AGENDA COMMITTEE OF THE WHOLE ADMINISTRATION & FINANCE

Monday, June 14, 2021, 6:30 PM
Council Chambers and by Zoom
18 Centre Street, Spencerville ON
Contact the Township Office to Register
(613)658-3055

- 1. Call to Order Chair, Mayor Sayeau
- 2. Approval of Agenda
- 3. Disclosure of Pecuniary Interest & the General Nature Thereof
- 4. Business Arising from Previous Committee of the Whole Meeting Minutes (if any)
- 5. Delegations and Presentations
- 6. Discussion Items
- 7. Action/Information Items
 - a. Community Grants Centennial 67' Funding Reallocation
 - b. RBC Financing for Grader
 - c. Annual IT Alignment Report
 - d. OPP Detachment Framework
 - e. Interim Control Bylaw Industrial Park Expansion Lands
 - f. Site Plan Control Agreement Prysmian
- 8. Councillor Inquiries/Notices of Motion
- 9. Mayor's Report
- 10. Question Period
- 11. Closed Session
- 12. Adjournment

MINUTES

COMMITTEE OF THE WHOLE ADMINISTRATION & FINANCE

Monday, May 10, 2021, 6:30 PM Corporation of The Township of Edwardsburgh Cardinal Council Chambers, Spencerville Ontario

PRESENT: Mayor Sayeau

Deputy Mayor Deschamps

Councillor Cameron Councillor Dillabough Councillor Hunter

Jack Bradley, Advisory Member Dave Robertson, Advisory Member

STAFF: Dave Grant, CAO

Rebecca Williams, Clerk Melanie Stubbs, Treasurer

Mike Spencer, Manager of Parks, Recreation & Facilities

1. Call to Order – Chair, Mayor Sayeau

Mayor Sayeau called the meeting to order at 6:30 p.m.

2. Approval of Agenda

Moved by: H. Cameron

Seconded by: T. Deschamps

That the agenda be approved as presented.

Carried

3. Disclosure of Pecuniary Interest & the General Nature Thereof

None.

4. Business Arising from Previous Committee of the Whole Meeting Minutes (if any)

None.

- 5. Delegations and Presentations
 - a. Alantra Leasing Marcus de Winter

Mr. de Winter, President/General Manager, and Ms. de Winter, Marketing, for Alantra Leasing provided Committee with an overview of the company; noting what they produce, available services, locations, past projects, and video examples of ongoing projects. Mr. de Winter noted that they are looking to expand their business into Eastern Ontario, with a 10,000 sqft building, where they will build modular buildings on market demand. Ms. de Winter highlighted some of the benefits of modular buildings.

Members inquired about Alantra's timeline to be fully ready to operate the new facility. Mr. de Winter noted that they have been searching for an investment ready site. Members inquired about Alantra's current purchase and sale agreement with the Town of Prescott. Mr. de Winter noted that they are currently reviewing concerns raised on the condition of soil samples to determine if the area is suitable to develop. Mr. de Winter noted that they may have to opt out of the agreement with Prescott depending on the soil and geotechnical study results. Mr. de Winter noted that he wants to move forward with the project in the Township, as there have already been significant delays at the Prescott location.

It was noted that if Alantra develops within the Township industrial park, they would be hiring 6 new employees, with the possibility of additional employment if they expand the business in the future.

Committee inquired about the timeline to develop the land and have the business running if the Township sold them the land. Mr. de Winter noted that it would mainly depend on how fast the building could be completed, along with drainage requirements, however, he hopes to have the development started in the spring of 2022. He confirmed that the project could be completed by the fall of 2022. Members noted their concerns with businesses purchasing land within the industrial park and then not developing the land. Members suggested that an in person meeting may be scheduled at a future date after the provincial orders are lifted.

6. Discussion Items

a. EORN Gig Project

Committee reviewed the information from EORN and the draft Council motion. Members noted their concerns about the information EORN provided in recent federal grant funding applications. Members noted that large rural areas in Eastern Ontario are left without sufficient internet, and EORN wants to help deliver the internet services, in areas where the bigger internet companies have not delivered the service. Members suggested changes to the draft motion to streamline it, rather than including the statistics from EORN.

7. Action/Information Items

Vacant & Abandoned Buildings Status Update Report

Committee reviewed the report and discussed department workload due to the increasing number of building permits for 2021. Members suggested that additional hours or staff may be necessary in order for the building department to gain compliance under the Vacant and Abandoned Building policy.

b. 2020 Township Surplus

Moved by: J. Bradley

Seconded by: D. Robertson

That Committee recommends that Council approve the proposed 2020 surplus allocation of \$113,900.24 and direct the Treasurer to transfer \$35,000.00 to the Tax Write Off reserve and \$78,900.24 to the Winter Control reserve and further direct the Treasurer to transfer \$47,195.72 into the Spencerville Wastewater Reserve as per audit review.

Carried

c. 2021 PSAB Budget Addendum

Members inquired if the federal/provincial government reviews the Township financial PSAB Addendum report and/or budget when considering granting funding to Township projects. It was noted that the reports shows the financial stability of the Township, which may impact whether or not the federal/provincial governments grant funding.

Moved by: J. Hunter

Seconded by: H. Cameron

That Committee recommends that Council adopt the 2021 PSAB Budget Addendum report which meets the requirements of Regulation 284/09

Carried

d. Purchase of New Phone System

Committee reviewed the report and confirmed that the proposed new system will meet the current and future needs of the Township. It was noted that the new system can handle the expansion of additional staff, while the current system is not able to expand and adapt. Members inquired if the Township sought other quotes. It was noted that staff discussed the request for quote with other telecommunication providers, including Telus, however, the Township only received a quote from Southeastern Telecommunication Services (STS). It was noted that the Township has been working with STS for approximately 12 years and that the procurement policy has been followed when collecting quotes for purchases under \$20,000.

Moved by: H. Cameron

Seconded by: T. Deschamps

That Committee recommends that Council approve the purchase of a replacement telephone system from Southeastern Telecommunication Services in the amount of \$10,674.00 plus non-rebated HST and fund this purchase with modernization funding.

Carried

8. Councillor Inquiries/Notices of Motion

There was a brief discussion on concerns raised by Mr. Bradley with respect to domestic fowl on the privately owned road, Tuttle Point.

9. Mayor's Report

Mayor Sayeau reported the following:

- Ingredion and Greenfield will each contribute \$5,000 towards the Township pools and summer programming for 2021
- Provided an update on Ingredion and Giant Tiger requesting that the health unit set up vaccination clinics at their locations. It was noted that the medical officer has not responded to the request and a follow-up email has been sent to Dr. Stewart
- Health Unit plans to organize a vaccination clinic in Cardinal for persons eligible under the health unit requirements. Briefly highlighted those eligible in the service industries
- Provided update on the sale of the Fahrngruber land. Noted that the deal closed last Thursday. Would the Township still be willing to sell the unopened road allowances.

10. Question Period

None.

11. Closed Session

Moved by: J. Hunter

Seconded by: T. Deschamps

That Committee proceeds into closed session at 8:03 p.m. in order to address a matter pertaining to:

 Section 239(2)(c) Proposed or pending acquisition or disposition of land by the municipality or local board; Specifically: Edwardsburgh Land Bank/Job Site Challenge and Minutes of Closed Session dated April 12, 2021 a. Section 239(2)(c) Proposed or pending acquisition or disposition of land by the municipality or local board; Specifically: Edwardsburgh Land Bank/Job Site Challenge and Minutes of Closed Session dated April 12, 2021

Moved by: J. Hunter

Seconded by: T. Deschamps

That the closed meeting of Committee does now adjourn and the open meeting does now resume at 8:38 p.m.

Carried

12. Report Out of Closed Session

Mayor Sayeau reported that Committee discussed and developed a strategy to proceed during negotiations with IO for the Edwardsburgh Land Bank.

Moved by: T. Deschamps Seconded by: J. Hunter

That Committee receives and approves the closed session minutes dated April 12, 2021.

Carried

13. Adjournment

Chair

Moved by: S. Dillabough Seconded by: J. Hunter

That Committee does now adjourn at 8:39 p.m.

Carried

Clerk



TOWNSHIP OF EDWARDSBURGH CARDINAL ACTION ITEM

Committee: Committee of the Whole – Administration & Finance

Date: June 14, 2021

Department: Administration

Topic: Community Grants – Centennial 67' Funding Reallocation

Purpose: To seek authorization to permit Centennial 67' Parent Council to reallocate funds received through the 2021 Community Grants & Donations program.

Background: Council approved the 2021 Community Grants & Donations by resolution at the regular meeting held on April 26, 2021. The Centennial 67' Public School Parent Council received a grant of \$500.00 to upgrade the water fountain to include a water bottle dispenser. In the interim the school board has purchased and installed the upgraded water fountains, resulting in the Township funding granted to the parent council going unused for the requested purpose.

Centennial 67' Public School Parent Council has submitted a letter requesting that the funds granted by the Township be reallocated to an outdoor kindergarten music wall that the parent council has been planning over a number of months (see attached letter).

Policy Implications: The community grants and donations policy states that "funds bestowed under this program are not transferable between projects or groups without prior Council approval, and must be used for the specific purpose outlined in the application."

Financial Considerations: None. Council already granted Centennial 67' Public School Parent Council \$500.00. If supported, the \$500.00 would simply be utilized for a different project.

Recommendation: That Committee recommends that Council authorize Centennial 67' Public School Parent Council to reallocate the \$500.00 granted under the Township's 2021 Community Grants & Donations program from the upgraded water fountain to the outdoor kindergarten music wall.

Clerk

. (1) illians

To whom it may concern;

I want to start by thanking the Township of Edwardsburgh/Cardinal for their generous grant donation of \$500 towards the water fountain project that Parent Council of Centennial' 67 had originally applied for.

Prior to the grant proposal, the school board had denied the schools request for an upgraded water fountain with a water bottle dispenser attached. Council thought it would be a great next step to helping our school reduce germs being passed around and to help reduce the use of disposable water bottles. Since then, we have found out that the board (I believe through government funding) has agreed to purchase and install each school with one new upgraded water fountain.

Council is hoping, with your approval, to transfer the \$500 that was allotted for the water fountain to be transferred to an outdoor Kindergarten Music Wall that we have been planning. Council, along with Principal Leann Bruley, have been coming up with concepts of how we want to design it. The music wall must be fastened to the existing fence within the Kinder area, and with the current cost of materials, it adds up quickly.

If this is not possible, Council will ensure the return of the cheque to the Township of Edwardsburgh/Cardinal office or destroyed as per you instructions.

Thank you again for all the support you have shown to our school and the members of the community.

Sabrina Winchester
Centennial '67 Parent Council Chair



TOWNSHIP OF EDWARDSBURGH CARDINAL ACTION ITEM

Committee: Administration and Finance

Date: June 14, 2021

Department: Finance

Topic: RBC Financing for Grader

Purpose: To seek Committee's recommendation that Council direct staff to enter into a credit facility agreement with RBC which includes a loan of \$300,192.00 for the 3 years with RBC at 1.73% to fund the purchase of the 2020 Grader.

Background: In 2013, council entered into a credit facility agreement with RBC under Bylaw 2013-05. RBC has requested an updated credit facility agreement due to the age of the previous agreement.

At a special Council meeting held on May 10th, council authorized the purchase of a 2020 Case Grader in the amount of \$300,192.00 and directed staff to finance the purchase with a 3-year loan with RBC.

Policy Implications: Any agreement that goes beyond the term of council requires a bylaw. Bylaw 2013-05 will need to be repealed and replaced.

Financial Considerations: As per Schedule H, the monthly loan repayments will begin on July 14, 2021 in the amount of \$8,562.77. The finance payments due in 2021 in the amount of \$51,376.26 will be funded through the savings from the Hot Mix Resurfacing project budget. Future finance payments will be included in the annual budget until the end of the loan.

Recommendation: That Committee recommends that Council directs staff to draft a bylaw that repeals Bylaw 2013-05 and outlines the current credit facilities agreement which includes a 36-month loan agreement with the Royal Bank of Canada in the amount of \$300,192.00 at an interest rate of 1.73% to fund the purchase of the new grader.

Treasurer

CAO



ONTARIO MUNICIPAL CORPORATIONS STATEMENT BY TREASURER RE BORROWING

	то	
Insert proper same of /funicipality)	Re:	The Corporation of the Township of Edwardsburgh/Cardinal
		in the Province of Ontario (the "Municipality") Twp of Edwardsburgh/Cardinal
		I hereby certify that the following statements are true and correct as of this date.
Refer to the	1.	The budget of the Municipality for the current year Has been adopted. has not been adopted.
stimates for the current year if such have been idopted; if not, efer to estimates if last year.)	2.	The nature and amount of the estimated revenues of the Municipality set forth in the budget of the Municipality adopted for the year 2021 (exclusive of revenues derivable of derived from, a) any borrowing, including through the issue of debentures; b) a surplusincluding arrears of taxes, fees or charges; and c) a transfer from the capital fund, reserve funds or reserves) are \$11,932,539.00, as more particularly set forth in Schedule A hereto.
Attach separate theets for Schedules A, 3, & C)	3.	The nature and amount of revenues of the Municipality for the current year collected to date is \$7,594,567.00, as more particularly set forth in Schedule B hereto.
Delete paragraph Lifestimates for current year not ret adopted.)	4.	The nature and amount of the estimated revenues of the Municipality (exclusive of revenues, derivable or derived from a) any borrowing, including through the issue of debentures; b) a surplus, including arrears of taxes, fees or charges; and c) a transfer from the capital fund, reserve funds or reserves) for the current year not yet collected is as more particularly set forth in Schedule C annexed hereto.
	5.	The total of any amounts borrrowed by the Municipality under Section 407 of the Municipal Act, 2001, as amended in the current year is nil and the total of such amounts that have not been repaid are nil.
		This statement is delivered to the ROYAL BANK OF CANADA pursuant to the provisions of Section 4 of the temporary borrowing by-law of the Municipality dated — as proof that the borrowing from the Bank comtemplated by such by-law has been validly authorized.
		11th June , 2021

Melanie Stubbs Treasurer

[®] Registered trademark of Royal Bank of Canada. RBC and Royal Bank are registered trademarks of Royal Bank of Canada.



Royal Bank of Canada Commercial Financial Services 5501 Manotick Main Street, PO Box 70 Manotick, Ontario K4M 1A2

May 26, 2021

The Corporation of the Township of Edwardsburgh/Cardinal 18 Centre Street Spencerville, Ontario K0E 1X0

We are pleased to confirm the credit facilities described below (the "Credit Facilities") and the lease facilities described below (the "Lease Facilities"), subject to the following terms and conditions. This agreement amends and restates without novation our existing letter agreement dated January 11, 2013 and any amendments thereto. In addition, any amount owing by the Borrower to the Bank under such previous agreement is deemed to be a Borrowing under this agreement. Any and all security that has been delivered to the Bank and is set forth as security in the Security section herein, shall remain in full force and effect, is expressly reserved by the Bank and, unless expressly indicated otherwise, shall apply in respect of all obligations of the Borrower under the Credit Facilities.

The Bank reserves all of its rights and remedies at any time and from time to time in connection with any or all breaches, defaults or Events of Default now existing or hereafter arising under this agreement or any other agreement delivered to the Bank, and whether known or unknown, and this agreement shall not be construed as a waiver of any such breach, default or Event of Default.

DEFINITIONS AND SCHEDULES

The attached schedules are incorporated into this agreement by reference. Schedule "A" contains definitions of capitalized terms used and not otherwise defined in this agreement. Unless otherwise provided, all dollar amounts are in Canadian currency and all accounting terms used in this agreement shall be interpreted in accordance with GAAP.

BORROWER

The Corporation of the Township of Edwardsburgh/Cardinal (the "Borrower")

LENDER

Royal Bank of Canada (the "Bank")

CREDIT FACILITIES

The aggregate of Facility (5) and Facility (6) shall not exceed \$100,000.00 at any time.

SRF #647 005 917 Page 1 of 13

[®] Registered Trademark of Royal Bank of Canada

Facility (1): \$1,000,000.00 revolving demand facility, by way of:

- (a) RBP based loans ("RBP Loans");
- (b) Letters of Guarantee ("LGs").
- Facility (2): \$100,000.00 revolving demand facility, by way of:
 - (a) LGs.
- Facility (3): \$30,817.99 non-revolving term facility, by way of:
 - (a) fixed rate term loans ("FRT Loans").
- Facility (4): \$300,192.00 non-revolving term facility, by way of:
 - (a) FRT Loans.
- Facility (5): \$100,000.00 revolving facility available by way of a series of term loans, by way of:
 - (a) FRT Loans.

LEASE FACILITIES

Facility (6): \$100,000.00 revolving lease line of credit, by way of Leases.

Leases will be governed by this agreement and separate agreements between the Borrower and the Bank. In the event of a conflict between this agreement and a separate agreement, the terms of the separate agreement will govern.

Each use of the Credit Facilities, other than advances made by way of Leases, is a "Borrowing" and all such usages outstanding at any time are "Borrowings". Schedule "C" contains terms and conditions applicable to Borrowings made by way of FRT Loans or LGs which must be complied with.

TERMS OF OTHER FACILITIES

The Credit Facilities and the Lease Facilities are in addition to the following:

(a) VISA Business to a maximum amount of \$90,000.00 which is governed by this agreement and separate agreements between the Borrower and the Bank.

In the event of conflict between this agreement and any separate agreement delivered in connection with any such other facilities, the terms of such separate agreement shall govern.

PURPOSE

Facility (1)

Finance general operating requirements.

Facility (2)

Finance security for obligations of a third party, namely Canadian Grain Commission.

Facility (3)

Long term financing for construction drainage loan.

Facility (4)

Finance the equipment purchase of a grader.

Facility (5)

Finance the acquisition of capital assets.

Facility (6)

Finance the acquisition of capital assets.

AVAILABILITY

Facility (1)

The Borrower may borrow, convert, repay and reborrow up to the amount of this revolving facility, provided:

(a) this facility is made available at the sole discretion of the Bank and the Bank may cancel or restrict availability of any unutilized portion of this facility at any time and from time to time without notice or demand.

Facility (2)

The Borrower may borrow, repay and reborrow up to the amount of this revolving facility, provided:

(a) this facility is made available at the sole discretion of the Bank and the Bank may cancel or restrict availability of any unutilized portion of this facility at any time and from time to time without notice or demand.

Facility (4)

The Borrower may borrow up to the amount of this term facility, provided:

- (a) this facility is made available at the sole discretion of the Bank and the Bank may cancel or restrict availability of any unutilized portion of this facility at any time and from time to time without notice or demand:
- (b) FRT Loans may not be converted or reborrowed and must be repaid on their maturity;
- (c) an Event of Default shall not have occurred and be continuing at the time of any Borrowing.

Facility (5)

The Borrower may borrow, repay and reborrow up to the amount of this facility, provided:

- (a) this facility is made available at the sole discretion of the Bank and the Bank may cancel or restrict availability of any unutilized portion of this facility at any time and from time to time without notice or demand;
- (b) an Event of Default shall not have occurred and be continuing at the time of any Borrowing;
- (c) the amount of any Borrowing does not exceed 75% of the purchase price of the capital asset being financed with such Borrowing:
- (d) the aggregate Borrowings outstanding under this facility plus the aggregate amount owing under Leases advanced under Facility (6) must not exceed \$100,000.00.

Facility (6)

The Borrower may borrow, repay and reborrow up to the amount of this facility, provided:

- (a) this facility is made available at the sole discretion of the Bank and the Bank may cancel or restrict availability of any unutilized portion of this facility at any time and from time to time without notice or demand;
- (b) the determination by the Bank as to whether it will enter into any Lease will be entirely at its sole discretion;

- (c) an Event of Default shall not have occurred and be continuing at the time of advance of any Lease;
- (d) any Lease advanced under this facility must meet the leasing criteria established by the Bank;
- (e) the Borrower is not in default of any covenants or other terms or conditions of this agreement or any other agreement delivered to the Bank;
- (f) the aggregate amount owing under Leases advanced under this facility plus the aggregate Borrowings outstanding under Facility (5) must not exceed \$100,000.00 at any time.

REPAYMENT

Facility (1)

Borrowings under this facility are expected to revolve with operating requirements.

Notwithstanding compliance with the covenants and all other terms and conditions of this agreement, and regardless of the maturities of any outstanding instruments or contracts, Borrowings under this facility are repayable on demand and the Bank may terminate this facility at any time, without notice or demand.

Upon demand or termination, the Borrower shall pay to the Bank all Borrowings outstanding under this facility including, without limitation, an amount equal to the aggregate of the face amounts of all LGs which are unmatured or unexpired, which amount shall be held by the Bank as security for the Borrower's obligations to the Bank in respect of such instruments or contracts. The Bank may enforce its rights to realize upon its security and retain an amount sufficient to secure the Bank for the Borrower's obligations to the Bank in respect of such instruments or contracts.

Facility (2)

Borrowings under this facility are expected to revolve with operating requirements.

Notwithstanding compliance with the covenants and all other terms and conditions of this agreement, and regardless of the maturities of any outstanding instruments or contracts, Borrowings under this facility are repayable on demand and the Bank may terminate this facility at any time, without notice or demand.

Upon demand or termination, the Borrower shall pay to the Bank all Borrowings outstanding under this facility including, without limitation, an amount equal to the aggregate of the face amounts of all LGs which are unmatured or unexpired, which amount shall be held by the Bank as security for the Borrower's obligations to the Bank in respect of such instruments or contracts. The Bank may enforce its rights to realize upon its security and retain an amount sufficient to secure the Bank for the Borrower's obligations to the Bank in respect of such instruments or contracts.

Facility (3)

Borrowings under this facility are repayable by consecutive, blended monthly payments of principal and interest in the amount of \$1,331.00 each based on a remaining amortization period of 25 months, on the 9th day of each month, and the balance of this facility shall be repayable in full on May 9, 2023.

Facility (4)

Borrowings under this facility shall be repayable by consecutive, blended monthly payments of principal and interest in an amount to be determined at drawdown, each based on an amortization period of 3 years, on the same day of each month, commencing 30 days from the date of drawdown and the balance of this facility shall be repayable in full on the last day of a 3 year term.

For any Borrowings that are repayable by scheduled payments, if the scheduled payment date is changed then the maturity date of the applicable Borrowings shall automatically be amended accordingly.

The specific repayment terms for Borrowings under this facility will be agreed to between the Borrower and the Bank at the time of drawdown by way of a Borrowing Request substantially in the form of Schedule "H" provided by the Borrower and accepted by the Bank.

Facility (5)

The Borrower agrees that each Borrowing under this facility shall be repayable by consecutive monthly principal payments or blended payments of principal and interest, based on a maximum amortization of 5 years and a maximum term of 5 years. The specific repayment terms for each new Borrowing will be agreed to between the Borrower and the Bank at the time of the Borrowing by way of a Borrowing Request substantially in the form of Schedule "E" provided to the Bank.

For any Borrowings that are repayable by scheduled payments, if the scheduled payment date is changed then the maturity date of the applicable Borrowings shall automatically be amended accordingly.

INTEREST RATES AND FEES

Facility (1)

RBP Loans: RBP plus 0.00% per annum.

LGs: fee to be quoted by the Bank at the time of issue of each LG, subject to a minimum

fee of \$100.

Facility (2)

LGs: fee to be quoted by the Bank at the time of issue of each LG, subject to a minimum

fee of \$100.

Facility (3)

FRT Loans: 3.53% per annum. Amount eligible for prepayment is 10%.

Facility (4)

FRT Loans: Fixed interest rate to be guoted by the Bank and fixed at the time of Borrowing.

Amount eligible for prepayment is to be determined at drawdown.

Facility (5)

FRT Loans: Fixed interest rate to be guoted by the Bank and fixed at the time of Borrowing.

Amount eligible for prepayment is to be determined at drawdown.

CALCULATION AND PAYMENT OF INTEREST AND FEES

RBP Loans

The Borrower shall pay interest on each RBP Loan, monthly in arrears, on the 26th day of each month or such other day as may be agreed to between the Borrower and the Bank. Such interest will be calculated monthly and will accrue daily on the basis of the actual number of days elapsed and a year of 365 days.

<u>LG Fees</u>

The Borrower shall pay LG fees in advance on a quarterly basis calculated on the face amount of the LG issued and based on the number of days in the upcoming quarter or remaining term thereof and a year of 365 days. LG fees are non-refundable.

FRT Loans

The Borrower shall pay interest on each loan monthly in arrears at the applicable rate on the 26th day of each month or such other date as may be agreed upon between the Bank and the Borrower. Such interest will be calculated monthly and will accrue daily on the basis of the actual number of days elapsed and a year of 365 days.

Limit on Interest

The Borrower shall not be obligated to pay any interest, fees or costs under or in connection with this agreement in excess of what is permitted by law.

Overdue Payments

Any amount that is not paid when due hereunder shall, unless interest is otherwise payable in respect thereof in accordance with the terms of this agreement or the instrument or contract governing same, bear interest until paid at the rate of RBP plus 5% per annum. Such interest on overdue amounts shall be computed daily, compounded monthly and shall be payable both before and after any or all of default, maturity date, demand and judgement.

Equivalent Yearly Rates

The annual rates of interest or fees to which the rates calculated in accordance with this agreement are equivalent, are the rates so calculated multiplied by the actual number of days in the calendar year in which such calculation is made and divided by 365.

Time and Place of Payment

Amounts payable by the Borrower hereunder shall be paid at such place as the Bank may advise from time to time in the applicable currency. Amounts due on a day other than a Business Day shall be deemed to be due on the Business Day next following such day. Interest and fees payable under this agreement are payable both before and after any or all of default, maturity date, demand and judgement.

EXCHANGE RATE FLUCTUATIONS

If, for any reason, the amount of Borrowings and/or Leases outstanding under any facility in a currency other than Canadian currency, when converted to the Equivalent Amount in Canadian currency, exceeds the amount available under such facility, the Borrower shall immediately repay such excess or shall secure such excess to the satisfaction of the Bank.

INCREASED COSTS

If any change in Applicable Laws or the interpretation thereof after the date hereof (i) imposes or increases taxes on payments due to the Bank hereunder (other than taxes on the overall net income of the Bank), (ii) imposes or increases any reserve or other similar requirement or (iii) imposes or changes any other condition affecting the Credit Facilities, and the result of any of the foregoing results in any additional cost to the Bank of making available, continuing or maintaining any of the Credit Facilities hereunder (or maintaining any obligations to make any such Credit Facilities available hereunder) or results in any reduction in the amount of any sum received or receivable by the Bank in connection with this agreement or the Credit Facilities made available hereunder, then from time to time, upon written request of the Bank, the Borrower shall promptly pay to the Bank, such additional amount or amounts as will compensate the Bank for any such additional costs incurred or reduction suffered.

EVIDENCE OF INDEBTEDNESS

The Bank shall open and maintain accounts and records evidencing the Borrowings made available to the Borrower by the Bank under this agreement. The Bank shall record the principal amount of each Borrowing, the payment of principal and interest and all other amounts becoming due to the Bank under this agreement.

The Bank's accounts and records constitute, in the absence of manifest error, conclusive evidence of the indebtedness of the Borrower to the Bank pursuant to this agreement.

The Borrower authorizes and directs the Bank to automatically debit, by mechanical, electronic or manual means, any bank account of the Borrower for all amounts payable by the Borrower to the Bank pursuant to this agreement.

GENERAL ACCOUNT

The Borrower shall establish a current account with the Bank (the "General Account") for the conduct of the Borrower's day to day banking business. If the balance in the General Account:

is a credit, the Bank may apply, at any time in its discretion, the amount of such credit or part thereof, rounded to the nearest \$5,000.00, as a repayment of Borrowings outstanding by way of RBP Loans under Facility (1), or

(b) is a debit, the Bank may, subject to availability, make available a Borrowing by way of an RBP Loan under Facility (1) in an amount, rounded to the nearest \$5,000.00, as is required to place the General Account at not less than a zero balance.

CONDITIONS PRECEDENT

The availability of any Borrowing and/or any Leases is conditional upon the receipt of:

- (a) a duly executed copy of this agreement;
- (b) the security provided for herein, in form and substance satisfactory to the Bank, registered as required to perfect and maintain the security created thereby;
- (c) such certificates, authorizations, resolutions and legal opinions as the Bank may reasonably require;
- (d) such documentation as required by the Bank in respect of any Lease Facilities and/or any Leases, in form and substance satisfactory to the Bank; and
- (e) such financial and other information or documents relating to the Borrower as the Bank may reasonably require.

Additionally:

- (e) all documentation to be received by the Bank shall be in form and substance satisfactory to the Bank;
- (f) no Borrowing under Facility (4) will be made available unless the Bank has received a Borrowing Request from the Borrower substantially in the form of Schedule "H", together with an invoice, bill of sale or cancelled cheque in respect of the equipment being financed with such Borrowing;
- (g) no Borrowing under Facility (5) will be made available unless the Bank has received a Borrowing Request from the Borrower substantially in the form of Schedule "E", at the time of each and every Borrowing.

SECURITY

Security for the Borrowings and all other obligations of the Borrower to the Bank, including without limitation any amounts owing under any Leases, shall include:

- (a) Ontario Municipal Corporations Temporary Borrowing By-Law on the Bank's form 348 for the current year;
- (b) Ontario Municipal Corporations Statement by Treasurer re Borrowing on the Bank's form 349 for the current year;
- (c) Borrowing by-law authorizing the financing granted in the amount of \$2,371,500.00;
- (d) Borrowing by-law authorizing the financing granted in the amount of \$675,000.00;
- (e) Borrowing by-law authorizing the financing granted under Facility (3);
- (f) Borrowing by-law authorizing the financing granted under Facility (4);
- (g) Borrowing by-law authorizing the financing granted under Facility (5).

REPRESENTATIONS AND WARRANTIES

The Borrower represents and warrants to the Bank, that:

- (a) it is duly constituted and validly existing under the *Municipal Act 2001* (Ontario), and is qualified to carry on its operations and activities in all jurisdictions where the nature of its properties, assets or activities make it necessary or desirable to do so;
- (b) it has the capacity to borrow and pledge security in the manner contemplated in this agreement;
- (c) the execution, delivery and performance by it of this agreement have been duly authorized by all necessary actions and approvals and do not violate its constating documents or legislation or any Applicable Laws or agreements to which it is subject or by which it is bound;
- (d) no event has occurred which constitutes, or which, with notice, lapse of time, or both, would constitute, an Event of Default; and
- (e) its indebtedness under this agreement is its direct, unconditional and general indebtedness and (save for its preferred liabilities arising by operation of law) ranks at least pari passu with all its other unsecured and unsubordinated indebtedness.

Representations and warranties are deemed to be repeated as at the time of each Borrowing and/or Lease hereunder.

REPORTING COVENANTS

The Borrower covenants and agrees with the Bank, while this agreement is in effect, to provide the Bank with:

- (a) annual audited financial statements for the Borrower, within 240 days of each fiscal year end:
- (b) annual budget and financial information return for the Borrower, within 240 days of each fiscal year end; and
- (c) such other financial and operating statements and reports as and when the Bank may reasonably require.

GENERAL COVENANTS

The Borrower covenants and agrees with the Bank, while this agreement is in effect:

- (a) to pay all sums of money when due by it under this agreement;
- (b) to provide the Bank with prompt written notice of any event which constitutes, or which, with notice, lapse of time, or both, would constitute an Event of Default;
- (c) to keep its assets fully insured against such perils and in such manner as would be customarily insured by Persons carrying on a similar business or owning similar assets and, in addition, for any buildings located in areas prone to flood and/or earthquake, will insure and keep fully insured such buildings against such perils;
- (d) to file all material tax returns which are to be filed by it from time to time, to pay or make provision for payment of all taxes (including interest and penalties) and Potential Prior-Ranking Claims when due, and to provide adequate reserves for the payment of any tax, the payment of which is being contested;
- (e) to comply in all material respects with all Applicable Laws including, without limitation, all Environmental and Health and Safety Laws;

- (f) not to, without the prior written consent of the Bank, grant, create, assume or suffer to exist any mortgage, charge, lien, pledge, security interest or other encumbrance affecting any of its properties, assets or other rights, except for Permitted Encumbrances;
- (g) not to, without the prior written consent of the Bank, guarantee or otherwise provide for, on a direct, indirect or contingent basis, the payment of any monies or performance of any obligations by any other Person, except as may be provided for herein;
- (h) to provide the Bank with prompt written notice if it merges or amalgamates with any other Person;
- (i) to provide the Bank with prompt written notice of any non-compliance by the Borrower with any Environmental and Health and Safety Laws or any Release from the land of the Borrower of a Contaminant into the natural environment and to indemnify and save harmless the Bank from all liability or loss as a result of an Environmental Activity or any non-compliance with any Environmental and Health and Safety Law;
- (j) to permit the Bank or its representatives, from time to time, i) to visit and inspect the Borrower's premises, properties and assets and examine and obtain copies of the Borrower's records or other information, ii) to collect information from any entity regarding any Potential Prior-Ranking Claims and iii) to discuss the Borrower's affairs with the auditors, counsel and other professional advisers of the Borrower. The Borrower hereby authorizes and directs any such third party to provide to the Bank or its representatives all such information, records or documentation requested by the Bank;
- (k) to provide the Bank with prompt written notice of any request, application or decision made pursuant to the Freedom of Information and Protection of Privacy Act or other applicable freedom of information legislation that relates or may relate in any way to this agreement or any security agreement given in connection therewith;
- (I) it will ensure that its indebtedness under this agreement will rank at least pari passu with all its other unsecured and unsubordinated indebtedness from time to time with the exception of its preferred liabilities arising by operation of law;
- (m) not to use the proceeds of the Credit Facilities for the benefit or on behalf of any Person other than the Borrower.

Nothing contained in the foregoing Covenants sections shall limit any right of the Bank under this agreement to terminate or demand payment of, or cancel or restrict availability of any unutilized portion of, any demand or other discretionary facility made available under this agreement.

EVENTS OF DEFAULT

Without limiting any other rights of the Bank under this agreement, if any one or more of the following events (herein an "**Event of Default**") has occurred and is continuing:

- the Borrower fails to pay when due any principal, interest, fees or other amounts due under this agreement;
- (b) the Borrower breaches any provision of this agreement or any security or other agreement with the Bank or any subsidiary or affiliate of the Bank;
- (c) the Borrower defaults in the payment of any indebtedness to any Person other than the Bank or in the performance or observance of any agreement in respect of any such indebtedness where, as a result of such default, the maturity of such indebtedness is or may be accelerated;
- (d) any representation or warranty made or deemed to have been made herein or in any certificate or security provided for herein shall be false or inaccurate in any materially adverse respect;

- there is, in the opinion of the Bank, a material adverse change in the financial condition or operation of the Borrower;
- (f) the Borrower is unable to pay its debts as such debts become due, or is, or is adjudged or declared to be, or admits to being, bankrupt or insolvent;
- (g) any notice of intention is filed or any voluntary or involuntary case or proceeding is filed or commenced for (i) the bankruptcy, liquidation, winding-up, dissolution or suspension of general operations of the Borrower, or (ii) the composition, re-scheduling, reorganization, arrangement or readjustment of, or other relief from, or stay of proceedings to enforce, some or all of the debts of the Borrower, or (iii) the appointment of a trustee, receiver, receiver and manager, liquidator, administrator, custodian or other official for, all or any significant part of the assets of the Borrower, or (iv) the possession, foreclosure or retention, or sale or other disposition of, or other proceedings to enforce security over, all or any significant part of the assets of the Borrower;
- (h) any secured creditor, encumbrancer or lienor, or any trustee, receiver, receiver and manager, agent, bailiff or other similar official appointed by or acting for any secured creditor, encumbrancer or lienor, takes possession of, or forecloses or retains, or sells or otherwise disposes of, or otherwise proceeds to enforce security over all or any significant part of the assets of the Borrower or gives notice of its intention to do any of the foregoing,

then, in such event, the ability of the Borrower to make further Borrowings under any term facility under this agreement shall immediately terminate and the Bank may, by written notice to the Borrower, declare the Borrowings outstanding under such term facility to be immediately due and payable. Upon receipt of such written notice, the Borrower shall immediately pay to the Bank all Borrowings outstanding under any term facility under this agreement and all other obligations of the Borrower to the Bank in connection with any such term facility under this agreement.

Nothing contained in the foregoing Events of Default section shall limit any right of the Bank under this agreement to terminate or demand payment of, or cancel or restrict availability of any unutilized portion of, any demand or other discretionary facility made available under this agreement.

SUCCESSORS AND ASSIGNS

This agreement shall be binding upon and enure to the benefit of the parties and their respective successors and permitted assigns.

The Bank may assign all or part of its rights and obligations under this agreement to any Person. The rights and obligations of the Borrower under this agreement may not be assigned without the prior written consent of the Bank.

The Bank may disclose to potential or actual assignees confidential information regarding the Borrower (including, any such information provided by the Borrower to the Bank) and shall not be liable for any such disclosure.

GENERAL

Fees, Costs and Expenses

The Borrower agrees to pay the Bank all fees stipulated in this agreement and all fees charged by the Bank relating to the documentation or registration of this agreement and the security provided for herein. In addition, the Borrower agrees to pay all fees (including legal fees), costs and expenses incurred by the Bank in connection with the preparation, negotiation, documentation and registration of this agreement and any security provided for herein and the administration, operation, termination, enforcement or protection of its rights in connection with this agreement and the security provided for herein. The Borrower shall indemnify and hold the Bank harmless against any loss, cost or expense incurred by the Bank if any facility under the Credit Facilities is repaid or prepaid other than on its maturity date. The determination by the Bank of such loss, cost or expense shall be conclusive and binding for all purposes

and shall include, without limitation, any loss incurred by the Bank in liquidating or redeploying deposits acquired to make or maintain any facility.

Review

The Bank may conduct periodic reviews of the affairs of the Borrower, as and when determined by the Bank, for the purpose of evaluating the financial condition of the Borrower. The Borrower shall make available to the Bank such financial statements and other information and documentation as the Bank may reasonably require and shall do all things reasonably necessary to facilitate such review by the Bank.

Potential Prior-Ranking Claims

The Borrower hereby grants its consent (such consent to remain in force as long as this agreement is in effect or any Borrowings and/or Leases are outstanding) to any Person having information relating to any Potential Prior-Ranking Claim arising by any law, statute, regulation or otherwise and including, without limitation, claims by or on behalf of government to release such information to the Bank at any time upon its written request for the purpose of assisting the Bank to evaluate the financial condition of the Borrower.

Set Off

The Bank is authorized, but not obligated, at any time, to apply any credit balance, whether or not then due, to which the Borrower is entitled on any account in any currency at any branch or office of the Bank in or towards satisfaction of the obligations of the Borrower due to the Bank under this agreement. The Bank is authorized to use any such credit balance to buy such other currencies as may be necessary to effect such application.

Electronic Mail and Fax Transmission

The Bank is entitled to rely on any agreement, document or instrument provided to the Bank by the Borrower, by way of electronic mail or fax transmission as though it were an original document. The Bank is further entitled to assume that any communication from the Borrower received by electronic mail or fax transmission is a reliable communication from the Borrower.

Electronic Imaging

The parties hereto agree that, at any time, the Bank may convert paper records of this agreement and all other documentation delivered to the Bank (each, a "Paper Record") into electronic images (each, an "Electronic Image") as part of the Bank's normal business practices. The parties agree that each such Electronic Image shall be considered as an authoritative copy of the Paper Record and shall be legally binding on the parties and admissible in any legal, administrative or other proceeding as conclusive evidence of the contents of such document in the same manner as the original Paper Record.

Non-Merger

The provisions of this agreement shall not merge with any security provided to the Bank, but shall continue in full force for the benefit of the parties hereto.

Amendments and Waivers

No amendment or waiver of any provision of this agreement will be effective unless it is in writing signed by the Borrower and the Bank. No failure or delay, on the part of the Bank, in exercising any right or power hereunder or under any security document shall operate as a waiver thereof.

<u>Severability</u>

If any provision of this agreement is or becomes prohibited or unenforceable in any jurisdiction, such prohibition or unenforceability shall not invalidate or render unenforceable the provision concerned in any other jurisdiction nor invalidate, affect or impair any of the remaining provisions of this agreement.

Judgement Currency

If for the purpose of obtaining judgement in any court in any jurisdiction with respect to this agreement, it is necessary to convert into the currency of such jurisdiction (the **"Judgement Currency"**) any amount due hereunder in any currency other than the Judgement Currency, then conversion shall be made at the

rate of exchange prevailing on the Business Day before the day on which judgement is given. For this purpose "rate of exchange" means the rate at which the Bank would, on the relevant date, be prepared to sell a similar amount of such currency in the Toronto foreign exchange market, against the Judgement Currency, in accordance with normal banking procedures.

In the event that there is a change in the rate of exchange prevailing between the Business Day before the day on which judgement is given and the date of payment of the amount due, the Borrower will, on the date of payment, pay such additional amounts as may be necessary to ensure that the amount paid on such date is the amount in the Judgement Currency which, when converted at the rate of exchange prevailing on the date of payment, is the amount then due under this agreement in such other currency together with interest at RBP and expenses (including legal fees on a solicitor and client basis). Any additional amount due from the Borrower under this section will be due as a separate debt and shall not be affected by judgement being obtained for any other sums due under or in respect of this agreement.

Governing Law

This agreement shall be construed in accordance with and governed by the laws of the Province of Ontario and of Canada applicable therein.

Whole Agreement

This agreement, the security and any other written agreement delivered pursuant to or referred to in this agreement constitute the whole and entire agreement between the parties in respect of the Credit Facilities. There are no verbal agreements, undertakings or representations in connection with the Credit Facilities.

Joint and Several

Where more than one Person is liable as Borrower for any obligation under this agreement, then the liability of each such Person for such obligation is joint and several with each other such Person.

Counterpart Execution

This agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together constitute one and the same instrument.

<u>Time</u>

Time shall be of the essence in all provisions of this agreement.

Acceptance

This offer is open for acceptance until June 25, 2021, after which date it will be null and void, unless extended in writing by the Bank.

Please confirm your acceptance of this agreement by signing the attached copy of this letter in the space provided below and returning it to your account manager.

Yours truly,

Per:

Name: Mike Cussen

Fitle: Vice President. Business Credit

/kb/gw/mw

We acknowledge and accept the foregoing terms and conditions as of, 20				
THE CORPORATION OF THE TOWNSHIP OF EDWARDSBURGH/CARDINAL				
y: ame: tle:				
y: ame: tle:				
We have authority to bind the Borrower.				

Schedule "A" to the agreement dated May 26, 2021, between The Corporation of the Township of Edwardsburgh/Cardinal, as Borrower, and Royal Bank of Canada, as the Bank.

DEFINITIONS

For the purpose of this agreement, the following terms and phrases shall have the following meanings:

- "Applicable Laws" means, with respect to any Person, property, transaction or event, all present or future applicable laws, statutes, regulations, rules, policies, guidelines, rulings, interpretations, directives (whether or not having the force of law), orders, codes, treaties, conventions, judgments, awards, determinations and decrees of any governmental, quasi-governmental, regulatory, fiscal or monetary body or agency or court of competent jurisdiction in any applicable jurisdiction;
- **"Business Day"** means a day, excluding Saturday, Sunday and any other day which shall be a legal holiday or a day on which banking institutions are closed throughout Canada;
- "Contaminant" includes, without limitation, any pollutant, dangerous substance, liquid waste, industrial waste, hazardous material, hazardous substance or contaminant including any of the foregoing as defined in any Environmental and Health and Safety Law;
- **"Environmental Activity"** means any activity, event or circumstance in respect of a Contaminant, including, without limitation, its storage, use, holding, collection, purchase, accumulation, assessment, generation, manufacture, construction, processing, treatment, stabilization, disposition, handling or transportation, or its Release into the natural environment, including movement through or in the air, soil, surface water or groundwater;
- "Environmental and Health and Safety Laws" means all Applicable Laws relating to the environment or occupational health and safety, or any Environmental Activity;
- "GAAP" means, Canadian Generally Accepted Accounting Principles, as appropriate, for publicly accountable enterprises, private enterprises, not-for-profit organizations, pension plans and in accordance, as appropriate, with Public Sector Accounting Standards for government organizations in effect from time to time, applied on a consistent basis from period to period. All financial statements and/or reports shall be prepared using one of the above bases of presentation, as appropriate. Except for the transition of accounting standards in Canada, any change in accounting principles or the application of accounting principles is only permitted with the prior written consent of the Bank;
- "Lease" means an advance of credit by the Bank to the Borrower by way of an equipment lease, a conditional sales contract, or pursuant to an Interim Funding Agreement or an Agency Agreement, in each case issued to the Borrower by the leasing division of the Bank;
- "Letter of Guarantee" or "LG" means a documentary credits issued by the Bank on behalf of the Borrower for the purpose of providing security to a third party that the Borrower or a person designated by the Borrower will perform a contractual obligation owed to such third party;
- "Permitted Encumbrances" means, in respect of the Borrower:
 - (i) liens arising by operation of law for amounts not yet due or delinquent, minor encumbrances on real property such as easements and rights of way which do not materially detract from the value of such property, and security given to municipalities and similar public authorities when required by such authorities in connection with the operations of the Borrower in the ordinary course of business; and
 - (ii) security granted in favour of the Bank;

- "Person" includes an individual, a partnership, a joint venture, a trust, an unincorporated organization, a company, a corporation, an association, a government or any department or agency thereof, and any other incorporated or unincorporated entity;
- "Potential Prior-Ranking Claims" means all amounts owing or required to be paid, where the failure to pay any such amount could give rise to a claim pursuant to any law, statute, regulation or otherwise, which ranks or is capable of ranking in priority to the Bank's security or otherwise in priority to any claim by the Bank for repayment of any amounts owing under this agreement;
- "RBP" and "Royal Bank Prime" each means the annual rate of interest announced by the Bank from time to time as being a reference rate then in effect for determining interest rates on commercial loans made in Canadian currency in Canada;
- "Release" includes discharge, spray, inject, inoculate, abandon, deposit, spill, leak, seep, pour, emit, empty, throw, dump, place and exhaust, and when used as a noun has a similar meaning.

Schedule "C" to the agreement dated May 26, 2021, between The Corporation of the Township of Edwardsburgh/Cardinal, as Borrower, and Royal Bank of Canada, as the Bank.

BORROWING CONDITIONS

Borrowings made by way of FRT Loans or LGs will be subject to the following terms and conditions:

LGs:

- (a) each LG shall expire on a Business Day and shall have a term of not more than 365 days;
- (b) at least 2 Business Days prior to the issue of an LG, the Borrower shall execute a duly authorized application with respect to such LG and each LG shall be governed by the terms and conditions of the relevant application for such contract;
- (c) an LG may not be revoked prior to its expiry date unless the consent of the beneficiary of the LG has been obtained;
- (d) any LG issued under a term facility must have an expiry date on or before the maturity date of the term facility, unless otherwise agreed by the Bank; and
- (e) if there is any inconsistency at any time between the terms of this agreement and the terms of the application for LG, the terms of the application for LG shall govern.

FRT Loans:

- (a) each FRT Loan shall be for a term of 1, 2, 3, 4 or 5 years, provided that the maturity date of any FRT Loan issued under any term facility shall not extend beyond the maturity date of the term facility:
- (b) the Borrower shall select an amount eligible for prepayment of 10% or 0% for each new FRT Loan prior to the advance of such FRT Loan;
- (c) each FRT Loan shall be in an amount not less than \$10,000; and
 - provided an Event of Default shall not have occurred and be continuing, the Borrower may prepay Borrowings made by way of FRT Loans on a non-cumulative basis up to the percentage, as selected by the Borrower for each FRT Loan, of the outstanding principal balance on the day of prepayment without fee or premium once per year during the 12 month period from each anniversary date of the Borrowing. Any prepayment of Borrowings by way of FRT Loans prior to the maturity date, in whole or in part (in excess of any prepayment explicitly permitted in this Agreement), requires an amendment of the terms of this Agreement. An amendment to permit such a prepayment requires the Bank's prior written consent. The Bank may provide its consent to an amendment to permit a prepayment upon satisfaction by the Borrower of any conditions the Bank may reasonably impose, including, without limitation, the Borrower's agreement to pay the Prepayment Fee as defined below.

The Prepayment Fee will be calculated by the Bank as the sum of:

a) the greater of:

- (i) the amount equal to 3 months' interest payable on the amount of the FRT Loan Borrowings being prepaid, calculated at the interest rate applicable to the FRT Loan Borrowings on the date of prepayment; and
- (ii) the present value of the cash flow associated with the difference between the Bank's original cost of funds for the FRT Loan and the current cost of funds for a loan with a term substantially similar to the remaining term of the FRT Loan and an amortization period substantially similar to the remaining amortization period of the FRT Loan, each as determined by the Bank on the date of such prepayment;

plus:

b) foregone margin over the remainder of the term of the FRT Loan. Foregone margin is defined as the present value of the difference between the Bank's original cost of funds for the FRT Loan and the interest that would have been charged to the Borrower over the remaining term of the FRT Loan;

plus:

c) a processing fee.

The Prepayment Fee shall also be payable by the Borrower in the event that the Bank demands repayment of the outstanding principal of the FRT Loan on the occurrence of an Event of Default. The Borrower's obligation to pay the Prepayment Fee will be in addition to any other amounts then owing by the Borrower to the Bank, will form part of the loan amount and will be secured by the Security described herein.

Schedule "E" to the agreement dated May 26, 2021, between The Corporation of the Township of Edwardsburgh/Cardinal, as Borrower, and Royal Bank of Canada, as the Bank.

REVOLVING FACILITY AVAILABLE BY WAY OF A SERIES OF TERM LOANS

FACILITY (____) BORROWING REQUEST

The Borrower hereby requests the following be	established under Facility ():
Amount of Borrowing:	\$
Date of Borrowing:	
Selected Amortization:	
Borrowing Option:	
Interest Rate (per annum)/ Acceptance Fee (per annum):	
Payment Amount:	\$
Payment Type:	Blended Principal plus Interest
Payment Frequency	weekly bi-weekly semi-monthly monthly quarterly semi-annual annual
First Payment due date:	
Maturity Date: (Date Borrowing repayable in full)	
Amount Eligible for Prepayment of FRT Loan	0% 10%
Dated thisday of	_, 20
THE CORPORATION OF THE TOWNSHIP OF	EDWARDSBURGH/CARDINAL
Per:	
Name:	
Title:	
SRF# 647005917	

Page 1 of 1

Schedule "H" to the agreement dated May 26, 2021, between The Corporation of the Township of Edwardsburgh/Cardinal, as Borrower, and Royal Bank of Canada, as the Bank.

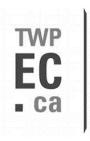
NON-REVOLVING TERM FACILITY

BORROWING REQUEST

The Borrower hereby requests the following be established under Facility (______):

	<u> </u>
Date of Borrowing	June 14, 2021
Amount of Borrowing:	\$ 300, 192,00
Amortization (in months):	36
Selected Term (in months):	36
(Borrowing repayable in full on the last day of the Term)	
Payment Amount:	\$8562.77
Payment Frequency:	monthly
Selected Interest Rate (per annum)/Acceptance Fee (per annum):	1.73 % RBP + %
Selected Payment Type:	Blended (Principal V Principal plus Interest and Interest)
First Payment Due Date:	July 14. 2021.
Amount Eligible for Prepayment of FRT Loans:	0% 10%
Dated this 14 day of June, 20.	21.
THE CORPORATION OF THE TOWNSHIP OF E	
Per:	
I/We have the authority to bind the Borrower	
SRF# 647005917	

Page 1 of 1



TOWNSHIP OF EDWARDSBURGH CARDINAL INFORMATION ITEM

Committee: Committee of the Whole – Administration Finance

Date: June 14, 2021

Department: Administration

Topic: IT Alignment Report

Background: The latest alignment report received on May 14, 2021 from ONServe indicates the following general areas are protected and/or meet with best practices:

- Infrastructure (server room, remote sites, Internet speed)
- Network devices (printers, warranties, wireless Internet access, router)
- Workstations (administration)
- Servers (service packs, physical age, server hardware management)
- Active Directory
- Password Policy
- Email Administration
- System Security (Spam, Anti-virus, Anti-malware, Windows, Remote/VPN)
- Backup (Software, redundancy)
- Warranty and Maintenance
- Group Policy (account and session lockout)

The details contained within the alignment report are for internal purposes and not disclosed or discussed in public.

The plans and policies associated with IT are dynamic documents and require regular refinements and adjustments.

CAO



TOWNSHIP OF EDWARDSBURGH CARDINAL ACTION ITEM

Committee: Committee of the Whole – Administration Finance

Date: June 14, 2021

Department: Administration

Topic: Grenville County OPP Detachment Board Proposal

Purpose: To receive approval to jointly submit the Grenville County Detachment Board proposal, with partnering municipalities, to the Solicitor General on or before June 28, 2021 and direct staff to work with the partnering board municipalities to develop terms of reference for the board.

Background: The following information is provided from the background summary of the attached proposal.

In 2019, the Ontario Legislature passed Bill 68, the *Comprehensive Ontario Police Services Act*, which made some significant changes to two key priorities – improving governance and providing some allowance for the role that civilians play in delivering public safety and security.

On March 18, 2021, Solicitor General Sylvia Jones issued a letter to the heads of municipal councils across the Province advising of the new OPP detachment board framework and the process to submit a formal proposal to establish detachment boards that best reflect community and local needs.

On April 21, 2021, the Mayor of the Municipality of North Grenville, Nancy Peckford, hosted a meeting with the Mayors of the other partner municipalities that currently comprise the Grenville County OPP Detachment. Representatives from the existing Police Services Boards of the respective municipalities were also in attendance. At this meeting, the parties reached a consensus with respect to the proposed configuration for the new OPP Detachment Board. Specifically, it was agreed that a model incorporating the following 3 detachment boards will best reflect the community and local needs of the member municipalities:

- 1. North Grenville
- 2. Prescott
- 3. Augusta, Merrickville-Wolford & Edwardsburgh-Cardinal

The partner municipalities have determined that a three-detachment board model is the best model to extend governance to the respective communities based on the unique and individual concerns and priorities of each. The justification for the division of the proposed boards is based upon the geography and population/demographics of each of the municipalities, along with the differences between call volumes and subject matter of calls attributable to each of the municipalities.

The division of the Grenville Detachment into three distinct detachment boards will allow for better identification and definition of key priorities and their drivers, resulting in more effective policing responsive to the unique concerns of each municipality. With a more defined and targeted approach, public consultation should result in a rational outcome to defining community satisfaction with police services and implementing community feedback to assist with the provision of adequate and effective policing services.

We are pleased to be given the opportunity to submit this joint proposal to the provincial government setting out our proposed respective board boundaries and the size and composition of the respective boards.

Next steps include supporting and jointly submitting the proposal followed by the partnering board municipalities developing terms of reference for the board structure. Terms of reference would include but not limited to administration and communication support, contact information and cost sharing.

Policy Implications: Our proposal is required to be submitted to the Solicitor General on or before June 28, 2021 for consideration and approval. However, if a proposal does not meet the minimum requirements set by the ministry or a proposal is not submitted, and/or if a detachment is unable to come to a consensus, the ministry will determine the composition of the detachment board(s).

Financial Considerations: No financial costs associated with submitting the proposal. There will be costs associated with operating a board and these costs will be better defined once the terms of reference are developed.

Recommendation: That Committee recommends that Council endorses the joint submission of the Grenville County Detachment Board proposal to the Solicitor General on or before June 28, 2021 and direct staff to work with partnering board municipalities to develop terms of reference for the board and return for Council approval.

CAO

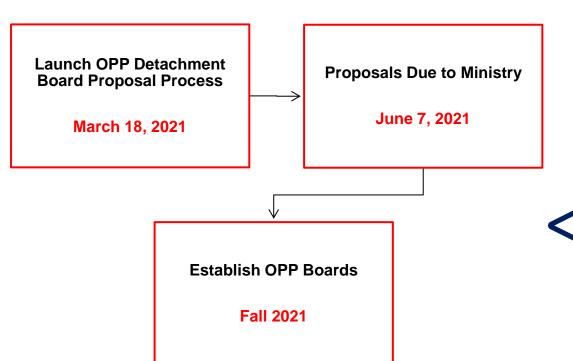


CONTEXT

- Ontario passed the Comprehensive Ontario Police Services Act, 2019 (Bill 68) and established the Community Safety and Policing Act, 2019 (CSP) which, once in force, will repeal the Police Services Act, 1990 (PSA).
- Section 67 of the CSPA requires there be an Ontario Provincial Police (OPP) detachment board, or more than one OPP detachment board, for each detachment of the OPP that provides policing in a municipality or in a First Nation community.
- The Ministry is required to develop a regulation related to the composition of each OPP detachment board. To achieve this, the ministry has developed an "OPP Detachment Board Framework".



TIMELINES





FRAMEWORK

- The new **OPP Detachment Board Framework** will provide civilian governance to 326 municipalities and 43 First Nations including those that:
 - Are directly policed by the OPP;
 - o Employ their own First Nations Constables but receive administrative support from the OPP; and
 - o Receive "OPP Dedicated" policing (i.e. North Caribou Lake and Wapekeka First Nation).
- By enhancing civilian governance, the **OPP Detachment Board Framework** under the CSPA will:
 - Ensure each municipality and First Nation receiving OPP services and supports has an opportunity to represent their local perspectives, needs, and priorities; and
 - o Provide opportunities for municipalities and First Nations to collaborate on efforts to improve community safety.



PROCESS



- To ensure the objectives of the **OPP Detachment Board Framework** are met, the ministry has developed a flexible approach that allows municipalities and First Nations to determine the preferred composition of their detachment board(s) by submitting a proposal using a digital form provided by the ministry.
 - o Link to Digital Form: OPP Board Proposal Form
- Municipalities and First Nations within a detachment will be required to work together to develop and submit **one proposal** indicating the composition of their board(s). The proposal must meet the minimum composition requirements established by the ministry (See Page 2 & Qs and As).
- Municipalities and First Nations will not be required to identify the names of the individuals that will be participating on the
 detachment board but will be required to identify the number of seats each municipality and First Nation will be allocated on the
 detachment board as well as the number of community representatives and provincial appointments.
- The ministry will work with each municipality and First Nation to obtain outstanding information and provide support to ensure each detachment submits a completed proposal. However, a proposal does not meet the minimum requirements set by the ministry or a proposal is not submitted, and/or if a detachment is unable to come to a consensus, the ministry will determine the composition of the detachment board(s).
- The ministry is offering virtual information sessions for municipalities and First Nation communities to address outstanding questions and clarify concerns related to the proposal requirements and process, upon request.





✓ OPP DETACHMENT BOARD COMPOSITION REQUIREMENTS

MINIMUM REQUIREMENTS

Minimum Size	5 members
Maximum Size	None
Waxiiiuiii Oize	None
Community Representatives	 20% Community Representation Province to appoint community representative(s) if municipal council/band council fail to appoint representatives by joint resolution.
Provincial Appointments	20% Provincial Appointees



General Information/OPP Detachment Board Proposal Process	Community Safety and Intergovernmental Policy Branch Joanna Reading (<u>Joanna.Reading@ontario.ca</u>)	
Civilian Governance Options for First Nations	Indigenous Engagement Unit Ashley O'Connell (Ashley.OConnell@ontario.ca)	

Grenville County Detachment Board Proposal

In 2019, the Ontario Legislature passed Bill 68, the *Comprehensive Ontario Police Services Act*, which made some significant changes to two key priorities – improving governance and providing some allowance for the role that civilians play in delivering public safety and security.

On March 18, 2021, Solicitor General Sylvia Jones issued a letter to the heads of municipal councils across the Province advising of the new OPP detachment board framework and the process to submit a formal proposal to establish detachment boards that best reflect community and local needs.

On April 21, 2021, the Mayor of the Municipality of North Grenville, Nancy Peckford, hosted a meeting with the Mayors of the other partner municipalities that currently comprise the Grenville County OPP Detachment. Representatives from the existing Police Services Boards of the respective municipalities were also in attendance. At this meeting, the parties reached a consensus with respect to the proposed configuration for the new OPP Detachment Board. Specifically, it was agreed that a model incorporating the following 3 detachment boards will best reflect the community and local needs of the member municipalities:

- 1. North Grenville
- 2. Prescott
- 3. Augusta, Merrickville-Wolford & Edwardsburgh-Cardinal

The partner municipalities have determined that a three-detachment board model is the best model to extend governance to the respective communities based on the unique and individual concerns and priorities of each. The justification for the division of the proposed boards is based upon the geography and population/demographics of each of the municipalities, along with the differences between call volumes and subject matter of calls attributable to each of the municipalities.

The division of the Grenville Detachment into three distinct detachment boards will allow for better identification and definition of key priorities and their drivers, resulting in more effective policing responsive to the unique concerns of each municipality. With a more defined and targeted approach, public consultation should result in a rational outcome to defining community satisfaction with police services and implementing community feedback to assist with the provision of adequate and effective policing services.

We are pleased to be given the opportunity to submit this joint proposal to the provincial government setting out our proposed respective board boundaries and the size and composition of the respective boards.

Introduction

Current Framework

In the United Counties of Leeds and Grenville, the City of Brockville and the Town of Gananoque each maintain their own police force. Police services in the remainder of the communities in the Counties are provided by the OPP, either through the Leeds Detachment or the Grenville Detachment.

The current Grenville Detachment is comprised of 5 municipalities: the Municipality of North Grenville, Augusta Township, Edwardsburgh-Cardinal Township, the Village of Merrickville-Wolford, and the Town of Prescott.

Each of these municipalities is sufficiently different from the other and each has distinctly different priorities, objectives, and challenges in the delivery of policing services.

Each of the Municipality of North Grenville, Augusta Township, the Village of Merrickville-Wolford, and the Town of Prescott have established police service boards.



Recent legislation will replace the current Police Services Board model with Ontario Provincial Police Detachment Boards

The Province passed the *Ontario Comprehensive Police Services Act* which, in turn, established the *Community Safety and Policing Act, 2019.* This Act, once in force, will repeal the *Police Services Act* and consequently the police service boards established under that Act.

To replace these police service boards, the Act requires that a minimum of one OPP detachment board be established for each OPP detachment.

The OPP detachment boards are intended to provide civilian governance to each of the 326 municipalities and 43 First Nations that receive OPP services and to ensure that these stakeholders' local needs, priorities and perspectives are represented in the delivery of police services. Accordingly, the Province has left it to these municipalities and First Nations to propose the composition of the OPP detachment board that will best meet their respective needs. The number and composition of each board, once approved, will be enacted by regulation. These regulations are expected to be enacted by Fall, 2021.

The municipalities within an OPP detachment are required to submit a single, joint proposal outlining the number of boards within the detachment area and the composition of the membership of the detachment board, including the number of community representatives and Provincial appointees. It is not necessary for the proposal to identify individuals to act as members.

If a proposal is not submitted, or if the proposal submitted does not meet minimum requirements, the Ministry will determine that board framework for the detachment area.

The Municipalities within the Grenville Detachment propose a 3 Detachment Board Model under the *Community Safety Policing Act, 2019*

The municipalities served by the Grenville Detachment propose that the following 3 detachment boards be established:

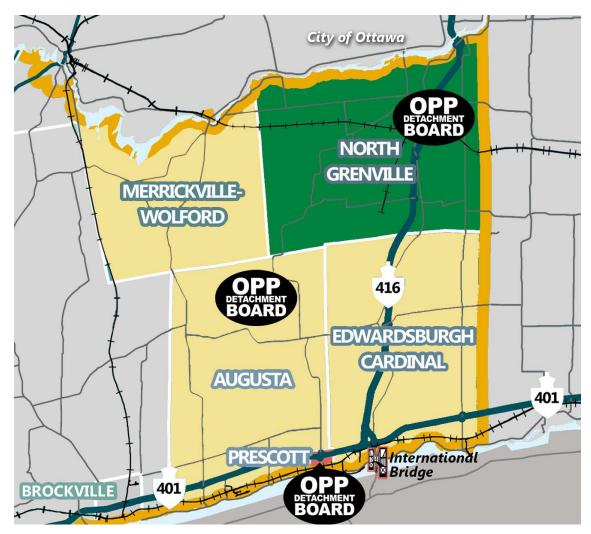
- Two boards to serve each of North Grenville and Prescott respectively; and
- A combined board to collectively serve Augusta Township, Edwardsburgh-Cardinal Township, and the Village of Merrickville-Wolford.

The composition of the Board in Prescott would be comprised of 5 members -the Mayor, a Council representative, 1 community representatives and 2 provincial representatives.

North Grenville would be comprised of 7 members -the Mayor, a Council representative, 3 community representatives and 2 provincial representatives.

The composition of the Board serving Augusta Township, Edwardsburgh-Cardinal Township, and the Village of Merrickville -Wolford would be comprised of 7 members

based on the desire for equal community representation for each of the municipality members.



The division of the Grenville Detachment into three distinct detachment boards will allow for better identification and definition of key community concerns and priorities regarding the delivery of policing services within the respective municipalities, resulting in more responsive and effective policing.

The following factors support this 3-detachment board model:

1. Geography

The locations of the municipalities are sufficiently far apart from each other to justify a separate board for each.

Specifically, North Grenville and Prescott are situated at opposite ends of the current detachment and are approximately 36 kilometres apart necessitating separate detachment boards. Augusta, Edwardsburgh-Cardinal and the village of Merrickville-

Wolford are closer in proximity to each other and can be serviced by a single detachment board.

2. Variations in population

The nature and character of the population of each of the municipalities is significantly different.

Prescott is a constrained, more densely populated municipality that is currently experiencing limited growth. Prescott lies immediately along the St. Lawrence River within which the border between Canada and the United States lies. Similarly, and parallel to the St. Lawrence River, Highway 401 also constrains Prescott's growth and development. Accordingly, Prescott contains a land area of only 4.93 square kilometres and a population density of 856.2 persons per square kilometre. Prescott's population declined by 1.4% during the period of 2011 to 2016.

In contrast, North Grenville's population is rapidly growing and expanding. North Grenville has experienced significant population growth of 9.1% from 2011 to 2016 and has been identified as one of the fastest growing municipalities in Eastern Ontario. However, unlike Prescott, North Grenville's population is distributed over 352.18 square kilometres, with the result that while North Grenville is more populous, its population density of 46.7 persons per square kilometre is significantly less than that of Prescott.

Once constructed, the new Eastern Ontario Correctional Facility will be located in North Grenville, adding to population diversity within the community and resulting in unique demands compared to the other municipalities.

Augusta Township, Edwardsburgh-Cardinal Township, and the Village of Merrickville - Wolford are rural municipalities having a combined population of 17,513 spread over 840.46 square kilometres averaging 20.83 people per square kilometre. The rural municipalities are located within a significantly larger, but far less densely populated area.

3. Service demands

The differing character of each of the municipalities is reflected, in part, in the differing nature of calls for service.

North Grenville, being more populous, had significantly more demands for service than Prescott. Further, North Grenville has a particular focus on traffic related calls for service.

For example, below is the four-year average (2015-2018) of calls for service for North Grenville:

25
8
845
541
49
315
122
291
95
2290

Prescott is also located next to Highway 401, one of the busiest highways in the country.

Prescott is located 5km from an international border crossing and will have policing related concerns specific to that crossing that are not otherwise addressed by the Canada Border Services Agency.

For example, below is the four-year average (2015-2018) of calls for service for Prescott:

Drug Possession	15
Drugs	3
Operational	683
Operational 2	268
Other Criminal Code violations	52
Property Crime Violations	197
Statutes and Acts	115
Traffic	78
Violent Criminal Code	106
Total:	1516

The rural municipalities of Augusta Township, Edwardsburgh-Cardinal Township, and the Village of Merrickville -Wolford have concerns related to a dearth of social services and response times due to the size of the geographic area to be covered.

For example, below are the itemized 2019 calls for service for each of Augusta Township, Edwardsburgh-Cardinal Township, and the Village of Merrickville -Wolford:

	Augusta	Edwardsburg/	Merrickville/	Total
		Cardinal	Wolford	
Drug Possession	4	7	0	11

Drugs	3	3	0	6
Operational	259	408	120	787
Operational 2	298	491	127	916
Other Criminal Code violations	18	28	11	57
Property Crime Violations	109	144	37	290
Statutes and Acts	55	60	12	127
Traffic	115	93	50	258
Violent Criminal Code	35	66	21	122
Total:	896	1300	378	2574

Background Details

North Grenville

- **Population:** 16,451
- Composition of current PSB: 5 members 2 members of Council (Mayor and 1 Councillor), 2 Provincial appointees, and 1 Council Appointee
- Term of current contract with OPP (plus any service level enhancements) including any special service funding such as Ride programs etc. that would run the length of the contract: Current OPP Contract effective January 1, 2021 subject to a 3-year term. There are currently no contract enhancements.
- Operating costs associated with PSB: \$20,000 including honorariums, conferences, cost of professional memberships, and various PSB initiatives including funding bursaries to the local high schools and the youth centre, and funding local initiatives related to the reduction of crime.

Prescott

- **Population:** 4,222
- Composition of current PSB: 5 members -2 members of Council (Mayor and 1 Councillor), 2 Provincial appointees, and 1 Council Appointee
- Term of current contract with OPP (plus any service level enhancements) including any special service funding such as Ride programs etc. that would run the length of the contract: Current OPP Contract renewed January 1, 2020 and will conclude at the earlier of December 31, 2024 or the date that the Community Safety and Policing Act, 2019 comes into force. CSP Grant \$22,500 per year 2019/2020, 2020/2021, 2021/2022, RIDE 2020-2021 \$8,715.00, RIDE 2021-2022 \$8,698.00.

Operating costs associated with PSB: \$9,150 includes honorariums (all 5 members), memberships fees, annual bursary support for SGDHS, and other amounts.

Merrickville-Wolford

- **Population:** 3,067
- Composition of current PSB: 3 members the Mayor, 1 Provincial appointee, and 1 Council appointee
- Term of current contract with OPP (plus any service level enhancements) including any special service funding such as Ride programs etc., that would run the length of the contract: The current contract will expire on December 31, 2021. RIDE Grant Program funding Year 1 2020-2021 in the amount of \$6,536.00 on a one-time basis for the period from April 1, 2020 to March 31, 2021; and Funding Year 2 2021-2022 in the amount of \$6,524.00 on a one-time basis for the period from April 1, 2021 to March 31, 2022.
- Operating costs associated with PSB: \$8,994.39

Augusta

- Population: 7353
- Composition of current PSB: 3 members the Mayor, 1 Provincial appointee, and 1 Council appointee. Currently Provincial appointee and local appointee positions are vacant.
- Term of current contract with OPP (plus any service level enhancements) including any special service funding such as Ride programs etc. that would run the length of the contract: January 1, 2019 to December 31, 2022, with annual RIDE program separately funded, at approximately \$7,000 per year.
- Operating costs associated with PSB: No fixed annual budget

Edwardsburgh/Cardinal

- **Population:** 7100
- Composition of current PSB: N/A
- Term of current contract with OPP (plus any service level enhancements) including any special service funding such as Ride programs etc., that would run the length of the contract annually (no current term): no special enhancements
- Operating costs associated with PSB: N/A

Solicitor General

Office of the Solicitor General

25 Grosvenor Street, 18th Floor Toronto ON M7A 1Y6 Tel: 416 325-0408 MCSCS.Feedback@Ontario.ca

Solliciteur général

Bureau du solliciteur général

25, rue Grosvenor, 18° étage Toronto ON M7A 1Y6 Tél.: 416 325-0408 MCSCS.Feedback@Ontario.ca



132-2021-404 By email

March 18, 2021

Dear Heads of Council and First Nations Chiefs:

I am writing to provide you with an update on the new Ontario Provincial Police (OPP) detachment boards under the *Community Safety and Policing Act, 2019* (CSPA).

As you may remember, in February 2020, the Ministry of the Solicitor General conducted seven regional roundtable sessions across the province. Discussions at these sessions focused on new OPP-related regulatory requirements under the CSPA. Municipalities and First Nation communities receiving policing services from the OPP were invited to learn more about new OPP-related legislative and regulatory requirements and provide the ministry with feedback to inform the development of related regulatory proposals. In addition, we heard from many of you through various letters and engagement opportunities, including meetings with the Association of Municipalities of Ontario MOU Table and Rural Ontario Municipal Association about what you would like your new OPP detachment board to look like.

In response to your feedback, an OPP detachment board framework has been developed that we hope will provide municipalities and First Nation communities receiving direct and/or supplemental services from the OPP the flexibility to create a board that reflects your community and local needs.

Under this framework, municipalities and First Nation communities receiving direct and/or supplemental services from an OPP detachment are being asked to submit one proposal (per detachment) indicating the composition of their board and, if needed, a rationale for multiple boards and the composition of each additional board.

Municipalities and First Nations within a detachment are asked to work together to determine the composition of their board(s) as well as the manner in which they will submit their proposal to the ministry. For example, after determining the composition of the detachment board(s), municipalities and First Nations within a detachment area may select one municipality or First Nation to complete and submit the proposal.

Dear Heads of Council and First Nations Chiefs Page 2

Proposals must meet base requirements set by the ministry, which include a minimum number of five members per board and a requirement that each board should be composed of 20% community representatives and 20% provincial appointees. To that end, municipalities and First Nations are not required at this time to identify the names of the individuals that will be participating on the detachment board. Rather, you are only asked to identify the number of seats each municipality and First Nation will be allocated on the detachment board as well as the number of community representatives and provincial appointments.

To streamline and support the proposal process, the ministry has developed a digital form that can be accessed using the link included <u>here</u>.

The ministry will work with municipalities and First Nations to obtain outstanding information/proposals and support you in submitting a completed proposal. If, however, a proposal still does not meet the minimum requirements, or a proposal is not submitted and/or if no consensus is reached on the composition of the board then the ministry will determine the composition of the detachment board.

Completed proposals are to be submitted to the ministry by Monday, June 7, 2021.

We recognize the significant implications that the current COVID-19 emergency has had on municipalities and First Nations across the province. To this end, in addition to the written supporting material attached here, we are also pleased to work with you directly through virtual information sessions.

If you have questions related to OPP detachment boards under the CSPA, please contact Sarah Caldwell, Director of Community Safety and Intergovernmental Policy, at sarah.caldwell@ontario.ca. If you have questions about the proposal process or would be interested in a virtual information session, please contact Joanna Reading, Senior Policy Advisor, at joanna.reading@ontario.ca

Sincerely.

Sylvia Jones

Solicitor General

Enclosures

c: Chief Administrative Officers

Municipal Clerks



TOWNSHIP OF EDWARDSBURGH CARDINAL ACTION ITEM

Committee: Committee of the Whole – Administration Finance

Date: June 14, 2021

Department: Administration

Topic: Interim Control Bylaw – Industrial Park Expansion Lands

Purpose: To consider implementing an interim control bylaw that includes all of the future Industrial Park Expansion Area lands as well as those lands currently zoned Rural lying west of Highway 16.

Background: Staff requested our planners to prepare the attached report for committee and Council consideration.

Policy Implications: An interim control bylaw, authorized under Section 38 of the Planning Act, is a powerful tool that has the effect of freezing development for a limited timeframe to allow for a planning study to take place.

Financial Considerations: The estimated cost to complete the study is \$15,000.00. This would be an unbudgeted expense and could be covered through the Industrial Park Land Reserve Fund. The current balance in the fund is \$2,836,488.75.

Recommendation: That committee recommends that Council pass a bylaw and undertake a planning study that includes all of the future Industrial Park Expansion Area lands as well as those lands currently zoned Rural lying west of Highway 16.

CAO



MEMORANDUM

DATE: JUNE 11, 2021

TO: COUNCIL FOR THE TOWNSHIP OF EDWARDSBURGH CARDINAL

FROM: NOVATECH

RE: INTERIM CONTROL BY-LAW – INDUSTRIAL PARK EXPANSION LANDS

Background and Planning Context

The Johnstown Industrial Park represents approximately 1,185 ac of land designated for employment use. The lands are designated *Regionally Significant Employment Area* in the United Counties Official Plan which are intended to accommodate employment growth for the regional economy. On a basis consistent with the Counites Plan, the lands are designated *Industrial Park Policy Area* in the Township's Official Plan.

The existing Industrial Park designation was identified in the 2010 Township Official Plan. During the 2018 review and update to the Township Official Plan, a *Future Industrial Park Expansion Area* representing approximately 55 ha (136 ac) was identified on Schedule A of the Official Plan in order to signal the Township's intention for future expansion of the existing Industrial Park designation. These expansion lands are located east of the Industrial Park Policy Area designation, but mostly located west of Frederick Street and north of the CN Railway adjacent to Highway 401. The Official Plan includes policy direction regarding the future expansion of the Industrial Park by indicating that only uses existing as of the date of approval of the Plan shall be permitted within the expansion lands area and that the lands shall be placed in a holding zone in the implementing Comprehensive Zoning By-law. A future expansion to the Industrial Park would also require an amendment to the Counties Official Plan to expand the *Regionally Significant Employment Area*.

The Industrial Park Expansion Area lands are zoned as Rural (RU) in Comprehensive Zoning By-law No. 2012-35. As the Township is currently working on preparing a new Zoning By-law, the draft Zoning By-law has been drafted to include an appropriate zone category with a holding provision. Until such time that the Zoning By-law has been approved by Council, the existing zoning allows for land uses that do not implement the direction set out in the Official Plan.

Discussion

The success of the Industrial Park is in large part due to its strategic location and proximity/access to a vitally important transportation network, including the Highway 401/416 interchange, convenient access to the USA via the international bridge, the CN railway, and the Township-owned Johnstown Port. These attributes support local, regional and international market opportunities.

In recognizing the importance of the Johnstown Industrial Park to the local and regional economy, the Township continues to promote the Industrial Park's strategic location, both in terms of opportunities within its existing land base, as well as for future expansion opportunities.



The village of Johnstown is situated at the foot of the international bridge and is one of the Settlement Area designations in the Township that serve as a focal point for residential and economic activity. The Plan directs that while the Settlement Areas are intended to play a vital role in serving as residential, social, cultural, and business hubs for the Township, the majority of non-residential growth will be directed to the Township's employment area, in accordance with the policies of the Industrial Park Policy Area designation.

The Johnstown settlement area is centred on Highway 16 and was historically laid out in a grid pattern of streets and blocks on both the east and west side of Highway 16. On lands west of Highway 16, development has been limited primarily to areas along County Road 2 and immediately adjacent to the Highway 16, which includes the border crossing Customs offices. A considerable land area of approximately 61 ha (152 ac) west of Highway 16 lies outside of the Settlement Area and remains largely vacant and zoned Rural. While access to these lands is limited, these lands could be developed with access provided via the few open public streets present in the area.

Development within the Johnstown settlement area has occurred primarily in areas east of Highway 16. In recognizing that historic growth in Johnstown is concentrated east of Highway 16, the east limits of the current Johnstown Settlement Area designation provides considerable vacant land to accommodate settlement area growth eastward.

In light of the importance of the Industrial Park and potential for the new development to occur on vacant lands west of Highway 16, land use efficiency and compatibility considerations are paramount in protecting the future industrial park expansion while managing impacts to sensitive land uses in Johnstown. Accordingly, the strategic direction and related land use compatibility considerations should be further studied so as to establish the principle of development and to avoid precluding the orderly development of the area.

The Council of the Corporation of the Township of Edwardsburgh Cardinal intends to continue to promote the Johnstown Industrial Park on the strengths of its locational attributes, in association with protecting future expansion opportunities that also benefit from this location. In doing so, it is understood that Council is considering the use of an interim control by-law.

An interim control by-law, authorized under Section 38 of the *Planning Act*, is a powerful tool that has the effect of 'freezing' development for a period of time to allow for a planning study to be undertaken. Section 7.2.4 of the Official Plan permits the use of Interim Control as follows:

- 7.2.4.1 Interim Control By-laws may be passed by Council in accordance with the provisions of Section 38 of the Planning Act for the purpose of controlling the use of land, buildings and structures within specifically identified areas for a specific period of time (i.e. not exceeding one year in length with provision for extending the time period for a total time period of not more than two years).
- 7.2.4.2 Prior to passing an Interim Control By-law, it is first necessary for Council to pass a resolution directing that a review or study be undertaken in respect to land use planning policies in the Township or in any area or areas thereof. It is intended that any Interim Control By-law be passed in order to adequately control development in a designated area while the review or study is being completed. Where an Interim Control By-law ceases to be in effect, Council may not for a period of three years pass a further Interim



Control By-law that applies to any lands to which the original Interim Control By-law applied.

It is considered that an interim control by-law is an approach that Council could utilize in order to allow for sufficient time to undertake planning study. During this period, the development of certain new land uses would be prohibited, thereby protecting Council's interests in securing the viability of the future expansion lands. An interim control by-law should not freeze all development, and therefore certain land uses would continue to be permitted, as set out in the by-law. In addition, the By-law would set out a defined area to which the interim control would apply. In this context, it is recommended that the defined area include the Future Industrial Park Expansion Area lands as well as those lands lying west of Highway 416 that are currently zoned Rural.

Recommendation

Should Council wish to implement an interim control by-law, draft by-law has been prepared for Council's consideration. As drafted, the by-law would apply to the area shown in Schedule "A", which includes all of the Future Industrial Park Expansion Area lands as well as those lands currently zoned Rural lying west of Highway 416.

The by-law would apply for 1 year and would be automatically repealed if it is not extended by a new by-law, but not to exceed an additional 12 months. During the period under which the by-law is in effect, a planning study would be undertaken to assess the land use context. The land use study would make recommendations to Council with respect to whether amendments to the Official Plan and/or its implementing Zoning By-law are necessary to reflect a different set of policies and related land uses for the defined area in order to support the long-term growth and vitality of the Johnstown Industrial Park and Johnstown Settlement Area.

It is noted that prior to passing an interim control by-law, Council must first, by resolution, direct that a review or study be undertaken in respect of land use planning policies for the defined area.

Sincerely,

NOVATECH

Steve Pentz, RPP, MCIP Senior Project Manager



TOWNSHIP OF EDWARDSBURGH CARDINAL ACTION ITEM

Committee: Committee of the Whole – Administration and Finance

Date: June 14, 2021

Department: Community Development

Topic: Application for Site Plan Control Amendment, 137 Commerce Drive (Prysmian

Power Cables)

Purpose: To review an application for an amendment to Prysmian's site plan control agreement, to permit an expansion to the existing building at 137 Commerce Drive.

Background: Cornerstone Builders Ltd., on behalf of property owner Prysmian Power Cables, has submitted an application for an amendment to the site plan control agreement at 137 Commerce Drive. The 46acre property is located within the Township's Industrial Park Policy Area and zoned Industrial Park/Highway Commercial as per our zoning bylaw. The cable manufacturing facility is surrounded by other industrial uses, including Greenfield Ethanol, Logistec, Measurements International and the Prescott Water Treatment Plant. The property has an existing entranceway on Commerce Drive and additional frontage on Edison Drive and County Road 2.

Prysmian Power Cables first came under site plan control in 2003 as Pirelli Cables Inc. The agreement was later amended in 2010 with an expansion to the building, and again in 2015 to include schedule "D" to acknowledge an auxiliary water system. The site plan agreement attached is another amendment that includes the proposed updates.

The proposed expansion includes a 4,610m² expansion to the existing 19,654m² facility; a new paved access road and entranceway off Edison Drive; a guardhouse building; and a future storage yard expansion area. In regards to the proposed second entranceway, the applicant has provided a Traffic Brief to outline the anticipated traffic to and from the site. There is an anticipated 30 trucks/day that will use the proposed new Edison Drive entranceway, a 15 truck increase based on the expansion. The facility operates 24hrs /day.

The applicant has provided a Stormwater Management Report that will make up Schedule "E" of the amended agreement. The report has been reviewed by the South Nation Conservation Authority and there is general agreement with the concept.

The property has frontage on County Road 2 and as such, the United Counties of Leeds and Grenville were consulted on the proposed site plan. The Counties requested that

road widening be completed prior to site plan approval, although they have accepted an undertaking from Prysmian Power Cables to confirm that the road width will be confirmed and the appropriate dedication will be made, if necessary, by July 31st.

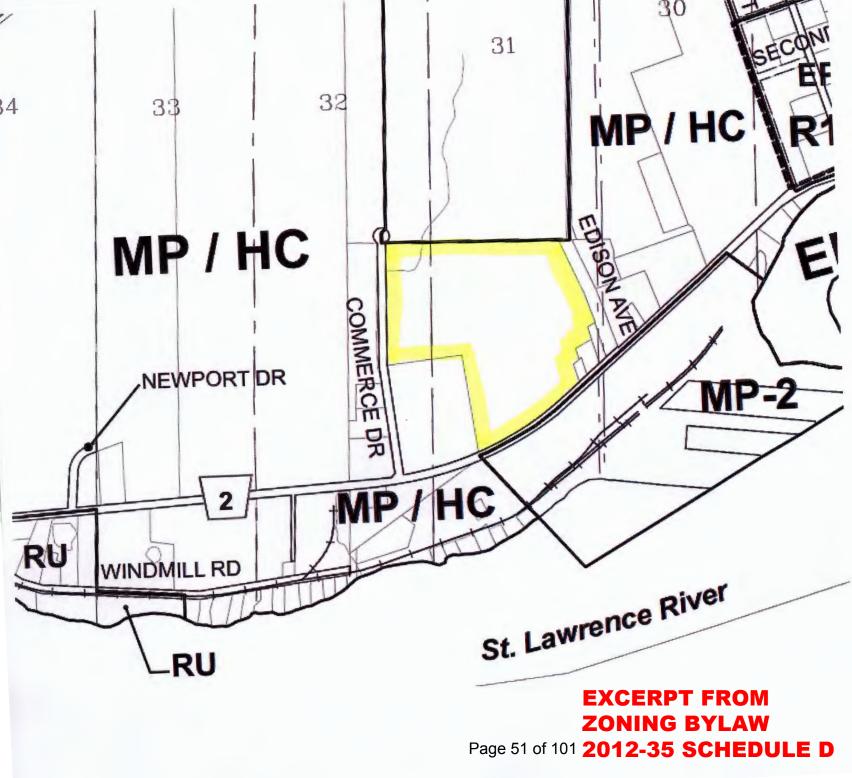
Policy Implications: All commercial, industrial and institutional properties in the Township are subject to Site Plan Control. An agreement which has been registered on title of the property survives transfer of ownership and changes to the site plan for the property must be granted by bylaw.

Financial Considerations: The applicant has submitted the required fee for an amendment

Recommendation: That Committee recommend that Council adopt a bylaw to amend the existing Site Plan Control Agreement for 137 Commerce Drive, as attached.

Community Development Coordinator

CAO





Township of Edwardsburgh Cardinal

Building & Planning Department 18 Centre Street Spencerville, ON. K7L 5A3 May 12th, 2021 CBL Project C8206

Re: Application for Entrance Permit

Prysmian Power Cables & Systems Canada Ltd. 137 Commerce Drive, Prescott ON. K0E 1T0

Attn: Wendy Van Keulen - Community Development Coordinator

Per initial discussions with both the Prysmian Group & the Township of Edwardsburgh Cardinal regarding the proposed expansion to the existing Prysmian facility located at 137 Commerce Drive, we have prepared this Traffic Assessment Brief to outline both the existing facility's usage as well as estimating increased use.

Prysmian currently operates a one-storey (19,654 sq.m.) manufacturing & warehousing facility at this location which has been in operation since approximately 1980. The owner intends to expand this existing facility to the east with an ultimate footprint increased by 4,610 sq.m. to 24,264 sq.m.

Although the total property area is 46.35 Acres (18.76 Ha), the developed portion of the property comprises only 0.96 Acres (0.39 Ha) of the overall site. The property is located at the northeast corner of Commerce Drive and County Road 2 outside the east limits of the Town of Prescott in the Township of Edwardsburgh Cardinal. The property is bordered by the St. Lawrence River / Highway 2 to the south, and Edison Avenue to the east. To fulfill the development requirements set forth by Prysmian – we are providing this traffic assessment as part of the Application for Entrance Permit for the rear truck entrance accessing Edison Avenue.

The existing Commerce Drive property is part of the Industrial Park Policy Area zone of the Official Plan, and is recognized as being zoned MP / HC Industrial Park / Highway Commercial Zone within the Township.

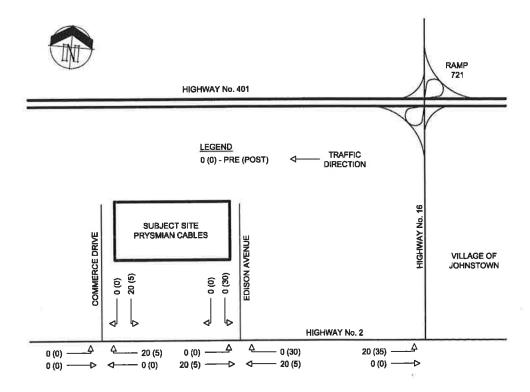
The existing 19,654 sq.m. manufacturing facility constructed in the 1980's is comprised of a 4,621 sq.m. office area, with the remaining 15,033 sq.m. being employee amenities, production floor, shipping & receiving, and storage areas.

Prysmian currently sees up to 20 trucks per day through their west access gate along Commerce Drive, as well as staff & visitors to their facility. Post expansion almost all of these trucks will use the new east entrance along Edison Avenue, with approximately 5 trucks to continue using the existing west entrance to access a receiving dock & existing yard scale. All trucks currently enter Commerce Drive via right turn from Highway 2 and when leaving site will access Highway 2 turning left off Commerce Drive to access the Highway 401, exit 721 in Johnstown.

During construction, all construction related traffic will access the site via the new entrance from Edison Avenue. Construction related traffic will be minimal with approximately 10 vehicles using the access during the morning hours and evening hours and occasional vehicles for deliveries during the daytime hours. No construction vehicles will be using the Commerce Drive access road to enter or exit the facility.

Once construction of the building and lot storage expansion are completed Prysmian expects an increase of 15 trucks per day which will all access the site via right turn from Highway 2 onto Edison Avenue and when leaving site will access Highway 2 turning left off Edison Road to access the Highway 401, exit 721 in Johnstown.

To summarize the proposed conditions; we are assuming up to 5 trucks per day will continue to use the west / Commerce Drive entrance & up to 30 trucks will use the east / Edison Avenue entrance per day (with the facility operating 24 hours per day). We have assumed an increase of 10 to 15 additional trucks per day after building expansion. All traffic will enter via right turn onto Edison Avenue and for a production facility within an Industrial Zone, this vehicle traffic is considered minor in nature.



The proposed yard expansion adjacent to the east (Edison Avenue) entrance will also include a new 'ring-road' around the perimeter of the existing storage yard; where trucks can access the new shipping / receiving docks directly while also providing plenty of road length to stage trucks on-site prior to accessing the docks.

We trust this traffic assessment brief will satisfy the requirements of the Township of Edwardsburgh Cardinal (Planning Department).

Sincerely,



C.P. (Peter) Yee P.Eng. Cornerstone Builders Ltd.

Mike Moulton – Project Manager Prysmian Power Cables & Systems Canada Ltd.



LETTER OF UNDERTAKING

27 May 2021

RE: Prysmian Cables - Road Widening

137 Commerce Drive

Prescott, ON

We Cornerstone Builders Ltd. have enlisted IN Engineering and Surveying on behalf of the property owner Prysmian Cables to confirm that the desired allowance exists along the Highway No. 2 Frontage and prepare a Reference Plan for Road Widening should the desired right-of-way of 15.25m from the centreline of the current road not be met.

Draft Reference Plan will be ready for review by June 22nd, 2021 and the dedication of lands will be made by July 31st, 2021 notwithstanding any unforeseen circumstances.

Thank You,

Cornerstone Builders Ltd.

Declaration	1 1			
1. Mle		of the		
the County of	L&G.	make oath and say (d	or solemnly de	clare) that the
information cor	ntained in this letter is t	rue to the best of m	y knowledge.	
Signature of O	Mil		EVILLE ZEMAY	_ in the County of 21
Signature or or	wilei.	WILL		
Signature of Co	ommissioner of Oaths:		1	

Jeffrey William Brown, a Commissioner, etc.
Province of Ontario
for Cornerstone Builders Ltd.
Expires March 3, 2024

CORPORATION OF THE TOWNSHIP OF EDWARDSBURGH/CARDINAL AMENDMENT TO SITE PLAN CONTROL AGREEMENT REGISTERED AS INSTRUMENT NO. 0177795 AS AUTHORIZED BY BYLAW 2003-12

THIS AGREEMENT, made in	triplicate this day of	, 2021
BETWEEN:	PRYSMIAN POWER CABLES (the "Owner")	
AND: THE CORPORATION OF	THE TOWNSHIP OF EDWARDS (the "Township")	BURGH/CARDINAL

WHEREAS: the Council of the Corporation of the Township of Edwardsburgh entered into a Site Plan Control Agreement with the owner of 137 Commerce Drive, formerly Pirelli Power Cables, at the open Council meeting on May 3, 2003, by bylaw 2003-12, which agreement was registered on November 3, 2003 as Instrument No. 0177795.

AND WHEREAS the Township has amended the agreement entered into by bylaw 2003-12 by replacing schedule "B" Exhibit 1- Site Plan with Site Plans SP-01, SP-02 and SP-03 by bylaw 2010-06, which was registered on February 12, 2010.

AND WHEREAS the Township has also amended the agreement entered into by bylaw 2003-12 by adding schedule "D" the Amending Agreement by bylaw 2015-49, which was registered on September 22, 2015.

AND WHEREAS the Township has received an application to amend the existing site plan control agreement for the lands described in Schedule "A" to the agreement of bylaw 2003-12;

AND WHEREAS the Council of the Township of Edwardsburgh Cardinal deems it appropriate to permit the original Agreement, as amended, to continue to operate subject to the terms and conditions within;

NOW THEREFORE THIS AGREEMENT WITNESSETH THAT in consideration of other valuable considerations and the sum of one dollar (\$1.00) of lawful money of Canada now paid by the Owner to the Township (the receipt whereof is hereby acknowledged) and in consideration of the mutual covenants hereinafter expressed, the parties hereto covenant and agree one with the other as follows:

- 1. That SP-01, SP-02 and SP-03 of Schedule "B" of the existing site plan control agreement, as amended, be replaced with the following, as attached:
 - SP-01 Overall Site Plan

AMENDMENT TO SITE PLAN CONTROL AGREEMENT BETWEEN PRYSMIAN POWER CABLES AND THE TOWNSHIP OF EDWARDSBUGH CARDINAL

- SP-02 Enlarged Site Plan
- SP-03 Enlarged Grading and Drainage Plan
- SP-04 Site Details
- 2. That the following terms be added to Schedule "C" of the Original Agreement, as amended:
 - 9. Pursuant to the 41(8)(a)(i) Planning Act and 6.2.2(d) Counties Official Plan, a dedication of land shall be made to the Counties along County Rd 2 for future potential road purposes. The road allowance should be 30.5 m. Should sufficient allowance exist, a letter from a surveyor would meet the Counties' needs. Should the allowance not meet minimum desired right-of-way, the appropriate dedication of 1/2 the desired allowance width, measured from the centerline of the current road shall be made. The lands to be transferred for road widening purposes shall be free and clear of all and any encumbrances.
 - 10. Any proposed or future outdoor lighting, including fixtures and signs, be designed, installed and maintained to prevent light spill over or glare onto the County Rd allowance.
- 3. That Schedule "E", Stormwater Management Plan as attached be added to the original agreement, as amended.
- 4. That all other terms and conditions of the Original Agreement shall remain in force and effect.

IN WITNESS WHEREOF the parties hereto have executed this agreement.

THE CORPORATION OF THE TOWNSHIP OF EDWARDSBURGH/CARDINAL

Mayor	
Clerk	
	authority to bind th

AMENDMENT TO SITE PLAN CONTROL AGREEMENT BETWEEN PRYSMIAN POWER CABLES AND THE TOWNSHIP OF EDWARDSBUGH CARDINAL

OWNER, PRYSMIAN POWER CABLE	S	
		Owner
		I have the authority to bind the Corporation.
DATED AT Spencerville, ON this	day of	2021

SCHEDULE "A" Site Plan Control Agreement Pirelli Cables

TO AGREEMENT EXECUTED THE 5th day of May, 2003.

BETWEEN: PIRELLI CABLES INC.

AND: THE CORPORATION OF THE TOWNSHIP OF

EDWARDSBURGH/CARDINAL

DESCRIPTION OF THE PROPERTY

CONCESSION 1, PART LOTS 31, 32 AND 33 RP15R6166, PART 1 GEOGRAPHIC TOWNSHIP OF EDWARDSBURGH PROVINCE OF ONTARIO

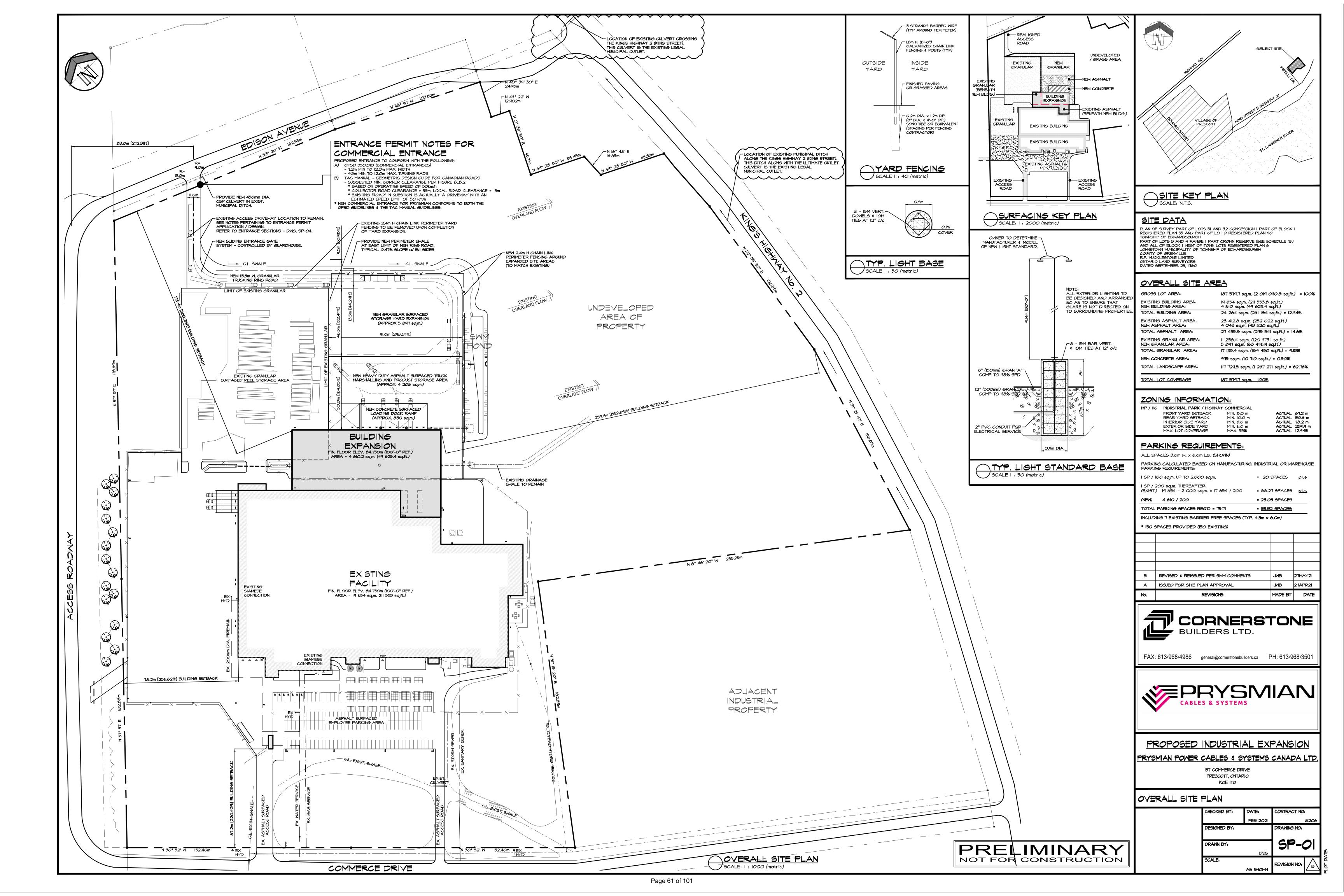
SCHEDULE "B" Site Plan Control Agreement Pirelli Cables

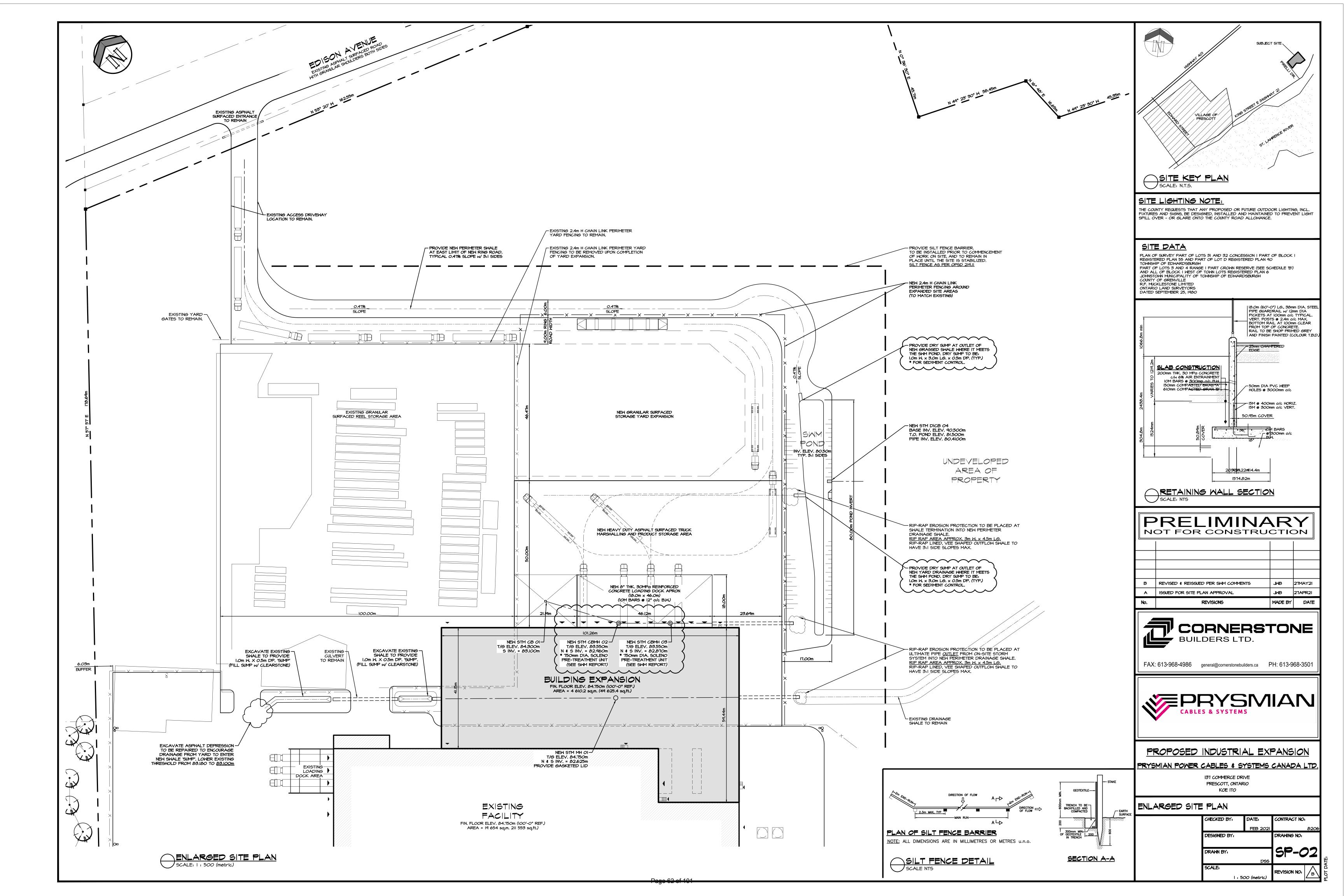
TO AGREEMENT EXECUTED 1	THE <u>5th</u> DAY OF	May	, 2003
AS AMENDED THE_	DAY OF	2021	

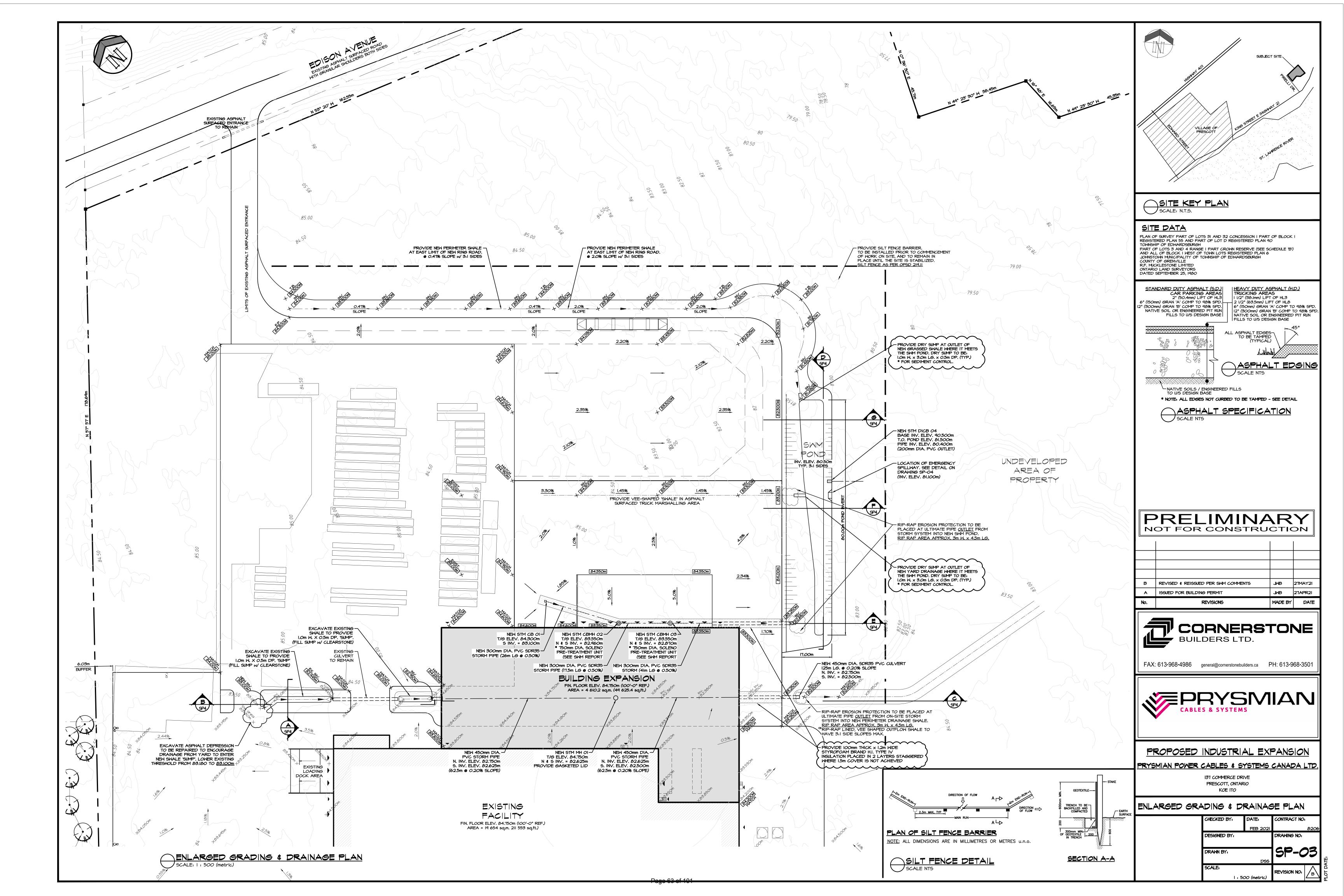
MASSING AND CONCEPTUAL PLAN SITE PLAN

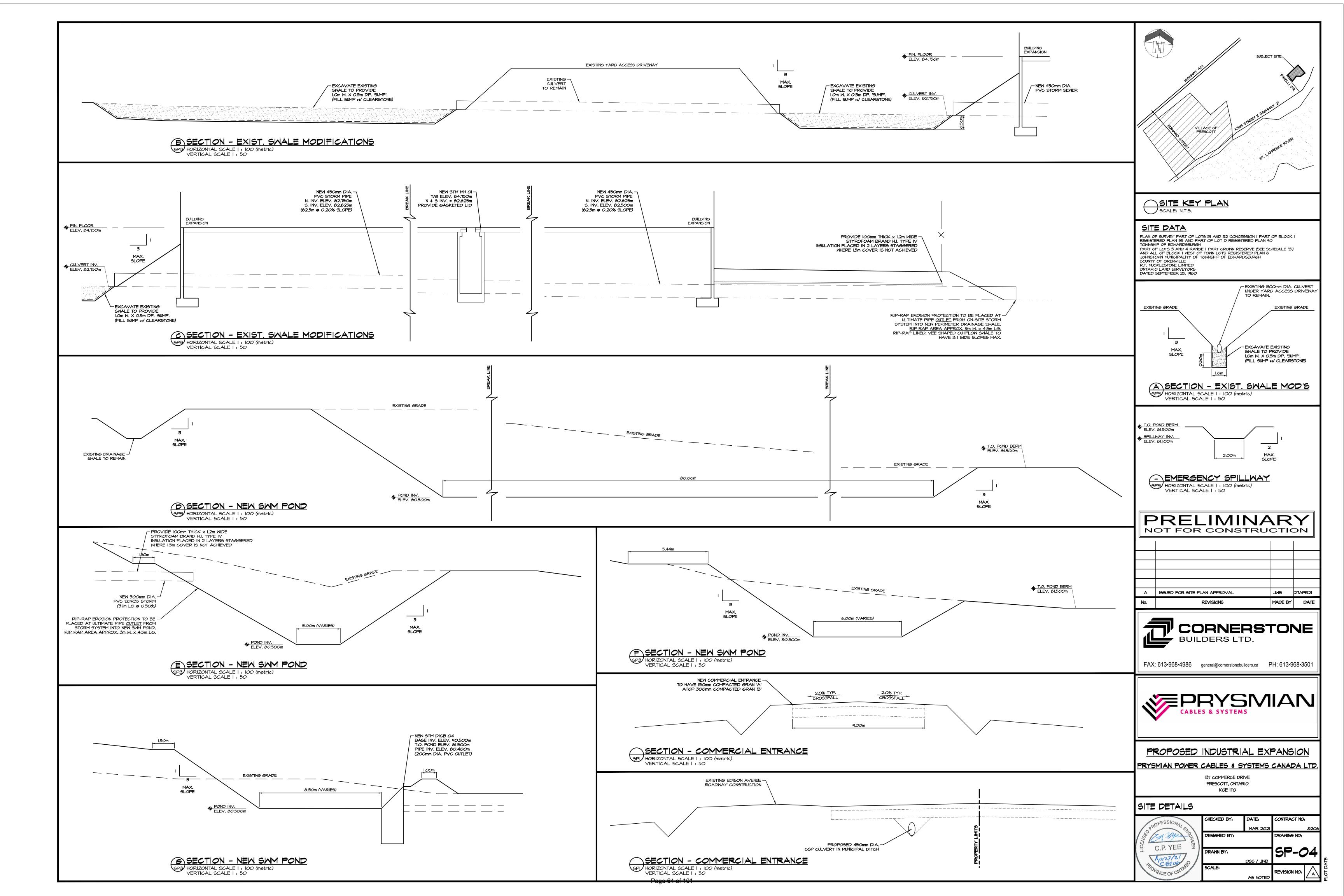
EXHIBITS: The following Exhibit attached hereto shall form part of this Schedule:

SP01 Overall Site Plan SP02 Enlarged Site Plan SP03 Enlarged Grading and Drainage Plan SP04 Site Details









SCHEDULE "C" Site Plan Control Agreement Pirelli Cables

TO AGREEMENT EXECUTED	THE 5th DAY OF	May	, 2003
AS AMENDED THE _	DAY OF	, 2021	

1. ACCESS FACILITIES

a) As per site plan forming Exhibit No. 1 of Schedule "B".

2. OFFSTREET PARKING AND LOADING

- a) As per site plan forming Exhibit No. 1 of Schedule "B" to this Agreement.
- b) All offstreet parking lots and access driveways on the owner's lands are to be paved within one year.

3. SNOW REMOVAL

a) Responsibility of the owner.

4. GRADING AND DISPOSAL OF STORM AND SANITARY WASTE

- a) Sanitary waste as per requirements of the District Health Unit.
- b) Storm water disposal as per Site Plan (Exhibit 1).

5. FLOODLIGHTING

a) Parking lots and access driveways on the owner's land are to be illuminated to the requirements of the Chief Building Official.

6. LANDSCAPING

a) As per site plan forming Exhibit No. 1 of Schedule "B" to this Agreement.

7. REFUSE STORAGE AND DISPOSAL

- a) A refuse storage shall be provided by the owner.
- b) The owner shall be responsible for the disposal of refuse from his property.

8. LOCATION OF BUILDING STRUCTURES AND FACILITIES

- a) As per Exhibit No. 1 of Schedule "B" to this Agreement.
- 9. Pursuant to the 41(8)(a)(i) Planning Act and 6.2.2(d) Counties Official Plan, a dedication of land shall be made to the Counties along County Rd 2 for future potential road purposes. The road allowance should be 30.5 m. Should sufficient allowance exist, a letter from a surveyor would meet the Counties' needs. Should the allowance not meet minimum desired right-of-way, the appropriate dedication of 1/2 the desired allowance width, measured from the centerline of the current road shall be made. The lands to be transferred for road widening purposes shall be free and clear of all and any encumbrances.
- 10. Any proposed or future outdoor lighting, including fixtures and signs, be designed, installed and maintained to prevent light spill over or glare onto the County Rd allowance.

SCHEDULE "E" Site Plan Control Agreement Prysmian Power Cables

TO AGREEMENT EXECUTED THE 5TH DAY OF MAY, 2003 AS AMENDED THE _____DAY OF _____, 2021

STORMWATER MANAGEMENT DESIGN BRIEF

Prysmian Power Cables & Systems Canada Ltd.

137 Commerce Drive,

Prescott, ON

Stormwater Management Design Brief

March 16, 2021



FAX: 613-968-4986 general@cornerstonebuilders.ca PH: 613-968-3501

Prysmian Power Cables & Systems Canada Ltd., Prescott Stormwater Management Design Brief

Revision Notes

This is the initial submission.

Prysmian Power Cables & Systems Canada Ltd., Prescott Stormwater Management Design Brief

Table of Contents

1	INTF	RODUCTION	1
2	STO	RMWATER MANAGEMENT TARGETS	3
	2.1	WATER QUANTITY CONTROL TARGET	4
	2.2	WATER QUALITY TARGET	
	2.3	LOW IMPACT DEVELOPMENT	
	2.4	CLIMATE CHANGE	
3	QUA	ANTITY CONTROL	5
	3.1	RATIONAL METHOD	5
	3.1.1	1 Precipitation	5
	3.1.2	2 Runoff Coefficients	5
	3.1.3	3 Intensity	6
	3.1.4	4 Time of Concentration	7
	3.2	PEAK FLOWS	7
	3.3	Storage	8
	3.3.1	1 Required	8
	3.3.2	2 Storage Facility	9
	3.3.3	3 Controls	9
	3.4	CONTROLLED PEAK FLOW SUMMARY	10
4	WAT	TER QUALITY CONTROL DESIGN	12
5	SEDI	IMENT AND EROSION CONTROLS	13
6	MAI	NTENANCE	14
	6.1	MAINTENANCE SUMMARY	14
	6.1.1	1 Monthly Maintenance	14
	6.1.2	2 After each large runoff event	14
	6.1.3	3 Annually	14
	6.1.4	Infrequently (10yrs to 20yrs)	14
7	CON	ICHTSIONS	15

Prysmian Power Cables & Systems Canada Ltd., Prescott Stormwater Management Design Brief

Table of Tables

Table 1-1:	2010 Storage and Peak Flow Summary	2
	Existing and Proposed Land Cover	
Table 3-1:	Runoff Coefficients	. 5
Table 3-2:	Pre-Development Runoff Coefficients	6
Table 3-3:	Post-Development Runoff Coefficients	6
Table 3-4:	Peak Flows	. 8
Table 3-5:	5-Yr Storage Requirement	. 8
Table 3-6:	100-Yr Storage Requirement	9
	Culvert Controls	
Table 3-8:	Stage:Storage:Discharge Relationship of Dry Pond	0
Table 3-9:	Peak Flow Storage Summary	1
	Summary of Stormwater Management Mitigation	
	Summary of Storage Required and Provided	
	Table of Figures	
Figure 1-1:	Site Location	1

Appendices

Appendix A Ottawa Station (6106000) IDF Curves

Appendix B Hydrologic Calculations

1 Introduction

The Prysmian facility in Prescott produces cables for the communications and energy sector. The 18.76ha site is located at the northeast corner of Commerce Drive and County Road 2 at 137 Commerce Drive (see Figure 1-1). Prysmian is seeking to expand their current facility with the addition of a 4,610m² building on the northeast side as well as an asphalt surfaced truck marshalling area and a granular yard.

The expanded building will extend over a drainage swale that must be modified to accommodate the addition. The swale drains west to east and ultimately discharges to the undeveloped portion of the property and eventually to County Road 2.

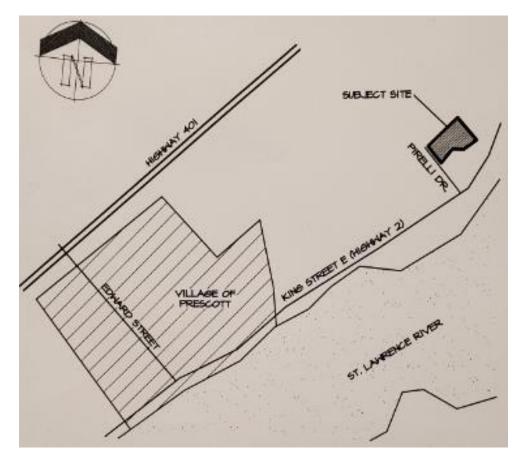


Figure 1-1: Site Location

An earlier stormwater management report prepared by WaterPlan Associates in 2010 was made available to CBL. The 2010 report provided good background information of the property and drainage information. Stormwater management measures were employed to mitigate peak flow impacts. A 240m long swale was provided in three segments of 80m each separated by rip-rap steps. Runoff flows through the swales sequentially. In total, the 2010 expansion featured 533m³ of storage that was provided in the swale system to reduce peak flows during the 100-yr event to 155L/s.

The 2010 storage is shown below in Table 1-1.

Table 1-1: 2010 Storage and Peak Flow Summary

Event	Storage (m3)	Peak Outflow (L/s)
5-Yr	329	97
100-Yr	533	155

The proposed 2021 expansion will include additional surface hardening that is anticipated to increase peak flows from the site and adversely impact water quality. Stormwater management measures are required to mitigate the impacts.

Runoff from the proposed expansion will not connect to or affect the existing stormwater management system. A distinct and separate drainage route and stormwater management measures are planned as part of the new addition.

The proposed work will be constrained to a 1.55ha portion of the site. The plant expansion will add new gravel surfacing of 5,897m². New asphalt and roof areas of 5,038m² and 4,610m² respectively will replace existing grass and some gravel and hard surfacing. The proposed landcover is summarized in Table 1-2.

Table 1-2: Existing and Proposed Land Cover

Surface	Ex. Coverage (m²)	Prop. Coverage (m²)
Grassed	13,816	0
Asphalt	1,262	5,038
Building	0	4,610
Gravel	467	5,897
Total	15,545	15,545

2 Stormwater Management Targets

Development of the site will increase the surface hardening and runoff coefficient. This results in an increase in peak flows and total volume of runoff. Water quality degradation is typically inferred in relation to the amount of surface hardening. CBL has sought to provide measures that will result in an improvement of water quality.

Stormwater management is provided to mitigate the water quantity and quality impacts from increased development.

CBL met with representatives of the Township of Edwardsburgh Cardinal on Monday, January 25th, 2021. At this meeting, the Township indicated the following stormwater management targets would be applied to the development:

1) Quantity Control

Post-development peak flows controlled to pre-development peaks for all events up to and including the 100-yr event.

2) Quality Control

Enhanced criteria (TSS removal 80%)

3) County Culverts

No negative impacts for flows up to 5-yr.

CBL referenced the following documents in preparing the stormwater management report.

- Ministry of the Environment Stormwater Management Planning and Design Manual, 2003
- TRCA/CVC Low Impact Development Guidelines, 2010
- Prysmian Cables Plant Expansion Stormwater Management Report, Jan 26 2010.

In addition to the above guidance, the province has issued direction to planning authorities that stormwater management planning shall:

- a. be integrated with planning for *sewage and water services* and ensure that systems are optimized, feasible and financially viable over the long term;
- b. minimize, or, where possible, prevent increases in contaminant loads;
- minimize erosion and changes in water balance, and prepare for the *impacts of a changing climate* through the effective management of stormwater, including the use of *green infrastructure*;
- d. mitigate risks to human health, safety, property and the environment;
- e. maximize the extent and function of vegetative and pervious surfaces; and

f. promote stormwater management best practices, including stormwater attenuation and reuse, water conservation and efficiency, and low impact development.

Water quantity and quality control targets are discussed below.

2.1 Water Quantity Control Target

Stormwater quantity control targets are based on the principle of peak flow control. That is, post-development peak flows should not exceed pre-development peak flows for return period flows up to the 100-yr event.

2.2 Water Quality Target

Water quality targets are calculated on the basis of negative impacts caused by development. Water quality mitigation will be provided by directing runoff over extensive grass covered lands prior to discharge to the County Road 2 ditch and ultimately the St. Lawrence River. *Enhanced* protection is required.

2.3 Low Impact Development

The objectives of Low Impact Development include replicating the water budget as much as possible by reducing surface hardening and encouraging infiltration. The LID guidelines (Toronto and Region Conservation Authority, 2010) provide limitations on the application of infiltration technologies such that they not be used within 1m from the water table or rock. Stormwater measures will include the opportunity for infiltration, such as grassed swales and substantial grassy contact.

The Prysmian stormwater management plan makes use of grassed swales, a dry pond and extensive grassy contact that aligns with the LID objectives.

2.4 Climate Change

The province requires all planning applications to consider the implications of climate change. Specific direction is, however, not given. For small site plans, climate change mitigation is often interpreted to be provided by provision of additional storage. Some jurisdictions suggest 10% additional storage be provided for climate change mitigation.

At the Prysmian site, the climate change objective is satisfied by the provision of surplus storage.

3 Quantity Control

3.1 Rational Method

For small sites, stormwater management analysis may be completed using the Rational Method. Target peak flows for the Prysmian site are developed using the Rational Method (see Equation 1).

Equation 1: Rational Method

$$Q = \frac{1}{360} CiA$$

Where:

C = runoff coefficient

i = intensity of precipitation at time of concentration (mm/hr)

A = Area in hectares

3.1.1 Precipitation

Environment Canada maintains records of precipitation and develops statistics that aid in hydrologic analysis. Station 6106000 in Ottawa has records from 1967 to current. Intensity Duration and Frequency (IDF) Statistics are developed from the records and are included in Appendix A.

3.1.2 Runoff Coefficients

CBL referenced the earlier stormwater management report prepared by WaterPlan Associates for the 2010 plant expansion. In that report, the accepted runoff coefficients for the various land cover types were found. Runoff coefficients are adjusted for the return period as recommended by MTO, 1997. The runoff coefficients from WaterPlan were also applied to the current investigation (see Table 3-1).

Table 3-1: Runoff Coefficients

Surface	5-Yr	100-Yr
Gravel	0.5	0.6
Roof	0.9	0.95
Asphalt	0.9	0.95
Grass	0.2	0.25

Runoff coefficients were blended for the catchment of interest following a simple area weighted method per Equation 2.

Equation 2: Weighted Runoff Coefficient

$$C_{w} = \frac{C_{1} \times A_{1} + C_{2} \times A_{2} + \dots C_{n} \times A_{n}}{A_{1} + A_{2} + \dots A_{n}}$$

Where:

C_i = Runoff Coefficient for A_i

 A_i = Land Area (ha) of Cover Type

Table 3-2: Pre-Development Runoff Coefficients

Surface Cover	Area R		.C.	
Surface cover	(m²)	5-Yr	100-Yr	
Grassed	13,816	0.2	0.25	
Asphalt	1,262	0.9	0.95	
Building	0	0.9	0.95	
Gravel	467	0.5	0.6	
Weighted	15,545	0.27	0.32	

Table 3-3: Post-Development Runoff Coefficients

Surface Cover	Area	R	.C.
Surface cover	(m²)	5-Yr	100-Yr
Grassed	0	0.2	0.25
Asphalt	5,038	0.9	0.95
Building	4,610	0.9	0.95
Gravel	5,897	0.5	0.6
Weighted	15,545	0.75	0.82

3.1.3 Intensity

Rainfall intensity is related to the time of concentration of the catchment by Equation 3.

Equation 3: Solving for Intensity using IDF Values

$$I = A \times T_c^{\ B}$$

Where:

I = Intensity in mm/hr

 T_c = Time of Concentration in hours

A and B = coefficients (see Appendix A)

3.1.4 Time of Concentration

At this location, the time of concentration to represent the existing conditions follows the Airport Method. The Airport Method is shown in Equation 4.

Equation 4: Airport Method of Determining Time of Concentration

$$Tc = 3.26 \times (1.1 - C) \times L^{0.5}$$
$$S_w^{0.33}$$

Where:

 T_c = Time of concentration (min)

C = runoff coefficient (dimensionless)

L = Length of the flow path (m)

S_w = Slope of the watershed (%)

The time of concentration for the post-development conditions was calculated using the Bransby-Williams equation (see Equation 5).

Equation 5: Bransby Williams Method of Determining Time of Concentration

$$T_c = \frac{0.057L}{S_w^{0.2} A^{0.1}}$$

Where:

 T_c = Time of concentration (min)

L = Length of the flow path (m)

S_w = Slope of the watershed (%)

A = Area of watershed (ha)

3.2 Peak Flows

The 5-Yr and 100-Yr target (pre-development) and post-development uncontrolled peak flows for the 1.55ha catchment are provided in Table 3-4. Peak flows exceed the pre-development flows and therefore stormwater quantity control is triggered.

Table 3-4: Peak Flows

Event	Pre	Post
5-Yr	0.077	0.327
100-Yr	0.157	0.588

3.3 Storage

3.3.1 Required

Since the post development peak flows are higher than the target flows, controls are required to reduce the peak flows. This is accomplished through storage. The storage volume that is needed will be determined using the Modified Rational Method which is a preferred modelling tool for small sites.

A calculation of peak flow is made using Equation 1 using rainfall intensities adjusted for varying times of concentration. The difference between the peak flow and the allowable peak flow is converted to a volume assuming a duration equal to the time of concentration. The volume of storage required is the greatest volume. The calculation is repeated for each of the 5-yr and 100-yr events.

The storage required for the 5-yr event is 152.4m³ and 259m³ for the 100-yr event. See Tables 3-5 and 3-6.

Table 3-5: 5-Yr Storage Requirement

T _c (min)	i (mm/hr)	Q _{post} (cms)	Q _{cont} (cms)	Stor (m³)
5	163.7	0.530	0.077	136.0
10	100.9	0.327	0.077	149.9
15	76.1	0.246	0.077	152.4
20	62.2	0.202	0.077	149.4
25	53.2	0.172	0.077	143.2
30	46.9	0.152	0.077	134.7
35	42.1	0.136	0.077	124.6
40	38.4	0.124	0.077	113.3
45	35.3	0.114	0.077	101.0
50	32.8	0.106	0.077	87.9
55	30.7	0.099	0.077	74.1
60	28.9	0.094	0.077	59.7

Table 3-6: 100-Yr Storage Requirement

T _c (min)	i (mm/hr)	Q _{post} (cms)	Q _{cont} (cms)	Stor (m³)
5	267.5	0.947	0.157	237.0
10	166.0	0.588	0.157	258.5
15	125.6	0.445	0.157	259.0
20	103.1	0.365	0.157	249.5
25	88.4	0.313	0.157	234.0
30	78.0	0.276	0.157	214.4
35	70.1	0.248	0.157	191.8
40	64.0	0.227	0.157	166.8
45	59.0	0.209	0.157	140.1
50	54.9	0.194	0.157	111.8
55	51.4	0.182	0.157	82.3
60	48.4	0.171	0.157	51.7

3.3.2 Storage Facility

Stormwater quantity control will be addressed through a dry pond facility located at the east side of the proposed gravel storage yard and asphalt marshalling area.

The storage facility will contain 426m³ at full storage elevation of 81.2m. An additional 0.3m freeboard is provided to help contain and safely pass unforeseen runoff events that exceed the design standard.

The flat bottom of the facility will help to enhance infiltration as retained water will slowly soak into the ground.

3.3.3 Controls

Two outlet controls are provided. See Table 3-7.

The minor events will be controlled using Outlet #1, a 200mm orifice pipe located within a ditch inlet. The grate of the inlet will help to reduce the tendency of debris from blocking the outlet. Larger events will crest up to engage Outlet #2, a 600mm rectangular weir located near the first outlet.

Table 3-7: Culvert Controls

Control	Size	Туре	Invert
Outlet #1	200mm	Orifice	80.5m
Outlet #2	600mm	Rectangular Weir	81.0m

The stage:storage:discharge relationship of the dry pond is given in Table 3-8.

Table 3-8: Stage:Storage:Discharge Relationship of Dry Pond

Depth (m)	Elevation (m)	Storage (m³)	Discharge (L/s)
0.000	80.5	0	0
0.100	80.6	48.6	4.4
0.200	80.7	97.2	26.4
0.300	80.8	152.3	37.3
0.400	80.9	214	45.7
0.500	81	275.7	52.8
0.600	81.1	350.8	92.8
0.700 *	81.2	425.9	156.8
0.800	81.3	507.8	233.1
0.900	81.4	596.7	316.7
1.000	81.5	685.6	404.5
		Storage (m³)	Controlled Flows (L/s)
5-Yr	81.06	298	77
100-Yr	81.20	426	157

^{*} Full Storage

3.4 Controlled Peak Flow Summary

The dry pond affords sufficient storage opportunity for the orifice control pipe and weir to reduce the peak flows below the target flows.

A total storage volume of 426m³ at a depth of 0.7m is provided in the dry pond, which exceeds the required storage of 259m³ (refer to Table 3-6) for the 100-yr event. The dry pond will have 0.3m of additional storage within the freeboard that would become engaged in the event of unforeseen conditions, such as blockage of the low flow outlet or if an event exceeding the design event occurred.

Provision has been made for the climate change requirement of 10% additional storage within the freeboard. The 10% requirement is 25.9m³. The surplus provided is 167m³, exceeding what is required.

Should other portions of the site be intercepted or future site alterations be made that directs a larger area to the facility, the weir outflow will safely pass excess runoff up to a flow of about 0.4m³/s and a storage volume of 686m³ before uncontrolled spills would occur.

The storage summary is given in Table 3-9.

Table 3-9: Peak Flow Storage Summary

Event	Flow (m³/s)		Storage (m³)		Elev.		
	Pre	Post	Controlled	Req'd	Provided	Surplus	(m)
5-Yr	0.077	0.327	0.077	152	298	146	81.06
100-Yr	0.157	0.588	0.157	259	426	167	81.20
Climate Change				25.9	167	141	81.20

Since the storage provided exceeds the storage required for the given outflows, the quantity control objectives are satisfied.

4 Water Quality Control Design

The water quality treatment follows a treatment train approach where stormwater quality will be improved through three technologies:

- 1) Shallow grassed swales.
- 2) Flat bottomed dry pond.
- 3) Sheet flow through unmanicured, undeveloped lands.

The dry pond has a wide flat bottom and is in excess of 90m long. The grassed swale will provide opportunity for filtration of runoff and will slow the velocity to less than 0.5m/s. In a study performed by Terry Lucke et al, researchers studied the effectiveness of TSS removal in grassed swales and concluded grass swales were very effective in a treatment train approach at providing pretreatment to prevent clogging of downstream treatment systems. Swales investigated were triangular in shape and had slopes of 1% or less. They found:

Results showed that between 50% and 80% of the TSS was generally removed within the first 10 m of the swales. A further 10% to 20% reduction in TSS concentrations can be expected in swales up to 30 m long.

The same removal rate can be expected in the dry pond with a bottom length in excess of 90m. The flat bottom would be more effective than the V-bottom swales in the study. In addition, the runoff will be intercepted by shallow grassed swales that will improve the treatment.

The Low Impact Development Guidelines (Toronto and Region Conservation Authority, 2010, pp. 4-141) states the dry pond bottom can be expected to achieve the following removal rates during small runoff events similar to the quality event:

TSS 76%
Total Phosphorus 55%
Total Nitrogen 50%

Factors that improve the removal rates include a reduced longitudinal slope and reduced velocity. The widened flat bottom and restricted outflow will help to reduce the velocity well below 0.5m/s.

A TSS removal in excess of 80% can be expected at the point of discharge from the control structure. Further water quality polishing can be expected after the outlet of the facility and before discharge into the ditch at County Road 2.

Extensive grassy contact and settlement in the grassy surfaces within the swales, dry pond and sheet flow outlet will provide water quality mitigation to achieve *Enhanced* water quality objectives.

5 Sediment and Erosion Controls

During construction, the cover material is disturbed and the underlying soils are more susceptible to erosion. Eroded soils may be transported into the drainage system during runoff events and can be deposited as sediment in storm sewers, stormwater management facilities and watercourses.

Materials from site should be protected during construction by temporary siltation control fencing and with the use of rock check dams or straw bale checks where concentrated flows may be experienced.

The dry pond facility will capture sediment released during construction. It should be constructed first in the sequence of the project to protect downstream water quality. The dry pond will act as a secondary sediment and erosion control during construction.

After construction is completed and the site has become stabilized, the temporary controls may be removed. Sediment that may have accumulated in the dry pond should also be removed and the facility be returned to its design conditions.

6 Maintenance

Dry Pond Facility

Debris has the potential to become lodged within the controls of the facility and operators of the facility should inspect the pond monthly and remove any accumulated debris.

The vegetation within the dry pond may be allowed to grow long, but should be cut once or twice per year to prevent growth of trees.

The dry pond will require infrequent maintenance to remove sediment that will accumulate. The sediment will impair the infiltration potential and reduce the performance of the quantity control. Sediment should be removed when the sediment depth accumulates to 0.2m.

Controls

The 200mm outlet pipe is intended to induce shallow ponding in the dry pond that will provide peak flow control during minor runoff events. Larger events will also engage the rectangular weir that will act in tandem with the 200mm outlet pipe a second control.

However, the small diameter opening is susceptible to clogging and should be checked after each large runoff event to ensure the opening is clear.

The weir, although less susceptible to clogging should also be inspected after each large event to maintain the flood protection for the site.

6.1 Maintenance Summary

6.1.1 Monthly Maintenance

- Inspect the dry pond for debris and remove any accumulated debris
- Check the outlets to ensure they are not obstructed

6.1.2 After each large runoff event

The facility should be inspected for damage and that the outlets are working correctly.

6.1.3 Annually

Mow the vegetation in the dry pond

6.1.4 Infrequently (10yrs to 20yrs)

• Remove sediment within the facility using excavation equipment.

7 Conclusions

Prysmian Canada plans to construct a large expansion to their facility on Commerce Drive in Prescott. The expansion will include an asphalt marshalling yard and a gravel yard. CBL completed hydrologic calculations using the Rational Method to determine the predevelopment and post-development peak flows for the 5-yr and 100-yr events. Target peak flows were calculated for the 5-yr and 100-yr events at 0.077m³/s and 0.157m³/s respectively.

Using the Modified Rational Method, CBL determined the storage required in order to reduce peak flows below the target flows. A dry pond facility with two outlet controls provides the necessary storage.

- Control #1 = 200mm orifice at 80.5m invert
- Control #2 = 600mm wide rectangular weir with invert = 81.0m

Table 7-1 shows the peak flow summary. Table 7-2 shows the storage summary.

Table 7-1: Summary of Stormwater Management Mitigation

Target	Pre-Development (m³/s)	Post-Development (m³/s)	Controlled (m³/s)	Target Achieved
5-Yr	0.077	0.327	0.077	✓
100-Yr	0.157	0.588	0.157	✓

Table 7-2: Summary of Storage Required and Provided

Target	Storage Required (m³)	Storage Provided (m³)	Target Achieved
5-Yr	152	298	✓
100-Yr	259	426	✓
Climate Change	25.9	141 (at 81.2m)	✓

The Enhanced water quality target is also achieved using the grassed swales, dry pond and sheet flow discharge. The stormwater measures achieve the required quantity control and water quality mitigation targets.

Report Submitted by

Byn Rune

Bryon Keene, P.Eng.



Peter Yee, P.Eng.

References

Lucke, T. (2014). Pollutant Removal and Hydraulic Reduction Performance of Field Grassed Swales during Runoff Simulation Experiments. . Water.

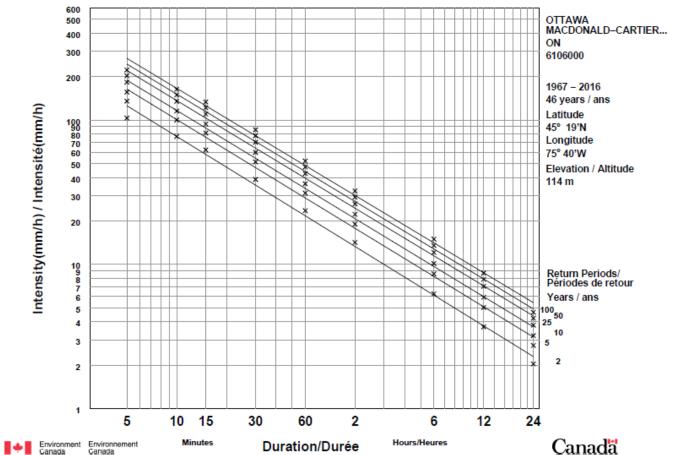
Ministry of the Environment. (2003). Stormwater Management Planning and Design Manual.

Ministry of Transportation. (1997). Drainage Management Manual.

Toronto and Region Conservation Authority. (2010). Low Impact Development Stormwater Management Planning and Design Guide, Version 1.0.

APPENDIX A IDF CURVES OTTAWA INTERNATIONAL AIRPORT STATION 6106000

Short Duration Rainfall Intensity-Duration-Frequency Data 2020/03/27 Données sur l'intensité, la durée et la fréquence des chutes de pluie de courte durée



Environment and Climate Change Canada Environnement et Changement climatique Canada

Short Duration Rainfall Intensity-Duration-Frequency Data Données sur l'intensité, la durée et la fréquence des chutes de pluie de courte durée

Gumbel - Method of moments/Méthode des moments

2020/03/27

OTTAWA MACDONALD-CARTIER INT'L A ON 6106000

Latitude: 45 19'N Longitude: 75 40'W Elevation/Altitude: 114 m

Years/Années : 1967 - 2016 # Years/Années : 46

Table 1 : Annual Maximum (mm)/Maximum annuel (mm)

Year	5 min	10 min	15 min	30 min	1 h	2 h	6 h	12 h	24 h
Année									
1967	13.2	15.2	15.7	16.5	24.6	35.3	43.4	45.7	55.6
1968	8.1	14.0	18.5	23.1	33.3	34.0	41.1	44.7	44.7
1969	7.6	13.2	19.8	26.4	32.5	32.5	46.7	47.2	50.3
1970	14.5	23.4	27.7	34.3	35.6	36.6	43.2	43.4	43.4
1971	15.7	16.0	16.5	18.8	33.3	35.1	36.8	37.3	37.3
1972	11.4	17.3	23.4	31.7	38.1	38.4	48.8	53.8	60.5
1973	7.4	11.9	15.7	20.6	30.2	34.5	43.4	43.7	45.2
1974	5.6	7.9	10.2	19.3	20.6	30.7	31.0	35.8	39.1
1975	10.4	18.3	22.9	26.2	34.8	36.8	37.8	39.9	41.4
1976	9.7	12.7	13.5	13.7	14.5	18.3	27.9	28.2	33.0
1977	9.1	14.7	15.5	19.0	21.8	30.5	39.1	39.6	39.6
1978	17.5	22.2	29.3	35.5	36.2	36.3	36.3	36.5	39.4
1979	13.2	25.5	32.1	41.4	43.9	44.0	44.0	62.3	63.0
1980	8.9	16.0	17.4	17.8	18.3	18.4	28.3	42.8	47.2
1981	7.9	14.4	19.4	27.5	35.3	63.7	108.9	111.3	115.9
1982	7.1	10.6	14.1	19.7	20.9	21.5	35.0	40.3	40.3
1983	5.1	7.3	9.1	9.9	12.0	19.6	32.6	38.2	56.7
1984	8.2	9.3	11.7	16.4	18.4	19.4	26.1	36.1	44.3
1985	5.4	9.6	11.2	15.9	19.0	34.5	39.6	39.6	39.6
1986	12.2						42.4		
	12.7								
1989	6.7	10.4							
1986 1987 1988	12.2 8.8	21.0 13.2 17.0	24.4 15.5 21.0 15.4	31.1 21.4 24.2 19.2	34.9 21.8 28.2 23.7	35.6 41.4 36.4 25.9	42.4 42.3 44.2 34.5	46.0 58.4 45.4 36.3	69.3 59.0 45.8 40.6

1990	10.4	12.6	13.6	17.5	20.8	24.7	35.0	53.5	54.0
1991	4.1	5.8	6.8	8.6	15.0	19.8	24.6	30.4	41.2
1992	6.2	10.3	13.8	19.6	31.5	37.4	43.3	49.7	54.2
1993	6.4	8.8	11.9	12.8	13.2	13.2	22.3	43.0	55.5
1994	15.6	20.0	21.8	23.6	23.8	23.8	32.5	35.0	42.9
1995	6.2	8.5	11.1	11.9	17.1	26.5	54.3	76.2	83.4
1996	6.4	11.9	14.3	18.9	26.9	27.1	33.0	35.6	44.1
1997	5.8	6.9	7.8	11.7	13.5	15.4	26.6	34.9	40.4
1998	9.1	12.1	12.3	15.8	15.8	17.8	24.0	30.5	43.6
1999	8.9	12.9	16.3	17.7	17.7	20.4	39.4	39.7	39.8
2000	7.7	8.7	9.9	11.5	15.9	19.6	38.8	46.7	46.7
2002	8.7	14.6	20.7	33.6	45.4	54.4	57.0	57.0	59.5
2003	7.4	10.8	12.1	17.1	20.0	20.0	26.1	38.2	44.6
2004	8.0	13.0	18.3	25.6	31.9	50.4	98.9	125.7	136.6
2006	11.3	12.8	14.9	16.9	18.1	21.3	40.0	46.1	50.7
2007	8.2	12.8	13.6	21.3	23.2	23.2	44.4	67.8	67.8
2008	7.6	12.0	15.9	18.3	20.9	23.5	33.1	44.8	49.6
2009	9.5	14.7	17.0	21.5	36.0	47.0	47.0	62.8	66.9
2010	8.4	15.5	17.6	21.4	29.0	33.1	35.6	41.4	46.6
2013	9.4	16.2	20.1	21.3	25.1	41.3	42.7	42.7	44.1
2014	11.4	17.7	19.4	22.8	24.9	26.6	33.4	46.2	56.2
2015	6.2	9.2	12.1	12.7	15.3	18.8	26.1	36.9	41.2
2016	9.5	14.2	14.6	14.8	16.4	24.6	35.6	37.3	40.4
# Yrs.	46	46	46	46	46	46	46	46	46
Années									
Mean	9.1	13.5	16.4	20.6	25.0	30.2	40.2	47.3	52.2
Moyenne									
Std. Dev.	3.0	4.4	5.4	7.1	8.6	10.9	15.9	18.3	19.0
Écart-type									
Skew.	0.92	0.68	0.83	0.88	0.50	0.86	2.94	2.86	2.92
Dissymétrie									
Kurtosis	3.69	3.60	3.99	3.91	2.50	3.87	13.66	12.49	13.04

^{*-99.9} Indicates Missing Data/Données manquantes

Warning: annual maximum amount greater than 100-yr return period amount Avertissement : la quantité maximale annuelle excède la quantité

pour une période de retour de 100 ans

_	_			
Year/Année	Duration/Du	ırée	Data/Données	100-yr/ans
1981	6	h	108.9	89.9
1981	12	h	111.3	104.6
1981	24	h	115.9	111.9
2004	6	h	98.9	89.9
2004	12	h	125.7	104.6
2004	24	h	136.6	111.9

Table 2a : Return Period Rainfall Amounts (mm)

Quantité de pluie (mm) par période de retour

Duration/Durée	2	5	10	25	50	100	#Years
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	Années
5 min	8.6	11.3	13.0	15.3	16.9	18.5	46
10 min	12.8	16.7	19.2	22.5	24.9	27.2	46
15 min	15.5	20.3	23.5	27.5	30.5	33.4	46
30 min	19.4	25.7	29.8	35.1	39.0	42.9	46
1 h	23.6	31.2	36.2	42.6	47.3	52.0	46
2 h	28.4	38.1	44.5	52.6	58.6	64.5	46
6 h	37.5	51.6	60.9	72.6	81.3	89.9	46
12 h	44.3	60.4	71.1	84.6	94.7	104.6	46
24 h	49.1	65.9	77.0	91.1	101.5	111.9	46

Table 2b :

Return Period Rainfall Rates (mm/h) - 95% Confidence limits Intensité de la pluie (mm/h) par période de retour - Limites de confiance de 95%

Duration/Durée	2	5	10	25	50	100	#Years
Dalacion, Dalec							
_	_	yr/ans	_	_	_	-	Années
5 min	103.3	135.2	156.3	183.0	202.8	222.5	46
	+/- 9.6	+/- 16.1	+/- 21.8	+/- 29.4	+/- 35.1 +	-/- 40.9	46
10 min	77.0	100.1	115.5	134.8	149.2	163.5	46
	+/- 6.9	+/- 11.7	+/- 15.8	+/- 21.3	+/- 25.5 +	-/- 29.7	46
15 min	62.2	81.3	94.0	110.0	121.9	133.7	46
	+/- 5.7	+/- 9.7	+/- 13.1	+/- 17.6	+/- 21.1 +	-/- 24.6	46
30 min	38.8	51.4	59.7	70.2	78.0	85.7	46
	+/- 3.8	+/- 6.3	+/- 8.6	+/- 11.6	+/- 13.8 +	-/- 16.1	46
1 h	23.6	31.2	36.2	42.6	47.3	52.0	46
	+/- 2.3	+/- 3.8	+/- 5.2	+/- 7.0	+/- 8.4 +	-/- 9.8	46
2 h	14.2	19.0	22.2	26.3	29.3	32.3	46
	+/- 1.5	+/- 2.4	+/- 3.3	+/- 4.5	+/- 5.3 +	-/- 6.2	46
6 h	6.3	8.6	10.1	12.1	13.5	15.0	46
	+/- 0.7	+/- 1.2	+/- 1.6	+/- 2.2	+/- 2.6 +	-/- 3.0	46
12 h	3.7	5.0	5.9	7.1	7.9	8.7	46
	+/- 0.4	+/- 0.7	+/- 0.9	+/- 1.2	+/- 1.5 +	-/- 1.7	46
24 h	2.0	2.7	3.2	3.8	4.2	4.7	46
	+/- 0.2	+/- 0.4	+/- 0.5	+/- 0.6	+/- 0.8 +	-/- 0.9	46

Table 3: Interpolation Equation / Équation d'interpolation: $R = A*T^B$

R = Interpolated Rainfall rate (mm/h)/Intensité interpolée de la pluie (mm/h)<math>RR = Rainfall rate (mm/h) / Intensité de la pluie (mm/h)

T = Rainfall duration (h) / Durée de la pluie (h)

Statistics/Statistiques	2	5	10	25	50	100
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans
Mean of RR/Moyenne de RR	36.8	48.3	55.9	65.5	72.7	79.8
Std. Dev. /Écart-type (RR)	36.4	47.5	54.8	64.0	70.8	77.6
Std. Error/Erreur-type	8.8	11.2	12.7	14.7	16.2	17.7
Coefficient (A)	21.7	28.9	33.6	39.6	44.0	48.4
Exponent/Exposant (B)	-0.707	-0.698	-0.695	-0.692	-0.690	-0.688
Mean % Error/% erreur moyenne	7.5	7.8	7.9	8.1	8.1	8.2

APPENDIX B HYDROLOGIC CALCULATIONS

Stage:Storage:Discharge

Determine Stage - Storage - Discharge Relationship

62

62

75

75

82

89

89

214

276

351

426

508

597

686

0.400

0.500

0.600

0.700

0.800

0.900

1.000

0.300

0.400

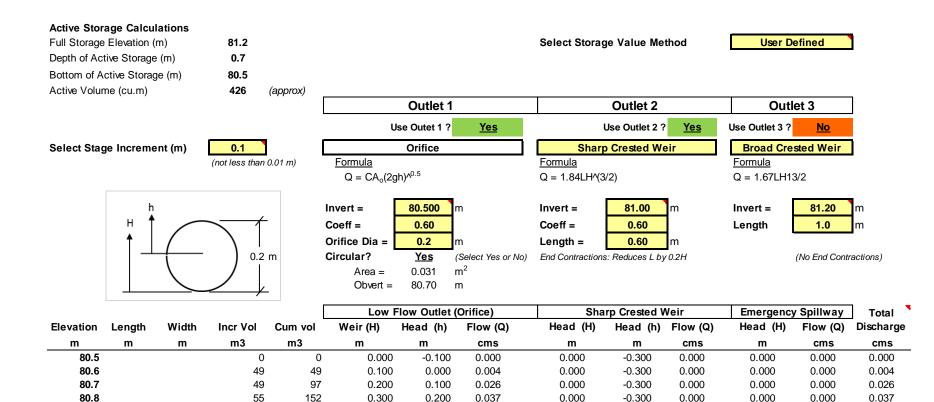
0.500

0.600

0.700

0.800

0.900



80.9

81.1

81.2

81.3

81.4

81.5

81

-0.300

-0.300

-0.200

-0.100

0.000

0.100

0.200

0.000

0.000

0.034

0.092

0.163

0.242

0.325

0.000

0.000

0.000

0.000

0.100

0.200

0.300

0.000

0.000

0.000

0.000

0.053

0.149

0.274

0.046

0.053

0.093

0.157

0.233

0.317

0.404

0.046

0.053

0.059

0.065

0.070

0.075

0.079

0.000

0.000

0.100

0.200

0.300

0.400

0.500

Pre-Development Time of Concentration

Calculate Time of Concentration by Airport Method

$$Tc = \frac{3.26 \times (1.1 - C) \times L^{0.5}}{S_w^{0.33}}$$

5-Yr

Where:		Slope Calculation	
T_c = Time of Concentration in min		85/10 Method	
L = Watershed length in metres =	110 m	Longest Flow Length =	110 m
C = Runoff Coefficient =	0.27	Elevation at 85% =	85 m
S_w = Watershed Slope in %	3.6 %	Elevation at 10% =	82 m
A = Watershed area in hectares	1.5545 ha	Length at 85/10 =	82.5 m
T _c = 18.5 min		Slope =	0.036 m/m

100-Yr

Where:		Slope Calculation	
T_c = Time of Concentration in min		85/10 Method	
L = Watershed length in metres =	110 m	Longest Flow Length =	110 m
C = Runoff Coefficient =	0.32	Elevation at 85% =	85 m
S _w = Watershed Slope in %	3.6 %	Elevation at 10% =	82 m
A = Watershed area in hectares	1.5545 ha	Length at 85/10 =	82.5 m
T _c = 17.4 min		Slope =	0.036 m/m

Post-Development Time of Concentration

Calculate Time of Concentration by Bransby Williams Method

$$Tc = \underbrace{0.057 \times L}_{S_w^{0.2} \times A^{0.1}}$$

Where:

 T_c = Time of Concentration in min

L = Watershed length in metres = 110 m S_w = Watershed Slope in % 3.6 %A = Watershed area in hectares 1.5545 ha

T_c = 4.6 min

Peak Runoff Estimate by Rational Method

 $Q=\frac{1}{360}\;C\;i\;A$

Where:

55

60

30.7

28.9

Q = Peak Flow in cmsC = Runoff Coefficient

i = Rainfall Intensity in mm/hr

A = Area in hectares

 $i = A * T_c^B$

25

30

35

40

45

50

55

60

88.4

78.0

70.1

64.0

59.0

54.9

51.4

48.4

Where:

i = Rainfall Intensity in mm/hr

 T_c = Time of Concentration in hours

5-Yr 100-Yr A = 28.9 48.4 B = -0.698 -0.688

5-Yr 1.5545 ha Area = Post Pre C= 0.27 0.75 $T_c =$ 18.5 10 min Bransby Williams Intensity = 65.70 mm/hr Q_{allow} = 0.077 cms 0.077 $Q_{cont} =$ cms T_c (min) i (mm/hr) $\mathbf{Q}_{\mathrm{cont}}$ (cms) Stor (m³) Q_{post} (cms) 5 163.7 0.530 0.077 136.0 10 100.9 0.327 0.077 149.9 15 76.1 0.246 0.077 152.4 20 62.2 0.202 0.077 149.4 25 53.2 0.172 0.077 143.2 46.9 30 0.152 0.077 134.7 35 42.1 0.136 0.077 124.6 40 38.4 0.124 0.077 113.3 45 35.3 0.114 0.077 101.0 50 32.8 0.106 0.077 87.9

0.099

0.094

0.077

0.077

74.1

59.7

100-Yr							
Area =	1.5545	5 ha					
	Pre	Post					
C =	0.32	0.82					
T _c =	17.4	10	min				
	Airport	Bransby William	S				
Intensity =	113.43	mm/hr					
Q _{allow} =	0.157	cms					
$Q_{cont} =$	0.157	cms					
T _c (min)	i (mm/hr)	Q _{post} (cms)	Q _{cont} (cms)	Stor (m ³)			
5	267.5	0.947	0.157	237.0			
10	166.0	0.588	0.157	258.5			
15	125.6	0.445	0.157	259.0			
20	103.1	0.365	0.157	249.5			

0.313

0.276

0.248

0.227

0.209

0.194

0.182

0.171

0.157

0.157

0.157

0.157

0.157

0.157

0.157

0.157

234.0

214.4

191.8

166.8

140.1

111.8

82.3

51.7

CORNERSTONE BUILDERS LTD. 195 Bellevue Drive, RR 5, Belleville, ON K8N 4Z5 (613) 968-3501 Fax: 968-4986



Township of Edwardsburg-Cardinal

27 May, 2021

18 Centre Street, P.O. Box 129 Spencerville, ON

Attn:

Ms. Wendy Van Keulen

Community Development Coordinator

Site Plan Control Application Review

Roll No. 070170102009906

We herein submit our response to South Nation Conservation comments dated – May 13, 2021 for the proposed Expansion at Prysmian Cables in Prescott, ON. We have reviewed these comments and have made some modifications to the stormwater design as discussed below. In some cases, we respectfully offer differing opinions to the SNC comments.

Re:

Comment 1

The first comment was regarding the legal outlet for the drainage from the site. The site drains directly to King Street East which is a legal outlet. We have updated our site plan drawings to show overland flow on the site to the legal municipal ditch running parallel to the King Street East.

Comment 2

The second comment included several issues and questioned the suitability of infiltration technologies to the site. The Prysmian Cables SWM report relies on grassed swales and does not appeal to infiltration technologies for the quality treatment.

The stormwater quality treatment technologies available to industrial sites are limited. The listing of common technologies available is provided in Table 4.1 from MOE, 2003). Given that the contributing area is about 1.5ha and the land use is industrial, the only technologies available (with the exception of Oil Grit Separators) are infiltration based. If all infiltration technologies are ruled out for industrial sites, then for small sites with less than 5ha of contributing area the only suitable technology remaining is an oil grit separator. However, oil grit separators are best matched with sites that are drained by storm sewer systems. The subject site is proposed to be surface drained.

SNC stated that grassed swales are predominantly an infiltration technology and for this reason they should not be used at industrial sites and in areas with low permeability soils and in areas where the groundwater table is high. Each is discussed below.

Contamination Risk of Industrial Sites

Industrial sites are assumed to present a much higher risk to the environment. However, later guidelines recognize a universal assumption that all industrial sites present high risk is incorrect. The <u>DRAFT Low Impact Development (LID) Stormwater Management Guidance Manual, April 20, 2017 states</u>, "for example, a moratorium on the infiltration of all water from industrial sites

would miss opportunities to infiltrate generally clean runoff originating on rooftops and landscaped areas". P68

In another study, by TRCA in 2009 prepared for the MECP called, <u>Review of the Science and Practice of Stormwater Infiltration in Cold Climates</u>, they concluded that a universal restriction on infiltration in industrial sites should be reconsidered.

Current stormwater planning and design guidelines in Ontario can be interpreted as blanket restrictions on infiltration practices installed within any industrial or commercial land use, which leaves little flexibility for exceptions. Improving direction in this regard in the updated guideline would reduce a significant barrier to the application of infiltration practices in Ontario.

Of particular note are differences in direction regarding the types of land uses that are considered unsuitable for application of stormwater infiltration practices. Some guidelines, such as in Ontario and Alberta, caution against the use of infiltration practices in all commercial and industrial developments, whereas most others suggest restrictions only in stormwater 'hot spots', such as gas stations and loading yards, where spills or leaks of organic compounds are more likely., P3

The Prysmian Cables yard will drain to the proposed stormwater management features. The yard area is used for storage of large spools of cables where the risk of contamination is extremely low. The loading area also contributes drainage. Drainage from the loading area is collected by a catchbasin. The contamination risk due to the loading area is from oils and fuels originating from trucks. Such contaminants are consistent with parking lots and linear infrastructure. This does not provide a high contamination risk. But, CBL agrees that pre-treatment would be an improvement for the runoff from the loading area.

Action: CBL has agreed to replace the standard catchbasin with a Soleno Catchbasin Treatment Unit that will pre-treat the runoff from the loading area and collect sediment and floating contaminants.

Action: CBL has also agreed to place sumps at the points of connection of the grassed swales to the dry pond to assist with grit collection.

Low Permeability Soils

It is commonly believed that infiltration technologies are not to be applied to soils with infiltration rates less than 15mm/hr. This is no longer the case. TRCA published Stormwater Management Criteria, August 2012, appendix C which states,

The MOE Manual 2003 recommends applying lot level and conveyance controls to areas with infiltration rates of greater than 15 mm/hr (soils with hydraulic conductivity as low as 10⁻⁸ m/s). For the purposes of site suitability, where the tested soil infiltration rate is low (i.e. less than 15 mm/h), infiltration may still be feasible and therefore should still be considered for all soil types.

Infiltration is not relied upon at the Prysmian site (as discussed below), but it should not be discouraged.

Grassed Swales Treatment Process

The list of technologies in Table 4.1 from MOE 2003 indicates that grassed swales are not required to be separated from the groundwater table by any distance. Further, grassed swales are not constrained by any particular soil type. Infiltration practices are required to be separated from the groundwater table and are reliant upon the soil types. Grassed swales are not (reference Table 4.1). This also suggests that infiltration is not the dominant process since infiltration is reliant on the soil type and depth to groundwater table.

MOE, 2003 states, "Stormwater management objectives have changed and grassed swales are now being promoted to **filter** and **detain** stormwater runoff". This indicates the MOE understood the dominant processes of quality treatment by grassed swales is filtration and settling.

In the LID manual, the study authors rely on a report by Deletic and Fletcher, who published the TSS and TP and TN removal rates referenced in the stormwater management report for Prysmian Cables. The LID manual continues to explain the processes that TSS removal is a physical process. (p37)

As reported by Deletic and Fletcher (2006), median pollutant removal rates of swales from available performance studies are 76% for TSS, 55% for total phosphorus and 50% for total nitrogen. In their own field studies of the performance of grassed swales they observed variable TSS removal rates ranging from 61-86%. They concluded that TSS removal from runoff is primarily a physical process, reflecting the balance between flow and particle settling velocity and that removal performance is a function of flow rate, grass density and particle size and density (Deletic and Fletcher, 2006).

This reference suggests that settling is the dominant process for grassed swales for TSS removal.

Since TSS removal is the yard stick for demonstrating Normal Treatment (70% TSS removal), water quality treatment success at the Prysmian site is inferred if 70% removal of TSS can be demonstrated.

The outlet from the dry pond will drain discharged flows across an additional 150m through well vegetated lands prior to being received by the municipal ditch. CBL believes the TSS targets are achieved at the outlet of the dry pond, but additional sedimentation can be expected along this very extended diffuse flow path. TSS target of Normal can be reasonably assured.

Other Jurisdictions

MECP has adopted principles and understanding of water quality treatment technologies from many jurisdictions and continues to look abroad. In a recent investigation commissioned by MECP, STEP Review of the Science and Practice of Stormwater Infiltration in Cold Climates, (TRCA, 2009), the study authors reviewed the state of practice in many jurisdictions including Australia. The following is a quotation from the TRCA study (p39).

Concentrations of metals, nutrients pesticides and phenolic compounds in groundwater near three infiltration basins studied in Perth, Australia, receiving runoff from a mixture of light industrial, medium density residential and a high traffic road, and located on predominantly sandy soil with some clay and limestone, were low and well within drinking water guidelines (Appleyard, 1993).

The same study also referenced research in many U.S. states and European Countries. MECP, having learned from study results from other jurisdictions, retreated from firm restrictions on stormwater practices for industrial lands and for low permeability and high permeability soils concluding the **infiltration technologies did not negatively impact groundwater resources**.

The SNC review comments make reliance on a study by Bäckström et al., 2006. This study was carried out in Sweden.

The Prysmian Cables SWM report reference to the Terry Lucke study should not be dismissed based on its location.

Design

The LID guidelines recommend sideslopes 3:1 or less and geometries that can reduce velocities to less than 0.5m/s within the swale of the 25mm 4hr Chicago event. The dry pond has 3:1 side slopes, flat bottom and 0% linear slope. Lucke studied swales that had breadths measured at the top of swale ranging from 3m to 6m and depths up to 0.49m. The dry pond used at Prysmian site would have dimensions exceeding those in the Lucke study and would have velocities much lower than 0.5m/s.

The average velocity of the 25mm quality event must be less than 0.5m/s. The CBL SWM report states the average velocity in the dry pond is less than 0.5L/s. While a 25mm 4-hr Chicago event was not simulated since hand calculations were employed in the modelling, the 2-yr peak flow can be readily investigated as a conservative approach. The 2-yr peak flow within the dry pond is 58L/s (0.058m³/s). Given an average cross-sectional area of 4m² the velocity in the dry pond is 0.0145m/s, which is well below the velocities considered acceptable for settling technologies.

The guidelines recommend soil amelioration, but only if the soils are not sufficiently fertile to produce grasses.

It is also recommended that the swales have some form of pretreatment. CBL has agreed to increase the pretreatment at the Prysmian Cables site as discussed above.

Short circuiting through the dry pond has been reduced by moving the outlet.

Action: Two sumps have been added to offer some pre-treatment. They will collect the courser sediment fraction.

Comment #3

SNC is concerned with the use of the dry pond during construction as a sediment collection device.

Action: To address this concern, CBL will not use the dry pond for sediment control during construction.

We trust this will satisfy your concerns.

Yours truly

Cornerstone Builders Ltd.