring Report Frequency
> 2500 and ≤ 17500	Grab or composite	Every 2 weeks but at least 7 days after any other sample	Quarterly	Quarterly

Acute Lethality Testing

ADV for Previous Calendar Year	Minimum Sampling Frequency	Reduced Sampling Frequency
> 2500 to ≤ 50000 m ³	Quarterly	Yearly (if samples for 4 consecutive quarters are not acutely lethal)

As a result of good sampling results, quarterly Acute Lethality testing has been reduced to annual sampling. This was a result of four consecutive quarters where the effluent samples tested were determined not to be acutely lethal. Accordingly, acute lethality testing has been reduced to yearly. But at least six months after any other sample. However, if a future sample is determined to be acutely lethal, sampling is required twice monthly to determine the cause. If three consecutive samples are determined not to be acutely lethal, sampling returns to quarterly.

All quarterly effluent reports were submitted prior to the regulatory deadline of within 45 days after the end of the quarter. In 2017 the Exeter Wastewater Treatment Facility was in compliance with the Federal (Environment Canada) Wastewater Systems Effluent Regulations.

The following are the 2017 results for the Exeter Wastewater Treatment Facility:

2017 Annual Wastewater Systems Report to Council

MUNICIPALITY OF SOUTH HURON						
2017 Environment Canada Effluent Regulatory Reporting (ERRIS)						
Location: Exeter Sewage Lagoons						
FIRST QUARTER REPORTING						
Reporting Period	Number of days that effluent was discharged	Total volume of effluent discharged (m³)	Date Sampled	Average CBOD (mg/L)	Average concentration of suspended solids (mg/l)	Acute Lethality Test Results
Jan - March	22	203,524		6.75	6	
JANUARY	0	0				
FEBRUARY	22	203,524	02/02/2017	9.00	5.00	Not Required
			07/02/2017	4.00	4.00	
			14/02/2017	6.00	7.00	
			21/02/2017	8.00	9.00	
MARCH	0	0				
SECOND QUARTER REPORTING						
Reporting Period	Number of days that effluent was discharged	Total volume of effluent discharged (m³)	Date Sampled	Average CBOD (mg/L)	Average concentration of suspended solids (mg/l)	Acute Lethality Test Results
April - June	79	573,762		<4	<2	
APRIL	19	177,992	18/04/2017	<4	<2	Not Lethal
			20/04/2017	<4	<2	
			27/04/2017	<4	<2	
MAY	30	207,662	04/05/2017	<4	<2	
			11/05/2017	<4	<2	
			18/05/2017	<4	<2	
			26/05/2017	<4	<2	
JUNE	30	188,108	08/06/2017	<4	<2	
			15/06/2017	<4	<2	
			22/06/2017	<4	<2	
			29/06/2017	<4	<2	
THIRD QUARTER REPORTING						
Reporting Period	Number of days that effluent was discharged	Total volume of effluent discharged (m³)	Date Sampled	Average CBOD (mg/L)	Average concentration of suspended solids (mg/l)	Acute Lethality Test Results
July - Sept	92	643,558		<4	2.40	
JULY	31	214,983	06/07/2017	<4	<2	Not Required
			11/07/2017	<4	<2	
			18/07/2017	<4	4.00	
			25/07/2017	<4	<2	
AUGUST	31	243,450	02/08/2017	<4	2.00	
			08/08/2017	<4	<2	
			15/08/2017	<4	<2	
			22/08/2017	<4	<2	
			29/08/2017	<4	<2	
SEPTEMBER	30	185,125	05/09/2017	<4	2.00	
			12/09/2017	<4	<2	
			19/09/2017	<4	2.00	
			27/09/2017	<4	2.00	
FOURTH QUARTER REPORTING						
Reporting Period	Number of days that effluent was discharged	Total volume of effluent discharged (m³)	Date Sampled	Average CBOD (mg/L)	Average concentration of suspended solids (mg/l)	Acute Lethality Test Results
Oct - Dec	0	0		0	0.00	
OCTOBER	0	0				
NOVEMBER	0	0				
DECEMBER	0	0				
	TOTAL NUMBER OF DAYS DISCHARGING	TOTAL AMOUNT OF DISCHARGE				
	193	1,420,844				

APPENDIX “A”

APPENDIX "A"**Reporting requirements set out in the Exeter Wastewater Treatment Facility
Environmental Compliance Approval (ECA – No. 2395-9QDPQWECA)**

The Owner shall prepare and submit a performance report to the Water Supervisor on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;
- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6.
- (g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- (h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (i) a summary of all Bypass, spill or abnormal discharge events;
- (j) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule 'A', Section 1, with a status report on the implementation of each modification;
- (k) a report summarizing all modifications completed as a result of Schedule 'A', Section 3; and
- (l) any other information the Water Supervisor requires from time to time.

APPENDIX “B”

2017 Annual Wastewater Systems Report to Council

APPENDIX "B"**REGULATIONS PERTAINING TO THE OPERATION OF A WASTEWATER SYSTEM**

1. Federal (Environment Canada) Wastewater Systems Effluent Regulations
SOR/2012-139
2. Ontario Water Resources Act, R.S.O. 1990, c. O.40

Related regulations made under the Ontario Water Resources Act:

- O. Reg. 223/07 - Environmental Penalties
 - O. Reg. 525/98 - Approval Exemptions
 - O. Reg. 155/98 – Transitional Provisions Related to the Repeal of Part VIII of the Environmental Protection Act.
 - O. Reg. 129/04 - Licensing of Sewage Works Operators
3. Ontario Environmental Protection Act, R.S.O. 1990, c. E.19
 4. Ontario Environmental Assessment Act, R.S.O. 1990, c. E.18
 5. Ontario Planning Act R.S.O. 1990, c. P.13
 6. Ontario Nutrient Management Act, 2002, S.O. 2002, c. 4
 7. Ontario Environmental Bill of Rights Act, S.O. 1993, c. 28
 8. Ontario Clean Water Act, 2006, S.O. 2006, c. 22
 9. Ontario Regulation 453/07 - Financial Plans Regulation made under the Safe Drinking Water Act, 2002, S.O. 2002, c. 32
 10. Ontario Building Code Act S.O. 1992, c. 23

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Last Modified: 09/03/2018

APPENDIX “C”



Ministry of the Environment and Climate Change
Ministère de l'Environnement et de l'Action en
matière de changement climatique

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 2395-9QDPQW

Issue Date: November 25, 2014

The Corporation of the Municipality of South Huron
322 Main St S
Post Office Box, No. 759
Exeter, Ontario, N0M 1S6

Site Location: Exeter Wastewater Treatment Plant
71042 Airport Line RR # 1, Exeter
South Huron Municipality, County of Huron, N0M 1S6

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

Upgrading of the existing Town of Exeter Sewage Treatment Facility for the collection, transmission, treatment and disposal of domestic sewage from the Town of Exeter, located at the above site location, rated at the capacities mentioned below and consisting of the following Works:

Exeter Sewage Treatment Facility (Rated Capacity)	
Annual Total Sewage Volume	2,573,718 m ³ /y
Average Daily Flow	7,051 m ³ /d

PROPOSED WORKS

- Installation of two (2) new positive displacement blowers, to replace two of the existing blowers, each sized to provide 100% of the air flow required to operate the lagoon system, thus capable of delivering a minimum of 435 L/s.

PREVIOUS WORKS

Treatment Plant

Sewage Lagoons

- Aerated Cell No. 3, approximate dimensions 330 m x 260 m x 4.15 m water depth, and effective storage volume of approximately 343,500 m³;
- Cell No. 4, constructed in an “L” shape, with one section of approximate dimensions 270 m x 550 m, and the other section of approximate dimensions 250 m x 160 m, both sections with 4.3 m water depth, and effective storage volume of approximately 751,000 m³; and
- Cell No. 1, approximate dimensions 340 m x 260 m x 3.7 m water depth, and effective storage volume of approximately 313,000 m³.

Inlet and Transfer Structures

- Aerated Cell No. 3, approximate dimensions 330 m x 260 m x 4.15 m water depth, and effective storage volume of approximately 343,500 m³;
- Inlet structure to sewage lagoon Cells No. 3 and 4;
- Interconnecting structure between sewage lagoon Cells No. 3 and 4;
- Interconnecting structure between sewage lagoon Cells No. 1 and 3; and
- Outlet structure from sewage lagoon Cells No. 1 and 4.

Aeration Equipment

- Submerged air diffuser system within lagoon Cell No. 3; and
- Three (3) positive displacement blowers, each rated at 800 L/s, housed within a blower building (two of the existing blowers to be replaced by the two new blowers as per Proposed Works and one to remain in place as a back up stand-by).

Filter Pumping Station

- Inground filter pumping station, consisting of two (2) submersible sewage pumps, each with a rated capacity of 237 L/s @ 13.5 m TDH, complete with valves and piping, alarms, etc., capable of pumping effluent from sewage lagoon Cell No. 3 or 4 to either the intermittent sand filter system or to sewage lagoon Cell No. 1.

Intermittent Sand Filter System

- Intermittent sand filtration system comprising four (4) filter beds to typically operate on a cycle of two operating and two resting, each with a top surface area of approximately 102 m x 63 m, having a minimum usable surface area of 23,400 m², together with distribution and underdrain collection piping, designed for an average hydraulic loading rate of 475 L/s.

Phosphorus Removal

- Enclosed alum storage tank and alum feed system, including application points to the sewage lagoon Cell No. 3 and 4 inlet structure and the sewage lagoon Cell No. 3 and 4 interconnecting structure.

Effluent Structure & Outfall

- Effluent flow control structure, complete with flow metering equipment; and
- Outfall piping to Ausable River.

William Street. Sewage Pumping Station

- Three (3) sewage pumps, each with a rated capacity of 145 L/s @ 25.0 m TDH for single pump operation, complete with variable speed drives, pump controls, piping, discharge forcemain, etc.; and
- One (1) 175 kW standby diesel generator set.

and other controls, piping, valves, drains, and appurtenances essential for the proper operation of the aforementioned sewage works,

all in accordance with supporting documents listed in Schedule 'B'.

For the purpose of this environmental compliance approval, the following definitions apply:

"Annual Average Concentration" means the arithmetic mean of the Monthly Average Concentrations of a contaminant in the effluent calculated for any particular calendar year;

"Annual Average Loading" means the value obtained by multiplying the Annual Average Concentration of a contaminant by the Average Daily Flow over the same calendar year;

"Approval" means this entire document and any schedules attached to it, and the application;

"Average Daily Flow" means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

"BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"Bypass" means diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final effluent sampling location, and discharging to the environment through the Sewage Treatment Plant outfall;

"Emergency Situation" means a structural, mechanical or electrical failure that causes a temporary reduction in the capacity of the Sewage Treatment Plant or an unforeseen flow condition that may result in:

- a) danger to the health or safety of any person; or,
- b) injury or damage to any property, or serious risk of injury or damage to any property; or
- c) treatment process biomass washout.

"Event" means an action or occurrence, at a given location within the Sewage Treatment Plant that causes a Plant Bypass or Plant Overflow. An Event ends when there is no recurrence of a Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Two Events are separated by at least 12 hours during which there has been no recurrence of a Bypass or Overflow;

"Final Effluent" means sewage discharge via the Sewage Treatment Plant outfall after undergoing the full train of unit processes as listed in the Approval;

"CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Composite Sample" means a sample made up of at least 24 individual samples taken approximately one hour apart, collected over a time period of 24 consecutive hours;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"*E. Coli* " refers to the thermally tolerant forms of *Escherichia* that can survive at 44.5 degrees Celsius;

"EPA" means the Environmental Protection Act , R.S.O. 1990, c.E.19, as amended;

"Equivalent equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Geometric Mean Density" is the nth root of the product of multiplication of the results of n number of samples over the period specified;

"Grab Sample" means an individual sample of at least 1000 millilitres collected in the appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;

"Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make

to the Works under this Approval;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Monthly Average Concentration" means the arithmetic mean of all Daily Concentrations of a contaminant in the effluent sampled or measured, or both, during a calendar month;

"Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works";

"Owner" means the Corporation of the Municipality of South Huron and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Peak Flow Rate" means the maximum rate of sewage flow for which the plant or process unit was designed;

"Plant Overflow" means a discharge to the environment from the Sewage Treatment Plant at a location other than the plant outfall or into the plant outfall downstream of the Final Effluent sampling location;

"Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Rated Capacity" means the Average Daily Flow for which the Works are approved to handle;

"Sewage Treatment Plant" means the entire sewage treatment and effluent discharge facility;

"Substantial Completion" has the same meaning as "substantial performance" in the Construction Lien Act;

"Water Supervisor" means the Water Supervisor or designate for the Sarnia and Windsor offices of the Ministry; and

"Works" means the sewage works described in the Owner's application and this Approval, including the Proposed Works, Previous Works and the modifications made under Limited Operational Flexibility.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this Approval.

(3) Where there is a conflict between a provision of any submitted document referred to in this Approval and the Conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this Approval shall not be affected thereby.

2. EXPIRY OF APPROVAL

This Approval will cease to apply to those parts of the Proposed Works which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

(1) The Owner shall notify the Water Supervisor and the Director, in writing, of any of the following changes within 30 days of the change occurring:

- (a) change of Owner;
- (b) change of address of the Owner;
- (c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included

in the notification to the Water Supervisor;

- (d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Informations Act, R.S.O. 1990, c. C39 shall be included in the notification to the Water Supervisor;

(2) In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the Water Supervisor and the Director.

4. UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

(1) Within one (1) year of the Substantial Completion of the Proposed Works a set of as-built drawings showing the works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. BYPASSES AND PLANT OVERFLOWS

(1) Any Bypass or Plant Overflow is prohibited, except:

- (a) in an Emergency Situation;
- (b) where the approved design and operation of the Works provides for Bypasses / Plant Overflows to be triggered under certain flow conditions and those conditions have been met;
- (c) where the Bypass / Plant Overflow is a direct and unavoidable result of a planned maintenance procedure, the Owner notified the Director 15 days prior to the Bypass/Plant Overflow and the Director has given written consent of the Bypass/Plant Overflow; and
- (d) where the Bypass / Plant Overflow is planned for research or training purposes, the discharger notified the Director 15 days prior to the Bypass / Plant Overflow and the Director has given written consent of the Bypass / Plant Overflow.

(2) The Owner shall forthwith notify the Spills Action Centre (SAC) and the Medical Officer of Health of all Bypass and Plant Overflow Events. This notice shall include, at a minimum, the following information:

- (a) the date, time, and duration of the Event;
- (b) the location of the Event;
- (c) the measured or estimated volume of the Event;
- (d) the reason for the Event; and
- (e) the level of treatment the Bypass(es) and/or Plant Overflow(s) received and disinfection status of same.

(3) The Owner shall submit Bypass and Plant Overflow Event Reports to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 14, May 15, August 14, and November 15. Event Reports shall be in an electronic format specified by the Ministry. In each Event Report the Owner shall include, at a minimum, the following information on any Events that

occurred during the preceding quarter:

- (a) the date of the Event(s);
- (b) the measured or estimated volume of the Event(s);
- (c) the duration of the Event(s);
- (d) the location of the Event(s);
- (e) the reason for the Event(s); and
- (f) the level of treatment the Bypass(es) and/or Plant Overflow(s) received and disinfection status of same.

(4) The Owner shall use best efforts to collect a representative sample consisting of a minimum of two (2) grab samples of the By-pass / Plant Overflow and have it analyzed for parameters outlined in Condition 7 using the protocols specified in Condition 9 (with BOD5 instead of CBOD5, preferably), one at the beginning of the Event and the second approximately near the end of the Event, to best reflect the effluent quality of such By-pass or Plant Overflow.

(5) The Owner shall maintain a logbook of all Plant Bypasses and Plant Overflows, which shall contain, at a minimum, the types of information set out in subsection 2(a) to 2(e) in respect of each Bypass and Plant Overflow.

6. EFFLUENT OBJECTIVES

(1) The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 1 - Final Effluent Objectives	
Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
CBOD ₅ (a)	5.0
CBOD ₅ (b)	15.0
Total Suspended Solids (a)	5.0
Total Suspended Solids (b)	15.0
Total Phosphorus (a)	0.50
Total Phosphorus (b)	0.80
Total Ammonia Nitrogen (a)(*)	1.0
Total Ammonia Nitrogen (b)(*)	>5:1 dilution (***)
Dissolved Oxygen (**)	5.0
<i>E. Coli</i>	<150 organisms/100 mL (monthly geometric mean density)

Note:

(a) Based on 2,290,518 cubic metres of filtered effluent and when stream temperatures are greater than 5 °C;

(b) Based on 283,200 cubic metres of unfiltered direct discharge and when stream temperatures are less or equal to 5 °C;

(*) During the operation of the intermittent sand filters, the Total Ammonia Nitrogen concentrations are based

on assumed temperature and pH conditions which will result in 0.1 mg/L or less unionized ammonia concentration in the discharge.

(**) The dissolved oxygen value shown is a minimum versus for the other variables the values are maximums.

(***) > 5:1 dilution means 5 parts streamflow to 1 part sewage effluent flow.

(2) The Owner shall use best efforts to:

- (a) operate the works within the Rated Capacity of the Works;
- (b) ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.

(3) The Owner shall include in all reports submitted in accordance with Condition 10 a summary of the efforts made and results achieved under this Condition.

7. EFFLUENT LIMITS

(1) The Owner shall design, construct, operate and maintain the Works such that the concentrations and waste loadings of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 2 - Final Effluent Limits		
Final Effluent Parameter	Monthly Average Concentration (milligrams per litre unless otherwise indicated)	Annual Average Loading (kilograms per day unless otherwise indicated)
Column 1	Column 2	Column 3
CBOD ₅ (a)	10.0	22,905
CBOD ₅ (b)	25.0	7,080
Total Suspended Solids (a)	10.0	22,905
Total Suspended Solids (b)	25.0	7,080
Total Phosphorus (a)	0.60	1,374
Total Phosphorus (b)	1.0	283
Total Ammonia Nitrogen (a)(*)	4.0	9,162
Un-ionized Ammonia (b)	0.10	28.3
Un-ionized Ammonia (c)	0.15	-
Dissolved Oxygen (**)	5.0	-
<i>E. Coli</i>	200/100 mL (monthly geometric mean density)	-

Note:

(a) Based on 2,290,518 cubic metres of filtered effluent and when stream temperatures are greater than 5 °C;

(b) Based on 283,200 cubic metres of unfiltered direct discharge and when stream temperatures are less or equal to 5 °C;

- (c) During the winter lagoon portion in the discharge based on a maximum temperature of 5°C and a historical pH range of 7.5 to 8.5. Any exceedance of the 0.1 mg/L un-ionized ammonia criterion in Ausable River must be reported immediately to the Water Supervisor. The Water Supervisor may require that a benthic invertebrate organisms investigation be carried out and the findings submitted to the Water Supervisor within sixty (60) days to determine if aquatic life in the Ausable River has been impacted by this exceedance.
- (*) During the operation of the intermittent sand filters, the Total Ammonia Nitrogen concentrations are based on assumed temperature and pH conditions which will result in 0.1 mg/L or less unionized ammonia concentration in the discharge.
- (**) The dissolved oxygen value shown is a minimum versus for the other variables the values are maximums.

(2) For the purposes of determining compliance with and enforcing subsection (1):

- (a) The Monthly Average Concentration of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (1).
- (b) The Annual Average Loading of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum waste loading set out in Column 3 of subsection (1).

(3) Notwithstanding subsection (1), the Owner shall operate and maintain the Works such that the effluent is continuously disinfected so that the monthly Geometric Mean Density of *E. Coli* does not exceed 200 organisms per 100 millilitres of effluent discharged from the Works.

(4) The unfiltered discharge (i.e when stream temperatures are less than or equal to 5 °C) shall be restricted to no more than 283,200 cubic metres in any one winter discharge season.

(5) Paragraphs (a) and (b) of subsection (2) shall apply upon the issuance of this Approval.

(6) The effluent limit set out in subsection (3) shall apply upon the issuance of this Approval.

(7) Only those monitoring results collected during the corresponding time period shall be used in calculating the Monthly Average Concentration and Annual Average Loading for this Approval.

8. OPERATION AND MAINTENANCE

(1) The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this Approval and the Act and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.

(2) The Owner shall prepare an operations manual within six (6) months of Substantial Completion of the Proposed Works, that includes, but not necessarily limited to, the following information:

- (a) operating procedures for routine operation of the Works;
- (b) inspection programs, including frequency of inspection, for the Works and the methods or tests

- employed to detect when maintenance is necessary;
- (c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;
- (d) procedures for the inspection and calibration of monitoring equipment;
- (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Ministry's local office; and
- (f) procedures for receiving, responding and recording public complaints, including recording any followup actions taken.

(3) The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

(4) The Owner shall provide for the overall operation of the Works with an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 129/04.

9. MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) For the purposes of this condition, the following definitions apply:

- (a) Daily means once each day;
- (b) Weekly means once every month;
- (c) Monthly means once every month;

(3) Samples shall be collected at the following sampling points, at the frequency specified, by means of the specified sample type and analysed for each parameter listed and all results recorded:

Table 3 - Raw Sewage Monitoring (Samples to be collected at the head of the inlet works)		
Parameters	Sample Type	Minimum Frequency
BOD ₅	Grab Sample	Monthly
Total Suspended Solids	Grab Sample	Monthly
Total Kjeldahl Nitrogen	Grab Sample	Monthly
Total Phosphorus	Grab Sample	Monthly

Table 4 - Final Effluent Monitoring (Samples to be collected at the outlet of the storage lagoons and at the outlet of the sand filter unless otherwise indicated)		
Parameters	Sample Type	Frequency
CBOD ₅	Composite Sample	Weekly
Total Suspended Solids	Composite Sample	Weekly
Total Phosphorus	Composite Sample	Weekly
Ammonia + Ammonium Nitrogen	Composite Sample	Weekly
Nitrates	Composite Sample	Weekly
<i>E. Coli</i>	Grab	Weekly
Dissolved Oxygen	Grab/probe	Weekly
pH	Grab/Probe	Weekly
Temperature	Grab/Probe	Weekly

(4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", as amended from time to time by more recently published editions;
- (b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
- (c) the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition), as amended from time to time by more recently published editions.

(5) The temperature and pH of the effluent from the Works shall be determined in the field at the time of sampling for Total Ammonia Nitrogen. The concentration of unionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended, for ammonia (unionized). For the purposes of determining concentration of unionized ammonia, single representative values of temperature and pH obtained through a probe shall be considered complementary to the 24-hour composite total ammonia nitrogen sample.

(6) The sampling locations in subsection (3) above may be changed or abandoned and new locations added if, in the opinion of the Water Supervisor, it is necessary to do so to ensure representative samples are being collected.

(7) The Owner shall install and maintain (a) continuous flow measuring device(s), to measure the flowrate through the Works with an accuracy to within plus or minus ten per cent (+/- 10%) of the actual flowrate for the entire design range of the flow measuring device, and record the flowrate at a daily frequency.

(8) The Owner shall, for the purpose of providing data for the calculation of loadings in effluent in accordance with Condition 7, measure, estimate or calculate and record the total volume of element

discharged on the sampling day.

(9) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

10. REPORTING

(1) One (1) week prior to the start up of the operation of the Proposed Works, the Owner shall notify the Water Supervisor (in writing) of the pending start up date.

(2) Ten (10) days prior to the date of a planned Bypass being conducted pursuant to Condition 5 and as soon as possible for an unplanned Bypass, the Owner shall notify the Water Supervisor (in writing) of the pending start date, in addition to an assessment of the potential adverse effects on the environment and the duration of the Bypass.

(3) The Owner shall report to the Water Supervisor, any exceedence of any parameter specified in Condition 7 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.

(4) In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the Water Supervisor describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(5) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

(6) The Owner shall prepare and submit a performance report to the Water Supervisor on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;

(b) a description of any operating problems encountered and corrective actions taken;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;

(d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6.
- (g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- (h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (i) a summary of all Bypass, spill or abnormal discharge events;
- (j) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule 'A', Section 1, with a status report on the implementation of each modification;
- (k) a report summarizing all modifications completed as a result of Schedule 'A', Section 3; and
- (l) any other information the Water Supervisor requires from time to time.

(6) The Owner shall, within thirty (30) calendar days of issuance of this Approval, submit a Municipal and Local Services Board Sewage Works Profile Information Form, and shall resubmit the updated document every time a notification is provided to the Water Supervisor in compliance with requirements of change of ownership under this Approval.

11. REVOCATION OF EXISTING APPROVALS

(1) The descriptions of the approved works and conditions of approval in this Approval apply in place of all the existing descriptions and conditions in the Approvals under the Ontario Water Resources Act for sewage works which are part of the Works approved by this Approval.

(2) Notwithstanding Condition 11(1) above, the original applications for approval, including design calculations, engineering drawings, and reports prepared in support of the existing Approvals whose descriptions of the approved works and conditions are now replaced pursuant to Condition 11(1) above, shall form part of this Approval.

(3) Where an existing Approval referred to in Condition 11(1) above applies to Works in addition to the Works approved by this Approval, it shall continue to apply to those additional Works.

12. LIMITED OPERATIONAL FLEXIBILITY

(1) The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works", included under Schedule 'A' of this Approval, as amended.

(2) Sewage works proposed under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.

(3) The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.

(4) For greater certainty, the following are not permitted as part of Limited Operational Flexibility:

(a) Modifications to the Works that result in an increase of the approved Rated Capacity of the Works;

(b) Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;

(c) Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;

(d) Modifications to the Works approved under s.9 of the EPA, and

(e) Modifications to the Works pursuant to an order issued by the Ministry.

(5) Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.

(6) If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, as deemed necessary in consultation with the Water Supervisor, provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.

(7) For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the Environmental Protection Act , Niagara Escarpment Planning and Development Act , Oak Ridges Moraine Conservation Act , Lake Simcoe Protection Act and Greenbelt Act .

(8) Prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the Water Supervisor.

SCHEDULE 'A'

Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works

1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

1.1 Sewage Pumping Stations

- a. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.
- b. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200mm

1.2 Sewage Treatment Process

- a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
- b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
- c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.
- d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the approved Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.
- e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same or exceeded. For clarity purposes, the following equipment can be considered under this provision: pumps, screens, grit separators, blowers, aeration equipment, sludge thickeners, dewatering

equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

1.3 Sewage Treatment Plant Outfall

- a. Replacement of discharge pipe with similar pipe size or diffusers provided that the outfall location is not changed.

1.4 Sanitary Sewers

- a. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200mm.

1.5 Pilot Systems

- a. Installation of pilot systems for new or existing technologies provided that:
 - i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
 - ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
 - iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and Water Supervisor three months after completion of the pilot project.
- 2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
- 3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.
- 4. The modifications noted in section (3) above are not required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

SCHEDULE 'B'

Environmental Compliance Approval (ECA) supporting documents:

1. Environmental Compliance Approval Application for Sewage Works dated September 27, 2013 signed by Don Gilbertson, and cover letter submitted by Andrew Garland, P.Eng., dated September 30, 2013;
2. A document entitled "Municipality of South Huron Exeter STP Blowers Design Brief and Notes", dated June 4, 2013 and Revised January 20, 2014;
3. Engineering Drawing No. M1 entitled "Municipality of South Huron – Exeter Wastewater Treatment Plant", dated September 27, 2013 and prepared by BMRoss, Consulting Engineers; and
4. Email dated January 20, 2014 from Andrew Garland, P.Eng. of B.M. Ross and Associates Limited to Youssouf Kalogo, P.Eng of the Ontario Ministry of the Environment.



Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number, issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
ECA Owner	Municipality	

Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Description shall include:

1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Conforms with the Limited Operational Flexibility as per the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Name (Print)	PEO License Number
Signature	Date (mm/dd/yy)
Name of Employer	

Part 4 – Declaration by Owner

I hereby declare that:

1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. These modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Name of Owner Representative (Print)	Owner representative's title (Print)
Owner Representative's Signature	Date (mm/dd/yy)

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction, to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
5. Condition 5 is included to indicate that Bypass(es) is prohibited unless there is an emergency situation or the Owner has permission from the Water Supervisor to do so and the Bypass will not violate the approved effluent requirements. Condition 5 is also included to indicate that Plant Overflow of untreated and/or partially treated sewage to the environment is prohibited, save in certain limited circumstances where the failure to do so could result in greater injury to the public interest than the Plant Overflow itself, or where the Plant Overflow can be limited or otherwise mitigated by handling it in accordance with an approved contingency plan. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass / Plant Overflow Event(s).
6. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 7 are exceeded.
7. Condition 7 is imposed to ensure that the effluent discharged from the Works to the receiver meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body.
8. Condition 8 is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by

the owner and made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.

9. Condition 9 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.
10. Condition 10 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
11. Condition 11 is included to stipulate that this Approval replaces all previous approvals for the Works being the subject of this Approval, and that the existing approvals remain in force for the purpose of any Works which are not subject to this Approval.
12. Condition 12 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the terms and conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6088-9FEREP issued on March 5, 2014.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 25th day of November, 2014



Edgardo Tovilla
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

HV/

c: DWMD Supervisor, MOECC Owen Sound District Office.
The Corporation of the Municipality of South Huron.

APPENDIX “D”

MUNICIPALITY OF SOUTH HURON
Performance Assessment Report - Wastewater Treatment Plant

Project: Exeter Lagoons
 Project Number: 110000221
 Works Number: 7051
 Description: Raw Flow Group Selected:

Month	Flows			BioChemical O2 Demand			Suspended Solids			Phosphorus			Nitrogen Series			←E.Coli → Geo. Mean per 100ml	
	Total Flow m3	Avg Day m3	Max Day m3	Avg Raw BOD mg/L	Avg Eff CBOD mg/L	Percent Removal kg/d	Avg Raw SS mg/L	Avg Eff SS mg/L	Percent Removal kg/d	Avg Raw Phos. mg/L	Avg Eff Phos. mg/L	Phos. Loading kg/d	Percent Removal	Avg Eff NH3+NH4 mg/L	Avg Eff NH3+NH4 Loading kg/d		Avg Eff Nitrite mg/L
JAN	180,296	7,839	54,144	52.7	74.3	94%	73.6	6.3	58.28	91%	2.7	0.24	2.22	8.13	75.21	0.59	0.07
FEB	128,584	4,592	8,781	116.3	7.5	69.38	123.7				3.2						
MAR	133,492	4,603	15,907	123.7			130.0										
APR	153,285	5,933	14,351	87.7	4.0	37.47	68.3	2.0	18.74	97%	1.9	0.40	3.74	0.13	1.21	5.75	0.06
MAY	170,593	5,502	21,312	207,662	60.3	4.0	17.3	2.0	13.39	88%	0.5	0.28	1.87	0.10	0.67	6.56	0.03
JUN	72,114	2,403	5,012	188,108	136.0	4.0	99.0	2.0	12.54	98%	3.7	0.24	1.50	0.10	0.62	4.97	0.03
JUL	59,913	1,932	9,168	214,383	98.6	4.0	42.7	2.5	17.33	94%	1.9	0.28	2.01	0.10	0.69	2.52	0.03
AUG	51,600	1,664	2,718	243,450	221.3	4.0	211.6	2.0	15.70	98%	5.6	0.27	2.12	0.18	1.41	4.96	0.09
SEP	55,110	1,837	5,520	185,125	99.7	4.0	97.3	2.0	12.34	98%	3.4	0.25	1.54	0.58	3.58	2.59	0.09
OCT	60,791	1,961	3,797	48.0			42.3				1.6						
NOV	114,499	3,816	9,414	130.3			285.7				3.8						
DEC	84,694	2,732	6,206	71.7			46.7				2.2						
Total Annual:	1,264,961	44,814	156,330	1,420,844	1,246.3	31.5	1,190.8	18.8	148.32	95%	31.80	1.96	15.00	9.32	83.39	28	0.40
AVG:	105,413	3,735	13,028	202,978	103.86	4.5	99.2	2.7	21.18	95%	2.65	0.28	2.14	1.33	11.91	3.99	0.06
MAX:	180,296	7,839	54,144	243,450	221.3	7.5	285.7	6.3	58.28	99%	5.6	0.40	3.74	8.13	75.21	6.56	0.09
Criteria:																	

NOTE: ECA Limit Exceedance Reported to MOECC

Winter Discharge from Feb 1 - Feb 22 2017

Summer Discharge From April 11 - Sept 29 2017

No Effluent discharge from WWTP

LEGEND:

Raw = Untreated raw sewage entering the lagoon

Total Flow = Total sewage flow in any given month

Avg Day = Total monthly sewage flow divided by the number of days in the month.

Max Day = Maximum sewage flow on any given day during the month.

Effluent = Treated sewage discharged from the lagoon

CBOD = Carbonaceous Biochemical Oxygen Demand

Loading = Loading is the contribution of each wastewater constituent measured in units of mass per time (kg/day) and may be calculated as the product of flow times concentration.

SS = Suspended Solids is the total small particulate matter which remains in suspension in sewage.

Phos. = Phosphorus is an allotropic nonmetallic element occurring in phosphates and living matter. It is an essential constituent of protoplasm and is commonly used in fertilizers.

NH3 = Ammonia (NH3) is a compound of nitrogen and hydrogen.

NH4 = Ammonium (NH4) is derived from ammonia and found in a wide variety of organic and inorganic compounds.

Nitrate = Nitrate (NO3) is a nitrogen-oxygen chemical unit which combine with various organic and inorganic compounds. The most common use is for plant fertilizer.

Nitrite = Nitrite (NO2) is a nitrogen-oxygen chemical unit which combine with various organic and inorganic compounds. Once taken into the body, nitrites are converted to nitrites.

E. Coli = Escherichia coli. A bacterium that is commonly found in the lower intestine of warm-blooded organisms. Most are harmless but some strains can cause serious illness.

Geo. Mean = Geometric mean is a type of mean or average, which indicates the central tendency or typical value of a set of numbers by using the product of their values (as opposed to the Arithmetic mean which uses their sum).

mg/L = milligrams per litre

kg/d = kilograms per day



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Don Giberson, Environmental Services Director**
Date: March 19 2018
Report: ESD.18.09
Subject: Tender Results - 2018 Provision of Crushed Granular "M" for Road Maintenance

Recommendations:

That South Huron Council receive the report from Don Giberson, Environmental Services Director RE: Tender Results - 2018 Provision of Crushed Granular "M" for Road Maintenance AND;

That South Huron Council accept the tender received from Jennison Construction Ltd and award a contract for the supply Crushed Granular "M" at \$9.20 per tonne for a total cost of \$304,704.00 plus HST.

Purpose:

The purpose of this report is to notify Council of the results of the tender for the 2018 Provision of Crushed Granular "M" for Road Maintenance and to recommend award of a contract to the low bidder.

Background and Analysis:

The tender for 2018 Provision of Crushed Granular "M" for Road Maintenance was advertised on the Biddingo web site, in accordance with section 9(b) of the Procurement By-Law#33-2017. Biddingo is an on-line procurement service for public sector tenders, quotations and RFPs. The 2018 Provision of Crushed Granular "M" for Road Maintenance tender was posted on Biddingo on January 30, 2018.

Tenders closed on Wednesday, February 28, 2017 at 2:00pm and three (3) tenders were received by the Municipality. Tenders were opened by Deputy Mayor Dave Frayne, in the presence of Dan Best CAO, Angela Shipway, Financial Analyst; Don Giberson, ESD Director and several contractors. The following are the tender results:

	Contractor	Price (Excluding HST)	HST	Total Cost (Including HST)
1	Jennison Construction Ltd.	\$304,704.00	\$39,611.52	\$344,315.52
2	Clarence Carter & Sons Ltd	\$344,448.00	\$44,778.24	\$389,226.24
3	Joe Kerr Limited	\$347,760.00	\$45,208.80	\$392,968.80

The tender received from the low bidder, Jennison Construction Ltd. was checked and found to be complete and in conformance with the specifications.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015-2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

This work was publicly tendered as early as possible in the fiscal year in order to achieve the best possible pricing. Procurement was conducted via Biddingo, a public sector on-line procurement service.

Increased Communications and Municipal Leadership

The tender notice was published in the local newspapers; on the municipal web site and on Biddingo to reach as many interested bidders as possible.

Transparent, Accountable and Collaborative Governance

The public tendering transparent process was for this work used in accordance with the procurement By-law 33-2017.

Dedicated Economic Development Effort

Having well maintained roads contributes to the wellbeing of our rural residents and is essential to attracting/retaining businesses, especially in the agricultural sector.

Financial Impact:

The costs associated with the 2018 Maintenance Gravel tender are included in the 2018 Transportation Services Operating Budget.

The amount within the Transportation Services Operating budget for unpaved road maintenance (gravel and dust control) is \$414,342. Of that amount \$336,342 was allocated for the supply and placement of maintenance gravel. In addition \$5,500 was budgeted for gravel in the Landfill operating Budget.

A financial analysis was carried out and the cost of this maintenance gravel tender, including non-recoverable HST, is within the approved budget amounts.

The following is a summary of the financial analysis:

FINANCIAL ANALYSIS SUMMARY	
	Total
Supply of 31,120 tonnes of gravel for Roads	\$286,304.00
Supply of 1,500 tonnes of provisional gravel	\$13,800.00
Supply of 500 tonnes of gravel for Landfill	<u>\$4,600.00</u>
Subtotal	\$304,704.00
13% HST	<u>\$39,611.52</u>
TOTAL	\$344,315.52
Cost prior to HST	\$304,704.00
Non-recoverable HST	<u>\$5,362.61</u>
TOTAL	\$310,066.61
Approved Budget for 2018 Maintenance Gravel	\$336,342.00
Approved Budget for 2018 Landfill Gravel	<u>\$5,500.00</u>
TOTAL	\$341,842.00
Net Difference Approved Budget vs Tender Cost	\$31,775.39

Historically there have been few bidders on the Maintenance Gravel tender. In order to give Council a more fulsome picture of pricing trends for maintenance gravel, an analysis was carried out on the historical costs as follows:

Historical Maintenance Gravel costs per tonne					
2013	2014	2015	2016	2017	2018
\$7.97	\$8.70	\$9.32	\$8.90	\$9.75	\$9.20

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Approved Transportation Operating Budget
2. Minimum Maintenance Standards, under the Highway Traffic Act

Consultation:

The Roads Foreman was consulted as part of the tender review and preparation of this report.

Related Documents:

None

Respectfully submitted,



Don Giberson, Environmental Services Director



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Don Giberson, Environmental Services Director**
Date: March 19 2018
Report: ESD.18.10
Subject: Tender Results - 2018 Supply and Application of Dust Suppressant on Gravel Roads

Recommendations:

That South Huron Council receive the report from Don Giberson, Environmental Services Director RE: Tender Results - 2018 Supply and Application of Dust Suppressant on Gravel Roads AND;

That South Huron Council accept the tender received from 552976 Ontario Limited o/a Cliff Holland Trucking and award a contract for the supply and application of 364 flake tonnes of dust suppressant at \$212.00 per tonne for a total cost of \$77,168.00 plus HST.

Purpose:

The purpose of this report is to notify Council of the results of the 2018 dust suppressant tender and to recommend award of a contract to the low bidder.

Background and Analysis:

The tender for 2018 Supply and Application of Dust Suppressant on Gravel Roads was advertised on the Biddingo web site, in accordance with section 9(b) of the Procurement By-Law#33-2017. Biddingo is an on-line procurement service for public sector tenders, quotations and RFPs. The 2018 Supply and Application of Dust Suppressant on Gravel Roads tender was posted on Biddingo on January 30, 2018.

Tenders closed on Wednesday, February 28, 2017 at 2:00pm and four (4) tenders were received by the Municipality. Tenders were opened by Deputy Mayor Dave Frayne, in the presence of Dan Best CAO, Angela Shipway, Financial Analyst; Don Giberson, ESD Director and several contractors.

The following are the tender results:

	Contractor	Price (Excluding HST)	HST	Price (Excluding HST)
1	Clifford Holland	\$77,168.00	\$10,031.84	\$87,199.84
2	Den-Mar Brines Ltd	\$91,000.00	\$11,830.00	\$102,830.00
3	Pollard Highway Products	\$98,280.00	\$12,776.40	\$111,056.40
4	Da-Lee Dust Control	\$139,601.28	\$18,148.17	\$157,749.45

The tender received from Den-Mar Brines Ltd did not include a tender deposit and was rejected as non-compliant.

The tender received from the low bidder, 552976 Ontario Limited o/a Cliff Holland Trucking, was checked and found to be complete and in conformance with the specifications.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

This work was publicly tendered as early as possible in the fiscal year in order to achieve the best possible pricing. Procurement was conducted via Biddingo, a public sector on-line procurement service.

Increased Communications and Municipal Leadership

The tender notice was published in the local newspapers; on the municipal web site and on Biddingo to reach as many interested bidders as possible.

Transparent, Accountable and Collaborative Governance

The public tendering transparent process was for this work used in accordance with the procurement By-law 33-2017.

Dedicated Economic Development Effort

Having well maintained roads contributes to the wellbeing of our rural residents and is essential to attracting/retaining businesses, especially in the agricultural sector.

Financial Impact:

The costs associated with the 2018 Supply and Application of Dust Suppressant Tender are included in the 2018 Transportation Services Operating Budget.

The amount within the Transportation Services Operating budget for unpaved road maintenance (gravel and dust suppressant) is \$414,342. Of that total, \$78,000 was allocated for the supply and placement of dust suppressant.

A financial analysis was carried out and the cost of this tender, including non-recoverable HST is \$526.11 over the budgeted amount. However, the gravel tender is \$31,775.39 under budget and more than offsets this minor additional cost. The following is a summary of the financial analysis:

FINANCIAL ANALYSIS SUMMARY	
	Total
Supply of 364 flake tonne of CL2 Composite for Dust Control	\$77,168.00
13% HST	<u>\$10,031.84</u>
TOTAL	\$87,199.84
Cost prior to HST	\$77,168.00
Non-recoverable HST	<u>\$1,358.11</u>
TOTAL	\$78,526.11
Approved Budget for 2018 Dust Control	<u>\$78,000.00</u>
Net Difference Approved Budget vs Tender Cost	<u>-\$526.11</u>

Historically there have been few bidders on the Dust Suppressant tender. In order to give Council a more fulsome picture of pricing trends for dust suppressant, an analysis was carried out on the historical costs as follows:

Historical Dust Suppressant costs per flake tonne					
2013	2014	2015	2016	2017	2018
\$218.48	\$209.34	\$171.00	\$158.00	\$198.00	\$212.00

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Approved Transportation Operating Budget
2. Minimum Maintenance Standards, under the Highway Traffic Act

Consultation:

The Roads Foreman was consulted as part of the tender review and preparation of this report.

Related Documents:

None

Respectfully submitted,



Don Giberson, Environmental Services Director



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Don Giberson, Environmental Services Director**
Date: March 19 2018
Report: ESD.18.11
Subject: Tender Results – Repairs to McTaggart Line Bridge Structures #3037, #3038, #3039

Recommendations:

That South Huron Council receive the report from Don Giberson, Environmental Services Director RE: Tender Results – Repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 AND;

That South Huron Council accepts the tender received from Weathertech Restoration Services Inc. and award a contract for the Repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 for a total cost of \$588,253.00 plus HST.

Purpose:

The purpose of this report is to notify Council of the results of the tender results for the repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 and to recommend award of a contract to the low bidder.

Background and Analysis:

The tender for repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 was advertised on the Biddingo web site, in accordance with section 9(b) of the Procurement By-Law#33-2017. Biddingo is an on-line procurement service for public sector tenders, quotations and RFPs. The

tender for repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 was posted on Biddingo on January 30, 2018.

Tenders closed on Wednesday, February 28, 2017 at 2:00pm and six (6) tenders were received by the Municipality. Tenders were opened by Deputy Mayor Dave Frayne, in the presence of Dan Best CAO, Angela Shipway, Financial Analyst; Don Giberson, ESD Director; Ryan Munn P.Eng, BM Ross Engineers and several contractors.

The following are the tender results:

McTaggart Line Bridge Repairs to Structures #3037, 3038, 3039				
	Contractor	Price (Excluding HST)	HST	Total Cost (Including HST)
1	Weathertech Restoration Services Inc.	\$588,253.00	\$76,472.89	\$664,725.89
2	AJN Builders Inc.	\$606,625.20	\$78,861.28	\$685,486.48
3	Theo Vandenberg Construction Inc.	\$632,997.00	\$82,289.61	\$715,286.61
4	Carlington Construction Inc.	\$786,187.80	\$102,204.41	\$888,392.21
5	Jarlian Construction Inc.	\$833,319.00	\$108,331.47	\$941,650.47
6	Nuroad Construction Limited	\$1,015,238.36	\$131,980.99	\$1,147,219.35

*

*Corrected total

All tenders were checked by the Engineer. Jarlian Construction Inc. tender was not signed and therefore was automatically rejected as non-compliant. Section 28 of the Procurement By-law#33-2017 sets out the process for bid irregularities. In accordance with Appendix "B" item 6, an unsigned tender results in automatic rejection of the tender. A mathematical error was also found in Jarlian Construction Inc. tender and the corrected amount is indicated above.

The tender received from the low bidder, Weathertech Restoration Services Inc., was checked and found to be complete and in conformance with the specifications. The Engineers review/recommendation letter is attached.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

This work was publicly tendered as early as possible in the fiscal year in order to obtain the best possible pricing. Procurement was conducted via Biddingo, a public sector on-line procurement service.

Increased Communications and Municipal Leadership

The tender notice was published in the local newspapers; on the municipal web site and on Biddingo to reach as many interested bidders as possible.

Transparent, Accountable and Collaborative Governance

A transparent public tendering process was used as the procurement method for this work, in accordance with the procurement By-law 33-2017.

Dedicated Economic Development Effort

Having well maintained bridge structures contributes to the wellbeing of our residents and is essential to attracting/retaining businesses.

Financial Impact:

The costs associated with the tender for the repairs to McTaggart Line Bridge Structures #3037, #3038, #3039 are included in the 2018 Transportation Services Capital Budget.

A financial analysis was carried out and the cost of this tender, including engineering and non-recoverable HST is within the total amount budgeted for repairs to structures #3037, #3038, #3039.

The following is a summary of the financial analysis:

FINANCIAL ANALYSIS SUMMARY	
	Total
Part 1 - Repairs to Structure #3038	\$380,135.00
Part 2 - Structure #3038 Provisional Items (incl. \$45,000 contingency)	\$117,378.00
Part 3 - Repairs to Structure #3037 (incl. \$5,000 contingency)	\$39,015.00
Part 4 - Repairs to Structure #3039 (incl. \$5,000 contingency)	<u>\$51,725.00</u>
Subtotal (Construction Costs)	\$588,253.00
Engineering Cost	<u>\$34,000.00</u>
Subtotal	\$622,253.00
Non-recoverable HST	<u>\$10,951.65</u>
TOTAL	\$633,204.65
Approved Budget for Structure #3038	\$570,446.00
Approved Budget for Structure #3037 & #3039	<u>\$65,753.00</u>
	\$636,199.00
Net Difference Approved Budget vs Tender Cost	\$2,994.35

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Approved Transportation Capital Budget
2. Minimum Maintenance Standards, under the Highway Traffic Act

Consultation:

The Roads Foreman was consulted as part of the tender review and preparation of this report.

Related Documents:

BM Ross Engineers review/recommendation letter dated March 1, 2018

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Don Giberson', enclosed within a large, loopy oval shape. The signature is written on a light gray background.

Don Giberson, Environmental Services Director

**B. M. ROSS AND ASSOCIATES LIMITED****Engineers and Planners**

62 North Street, Goderich, ON N7A 2T4

p. (519) 524-2641 • f. (519) 524-4403

www.bmross.net

File No. BR1262

March 1, 2018

Don Giberson, Environmental Services Director
 Municipality of South Huron
 322 Main St. S., Box 759
 Exeter, ON N0M 1S6

**RE: Municipality of South Huron; Repairs to
 Structures 3037, 3038, 3039 on McTaggart Line
 BR047B, BR297B, BR1262**

Tenders were received on February 28, 2018 for the above note project, as summarized by the following table:

Tenderer	Tendered Amount (incl. HST)
Weathertech Restoration Services Inc.	\$664,725.89
AJN Builders Inc.	\$685,486.48
Theo Vandenberg Construction Inc.	\$715,286.61
Carlington Construction Inc.	\$888,392.21
Jarlian Construction Inc.	\$941,650.47
Nuroad Construction Limited	\$1,147,219.35

All of the tenders were checked. The corrected value for the Jarlian Construction bid is shown. All others were found to be correct. The Jarlian tender was not signed and could be considered “invalid”. All other tenders were properly signed and each was submitted with the specified tender deposit and Agreement to Bond.

A definitive start date has not been established.

Since the lowest tender is acceptable contractually, and the tenderer is experienced in bridge repairs, further analysis is limited to the lowest bid. We therefore recommend that this contract be awarded to Weathertech Restoration Services Inc. for the total tender sum of \$664,725.89.

The tender deposits were received in the form of bid bonds and as such, there are no cheques to return.

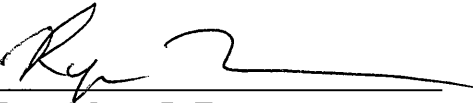
- 2 -

The tender contains a number of provisional sections. Please provide direction regarding provisional work.

Should you have any questions, please contact the undersigned.

Yours very truly,

B. M. ROSS AND ASSOCIATES LIMITED

Per 
Ryan Munn, P. Eng.

RM:es



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Don Giberson, Environmental Services Director**
Date: March 19 2018
Report: ESD18.12
Subject: South Huron Landfill Site Grounds Maintenance Contract Extension

Recommendations:

That South Huron Council receive the report from Don Giberson, Environmental Services Director RE: South Huron Landfill Site Grounds Maintenance Contract Extension AND;

That South Huron Council authorize a one year extension of the existing South Huron Landfill Site Grounds Maintenance Contract with N.C. Jones and Sons Ltd.

Purpose:

The purpose of this report is to seek authorization from Council to extend the South Huron Landfill Site Grounds Maintenance Contract for one additional year.

Background and Analysis:

The previous South Huron Landfill Site Grounds Maintenance contract was publicly tendered and N.C. Jones and Sons Ltd were the successful bidder. The current three year contract for South Huron Landfill Site Grounds Maintenance is due to expire on April 30, 2018. The contract has a provision to extend the contract for one additional year, if both parties agree and N.C.

Jones and Sons Ltd has agreed to the one year extension at no increase in unit prices.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

Increased Communications and Municipal Leadership

Transparent, Accountable and Collaborative Governance

Dedicated Economic Development Effort

Financial Impact:

N.C. Jones and Sons Ltd have agreed to the contract extension with no increase in the unit prices. The current contact unit prices (from 2015) are as follows:

- Landfilling Cost (compacting, burying and covering waste) @ \$20.00 per tonne
- 2014 Doosan 200 Front End Loader @ \$98.00 per hour
- 2013 Doosan 225 Excavator @\$110.00 per hour
- 2001 Cat D4 Trim Dozer @ \$98.00 per hour
- Tri-Axel Dump Trucks @ \$80.00 per hour

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Approved 2018 Solid Waste Management Operating Budget
2. South Huron Landfill Site MOECC Environmental Compliance Approval A161501
3. Ontario Regulation 347 – General Waste Management

Consultation:

The Roads Foreman and Water/Sewer Foreman were consulted as part of preparation of this report.

Related Documents:

None

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Don Giberson', enclosed within a faint rectangular box.

Don Giberson, Environmental Services Director



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Jo-Anne Fields, Community Services Manager**
Date: March 19 2018
Report: CSD.18.01
Subject: Results of Request for Tender for the Provision of Municipal Flower Purchase

Recommendations:

That South Huron Council receives the report from Jo-Anne Fields, Community Services Manager re: Results of Request for Tender for the Provision of Municipal Flower Purchase SH-18-RS-03.

Purpose:

To advise Council of the results for the procurement of municipal flowers for the 2018 season.

Background and Analysis:

In an attempt to continue to promote partnerships, work in harmony and reap the most effective pricing, the South Huron flower tender was prepared in consultation with the BIA, CIB and the Exeter Cemetery. For the past three years, flower needs have been purchased as a group, rather than individually. This process has proven effective, however with limited response.

In the early spring, staff deliver the planters, barrels and hangers to the successful bidder. This timeline provides the grower ample time to prepare the planters, ensuring appropriate growth and development prior to being delivered to South Huron in early June. At the present time, cemetery floral plantings are provided by the Municipality.

Bids were solicited through the Biddingo process. The Municipality uses Biddingo for issuing tenders, proposals and quotes. The use of Biddingo is aimed at streamlining purchasing and ensures that all suppliers wanting to participate in the bidding process have the opportunity, hence creating a fair, open and transparent approach. Staff also advised local growers and businesses to submit a tender through biddingo for the flower needs of the BIA, CIB and Exeter Cemetery for 2018.

The tender closed on Friday, January 19, 2018. No bid submissions were received. Present at the opening were Angela Shipway, Wayne DeLuca, Dave Atthill and Jo-Anne Fields.

Operational Considerations:

Request for Tender for the provision of Municipal flower purchase was released early to enable the grower time to prepare plant materials and deliver the stock in full bloom. Time is of the essence as the plants require time to develop and grow in the containers provided.

As no submissions were received in the initial request for tender, staff contacted three greenhouse growers to request a bid through the informal quotation process as defined in Section 14 of the procurement bylaw.

Two of the three growers submitted a quote. The third company indicated that they would be interested, however their greenhouses are at capacity for the season and therefore would not be able to supply a bid for this year.

South Huron's Strategic Plan:

There is no direct correlation to the Strategic Plan.

Financial Impact:

The total flower purchase (BIA, CIB, Municipal areas and Cemetery) is identified in the Community Services operating budget in the amount of \$16,300.00. The BIA reimburses the municipality for 50% of the BIA flower portion of this budget.

Contractor	Price (Excluding HST)	HST	Total Cost (Including HST)
Huron Ridge Acres	12,996.00	1,689.48	14,685.48
Greyhaven Gardens	15,870.00	2,063.10	17,933.10

Huron Ridge Acres have been contacted to provide the Municipality with plants for this season.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

No policies, by-laws and or legislation associated with this report.

Consultation:

Chief Administrative Officer
Financial Services Manager/Treasurer

Related Documents:

2018 Budget
BIA Partnership Agreement

Respectfully submitted,

Jo-Anne Fields, Community Services Manager



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Jo-Anne Fields, Community Services Manager**
Date: March 19 2018
Report: CSD.18.02
Subject: Results of Request for Tender for the provision of Grass Cutting and Trimming Tender

Recommendations:

That South Huron Council receives the report from Jo-Anne Fields, Community Services Manager re: Results of Tender for Grass Cutting and Trimming SH-18-RS-02;

And that Council awards the tender as follows:

- Area A and B to Honeydo Property Maintenance in the amount of \$8,394.00 plus HST,
- Area C and D to Sunrise Lawn Care (2224737 Ontario Inc.) in the amount of \$5,296.00 plus HST
- Area E to Vandenbussche Property Services in the amount of \$6,160.00 plus HST.

Purpose:

Decision

Background and Analysis:

The Grass Cutting and Trimming tender closed on February 26, 2018. Present at the opening were Angela Shipway, Dave Frayne and Dave Atthill.

The breakdown of the areas are outlined below in Table 1:

Table 1:

Area A	Area B	Area C	Area D	Area E
Dashwood Athletic Field	Centralia Ball Park Community Centre	Stephen Arena	Exeter Landfill	Port Blake Day Park
Dashwood Guelen Park & Community Centre		Huron Park Pumping Station	Bethesda I Abandoned Cemetery	
Crediton Ball Park		Huron Park Fire Hall	Ebenezer Abandoned Cemetery	
Crediton Pumping Station		Fairfield	Eden Abandoned Cemetery (Bible Christian Church)	
Bethesda II Abandoned Cemetery (Methodist Church)		Municipal Water Tower	Usborne Shed	
Methodist Cemetery				

All tenders were reviewed by Staff for completeness and in conformance with the specifications. The tenders received in each area are recommended to be awarded to the proponents as follows:

- Area A and B to Honeydo Property Maintenance in the amount of \$8,394.00 plus HST,
- Area C and D to Sunrise Lawn Care (2224737 Ontario Inc.) in the amount of \$5,296.00 plus HST
- Area E to Vandenbussche Property Services in the amount of \$6,160.00 plus HST.

Operational Considerations:

There were no alternative operational considerations examined.

South Huron's Strategic Plan:

There is no direct correlation to the Strategic Plan.

Financial Impact:

Grass cutting service costings were allocated in specific areas throughout the 2018 Community Services Department operating budget, as noted below. The total cost for the grass cutting is within the approved 2018 Community Services operating budget. The recommended proponents are outlined by area as follows:

Table 2:

Tender Results for Grass Cutting & Trimming - Summer 2018					
Company Name	Area A	Area B	Area C	Area D	Area E
Casey's Lawn Care	\$ 12,795	\$ 2,895	\$ 3,795	\$ 4,975	\$ 10,895
M Worx Inc	\$ 16,500	\$ 3,140	\$ 2,700	\$ 3,140	\$ 17,400
Honeydo Property Maintenance	\$ 6,537	\$ 1,857	\$ 4,290	\$ 3,948	No Bid recd
Sunrise Lawn Care (2224737 Ontario Inc	\$ 6,812	\$ 2,880	\$ 2,648	\$ 2,648	\$ 6,898
Vandenbussche Property Services	\$ 8,320	\$ 2,640	\$ 4,460	\$ 4,750	\$ 6,160
All seasons (priced per cut)		140/cut	300/cut		185/cut
Lowest Bid Per Area	\$ 6,537	\$ 1,857	\$ 2,648	\$ 2,648	\$ 6,160
HST Expense	\$ 115	\$ 33	\$ 47	\$ 47	\$ 108
	\$ 6,652	\$ 1,890	\$ 2,695	\$ 2,695	\$ 6,268
2018 Budget per Area	\$ 6,800	\$ 1,600	\$ 3,200	\$ 4,000	\$ 5,500
Bid Amount (Over)/Under Budget	\$ 148	\$ (290)	\$ 505	\$ 1,305	\$ (768)

**All Seasons could not be considered in this process as their submission was not provided in the required format.*

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

No policies, by-laws and or legislation associated with this report.

Consultation:

Chief Administrative Officer
Financial Services Manager/Treasurer

Related Documents:

2018 Budget

Respectfully submitted,

Jo-Anne Fields, Community Services Manager



Staff Report

Report To: Dan Best, Chief Administrative Officer
From: **Rebekah Msuya-Collison, Deputy Clerk**
Date: March 9 2018
Report: 6-2018
Subject: Appoint Members to Court of Revision

Recommendations:

That South Huron Council receives the report from R. Msuya-Collison, Clerk, re: Appoint Members to Court of Revision for the following Municipal Drains:

- **Ford-Neeb Municipal Drain;**
- **Allen Municipal Drain;**
- **Rowe-Rasenberg Municipal Drain; and**
- **Khiva Municipal Drain; and**

That South Huron Council hereby appoints the following members to the Court of Revision for above Municipal Drains to be held on April 16, 2018 at 5:00 p.m., prior to the regularly scheduled Council meeting:

That **be appointed Chair.**

Purpose:

To set the date and appoint the members for the Court of Revision for the following municipal drains:

- Ford-Neeb Municipal Drain;
- Allen Municipal Drain;
- Rowe-Rasenberg Municipal Drain; and

- Khiva Municipal Drain.

Background and Analysis:

The Drainage Act, R.S.O. 1990, requires a Court of Revision be held for the purpose of receiving appeals to the assessments for drainage work, as set out in the engineer's report. The Court may have three (3) or five (5) members, and must be held at least twenty (20) days after but not more than thirty (30) days after mailing the notice.

A provisional by-law is provided in the By-Law portion of the agenda for first and second readings to adopt the Engineer's Report, as presented by Mr. William J. Dietrich, P. Eng., for each of the drains: Ford-Neeb Municipal Drain, Allen Municipal Drain, Rowe-Rasenbert Municipal Drain and Khiva Municipal Drain. A copy of each of the provisional By-laws and the Notices of the Court of Revision must be sent to other municipalities affected and the owners of lands assessed or given compensation or allowances in the report.

Operational Considerations:

There are no other operational considerations as a result of the actions outlined in this report.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

There are no financial implications as a result of the actions outlined in this report.

Legal Impact:

There are no legal implications as a result of the actions outlined in this report.

Staffing Impact:

There are no staffing implications as a result of the actions outlined in this report.

Policies/Legislation:

Drainage Act

Consultation:

Dietrich Engineering Limited

Related Documents:

Ford-Neeb Municipal Drain 2018, Dietrich Engineering Limited Report

Allen Municipal Drain 2018, Dietrich Engineering Limited Report

Rowe-Rasenbert Municipal Drain 2018, Dietrich Engineering Limited Report

Khiva Municipal Drain 2018, Dietrich Engineering Limited Report

Respectfully submitted,

Rebekah Msuya-Collison, Clerk

**Ministry of
Municipal Affairs**

Provincial Planning Policy
Branch
777 Bay Street, 13th Floor
Toronto ON M5G 2E5
Tel. 416-585-6014
Fax 416-585-6870

**Ministère des
Affaires municipales**

Direction des politiques provinciales
d'aménagement
777, rue Bay, 13^e étage
Toronto ON M5G 2E5
Tél. 416-585-6014
Télééc. 416-585-6870



Date: March 5, 2018

Subject: Planning Act Regulations related to the Building Better Communities and Conserving Watersheds Act, 2017

Further to the email sent on February 27, 2018, I am writing to provide an update on regulations under the Planning Act related to the Building Better Communities and Conserving Watersheds Act, 2017.

The Planning Act regulations will come into effect on April 3, 2018.

New regulations under the Local Planning Appeal Tribunal Act, 2017 are also proposed and it is anticipated that they will be finalized in the near future. In the interim, please visit the [Ontario Regulatory Registry posting](#) for information on the Local Planning Appeal Tribunal Act, 2017 regulations.

Under the *Planning Act*, changes will be made to existing regulations to facilitate implementation of the Building Better Communities and Conserving Watersheds Act, 2017 changes to the land use planning and appeal system by:

- requiring explanations of how planning proposals are consistent/conform with provincial and local policies and clarify requirements for municipal notices;
- making technical changes, such as changing references from Ontario Municipal Board to Local Planning Appeal Tribunal, and amending cross-references; and
- establishing new transition provisions to set out rules for planning matters in process at the time of proclamation.

You can view copies of the amending *Planning Act* regulations on Ontario's e-Laws:

- [Ontario Regulation 67/18 "Transitional Matters – General"](#) – amending Ontario Regulation 174/16 "Transitional Matters Relating to the *Smart Growth for Our Communities Act*, 2015"
- [Ontario Regulation 68/18](#) – amending Ontario Regulation 543/06 "Official Plans and Plan Amendments"
- [Ontario Regulation 69/18](#) – amending Ontario Regulation 549/06 "Prescribed Time Period – Subsections 17 (44.4), 34 (24.4) and 51 (52.4) of the Act"
- [Ontario Regulation 70/18](#) – amending Ontario Regulation 551/06 "Local Appeal Bodies"

- [Ontario Regulation 71/18](#) – amending Ontario Regulation 200/96 “Minor Variance Applications”
- [Ontario Regulation 72/18](#) – amending Ontario Regulation 197/96 “Consent Applications”
- [Ontario Regulation 73/18](#) – amending Ontario Regulation 545/06 “Zoning By-Laws, Holding By-Laws and Interim Control By-Laws”
- [Ontario Regulation 74/18](#) – amending Ontario Regulation 544/06 “Plans of Subdivision”
- [Ontario Regulation 75/18](#) – amending Ontario Regulation 173/16 “Community Planning Permits”

Questions

If you have any questions about the changes to the land use planning and appeal system, including the Planning Act regulatory changes, please email OMBReview@ontario.ca.

Sincerely,

Laurie Miller, Director
Provincial Planning Policy Branch
Ministry of Municipal Affairs

Rebekah Msuya-Collison

From: AMO Communications <communicate@amo.on.ca>
Sent: Friday, March 09, 2018 11:19 AM
To: Rebekah Msuya-Collison
Subject: AMO Policy Update - Cannabis Implementation – Municipal Funding Announcements
Attachments: Cannabis Implementation – Municipal Funding Announcements - FAQs 2018-03-09.pdf

March 9, 2018

Cannabis Implementation – Municipal Funding Announcements

Today, the Ontario Minister of Finance released the outcome of discussions on how the federal cannabis excise tax will support provincial and municipal activities for the next two years. Ontario estimates that it will receive a maximum share of \$100 million over the next two years.

The parties agree that the impacts and costs are not truly known for either the Province or municipal governments – that this is new terrain for all of us. Other jurisdictions with legalized recreational cannabis have different laws and regulated approaches. It is important that we monitor the implementation in Ontario of the new laws when in effect and any future changes to the regulated framework (e.g., introduction of edibles) as all of this will be central to our future discussions.

In the short term, this funding will help pay municipal costs and this is critically important. Keeping municipal governments whole is our goal. As well, AMO's Board believes there is a future case to be made for this new federal and provincial revenue source to support broader community benefits.

The immediate arrangement to help deal with municipal costs is a combination of \$40 million plus some cost avoidance for municipal governments. This \$40 million exceeds the 25%, which the federal government vacated and gave to provinces and territories in recognition that municipal governments will have cost impacts.

Attached is an AMO FAQ. Please read the FAQ – it contains more information on cost containment and funding along with other information. Here's the link to the Ontario News Release:

<https://news.ontario.ca/mof/en/2018/03/ontario-supporting-municipalities-to-ensure-safe-transition-to-federal-cannabis-legalization.html>.

AMO Contacts:

Pat Vanini, Executive Director, E-Mail: pvanini@amo.on.ca , 416-971-9856 ext. 316
Monika Turner, Director of Policy, E-Mail: mturner@amo.on.ca , 416-971-9856 ext. 318
Craig Reid, Senior Advisor, E-Mail: creid@amo.on.ca, 416-971-9856, ext. 334.

PLEASE NOTE: AMO Breaking News will be broadcast to the member municipality’ s council, administrator, and clerk. Recipients of the AMO broadcasts are free to redistribute the AMO broadcasts to other municipal staff as required. We have decided to not add other staff to these broadcast lists in order to ensure accuracy and efficiency in the management of our various broadcast lists.

DISCLAIMER: Any documents attached are final versions. AMO assumes no responsibility for any discrepancies that may have been transmitted with this electronic version. The printed versions of the documents stand as the official record.

OPT-OUT: If you wish to opt-out of these email communications from AMO please click [here](#).



DRAFTSent via e-mail: marie-france.lalonde@ontario.ca
registryfeedback@ontario.ca**March XX, 2018**

The Honourable Marie-France Lalonde
Ministry of Community Safety and Correctional Services
George Drew Building, 18th Floor
25 Grosvenor Street
Toronto, Ontario M7A 1Y6

RE: Comment on Draft Fire Regulations (Proposal No: 18-CSCS002 & 18-CSCS004)

Dear Minister Lalonde:

The Association of Municipalities of Ontario (AMO), representing municipal governments who are the employers and funders of fire services in Ontario, would like to provide our comments on three draft regulations to the *Fire Protection and Prevention Act, 1997* (FPPA), that were recently released by the Ministry of Community Safety and Correctional Services (MCSCS):

1. Firefighter Certification;
2. Community Risk Assessment; and
3. Public Reports.

Municipal governments are in general supportive of the efforts to modernize the FPPA and enhance the professionalism of the Fire Services that serve Ontario communities. MCSCS established the Fire Safety Technical Table (Table) in January 2017, to provide advice to the Ministry on current and future fire safety challenges and opportunities, identify priorities for action, and support the development of evidence-based recommendations that will enhance fire safety in Ontario.

Since the Table was established, AMO has been attending these monthly meetings with the Ontario Association of Fire Chiefs (O AFC), Toronto Fire Services, the Ontario Professional Fire Fighters Association, and the Fire Fighters Association of Ontario, to provide informed input to your Ministry officials on minimum standards for professional fire service qualifications. There was not always consensus at the Table; however, there were active discussions. The Table's input was considered by MCSCS staff towards the development of these three draft regulations, for your final review and approval.

Local elected officials across Ontario share in the Province's commitment to keep our communities safe by providing public and firefighter safety, and are interested in finding ways to modernize fire service delivery in this province. However, as the sole funders of fire

services in Ontario, we are recommending that the Ministry adopt key amendments to these proposed regulations before they are finalized as well as providing explicit provincial implementation resources and measures. We are very concerned about the fiscal impacts of these proposed regulations and would ask for a public provincial commitment, prior to these regulations receiving approval, for adequate financial funding for implementation so that they do not become an unfunded mandate for municipalities. We understand that MCSCS will be surveying fire services shortly to get a better handle on the resource needs for successful implementation, particularly with respect to the draft Firefighter Certification regulation, however, we need an upfront commitment from the Province that appropriate funding will be provided.

We, along with the OAF, are asking that the draft Public Reports regulation is put on hold until an overhaul of the Ontario Standard Incident Reporting (SIR) be completed through the Table. Further, the current draft Public Reports regulation is not drafted well, has ambiguous language within it, and appears to be setting service level expectations for volunteer fire service response times (either within a composite service or a volunteer) as if they were full-time fire services. It is a municipal government's responsibility to set the level of fire services, including reporting standards. This draft regulation has been a challenging matter at the Table with a very short time for consideration and discussion. We are asking you directly that this proposed regulation not be approved at this time, even if some of the language is clarified in the next few weeks.

As you will hear from our municipal members and the OAF, implementing these fire regulations will take substantial effort, time, and financial resources to ensure that they can comply with the legislation by the proposed commencement dates. While the proposed Firefighter Certification regulation does state that some of the mandatory certification to be required for only new hires, it is our concern that there is great liability risk to a municipal government if it does not certify to the new mandatory standard for all categories of fire operations.

Therefore, AMO is asking that provincial liability indemnification be provided legislatively to accompany these draft regulations. This indemnification should be in place for all municipal governments who comply with these new regulations at least 12 months before the Firefighter Certification regulation comes into force. We understand that the Province of Quebec provided such indemnification as a quid pro quo for the requirement of mandatory certification of fire service personnel.

This is essential protection as throughout this exercise the Table has not received information on what the gap might be between those fire personnel that are, or could be, certified and those that will need to receive immediate training in order to be able to be certified by the time the regulation comes into force. For these reasons, we are asking for the training and certification regulation not to come into force until at least January 2020. We know that the Ministry staff have tried to gather this information, however, the gap analysis is not available. Therefore, the current final decisions cannot be evidence-based and rather they need to be done from a risk mitigation perspective.

We do thank the Ministry for its commitment to make sure all the training and associated examinations related to the mandatory Firefighter Certification regulation will be provided at no charge to the municipal fire service. That said, we do need financial resources to cover the expected staffing costs for training that this new regulation will require. We also ask the grandfathering provisions associated with this mandatory certification are made as broad as possible as those who could have been certified in 2014, when voluntary, should have every opportunity to be certified now.

In closing, we are looking for the following key amendments or provincial commitments prior to the proposed Firefighter Certification and the Community Risk Assessment regulations being approved:

- Provincial commitment to fund new firefighter certification costs so that it is not an unfunded mandate for municipal governments;
- The Province provide, in legislation, liability indemnification for all municipal governments who certify their firefighters to the standards in the Firefighter Certification regulation and that this is done at least 12 months before this regulation comes into force;
- The proposed Firefighter Certification regulation does not come into force any earlier than January 1, 2020;
- Technical amendments to the draft Firefighter Certification Community Risk Assessment as per the attached appendix as well as those provided in the OAFC submission; and
- The draft Public Reports regulation be held and not approved until Ontario's SIR framework, system improvements, and implementation strategies are discussed and consensus is achieved at the Table.

We trust that the Ministry appreciates the rationale behind why these key amendments are needed, and will recognize the significant burdens and impacts these regulations will have, especially on small, rural and northern municipalities if the fiscal, risk management, timing, and technical aspects are not resolved well.

For these reasons, further consultation with AMO and the municipal sector is needed before finalizing the regulations to ensure that these can be implemented successfully. We look forward to meeting with you soon to discuss these draft regulations.

Sincerely,

Lynn Dollin
AMO President

cc: The Honourable Kathleen Wynne, Premier of Ontario
The Honourable Bill Mauro, Minister of Municipal Affairs

March 6, 2018

Province Broadens Municipal Investment Powers

Today the Minister of Municipal Affairs, Bill Mauro, sent a letter to all heads of council informing them of the Province's reforms to the municipal eligible investment regulation. The regulatory change will guide the use of the prudent investor standard by municipal governments, paving the way for new investment options and opportunities.

Rather than just being able to invest in a "legal list" of eligible investments set out by the province, qualifying municipalities will be able to invest in any security, as long as it is prudent for their situation. This standard is already used by pension fund managers and trustees.

It means that municipal governments will be able to build more diverse investment portfolios that are more tailored to local needs and better manage risk. It also provides greater flexibility to respond to changing financial markets.

Municipalities will be able to pass a by-law approving the approach on or after January 1, 2019, giving the municipal community about 10 months to prepare.

The regulation details who qualifies for the new powers, and how these investments are to be managed and governed, including:

- Municipalities will be able to qualify either independently or as part of a group. To qualify independently, the municipal government must have at least \$100 million in money and investments that it does not require immediately, or at least \$50 million in net financial assets.
- Municipalities must pass a by-law to participate, and adopt an investment policy that includes investment objectives, timeframes, and risk tolerance levels.
- A Council-appointed Investment Board will use the policy to develop and implement an investment plan. Other than the municipal treasurer, no other municipal staff or elected officials would sit on this board, which would be comprised of investment experts. Municipal governments will have the option of establishing this Board independently or jointly with other municipalities.
- The regulation requires compliance monitoring systems, and regular reviews and financial reports.

AMO welcomes this regulation change and appreciates the support of the Ministry of Municipal Affairs in granting this new authority, which will offer municipalities more options and independence in financing critical projects.

AMO, through Local Authority Services (LAS) and its ONE Investment program, has been advocating for prudent investor standard for a long time. It is in keeping with ONE's 25-year track record of providing turnkey investment solutions for municipal governments, whether to help fund capital projects or build up reserve accounts.

ONE will ensure that all municipalities, regardless of financial assets, will have options to access the prudent investor standard and the benefits it can offer. ONE will also continue to operate its current investment programs.

Municipalities will continue to have the option of investing under the "legal list" of investments. As part of its announcement, the Province also made several changes to the list. Most significantly, it will drop the minimum credit rating for securities from AA- to A-. AMO had advocated for changing this to BBB (Triple Bs), given that many large corporations are borrowing more in the low-interest environment. The Province's change is a step in the right direction and will allow more opportunities under the legal list.

For more details, ONE Investment has developed [full analysis](#) of the regulation and legal list amendments, and what it all means for municipal governments. As well, municipal treasurers and finance directors are receiving regular updates on the details of the new investment standard.

AMO Contact:

Judy Dezell, CAE
Director AMO Enterprise Centre,
Business Partnerships and LAS
416-971-9856 ext 306



Community Energy Planning

Overcoming Challenges & Attaining Benefits

February 2018

Table of Contents

Purpose.....	3
Background.....	4
Community Energy Planning	5
Questions for Discussion	7
Benefits and Challenges.....	8
Questions for Discussion	10
Overcoming Challenges and Attaining Benefits.....	11
Questions for Discussion	11
Conclusion	12
Appendix: Complete List of Discussion Questions	13

Purpose

In 2016, LAS staff reached out to several municipalities to discuss local experiences of implementing community energy planning. Through these conversations, AMO/LAS wanted to understand what factors encourage municipalities to engage in community energy planning, what benefits and challenges exist for those who conduct the process, and what role AMO/LAS can play to support municipalities who wish to engage in community energy planning, but may not have the awareness, resources, or capacity to undertake such a process.

AMO/LAS are supportive of the province's Climate Change Action Plan (2016) and related policies and strategies such as the Long-Term Energy Plan (2017) that have identified the benefits and opportunities of community energy planning. AMO/LAS are seeking ways to help municipalities capitalize on the opportunities in the low carbon economy to enhance local economic development and energy/environmental sustainability.

The purpose of this paper is twofold. First, to briefly discuss the community energy planning process, some benefits and challenges of the energy planning process, and the roles for municipalities, the Province, and AMO/LAS to overcome these challenges and help Ontario communities attain the identified benefits associated with transitioning to a low-carbon economy. Second, this paper asks a number of questions to help AMO/LAS understand how we can advocate on your behalf and provide programs or services that support municipalities with community energy planning.

A complete list of questions that AMO/LAS are available in **Appendix A**. We encourage members to distribute this paper to the appropriate lead for community energy planning in your municipality to encourage discussion about challenges, benefits and opportunities of community energy planning. With your feedback, AMO/LAS can begin further research into the development of programs and services that can help the membership move both provincial and local energy priorities forward.



RECEIVED
MAR 02 2018

Sylvia Jones, MPP
Dufferin-Caledon

Room 443, Legislative Building
Toronto, Ontario M7A1A8
Tel: 416-325-1898
Fax: 416-325-1936
E-Mail: sylvia.jonesla@pc.ola.org

February 8th, 2018

Hon. Chris Ballard
Ministry of Environment and Climate Change
11th Floor, Ferguson Block
77 Wellesley Street West
Toronto, Ontario M7A 2T5

Dear Minister Ballard,

I want to draw your attention to the work of your colleague, the Minister of Infrastructure. I trust you are aware the newly released requirements for asset management plans for municipal infrastructure include a variety of measures on wastewater assets.

These include the frequency and volume of overflows in combined sewers, and a "description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system."

Municipalities are already required to send notice to the Ministry of Environment regional offices. It seems redundant for municipalities to be required to report the same information to the Ministry of Infrastructure. The government already has this information.

Municipalities are already burdened by red tape and there is concern among smaller municipalities about their ability to comply with the new asset management plans. I encourage you to reduce the burden on municipalities by sharing the information you already have on sewage bypasses with the Ministry of Infrastructure.

Sincerely,

Sylvia Jones, MPP
Dufferin-Caledon

Cc: Hon. Bob Chiarelli, Minister of Infrastructure
Cc: Progressive Conservative Municipal Affairs Critic, Ernie Hardeman

ONTARIO SMALL URBAN MUNICIPALITIES-
Section of Association of Municipalities of Ontario

2018 NOMINATION FORM

Nomination for OSUM Executive Committee
(Term 2018-2020)

Name of Nominee _____

Representing Municipality of _____

Is the municipality a current member of the Association of Municipalities of Ontario?

YES ☐ NO ☐ (please check one)

Title _____

Address _____

Telephone _____

Fax _____

E-mail _____

Background information (municipal service, areas of municipal interest, etc.)

Nominees should be aware that OSUM is not responsible for the cost of expenses associated with OSUM activities. Those interested should have a Municipal Council motion supporting their nomination. The OSUM Executive Committee requires nominees to have the support of their Council in registering as OSUM Caucus supporters at the AMO Conference and have representatives attend the OSUM Annual Conference

Signature of Nominee

Signature of Nominator

Date

Signature of Seconder

*Please return to Larry J. McCabe c/o Town of Goderich,
57 West Street, Goderich ON N7A 2K5 by March 20, 2018 by 4:00 p.m.*

Sue Johnson

From: Chad Alberico <calberico@perthhuron.unitedway.ca>
Sent: Tuesday, March 06, 2018 11:16 AM
To: Sue Johnson
Subject: United Way Perth-Huron Spirit of Community Celebration

Good morning,

I am emailing you in the hopes you will post United Way Perth-Huron's Spirit of Community Celebration in the Municipality's community calendar. The event takes place on Thursday, March 29, 2018 at the Best Western Arden Park Hotel in Stratford. Cocktails will be at 6:00 pm and the ceremony begins at 6:30 pm.

The evening will include a three course buffet, a speech by special guest Peter Mansbridge, presentation of community and spirit awards, the first public announcement of our campaign results, and insight into how donor dollars are being invested locally. Best of all, several speakers will share their stories about how the generosity of our community has impacted them.

Tickets are \$49 each or \$352 for a table of eight. For more information, or to purchase tickets, people can call 519-271-7730 | 877-818-8867, email reception@perthhuron.unitedway.ca or buy online (service charges apply) at <https://www.eventbrite.ca/e/spirit-of-community-celebration-tickets-42717445028>

Please let me know if you need any other information and if you're willing to post this event for us.

Thank you for your time!



Sincerely



United Way
Perth-Huron

Chad Alberico
 Resource Development and Communications Associate
calberico@perthhuron.unitedway.ca

United Way Perth-Huron
 Ignite Possibilities!

 32 Erie Street Stratford, ON N5A 2M4
 519-271-7730 | 877-818-8867 EXT 226
perthhuron.unitedway.ca  



Reg. Charity Number: 119278414 RR0001

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**Huron County Municipal Officers' Association
Annual Meeting April 20, 2018
Howick Community Centre, Howick, Ontario**

AGENDA

- 9:00 a.m. **Registration** (coffee and snacks)
- 9:30 a.m. **Call to order by President Watson**
 “O CANADA” by Cara Smith
- President’s Watson’s Remarks**
- Minutes** – Approval of the April 21st, 2017 meeting
- Treasurer’s Report** – Approval of the Treasurer’s Report-December 2017
- Greetings** – Host Township & County of Huron
- Mayor Art Versteeg, Township of Howick
 - Warden Jim Ginn, County of Huron
- 9:45 a.m. **Municipal Property Assessment Corporation**
- Assessment Base Management, Jennifer Lajoie, Account, Manager, Municipal and Stakeholder Relations.
- 10:45 a.m. **Break**
- 11:00 a.m. **Geographic Information System Open Data County Website**
- Huron County Geographic Information System Department
- 11:15 a.m. **2017 International Plowing Match**
- Update from Jacquie Bishop, Chair of IPM and Brian McGavin, Administration Coordinator
- 11:30 a.m. **Huron County Economic Development Update**
- Work Force Retention and Attraction Strategy
 - Tourism, Arts and Culture Update
 - AgriFood Strategy
- 12:00 Noon **Luncheon** – President Carol Watson
- Call to Order by President
 - Grace and Toast to the Queen
 - Huron-Bruce MP, Ben Lobb
 - Huron-Bruce MPP, Lisa Thompson
 - Extend Thanks to Sponsors
 - Thanks to Caterers

Introduce Executive of HCMOA 2016-2017

Past President	Joe Steffler, Deputy Mayor, Municipality of Huron East
President	Carol Watson, Clerk, Township of Howick
1 st Vice-President	Tyler Hessel, Mayor, Municipality of Bluewater
2 nd Vice President	Nancy Michie, Administrator-Clerk-Treasurer
Executive	
One Year	Dave Jewitt, Deputy Mayor, Municipality of Central Huron
Two Years	Dwayne Evans, Chief Administrative Officer, Township of North Huron
Three Years	Councillor Yolanda Ritsema-Teeninga, Township of North Huron
CAO	Meighan Wark
Secretary-Treasurer	Susan Cronin

Introduce Guests, Councillors and Speakers - Warden Jim Ginn

12:45 p.m. Nominating Committee's Report

The following be the Nominating Committee to bring in a slate of officers for the year 2017-2018:

Past President	Carol Watson, Clerk, Township of Howick
President	Tyler Hessel, Mayor, Municipality of Bluewater
1 st Vice-President	Nancy Michie, Administrator-Clerk-Treasurer, Municipality of Morris-Turnberry
2 nd Vice President	Dave Jewitt, Deputy Mayor, Municipality of Central Huron
One Year	Dwayne Evans, Chief Administrative Officer, Township of North Huron
Two Years	Councillor Yolanda Ritsema-Teeninga, Township of North Huron, Clerk
Three Years	Janice Hallahan, Clerk, Town of Goderich

1:00 p.m. **The Leadership Gap - ONWARD with Growing Tomorrow's Municipal Leaders in Ontario** – Lori Kelly, Senior Manager, Talent Management, City of Mississauga.

1:45 p.m. **Huron County Leadership Series** – Lara Vanstone, Director of Human Resources, County of Huron

2:15 p.m. **Huron Perth Health Units Amalgamation Update** – Tyler Hessel, Huron County Board of Health Chair

2:30 p.m. **Election 2018 Updates** – Spenser Sandor, MPA, Ministry of Municipal Affairs,

3:00 p.m. **Adjournment**

Media Release

For immediate release, March 1

After more than 6 years at the helm, David Campbell is retiring from his position as Executive Director of the Grand Bend Community Foundation. Pat Morden will become the new Executive Director on April 1.

Campbell has been a powerful force in the Grand Bend area, providing leadership in the non-profit sector and helping to raise and steward funds for the Foundation. Among his many achievements: revitalizing the Community Improvement Coalition (which is currently working on a Community Hub for Grand Bend), supporting the Rotary Community Stage project, helping to increase the Foundation's endowment to \$2.4 M, overseeing granting to local charities of more than \$550,000, and helping to establish the South Huron Community Fund.

"It's been an honour and a pleasure to lead this dynamic organization," says Campbell. "I've come to appreciate the depth and breadth of community spirit in the Grand Bend area, and the talented and committed people who give and volunteer here."

"David has made an enormous contribution to the Foundation and our community," says Chair Judy McDonald. "We are grateful for his dedication and vision, and wish him well in his future endeavours."

Pat Morden has lived in Grand Bend for 13 years. A professional writer and communication consultant, she previously served on the Foundation Board for six years. She has been involved in a variety of other community activities, including Friends of Pinery Park, the Lakeshore Eco-Network, and Huron Shores United Church.

"I'm looking forward to a challenging new role," she says. "We have an exceptional group of volunteers on our board, and an excellent reputation in our community. My job will be to grow the Foundation's support and impact."

The Grand Bend Community Foundation is one of 191 Community Foundations across Canada. Founded in 2000 with the funds from the sale of Grand Bend's PUC, the Foundation manages an endowment of \$2.4 million, provides leadership in the community, and makes grants to local charities. To date, the Foundation has granted a total of more than \$1.3 million.

For more information, contact David Campbell at 519-238-2190 or Pat Morden at 519-238-2785.



March 12, 2018

Via Email

Dear Mayor and Council:

**Re: 2018 National Public Works Week
May 20 – 26, 2018
"The Power of Public Works"**

Since 1960, public works officials in Canada and the United States have celebrated National Public Works Week. This annual observance, which takes place during the third full week in May, is designed to educate the public regarding the importance of our nation's public infrastructure and services. It serves, moreover, as a time to recognize the contributions of public works professionals who work in the public interest to build, manage and operate the essential infrastructure and services of our communities. The week is organized by the Canadian Public Works Association (CPWA) and the American Public Works Association (APWA) and is being celebrated for its 58th year in 2018.

The theme for the 2018 National Public Works Week is **"The Power of Public Works."** This theme gives voice to the impact the many facets of public works have on modern civilization. From providing clean water to disposing of solid waste, to building roads and bridges or planning for and implementing mass transit, to removing snow on roadways or devising emergency management strategies to meet natural or manmade disasters, public works services determine a society's quality of life.

As a steward of your municipality's public interest, we appeal to you to lend your support to our efforts by issuing a proclamation officially recognizing May 20–26, 2018 as National Public Works Week. Enclosed for your consideration is a draft proclamation. We hope to have all proclamations in our possession by April 13, 2018.

Together, the more than 30,000 members of CPWA and APWA in North America design, build, operate, and maintain the transportation, water supply, sewage and refuse disposal systems, public buildings, and other structures and facilities essential to our economy and way of life. Their dedication and expertise at all levels of government are a capital investment in the growth, development, economic health—and ultimate

stability—of the nation. Therefore, we believe it is in the national interest to honour those who devote their lives to its service.

An effective public works program requires the confidence and informed support of all our citizens. To help public works professionals win that confidence and support, it is the mission of CPWA and APWA to promote professional excellence and public awareness through education, advocacy and the exchange of knowledge.

Through a variety of public education activities conducted by CPWA, its chapters and individual public works agencies—particularly during National Public Works Week—tens of thousands of adults and children have been shown the importance of the role of public works in society. The program also seeks to enhance the prestige of the professionals, operators and administrators serving in public works positions and to arouse the interest of young people to pursue careers in the field.

We respectfully request that you join other Canadian and U.S. Municipalities in proclaiming the importance of public works to the quality of life in our nations and affirm the contributions of public works professionals.

Should you have questions, please contact me at:

Ed Dujlovic
President, Ontario Chapter
Canadian Public Works Association
Director of Infrastructure and Development Services
City of Stratford
82 Erie Street, 3rd Floor
Stratford ON N5A 2M4
edujlovic@stratford.ca
519-271-0250 ext. 224

Sincerely,

A handwritten signature in black ink, appearing to read 'Ed Dujlovic', with a stylized flourish at the end.

Ed Dujlovic
President
Ontario Chapter, Canadian Public Works Association

National Public Works Week
May 20–26, 2018
"The Power of Public Works"

Municipal Proclamation

WHEREAS, public works professionals focus on infrastructure, facilities and services that are of vital importance to sustainable and resilient communities and to the public health, high quality of life and well-being of the people of Ontario; and,

WHEREAS, these infrastructure, facilities and services could not be provided without the dedicated efforts of public works professionals, who are engineers, managers and employees from provincial and municipal governments and the private sector, who are responsible for rebuilding, improving and protecting our nation's transportation, water supply, water treatment and solid waste systems, public buildings, and other structures and facilities essential for our citizens; and,

WHEREAS, it is in the public interest for the citizens, civic leaders and children in Canada to gain knowledge of and to maintain a progressive interest and understanding of the importance of public works and public works programs in their respective communities,

WHEREAS, the year 2018 marks the 58th annual National Public Works Week sponsored by the American Public Works Association and Canadian Public Works Association be it now,

RESOLVED, We, the Mayor and Council of *MUNICIPALITY* do hereby designate the week May 20–26, 2018 as National Public Works Week; I urge all our people to join with representatives of the Canadian Public Works Association and government agencies in activities, events and ceremonies designed to pay tribute to our public works professionals, engineers, managers and employees and to recognize the substantial contributions they make to protecting our national health, safety, and quality of life.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the Municipality to be affixed,

DONE at the _____, Ontario this _____ the day of _____ 2018.

Mayor



Hamilton

Office of the City Clerk
City Manager's Office
City of Hamilton
71 Main St. W., 1st Floor
Hamilton, Ontario,
Canada L8P 4Y5
www.hamilton.ca

March 13, 2018

Association of Municipalities of Ontario (AMO)
200 University Avenue, Suite 801
Toronto, ON M5H 3C6

Rural Ontario Municipal Association
200 University Avenue, Suite 800
Toronto, ON M5H 3C6

Ontario Municipalities

Dear Sir/Madame,

Re: Offering School Property to Municipalities

At its meeting of February 28, 2018, Hamilton City Council endorsed The Town of Essex's resolution regarding the above matter, as follows:

That when schools boards make decisions to close schools that they have to offer the building to the local municipality for a dollar.

Yours truly,

Janet Pilon, CMMIII, DPA, CMO
Manager, Legislative Services/Deputy Clerk

cc Robert Auger
Clerk, Legal and Legislative Services
Town of Essex

File: C18-003
(5.5)



March 12, 2018

To: Association of Municipalities of Ontario (AMO)
200 University Avenue, Suite 801
Toronto, Ontario M5H 3C6

Federation of Canadian Municipalities (FCM)
24 Clarence Street
Ottawa, Ontario K1N 5P3

And To: All Ontario Municipalities

Re: User Pay Childcare Services at AMO and FCM Conferences

Dear Sir/Madam,

At its regular council meeting of March 5, 2018, Essex Town Council discussed the issue of ensuring access to childcare services for elected and municipal officials when they attend with their families at AMO and FCM conferences.

As a result of the discussion the following resolution was passed by Essex Town Council at its March 5, 2018 regular meeting:

Moved by Councillor Bondy
Seconded by Councillor Voakes

(R18-03-096) That the Association of Municipalities of Ontario (AMO) and the Federation of Canadian Municipalities (FCM) be requested to offer user pay childcare services at conferences during conference hours;

And that this resolution be circulated to all Ontario municipalities.

Carried



On behalf of Essex Town Council we accordingly ask the Association of Municipalities of Ontario and the Federation of Canadian Municipalities to respectfully give consideration to this request. Should you have any questions or comments regarding this matter, please feel free to contact the undersigned.

Yours truly

A handwritten signature in black ink, appearing to read "Robert Auger".

Robert Auger, L.L.B.
Clerk, Legal and Legislative Services
Town of Essex
Email: rauger@essex.ca

RA/Im

Office of the
County Warden



9 INTERNATIONAL DRIVE
PEMBROKE, ON, CANADA
K8A 6W5
613-735-7288
FAX: 613-735-2081
www.countyofrenfrew.on.ca

February 28, 2018

Premier Kathleen Wynne
Legislative Building
Queen's Park
Toronto, Ontario M7A 1A1
Via email: KWynne.mpp.co@liberal.ola.org

The Honourable Nathalie Des Rosiers
Minister of Natural Resources and Forestry
Suite 6630, 6th Floor, Whitney Block
99 Wellesley Street West
Toronto, Ontario M7A 1W3
Via email: NDesRosiers.mpp@liberal.ola.org

Dear Premier Wynne and Minister Des Rosiers:

On February 28, 2018 the Council of the Municipal Corporation of the County of Renfrew passed the following resolution:

WHEREAS approximately 6,900 people in Renfrew County are directly or indirectly employed by the forest sector and many of our communities are highly reliant on the local forest industry;

WHEREAS approximately 30% of the productive forest land base on Crown lands in Renfrew County has some form of species at risk restriction on regular operations;

WHEREAS Crown forests are sustainably managed according to the *Crown Forest Sustainability Act* (CFSA). Species at Risk and all other forest values are protected using the best available science, and economic and social values should be weighted with equal importance;

WHEREAS it is desirable to allow forest managers and companies to continue to provide for species at risk under one Act, the CFSA, while an independent panel develops a long-term approach that protects species at risk and their habitat and minimizes impacts to the forest industry;

THEREFORE BE IT RESOLVED THAT the County of Renfrew asks that the Province provides the forest sector with the certainty it needs to invest in the future, through a 5-year extension in Section 22.1 of the *Endangered Species Act, 2007* instead of the proposed 2-year extension;

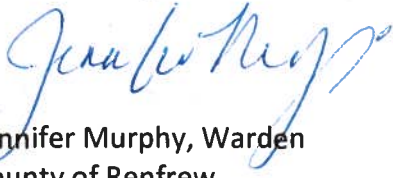
AND FURTHER BE IT RESOLVED THAT the County of Renfrew supports the establishment of an independent panel of credible stakeholders directly affected in their day-to-day lives by the management of Crown land forests who will look at the facts of the matter to come up with a long-term solution;

AND FURTHER BE IT RESOLVED THAT these decisions be made in a timely manner and shared before March 30, 2018;

AND FURTHER BE IT RESOLVED THAT the County of Renfrew circulate this resolution to the Premier of Ontario, the Minister of Natural Resources and Forestry, MPP John Yakabuski, Ontario Forestry Coalition, Ontario Forest Industries Association and all municipal councils of Ontario requesting that they endorse and support this resolution and communicate their support to the Ontario government.

The County of Renfrew recognizes that our communities, like many others in rural and northern Ontario, are dependent on the forest sector and have been impacted by the *Endangered Species Act* since its inception in 2007. We look forward to improvements to the Act that will lead to a better future for local businesses, communities and all species in the forests that surround us.

Yours sincerely,



Jennifer Murphy, Warden
County of Renfrew
warden@countyofrenfrew.on.ca

- c. MPP John Yakabuski, Renfrew-Nipissing-Pembroke
All Municipalities of Ontario
Ontario Forestry Coalition
Ontario Forest Industries Association
Ottawa Valley Forest Inc.
Algonquin Forestry Authority



The Corporation Of The Municipality Of South Huron

By-Law # 22- 2018


To amend By-Law #12-84, being the Zoning By-Law for the former Township of Stephen for lands known as Conc N BDY N PT Lot 25, Stephen Ward, Municipality of South Huron.

Whereas the Council of The Corporation of the Municipality of South Huron considers it advisable to amend Zoning By-Law #12-84, of the former Township of Stephen, Corporation of the Municipality of South Huron;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

1. That this By-Law shall apply to Conc N BDY N PT Lot 25, Stephen Ward, Municipality of South Huron.
2. That By-Law #12-84 is hereby amended by changing the zone symbol from Agricultural Small Holding (AG4) to Restricted Agriculture (AG2) on the lands designated 'zone change' on Key Maps, identified as Schedule "C", attached hereto and forming an integral part of this by-law.
3. That the purpose and effect of this amendment, identified as Schedule "A", attached hereto, forms an integral part of this by-law.
4. That the Township of Stephen Location Map, identified as Schedule "B", attached hereto, forms an integral part of this by-law.
5. That this By-Law shall come into effect upon final passing, pursuant to Section 34(21) of the *Planning Act*, 1990.

Read a first and second time this 5th day of March, 2018.


Maureen Cole, Mayor


Rebekah Msuya-Collison, Clerk

Read a third time and finally passed this _____ day of _____, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk



**By-law for Municipalities Not Within a Regional
Municipality, the County of Oxford or The
District Municipality of Muskoka – Form 5**
Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number 26-2018

A by-law to provide for a drainage works in the Municipality of South Huron
in the County of Huron.

Whereas the council of the Municipality of South Huron has procured a
report under section 78 of the *Drainage Act* for the improvement
of the Allen Municipal Drain drain;

And whereas the report dated 2018/02/20 has been authored by W.J. Dietrich P. Eng.
and the attached report forms part of this by-law;

And whereas the estimated total cost of the drainage work is \$82,900.00 ;

And whereas \$21,785.00 is the amount to be contributed by the Municipality
of South Huron for the drainage works;

And whereas *(Complete this clause only if other municipalities are being assessed a share of the cost of the project.);*

_____ is being assessed in the _____ of _____
_____ is being assessed in the _____ of _____
_____ is being assessed in the _____ of _____
_____ is being assessed in the _____ of _____

And whereas the council is of the opinion that drainage of the area is desirable;

Therefore the council of the Municipality of South Huron
pursuant to the *Drainage Act* enacts as follows:

1. AUTHORIZATION

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Municipality of South Huron
may borrow on the credit of the Corporation the amount of \$82,900.00 being the amount necessary for
the improvement of the drainage works.

This project will NOT be debentured.

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the

" Allen Municipal Drain 2018 _____ by-law".

First reading 2018/03/19

Second reading 2018/03/19

Provisionally adopted this 19 day of March, 2018

Name of Head of Council (Last, First Name)

Cole, Maureen

Signature

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Third reading _____

Enacted this _____ day of _____, 2018

Name of Head of Council (Last, First Name)

Cole, Maureen

Signature

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Corporate Seal

I, Rebekah Msuya-Collison

clerk of the Corporation of the Municipality of South Huron,

certify that the above by-law was duly passed by the council of the Corporation and is a true copy thereof.

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Corporate Seal



**By-law for Municipalities Not Within a Regional
Municipality, the County of Oxford or The
District Municipality of Muskoka – Form 5**
Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number 27-2018

A by-law to provide for a drainage works in the Municipality of South Huron
in the County of Huron.

Whereas the council of the Municipality of South Huron has procured a
report under section 4 of the *Drainage Act* for the construction
of the Ford-Neeb Municipal Drain drain;

And whereas the report dated 2018/02/20 has been authored by W.J. Dietrich P. Eng.
and the attached report forms part of this by-law;

And whereas the estimated total cost of the drainage work is \$146,100.00 ;

And whereas \$44,179.00 is the amount to be contributed by the Municipality
of South Huron for the drainage works;

And whereas *(Complete this clause only if other municipalities are being assessed a share of the cost of the project.);*

_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____

And whereas the council is of the opinion that drainage of the area is desirable;

Therefore the council of the Municipality of South Huron
pursuant to the *Drainage Act* enacts as follows:

1. AUTHORIZATION

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Municipality of South Huron
may borrow on the credit of the Corporation the amount of \$146,100.00 being the amount necessary for
the construction of the drainage works.

This project will NOT be debentured.

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the

" Ford-Neeb Municipal Drain 2018 _____ by-law".

First reading 2018/03/19

Second reading 2018/03/19

Provisionally adopted this 19 day of March, 2018

Name of Head of Council (Last, First Name)

Cole, Maureen

Signature

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Third reading _____

Enacted this _____ day of _____, 2018

Name of Head of Council (Last, First Name)

Cole, Maureen

Signature

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Corporate Seal

I, Rebekah Msuya-Collison

clerk of the Corporation of the Municipality of South Huron,

certify that the above by-law was duly passed by the council of the Corporation and is a true copy thereof.

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Corporate Seal



**By-law for Municipalities Not Within a Regional
Municipality, the County of Oxford or The
District Municipality of Muskoka – Form 5**
Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number 28-2018

A by-law to provide for a drainage works in the Municipality of South Huron
in the County of Huron.

Whereas the council of the Municipality of South Huron has procured a
report under section 4 and 78 of the *Drainage Act* for the construction and improvement
of the Khiva Municipal Drain drain;

And whereas the report dated 2018/02/20 has been authored by W.J. Dietrich P. Eng.
and the attached report forms part of this by-law;

And whereas the estimated total cost of the drainage work is \$163,000.00;

And whereas \$2,102.00 is the amount to be contributed by the Municipality
of South Huron for the drainage works;

And whereas *(Complete this clause only if other municipalities are being assessed a share of the cost of the project.);*

_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____

And whereas the council is of the opinion that drainage of the area is desirable;

Therefore the council of the Municipality of South Huron
pursuant to the *Drainage Act* enacts as follows:

1. AUTHORIZATION

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Municipality of South Huron
may borrow on the credit of the Corporation the amount of \$163,000.00 being the amount necessary for
the construction and improvement of the drainage works.

This project will NOT be debentured.

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the

" Khiva Municipal Drain 2018 _____ by-law".

First reading 2018/03/19

Second reading 2018/03/19

Provisionally adopted this 19 day of March, 2018

Name of Head of Council (Last, First Name)

Cole, Maureen

Signature

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Third reading _____

Enacted this _____ day of _____, 2018

Name of Head of Council (Last, First Name)

Cole, Maureen

Signature

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Corporate Seal

I, Rebekah Msuya-Collison

clerk of the Corporation of the Municipality of South Huron,

certify that the above by-law was duly passed by the council of the Corporation and is a true copy thereof.

Name of Clerk (Last, First Name)

Msuya-Collison, Rebekah

Signature

Corporate Seal



**By-law for Municipalities Not Within a Regional
Municipality, the County of Oxford or The
District Municipality of Muskoka – Form 5**
Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number 29-2018

A by-law to provide for a drainage works in the Municipality of South Huron
in the County of Huron.

Whereas the council of the Municipality of South Huron has procured a
report under section 4 of the *Drainage Act* for the construction
of the Rowe-Rasenberg Municipal Drain drain;

And whereas the report dated 2018/02/20 has been authored by W.J. Dietrich P. Eng.
and the attached report forms part of this by-law;

And whereas the estimated total cost of the drainage work is \$133,700.00;

And whereas \$37,321.00 is the amount to be contributed by the Municipality
of South Huron for the drainage works;

And whereas *(Complete this clause only if other municipalities are being assessed a share of the cost of the project.);*

_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____

And whereas the council is of the opinion that drainage of the area is desirable;

Therefore the council of the Municipality of South Huron
pursuant to the *Drainage Act* enacts as follows:

1. AUTHORIZATION

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Municipality of South Huron
may borrow on the credit of the Corporation the amount of \$133,700.00 being the amount necessary for
the construction of the drainage works.

This project will NOT be debentured.

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the
 "Rowe-Rasenberg Municipal Drain 2018 _____ by-law".

First reading 2018/03/19

Second reading 2018/03/19

Provisionally adopted this 19 day of March, 2018

Name of Head of Council (Last, First Name)	Signature
<u>Cole, Maureen</u>	

Name of Clerk (Last, First Name)	Signature
<u>Msuya-Collison, Rebekah</u>	

Third reading _____

Enacted this _____ day of _____, 2018

Name of Head of Council (Last, First Name)	Signature
<u>Cole, Maureen</u>	

Name of Clerk (Last, First Name)	Signature
<u>Msuya-Collison, Rebekah</u>	

Corporate Seal

I, Rebekah Msuya-Collison

clerk of the Corporation of the Municipality of South Huron,

certify that the above by-law was duly passed by the council of the Corporation and is a true copy thereof.

Name of Clerk (Last, First Name)	Signature
<u>Msuya-Collison, Rebekah</u>	

Corporate Seal



The Corporation Of The Municipality Of South Huron

By-Law # 30 - 2018

Being a By-Law to provide for the adoption of the 2018 tax rates and to further provide for penalty and interest in default of payment thereof

Whereas Section 312 of the *Municipal Act, S.O.2001, c.25* as amended, provides that the Council of a local municipality shall, after the adoption of estimates for the year, pass a By-Law to levy a separate tax rate, as specified in the By-Law, on the assessment in each property class in the local municipality rateable for local municipality purposes; and

Whereas the Assessment Roll made in 2017 and upon which the 2018 taxes are to be levied has been received by the Municipality of South Huron; and

Whereas the County of Huron, under the provisions of Section 308, 311 and 312 of the *Municipal Act, S.O., 2001, c.25* as amended, has by By-Law 2018-018 established tax ratios and a county tax levy for 2018; and

Whereas the Minister of Finance, under the provisions of Ontario Regulation 400/98, under the *Education Act R.S.O., 1990* as amended by Ontario Regulation 26/18, established tax rates; and

Whereas Section 312 (4) of the *Municipal Act, S.O., 2001, c.25* as amended provides that sums required to be levied by taxation for special local municipality levies are to be levied by separate tax rates on all of part of the assessment in each property class in the local municipality rateable for local municipality purposes; and

Whereas Section 326 of the *Municipal Act, S.O., 2001, c.25* as amended, authorizes that a municipality may designate the area of a municipality in which residents and property owners receive or will receive an additional benefit from the special service that is not received or will not be received in other areas of the municipality; and

Whereas Section 398 of the *Municipal Act, S.O. 2001, c.25* as amended, provides that fees and charges imposed by the municipality, upper-tier municipality or local board may be added to the tax roll and collected in the same manner as municipal taxes; and

Whereas it is necessary and expedient to levy on the whole rateable property according to the last revised assessment roll of the Municipality of South Huron for General, County and Education purposes of the said Municipality of South Huron for the current year as set out in the 2018 Budget;

Now therefore be it resolved that the Council of the Corporation of the Municipality of South Huron enacts as follows:

1. That the assessment contained in the assessment roll of the Municipality of South Huron compiled during the year 2017 and returned December 12, 2017 is hereby adopted and confirmed as the assessment on which the taxes for the year 2018 shall be levied.
2. That the tax rates as per Schedule "A" attached hereto shall form an integral part of this By-Law and be levied and charged in 2018.
3. That the taxes shall become due and payable on the 1st day of September 2018, but may be paid in two installments, approximately one half on the 15th day of September 2018 and the balance on the 15th day of November 2018.
4. That there shall be imposed a penalty for non-payment of taxes on the first day following the due date in the amount of 1 1/4% of the amount due and unpaid, and an additional penalty of 1 1/4% shall be added on the first day of each calendar month thereafter in which default continues, but not after the end of the year in which the taxes are levied.
5. That the Tax Collector is hereby authorized to mail or cause to be mailed the notice of taxes due to the address of the residence or place of business of the person to whom notice is required to be given.
6. That taxes may be paid at the following banks with the municipality accepting no liability for service or collection charges:

Bank of Montreal, Exeter and Grand Bend
Royal Bank of Canada, Exeter
Toronto-Dominion Bank, Grand Bend
Canadian Imperial Bank of Commerce, Exeter
Libro Credit Union, Exeter
Scotiabank, Exeter

7. That nothing in this By-Law shall prevent the Tax Collector from proceeding at any time with the collection of any tax, or any part thereof, in accordance with the provisions of the statutes and By-Laws governing the collection of taxes.

8. That the Tax Collector and Treasurer are hereby empowered to accept part payment from time to time on account of any taxes due, provided that acceptance of any such part payment shall not affect the collection of any percentage charge imposed and collectable under Section 4 of this By-Law in respect of non-payment or late payment of any taxes or any installment of taxes.
9. That this By-Law will come into force and effect upon final passing.

Read a first and second time this 19th day of March, 2018.

Read a third and final time this 19th day of March, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

**Municipality of South Huron
Schedule "A" to By-Law # 30 -2018**

TAXABLE	COUNTY TAX RATE	EDUCATION TAX RATE	MUNICIPAL WARD 1 & 3	MUNICIPAL WARD 2	CENTRALIA STREET- LIGHTING	CREDITON STREET- LIGHTING	DASHWOOD STREET- LIGHTING	EXETER STREET- LIGHTING	HURON PARK STREET- LIGHTING	HURON PARK SEWER
CJ Commercial Taxable: Vacant Land, Shared PIL	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
CT Commercial Taxable: Full	0.00526358	0.01055893	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
CU Commercial Taxable: Excess Land	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
CX Commercial Taxable: Vacant Land	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
FT Farmlands Taxable: Full	0.00119627	0.00042500	0.00142367	0.00167243	0.00005399	0.00004854	0.00009037	0.00004735	0.00006009	0.00617898
IH Industrial Taxable: Full, Shared PIL	0.00526358	0.01090000	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
IJ Industrial Taxable: Vacant Land Shared PIL	0.00368450	0.00763000	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
IT Industrial Taxable: Full	0.00526358	0.01090000	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
IU Industrial Taxable: Excess Land	0.00368450	0.00763000	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
IX Industrial Taxable: Vacant Land	0.00368450	0.00763000	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
I1 Industrial Taxable: Farmland 1	0.00119627	0.00042500	0.00142367	0.00167243	0.00005399	0.00004854	0.00009037	0.00004735	0.00006009	0.00617898
JT Industrial (New Construction) Taxable: Full	0.00526358	0.01090000	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
LT Large Industrial Taxable: Full	0.00526358	0.01090000	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
LU Large Industrial Taxable: Excess Land	0.00368450	0.00708500	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
MT Multi-Residential Taxable: Full	0.00526358	0.00170000	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
PT Pipeline Taxable: Full	0.00334955	0.00469360	0.00398626	0.00468280	0.00015117	0.00013590	0.00025303	0.00013259	0.00016826	0.01730113
RD Residential/Farm Taxable: Education Only	0.00000000	0.00170000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
RH Residential/Farm Taxable: Shared PIL	0.00478507	0.00170000	0.00569466	0.00668971	0.00021596	0.00019414	0.00036147	0.00018942	0.00024037	0.02471590
RT Residential/Farm Taxable: Full	0.00478507	0.00170000	0.00569466	0.00668971	0.00021596	0.00019414	0.00036147	0.00018942	0.00024037	0.02471590
R1 Residential/Farm Taxable: Farmland 1	0.00119627	0.00042500	0.00142367	0.00167243	0.00005399	0.00004854	0.00009037	0.00004735	0.00006009	0.00617898
ST Shopping Centre Taxable: Full	0.00526358	0.01055893	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
SU Shopping Centre Taxable: Excess Land	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
TT Managed Forest Taxable: Full	0.00119627	0.00042500	0.00142367	0.00167243	0.00005399	0.00004854	0.00009037	0.00004735	0.00006009	0.00617898
XT Commercial (New Construction) Taxable: Full	0.00526358	0.01055893	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
XU Commercial (New Construction) Taxable: Excess	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
PAYMENT IN LIEU(PIL)										
CF Commercial Payment-In-Lieu: Full	0.00526358	0.01055893	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
CG Commercial Payment-In-Lieu: General	0.00526358	0.01055893	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
CP Commercial Payment-In-Lieu: Full Tenant of Prov	0.00526358	0.01055893	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
CY Commercial Payment-In-Lieu: Full Vacant Land	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
CZ Commercial Payment-In-Lieu: General Vac Land	0.00368450	0.00739125	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
HF Landfill Payment in Lieu: Full	0.00526358	0.00831607	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
IP Industrial Payment-In-Lieu: Full Tenant of Prov	0.00526358	0.01090000	0.00626413	0.00735868	0.00023756	0.00021355	0.00039762	0.00020836	0.00026440	0.02718750
IZ Industrial Payment-In-Lieu: General Vac Land	0.00368450	0.00763000	0.00438489	0.00515108	0.00016629	0.00014949	0.00027833	0.00014585	0.00018508	0.01903125
RG Residential/Farm Payment-In-Lieu: General	0.00478507	0.00170000	0.00569466	0.00668971	0.00021596	0.00019414	0.00036147	0.00018942	0.00024037	0.02471590
RP Residential/Farm PIL: Full, Tenant of Prov	0.00478507	0.00170000	0.00569466	0.00668971	0.00021596	0.00019414	0.00036147	0.00018942	0.00024037	0.02471590



The Corporation Of The Municipality Of South Huron

By-Law #31- 2018

To amend By-Law #12-84, being the Zoning By-Law for the former Township of Stephen for lands known as Conc N BDY E PT Lot 35, Stephen Ward, Municipality of South Huron.

Whereas the Council of The Corporation of the Municipality of South Huron considers it advisable to amend Zoning By-Law #12-84, of the former Township of Stephen, Corporation of the Municipality of South Huron;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

1. That this By-Law shall apply to Conc N BDY E PT Lot 35, Stephen Ward, Municipality of South Huron.
2. That By-law 12-1984 is hereby amended by modifying Section 12.6.7 to add the following provisions to the existing special provisions in the RC2-1 Zone:

Accessory Structure in Front Yard

Notwithstanding the provisions of Section 3.11.2 to the contrary, one accessory structure accessory to the main Recreational Trailer Park and Campground is permitted to be built in the front yard with the following provisions: front yard to accessory structure (minimum) 29m

Notwithstanding the provisions of Section 3.11.3 to the contrary, this accessory structure is permitted to be built at a height of 7m (maximum)

Main Building Height

Notwithstanding the provisions of Section 12.4.1 to the contrary, main building height (maximum) is permitted at 11m

3. That the purpose and effect of this amendment, identified as Schedule "A", attached hereto, forms an integral part of this by-law.
4. That the Township of Stephen Location Map, identified as Schedule "B", attached hereto, forms an integral part of this by-law.

5. That this By-Law shall come into effect upon final passing, pursuant to Section 34(21) of the *Planning Act, 1990*.

Read a first and second time this 19^h day of March, 2018.

Read a third time and finally passed this 19th day of March, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

Schedule “A” to By-Law #31-2018

Corporation Of The Municipality Of South Huron

By-Law #31-2018 has the following purpose and effect:

This By-law affects the property known municipally at 36501 Dashwood Road, and legally as Conc N BDY E PT Lot 35, Stephen Ward. The subject lands are currently zoned Recreational Trailer Park and Campground Special Provisions (RC2-1) which permits a campground and trailer park, in addition to uses accessory to the trailer camp.

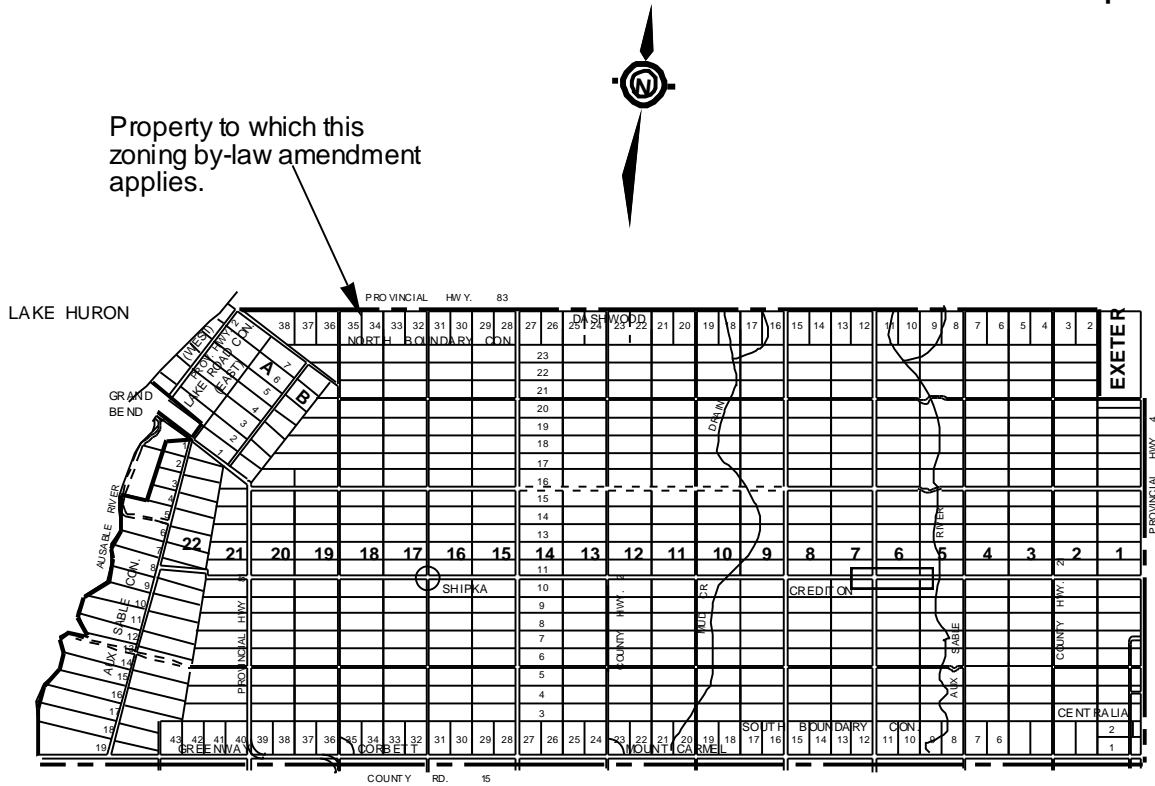
This Zoning By-law amendment amends site specific zoning provisions on the property to allow for the construction of an accessory work shed for the campground with relief from height limits and limits on location of this accessory structure. This By-law also amends the height of main building in the RC2-1 zone to 11 metres. This by-law makes the following amendments to the Township of Stephen Zoning By-law:

1. Relief from Section 3.11.2 to permit an accessory structure in the front yard when General Provisions prohibit accessory structures to be located in the front yard.
2. Relief from Section 3.11.3 to permit an accessory structure at a height of 7m when 6m maximum is permitted in the Zoning By-law.
3. Relief from Section 12.4.1 to permit a main building height of 11 metres when main building height is permitted to a maximum of 9 metres.

This By-law amends Zoning By-law #12-1984 of the former Township of Stephen. Maps showing the general location of the lands to which this proposed zoning by-law amendment applies are shown on the following pages.

**Schedule "B" to By-Law #31- 2018
Corporation Of The Municipality Of South Huron**

**Schedule 'A'
STEPHEN WARD
Location Map**



**Schedule "C" – Showing the Area Subject to the Amendment
Corporation Of The Municipality Of South Huron
By-Law #31-2018**



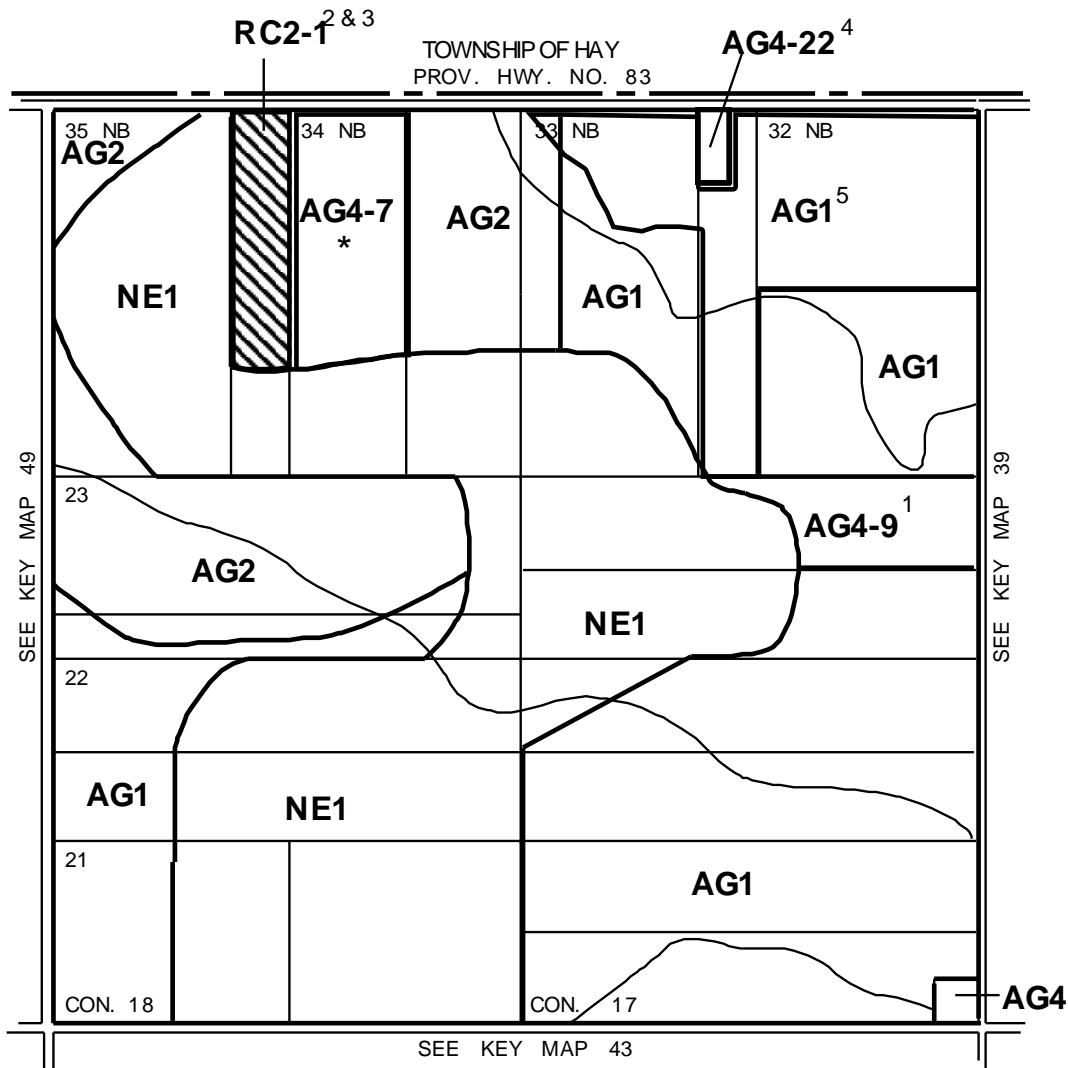
SCHEDULE "A"

KEY MAP 44

TOWNSHIP OF STEPHEN

0 100 200 500 METRES

0 500 1000 2000 FEET



* AMENDED BY BY-LAW 27-1988

1 AMENDED BY BY-LAW 32-1992

2 AMENDED BY BY-LAW 60-2004

3 AMENDED BY BY-LAW 44-2007

4 AMENDED BY BY-LAW 29-2010

5 Temporary Use By-law 89-2010 (Expires Sept 20, 2013)

Area to which this Zoning By-law Amendment applies



The Corporation Of The Municipality Of South Huron

By-Law #32- 2018

To amend By-Law #12-84, being the Zoning By-Law for the former Township of Stephen for lands known as Lot 9, Concession 20, Stephen Ward, Municipality of South Huron.

Whereas the Council of The Corporation of the Municipality of South Huron considers it advisable to amend Zoning By-Law #12-84, of the former Township of Stephen, Corporation of the Municipality of South Huron;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

1. That this By-Law shall apply to Lot 9, Concession 20, Stephen Ward, Municipality of South Huron.
2. That By-Law #12-84 is hereby amended by changing the zone symbol from General Agriculture (AG1) to General Agriculture-Special Provisions (AG1-1) and Agricultural Small Holding (AG4) on the lands designated 'zone change' on Key Maps, identified as Schedule "C", attached hereto and forming an integral part of this by-law.
3. That the purpose and effect of this amendment, identified as Schedule "A", attached hereto, forms an integral part of this by-law.
4. That the Township of Stephen Location Map, identified as Schedule "B", attached hereto, forms an integral part of this by-law.
5. That this By-Law shall come into effect upon final passing, pursuant to Section 34(21) of the *Planning Act, 1990*.

Read a first and second time this 19th day of March, 2018.

Read a third time and finally passed this 19th day of March, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

Schedule “A” to By-Law #32-2018**Corporation Of The Municipality Of South Huron**

By-Law #32-2018 has the following purpose and effect:

This By-law affects the property known municipally at 69860 Grand Bend Line, and legally as Lot 9, Concession 20, Stephen Ward. Huron County approved an application to sever a surplus dwelling on this property (#B64-2017); the severed and retained lots must be rezoned as a condition of this approval.

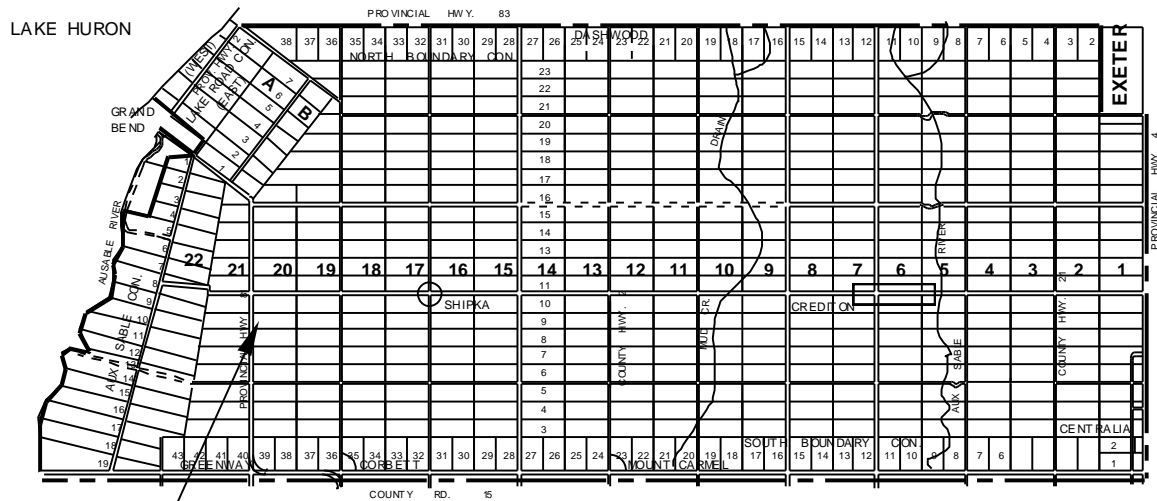
The area proposed to be severed is approximately 3.98 acres (1.61 ha) and contains a house and accessory structures. This By-law changes the zoning on the severed parcel from General Agriculture (AG1) to Agriculture Small Holding (AG4) to recognize a residential use in the agricultural area.

The retained lands require a rezoning from General Agriculture (AG1) to General Agriculture Special Provisions (AG1-1) in order to prohibit construction of a new residence as required by the Provincial Policy Statement and the South Huron Official Plan. The retained lands will continue to be used for agricultural purposes.

This By-law amends Zoning By-law #12-1984 of the former Township of Stephen. Maps showing the general location of the lands to which this proposed zoning by-law amendment applies are shown on the following pages.

**Schedule "B" to By-Law #32- 2018
Corporation Of The Municipality Of South Huron**

**Schedule 'A'
STEPHEN WARD
Location Map**



Property to which this
zoning by-law amendment
applies.

**Schedule "C" – Showing the Area Subject to the Amendment
Corporation Of The Municipality Of South Huron
By-Law #32-2018**



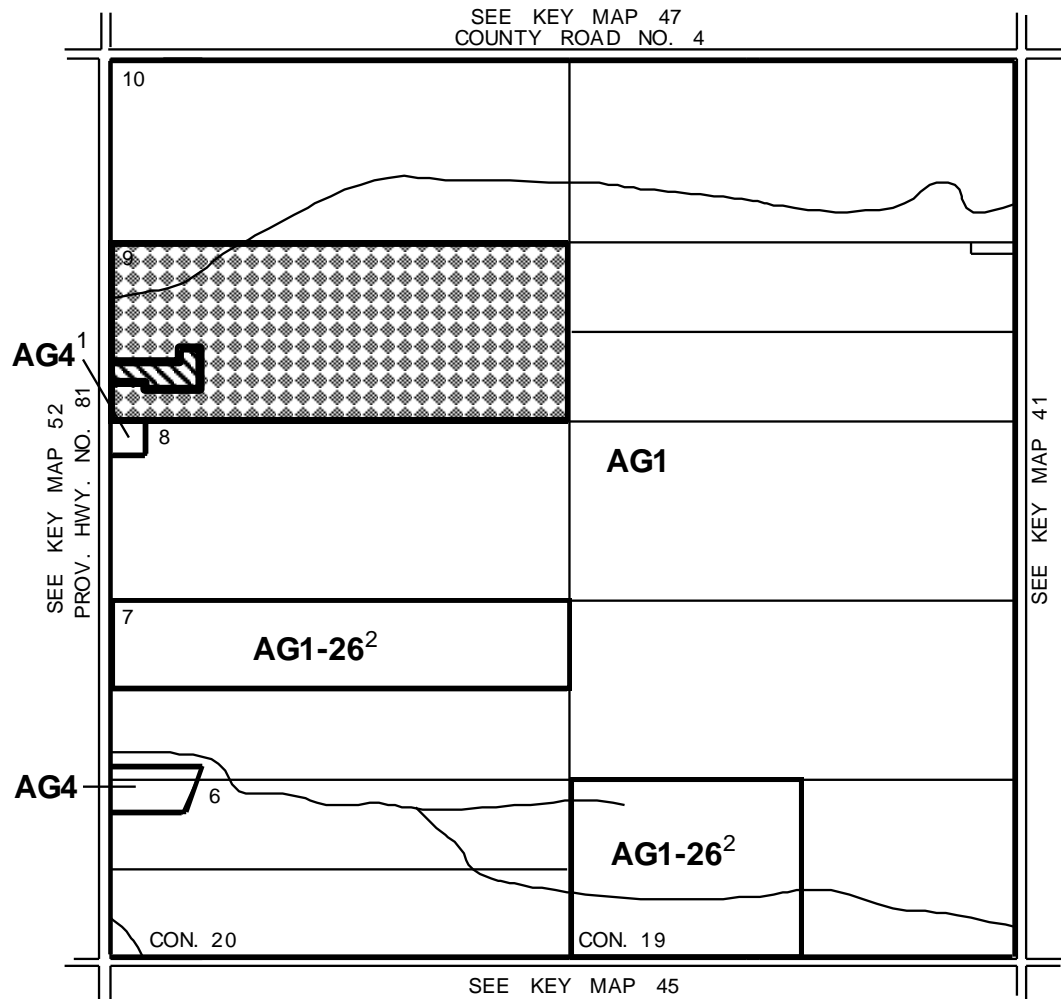
SCHEDULE "A"

KEY MAP 46

TOWNSHIP OF STEPHEN

0 100 200 500 METRES

0 500 1000 2000 FEET



1 AMENDED BY BY-LAW 26-1986

2 AMENDED BY BY-LAW 23-2001



Zone change from AG1 (General Agriculture) to AG4 (Agricultural Small Holding)



Zone change from AG1 (General Agriculture) to AG1-1 (General Agriculture - Special Provisions)



The Corporation Of The Municipality Of South Huron

By-Law #33- 2018

To amend By-Law #12-84, being the Zoning By-Law for the former Township of Stephen for lands known as Stephen Con LRW Pt Lots 2; and 3 Plan 125 PT Lots 143; to 145 187 188 196 to 200; Plan 127 PT BLK C Plan 129; PT BLK a RP 22R2797 Parts 3, Stephen Ward, Municipality of South Huron.

Whereas the Council of The Corporation of the Municipality of South Huron considers it advisable to amend Zoning By-Law #12-84, of the former Township of Stephen, Corporation of the Municipality of South Huron;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

1. That this By-Law shall apply to Stephen Con LRW Pt Lots 2; and 3 Plan 125 PT Lots 143; to 145 187 188 196 to 200; Plan 127 PT BLK C Plan 129; PT BLK a RP 22R2797 Parts 3, Stephen Ward, Municipality of South Huron.
2. That By-Law #12-84 is hereby amended by changing the zone symbol from Recreational Commercial (RC3) to Recreational Residential Special Provisions (RC1-2) on the lands designated 'zone change' on Key Maps, identified as Schedule "C", attached hereto and forming an integral part of this by-law.
3. That the purpose and effect of this amendment, identified as Schedule "A", attached hereto, forms an integral part of this by-law.
4. That the Township of Stephen Location Map, identified as Schedule "B", attached hereto, forms an integral part of this by-law.
5. That this By-Law shall come into effect upon final passing, pursuant to Section 34(21) of the *Planning Act*, 1990.

Read a first and second time this 19th day of March, 2018.

Read a third time and finally passed this 19th day of March, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

Schedule “A” to By-Law #33-2018

Corporation Of The Municipality Of South Huron

By-Law #33-2018 has the following purpose and effect:

This By-law affects the property known municipally as 70671 Bluewater Highway, and legally as Stephen Con LRW Pt Lots 2; and 3 Plan 125 PT Lots 143; to 145 187 188 196 to 200; Plan 127 PT BLK C Plan 129; PT BLK a RP 22R2797 Parts 3, Stephen Ward. Huron County approved an application for boundary adjustment on this parcel to add lands to an abutting property (#B57/2015); the severed parcel must be rezoned to match the zoning of the lands to which it is to be added to. This rezoning was made a condition of consent #B57/2015.

By way of this zoning by-law amendment, the lands to be severed are proposed to be rezoned from RC3 (Recreational Commercial) to RC1-2 (Recreational Residential Special Provisions) to match the zoning of the recreation residential parcel to which the lands will be added.

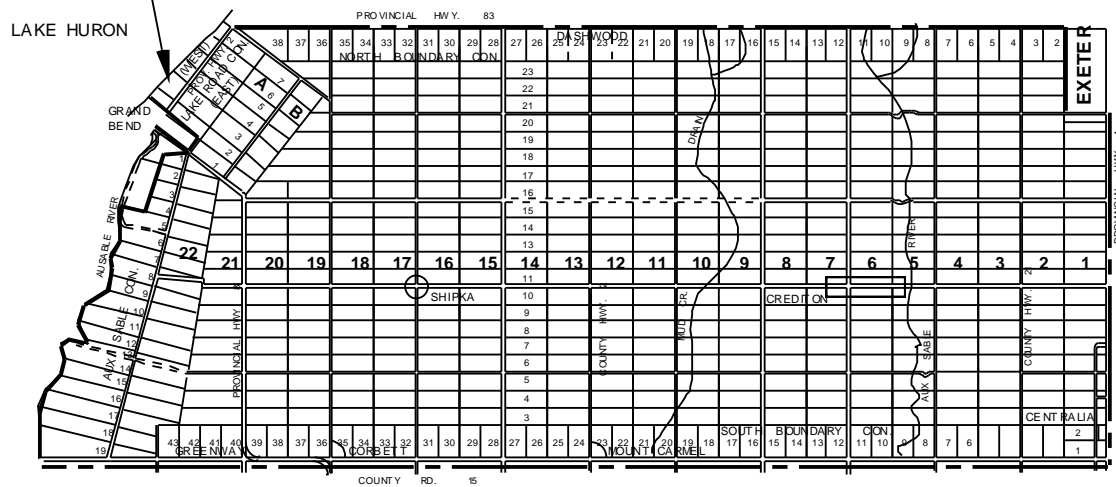
This By-law amends Zoning By-law #12-1984 of the former Township of Stephen. Maps showing the general location of the lands to which this proposed zoning by-law amendment applies are shown on the following pages.

Schedule "B" to By-Law #33- 2018 Corporation Of The Municipality Of South Huron

Schedule 'A'
STEPHEN WARD
Location Map



Property to which this
zoning by-law amendment
applies.



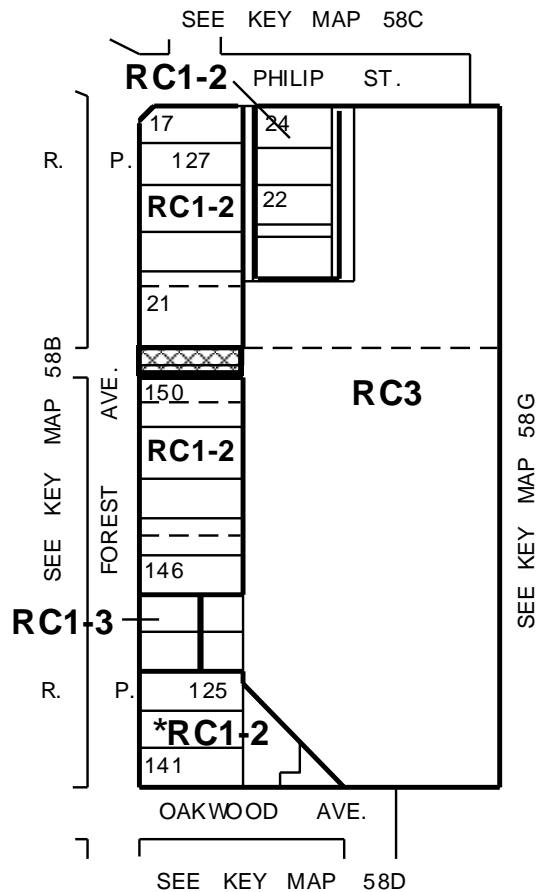
**Schedule "C" – Showing the Area Subject to the Amendment
Corporation Of The Municipality Of South Huron
By-Law #33-2018**




SCHEDULE "A"

KEY MAP 58E

TOWNSHIP OF STEPHEN



 Zone change from RC3 (Recreational Commercial) to RC1-2 (Recreational Residential - Special Provisions)

* AMENDED BY BYLAWS 21-1986, 15-1989



The Corporation Of The Municipality Of South Huron

By-Law #34- 2018

To amend By-Law #30-78, being the Zoning By-Law for the former Town of Exeter, Municipality of South Huron.

Whereas the Council of The Corporation of the Municipality of South Huron considers it advisable to amend Zoning By-Law #30-1978 of the former Town of Exeter, Corporation of the Municipality of South Huron;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

1. That Section 2 is hereby amended by the addition of the following:

2.75.A "SECOND UNIT" – Means an accessory dwelling unit with its own kitchen, sanitary facilities and bedroom(s)/sleeping area in a single detached dwelling, semi-detached dwelling or multiple attached dwellings or accessory structure.

2. That Section 3.8.4 is hereby removed and replaced with the following:

3.8.4 No accessory buildings or travel trailer shall be used for human habitation except where a dwelling is a permitted accessory use"

3. That Section 4 is hereby amended by the addition of the following:

4.1.11 Second Unit Special Provisions

Second units are permitted in a single detached dwelling, semi-detached or multiple attached dwelling or accessory structure subject to the following requirements:

- a) a maximum of two (2) dwelling units are permitted on the property – either with both units in the main dwelling or with one unit in the main dwelling and the second unit in an accessory structure.
- b) access to the second unit is by an entrance in the side yard or rear yard.
- c) there are no stairs, stairwells, or retaining walls facing a street for the second unit entrance.
- d) any additional exterior stairways provided for the second unit leading to a full floor above the first storey are not located in the front yard.
- e) were a single detached dwelling unit, semi-detached dwelling unit, or multiple attached unit contains an accessory unit and is permitted to have a home occupation, the home occupation shall be permitted in only one unit, in accordance with the definition of Home Occupation.
- f) 1 (one) additional on-site parking space is provided for the second unit in addition to the parking for the main dwelling.
- g) there is only 1 (one) driveway on the property.

h) all secondary units must comply with any applicable laws and standards including but not limited to the Ontario Building Code, Fire Code and property standards by-laws.

4. That Section 4.2.1 is hereby amended by adding the following as a permitted use:

a second unit subject to Section 4.1.11

5. That Section 4.3.1 is hereby amended by adding the following as a permitted use:

a second unit subject to Section 4.1.11

6. That Section 4.4.1 is hereby amended by adding the following as a permitted use:

a second unit subject to Section 4.1.11

7. That the purpose and effect of this amendment, identified as Schedule “A”, attached hereto, forms an integral part of this by-law.

4. That the Town of Exeter Location Map, identified as Schedule “B”, attached hereto, forms an integral part of this by-law.

5. That this By-Law shall come into effect upon final passing, pursuant to Section 34(21) of the *Planning Act, 1990*.

Read a first and second time this 19th day of March, 2018.

Read a third time and finally passed this 19th day of March, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

**Schedule "A" to By-Law #34-2018
Corporation Of The Municipality Of South Huron**

By-Law #34-2018 has the following purpose and effect:

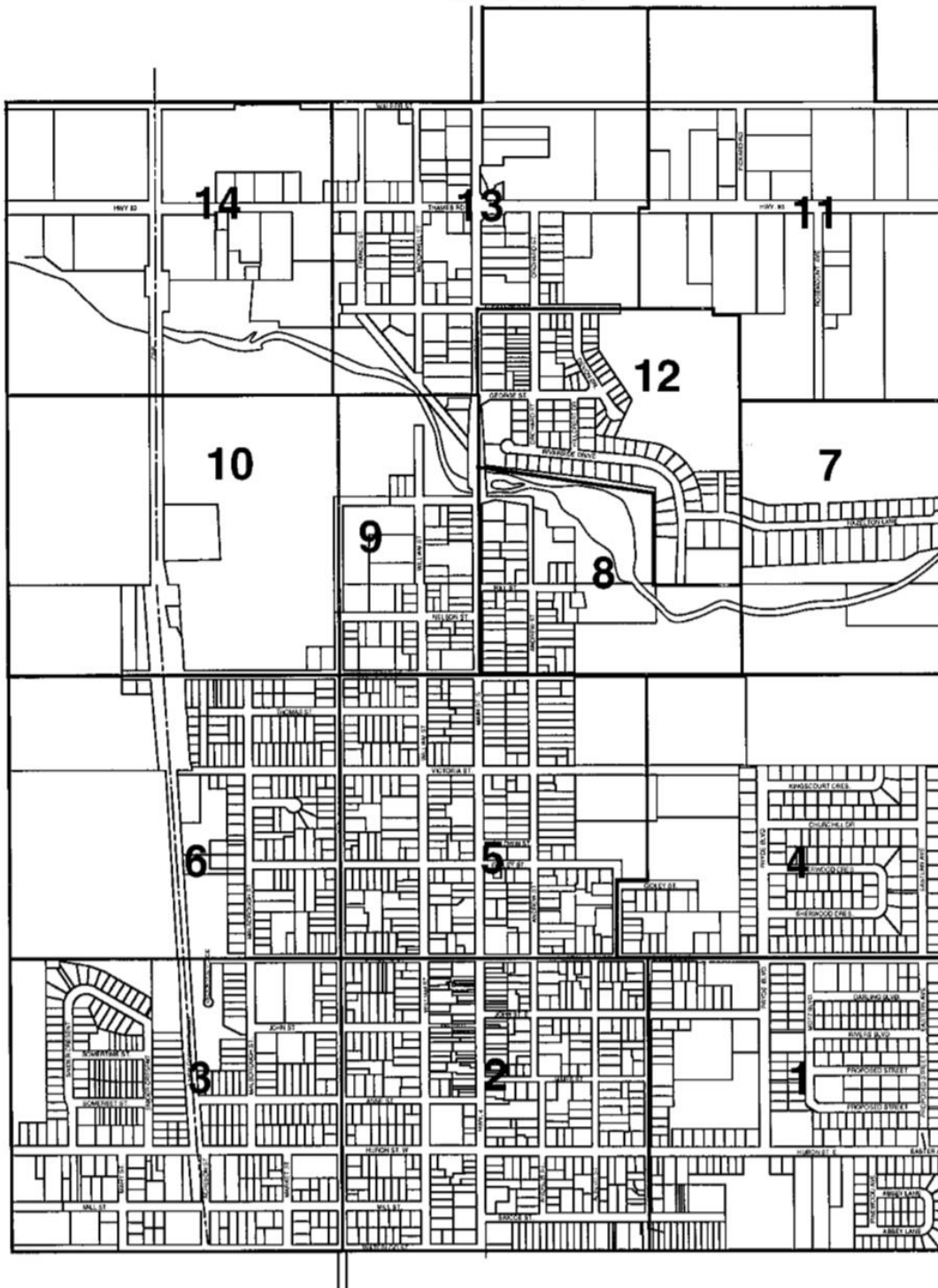
This Housekeeping Zoning By-law Amendment to the Town of Exeter Zoning By-law 30-1978 would affect all lands within the Town of Exeter, Municipality of South Huron, as it includes text amendments specific to certain zones. This by-law proposes the following changes:

1. To add a definition for Second Unit
2. To amend the General Provisions for accessory structures to identify that an accessory structure can be used for human habitation if it is an identified permitted use.
3. To add a general provision for all residential zones for provisions that pertain to second units.
4. To add a Second Unit as a permitted use subject to Residential Second Unit Special Provisions in the R1 Zone.
5. To add a Second Unit as a permitted use subject to Residential Second Unit Special Provisions in the R2 Zone.
6. To add a Second Unit as a permitted use subject to Residential Second Unit Special Provisions in the R3 Zone.

This By-law amends Zoning By-law #30-1978 of the former Town of Exeter. Maps showing the general location of the lands to which this proposed zoning by-law amendment applies are shown on the following pages.

**Schedule "B" to By-Law #34- 2018
Corporation Of The Municipality Of South Huron**

**MUNICIPALITY OF SOUTH HURON
WARD 2 (FORMER TOWN OF EXETER)
INDEX MAP**





The Corporation of The Municipality of South Huron

By-Law # 35 -2018

Confirming By-Law

Being a by-law to adopt, confirm and ratify matters dealt with by the Council of the Corporation of the Municipality of South Huron.

Whereas Section 8 of the *Municipal Act, 2001*, as amended, provides that the powers of a Municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the Municipality's ability to respond to municipal issues; and

Whereas Section 5(3) of the *Municipal Act, 2001*, as amended, provides that a municipal power, including a municipality's capacity, rights, powers and privileges under section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise; and

Whereas the Council of The Corporation of the Municipality of South Huron deems it expedient to adopt, confirm and ratify matters dealt with at all meetings of Council;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

1. That the proceedings and actions taken by Council and municipal officers of the Corporation of the Municipality of South Huron at the March 19, 2018 Regular Council and Public Meetings in respect of each report, motion, recommendation, by-law and any other business conducted are, except where the prior approval of the Ontario Municipal Board or other authority is required by law, hereby adopted, ratified and confirmed and shall have the same force and effect as if each and every one of them had been the subject matter of a separate by-law duly enacted.
2. That the Mayor and Members of Council of the Corporation of the Municipality of South Huron are hereby authorized and directed to do all things necessary to give effect to the said actions of Council of the Corporation of the Municipality of South Huron or to obtain approvals where required.
3. That on behalf of The Corporation of the Municipality of South Huron, the Mayor, or the Presiding Officer of Council, and the Clerk or the Chief Administrative Officer, where instructed to do so, are hereby authorized and directed to execute all necessary documents and to affix thereto the Corporate Seal.
4. That this By-Law shall not be amendable or debatable.

Read a first and second time this 19th day of March, 2018

Read a third time and passed this 19th day of March, 2018.

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk