



**TOWNSHIP OF WILMOT  
COUNCIL MEETING AGENDA  
MONDAY, MAY 25, 2015**

**REGULAR COUNCIL MEETING  
COUNCIL CHAMBERS  
7:00 P.M.**

1. MOTION TO CONVENE INTO CLOSED SESSION
2. MOTION TO RECONVENE IN OPEN SESSION
3. MOMENT OF SILENCE
4. ADDITIONS TO THE AGENDA
5. DISCLOSURE OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT
6. MINUTES OF PREVIOUS MEETINGS
  - 6.1 Council Meeting Minutes May 11, 2015

**Recommendation**

**THAT the minutes of the following meeting be adopted as presented:**

**Council Meeting May 11, 2015.**

7. PUBLIC MEETINGS
  - 7.1 REPORT NO. DS 2015-20  
Zone Change Application 09/15  
Louise Guthrie  
Part of Lot 7, Concession North of Erb's Road  
97 Clarence Avenue, St. Agatha

**Recommendation**

**THAT Zone Change Application 09/15 made by Louise Guthrie, affecting Part of Lot 7, Concession North of Erb's Road, to permit a second dwelling unit to be located within the existing single detached dwelling on the subject property, be approved.**

8. PRESENTATIONS/DELEGATIONS

**9. REPORTS****9.1 CAO – no reports****9.2 CLERKS****9.2.1 Addendum to Report CL2015-14  
Consideration of Engineer's Report  
For the Trussler Road Municipal Drain 2015  
Parts of Lots 1 and 2, German Block North of Bleams Road  
Township of Wilmot  
And Parts of Lots 46 and 129, German Company Tract  
City of Kitchener  
Region of Waterloo****Recommendation**

**THAT the Drainage Engineer's Report dated April 29, 2015 for the Trussler Road Municipal Drain, for improved drainage in Parts of Lots 1 and 2, German Block North of Bleams Road, Township of Wilmot, and Parts of Lots 46 and 129, German Company Tract, City of Kitchener, Region of Waterloo, be referred back to the Engineer for reconsideration.**

**9.3 FINANCE – no reports****9.4 PUBLIC WORKS****9.4.1 REPORT NO. PW-2015-12  
Zehr Municipal Drain Construction****Recommendation**

**THAT the tender submitted by Sebben AG Drainage Systems Ltd. for the construction of the Zehr Municipal Drain in the amount of \$76,061.00, plus HST, be accepted.**

**9.5 DEVELOPMENT SERVICES – no additional reports****9.6 FACILITIES AND RECREATION SERVICES – no reports****9.7 FIRE – no reports****9.8 CASTLE KILBRIDE – no reports****10. CORRESPONDENCE – no correspondence**

**11. BY-LAWS**

- 11.1 By-law No. 2015-33 – Zone Change Application 09/15, Louise Guthrie, Part of Lot 11, Concession North of Erb’s Road, 97 Clarence Avenue, St. Agatha**

**Recommendation**

**THAT By-law No. 2015-33 be read a first, second and third time and finally passed in Open Council.**

- 11.2 By-law No. 2015-15 – Zehr Municipal Drain 2015**

**Recommendation**

**THAT By-law No. 2015-15 be read a third and final time in Open Council.**

**12. NOTICE OF MOTIONS**

**13. QUESTIONS/NEW BUSINESS/ANNOUNCEMENTS**

**14. BUSINESS ARISING FROM CLOSED SESSION**

**15. CONFIRMATORY BY-LAW**

- 15.1 By-law No. 2015-34**

**Recommendation**

**THAT By-law No. 2015-34 to Confirm the Proceedings of Council at its Meeting held on May 25, 2015 be introduced, read a first, second, and third time and finally passed in Open Council.**

**16. ADJOURNMENT**

**Recommendation**

**THAT we do now adjourn to meet again at the call of the Mayor.**



**TOWNSHIP OF WILMOT  
COUNCIL MEETING MINUTES  
MONDAY, MAY 11, 2015**

**REGULAR COUNCIL MEETING  
COUNCIL CHAMBERS  
7:00 P.M.**

**Members Present: Mayor L. Armstrong, Councillors A. Junker, P. Roe, B. Fisher, J. Gerber,  
M. Murray**

**Staff Present: Chief Administration Officer G. Whittington, Director of Clerk's Services  
B. McLeod, Deputy Clerk D. Mittelholtz, Director of Public Works G. Charbonneau,  
Director of Facilities and Recreation Services S. Nancekivell, Director of  
Development Services H. O'Krafka, Fire Chief M. Raine, Director of Finance R. Tse,  
Planner/EDO A. Martin**

- 1. MOTION TO CONVENE INTO CLOSED SESSION (IF NECESSARY)**
- 2. MOTION TO RECONVENE IN OPEN SESSION**
- 3. MOMENT OF SILENCE**
- 4. ADDITIONS TO THE AGENDA**
- 5. DISCLOSURE OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST  
ACT**

None disclosed.

**6. MINUTES OF PREVIOUS MEETINGS**

**6.1 Council Meeting Minutes April 27, 2015**

**Resolution No. 2015-097**

**Moved by: M. Murray**

**Seconded by: P. Roe**

**THAT the minutes of the following meeting be adopted as presented:**

**Council Meeting April 27, 2015.**

**CARRIED.**

**7. PUBLIC MEETINGS**

- 7.1 REPORT NO. DS 2015-17**  
**Zone Change Application 08/15**  
**exp Services / 1920270 Ontario Inc.**  
**Part of Lot 15, Concession South of Snyder's Road**  
**Foundry Street / Gingerich Road / Brewery Street, Baden**

**Resolution No. 2015-098****Moved by: M. Murray****Seconded by: A. Junker****THAT report DS 2015-17 be received for information.****CARRIED.**

Mayor Armstrong declared the public meeting open and stated that Council would hear all interested parties who wished to speak. He indicated that if the decision of Council is appealed to the Ontario Municipal Board, the Board has the power to dismiss an appeal if individuals do not speak at the public meeting or make written submissions before the by-law is passed.

Mayor Armstrong stated that persons attending as delegations at this meeting are required to leave their names and addresses which will become part of the public record and advised that this information may be posted on the Township's official website.

The Planner/EDO highlighted the report.

Mayor L. Armstrong asked if there were questions of a technical nature from Council. There were none.

Mayor Armstrong asked if the applicant wished to address Council.

**Alex Kolsteren, exp Services Inc., 258 Clinton Street, Toronto**

Mr. Kolsteren introduced himself as the representative for the applicant. He advised Council that the purpose of the application was to have zoning conform with the Official Plan. He further advised that all feedback received to date and at this meeting would be considered for revision of the application.

In response to Councillor B. Fisher, the Planner/EDO confirmed that a traffic impact study has been conducted and is being reviewed by the Region.

Mayor L. Armstrong asked if anyone else wished to address Council on this matter.

**Clayton Knarr, 1413 Gingerich Road**

Mr. Knarr expressed his concerns over his property receiving the water draining from the development. He advised Council that his property currently receives the water draining the hill and that erosion is occurring as a result of the creek.

Mayor L. Armstrong advised Council that the site plan process would address any drainage issues.

**Rick Pereira, 85 Village Green Way**

Dr. Pereira expressed his concerns over traffic flowing in and out of the development and taking business away from the downtown area of Baden. He spoke of the changes that have taken place in Baden over the past ten years which included a decline in local businesses then a revitalization with the construction of the downtown plaza and local events such as Corn Fest, summer concerts and car shows encouraging

a sense of community. He reiterated that a development on the edge of town will put residents into their cars and drive away from the downtown as there are no sidewalks that far down Foundry Street or on Gingerich Road. He concluded his discussion by suggesting that limits be placed on the types of businesses allowed to avoid taking business away from the downtown.

### **John Jantzi, 14 Brewery Street**

Mr. Jantzi advised Council that he does not have concerns with light industrial businesses in the development but suggested that downtown businesses will suffer if retail locations are allowed in the development.

Mayor L. Armstrong asked twice if anyone else wished to address Council, and in the absence of any comments, declared the public meeting to be closed.

Mayor L. Armstrong advised those present that the application will be brought before Council again and that those who have made comments will be notified.

The Planner/EDO clarified for Councillor J. Gerber that the current site plan does not include a drive thru, but typically a drive thru would refer to a restaurant or banking facility. He further clarified that staff can meet with the applicant to scale down the proposed uses and that Council can limit uses as they fell appropriate.

## **8. PRESENTATIONS/DELEGATIONS**

### **8.1 Jerry Van Ooteghem, President and CEO Mark Jackson, Chair Kitchener-Wilmot Hydro 2014 Annual Report**

Mr. Jackson introduced himself and Mr. Van Ooteghem to Council. He expressed his pleasure at being able to appear before Council to present the Annual Report for 2014. He noted to Council that Kitchener-Wilmot Hydro has among the lowest controllable costs in the Province for a hydro corporation. He stated that change is constant and that they are focusing on continuous improvements and opportunities to drive value. He thanked Council for their continued support of Kitchener-Wilmot Hydro's efforts.

Mr. Van Ooteghem highlighted the 2014 Annual Report for Council which included the following:

- 1.2% increase in number of customers
- 0.63% decrease in kilowatt hour consumption
- Peak demand decrease of 15% contributed to weather and better management of peak demand consumption by customers
- 9<sup>th</sup> lowest in the Province for monthly residential bills at \$121.67
- 2<sup>nd</sup> lowest in the Province for controllable costs per customer per year at \$186
- 2.4% increase in Net Income
- \$318,000 increase in capital investments

Mr. Van Ooteghem concluded his presentation by summarizing the reliability indicators and community initiatives.

Mr. Jackson then presented Mayor L. Armstrong with the annual reforestation grant and dividend cheques in the amounts of \$45,000 and \$330,600 respectively.

Mayor L. Armstrong addressed Council by stating that as the Township's representative on the Board he is able to observe the staff at Kitchener-Wilmot Hydro and that he is very pleased with and proud of the

work they accomplish. He noted that the Township of Wilmot and its residents should be proud to be part owners of the corporation.

Councillor P. Roe noted the fact that the reliability indicators show that Kitchener-Wilmot Hydro meets the response times for rural response but that he would still appreciate a response time more equal to urban response times.

In response to Councillor P. Roe's inquiry on the effects of the FIT Solar program Mr. Van Ooteghem responded that the ongoing rebuilds have assisted in accommodating the surplus power and with the transformer station recently built in Wilmot there no restrictions.

In response to Councillor P. Roe, Mr. Ooteghem replied that the lower controllable costs for Kitchener-Wilmot Hydro compared to Waterloo North Hydro is due to their larger rural area and Kitchener-Wilmot Hydro's long term view on asset management.

Councillor A. Junker commended Kitchener-Wilmot Hydro on their improvements in communication efforts during power outages. Mt. Van Ooteghem noted that improvements in communications to the public and municipalities were a priority for 2014.

Councillor J. Gerber echoed Councillor A. Junker's comments regarding communications and the advantages of using Twitter.

In response to Councillor B. Fisher, Mr. Van Ooteghem advised that they are monitoring the potential impact of Tesla home batteries but noted that the batteries are currently quite costly with limited capacity.

## **9. REPORTS**

### **9.1 CAO – no reports**

### **9.2 CLERKS**

#### **9.2.1 REPORT NO. CL 2015-12 Designation of Livingston Presbyterian Church**

#### **Resolution No. 2015-099**

**Moved by: P. Roe**

**Seconded by: A. Junker**

**THAT By-law No. 2015-26, Being a by-law to Designate the Property Known as Livingston Presbyterian Church, 44 Beck Street, Lot 97, Plan 627 be adopted, and further;**

**THAT the Director of Clerk's Services be authorized to proceed under the provisions of the Ontario Heritage Act.**

**CARRIED.**

The Director of Clerk's Services highlighted the report.

**9.2.2 REPORT NO. CL 2015-14  
Consideration of Engineer's Report  
For the Trussler Road Municipal Drain 2015  
Parts of Lots 1 and 2, German Block North of Bleams Road  
Township of Wilmot  
And Parts of Lots 46 and 129, German Company Tract  
City of Kitchener  
Region of Waterloo**

**Resolution No. 2015-100**

**Moved by: J. Gerber**

**Seconded by: A. Junker**

**THAT Consideration of the Engineer's Report for the Trussler Road Drain as recommended in Report No. CL 2015-14 be deferred to the next Regular Council Meeting scheduled for May 25, 2015.**

**CARRIED.**

The Deputy Clerk highlighted the report.

Mr. Stephen Kay, representing Mr. and Mrs. Choi, assessed land owners within the Trussler Road Drain watershed, requested that the Consideration of the Engineer's Report be deferred to allow his clients the opportunity to have the report reviewed by a third party. He cited reasons for deferral being his client's limited understanding of the English language, and having received the Report at a late date and the appearance of the drain being solely to the benefit of Activa Group.

Mr. Bill Dietrich of Dietrich Engineering advised Council that his firm has been seeking public input during the entire process and that the Choi family had been present at various meetings. He further explained that the Choi family had indicated they had concerns and some questions. His firm reached out to the Choi family on three occasions to ascertain what the concerns or questions might be and no response was ever received back. He noted to Council that changes to the report can be requested through the drainage tribunal.

Mr. Larry Maseo of Activa Group stated to Council that he originally supported the deferral but that he would now prefer the Engineer's Report be considered at this meeting. He reiterated that the Choi family has been present at previous meetings relative to the drain with a family member who can translate English to Chinese and that this drainage outlet is appropriate given the natural watercourse present.

Councillor J. Gerber stated he was in favour of the deferral as an opportunity to discuss and understand the project and any alternatives that may be available to benefit all property owners.

Councillor A. Junker advised that the deferral may be beneficial in preventing an appeal down the road.

Councillor P. Roe concurred that every opportunity should be given to discuss and understand the Report.

Mayor L. Armstrong advised Council that the property owners have been involved in the process for over a year.

In response to Councillor J. Gerber, Mr. Dietrich advised that the financial ramifications of a deferral, reconsideration or Drainage Tribunal appeal are unknown but that a deferral of two weeks is not a long time and that efforts to avoid an appeal would be best.



**9.3 FINANCE – no reports**

**9.4 PUBLIC WORKS**

**9.4.1 REPORT NO. PW 2015-10  
Hot Mix Asphalt Paving – Award of Tender**

**Resolution No. 2015-101**

**Moved by: P. Roe**

**Seconded by: M. Murray**

**THAT the tender submitted by Brantco Construction, for the paving of Township roads with hot mix asphalt, in the amount of \$368,840.72, net of the HST rebate, be accepted.**

**CARRIED.**

The Director of Public Works responded to Councillor A. Junker's inquiry regarding the contractor by stating that Brantco Construction is a large contractor who is fully capable of this size of project. He further confirmed that Wilmot has not awarded them a contract previously.

**9.4.2 REPORT NO. PW 2015-11  
Surface Treatment – Award of Tender**

**Resolution No. 2015-102**

**Moved by: P. Roe**

**Seconded by: B. Fisher**

**THAT the tender submitted by Cornell Construction Ltd. For the application of surface treatment to Township roads in the amount of \$371,838.52, net of the HST rebate, be accepted.**

**CARRIED.**

**9.5 DEVELOPMENT SERVICES**

**9.5.1 REPORT NO. DS 2015-18  
April Building Statistics Summary**

**Resolution No. 2015-103**

**Moved by: M. Murray**

**Seconded by: A. Junker**

**THAT the April 2015 Building Statistics Summary be received for information.**

**CARRIED.**

**9.5.2 REPORT NO. DS 2015-19**

**Source Protection Municipal Implementation  
Septic System Mandatory Maintenance Inspection Program (SSMMIP)**

**Resolution No. 2015-104**

**Moved by: P. Roe**

**Seconded by: M. Murray**

**THAT Report DS 2015-19 be received for information.**

**CARRIED.**

The Director of Development Services highlighted the report.

In response to Councillor A. Junker, the Director of Development Services confirmed that education on proper maintenance and use of septic systems is a significant part of the program for the protection of source water.

**9.6 FACILITIES AND RECREATION SERVICES – no reports**

**9.7 FIRE – no reports**

**9.8 CASTLE KILBRIDE – no reports**

**10. CORRESPONDENCE**

**10.1 Grand River Conservation Authority – Grand Actions**

**10.2 Wilmot Family Resource Centre – Letter of Thanks for Municipal Grant**

**Resolution No. 2015-105**

**Moved by: J. Gerber**

**Seconded by: A. Junker**

**THAT Correspondence Items 10.1 and 10.2 be received for information.**

**CARRIED.**

**11. BY-LAWS**

**11.1 By-law No. 2015-26 – Heritage Designation By-law – Livingston Presbyterian Church**

**11.2 By-law No. 2015-29 – By-law to Appoint a Municipal Law Enforcement Officer, Waseem Khalid**

**Resolution No. 2015-106**

**Moved by: J. Gerber**

**Seconded by: M. Murray**

**THAT By-law Nos. 2015-26 and 2015-29 2015-30 be read a first, second and third time and finally passed in Open Council.**

**CARRIED.**

**11.3 By-law No. 2015-30 - Being a By-Law to Provide For Drainage Works in the Township of Wilmot, Trussler Road Municipal Drain 2015**

**Resolution No. 2015-107**

**Moved by:**

**Seconded by:**

**THAT By-law No. 2015-30 be read a first and second time in Open Council.**

**DEFERRED.**

**12. NOTICE OF MOTIONS**

**13. QUESTIONS/NEW BUSINESS/ANNOUNCEMENTS**

13.1 Councillor J. Gerber reminded Council of the Athlete of Year Awards Banquet being held on May 20 at 5:50. He noted that the Aquatic Aces and the Firebirds are being recognized at the banquet.

13.2 Councillor A. Junker advised Council of the Victoria Celebrations occurring in New Dundee on Monday, May 18 which include a fundraising breakfast for the fireworks, parade, yard sale and evening fireworks.

**14. BUSINESS ARISING FROM CLOSED SESSION**

**15. CONFIRMATORY BY-LAW**

**15.1 By-law No. 2015-31**

**Resolution No. 2015-108**

**Moved by: B. Fisher**

**Seconded by: P. Roe**

**THAT By-law No. 2015-31 to Confirm the Proceedings of Council at its Meeting held on May 11, 2015 be introduced, read a first, second, and third time and finally passed in Open Council.**

**CARRIED.**

**16. ADJOURNMENT (8:42 P.M.)**

**Resolution No. 2015-109**

**Moved by: P. Roe**

**Seconded by: B. Fisher**

**THAT we do now adjourn to meet again at the call of the Mayor.**

**CARRIED.**

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**Mayor**

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**Clerk**



# ***Township of Wilmot***

## **REPORT**

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**REPORT NO.** DS 2015-20

**TO:** Council

**PREPARED BY:** Andrew Martin, Planner/EDO

**DATE:** May 25, 2015

**SUBJECT:** Zone Change Application 09/15  
Louise Guthrie  
Part of Lot 7, Concession North of Erb's Road  
97 Clarence Avenue, St. Agatha

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### **Recommendation:**

That Zone Change Application 09/15 made by Louise Guthrie, affecting Part of Lot 7, Concession North of Erb's Road, to permit a second dwelling unit to be located within the existing single detached dwelling on the subject property, be approved.

### **Background:**

Notice of the Public Meeting was given to property owners within 120 metres of the subject lands on May 1, 2015. The following is a summary of comments received prior to the Public Meeting.

*Public:* none

*Agencies:* none

### **Discussion:**

The subject lands are comprised of approximately 0.14ha, are designated Settlement Residential in the Township Official Plan, and are zoned Zone 2 (Residential) within the Township Zoning By-law.

The subject property is currently developed with a single detached dwelling and accessory structures. Zone 2 (Residential) only permits one dwelling unit on the property; the applicant wishes to legalize a second dwelling unit that has been created above the attached garage on the property.

The applicant originally proposed a dwelling unit above the attached garage when it was constructed in 2003. At that time, the Region of Waterloo had indicated that there was

insufficient capacity in the St. Agatha water system to service an additional dwelling unit, so a zone change was not sought at that time. At some point after the garage addition received a final inspection from the Township, a kitchen was added to the habitable floor area above the garage. The inclusion of a kitchen within a habitable space, based on prior Council interpretations, creates a dwelling unit. The property is presently on the market and the status of the dwelling unit above the garage was brought to the attention of Township staff. Subsequently the current application was filed.

During pre-consultation on the current application, the Region of Waterloo indicated there were no longer concerns with water capacity for the proposed dwelling unit. The Township Official Plan supports the creation of a mix of housing types and densities within residential designations. Given the property is serviced by municipal water, it can support a septic system to adequately service the two dwelling units on the property, and sufficient parking is provided on site, staff support that the proposed dwelling unit is appropriate for the property.

No objections were raised through circulation of the application.

**Strategic Plan Conformity:**

The approval of appropriate accessory dwelling units maximizes the use of existing infrastructure and reduces the demand for additional greenfield lands to accommodate all residential development which are both strategies in achieving the Township's goal to protect the natural environment.

**Financial Considerations:**

The application fees, established by the Township of Wilmot Fees and Charges By-law, were collected at the time of application.

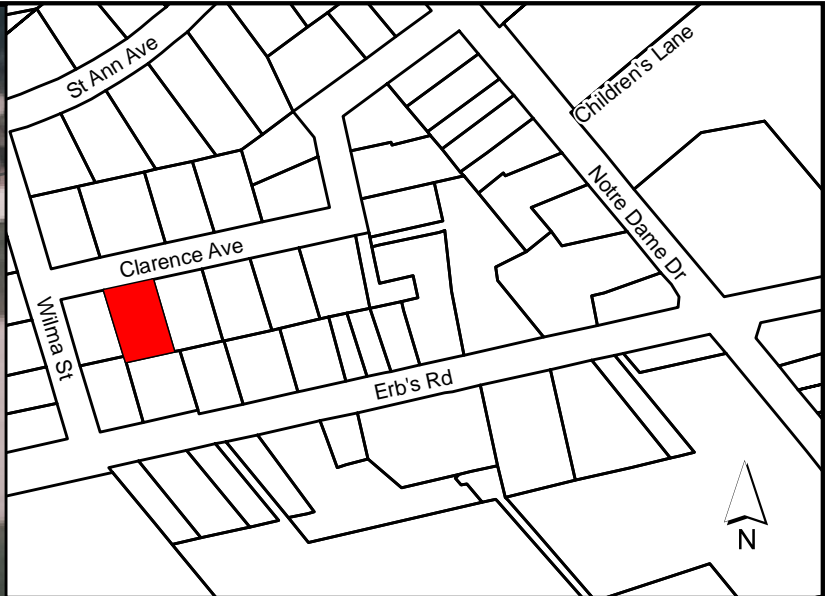
**Conclusion:**

The approval of this additional dwelling unit provides future opportunity for a rental unit and is an appropriate use of the subject property.

  
\_\_\_\_\_  
Andrew Martin, MCIP RPP  
Planner/EDO

  
\_\_\_\_\_  
Reviewed by CAO

ZCA-09/15  
97 Clarence Avenue  
St. Agatha





## ***Township of Wilmot*** **REPORT**

**REPORT NO.** Addendum to Report CL2015-14

**TO:** Council

**PREPARED BY:** Barbara McLeod, Director of Clerk's Services

**DATE:** May 25, 2015

**SUBJECT:** Consideration of Engineer's Report  
For the Trussler Road Municipal Drain 2015  
Parts of Lots 1 and 2, German Block North of Bleams Road  
Township of Wilmot  
And Parts of Lots 46 and 129, German Company Tract  
City of Kitchener  
Region of Waterloo

### **Recommendation:**

**THAT the Drainage Engineer's Report dated April 29, 2015 for the Trussler Road Municipal Drain, for improved drainage in Parts of Lots 1 and 2, German Block North of Bleams Road, Township of Wilmot, and Parts of Lots 46 and 129, German Company Tract, City of Kitchener, Region of Waterloo, be referred back to the Engineer for reconsideration.**

### **Background:**

On February 10, 2014 Council accepted the Petition for Drainage Works from the Region of Waterloo and the Activa Group for drainage works at 468 Trussler Road, Mannheim. On April 7, 2014 Council appointed Dietrich Engineering Limited as the Engineer for this Municipal Drainage project.

On April 29, 2015 Dietrich Engineering filed their Engineer's Report with the Clerk.

As Council is aware, by resolution at the regular Council meeting held on May 11, 2015, the recommendation contained within Report No CL 2015-14 to consider the Engineer's Report was deferred until May 25, 2015. The reason for the deferral was based upon the request of the solicitor acting on behalf of the Choi's for more time to discuss the Report with the Engineer.

A new notice was delivered by the Township (by hand) to all assessed property owners within the drainage area and to public agencies on Wednesday, May 13, 2015 advising that the



Consideration of the Report had been deferred to May 25, 2015, that all parties were entitled to attend the rescheduled meeting and to ask questions of the Engineer relevant to the report.

**Discussion:**

It has been confirmed to Township staff that no meeting or discussion took place between the Choi's and Dietrich Engineering since the May 11<sup>th</sup> Council meeting, however on May 19, 2015, staff received a letter from Patrick Kraemer of Duncan, Linton advising that he was now representing the Choi's and requesting that he be registered as a delegation at the rescheduled Meeting to Consider the Engineer's Report.

Mr. Kraemer has submitted a presentation (attached to this Report), which he will speak to Council about at the meeting on May 25<sup>th</sup>.

Based on the attached letter, staff are recommending that the Engineer's Report as prepared by Dietrich Engineering, be referred back to the Engineer pursuant to Section 57 of *The Drainage Act*. The Engineer will then report back to Council at a future date to be determined.

**Strategic Plan Conformity:**

Council is ensuring the communication of municipal matters pursuant to the requirements of *The Drainage Act*.

**Financial Considerations:**

If there are any changes to the Engineer's Report this may result in a reassessment of the costs.

**Conclusion:**

**THAT the Drainage Engineer's Report dated April 29, 2015 for the Trussler Road Municipal Drain, for improved drainage in Parts of Lots 1 and 2, German Block North of Bleams Road, Township of Wilmot, and Parts of Lots 46 and 129, German Company Tract, City of Kitchener, Region of Waterloo, be referred back to the Engineer for reconsideration.**

  
\_\_\_\_\_  
Barbara McLeod, Director of Clerk's Services

  
\_\_\_\_\_  
Reviewed by CAO

DUNCAN, LINTON LLP  
LAWYERS

IRWIN A. DUNCAN+ • J. DAVID LINTON+ • DAVID M. STEELE  
MICHAEL A. VAN BODEGOM • PATRICK J. KRAEMER • DANIEL W. VEINOT  
PETER A. HERTZ • MICHAEL R.E. KOCHIEFF • THOMAS E. SANDERSON

(+ Denotes Professional Corporation)

P.O. BOX 457  
45 ERB STREET EAST  
WATERLOO, ONTARIO  
N2J 4B5

TEL: 519-886-3340  
FAX: 519-886-8651  
WEBSITE: [www.kwlaw.net](http://www.kwlaw.net)  
EMAIL: [pkraemer@kwlaw.net](mailto:pkraemer@kwlaw.net)

May 20, 2015  
File No. 0039629

THE CORPORATION OF  
THE TOWNSHIP OF WILMOT  
60 Snyder's Road West  
Baden ON N3A 1A1

VIA EMAIL ([dawn.mittelholtz@wilmot.ca](mailto:dawn.mittelholtz@wilmot.ca))

ATTENTION: Mayor Les Armstrong and  
Members of Wilmot Township Council

Dear Mr. Armstrong and Members of Council:

Re: Il Kyu Choi  
549 Trussler Road, Kitchener ON  
Opposition to Proposed Trussler Road Municipal Drain 2015  
Engineer's Report by Dietrich Engineering Ltd. Consulting Engineers Reference  
No. 1419 dated April 29, 2015 (the "Engineer's Report")

We are the lawyers for Mr. Choi in the above noted matter.

We request an opportunity to address Council on this matter. We have contacted Township staff and have registered to appear as a delegation before Council at its meeting of Monday May 25, 2015, to speak to the Engineer's Report that is scheduled to be considered at the meeting.

Our client is opposed to the proposed Municipal Drain. We request that Council not adopt the Engineer's Report and not pass a by-law adopting the Engineer's Report. In the alternative, we request that the Council refer the Report back to the Engineer for reconsideration pursuant to section 57 of the *Drainage Act*, R.S.O. 1990 c. D. 17, as amended (the "Drainage Act").

Our client is opposed to the proposed Municipal Drain for the following reasons:

1. 2140065 Ontario Inc. ("Activa") is the primary petitioner of the proposed Municipal Drain. Activa has obtained draft plan approval for a subdivision on the lands located on

the east side of Trussler Road in the City of Kitchener. The Municipal Drain is being proposed to accommodate the outflow from the proposed stormwater management facility for the Activa subdivision. The proposed Municipal Drain and the Report ought to be set aside as being contrary to the Planning Act, R.S.O. 1990 c. P 13, as amended (the "Planning Act"). Section 71 of the Planning Act states that in the event of a conflict between the provisions of the Planning Act and any other act the provisions of the Planning Act shall prevail. In addition, s.3 of the Planning Act requires that decisions of a municipal council in respect of a planning matter shall be consistent with the Planning Act, the policy statements and provincial plans in effect.

The proposed works are a new stormwater management facility benefiting urban lands. The works will divert water from the urban development across our client's lands with an ultimate outflow to Alder Creek. The works provide no benefit to our client. The development approvals related to the Activa subdivision including the provisions for the stormwater management facilities on the Activa lands as well as the continuation of those stormwater management facilities in the proposed works cross our client's property and ultimately into Alder Creek are all land use planning matters. It appears that the petition submitted under the Drainage Act and the resulting Engineer's Report is an attempt to circumvent the provisions and applications of the Planning Act and the associated planning legislation. There is no authority for the Drainage Act to be used as a means to provide stormwater management facilities for a proposed plan of subdivision. Moreover, the Planning Act and the Provincial Policy Statements prohibit the application of other legislative as means to deal with land use planning matters. On this basis the proposal should be rejected;


2. In the alternative to the above we oppose the proposed Municipal Drain on the following grounds:
  - a. The proposed drainage works do not provide capacity for the entire surface water contrary to subsection 14(1) of the Drainage Act. The proposed works contemplate the capacity of the underground pipe on our client's property has the capacity to handle water flows to the capacity of a 5-year storm event. Water flows in excess of 5-year storm events are designed in the proposed works to drain over land across our client's property. We object that the underground pipe has not been designed to the capacity to accommodate all water flows;
  - b. The allowance payable to the owners in accordance with sections 29 and 30 of the Drainage Act as set out in the table on page 5 of the Engineer's Report are inadequate and do not meet the requirements of the Drainage Act. More particularly, the land values are inadequate and have not been substantiated. The discount rate of 25% applied to such land values is arbitrary and excessive;
  - c. The calculation of the allowance for the right-of-way on the table on page 5 of the Engineer's Report as well as a schedule of assessment for construction on page 10 of the Report do not mathematically compute to the amounts indicated as compared to the length of pipe on drawing number 3 of 5 - Profile of the Engineer's Report and the calculation of the area of the right-of-way;
  - d. The schedule of assessment for construction does not meet the requirements of the Drainage Act. The column headed (SEC. 22) Benefit Liability should have a heading "Benefit" pursuant to section 21 of the Drainage Act;
  - e. The schedule of assessment for construction does not contain a column for injury liability as required by section 21 of the Drainage Act;

- f. The Engineer's Report indicates a benefit of \$6,000.00 to our client's property pursuant to section 22 of the Drainage Act. There is no benefit to our client's property for the proposed works, there is no improvement to the drainage as it relates to our client's property and only imposes a burden and a liability by having such drainage works installed on our client's property;
- g. Column for the benefit under section 22 in the schedule of assessment for construction indicates a \$30,200.00 benefit to the Regional Municipality of the Region of Waterloo. Notwithstanding that the Region of Waterloo has signed the petition, the Report does not substantiate the benefit to the Trussler Road. We understand from the Engineer's report that the existing culvert that traverses under Trussler Road will remain in effect and thereby provide continuation of the existing drainage condition of Trussler Road. The proposed construction of an additional culvert under Trussler Road, at a lower elevation than the existing culvert is designed to convey the water from the outflow of the stormwater management facilities that are on the Activa subdivision property. We understand that the existing culvert provides more than sufficient capacity for the drainage of Trussler Road and thereby makes the additional culvert redundant in terms of the providing a benefit to the drainage of Trussler Road. The number indicated under the column section 22, Benefit should indicate "no benefit" to the Regional Municipality of Waterloo, Trussler Road property;
- h. The amount indicated under section 22, Benefit column of this schedule of assessment for construction for the Township of Wilmot property similarly indicates an amount as a benefit to the Wilmot property notwithstanding that the proposed drainage works contemplates the continuation of the existing open drainage swale. There is no increased benefit to the Township of Wilmot from the proposed works;
- i. In addition to the schedule of assessment for construction not containing a separate column for outlet liability as well as injury liability under subsections 23(1) and subsection 23(2) of the Drainage Act, the schedule fails to provide the calculation and basis of assessment for such liability pursuant to subsection 23(3) of the Drainage Act. Subsection 23(3) requires that the assessment for outlet liability and injury liability shall be based upon the volume and rate of flow of water artificially caused to flow upon the injured lands. The proposed Activa subdivision will cause the flow of water to be artificially caused to flow across the injured lands of our client;
- j. In addition to the errors in calculating the value of land as noted above, the Engineer's Report fails to consider damages to our client for the construction, improvement, repair and maintenance of the Drainage Works pursuant to section 29 of the Drainage Act;
- k. There has been no allowance made for loss of access pursuant to section 33 of the Drainage Act;
- l. The Engineer's Report fails to indicate the assessment for lands that are not agricultural lands and fails to distinguish between agricultural lands and other lands within the schedule of assessment for construction pursuant to section 37 of the Drainage Act;
- m. The Engineers Act fails to consider equitable assessment criteria pursuant to section 38 of the Drainage Act;

- n. The Engineer's Report fails to consider an alternative route for the proposed Municipal Drain. In particular, the drainage works should consider a stormwater management system that contains all the stormwater on the Activa subdivision lands including adequate stormwater management ponds that will allow for the absorption of the stormwater within the confines of the proponent's lands. Alternatively, any required outflow from the stormwater management system should be provided for on the municipally owned property with adequate infrastructure for which development charges presumably have been charged and paid and accounted for under the Development Charges Act. Our client should not be subjected to providing infrastructure for development proposals on his private property without benefit and without adequate compensation. The drainage works should be altered to drain from the petitioners land to Trussler Road and other municipally owned properties to an adequate outlet;
- o. In view of the entire scheme being proposed, the overall purpose of providing an outlet to a stormwater management pond on a proposed subdivision development and the location and routing of the proposed drainage works, it appears that the proposed works under the Drainage Act are unnecessary. There are alternative and better approaches to the provisions for stormwater management facilities for the proposed subdivision;
- p. The proposed works are unjust and lacks equitable treatment of our client's lands. A system of drainage works is being proposed and imposed upon our client's lands with no benefit and yet has a enormous and excessive practical and financial benefit to the proposed Activa subdivision. Such proposal should be rejected on this basis. The Activa subdivision should be exposed to the normal rigors of the requirements under the Planning Act as described above. In addition, the proposed subdivision should be properly integrated with the municipal infrastructure including the provision for the financial costs of accomplishing same under the Development Charges Act as described above. The imposition of the proposed works on our client's private property is an unjust and inequitable imposition for which he is receiving no benefit.

In conclusion, we respectfully request that the Council reject the proposed drainage works, not adopt the Engineer's Report or pass a by-law the Engineer's Report or in the alternative, refer the Engineer's Report back to the Engineer for reconsideration. Thank you for your opportunity to address you on this matter.

Yours very truly,  
DUNCAN, LINTON LLP



Patrick J. Kraemer  
PJK/mls  
Encls.

**Trussler Road Municipal Drain 2015  
Township of Wilmot**



**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

*Reference No. 1419*

*April 29, 2015*

Trussler Road Municipal Drain 2015  
Township of Wilmot

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Specifications for the Construction of Municipal Drainage Works

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DIVISION B-Specification for Open Drains

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**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

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

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Waterloo, Ontario

April 29, 2015

**Trussler Road Municipal Drain 2015**  
**Township of Wilmot**

**To the Mayor and Council  
of the Township of Wilmot**

**Members of Council:**

**Introduction**

We are pleased to present our report on the “Trussler Road Municipal Drain 2015”, serving parts of Lots 1 and 2, German Block North of Bleams Road in the Township of Wilmot and parts of Lots 46 and 129, German Company Tract in the City of Kitchener, Region of Waterloo.

Authority to prepare this report was obtained by a resolution of the Township of Wilmot Council at its April 7, 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, signed by Larry Maseo representing 2140065 Ontario Inc. and John Hammer, P.Eng. representing the Regional Municipality of Waterloo, we have made an examination and survey of the affected area and submit herewith our Report which includes Plans, Profile, Details and Specifications for this work.

The area requiring drainage is part of Lot 46, German Company Tract in the City of Kitchener, and part of the Trussler Road Right-of-Way. The petition is valid in compliance with Section 4(1)(a) of the Drainage Act, R.S.O. 1990.

The attached Plans, Profile and Details, Drawing Numbers 1 to 5, Reference No. 1419, 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.

The outlet for this drain is Alder Creek.

**On-Site Meeting**

In accordance with Section 9(1) of the Drainage Act, R.S.O. 1990, an on-site meeting was held on July 16, 2014. The place of meeting was on Trussler Road opposite the L. & M. Federau property. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Stephen Brickman, B. Eng.	Dietrich Engineering Limited
Alastair Duncan, C.E.T.	Township of Wilmot
Kelly Robinson	Regional Municipality of Waterloo
Trevor Fraser, B. Eng.	Stantec Consulting Ltd. (also representing Activa Group)



Ilkyu & Olivia Choi	Landowners
Henry Federau	Representing Leo and Mary Federau

### **Information Meeting No. 1**

An information meeting was held on February 13, 2015 at the Township of Wilmot Municipal Office. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Stephen Brickman, B. Eng.	Dietrich Engineering Limited
Alastair Duncan, C.E.T.	Township of Wilmot
Kelly Robinson	Regional Municipality of Waterloo
Peter Fitzgerald, P. Eng.	Stantec Consulting Ltd.
Trevor Fraser, B. Eng.	Stantec Consulting Ltd.
Larry Maseo	Landowner (Activa Group)
Jennifer Voss	Landowner (Activa Group)

The information provided proposed constructing the Trussler Road Municipal Drain from the outlet into Alder Creek in Lot 2, German Block North of Bleams Road in the Township of Wilmot, to the east side of the Trussler Road Right-of-Way adjacent Lot 46, German Company Tract in the City of Kitchener. The proposed design consisted of constructing a closed drainage system from the east side of the Trussler Road Right-of-Way adjacent to the 2140065 Ontario Inc. property (Roll No. 12-098) to where the closed portion would outlet into a new swale before entering Alder Creek on the M. Federau property (Roll No. 4-086).

Dietrich Engineering Limited was asked to investigate modifying the above described design by incorporating the existing constructed swale on the Township of Wilmot property (Roll No. 6-056), in lieu of installing a closed drainage system on the Township of Wilmot property.

### **Information Meeting No. 2**

An information meeting was held on March 13, 2015 at the Township of Wilmot Municipal Office. Persons in attendance were:

William Dietrich, P. Eng.	Dietrich Engineering Limited
Stephen Brickman, B. Eng.	Dietrich Engineering Limited
Alastair Duncan, C.E.T.	Township of Wilmot
Gary Charbonneau	Township of Wilmot
Bruce Erb	Regional Municipality of Waterloo
Kelly Robinson	Regional Municipality of Waterloo
Larry Maseo	Landowner (Activa Group)
Jennifer Voss	Landowner (Activa Group)
Peter Fitzgerald, P. Eng.	Stantec Consulting Ltd.
Ilkyu & Olivia Choi	Landowners

The information provided proposed constructing the Trussler Road Municipal Drain in accordance with the modified design as described above.

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. Activa Group is in the design stage for a proposed development on the 2140065 Ontario Inc. property (Roll No. 12-098) located on the east side of Trussler Road, Part Lot 46, G.C.T. and Part Lot 129 G.C.T. in the City of Kitchener.
2. The Regional Municipality of Waterloo will be upgrading Trussler Road from a rural cross section to an urban cross section.
3. Current conditions provide for the collection and uncontrolled discharge of stormwater onto the surface of the I. & K. Choi property (Roll No. 4-192-03) by means of a 900mm diameter surface culvert, and again onto the M. Federau property (Roll No. 4-086) by means of the swale on the Township of Wilmot property (Roll No. 6-056).
4. A legal outlet is required for the proposed development on the 2140065 Ontario Inc. property (Roll No. 12-098), and Trussler Road.
5. A portion of the M. Federau property (Roll No. 4-086) on the west side of the driveway near the outlet of the proposed drain has been permanently taken out of production.
6. The existing swale on the Township of Wilmot property (Roll No. 6-056) was originally constructed during the development of the Mannheim Millennium Park Estates subdivision, and was designed to convey Regional Storm flows from the upstream watershed, including a portion of the proposed development on the 2140065 Ontario Inc. property (Roll No. 12-098).
7. The existing low lying flow path on the I. & K. Choi property (Roll No. 4-192-03) has been naturally shaped and has not been designed or constructed to convey storm flows.

## Recommendations

It is our recommendation that:

1. A new drainage system be constructed from the outlet into Alder Creek in Lot 2, German Block North of Bleams Road in the Township of Wilmot, to the east side of the Trussler Road Right-of-Way adjacent Lot 46, German Company Tract in the City of Kitchener. This drainage system will consist of both open and closed portions.
2. The outlet of the drain will consist of a plunge pool and shallow swale that will dissipate energy and convey flow from the closed portion of the drain to Alder Creek.
3. A closed drainage system be installed across the M. Federau property (Roll No. 4-086) complete with a berm and catchbasin inlet configuration on the Township of Wilmot property (Roll No. 6-056) to reduce and control the volume of stormwater flowing overland across the Federau property.
4. The existing storm swale on the Township of Wilmot property (Roll No. 6-056) be incorporated as part of the municipal drain.
5. A closed drainage system be installed on the Choi property to convey storm flows and prevent erosion.
6. This new drainage system shall be known as the "Trussler Road Municipal Drain 2015".
7. The drainage system has been designed to accommodate the outflow from the proposed stormwater management facility (SWM Facility #2, Preliminary Servicing and Stormwater Management Report - Trussler North Lands) for the five (5) year rainfall event. Additional

capacity has been provided to account for the Trussler Road Right-of-Way and the lands west of Trussler Road using a drainage coefficient design standard of 38mm of rainfall per 24 hour period.

### **Summary of Proposed Works**

The proposed work consists of approximately 50 metres of swale excavation; the installation of approximately 526 metres of 450mm to 750mm diameter field tile and HDPE pipes; the installation of four (4) concrete catch basins; and the installation of 24 metres of 400mm O.D. smooth wall steel casing by the Boring Method; the construction of a plunge pool; and the construction of a splash pad.

### **Working Area**

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

### **Watershed Characteristics**

The drainage area comprises approximately 48.6 hectares. Land use within the watershed will be primarily residential with some agricultural and woodlot land uses.

## 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 & Crops (Section 30)	Total Allowances
<b>Township of Wilmot</b>						
1	G.B.N.B.R.	I. & K. Choi	4-192-03	\$11,430	\$1,990	\$13,420
1	G.B.N.B.R.	Township of Wilmot	6-056	\$8,340	\$500	\$8,840
2	G.B.N.B.R.	M. Federau	4-086	\$7,400	\$2,590	\$9,990
<b>Total Allowances, Township of Wilmot</b>				<b>\$27,170</b>	<b>\$5,080</b>	<b>\$32,250</b>
<b>City of Kitchener</b>						
46	G.C.T.	2140065 Ontario Inc.	12-098		\$500	\$500
<b>Total Allowances, City of Kitchener</b>					<b>\$500</b>	<b>\$500</b>
<b>Total Allowances, Trussler Road Municipal Drain 2015</b>				<b>\$27,170</b>	<b>\$5,580</b>	<b>\$32,750</b>

**Total Allowances under Sections 29 and 30 of the Drainage Act, R.S.O. 1990,  
Trussler Road Municipal Drain 2015**

**\$32,750**

The land values used for calculating allowances for Right-of-Way are \$120,000/ha.

The park and wooded area land values used for calculating allowances for Right-of-Way are \$30,000/ha.

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

The allowances for Right-of-Way under Section 29 of the Drainage Act, R.S.O. 1990 for the open portions of the drain were calculated based on the total 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)	Tree Transplanting	15 ea.	\$ 250.00	\$ 3,750.00
2)	Construct outlet swale (Sta. 0+000 to Sta. 0+050)	50 m	\$ 10.00	\$ 500.00
3)	Disposal of excavated material (levelling and pipe cover)	I.s.		\$ 600.00
4)	Supply and place SC200 Erosion Control Blanket (or equivalent) on bottom and sideslopes of swale c/w seeding	200 m2	\$ 12.50	\$ 2,500.00
5)	Construct plunge pool at Sta. 0+050	I.s.		\$ 5,000.00
6)	Supply 750mm diameter HDPE pipe (Challenger 3000 or equivalent) including rodent grate (Sta. 0+050 to Sta. 0+088)	38 m	\$ 195.00	\$ 7,410.00
	Installation	38 m	\$ 60.00	\$ 2,280.00
7)	Restore asphalt driveway including: 50mm lift of HL4 surface course	20 m2	\$ 150.00	\$ 3,000.00
8)	Supply 600mm diameter concrete field tile (2000D) (Sta. 0+088 to Sta. 0+327)	239 m	\$ 48.00	\$ 11,472.00
	Installation	239 m	\$ 80.00	\$ 19,120.00
9)	Supply 525mm diameter HDPE pipe (Challenger 3000 or equivalent) (Sta. 0+635 to Sta. 0+735)	100 m	\$ 95.00	\$ 9,500.00
	Installation	100 m	\$ 80.00	\$ 8,000.00
10)	Supply 450mm diameter HDPE pipe (Challenger 3000 or equivalent) (Sta. 0+735 to Sta. 0+884)	149 m	\$ 65.00	\$ 9,685.00
	Installation	149 m	\$ 80.00	\$ 11,920.00
11)	Supply and install 900mm X 1200mm concrete ditch inlet catchbasin at Sta. 0+088 and Sta. 0+327 (inline type)	2 ea.	\$ 2,500.00	\$ 5,000.00
12)	Construct Berm at Sta. 0+327	I.s.		\$ 5,000.00

13) Construct ScourStop splash pad at Sta. 0+635 (3.6m length x 2.4m width)			\$	2,000.00
14) Tile connections		I.s.	\$	<u>503.00</u>
<b>Sub-Total</b>			<b>\$</b>	<b><u>107,240.00</u></b>

15) Work to be done on the Region of Waterloo Road Allowance, Trussler Road  
(Sta. 0+884 to Sta. 0+908)

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a) Supply 400mm O.D. smooth wall steel casing, 9.53mm wall thickness	24 m	\$	120.00	\$	2,880.00
Installation of 400mm O.D. smooth wall steel casing by the Boring Method (Sta. 0+884 to Sta. 0+908)	24 m	\$	290.00	\$	6,960.00
c) Supply and install 900mm X 1200mm concrete catchbasin at Sta. 0+884	1 ea.	\$	2,500.00	\$	2,500.00
d) Supply and install 600mm X 600mm concrete catchbasin at Sta. 0+908	1 ea.	\$	1,500.00	\$	<u>1,500.00</u>
<b>Sub-Total</b>				<b>\$</b>	<b><u>13,840.00</u></b>

**TOTAL ESTIMATED CONSTRUCTION COSTS  
TRUSSLER ROAD MUNICIPAL DRAIN 2015**

**\$ 121,080.00**

**Summary of Construction Costs**

Total Estimated Materials	\$	40,947.00
Total Estimated Labour and Equipment	\$	<u>80,133.00</u>

**TOTAL ESTIMATED CONSTRUCTION COSTS  
TRUSSLER ROAD MUNICIPAL DRAIN 2015**

**\$ 121,080.00**

## Summary of Costs

Allowances under Section 29, 30 of the Drainage Act, R.S.O. 1990	\$ 32,750.00
Total Estimated Construction Costs	\$ 121,080.00
Meetings, survey, design, preparation of preliminary cost estimates and reports, preparation of final drainage report, consideration of report and court of revision	\$ 36,500.00
Preparation of contract documents, contract administration, supervision and inspection of construction	\$ 19,800.00
Contingencies, Interest and net H.S.T.	\$ 14,170.00
<b>TOTAL ESTIMATED COSTS</b>	
<b>TRUSSLER ROAD MUNICIPAL DRAIN 2015</b>	<b><u>\$ 224,300.00</u></b>

The estimated cost of the work in the Township of Wilmot is \$224,300.00.

**Future Widening of Trussler Road**

It is our understanding that the Regional Municipality of Waterloo plans to upgrade Trussler Road from a rural cross section to an urban cross section. At this time, a detailed design of the Trussler Road widening project is not complete.

The Regional Municipality of Waterloo may adjust the location of the proposed structures on Trussler Road to better accommodate the future cross section of the road. All the costs associated with the relocation of the proposed structures shall be borne by the Regional Municipality of Waterloo.

The attached Schedules of Assessment for Construction and Maintenance account for the future widening of Trussler Road.

**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 for Construction. We have determined that there is no injuring liability assessment involved.

Whether or not the Regional Municipality of Waterloo elects to do the work on their property, Sta. 0+884 to Sta. 0+908 (Trussler Road), 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 Township of Wilmot 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 assessments are changed under the Drainage Act.

Respectfully submitted,

**DIETRICH ENGINEERING LIMITED**

  
W. J. Dietrich, P.Eng.

WJD:sb





**SCHEDULE OF ASSESSMENT FOR CONSTRUCTION**  
**Trussler Road Municipal Drain 2015**  
**Township of Wilmot**

LOT OR PART	CON.	HECTARES AFFECTED	OWNER	ROLL NO.	(SEC. 22) BENEFIT LIABILITY	(SEC. 23) OUTLET LIABILITY	(SEC. 26) SPECIAL ASSESSMENT	TOTAL ASSESSMENT	LESS GOV'T GRANT	1/3	LESS ALLOWANCES	NET ASSESSMENT
<b>Township of Wilmot</b>												
1	G.B.N.B.R.	0.61	L. Federau	4-192-02		\$98	\$98	\$98	\$33			\$65
* 1	G.B.N.B.R.	3.16	I. & K. Choi	4-192-03	\$6,000	\$463	\$6,463	\$6,463			\$13,420	-\$6,957
* 1	G.B.N.B.R.	2.02	Township of Wilmot	6-056	\$10,000	\$913	\$10,913	\$10,913			\$8,840	\$2,073
2	G.B.N.B.R.	2.83	M. Federau	4-086	\$10,000	\$127	\$10,127	\$10,127	\$3,376		\$9,990	-\$3,239
Total Assessment on Lands Township of Wilmot					\$26,000	\$1,601	\$27,601	\$27,601	\$3,409		\$32,250	-\$8,058
Trussler Road					\$30,200	\$1,850	\$49,150	\$49,150				\$49,150
Total Assessment on Roads Township of Wilmot					\$30,200	\$1,850	\$49,150	\$49,150				\$49,150
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (Township of Wilmot)</b>					<b>\$56,200</b>	<b>\$3,451</b>	<b>\$76,751</b>	<b>\$76,751</b>	<b>\$3,409</b>		<b>\$32,250</b>	<b>\$41,092</b>

**SCHEDULE OF ASSESSMENT FOR CONSTRUCTION**  
**Trussler Road Municipal Drain 2015**  
**Township of Wilmot**

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	(SEC. 22) BENEFIT LIABILITY	(SEC. 23) OUTLET LIABILITY	(SEC. 26) SPECIAL ASSESSMENT	TOTAL ASSESSMENT	LESS 1/3 GOV'T GRANT	LESS ALLOWANCES	NET ASSESSMENT	
<b>City of Kitchener</b>												
* 46	G.C.T.	30.39	2140065 Ontario Inc.	12-098	\$110,100	\$32,202		\$142,302		\$500	\$141,802	
* 46	G.C.T.	7.49	Regional Municipality of Waterloo	12-100		\$3,359		\$3,359			\$3,359	
Total Assessment on Lands City of Kitchener					<u>\$110,100</u>	<u>\$35,561</u>		<u>\$145,661</u>		<u>\$500</u>	<u>\$145,161</u>	
Hwy No. 7 & 8					1.05	Ministry of Transportation		\$1,888			\$1,888	
Total Assessment of Roads City of Kitchener						<u>\$1,888</u>		<u>\$1,888</u>			<u>\$1,888</u>	
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (City of Kitchener)</b>					<u>\$110,100</u>	<u>\$37,449</u>		<u>\$147,549</u>		<u>\$500</u>	<u>\$147,049</u>	
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015</b>					<u>\$166,300</u>	<u>\$40,900</u>	<u>\$17,100</u>	<u>\$224,300</u>	<u>\$3,409</u>	<u>\$32,750</u>	<u>\$188,141</u>	

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.

**SCHEDULE OF ASSESSMENT FOR MAINTENANCE (STA. 0+000 TO STA. 0+327)  
Trussler Road Municipal Drain 2015  
Township of Wilmot**

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<b><u>Township of Wilmot</u></b>					
1	G.B.N.B.R.	0.6	L. Federau	4-192-02	0.6%
* 1	G.B.N.B.R.	3.2	I. & K. Choi	4-192-03	3.2%
* 1	G.B.N.B.R.	2.0	Township of Wilmot	6-056	5.5%
2	G.B.N.B.R.	2.8	M. Federau	4-086	2.8%
Total Assessment on Lands Township of Wilmot					12.1%
Trussler Road		1.1	Regional Municipality of Waterloo		4.2%
Total Assessment on Roads Township of Wilmot					4.2%
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (Township of Wilmot)</b>					<b>16.3%</b>
<b><u>City of Kitchener</u></b>					
* 46	G.C.T.	30.4	2140065 Ontario Inc.	12-098	72.0%
* 46	G.C.T.	7.5	Regional Municipality of Waterloo	12-100	7.5%
Total Assessment on Lands City of Kitchener					79.5%
Hwy No. 7 & 8		1.1	Ministry of Transportation		4.2%
Total Assessment of Roads City of Kitchener					4.2%
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (City of Kitchener)</b>					<b>83.7%</b>
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015</b>					<b>100.0%</b>

NOTE: \* Denotes lands not eligible for ADIP grants.

**SCHEDULE OF ASSESSMENT FOR MAINTENANCE (STA. 0+327 TO STA. 0+635)  
Trussler Road Municipal Drain 2015  
Township of Wilmot**

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<b><u>Township of Wilmot</u></b>					
1	G.B.N.B.R.	0.6	L. Federau	4-192-02	0.6%
* 1	G.B.N.B.R.	3.2	I. & K. Choi	4-192-03	3.4%
* 1	G.B.N.B.R.	2.0	Township of Wilmot	6-056	3.1%
Total Assessment on Lands Township of Wilmot					7.1%
Trussler Road		1.1	Regional Municipality of Waterloo		4.5%
Total Assessment on Roads Township of Wilmot					4.5%
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (Township of Wilmot)</b>					<b>11.6%</b>
<b><u>City of Kitchener</u></b>					
* 46	G.C.T.	30.4	2140065 Ontario Inc.	12-098	75.9%
* 46	G.C.T.	7.5	Regional Municipality of Waterloo	12-100	8.0%
Total Assessment on Lands City of Kitchener					83.9%
Hwy No. 7 & 8		1.1	Ministry of Transportation		4.5%
Total Assessment of Roads City of Kitchener					4.5%
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (City of Kitchener)</b>					<b>88.4%</b>
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015</b>					<b>100.0%</b>

NOTE: \* Denotes lands not eligible for ADIP grants.

**SCHEDULE OF ASSESSMENT FOR MAINTENANCE (STA. 0+635 TO STA. 0+908)  
Trussler Road Municipal Drain 2015  
Township of Wilmot**

LOT OR PART	CON.	APPROX. HECTARES AFFECTED	OWNER	ROLL NO.	PORTION OF MAINTENANCE COST
<b><u>Township of Wilmot</u></b>					
1	G.B.N.B.R.	0.4	L. Federau	4-192-02	0.5%
* 1	G.B.N.B.R.	0.8	I. & K. Choi	4-192-03	0.9%
Total Assessment on Lands Township of Wilmot					<u>1.4%</u>
Trussler Road		1.1	Regional Municipality of Waterloo		<u>4.8%</u>
Total Assessment on Roads Township of Wilmot					<u>4.8%</u>
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (Township of Wilmot)</b>					<b><u>6.2%</u></b>
<b><u>City of Kitchener</u></b>					
* 46	G.C.T.	30.4	2140065 Ontario Inc.	12-098	80.5%
* 46	G.C.T.	7.5	Regional Municipality of Waterloo	12-100	8.5%
Total Assessment on Lands City of Kitchener					<u>89.0%</u>
Hwy No. 7 & 8		1.1	Ministry of Transportation		<u>4.8%</u>
Total Assessment of Roads City of Kitchener					<u>4.8%</u>
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015 (City of Kitchener)</b>					<b><u>93.8%</u></b>
<b>Total Assessment on Lands and Roads, Trussler Road Municipal Drain 2015</b>					<b><u>100.0%</u></b>

NOTE: \* 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

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# DIVISION A

## GENERAL CONDITIONS

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### A.1 SCOPE

These Specifications, the Report And Drawings, govern the supply of labour, materials, and equipment necessary to construct the works as shown on, described by or reasonably inferable from the Report, Specifications and Drawings. In some Municipalities, the Contractor shall supply all materials. The accompanying Form of Tender and Agreement and Scope of Work list materials which are to be supplied by the Contractor.

### 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 lowest or any Tender will not necessarily be accepted. A Tender deposit of Ten per cent (10%) of the total tendered amount in the form of a certified cheque payable to the Treasurer of the Municipality, must accompany each Tender as guarantee of good faith.

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 returned with the final payment on the work or will be retained until the successful Tenderer furnishes a Performance Bond for One Hundred per cent (100%) of the amount of the Tender or other satisfactory security, if required by the Municipality. A Performance Bond shall insure completion of the work and maintenance of the work for a period of one (1) year after the date of the completion certificate.

### A.3 EXAMINATIONS OF SITE, PLANS AND SPECIFICATIONS

The Tenderer must examine the premises and site to compare them with the Plans 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 Plan, or in the Report 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 Tenderer must satisfy himself that he understands the meaning and intent of the Plans and Specifications before submission of his Tender. In case of any inconsistency or conflict between the Plans and Specifications, the notes on the Plans shall take precedence over the Specifications.

#### A.4 PAYMENT

Progress payments in cash equal to Eighty per cent (80%) of the value of work done and materials incorporated in the work will be made to the Contractor monthly on written request of the Contractor to the Engineer. An additional Seventeen per cent (17%) will be paid thirty-seven (37) days after the final acceptance by the Engineer, and Three per cent (3%) of the Contract price may be reserved by the Municipality for one (1) year.

A greater percentage of the Contract price may be reserved by the Municipality for the same (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 if he desires.

#### A.5 WORKING AREA AND ACCESS

On a closed drain, the working area for construction purposes shall be a width of six (6) metres (see item No. 3 in the Special Provisions, Division H). On an open drain, the working area shall be fifteen (15) metres on the side of the drain where the excavated material is to be placed unless additional width is required to level the excavated material.

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.6 INSPECTION

Final inspection by the Engineer will be made within twenty (20) days after he has received notice in writing from the Contractor that the work is complete, or as soon thereafter as weather conditions permit. All the work included in the Contract must at the time of final inspection have the full dimensions and cross-sections.

#### A.7 COMPLETION OF WORK

The work must commence immediately after the Contractor is notified of the acceptance of his Tender or at a later date if set out as a condition of the Tender. If weather and ground conditions are unsuitable, work may be started at a later date from either of these two (2) dates if such delay is approved by the Engineer.

The work must be proceed in such a manner as to ensure its completion at the earliest possible date consistent with the first class workmanship and within the time limit set out in the Tender or in the Contract Documents.

#### A.8 ALTERATIONS AND ADDITIONS

The Engineer shall have the power to make alterations in the work shown or described in the Drawings or 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. Where such changes involve work additional and similar to the items in the Main Contract, the price agreed to be paid shall be determined after due consideration has been given to the ratio of the Tendered amount to the Engineer's estimate of the Contract. 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.9 SUPERVISION

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

#### A.10 MAINTENANCE

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 evident by the final payment 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 final payment certificate nor payment there under, nor any provision in the Contract Documents shall relieve the Contractor from his responsibility.

#### A.11 CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall protect himself and indemnify and save the Owner harmless from any and all claims which may arise from the Contractor's operations under the Contract where bodily injury, death, or property damage is caused and for this purpose shall, without restricting the generality of the foregoing, maintain insurance acceptable to the Owner, and subject to the limits of not less than One Million Dollars (\$1,000,000.00) inclusive, per occurrence for bodily injury, death, and damage to property including loss of use thereof.

The Contractor shall furnish evidence of compliance with all requirements of the applicable Workmen's Compensation Act or Ordinance of the Province or Territory concerned including payments due there under.

Prior to commencement of any work hereunder, the Contractor shall file with the Owner a copy of each insurance policy and certificate required. All such insurance shall be maintained until final

completion of the work including the making good of faulty work or materials; except that coverage of completed operations liability shall in any event be maintained for twelve (12) months from the date of substantial completion as certified by the Engineer.

#### A.12 FLOODS OR CASUALTIES

The Contractor shall take all risks from floods or casualties of any kind.

#### A.13 SUB-CONTRACTORS

If the Municipality so directs, the Contractor shall not sublet the whole or part of this Contract without the approval of the Engineer.

#### A.14 ROAD CROSSINGS

All road crossings may be made with an open cut unless otherwise noted. The exact location of the crossings shall be verified and approved by the Road Authority or the Engineer. A 150 mm depth of pit run gravel, well compacted, shall be placed as a base for each pipe crossing. The pipe shall be backfilled with a granular material for the width of the travelled portion plus 1200 mm on either side. The material shall be placed in lifts not exceeding 300 mm in depth and shall be thoroughly compacted with an approved type mechanical vibrating compactor where so required by the Engineer. The top 150 mm of the roadway backfill shall consist of crushed granular material meeting the Specifications of the Ministry of Transportation of Ontario for Granular Base Course Class "A" (Granular "A") material. Existing pavement, if any, shall not be replaced by the Contractor unless noted differently on the Plan.

The Contractor shall be responsible, however, for subsequent uneven joints in the pavement due to settling of the backfill. The Contractor should arrange with a local resident to keep the crossing in repair if unable to do such personally. A small load of Granular "A" gravel at the side of the road may be advisable so that if any settlement does occur, the local resident can add additional gravel. All road crossings shall meet the approval of the Road Authority. For County road crossings, see Division D – "Specifications for Municipal Drains Crossing County Roads". In doing work on or across any public road, care must be taken to protect the travelling public, the Contractor being required to erect and maintain, until the completion of the work, all signs, barricades, and lights necessary to indicate or warn the travelling public that the work is being undertaken, all satisfactory to the Road Authority having jurisdiction.

The excavated material from the travelled portion of the road and 1200 mm or the full width of the graveled shoulder, whichever is greater, on each side of the travelled portion shall be removed. Excavated material may be spread on the right-of-way with consent of the Road Authority. Surplus excavated material must be removed from the job site

If the Engineer deems a gravel road to have been damaged by the construction of a drain either across or along the said road, the Engineer may direct the Contractor to supply and place sufficient crushed granular material on the roadway to restore it to a safe and passable condition at the Contractor's expense.

#### A.15 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 also is not easily erodable. All backfill material shall be thoroughly compacted as directed by the Engineer.

All structural plate pipe culverts whether located on public roads or laneways shall be backfilled with granular material to a minimum distance of 900 mm beyond each side of the culvert. Three hundred millimeters (300 mm) of granular material shall be placed under the culvert as a base. Granular material shall be placed simultaneously on each side of the culvert in 150 mm layers and compacted to a ninety-five per cent (95%) Proctor Density. All culverts to be assembled according to the Engineer's and Manufacturer's Specifications. Culverts to be installed 300 mm below design grade with a minimum of 600 mm of cover over the pipe unless otherwise noted on 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 300 mm of pit run granular material and 150 mm of crushed granular 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. Any existing bituminous pavement on laneways shall be placed to its original condition by the Contractor.

#### A.16 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 new 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 or Drainage Commissioner/Superintendent. Any fences found in such poor condition that replacement is not necessary, shall be noted and verified with the Engineer or Drainage Commissioner/Superintendent prior to commencement of work. 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 Land owner at his own expense. The Contractor shall not leave fences open when he is not at work in the immediate vicinity.

#### A.17 LIVESTOCK

The Owner of the property on which the drain is located shall be responsible for the protection of all livestock on said property during construction and shall also be liable for any damages caused by such livestock.

#### A.18 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 if the Contractor has failed to notify the Owners forty-eight (48) hours prior to commencement of the work on that portion of the drain.

#### A.19 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 in the construction of the works, the Contractor shall haul away such surplus gravel or stone. This does not apply to a road crossing where surplus gravel is left to allow for building up the trench after settlement occurs.

#### A.20 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall apply and pay for all necessary permits or licenses required for the execution of the work (but this shall not include the obtaining of 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 and if the Specifications and Drawings are at variance therewith, any resulting additional expenses incurred by the Contractor shall constitute an addition to the Contract price.

#### A.21 RAILWAYS, HIGHWAYS AND UTILITIES

A minimum of forty-eight (48) hours notice in writing to the Railway's Division Engineer, the M.T.O. District Engineer, or the Utility Company, exclusive of Saturdays, Sundays, and Statutory Holidays, is required by the Contractor prior to any work performed on or affecting the applicable property and in the case of a pipe being installed by open cut, a minimum of seventy-two (72) hours notice is required; and if boring, a minimum of five (5) days notice is required

#### A.22 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 Owner, 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 Owner 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, including the certified cheque and deposit as provided by A.2 "Tenders", the Contractor shall pay the difference to the Owner. The expense incurred by the Owner, as herein provided, shall be certified by the Engineer.

If the Contract is terminated by the Owner 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 grow due to the Contractor.

#### A.23 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. The Contract amount shall be adjusted in accordance with a fair evaluation of the work added or deleted.

#### A.24 EXCESS TILE

If the tile is supplied by the Municipality, the Contractor shall stockpile all excess tile in one (1) readily accessible location for pickup by the Municipality at the end of the project. If the tile is supplied by the Contractor he shall remove all excess tile from the job site.

#### A.25 REPLACEMENT OF STAKES

The Contractor shall be held liable for the cost of replacing any stakes or benchmarks destroyed during the course of construction. The municipal drain shall be liable for the cost of replacing stakes or benchmarks destroyed or removed before commencement of construction.

#### A.26 DRAINAGE COMMISSIONER/SUPERINTENDENT

Where a Drainage Commissioner/Superintendent is appointed by the Municipality, the Drainage Commissioner/Superintendent will act as the Engineer's representative. The Commissioner/Superintendent shall have the power to direct the execution of the work and to make any necessary minor adjustments.

Any instructions given by the Commissioner/Superintendent which change considerably the proposed work, or with which the Contractor does not agree, shall be referred to the Engineer for his decision.

#### A.27 TESTS

The cost for the testing of materials supplied to the job by the Contractor shall be borne by the Contractor. The cost of testing materials supplied by the Municipality shall be borne on the Municipality. 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.28 ONTARIO MUNICIPAL BOARD

The award of the Contract shall be subject to the approval of the project by the Ontario Municipal Board.

#### A.29 NOTICE RE. COMMENCEMENT OF WORK

The Contractor shall give the Engineer and the Drainage Commissioner/Superintendent a minimum of forty-eight (48) hours advance notice before commencement of work on any municipal drain.

If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Drainage Commissioner/Superintendent a minimum of forty-eight (48) hours advance notice prior to returning to the job.

If any work is commenced without such advance notice, the Contractor shall be fully responsible for all such work undertaken prior to such notification and shall make good any works or materials used judged to be inadequate or constructed in a manner that may have been subject to alteration if made known to the Engineer prior to commencement of construction.

#### A.30 FIELD MEETINGS

At the Engineer's discretion, 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 after notification of commencement of work has been given and prior to commencement of, or during construction.



# DIVISION B

## SPECIFICATIONS FOR OPEN DRAINS

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# **DIVISION B**

## **SPECIFICATIONS FOR OPEN DRAINS**

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### **B.1 STAKES**

Stakes are set along the course of the drain at intervals of twenty-five (25) metres. The Contractor shall ensure that the stakes are not disturbed unless approval is obtained from the Engineer. Any stakes removed by the Contractor without the authority of the Engineer, shall be replaced at the expense of the Contractor; any stakes which are removed by livestock or others, shall be replaced at the expense of the drain. If the Contractor is unable to locate any stakes along the drain, the Contractor shall clear, if necessary a path for re-staking and contact the Engineer with regard to re-staking any part or all of the drain. If required, the Contractor shall assist the Engineer in re-staking the drain.

### **B.2 EXCAVATION**

The bottom width and the side slopes of the ditch shall be those shown on the Profile Drawing. Side slopes are normally 1.5 metres horizontally to 1.0 metre vertically unless otherwise noted on the Profile Drawing. Bottom widths will vary with the size of the drain. Where the width of the bottom of the existing ditch is sufficient to permit the desired width, depth and back slopes for the new ditch to be constructed without disturbing existing banks, such banks shall be left as is, subject to clearing required as described in Section B.9 "Obstructions".

### **B.3 PROFILE**

The Profile Drawing shows the depth of cuts from the ground beside the stake to the final invert of the ditch in metres and decimals of a metre, and also the approximate depth of cuts 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.

### **B.4 LINE**

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run except where necessary to straighten any unnecessary bend or irregularities in alignment. Where there are such 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 shall be removed from the drain. All curves shall be made with a minimum radius of fifteen (15) metres. A uniform grade shall be maintained between stakes in accordance with the Profile Drawing. A variation of 25 mm from the proposed Profile shall be sufficient to require the Contractor to remedy the discrepancy.

### B.5 EXCAVATED MATERIAL

Excavated material shall be deposited on either or both sides of the drain as directed by the Engineer. In general, the material shall be placed on the low side of the drain or opposite trees and fences. The Contractor shall contact all Owners before proceeding with the work to verify the location to place and level the excavated material.

A berm of not less than 600 mm shall be left along the top edges of the drain. No excavated material shall be placed in tributary drains, depressions, or low areas which direct water behind the spoil bank. Inlets shall be left in the levelled spoil approximately every ninety (90) metres in order that surface water is not trapped behind the spoil bank.

Beyond the berm, the excavated material shall be placed and levelled to a maximum depth of 200 mm, unless instructed otherwise. 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 two to one (2:1). 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 or rubbish of any kind.

Any large stones or boulders which exceed 500 mm in diameter shall be bulldozed into a pile and left near the ditch banks or a nearby fence line or bush, or such other convenient location as approved 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.

A written statement from the Owners indicating their complete satisfaction with the levelling of the spoil bank is sufficient to comply with this Specification. The final decision with respect to levelling the spoil bank shall be by the Engineer.

### B.6 EXCAVATION AT BRIDGE SITES

The Contractor shall excavate the drain to the full specified depth under all bridges and to the full width between abutments. Temporary bridges may be carefully removed and left on the bank of the drain. 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 Owner if excavation will expose the footings or otherwise cause the structure to undermine or collapse such that the Owner may take precautions for repair of the bridge.

### B.7 BRIDGES

All structures constructed on a Municipal drainage works shall be of adequate capacity, structural strength and shall be constructed at an approved elevation as determined by the

Engineer. If an Owner at the time of construction has furnished a suitable culvert at the site, the Contractor shall install it as part of the work at the Owner's expense, with the invert 150 mm below the grade of the drain, and with a suitable earth backfill such that a crossing with normal farm machinery can be made. Final grading, shaping or rip-rapping of backfill shall be the responsibility of the Landowner(s) involved. A minimum of 400 mm of cover shall be placed over each culvert.

#### B.8 RIP-RAP PROTECTION FOR CULVERTS

Where rip-rap protection is called for at either or both ends of a new culvert such rip-rap shall be sacked concrete or heavy field stone rip-rap protection with geotextile filter material (Mirafi P-150 or approved equal). The rip-rap shall extend a minimum of 550 mm below the culvert invert for the full ditch bottom width and 300 mm minimum into undisturbed soil along the banks adjacent to the culvert and shall extend to the top of the finished roadway or laneway over the culvert. Maximum slopes for rip-rap shall be one-quarter to one (1/4:1) 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 the faulty workmanship of materials for a period of one (1) year from the time of the final payment certificate.

#### B.9 OBSTRUCTIONS

All brush, bushes, fallen timber and debris shall be removed from the banks and slopes of the drain and to such a distance on each side to eliminate any interference with the spreading of the spoil bank. Grubbing shall include the removal and disposal of all stumps to the satisfaction of the Engineer. The slopes shall be cleared whether or not they are directly affected by the excavation. The roots shall be left in the banks if no bank excavation is required as part of the new channel excavation. Any trees necessarily removed, are to be brushed and left for the Owner. In wooded or heavily overgrown areas, the brush, limbs, etc. may be pushed into piles back out of the way. All dead elms or other dead trees alongside the drain that impede the performance of the drain if allowed to remain and fall into the ditch, shall be removed prior to excavation and put in piles, unless directed otherwise by the Engineer. All brush, limbs, debris, etc. shall be put in piles for disposal by the Owner.

#### B.10 ROADS

Where an open drain is being removed from the road allowance, it must be reconstructed wholly on the adjacent farm land with a minimum berm width of 1200 mm on the roadway side of the ditch, unless otherwise noted on the Drawings. The excavated material shall be used to fill the existing open ditch and any excess excavated material shall be placed and levelled on the adjacent farm land. Any work done on road allowances with respect to excavation, disposal of materials, installation of culverts, cleaning under bridges, etc., shall be to the satisfaction of the Road Authority. Any metal pipe culvert laid under the traveled portion of the road allowance

shall be backfilled to the surface with acceptable granular material. The top 400 mm shall be made up of 250 mm Granular “B” material and 150 mm of Granular “A” material. The material shall be placed in lifts not exceeding 250 mm in depth and shall be thoroughly compacted with an approved type mechanical vibrating compactor.

All excavated excess material from the construction of a road culvert or cleanout through culverts on any road allowance shall be trucked away or deposited and spread on the road allowance if permitted by the Road Authority. Any culverts suitable for salvage shall become the property of the Owner, if the Owner wishes to retain same, otherwise the Contractor shall be responsible for the disposal of the culvert to the satisfaction of the Engineer.

#### B.11 TILE OUTLETS IN EXISTING DITCHES

All tile outlets in existing ditches shall be noted by the Contractor prior to excavation. The Contractor shall contact all Owners and ask them to mark all their tile outlets which enter the ditch. Any tile drain outlets that were marked and are subsequently damaged by the Contractor shall be repaired by the Contractor at his expense. If any ditch bank is altered due to the construction at the tile outlet, the Contractor shall replace the altered outlet.

In general, if the existing outlet is tile only, the new outlet shall consist of undamaged lengths of tile. If the existing outlet is a metal pipe with or without a rodent grate, such outlet shall either be relocated to adjust to the new banks or shall be repaired if damaged. If any outlet becomes plugged as a result of construction, the Contractor shall be obliged to free such outlet of impediments. Where stone or concrete rip-rap protection exists at any existing outlet, such protection shall be moved as necessary to protect the outlet after reconstruction of the channel. Where any damage results to tile leading to, and upstream of the outlet as a consequence of construction, the Engineer may direct the Contractor to repair such tile and shall determine fair compensation to be paid to the Contractor for performing the work.

#### B.12 GRASS SEED AND FERTILIZER

The ditch slopes where disturbed shall be seeded using an approved seed mixture. The grass seed and fertilizer 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 Seed Act for Canada No. 1 seed and composed of the following varieties mixed in the proportion by weight as follows:

- 40% Creeping Red Fescue
- 30% Blue-Joint Grass
- 30% Perennial Rye Grass

Grass seed shall be applied at the rate of 85 kg/ha (75 lbs./acre) and the fertilizer shall be applied at the rate of 450 kg/ha (400 lbs./acre), or as directed otherwise. Fertilizer shall be 10-10-10.

### B.13 EQUIPMENT

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

### B.14 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

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# DIVISION C

## SPECIFICATIONS FOR TILE DRAINS

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### C.1   TILE

The Contractor is to state the type and manufacturer of the tile which he proposes to use and is to be prepared to submit alternative prices for concrete or clay tile in the sizes available, if required.

Standard clay tile shall meet all A.S.T.M. Specifications as set out in Designation C4-62 and Designation C498-65 with the exception of the Absorption Factor and the Freeze and Thaw test. Extra quality drain tile and heavy duty drain tile shall meet all Specifications as set out in Designation C4-62 and Designation C498-65.

Concrete tile shall be extra quality drain tile which meets all A.S.T.M. Specifications as set out in Designation C412 with the exception that the nominal lengths of drain tile 150 mm to 300 mm in diameter inclusive, shall not be less than 300 mm; and that tile of 350 mm to 750 mm in diameter inclusive, shall have nominal lengths of not less than the diameters.

Where any of the above referred to standards are amended or superseded, such amendments or revisions shall apply.

### C.2   STAKES

Stakes are set along the course of the drain at intervals of twenty-five (25) metres. Benchmarks have been established which are to govern the elevations of the drain. The location and elevations of the benchmarks are given on the Plan and Profile drawings. The Contractor will ensure that the stakes are not disturbed unless approval is obtained from the Engineer.

### C.3   LINE

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 fifteen (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 correction or repair at his expense. The Engineer will designate the general location of the tile drain, but the Landowners may indicate the exact location if approval is given by the Engineer. A variation of 20 mm from the proposed Profile shall be sufficient to require the Contractor to remedy this discrepancy.

The Contractor shall verify the location of the new tile drain with the Engineer, Drainage Commissioner/Superintendent and the Landowners before proceeding with the work.

#### C.4 LAYING

The tile is to be laid with close joints and in regular grade and alignment in accordance with the Plan and Profile Drawings. The Contractor is to erect cross-arm sights and use a boning rod in the laying of the tile. The tiles are to be bevelled, if necessary to ensure close joints. Rather than bevelling the tile on sharp bends, the Contractor may wrap the wide joints with a 130 mm wide band of felt building paper. The inside of the tile is to be kept clear when laid. Any joints with a gap greater than 5 mm are to be wrapped with plastic or geotextile filter material at no extra cost.

Where soil conditions warrant, the Engineer may require that the tile be wrapped with a geotextile filter material, Mirafi P-50, manufactured by Dominion Textile, Inc., 415 Norwich Street, Woodstock, Ontario (519) 539-9877, or an approved equal. Any such work shall be considered an extra to the Contract. The Contractor shall submit with his Tender the extra cost for wrapping the tiles, if necessary.

The sides of the tile are to be supported by partial filling of the trench prior to inspection by the Engineer. The remainder of the excavated material shall be used to restore and maintain the natural surface of the ground. No tile shall be backfilled until inspected by the Drainage Commissioner/Superintendent or Engineer unless directed otherwise 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.

#### C.5 LOWERING OF SURFACE GRADES

Where required, the Contractor shall strip back and stockpile the topsoil, and strip the subsoil in order that the tiling machine may trench to the correct depths. After the tile is installed, the trench shall be backfilled, subsoil replaced and the topsoil shall be spread over the disturbed area. The Contractor's Tender price shall include the cost of stripping the topsoil, bulldozing of the subsoil to the depth required and subsequent replacement of subsoil and topsoil.

#### C.6 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. 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 InsertaTee or a manufactured Tee (Typical Tile Connection Detail).

Where the existing drains are full of sediment, the decision to connect or not to connect 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 after the issuance of the completion certificate by the Engineer. 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 the Contractor is required by the Engineer to hook up an existing tile which is not encountered in the course of the drain, the cost of such work shall constitute an extra and the basis for payment shall be determined by the Engineer subject to the provision of Section A.7 "Completion of Work".

### C.7 OUTLET PROTECTION

Riveted corrugated metal pipe shall be used to protect the tile at its outlet. The joint between the metal pipe and the field tile shall be sealed with mortar. Sacked concrete rip-rap protection or heavy field stone rip-rap protection and geotextile filter material (Mirafi P-150 or approved equal) unless otherwise specified, shall be installed around the corrugated metal pipe and extended downstream a minimum distance of three (3) metres. 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 600 mm into undisturbed soil on either side of the backfilled trench.

Where the outlet occurs at the end of an open ditch, the above sacked concrete or heavy field stone rip-rap protection will extend all around the end of the ditch and to a point 800 mm 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. A concrete structure may be required to protect against heavy overflow if so indicated on the Drawings. The corrugated metal pipe shall have a hinged metal grate on the outlet end to prevent the entry of small animals. Maximum spacing between bars shall be 50 mm.

### C.8 CATCH BASINS

Cast-in-place catch basins shall be constructed using a minimum of 20 MPa concrete with inside dimensions as specified on the Drawings or in the Scope of Work, walls and floors – 150 mm thick, and the bottom – 450 mm below the invert of the tile. The catch basin top shall be substantial iron grate approved by the Engineer, easily removable for cleaning. Precast catch basins and manholes may be used if prior approval is given by the Engineer. Minimum wall thickness permitted for catch basins without reinforcement is 150 mm, and with reinforcement is 100 mm; provided that either is acceptable by the Engineer.

Where a catch basin is located on a road allowance, the type of catch basin and grate to be used and its proposed elevations shall be approved by the Engineer or the Road Superintendent. Catch basins may be offset from the drain, where practical and shall have 200

mm concrete tile or metal pipe leads unless otherwise specified. Catch basin leads shall have a minimum cover of 750 mm.

The joints between sectional precast catch basins shall be mortared and such mortar shall be applied to each lower section before the upper section is added on. All tile or pipe connected to the catch basin shall be mortared in place so that no gaps remain in the wall. Mortar is to be applied from the outside of the walls.

Catch basins located on Highways shall be M.T.O. Type Standard DD-702 or M.T.O. Precast Type Standard DD-711. The catch basin top shall be M.T.O. Standard DD-706 (if required, contact the Engineer for applicable Standards). Standard DD-716-A shall apply for ditch inlet catch basins.

All catch basins located on Highways, County roads, and Township roads shall be backfilled with porous backfill placed to a minimum thickness of 300 mm on all sides. The backfilled material shall be satisfactorily tamped. If settling occurs after construction, the Contractor shall supply and place sufficient granular material to maintain the backfill level flush with adjacent ground as part of the Contract.

Heavy field stone rip-rap protection shall be placed around all catch basins and shall extend a minimum distance of 600 mm 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.

Catch basin grates shall be fabricated from angle iron for the frame and welded steel bearing pads spaced at 75 mm centres. Any grate used is subject to the Engineer's approval. Unless otherwise noted, the tops of all standard catch basins shall be 100 mm above adjacent ground levels.

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 diameter and elevations as the outlet tile.

### C.9 BRUSH, TREES, DEBRIS, ETC.

The Contractor is to include the removal of all excavation of whatever nature, disposal of material, removal and cutting of all brush, supplying of all labour and completing the whole work in accordance with the Plan, Profile and Specifications. Any trees necessarily removed are to be brushed and left for the Owner of the property on which they are found. All brush, limbs, etc. are to be put in piles by the Contractor and left for disposal by the Owner. No additional payment will be made for brushing of scattered trees where required by the Engineer.

Where, in the opinion of the Engineer, the drain or proposed location of the drain is heavily overgrown with small trees and brush, the Contractor may use a bulldozer or other such equipment to clear a minimum width of thirty (30) metres. The resulting debris shall be placed where directed by the Engineer and/or the Owner(s) and left for disposal by the Owner(s).

Where roots may interfere with the new drain, all such roots shall be grubbed and placed in a pile convenient for disposal by the Owner. No additional payment will be made for such work.

#### C.10 QUICKSAND

The Contractor shall immediately contact the Engineer or Drainage Commissioner/Superintendent if quicksand is encountered. The Engineer or Drainage Commissioner/Superintendent shall direct the Contractor to construct a temporary open drain to lower the water table or to lay the tile on a crushed stone mat and wrap the tile joints with filter material, or to take such action as may be necessary. The basis of payment for such work shall be determined by the Engineer or Drainage Commissioner/Superintendent.

#### C.11 ROCKS

The Contractor shall immediately contact the Engineer or Drainage Commissioner/Superintendent if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a tiling machine. The Engineer or Drainage Commissioner/Superintendent may direct the Contractor to use some other method of excavating to install the drain. The basis of payment for this work shall be determined by the Engineer or Drainage Commissioner/Superintendent.

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 same to a nearby bush or fence line, or such other convenient location as approved by the Landowner(s).

#### C.12 BROKEN OR DAMAGED TILE

The Contractor shall either bury or remove all damaged tile or tiles not required elsewhere. NO tile shall be left on the grounds for the Landowner(s) to dispose.

#### C.13 ROADS

On any road crossing, the Contractor may use original ground as backfill to within 600 mm of finished grade only if adequate compaction and if the use of the original ground backfill has been approved beforehand by the affected Road Authority. For further information for roadway crossings, refer to Section A.14 – “Road Crossings” of the General Conditions (Division A).

#### C.14 JUNCTION BOXES

Junction Boxes shall be constructed using a minimum of 20 MPa concrete with inside dimensions as specified in the Drawings or in the Scope of Work. The sides, bottom and top shall be 150 mm thick. The top of the junction box should have a minimum ground cover of 600 mm.

### C.15 FILLING IN EXISTING DITCHES

The Contractor shall backfill the ditch sufficiently for traversing by farm machinery. If sufficient material is not available from the old spoil banks 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.

### C.16 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 and fertilizer. The grass seed shall be fresh, clean and new crop seed, meeting the requirements of the Seed Act for Canada No. 1 seed and composed of the following varieties:

- 45% Creeping red fescue
- 20% Bromegrass
- 15% Kentucky Bluegrass
- 5% White clover
- 5% Blue-Joint Grass
- 10% Perennial ryegrass

A cover crop of mixed grain or winter rye or wheat is also to be used (2 bushels/acre). Grass seed shall be applied at the rate of 68 kg/ha (60lbs/acre) and fertilizer shall be applied at the rate of 450 kg/ha (400 lbs/acre). Fertilizer shall be 10-10-10.

### C.17 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS

The latest report of the Ontario Farm Drainage Association (O.F.D.A.), Construction Standard Committee 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**

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# **DIVISION E**

## **SPECIFICATIONS FOR DRAINAGE**

### **CROSSINGS BY THE BORING METHOD**

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#### **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

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# DIVISION H

## SPECIAL PROVISIONS

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**Trussler Road Municipal Drain 2015  
Township of Wilmot**

**Reference No. 1419**

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.

### H.1 GENERAL

The Contractor shall notify the Landowners, the Township Drainage Superintendent and the Engineer forty-eight (48) hours prior to construction.

The Contractor shall verify the location of the new drainage system with the Engineer prior to construction.

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

All objects or obstructions within the construction working area such as signs, mailboxes, fences, property ornamentals, etc., that interfere with the installation of the drain shall be removed and re-erected in the same location. Any damages to such objects by the Contractor shall be repaired, replaced, installed or paid for by the Contractor at the discretion of the Engineer.

### H.2 UTILITIES

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. All utilities shall be located and uncovered in the affected areas 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

The working area for construction purposes shall be a width of 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.

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.

#### H.4 TREE TRANSPLANTING

The Contractor shall dig out all trees that may interfere with the installation of the drainage system.

The size of root balls for trees shall be a minimum diameter of one (1) metre for trees less than three (3) metres in height, and a minimum diameter of 1.5 metres for trees less than five (5) metres in height.

Immediately after digging, the root system shall be wrapped and kept moist until transplanted.

After the construction of the municipal drain is complete, the Contractor shall transplant the removed trees as soon as possible.

The Contractor shall be prepared to provide all necessary fertilizers and tree supports as may be required.

#### H.5 OPEN WORK (SWALE)

The Contractor may make minor adjustments to the proposed alignment of the swale at the outlet to avoid unnecessary transplanting of trees.

Prior to the new swale construction, the Contractor shall strip and stockpile the topsoil on site. The Contractor shall later spread the topsoil over the side slopes and disturbed areas of the swale.

The Contractor shall use spoil from the swale construction to provide sufficient cover for the proposed 750mm diameter HDPE pipe near the outlet (see Cross Section A, Drawing No. 5). All excess spoil shall be levelled to maximum depth of 200mm.

##### H.5.1 Erosion Control

The Contractor shall supply and place an approved grass seed mixture on the disturbed sideslopes of the newly constructed swale, and place erosion control blanket (Terrafix SC200 or equivalent).

The Contractor shall construct a plunge pool at the outlet of the proposed 750mm diameter HDPE pipe (Sta. 0+050). The plunge pool shall be constructed in accordance with the `Typical Plunge Pool Detail` on drawing 5 of 5.

All stone rip-rap material shall be quarry stone 150mm to 300mm dia. and placed to a depth of 400mm. All rip-rap material shall be placed on geo-textile filter material (Mirafi 180N).

The Contractor shall construct a splash pad at Sta. 0+635. The splash pad shall be 3.6m long and 2.4m wide. Any disturbed soil shall be seeded with an approved grass seed mixture and Terrafix S100 (or equivalent) erosion control blankets shall be placed. ScourStop (or equivalent) transition mats shall be installed for permanent protection against high intensity flows.



## H.6 PIPE, INSTALLATION, BEDDING & BACKFILL

### H.6.1 Concrete Field Tile

An approved wheel trencher may be used to install the concrete field tile. If the Contractor elects to use an approved hydraulic excavator to install the concrete field tile, the tile shall be installed using compacted Granular 'A' 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.

All concrete tile shall be Heavy-Duty Extra Quality Concrete Drain Tile 2000D.

All concrete field tile shall be backfilled using native material if installed using a wheel machine.

The Contractor shall be responsible for all trench settlement.

The Contractor shall supply and wrap all concrete tile joints with geotextile filter. The width of the filter material shall be 400mm wide. The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The filter material shall be Mirafi 140NC for clay or loam soil conditions and Mirafi 160N for sandy or silty soil conditions.

### H.6.2 High Density Polyethylene Pipe (HDPE)

An approved wheel trencher may be used to install the HDPE pipe.

All HDPE pipe shall be Challenger 3000 (or equivalent) CSA B182.8-02/320 KPa.

All HDPE pipe shall be installed using compacted Granular 'A' 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.

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.

The Contractor shall be responsible for all trench settlement.

### H.6.3 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 the full top width of the trench.

For the sections of drain through agricultural properties, the Contractor shall stockpile the topsoil and later spread it over the backfilled trench.

All excess material shall be disposed of off-site by the Contractor.

## H.7 ASPHALT DRIVEWAY RESTORATION

The Contractor shall saw cut the existing asphalt driveway at Sta. 0+084 for the full depth of asphalt. All saw cuts shall be made perpendicular to the driving surface (i.e. skewed saw cuts are not permitted).

If the existing backfill material is unsuitable to be used for sub-grade, the Contractor shall supply and place 200mm of compacted Granular 'B'. The Contractor shall then place one (1) 50mm lift of HL4 asphalt on the disturbed portion of the driving surface.

## H.8 CATCHBASINS

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

The Contractor shall supply and install catchbasin markers beside all catchbasins.

All catchbasins to have 300mm sumps.

All catchbasins shall be installed on 150mm crushed stone bedding.

Catchbasins within the road allowances shall have 300mm minimum M.T.O. Granular 'B' backfill around all sides. Catchbasins 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.

### H.8.1 Grates

All catchbasins shall have birdcage grates (Coldstream Concrete Ltd. or approved equal). The Grates shall be hot dipped galvanized, and shall be fastened to the new catchbasins.

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

### H.8.2 Holes and Knockouts

Knockouts shall be provided in all catchbasins.

All holes for catchbasin pipe connections are to be cored by the manufacturer.

The Contractor shall be responsible to repair or reapply grout for all grouted connections into any catchbasin or manhole for a period of one year after the completion certificate has been issued.

### H.8.3 Berm Construction

The Berm at Sta. 0+327 shall be constructed using approved clay fill material placed in maximum lifts of 250mm depth compacted to 95% standard proctor maximum dry density.

### H.8.4 Erosion Control

The Contractor shall place quarry stone rip-rap material around all sides of the catchbasins for a width of one (1) metre and shall be placed on an approved geo-textile filter material.

Topsoil shall be spread over the finished berm at Sta. 0+327 to a minimum depth of 100mm and seeded with an approved grass seed mixture and covered with Terrafix S100 (or equivalent) erosion control blanket. Rock rip-rap shall be placed on the spillway of the berm in accordance with the berm detail on Drawing No. 5.

All stone rip-rap material shall be quarry stone 150mm to 300mm dia. and placed to a depth of 400mm. All rip-rap material shall be placed on geo-textile filter material (Mirafi 180N).

## H.9 TILE CONNECTIONS

If an existing drain is cut off during the installation of the new drainage system, the Contractor, shall plug the downstream end using appropriate materials. The upstream ends shall be connected to the new drainage system by the Contractor, in accordance with the Typical Tile Connection Detail on Drawing No. 5.

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 Contractor shall be responsible for all tile connections for a period of one year after the issuance of the completion certificate. 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.

## H.10 TRUSSLER ROAD CROSSING

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 shall contact the Region of Waterloo and the Township of Wilmot for specified local procedures, guidelines and timelines. Traffic control shall meet the standards of Book 7 of the Ontario Traffic Manual.

#### H.10.1 Clearing & Brushing

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

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. The Contractor shall dispose of the removed trees, stumps and other vegetation off-site.

TOWNSHIP OF WILMOT  
REGIONAL MUNICIPALITY OF  
WATERLOO

CITY OF KITCHENER  
REGIONAL MUNICIPALITY OF  
WATERLOO



NOTES:

**BENCHMARK No. 1**      ELEV.=339.13  
NAIL IN SOUTH FACE OF FENCE POST 27 METRES NORTH OF STA. 0+084

**BENCHMARK No. 2**      ELEV.=362.40  
NAIL IN NORTH FACE OF HYDRO POLE 24 METRES SOUTH OF STA. 0+889

**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.
- BENCHMARK ELEVATION

No.	ISSUES AND REVISIONS	DATE	BY
5.	REPORT SUBMISSION	2015-04-29	DEL
4.	INFORMATION MEETING	2015-03-13	DEL
3.	ISSUED FOR REVIEW	2015-02-26	DEL
2.	INFORMATION MEETING	2015-02-13	DEL
1.	ON-SITE MEETING	2014-07-16	DEL



PROJECT: TRUSSLER ROAD MUNICIPAL DRAIN 2015

DRAWING: **Watershed Plan**



**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR: W.J.D.	DESIGNED BY: S.B.	DRAWN BY: D.C.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE:	PROJECT No. 1419	DRAWING No. 1 of 5

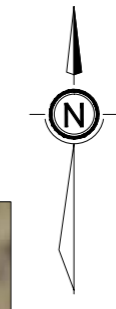
**PLAN**

PLAN SCALE



TOWNSHIP OF WILMOT  
REGIONAL MUNICIPALITY  
OF WATERLOO

CITY OF KITCHENER  
REGIONAL MUNICIPALITY  
OF WATERLOO



NOTES:

BENCHMARK No. 1 ELEV.=339.13  
NAIL IN SOUTH FACE OF FENCE POST 27 METRES NORTH  
OF STA. 0+084

BENCHMARK No. 2 ELEV.=362.40  
NAIL IN NORTH FACE OF HYDRO POLE 24 METRES SOUTH  
OF STA. 0+889

LEGEND:

- DRAIN NAME → EXISTING MUNICIPAL DRAIN
- INTERIOR/EXTERIOR WATERSHED BOUNDARY
- PROPERTY BOUNDARY
- LOT OR CONCESSION BOUNDARY
- TOWNSHIP BOUNDARY
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2.	INFORMATION MEETING	2015-02-13	DEL
1.	ON-SITE MEETING	2014-07-16	DEL



PROJECT:  
TRUSSLER ROAD MUNICIPAL DRAIN 2015

DRAWING:  
**Work Area Plan**

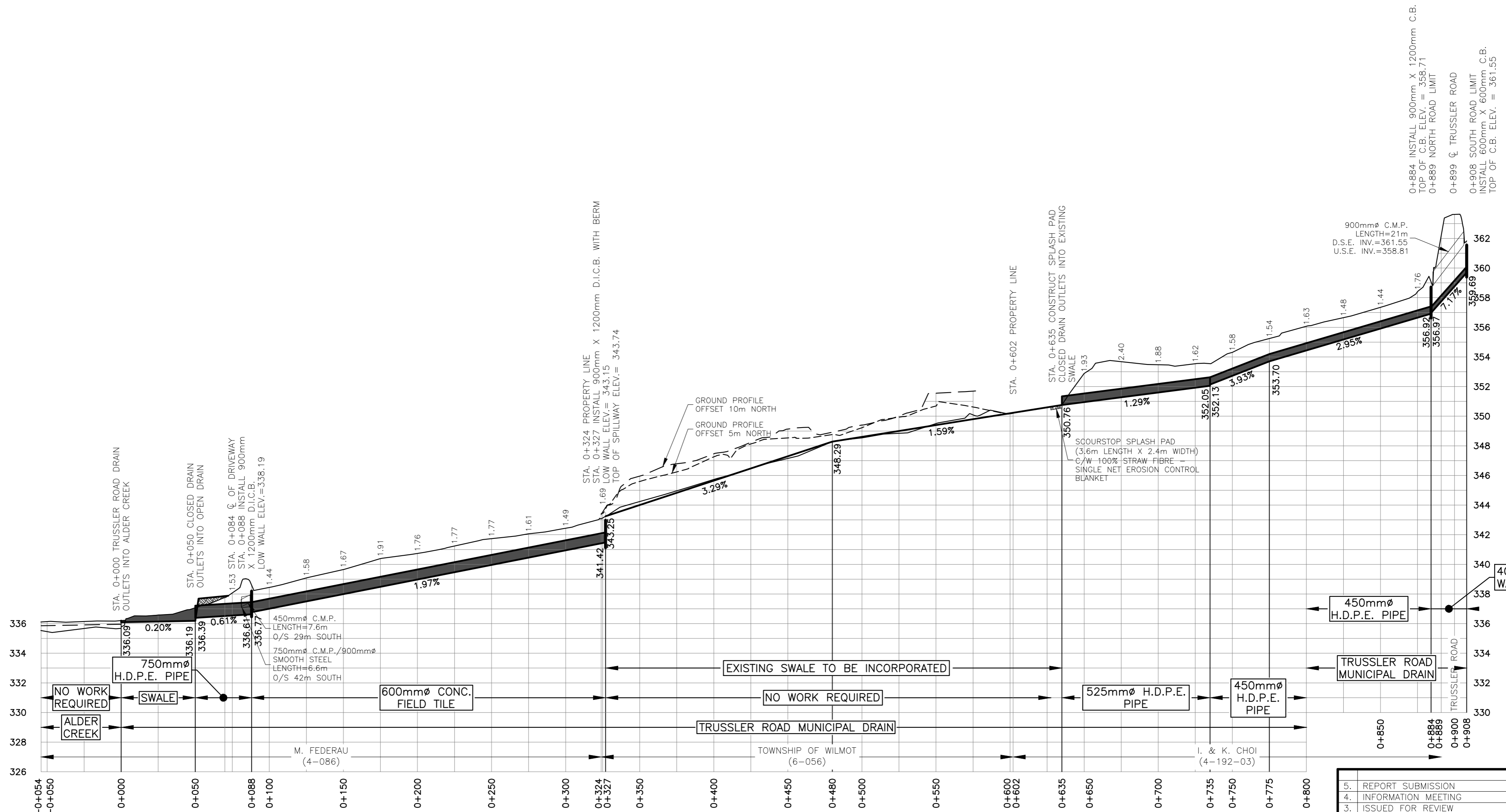


**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR: W.J.D.	DESIGNED BY: S.B.	DRAWN BY: D.C.	CHECKED BY: W.J.D.
DRAWING SCALE: AS NOTED	DATE:	PROJECT No. 1419	DRAWING No. 2 of 5

**PLAN**  
PLAN SCALE



0+884 INSTALL 900mm X 1200mm C.B.  
TOP OF C.B. ELEV. = 358.71  
0+889 NORTH ROAD LIMIT  
0+899 TRUSSLER ROAD  
0+908 SOUTH ROAD LIMIT  
INSTALL 600mm X 600mm C.B.  
TOP OF C.B. ELEV. = 361.55

900mm C.M.P.  
LENGTH=21m  
D.S.E. INV.=361.56  
U.S.E. INV.=358.81

**PROFILE**

PROFILE SCALES



**TILE SIZES**

No.	ITEM	SIZE (mm)	STATION	LENGTH (m)	THICKNESS (mm)
1.	HIGH DENSITY POLYETHYLENE PIPE	750	0+050 - 0+088	38	
2.	CONCRETE FIELD TILE	600	0+088 - 0+327	239	
3.	HIGH DENSITY POLYETHYLENE PIPE	525	0+635 - 0+735	100	
3.	HIGH DENSITY POLYETHYLENE PIPE	450	0+735 - 0+884	149	
4.	SMOOTH WALL STEEL CASING	400 O.D.	0+884 - 0+908	24	9.53

**NOTES:**

1. ALL HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 JOINING SYSTEMS UNLESS OTHERWISE NOTED.

**BENCHMARK No. 1** ELEV.=339.13  
NAIL IN SOUTH FACE OF FENCE POST 27 METRES NORTH OF STA. 0+084

**BENCHMARK No. 2** ELEV.=362.40  
NAIL IN NORTH FACE OF HYDRO POLE 24 METRES SOUTH OF STA. 0+889

No.	ISSUES AND REVISIONS	DATE	BY
5.	REPORT SUBMISSION	2015-04-29	DEL
4.	INFORMATION MEETING	2015-03-13	DEL
3.	ISSUED FOR REVIEW	2015-02-26	DEL
2.	INFORMATION MEETING	2015-02-13	DEL
1.	ON-SITE MEETING	2014-07-16	DEL



PROJECT: TRUSSLER ROAD MUNICIPAL DRAIN 2015  
DRAWING:

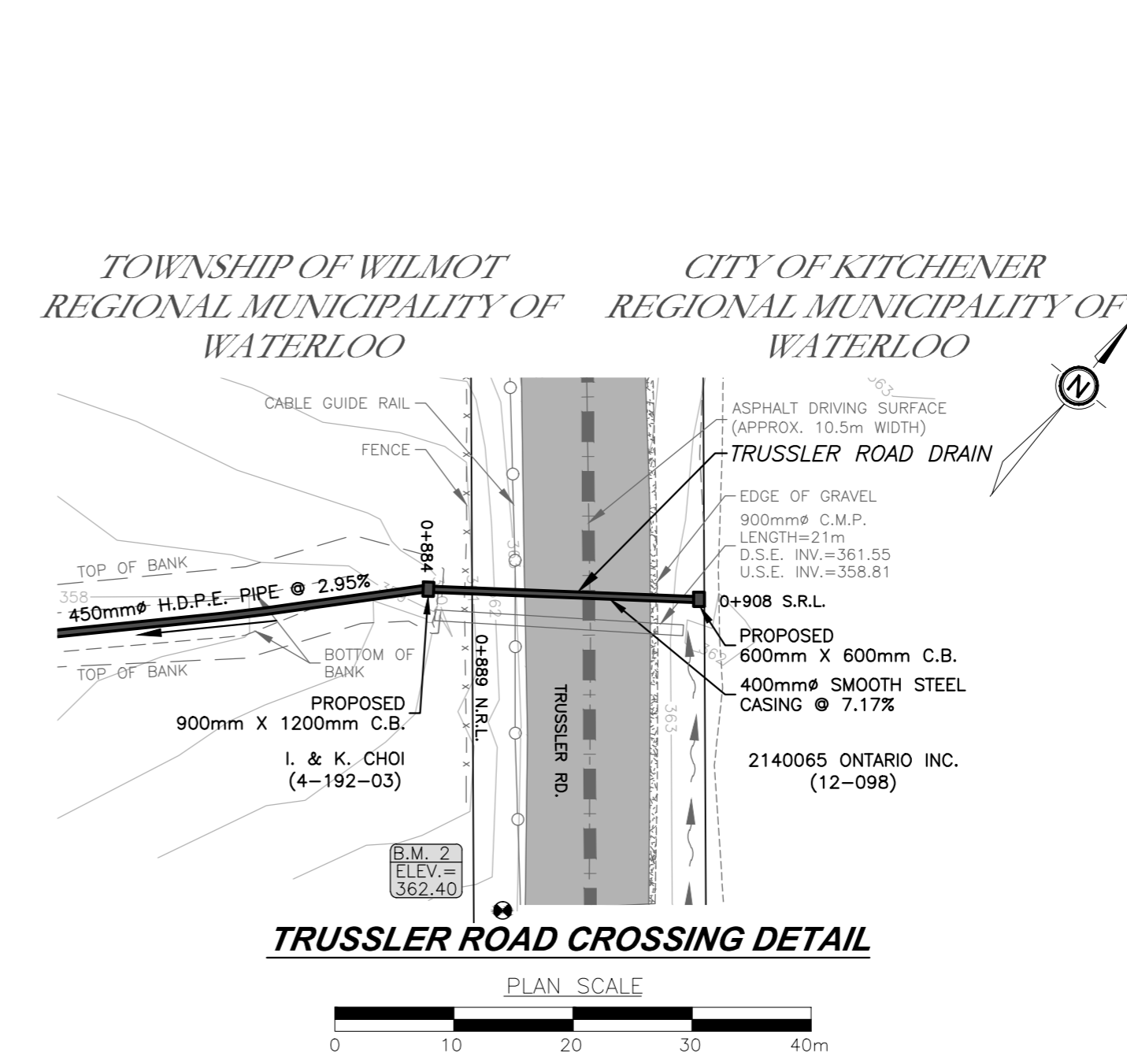
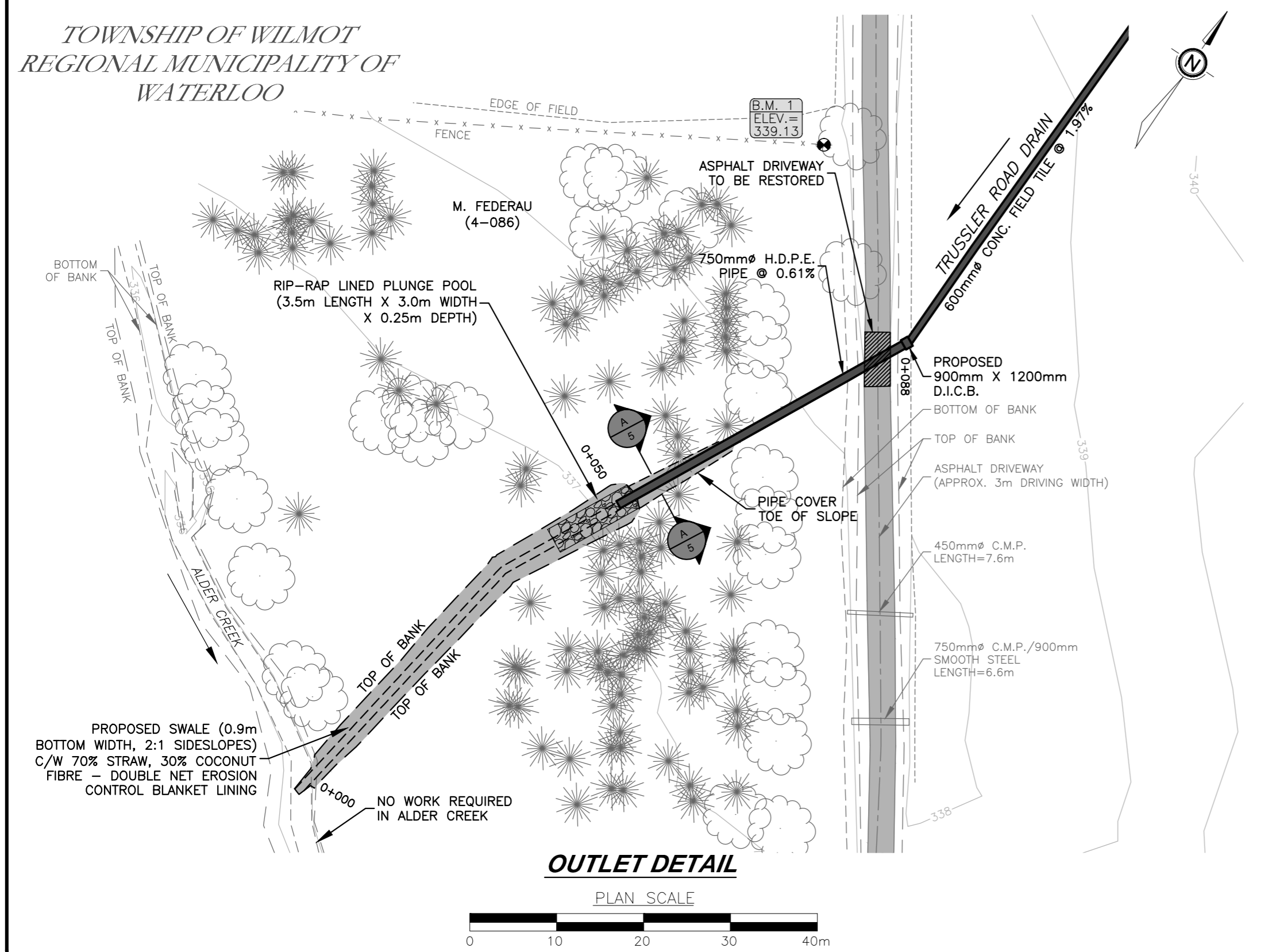
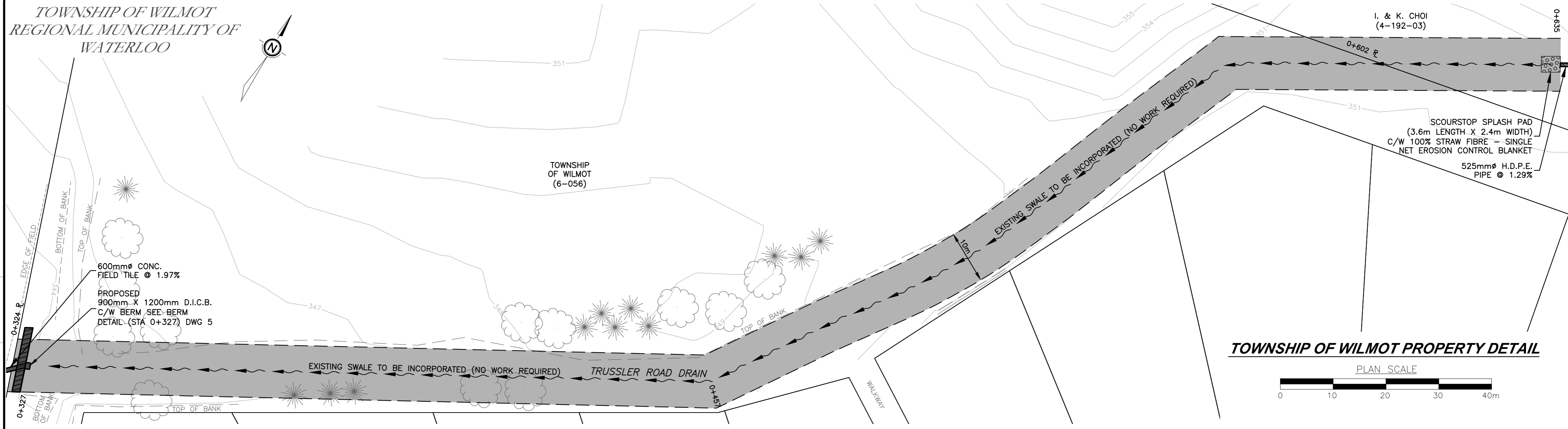
**Profile**



**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR:	DESIGNED BY:	DRAWN BY:	D.C.	CHECKED BY:
W.J.D.	S.B.			
DRAWING SCALE:	DATE:	PROJECT No.	DRAWING No.	
AS NOTED		1419	3 of 5	



**LEGEND:**

	EXISTING MUNICIPAL DRAIN
	INTERIOR/EXTERIOR WATERSHED BOUNDARY
	PROPERTY BOUNDARY
	LOT OR CONCESSION BOUNDARY
	TOWNSHIP BOUNDARY
	EXISTING CATCH BASIN OR JUNCTION BOX
	EXISTING MANHOLE
	MUNICIPAL DRAIN (AREA OF WORK)
	WATERSHED BOUNDARY
	PROPOSED CATCH BASIN OR JUNCTION BOX
	PROPOSED MANHOLE
	BENCHMARK LOCATION
	B.M. 1 ELEV.= 50.00 BENCHMARK No. BENCHMARK ELEVATION

No.	ISSUES AND REVISIONS	DATE	BY
5.	REPORT SUBMISSION	2015-04-29	DEL
4.	INFORMATION MEETING	2015-03-13	DEL
3.	ISSUED FOR REVIEW	2015-02-26	DEL
2.	INFORMATION MEETING	2015-02-13	DEL
1.	ON-SITE MEETING	2014-07-16	DEL

W. J. DIETRICH  
REGISTERED PROFESSIONAL ENGINEER  
PROVINCE OF ONTARIO

TOWNSHIP OF WILMOT

PROJECT: TRUSSLER ROAD MUNICIPAL DRAIN 2015

DRAWING: Details 1

**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

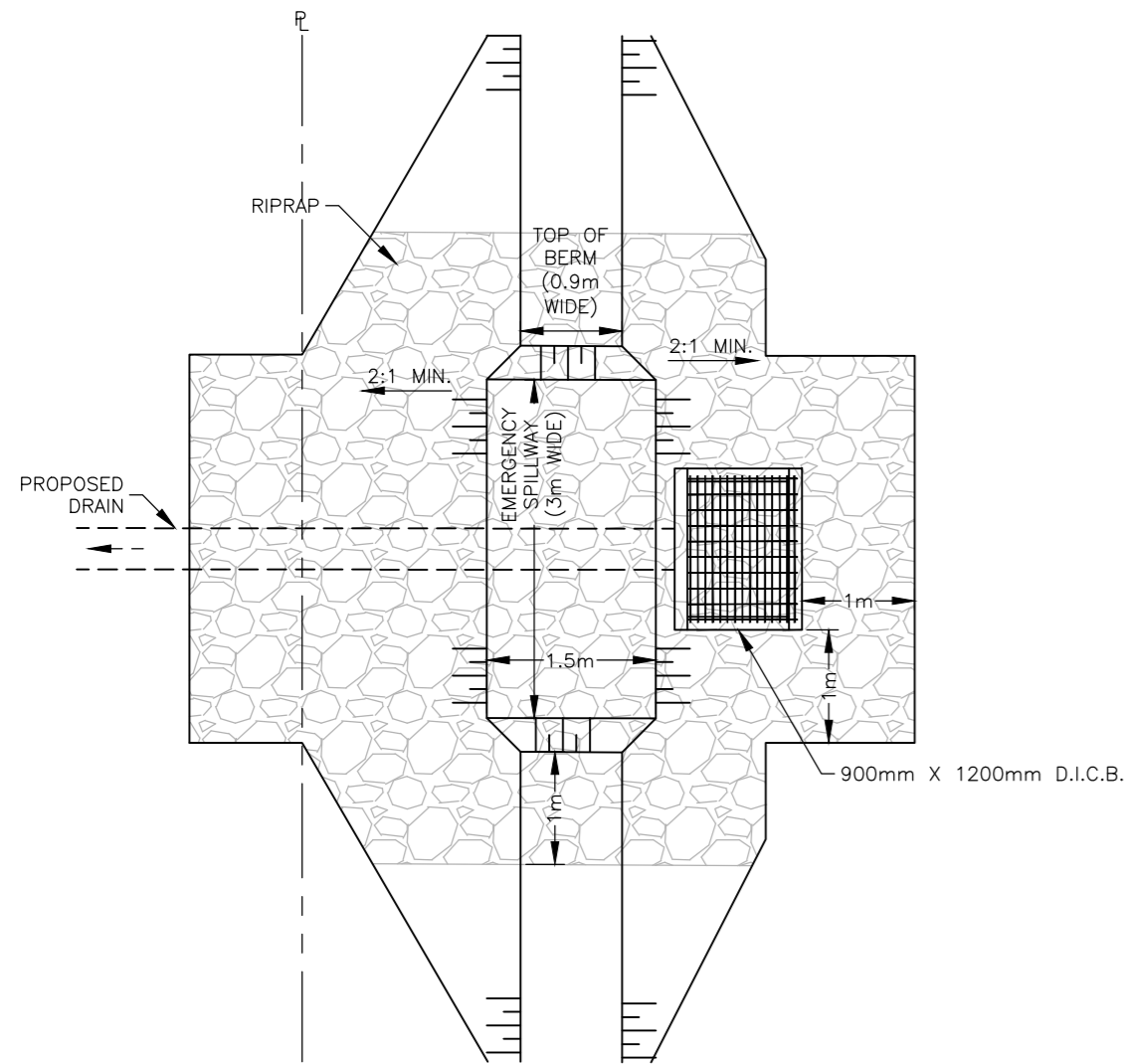
515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR: W.J.D.	DESIGNED BY: S.B.	DRAWN BY: D.C.	CHECKED BY: J.D.
DRAWING SCALE: AS NOTED	DATE:	PROJECT No. 1419	DRAWING No. 4 of 5

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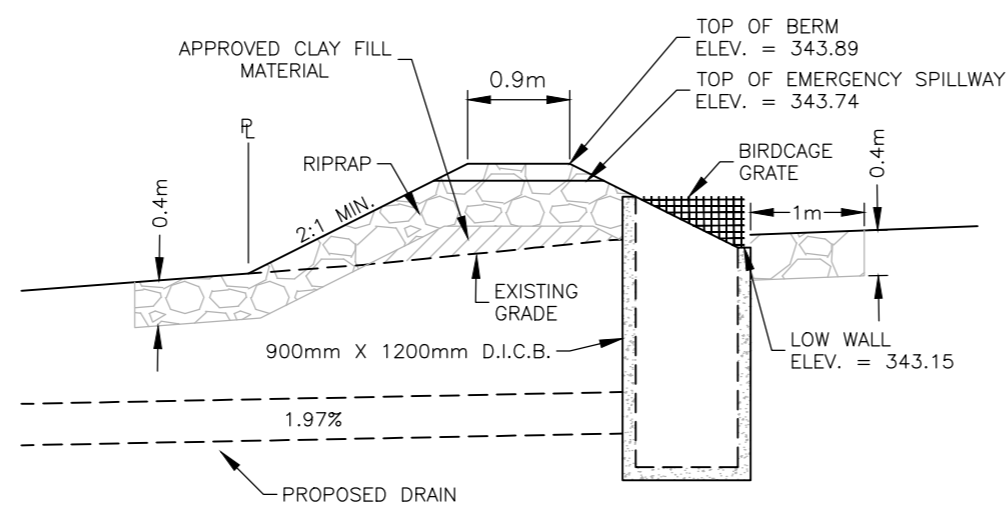




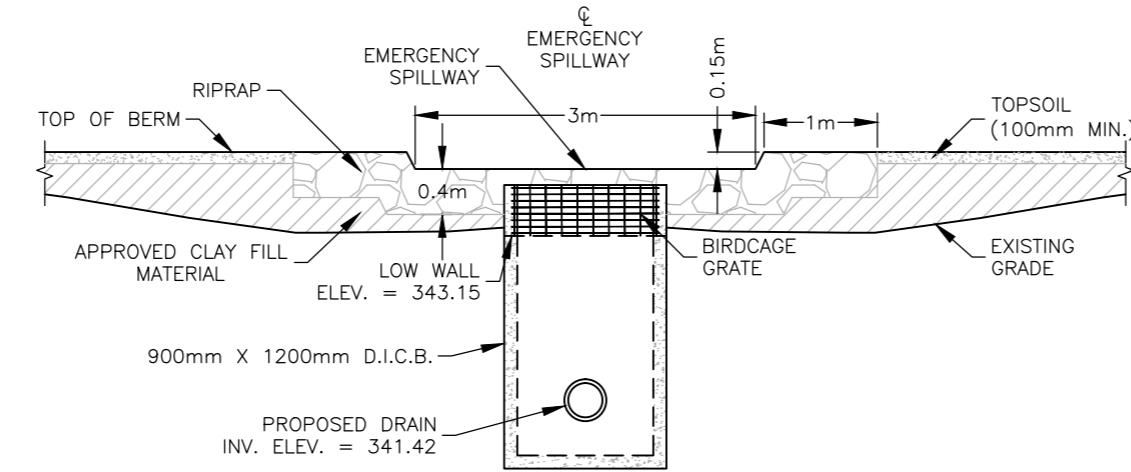
**PLAN**

**BERM DETAIL (STA. 0+327)**

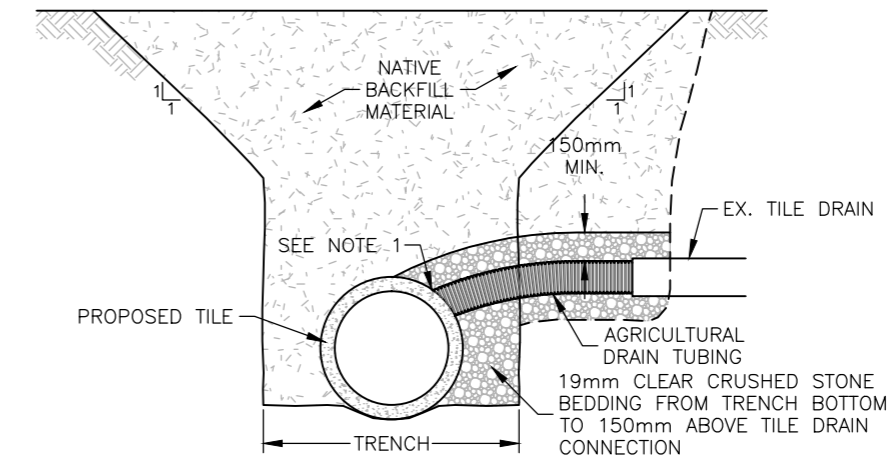
N.T.S.



**SIDE SECTION**



**FRONT SECTION**

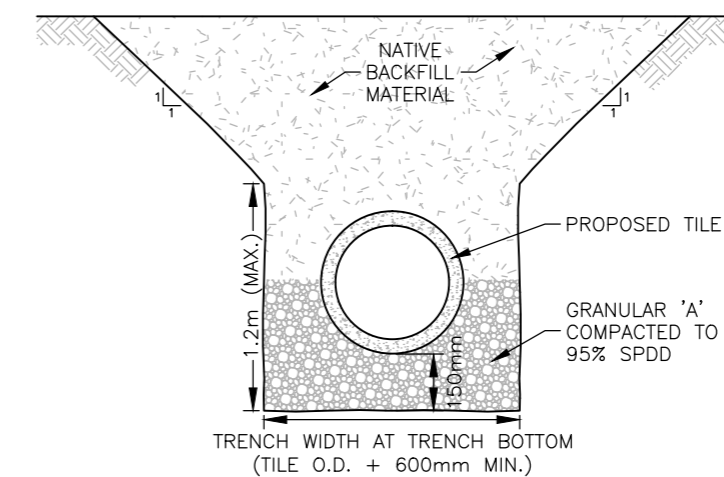


NOTE:

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

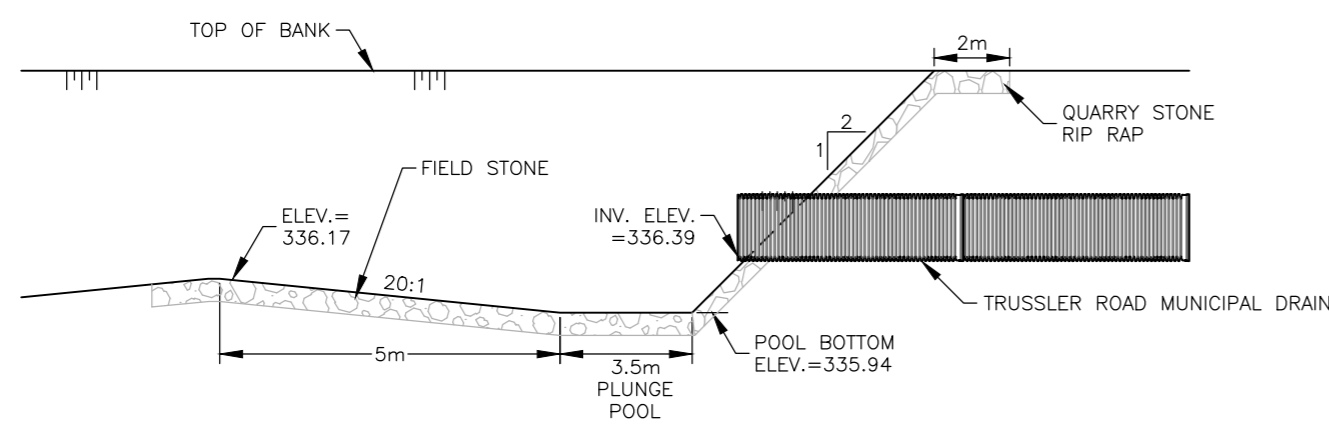
**TYPICAL TILE CONNECTION DETAIL**

N.T.S.



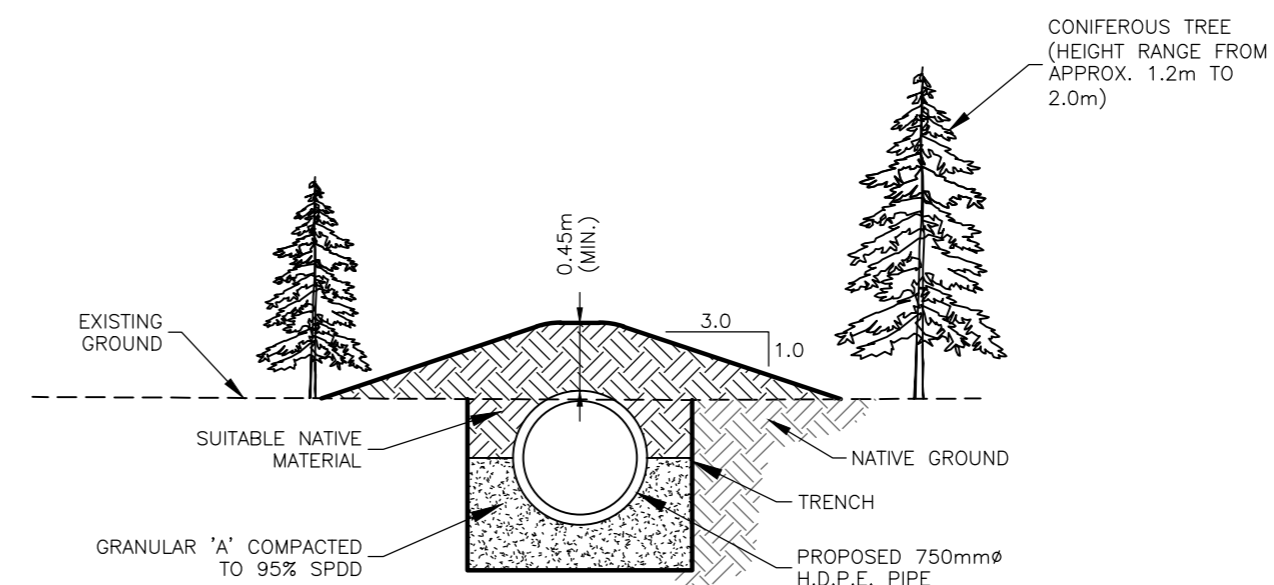
**TYPICAL PIPE INSTALLATION DETAIL**

N.T.S.



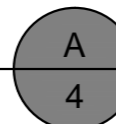
**TYPICAL PLUNGE POOL DETAIL**

N.T.S.



**CROSS SECTION**

N.T.S.



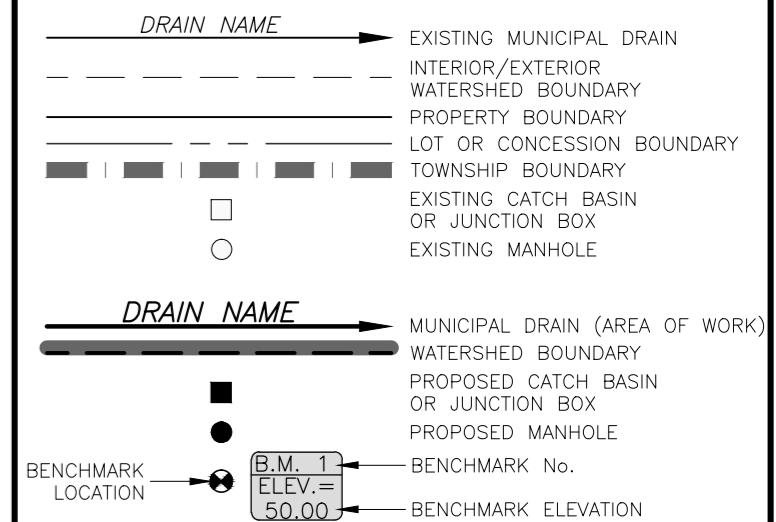
**NOTES:**

1. ALL HIGH DENSITY POLYETHYLENE PIPE SHALL BE BELL & SPIGOT CSA B182.8 JOINING SYSTEMS UNLESS OTHERWISE NOTED.

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BENCHMARK No. 2 ELEV.=362.40  
NAIL IN NORTH FACE OF HYDRO POLE 24 METRES SOUTH OF STA. 0+889

**LEGEND:**



No.	ISSUES AND REVISIONS	DATE	BY
5.	REPORT SUBMISSION	2015-04-29	DEL
4.	INFORMATION MEETING	2015-03-13	DEL
3.	ISSUED FOR REVIEW	2015-02-26	DEL
2.	INFORMATION MEETING	2015-02-13	DEL
1.	ON-SITE MEETING	2014-07-16	DEL



PROJECT: TRUSSLER ROAD MUNICIPAL DRAIN 2015

DRAWING:

Details 2



**DIETRICH ENGINEERING LIMITED**  
CONSULTING ENGINEERS

515 Dotzert Crt., Unit 8, Waterloo, ON, N2L 6A7

PROJ. MGR:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
W.J.D.	S.B.	D.C.	W.J.D.
DRAWING SCALE:	DATE:	PROJECT No.	DRAWING No.
AS NOTED		1419	5 of 5



## ***Township of Wilmot*** **REPORT**

**REPORT NO.:** PW-2015-12

**TO:** Council

**PREPARED BY:** Gary Charbonneau, Director of Public Works

**DATE:** May 25, 2015

**SUBJECT:** Zehr Municipal Drain Construction

### **Recommendation:**

**That the tender submitted by Sebben AG Drainage Systems Ltd. for the construction of the Zehr Municipal Drain in the amount of \$76,061.00, plus HST, be accepted.**

### **Background:**

March 25, 2013 Council accepted the Petition for Drainage Works from Don Zehr and Wendy Cressman Zehr and on May 27, 2013 Dietrich Engineering was appointed by Council as the Engineer for this project.

The Engineer's Report was filed with the Clerk by Dietrich Engineering on February 13, 2015 and Council acknowledged receipt of the report on March 30<sup>th</sup> with the Court of Revision held on April 27<sup>th</sup>.

### **Discussion:**

We received tenders for the construction of the Zehr Municipal Drain and the results, are as follows:

<b><u>Tenderer</u></b>	<b><u>Amount</u></b>
Sebben Ag Drainage Systems Ltd. (Stratford)	\$76,061.00
A.G. Hayter Contracting Ltd. (Parkhill)	\$82,700.00

The Township Drainage Engineer, Dietrich Engineering, has reviewed the tenders and are recommending that the low bidder be awarded the work to construct the Zehr Municipal Drain. It is anticipated that construction of the Zehr Municipal Drain will be completed this summer.

**Strategic Plan Conformity:**

We are an engaged community through communicating municipal matters and we have a prosperous economy which includes a thriving agriculture and agri-business.

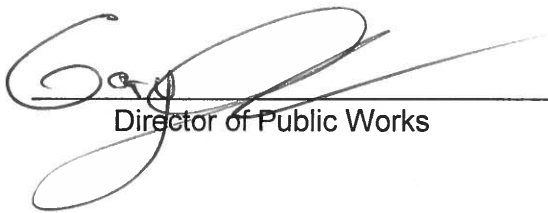
**Financial Considerations:**

Dietrich Engineering has estimated the total costs for the Zehr Municipal Drain which, includes allowances, construction, engineering and contingencies at \$125,500 with the construction costs estimated at \$75,340, plus HST.

The total cost of the drainage works will be assessed to the lands and roads in the Zehr Municipal Drain watershed based on the actual costs using the assessment schedule contained within the Engineer's Report. The Township portion, estimated at approximately \$25,701 will be funded from the General Levy.

**Conclusion:**

The Township Drainage Superintendent has reviewed the tenders submitted and recommends that the work be awarded to Sebben AG Drainage Systems Ltd..



Director of Public Works



Reviewed by CAO

**TOWNSHIP OF WILMOT**

**BY-LAW NO. 2015-33**

**BY-LAW TO FURTHER AMEND BY-LAW NO. 83-38 OF THE TOWNSHIP OF WILMOT BEING A ZONING BY-LAW FOR THE SAID TOWNSHIP OF WILMOT.**

**WHEREAS** The Corporation of the Township of Wilmot deems it desirable to further amend By-law No. 83-38, being a Zoning By-law for the said Township of Wilmot.

**NOW THEREFORE THE MUNICIPAL COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF WILMOT ENACTS AS FOLLOWS:**

1. That the lands described on Schedule "A" and illustrated on Schedule "B" attached to and forming part of this by-law, may be used for the following use in addition to the uses permitted in Section 8.1 of By-law No 83-38, as amended:
  - a) a second dwelling unit self-contained within a residential building – one unit
2. Except as amended by the preceding regulations, the lands described on Schedule "A" attached to and forming part of this by-law and shown on Schedule "B" attached to and forming part of this by-law, shall be subject to all other applicable regulations as set down in By-law No. 83-38, as amended.
3. This by-law shall come into effect on the final passing thereof by the Council of The Corporation of the Township of Wilmot subject to compliance with the provisions of The Planning Act, R.S.O., 1990 and amendments thereto.

READ a first and second time on the 25<sup>th</sup> day of **May, 2015**.

READ a third time and finally passed in Open Council on the 25<sup>th</sup> day of **May, 2015**.

---

MAYOR

---

CLERK

## SCHEDULE "A"

**ALL AND SINGULAR** that certain parcel or tract of land and premises situate, lying and being in the Township of Wilmot, in the Regional Municipality of Waterloo and Province of Ontario being composed of Part of Lot 7, Concession North of Erb's Road in the said Township of Wilmot.

This is Schedule "A" to By-law No. 2015-33.

PASSED this 25<sup>th</sup> day of May, 2015.

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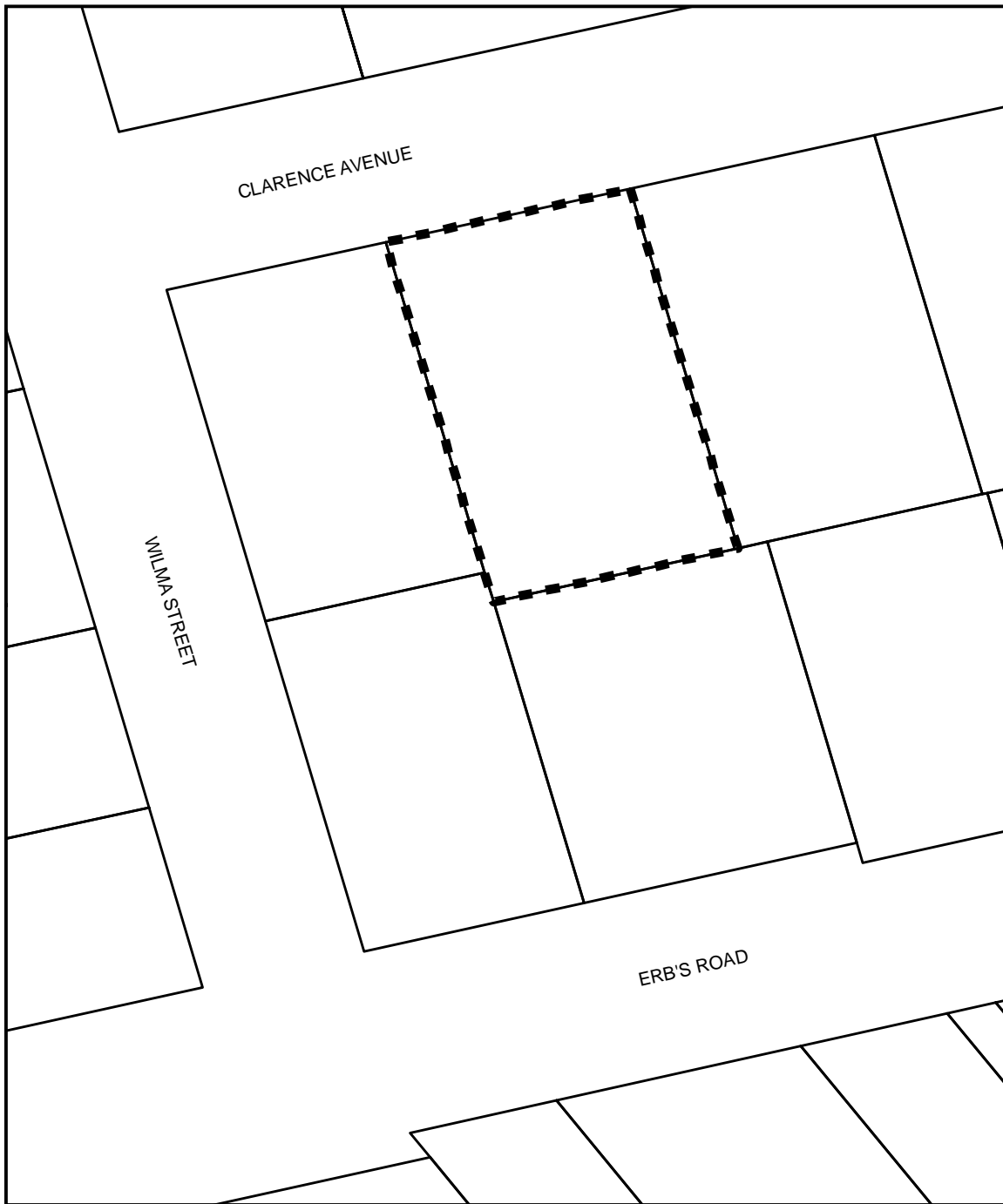
MAYOR

---

CLERK

SCHEDULE "B"  
PART OF LOT 7, CONCESSION NORTH OF ERB'S ROAD  
TOWNSHIP OF WILMOT

SUBJECT LANDS OUTLINED THUS: - - - - -



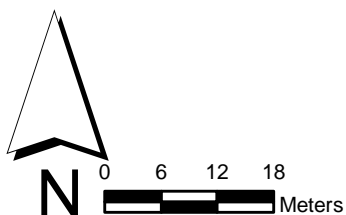
THIS IS SCHEDULE "B" TO BY-LAW NO. 2015-33  
PASSED THIS 25TH DAY OF MAY, 2015.

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MAYOR

---

CLERK



**THE CORPORATION OF THE TOWNSHIP OF WILMOT**

**BY-LAW NO. 2015-15**

**ZEHR MUNICIPAL DRAIN 2015  
BEING A BY-LAW TO PROVIDE FOR DRAINAGE WORKS  
IN THE TOWNSHIP OF WILMOT  
IN THE REGIONAL MUNICIPALITY OF WATERLOO**

**WHEREAS** the requisite number of owners have petitioned the Council of the Township of Wilmot in the Regional Municipality of Waterloo in accordance with the provisions of the Drainage Act, R.S.O., 1990, Chapter D. 17, requesting that the following lands and roads may be drained by drainage works - being Part of lots 26 and 27, Concession North of Blead's Road, Township of Wilmot, Region of Waterloo, and Lot 1, Concession 1, Township of Perth East, County of Perth.

**AND WHEREAS** the Council of the Corporation of the Township of Wilmot in the Regional Municipal of Waterloo has procured a report made by Dietrich Engineering Limited, and said report forms part of this by-law;

**AND WHEREAS** the estimated total cost of constructing the Drainage Works is \$125,500.00;

**AND WHEREAS** the Council is of the opinion that the drainage of the area is desirable;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF WILMOT ENACTS AS FOLLOWS:**

1. The Report dated February 5, 2015 including the schedules are hereby adopted and the Drainage Works as therein indicated and set forth is hereby authorized, and shall be completed in accordance therewith.
2. The Corporation of the Township of Wilmot may borrow on the credit of the Corporation the amount of \$125,500.00, being the amount necessary for the construction of the Drainage Works.
3. All assessments are payable in the first year in which the assessment is imposed less the total amount of:
  - (a) grants received under Section 85 of the Drainage Act;
  - (b) allowances received under Section 29 to 33 of the Drainage Act.
4. This By-law comes into force and effect on the passing thereof and may be cited as the Zehr Municipal Drain 2015.

FIRST READING: March 30, 2015

SECOND READING: March 30, 2015

PROVISIONALLY ADOPTED THIS 30th DAY OF MARCH, 2015.

  
\_\_\_\_\_  
Mayor

  
\_\_\_\_\_  
Clerk

THIRD READING

PASSED THIS DAY OF , 2015 .

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Clerk