

**THE CORPORATION OF THE TOWN OF AMHERSTBURG
BY-LAW NO. 2016-74**

**By-law to authorize the execution of a Consent Agreement
between Giuseppe DiCecco
and the Corporation of the Town of Amherstburg**

WHEREAS Giuseppe DiCecco has proposed the subdivision and servicing of lands owned by him within Part of Lot 29, Concession 3(formerly Township of Malden) now Town of Amherstburg;

AND WHEREAS the Corporation of the Town of Amherstburg have settled with Giuseppe DiCecco the requirements for the provisions of Municipal Services within the area to be subdivided, which requirements are set out in the agreement hereto annexed, and which agreement is ratified and adopted by Giuseppe DiCecco;

NOW THEREFORE the Corporation of the Town of Amherstburg enacts as follows:

1. That the Corporation of the Town of Amherstburg enter into a Consent Agreement with Giuseppe DiCecco in the form annexed hereto, and the Mayor and Clerk be and they are hereby authorized to sign the original and copies thereof and affix the Corporate Seal thereto.
2. This By-law shall come into force and effect on the date of final passage hereof.

Read a first, second and third time and finally passed this 12th day of September, 2016.



MAYOR – ALDO DICARLO



CLERK – PAULA PARKER

TOWN OF AMHERSTBURG

CONSENT AGREEMENT

BETWEEN: GUISEPPE DICECCO

-AND-

THE COPORATION OF THE TOWN OF AMHERSTBURG

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CONSENT AGREEMENT

THIS AGREEMENT made in quadruplicate this 12th day of September, 2016.

BETWEEN:

Giuseppe DiCecco
(hereinafter called the "**Developer**")

OF THE FIRST PART;

- and -

THE CORPORATION OF THE TOWN OF AMHERSTBURG
(hereinafter called the "**Town**")

OF THE SECOND PART;

WHEREAS the Developer proposes the subdivision, development, servicing and sale of lands within Part of Lot 29, Concession 3 (formerly Township of Malden), now Town of Amherstburg, County of Essex which lands are more particularly described in Schedule "A" annexed hereto;

AND WHEREAS the Amherstburg Committee of Adjustment granted consent on October 6, 2015 for the subdivision of lands to create five (5) lots for purposes of single unit dwellings, subject to conditions imposed including a provision that the Developer agrees in writing to satisfy all of the requirements, financial and otherwise, of the Town concerning the provision of roads, installation of services, drainage, the granting of easements and parkland and other matters;

AND WHEREAS the Developer represents and warrants to the Town that it is now the registered Developer of all of the lands described in Schedule "A" annexed hereto and that all of the right, title and interest of its predecessors in title and all the right and authority to complete the subdivision and to develop the lands is vested in it.

NOW THEREFORE IN CONSIDERATION of the premises and of the Town certifying to the Committee of Adjustment that the requirements of the Town have been met, the parties hereto agree as follows:

1. Schedules

The following Schedules are attached hereto, are hereby made a part of this Agreement, as fully and to all intents and purposes as though recited in full herein:

- i. Schedule "A" Legal Description;
- ii. Schedule "B" Design Criteria;
- iii. Schedule "C" Interpretation;
- iv. Schedule "D" Draft Reference Plan;
- v. Schedule "E" Notice to Purchasers and Restrictive Covenants;
- vi. Schedule "F" Environmental Impact Assessment – Dillon Consulting, September 17, 2014;
- vii. Schedule " G" Correspondence – Essex Region Conservation Authority, September 23, 2015;
- viii. Schedule "H" Transfer of Buffer Zone to the Corporation of the Town of Amherstburg;
- ix. Schedule "I" Erosion and Sedimentation Control Plan – Dillon Consulting, June 6, 2014;
- x. Schedule "J" Correspondence – Dillon Consulting, July 16, 2015;
- xi. Schedule "K" Correspondence – Corporation of the Town of Amherstburg Public Works - February 17 and 19, 2015.

2. **Recitals**

The foregoing Recitals are true in substance and in fact and are hereby incorporated herein by reference.

3. **Installation of Services**

The Developer will design, construct and install Services at its own expense on the Lands described in Schedule "A" annexed hereto, all of the services referred to in Schedule "B" in accordance with such design criteria, detailed plans and work schedules to be filed in the office of the Clerk of the Town, with good materials, in a good, workmanlike and timely manner, in accordance with good and accepted engineering practices, and to the satisfaction of the Town, and in all cases the Town engineer.

4. **Certificate of Liability Insurance**

The Developer will provide to the Town, on or before the commencement of any construction and installation of any of the Services called for herein, a certificate of liability insurance satisfactory to the Town, naming the Town as an additional insured party. The insurance shall protect the Developer and the Town against any liability that might arise out of the construction or installation of any of the Services herein referred to, and the said Developer shall continue such insurance in full force and effect so long as any Services are to be constructed or installed, and for a period of two (2) years after completion and Final Acceptance of the last of such Services. The limits of liability for public liability and property damage coverage under such insurance shall not be less than \$5,000,000.00. Before commencement of the installation of the Services, the Developer's consulting engineer shall provide satisfactory evidence to the Town that the said consulting engineer maintains a policy of public liability insurance and errors and omissions insurance satisfactory to the Town, which policy is to be maintained in full force and effect until the Services are completed and formally accepted (final acceptance) by the Town.

5. **Save and Hold Harmless**

The Developer covenants and agrees to save the Town harmless from any and all claims, demands, loss, costs, or damages, including legal costs on a substantial indemnity basis in any way arising from or related to the subdivision and the proposed development thereof, arising or accruing to anyone up to two years after the completion and Final acceptance of the last of the Services in the subdivision.

6. **Drawings and Tenders**

The Developer shall submit all plans, design drawings, grading plans and specification lists, all of which shall carry the seal of the professional engineer who is responsible for such design and be signed by him, to the Town for examination by them and the Town engineer. In the case of any Services to be constructed by contract, the Developer shall also submit to the Town a copy of each set of "information for tenders" documents and each proposed contract together with the names of the proposed contractors and sub-contractors to be engaged. The Developer shall file with the Town work schedules for the construction and installation of all Services, whether by the Developer, the contractors, sub-contractors or others. The Developer shall obtain the approval in writing of the Town to all of the foregoing, except the selection of contractors or sub-contractors before granting any contract or commencing any work. The design criteria contained in Schedule "B" hereto shall constitute the minimum conditions upon which tenders are made, contracts let, or work done. The Developer's consulting engineer, or successor thereto, shall continue to be retained by the Developer until the works are complete and formally accepted by the Town.

7. **Construction of Services by Contractors**

In case of construction of Services by contractors, the Developer shall comply with all of the holdback provisions of the Construction Lien Act. In the construction of all Services the Developer shall indemnify and save the Town

harmless from any and all claims, actions and demands resulting from the construction and installation of Services.

8. Inspection

The Town, and its authorized agents, including the Town engineer, shall have the right at any time and from time to time to inspect all services during and after construction and to inspect and test all materials proposed to be used in the construction of any of the services. The costs of such inspections and tests shall be paid by the Developer within 30 days of written demand by the Town. If at any time, the construction of any service or material is, in the opinion of the Town engineer, acting reasonably, not in accordance with the plans and specifications or not in accordance with good engineering practices or any of the provisions of this agreement, the Town engineer may order the materials to be replaced or the work to be placed in satisfactory condition within such time as he may specify, and in the event of the Developer failing to comply or obtain compliance with such order, the Town engineer may stop work upon such services, or in his sole discretion upon all services. The Developer shall at all times provide all information requested by the Town, its authorized agents and the Town engineer in relation to the various materials and services and shall at any time at his expense expose any municipal service for inspection by the Town engineer. Notwithstanding the generality of the foregoing, the rights of the Town and its authorized agents including the Town engineer hereunder shall be limited to a period of one year after the initial acceptance of the last of the services within or required to facilitate the servicing of lots where such inspection, testing or other action is proposed.

9. Approval for Commencement of Work

No work shall commence without the approval of the Town and any work requiring the approval or consent of any other governmental authority shall not commence until such approval or consent has also been obtained. No watermain, drainage/storm sewer, gas or hydro line shall be connected to any existing municipal services without the written approval of whichever of the Town or approval authority has jurisdiction over such municipal system.

10. Work Schedule/Quality of Work

The Developer will prepare and submit to the Town, plans for the installation of Services for each phase of the development and will request a pre-construction meeting with the Town and its consultants in order to establish a work schedule acceptable to the Town and shall proceed with reasonable development procedures and in accordance with such work schedule. Subject to Force Majeure, if the Developer fails to proceed with reasonable development procedures and in accordance with the accepted work schedule or if in the opinion of the Town Engineer the Services are not being installed in accordance with the drawings, or specifications approved therefore, or in accordance with good engineering practices in a good, workmanlike manner, using good materials, then the Town shall give the Developer thirty (30) days to Cure any default following which and in addition to any other remedy the Town may have, the Town may, without further notice, enter upon the lands of the Developer and proceed to supply all materials and do all necessary work in connection with the installation of the Services, including the repair or reconstruction of faulty work, and replacement of materials not in accordance with the drawings or specifications and the Town shall charge the cost thereof, including all engineering and other fees to the Developer, who shall forthwith pay the same within thirty (30) days of a written demand therefor by the Town. In the event that the payment is not received within thirty (30) days of the written demand by the Town, the amount expended shall constitute and be a lien and charge upon the lands of the developer and may be collected as real property taxes in accordance with the Municipal Act as amended from time to time.

11. Developers Responsibilities Until Final Acceptance

Until such time as the Town has finally accepted each of the Services, including roadways herein referred to, the Developer shall be responsible therefor. The

responsibility of the Developer prior to Final Acceptance by the Town shall include liability for all types of maintenance in connection therewith. If the Developer should in the opinion of the Town or of its agents or employees fail to maintain any Service including roadways, prior to the Final Acceptance by the Town, the Town may without notice in case of emergency, or in any other case on 30 days' notice, if such default is not Cured by the Developer during the 30 day notice, maintain the same, but in so doing, the Town shall for all purposes be deemed to have acted as agent for the Developer, without in any way being deemed to have finally accepted such Service, or to have incurred any liability for future maintenance, and the Town shall be entitled to reimbursement for the cost of any such maintenance, within thirty (30) days of written demand therefor, and the Town shall further be relieved of liability for damages caused unintentionally, in the course of such maintenance. Snow removal, salting or sanding by the Town shall not constitute acceptance of the roads by maintenance thereof. The Developer shall also be responsible for the cleaning and flushing of sewers throughout the development until such time as the maintenance period for the construction of the Services has expired. The Town shall have the right to inspect the said sewers from time to time and, if deemed necessary, may require the Developer to clean and flush same immediately, and the Developer hereby agrees to perform such cleaning and flushing on demand to the entire satisfaction of the Town.

12. Building Permits

The Developer covenants and agrees on behalf of itself and its successors in title to any lot, not to apply for any building permit for the construction of any building on any lots covered by this agreement until:

Initial Acceptance of Services

All of the services relating to all of the lots therein have been installed and initially accepted by the Town.

(a) Tree Provision/Mailbox Requirements

The Developer shall:

i. Tree Provision

Include in all Agreements of Purchase and Sale a requirement for planting a minimum of one (1) tree in the front yard of each lot having a minimum diameter of 60 mm. The subject tree is to be planted no closer than one (1) metre to any lot line. The tree shall be planted within 12 months of the initial occupancy of the house. Such tree shall be maintained in perpetuity. A list of the acceptable trees is available at the Public Works Department at the Town of Amherstburg. The Developer shall impose a covenant as to the planting and maintenance of the tree in the transfer of each lot conveyed by it; and

ii. Super Mailboxes (if applicable)

Contact Canada Post to determine the location of super mailboxes throughout the subdivision and shall notify all purchasers of the exact location thereof. The location of super mailboxes also to be satisfactory to the Town.

(b) Landscaping Requirements

The front lawn and exterior side yard of each lot shall be sodded, seeded or otherwise landscaped within six months of the construction of a house thereon, and such sodding, seeding or landscaping shall be continued over the unpaved portion of the road allowance, including any lands between the road, to the front of such lot. Such sodding, seeding or landscaping shall be maintained in perpetuity. The Developer shall impose a covenant to this effect in the transfer of each lot conveyed by it.

13. Registration Requirements

The Developer covenants and agrees to cause the local Land Registrar to register, immediately after registration of the proposed plan of subdivision, as

annexed to each lot in the proposed plan of subdivision, a condition of restriction running with the lands, that such lot is not to be built upon unless the provisions of paragraph 10 of this agreement, limiting entitlement to building permits has been complied with.

14. Installation of Services and Associated Fees

The Developer will provide to the Town, upon execution of this agreement a water connection charge for each of the lots to be serviced of \$4060.00 which will include the service to the lot line meter pit and meter, and any further costs necessary as determined by the Building Department and Public Works, for the installation of the water connections. Any required culverts on Town property must be approved by the Town's Public Works Department.

15. Maintenance Security

The Developer shall provide to the Town an irrevocable letter of credit, (self-renewing and without burden of proof), or a certified cheque, satisfactory to the municipality in the value of \$7040.00 for the chainlink fence to be installed along edge of the buffer strip at the approximate length of 1408 ft (429.15m). The Town will hold the fence maintenance security for a period of two years from the date of its installation. The security will be utilized by the Town during this period to enforce the requirements of the Environmental Impact Study. The deposit of security by the Developer shall not be construed to limit the Developer's liability in the event of non-compliance with the requirements of the Environmental Impact Study relating to fencing.

16. Iron Bars

The Developer will file with the Town a surveyor's certificate dated within 30 days before the application for initial acceptance by the Town of asphalt surfacing on roadways, to the effect that all Standard Iron Bars shown upon the plan of subdivision have been located or replaced.

17. Staking of Bars Prior to Construction

Before the sale of any lot or the issue of any building permit within the subdivision the Developer shall stake to the satisfaction of the Town engineer, the locations of all Standard Iron Bars, and shall maintain such staking to the satisfaction of the Town, its respective servants and agents and the Town engineer, in relation to each lot until the home foundation is installed and all services to the proposed home have been provided. The Developer will provide to the Town engineer on request, and to any proposed builder, all usual information as to grades and levels for each lot within the subdivision.

18. Developers Responsibilities in Regard to Damages

The Developer undertakes and agrees to pay for any damage caused to any existing road, road allowance, structure or plant and any costs involved in the relocation of or repair or connection to any existing services arising in any way from or in connection with this agreement or the provision of services called for herein including the changing of grades of existing adjacent roads, and also any taxes or other charges levied or to be levied upon the lands to be subdivided, until such time as the lands have been assessed and entered on the collector's roll according to the proposed and presently registered plans.

19. Additional Work

If at any time prior to final acceptance of the last of the services by the Town it is of the opinion that additional works are proven necessary to provide adequately any of the public services specified in the schedules hereto, which were not reasonably foreseeable at the date of this Agreement then the Developer shall construct, install or perform such additional work at the request of the Town provided that if the Developer disagrees that such additional works are necessary, the question shall be resolved by a single arbitrator if the parties can agree on one, otherwise by a panel of three arbitrators proceeding under The Arbitrations Act.

20. Stormwater Management

The development of the subdivision requires special measures to deal with stormwater management. The Developer agrees:

- i. To undertake an engineering analysis to identify stormwater quality and quantity measures as necessary to control any increases in flows in downstream watercourses, up to and including the 1:100 year design storm, to the satisfaction of the Municipality and the Essex Region Conservation Authority;
- ii. That the developer installs stormwater management measures identified above, as part of the development of the site, to the satisfaction of the Municipality and the Essex Region Conservation Authority;
- iii. That the proponent complies with the Erosion and Sedimentation Control Plan submitted by Dillon Consulting dated June 6, 2014, and completes and installs the Storm Water Management measures identified above, to the satisfaction of the Municipality and the Essex Region Conservation Authority;
- iv. That the developer obtains the necessary permit or clearance from the Essex Region Conservation Authority prior to undertaking site alterations and/or construction activities;
- v. That the Developer will carry out all of the recommendations and requirements as outlined in the DiCecco Drain #1 & Branch Report and the DiCecco Drain #2 & #3 and Branches Report and further that provision be made for the construction of the drainage swales and conveyances on the Dicecco lands as required in the Drainage reports noted above.

21. Provincially Significant Wetland Protection

- i. The subject property is adjacent to within 120 metres of a natural heritage feature that is identified as a provincially significant wetland (Big Creek). The Environmental Impact Statement for the DiCecco Property, Addendum Report, Revised - September 17, 2014 which was submitted by Dillon Consulting Ltd., contains the appropriate provisions for ensuring that the natural heritage policies of the PPS, 2014 are addressed by this application. The following conditions are required to address natural heritage issues which shall be completed to the satisfaction of the municipality and the Essex Region Conservation Authority;
- ii. That the new lots will not extend into the PSW or buffer lands and that the proponent will convey all natural/naturalized lands (identified in Figure 3 of the EIA study) outside of the defined residential lots to the Municipality as per correspondence received from the Town dated February 17, 2015;
- iii. That the proponent establish the identified 16 foot grassed buffer strip area, and install the prescribed 4 foot high fence (with no access gates) as described in the EIA (dated September 17, 2014);
- iv. It is the Developer's responsibility to install a 4 foot high fence running the length of the development. The fence is to be installed on the Town owned buffer and not on the private properties. The fence shall be installed after the completion of the drainage works and prior to the issuance of building permits on any lands;
- v. The Developer shall ensure that a restriction shall be placed on the title of each of the properties that the buffer zone is not to be entered or disturbed including not dumping of yard waste or debris. That the

fence is on public lands, and is not to be removed, and a gate is not to be installed on the Town's fence.

22. Design Drawings

For all the works outlined therein and referred to in this section, the Developer shall provide design drawings, specification lists, tender in the same manner as for services in the subdivision, as detailed in paragraphs 3 through 11 and 14 and 15 hereof, and shall obtain approval of the works as detailed in paragraph 31 hereof.

23. Grading/Dumping/Removal of Material

The Developer shall carry out all grading of all lands, in accordance with the grading plans to be filed in the office of the Clerk of the Town Amherstburg, and shall forthwith carry out temporary or permanent drainage work that the Town engineer may certify to be necessary to eliminate ponding erosion, channeling of underground water or other drainage problems. The Developer shall neither dump nor permit to be dumped any fill or debris, or remove or permit the removal of any soil or fill from any of the lands to be subdivided without the written consent of the Town engineer. In seeking consent of the Town engineer to the removal of topsoil the Developer shall establish that when final grades are established for all of the lots and blocks within the subdivision there will be topsoil to a depth of at least four inches (4") over the entire area.

24. Grass and Weed Maintenance

The Developer shall be responsible for the proper maintenance of grass and weeds throughout the development under the direction of the Town until such time as a building permit is issued on a lot or the lot is transferred to a new owner. The Developer is required to place notice on title of this requirement on each lot conveyed by it.

25. Rear Yard Drainage

Rear lot drainage will be installed on each lot, in connection with the construction of a house thereon, and shall be connected to the storm sewer system. The specifications, design and installation of such rear yard drainage shall be acceptable to, and subject to the approval of the Town engineer. On an application for a building permit on any lot within the lands to be subdivided, the builder shall produce a plan or sketch satisfactory to the Chief Building Official of the proposed rear yard drainage, which shall be deemed to be a requirement to meet the Surface Drainage and Drainage Disposal requirements of the Building Code. The installation of such rear yard drainage shall be subject to the same inspections as foundation drains and the Chief Building Official may issue work orders to stop work orders in relation thereto (as applicable).

The rear yard drainage system consisting of shared grassed swales shall be provided for each lot. The Developer shall impose a covenant for the maintenance of these swales by the property Developer in perpetuity in the transfer of each lot conveyed by it.

26. Municipal Numbers

The Developer shall ascertain from the Town the appropriate municipal numbers for each lot, and shall provide such numbers to prospective purchasers, builders and lenders.

27. Initial Acceptance of Services

The Developer shall apply for initial acceptance of each individual service by filing with the Town a certificate under the hand and seal of its project engineer that the construction and/or installation of such services has been completed in accordance with the design criteria and the plans and specifications therefore approved and filed by the Town before construction, and by filing as-built drawings of such service, and a certificate of payment therefor and of compliance with the Construction Lien Act. The Town and its authorized agents,

including the Town engineer, shall carry out such inspections as they deem necessary, and such service shall then be initially accepted after the Town engineer certifying that such service has been completed in accordance with the agreement, providing that all the covenants of this agreement have been complied with to the date of such certificate. After initial acceptance and after maintenance securities or bonds have been filed, the labour and materials payment bond and the performance bond or security in lieu thereof relating to such service shall be released.

28. Final Acceptance of Services

The Town shall finally accept the services in each phase upon the Town engineer and the Town being satisfied that all covenants under this agreement have been fully complied with and all repairs and replacement required during the maintenance period has been carried out within such phase, and then authorizing release of the maintenance securities or bonds.

29. Easements

The Developer covenants and agrees that such easements as may be required for utility or drainage purposes shall be granted to the appropriate authority and registered on title.

30. Town's Fees

The Developer undertakes, covenants and agrees to pay any planning, engineering, legal, auditing or other fees or disbursements incurred by the Town relating in any way to the proposed subdivision, or the servicing thereof, or to this agreement, including negotiations and preparations prior to its execution and including the entire fees and disbursements of the Town engineer when acting pursuant to the terms of this agreement, and any clerical or administrative expense of the Town relating in any way to or arising from this agreement, forthwith upon being invoiced therefor. The Developer agrees to deposit with the Town on or before the execution of this agreement, the sum of \$2,000.00 to be applied against such fees as may be incurred from time to time, with such deposit to be renewed from time to time as used up, when requested by the Town, any unused balance to be returned to the Developer without interest, on the expiry of the maintenance period.

31. Register Notice of Agreement

The Developer covenants and agrees to cause the Local Land Registrar to register notice of this agreement against all of the lands affected hereby, immediately after registration of the proposed subdivision, and to obtain acknowledgment, consent and postponement agreements, from any and all encumbrancers registered prior to registration of such notice.

32. Development Charge

The Developer acknowledges that the lands subdivided by this agreement are subject to By-law 2014-101 passed September 8th, 2014 which established development charges for residential development in the Town, and provided that a development charge of \$3,731.00 be paid for each single detached dwelling to be constructed. The Developer further acknowledges that the by-law provides for an annual inflationary adjustment in accordance with the Section 3(4)(a) of the Development Charges Act, and that the above noted figure may change annually. The said development charge shall be paid prior to the issuance of a building permit for each lot. The Developer undertakes and agrees to provide that all Offers of Purchase and Sale include information that satisfies Subsection 59(4) of the Development Charges Act.

33. Town Engineer

Throughout this agreement the term Town Engineer shall mean the professional engineer or firm of professional engineers retained by the Town to carry out the duties referred to in this agreement. Notwithstanding the above, the Town may agree to the use of a single engineering firm. However, should any dispute arise as a result of this agreement, the selected engineering firm shall be responsible

to the Town, and the Developer shall be required to retain its own professional engineer.

34. Use of General Terms

Throughout this agreement the singular shall be deemed to include the plural, and the masculine, feminine and neuter genders shall be interchangeable as the context and applicable situations may require.

35. Enforcement of Agreement

The Developer will not call into question directly or indirectly in any proceeding whatsoever in law or in equity or before any administrative or other tribunal the right of the Town to enter into this agreement and to enforce each and every term, covenant and condition thereof and this provision may be pleaded by the Town in any such action or proceeding as a complete and conclusive estoppel of any denial of such right. If any provision of this agreement shall be found to be or deemed illegal or invalid, the remainder of the agreement shall not be affected thereby.

In the event of any default or breach of this Agreement by the Developer, which causes the Town to incur any cost, expense or damage, including the reasonable costs of utilizing its own employees, to remedy the default or breach, and in addition to any other remedy available to the Town in law or in equity, the Town is entitled to payment by the Development for the amounts incurred by the Town within thirty (30) days of notice of the demand for reimbursement being sent to the Developer. If the Developer fails to pay the amount of the demand in full, the amount outstanding shall constitute and shall be a lien and charge upon the lands of the Developer and may be collected as real property taxes in the same manner and priority as described in the provisions of the Municipal Act as amended from time to time

36. No Waiver of Rights

No indulgence or forbearance by the Town shall be deemed to constitute a waiver by the Town of its rights to insist on performance in a full and timely manner of all the covenants contained herein, and any such waiver, in order to be binding, must be in writing and duly authorized by the Town Council. No such waiver of any provisions, conditions or covenants shall be deemed to be a waiver of the right to later require full and timely compliance with the same terms, conditions or covenants, or with any other terms, covenants or conditions of this agreement at any time.

37. Parkland – Cash in Lieu

In satisfaction of the requirement of the Planning Act that the Developer convey up to 5% of the land included in the plan to the municipality for park purposes, cash-in-lieu thereof.

38. Schools

In accordance with the requirements of the Greater Essex County District School Board and the Windsor Essex District Catholic School Board, the Developer is required to place notice on title for purchasers of the lots to be aware that students may not be able to attend the closest school and could be bused to a distant school with available capacity.

39. Septic Systems

With regard to the installation of private septic systems and in accordance with the requirements of the Ontario Building Code and the Conservation Authorities Act, the lots and the beds are to be protected against flooding, and the tile bed must be raised to the satisfaction of the municipality and the Essex Region Conservation Authority. These requirements and/or any other applicable requirements including permitting processes. The Developer shall notify all purchasers and shall impose as a covenant on each lot that they must be serviced with a tertiary septic system in accordance with Part 8 of the Ontario Building Code.

40. Cure Period

Throughout this Agreement, where reference is made to the Town undertaking works on behalf of the Developer because of default or some other reason, it is agreed that the Developer will be given thirty (30) days to Cure any such deficiency, default or other problem or commence to Cure default and proceed diligently to remedy same prior to the Town undertaking the required works unless such deficiency, default or other problem is deemed to be an emergency.

41. Notice

- (a) Any notice, direction or other instrument required or permitted to be given by any party under this Agreement shall be in writing and shall be sufficiently given if delivered personally, sent by prepaid first-class mail or transmitted by telecopier or other form of electronic communication during transmission of which no indication of failure or receipt is communicated to the sender:

In the case of notice to the Developer:

Giuseppe DiCecco
859 Front Road N
Amherstburg, ON N9V 2V6

In the case of notice to the Town:

271 Sandwich Street South
Amherstburg, ON N9V 2A5

Attention: The Clerk
Fax: (519) 736-5403

Manager of Planning Services
Fax: (519) 736-9859

Manager of Engineering and Operations
Fax: (519) 736-7080

- (b) Any such notice, direction or other instrument if delivered personally, shall be deemed to have been given and received on the date on which it was received at such address, or, if sent by mail, shall be deemed to have been given and received on the date which is five (5) days after which it was mailed, provided that if either such day is not a Business Day, then the notice shall be deemed to have been given and received on the Business Day next following such day. Any notice transmitted by telecopier or other form of electronic communication shall be deemed to have been given and received on the date of its transmission provided that if such day is not a Business Day or it is received after the end of normal business hours on the date of its transmission at the place of receipt, then it shall be deemed to have been given and received at the opening of business in the office of the recipient on the first Business Day next following the transmission thereof. If normal mail service, telex, telecopier or other form of electronic communication is interrupted by strike, slowdown, Force Majeure, or other cause, a notice, direction or other instrument sent by the impaired means of communication will not be deemed to be received until actually received, and the party sending the notice shall utilize any other such service which has not been so interrupted to deliver such notice.

42. Agreement Binding on Parties

This agreement shall ensure to the benefit of, and be binding upon the parties hereto, and their respective heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF the Parties have executed this Agreement, as of the date set out above, under the hands and seals of their respective and duly-authorized signing officers.

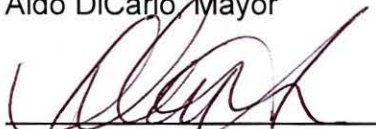
DEVELOPER: GIUSEPPE DICECCO


Per Giuseppe DiCecco

I have authority to bind the Corporation

**THE CORPORATION OF THE
TOWN OF AMHERSTBURG**


Per Aldo DiCarlo, Mayor


Per Paula Parker, Clerk

We have authority to bind the Corporation

Authorized and approved by By-law
No. 2016-74 enacted the 12th day of
September, 2016

SCHEDULE A
LEGAL DESCRIPTION

The following is a description of the land to which this instrument applies.

Part Lot 29, Concession 3
Town of Amherstburg,
County of Essex,
Province of Ontario

SCHEDULE B
DESIGN CRITERIA

**FOR SERVICES TO BE PROVIDED IN THE
DICECCO SUBDIVISION (5 LOTS)
CREEK ROAD
TOWN OF AMHERSTBURG**

The required service connections and drainage shall be constructed in accordance with plans and specifications prepared by a professional engineer, registered to practice in the Province of Ontario, and acceptable to the Town of Amherstburg. Criteria upon which these services are to be designed, are as described in this schedule.

1. Storm Drainage

Storm drainage shall be installed along Creek Road fronting the development in accordance with approved engineering drawings satisfactory to the Town of Amherstburg and the Essex Region Conservation Authority.

The Developer will carry out all of the recommendations and requirements as outlined in the DiCecco Drain #1 & Branch Report and the DiCecco Drain #2 & #3 and Branches Report and further that provision be made for the construction of the drainage swales and conveyances on the DiCecco lands as required in the Drainage reports noted above.

2. Environmental Impact Assessment

The recommendations contained within the Environmental Impact Assessment dated and the Addendum Report dated August 10, 2014, shall be implemented to the satisfaction of the Corporation of the Town of Amherstburg and the Essex Region Conservation Authority.

3. Private Septic Systems

Private septic systems shall be installed in accordance with the regulations of the Ontario Building Code Act.

The Developer shall notify all purchasers and impose a covenant on each lot that they must be serviced with a tertiary septic system in accordance with Part 8 of the Ontario Building Code.

4. Watermains

Where required the Developer shall construct and install connections to all lots in accordance with the approved engineering drawings. Each lot shall be serviced by a single water service connected to the mainline.

Minimum Cover	1.5m
Lot Connection	19 mm dia.
Pipe Material	Copper (Type "K")

Design and installation shall be in accordance to the Town's watermain specification to the satisfaction of the Town of Amherstburg.

The Developer shall obtain a certificate of approval from the Ministry of the Environment, Design Approval Branch.

5. Hydro Service

The Developer shall construct and install a sufficient hydro distribution system to service the development with connections to the 5 lots therein and connect the same to the existing hydro distribution system. Individual lot services, where possible, shall be provided on common lot lines so that residential hydro meters face each other. The hydro distribution system within the development shall be grounded to the water distribution system if applicable. All hydro service within the development shall be designed and installed in accordance with the

requirements and criteria of the Town of Amherstburg and Hydro One.

6. Telephone

The Developer shall arrange for Bell Telephone to provide underground telephone service to all of the lots within the development.

7. Gas (if applicable)

The Developer shall arrange for Union Gas Company to provide underground gas service to all of the lots within the subdivision.

8. Adjustments

The grade of any and all water service boxes, valves chambers, hydrants, manholes, drains and transformer boxes shall be adjusted by the Developer when and as may be required by the Town engineer.

9. Temporary Services

Upon a connection of any type being made to the hydro or water services, a temporary meter or meters of a type and in a location or locations satisfactory to the Town shall be installed and continuously maintained until all hydro and/or water used within the subdivision, once the same is accepted by the Town, is metered through approved private connections. The Developer shall be responsible for, and will promptly pay or cause to be paid all charges for hydro and water supplied to the subdivision.

10. Community Mailboxes (if applicable)

The Developer will be responsible for negotiating specific locations within the subdivision with Canada Post for the location of community mailboxes.

11. Easements (if applicable)

The Developer agrees that such easements as may be required for utility or drainage purposes shall be granted to the appropriate authority.

12. Rear Yard Drainage

- a) Rear yard drainage shall be provided for each building lot in the locations and according to the specifications prescribed by the approved engineering drawings and as approved by the Corporation. Rear yard drainage shall be installed contemporaneously with the construction of dwellings on each building lot. A separate rear yard drainage system consisting of shared grassed swales shall be provided for each building lot. Rear yard drains shall be installed in accordance with the Drainage Reports approved by Council.
- b) The Developer shall, at its own expense, prepare a lot grading and rear yard drainage plan for each individual building lot within this development and shall file same with the Corporation. The lot grading plan shall show proposed dwelling elevation, proposed elevations at lot corners and direction of flow of the rear yard drain. The final elevations of all dwellings and other buildings, minimum opening elevations, where applicable and the final lot grades relating thereto and the rear yard drainage shall conform to the proposed lot grading and rear yard drainage plan filed for that lot. The consulting engineer, or a certified Ontario Land Surveyor, shall certify upon completion of the construction of the dwelling and building on each lot that the said lot grading and rear yard drainage plan has been complied with, in accordance with the approved engineering drawings, and until such time as the said certification has been received by the Corporation, occupancy of the dwelling on the subject building lot shall not be permitted.

13. Special Servicing Requirements

The construction of structures shall conform to the following requirements:

- a) Roof or rain water leaders from each respective building must be discharged into the rear yard drainage system. Perimeter tile drains and sump pump

must be provided for each building and discharged into the rear yard drainage system swales;


- b) Perimeter tile drains shall not be connected to the private septic system;
- c) Basement floor drains shall be connected to the private septic systems for each dwelling;
- d) A lot grading plan shall be included in the final set of plans approved for construction of the works. The consulting engineer or a certified land surveyor shall certify, upon completion of the works, that the lot grades are in accordance with the design and that the lands abutting the subdivision are draining adequately. The Developer acknowledges that, until such time as the provisions of this paragraph have been complied with, no occupancy of any building shall be permitted and any and all securities delivered to the Corporation by the Developer herein shall be held to ensure the provisions of this paragraph are complied with.

DEVELOPER: GIUSEPPE DICECCO


Per Giuseppe DiCecco

I have authority to bind the Corporation

**THE CORPORATION OF THE
TOWN OF AMHERSTBURG**


Per Aldo DiCarlo, Mayor
Per Paula Parker, Clerk

We have authority to bind the Corporation

Authorized and approved by By-law
No. 2016-74 enacted the 12th day of
September, 2016.

SCHEDULE "C"
INTERPRETATION

The following definitions shall apply in the interpretation of this Agreement:

"Cure" means that the Developer has commenced the works required to address the Event of Default that has been identified and for which notice in accordance with this Agreement has been provided and is proceeding diligently to remedy any deficiency or default.

"Event of Default" means if the Developer fails in the performance of an obligation under this Agreement, and the Town issues a notice of such failure or default and a demand for performance, observance or compliance has been given. In such cases, the Town must allow the Developer a minimum of thirty (30) days to Cure the default unless such default is determined to be an emergency by the Town in which case a minimum less than thirty (30) days can be established for the Developer to Cure the default.

"Final Acceptance" means the date, commencing no sooner than the expiry of the maintenance period wherein the Developer's Consulting Engineer has provided a declaration to the Town confirming that the works and Services have been completed in accordance with the terms of this Agreement and the Town engineer formally accepts the Services in writing.

"Force Majeure" means and includes acts of God, terrorist attacks, weather conditions, labour disputes, shortage of labour and materials and any happening, condition or thing beyond the control of a person which could not reasonably have been anticipated and avoided by such person which delays or prevents such person from performing any of its obligations hereunder, financial inability excepted.

"Lands" means those lands as described in Schedule "A" attached hereto.

"Plan of Subdivision" means a registered plan of the lands where new, separate parcels of land have been created and can be legally used for the sale of lots.

"Services" means the storm sewers, sanitary sewers, waterlines, roads, curbs and hydro services, including those components of infrastructure described in Schedule "D".


DEVELOPER: GIUSEPPE DICECCO



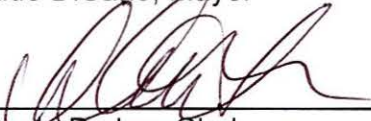
Per Giuseppe DiCecco

I have authority to bind the Corporation

**THE CORPORATION OF THE
TOWN OF AMHERSTBURG**



Per Aldo DiCarlo, Mayor

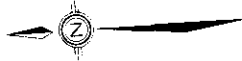


Per Paula Parker, Clerk

We have authority to bind the Corporation

Authorized and approved by By-law
No. 2016-74 enacted the 12th day of
September, 2016.

SCHEDULE "D" TO BY-LAW 2016-74
"DRAFT REFERENCE PLAN"

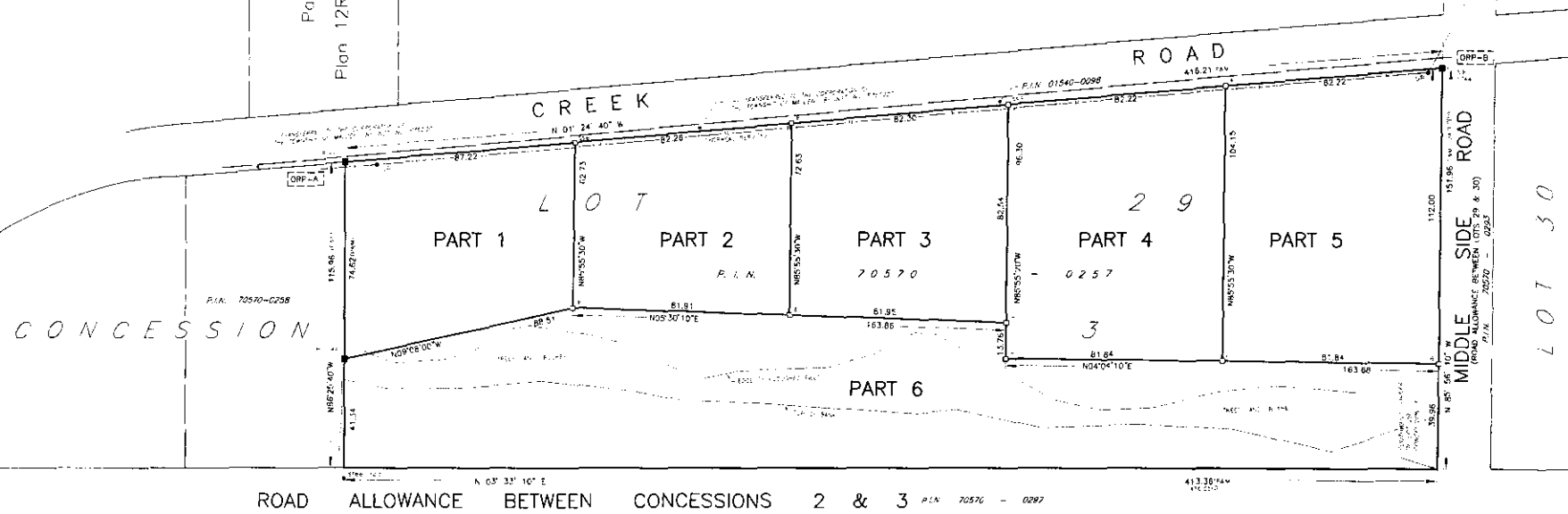


INTEGRATION DATA		
COORDINATES ARE DERIVED FROM GNSS OBSERVATIONS USING THE CAN-NET NETWORK SERVICE AND ARE REFERRED TO JTM ZONE 17 (BY WEST LONGITUDE) NAD83 (GRS) (1997.0). COORDINATE VALUES ARE TO AN URBAN ACCURACY IN ACCORDANCE WITH SECTION 14(2), O.R.G. 216/10		
POINT ID	NORTHING	EASTING
CRP-A	N4851338.611	E327826.240
CRP-B	N4863072.537	E327836.486
COORDINATES CAN NOT IN THEMSELVES BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.		

PARTS SCHEDULE				PARTS SCHEDULE					
PART	LOT	CONCESSION	P.L.N.	AREA	PART	LOT	CONCESSION	P.L.N.	AREA
1	PART OF LOT 28	CONCESSION 3	PART OF 70570-0257	5344.8 sq.m.	4	PART OF LOT 29	CONCESSION 3	PART OF 70570-0257	8222.8 sq.m.
2	PART OF LOT 28	CONCESSION 3	PART OF 70570-0257	5541.9 sq.m.	5	PART OF LOT 29	CONCESSION 3	PART OF 70570-0257	8645.2 sq.m.
3	PART OF LOT 28	CONCESSION 3	PART OF 70570-0257	6356.1 sq.m.	6	PART OF LOT 29	CONCESSION 3	PART OF 70570-0257	2056 sq.m.

THIS PLAN COMPRISES ALL OF P.L.N. 70570-0257

<p>I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT</p> <p>DATE _____</p> <p>ROY A. SIMONE ONTARIO LAND SURVEYOR</p>	<p>PLAN 12R- RECEIVED AND DEPOSITED</p> <p>DATE _____</p> <p>REPRESENTATIVE FOR LAND REGISTRAR FOR THE LAND TITLES DIVISION OF ESSEX (12)</p>
---------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------



PLAN OF SURVEY
OF
PART OF LOT 29,
CONCESSION 3
GEOGRAPHIC TOWNSHIP OF MALDEN
NOW IN THE
TOWN OF AMHERSTBURG
COUNTY OF ESSEX, ONTARIO
VERHAEGEN • STUBBERFIELD • HARTLEY • BREWER • BEZAIRE INC.
SCALE = 1:1000

- 1. DENOTES 25mm x 25mm x 1.22m STANDARD IRON BAR
- 2. DENOTES 25mm x 25mm x 0.61m SHORT STANDARD IRON BAR
- 3. DENOTES 16mm x 16mm x 0.61m IRON BAR
- 4. DENOTES 19mm diameter x 0.61m ROUND IRON BAR
- 5. DENOTES CUT-CROSS
- 6. DENOTES 50mm x 50mm STEEL PILE
- 7. DENOTES SURVEY MONUMENT FOUND
- 8. DENOTES SURVEY MONUMENT SET AND MARKED 1744
- 9. DENOTES WITNESS DENOTES PERPENDICULAR
- 10. DENOTES SET DENOTES WEAVER
- 11. DENOTES OBSERVED REFERENCE POINT DENOTES BEED
- 12. DENOTES SET DENOTES WEAVER
- 13. DENOTES SET PROPORTIONALLY DENOTES OR DIS UNKNOWN
- 14. DENOTES PLAN OF SURVEY BY (1744) DATE JUNE 4, 2012 (B-5896)
- 15. DENOTES VERHAEGEN, STUBBERFIELD, HARTLEY, BREWER, BEZAIRE INC., C.L.S.
- 16. DENOTES C.G.R. ARMSTRONG, C.L.S.
- 17. DENOTES WILLIAM J. SETTERBERG, C.L.S.

SURVEYOR'S CERTIFICATE
I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM
2. THIS SURVEY WAS COMPLETED ON THE 3rd DAY OF DECEMBER, 2015

DATE DECEMBER 22, 2015

Roy Simone
ROY A. SIMONE
ONTARIO LAND SURVEYOR
for VERHAEGEN • STUBBERFIELD • HARTLEY • BREWER • BEZAIRE INC.

"METRIC" DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

LEGEND AND NOTES
BEARINGS ARE UTM GRID DERIVED FROM OBSERVED REFERENCE POINTS "A" AND "B" BY REAL TIME NETWORK OBSERVATIONS
DISTANCES ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99994215

WINDSOR 84 DUNDAS Street N8M 2E1 Ph: (519) 255-1122 Fax: (519) 255-1791

VERHAEGEN • STUBBERFIELD • HARTLEY • BREWER • BEZAIRE INC. LEAMINGTON 87 Park Street East N8M 1L6 Ph: (519) 252-2276 Fax: (519) 252-2215

ONTARIO LAND SURVEYORS www.vshsbysurveyors.com

Drawn by: RAS CAD Date: December 17, 2015 11:52 AM
Checked by: RAS CAD File: 42607601.dwg
Plot Date: 4-26076-X01 Plot No: E-MALDEN-3-29 Plot File No: B-5896A

NOTICE TO PURCHASERS

RE: DICECCO DEVELOPMENT AGREEMENT WITH AMHERSTBURG

Part of Lot 29, Concession 3, in the former geographic Township of Malden, currently, Town of Amherstburg more particularly described as Parts 1 to 5 (the 'lots'), of a reference plan, registered with the Land Registrar for the Land Title's Division of Essex (No 12) on the 22nd day of August, 2016 as Plan 12R-26713 (the 'development lands').

WHEREAS Giuseppe DiCecco (hereinafter described as the 'developer') has entered into a Development Agreement with the Corporation of the Town of Amherstburg (hereinafter described as the 'Town') to subdivide, develop, service and sell the development lands;

AND WHEREAS the Town has imposed upon the developer, obligations to notify ostensible purchasers of the property of conditions affecting the property (the 'purchasers');

AND WHEREAS the developer has bound himself to deliver such notifications to the purchasers;

AND WHEREAS this NOTICE TO PURCHASERS shall be, a mandatory schedule of any Agreement of Purchase and Sale made between the developer and any purchaser of the development lands;

DEVELOPER DISCLOSURE NOTICE:

1. A lot purchaser of the development lands shall be required, as part of the terms of the acquisition of such lot, to plant a minimum of one tree in the front yard of each lot having a minimum diameter of sixty (60) mm. Such tree, must be planted no closer than one (1) metre from any lot line and must be planted within twelve (12) months of such purchaser, taking up initial occupancy in any house, such purchaser builds, or causes to be built, upon such lot. It shall be the obligation of such purchaser, and all successors of such purchaser, to maintain such tree in perpetuity. Furthermore, a list of all trees acceptable to the Town, has been filed with the Public Works Department of the Town, and is available to such purchaser upon inquiry at the office of the Public Works Department of the Town.
2. The development lands, shall be serviced by "super mailboxes" of Canada Post erected, or to be erected, within such development. The location of such super mailboxes, shall be determined, to the satisfaction of the Town. As such, all purchasers of a lot of the development lands, shall bear the direct responsibility of informing himself, herself or themselves of the exact location of such super mailboxes, by direct inquiry with Canada Post and the Town.

3. All purchasers of a lot of the development lands, shall bear the direct obligation to sod, seed or otherwise landscape the front lawn and the exterior side yard of each such lot, within six (6) months of the construction of a residence on such lot. The sodding, seeding or landscaping shall extend over the unpaved portion of any road allowance, including any lands between the road to the front of each such lot. Each purchaser and all successors of such purchaser shall be bound to sod, seed or landscape such front and exterior side yards in perpetuity.
4. The purchaser of a lot of the development lands, is hereby notified, no building permit shall be issued for any such lot unless the services described in the Development Agreement, registered against the property have been completed.
5. Each purchaser of a lot of the development lands, is hereby notified, such lot is within a hundred and twenty (120) metres of a provincially identified natural heritage designation, identified as a provincially significant wetland (Big Creek). As regards such provincially significant wetland, the purchasers of the lots of the development lands must respect and not interfere with, disrupt or alter the natural heritage policies affecting such provincially significant wetland. Each such purchaser is hereby notified, a four (4) foot high fence shall be erected, with no access gates, along a strip of land, that the developer conveys to the Town to protect such provincially significant wetland. Each purchaser of a lot of the development lands shall not, under any circumstances, alter, change, interfere with or vandalize such fence. Furthermore, each purchaser is hereby notified, that the strip of land conveyed by the developer to the Town bars such purchaser from entering, disturbing or interfering with the buffer strip owned by the Town. Without intending to limit the generality of the foregoing, none of such purchasers shall dump yard waste or debris in, on, along or upon such Town buffer strip, at any time. Furthermore, each of such purchasers, are hereby notified, such fence, is on Town owned property, is owned by the Town, shall not be removed and, as importantly, shall not be changed to permit a gate to egress and ingress in, on, along and upon such buffer strip or the provincially significant wetland west of such buffer strip.
6. Each purchaser of a lot of the development lands, is hereby notified, the developer is responsible for the proper maintenance of grass and weeds throughout the developed lots, under the direction of the Town, until such time as a transfer of such lot, is concluded with such purchaser or until such time as a building permit is issued for such lot, whichever event shall sooner occur.
7. Each purchaser of a lot of the development lands is hereby notified, no dumping of fill or debris shall be permitted upon the Town buffer strip or the Provincially Significant Wetland

nor shall any soil or fill be removed from such development lands without the written consent of the Engineer of the Town who, shall establish final grades for all such lots and ensure a topsoil depth of at least four (4) inches over the entire development lands.

8. Each purchaser of a lot of the development lands is hereby notified, a rear yard drainage system is required for each lot in the development and shall consist of a shared grassed swale which shall be graded in accordance with the terms of the Development Agreement and the Drainage Reports under the *Drainage Act*, R.S.O. 1990 Chapter D.17 as amended. Each such purchaser and the successors of such purchaser shall be required to maintain such swales in perpetuity upon the transfer of such lot from the developer to such purchaser.
9. Each purchaser of a lot of the development lands, is hereby notified, Town Bylaw 2014 – 101 passed October 3, 2014 imposes a development charge for residential development of \$3,731.00 (rural rate) per lot and more specifically for each single detached dwelling to be constructed on such lot. Such development charge, in accordance with the terms of the bylaw, is subject to annual inflationary adjustment. All such purchasers are hereby given notice of such development charge and the obligation of such purchaser to pay to the Town such development charge at the commencement of such purchaser applying for a building permit to build on such lot.
10. Each purchaser of lot of the development lands is hereby notified, school-aged children of such purchasers, may not be able to attend the closest school, in the Town for such school-age children. As such, each purchaser of a lot of such development lands is hereby notified, the school-aged children of such purchasers may be bussed to a distant school within the Town, with available capacity for such school-age children.
11. Each purchaser of a lot of the development lands is hereby notified, sanitary services for such lot is available by means of private tertiary septic systems that must comply with the *Ontario Building Code* and the *Conservation Authorities Act*. Such tertiary septic systems must be protected against flooding and all of the components of such septic systems must comply with Part 8 of the *Ontario Building Code* and must be raised to the satisfaction of the Town and the Essex Region Conservation Authority. Furthermore each of such purchasers are hereby notified, the development lands shall not be serviced with sanitary sewers supplied by the Town or the developer and, as a result alternative sanitary servicing of such lots shall be by means of a tertiary private septic system. Should sanitary sewers be installed along Creek Road in the future by the Town of Amherstburg, each owner shall be required to connect to such municipal sanitary sewer installation as it is available. In the event that the owners are required to connect to such municipal sanitary sewer installation the owners shall pay any applicable charges, levies, assessments or costs.

The applicant(s) hereby applies to the Land Registrar.

Properties

PIN 70570 - 0257 LT
Description PT LT 29 CON 3 MALDEN AS IN R1263673 (FIRSTLY); AMHERSTBURG
Address AMHERSTBURG

Applicant(s)

Name DICECCO, GIUSEPPE
Address for Service 859 Front Road North, Amherstburg, Ontario N9V 2V6

This document is not authorized under Power of Attorney by this party.

Statements

Schedule: See Schedules

Signed By

Luigi Di Pierdomenico 285 Sandwich St. S. acting for Signed 2016 09 09
Amherstburg Applicant(s)
N9V 2A7
Tel 5197362126
Fax 5197362787

I have the authority to sign and register the document on behalf of the Applicant(s).

Submitted By

DIPIERDOMENICO LAW FIRM 285 Sandwich St. S. 2016 09 12
Amherstburg
N9V 2A7
Tel 5197362126
Fax 5197362787

Fees/Taxes/Payment

Statutory Registration Fee \$62.85
Total Paid \$62.85

File Number

Applicant Client File Number : 16-6452

RESTRICTIVE COVENANTS RUNNING WITH LAND

Giuseppe DiCecco, the registered legal and equitable owner of the lands and premises formerly in the geographic Township of Malden and currently in the Town of Amherstburg, more particularly described as Parts 1 to 5 of a Reference Plan (the 'lots') registered with the Land Registrar for the Land Titles Division of Essex (No. 12) on the 22nd day of August, 2016 as Reference Plan 12R-26713 (the 'development lands') hereby imposes upon the development lands, the following registered restrictions, for the benefit of enforcement by each of the lot owners of the development lands and the Town of Amherstburg. As such, each of such lot owners or the Town of Amherstburg shall have the unqualified right to enforce the restrictive covenants, hereafter described, against any or all of the lot owners of the development lands.

RESTRICTIVE COVENANTS:

1. No lot owner shall apply for any building permit for the construction of any residence or building on any of the lots of the development lands until all of the services related to such lots are installed and accepted by the Town of Amherstburg. This includes the completion of the drainage works and installation of the fence on the eastern edge of the buffer strip owned by the Town.
2. A lot owner shall plant a minimum of one (1) tree in the front yard of each lot of the development lands, having a minimum diameter of sixty (60) mm. Such tree is to be planted no closer than one (1) metre to any lot line. Such tree shall be planted by a lot owner of the development lands within twelve (12) months of the initial occupancy of any house built upon any such lot of the development lands and be maintained, by the owner of such lot, and all successors, in perpetuity.
3. No lot owner of the development lands, shall plant the aforementioned tree in the front yard of each lot of the development lands, unless such tree is acceptable to the Public Works Department of the Town of Amherstburg.
4. The development lands, shall be serviced by Canada Post, in a manner which may include the use of super mailboxes or other means to the satisfaction of Canada Post in consultation with the Town.
5. Each lot of the development lands shall have its front yard and exterior side yard sodded, seeded or otherwise landscaped within six (6) months of the construction of a residence

upon such lot. Such sodding, seeding or landscaping shall be continued over the unpaved portion of the road allowance including the lands between the road to the front of such lot. Furthermore such sodding, seeding or landscaping shall be maintained in perpetuity by the lot owner and all successors of such lot owner.

6. Each lot owner of the development lands shall attorn to the rights of the Town of Amherstburg in, over, along and upon a sixteen (16) foot grassed buffer strip area abutting the westerly boundary of such lot owners and conveyed to the Town of Amherstburg as a measure to protect and safeguard the provincially significant wetland located to the west of such lots (the 'buffer strip').
7. A four (4) foot high fence shall be erected within the buffer strip after the completion of the drainage works required for the development lands and before building permits are issued for any of the lots of the development lands. Each lot owner and all successors in title to each lot owner, shall attorn to the rights accorded to the Town in, over, along and upon the buffer strip. Specifically each lot owner of the development lands, and their respective successors shall not enter or disturb the buffer strip, in any manner. Out of an abundance of caution, this includes but is not limited to, a complete prohibition against each lot owner of the development lands, or their respective successors, dumping yard waste or debris in, over, along or upon the buffer strip.
8. Each lot owner of the development lands, and all respective successors of such lot owners, shall not alter, change, interfere with or encroach upon the fence erected along the buffer strip. Out of an abundance of caution, and not so as to limit the generality of the foregoing, no lot owners of the development lands, nor any of their respective successors in title, shall install any gate in, along, upon or throughout the fence and fence limits erected upon the buffer strip.
9. Giuseppe DiCecco, shall be responsible for the proper maintenance of grass and weeds throughout the development lands under the direction of the Town of Amherstburg, until such time as Giuseppe DiCecco transfers any of the lots of the development lands to a successor in title or until a building permit is issued for any such lot.
10. The rear yards of each of the lots of the development lands, shall be graded, to specifically include shared grassed swales to accommodate rear yard drainage. Each of the lot owners

of the development lands, shall maintain such shared grassed swales to accommodate rear yard drainage and, each of the successors of such lot owners, shall bear a comparable maintenance obligation to ensure maintenance of such grassed swales, in perpetuity.

11. Each lot owner of the development lands, shall be required to comply with the terms of the Town of Amherstburg Bylaw 2014-101 passed October 3, 2014. Such bylaw establishes development charges for single detached dwellings built in the Town of Amherstburg. Such bylaw prescribed a development charge, at the time of its passage, of \$3,731.00 (rural rate). Such development charge is subject to annual inflationary adjustment and changes annually. Such development charge, shall be an encumbrance against the title of such lot until paid by the pertinent lot owner of such development lands prior to the issuance of a building permit for a residence to be built on such lot.
12. Each of the lot owners of the development lands must, service any residences built upon such lots, with a tertiary septic system that complies with Part 8 of the *Ontario Building Code* as an express condition, required to insure sanitary services for such lot and comply with Ontario Health Standards.
13. Each of the lot owners have been advised that prior to acquiring any lot of the development lands, such owners as Purchasers(s)/Transferee(s) have been advised that the subject lands:
 - a. Are reasonably proximate to an active quarry and as such, from time to time drilling and blasting may occur, which may cause a certain degree of noise, dust and vibration at and on the subject lands; and
 - b. Are reasonably proximate to an animal barn which may cause a certain degree of odour from time to time, at and on the subject lands.
14. The Town may enforce these covenants by the performance of any work necessary to ensure compliance or to remedy any breach of covenant. The cost of such work shall form a lien on the lands and may be added to the tax rolls of the lands to be collected in the same manner and with the same priority as municipal taxes.

**SCHEDULE "F" TO BY-LAW 2016-74
"ENVIRONMENTAL IMPACT ASSESSMENT"**

**An Environmental Impact
Statement for the DiCecco
Property
Town of Amherstburg,
County of Essex, Ontario**

*Addendum Report
Revised September 17, 2014*



10-4250-3000

Submitted by

**Dillon Consulting
Limited**

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List of Appendix

- Appendix A – List of Vascular Plants found on Property

1.0 INTRODUCTION

Dillon Consulting Limited (DCL) was retained by Mr. Joe DiCecco to prepare an Environmental Impact Statement (EIS) for a 14.83 acre (6.00 ha) property which is located on the west side of Creek Road, immediately north of the intersection of South Side Road and Creek Road. The legal description of the property is Part Farm Lot 26, Concession 3 (see *Figure 1*).

The majority of the subject property has been cropped with soybeans for at least the last decade. The west side of the site is bounded by the Big Creek which is a provincially significant wetland (PSW); the south side is bounded by an unopened South (Middle) Side Road road allowance, and the north side is adjacent to a machine shop, several estate residential lots and a storage area for school buses. The eastern boundary fronts on Creek Road. The east side of Creek Road is primarily under agricultural production with a few residential estate properties located adjacent to the road. From viewing these properties, the lands contain manicured lawns and ornamental plantings with the exception of edge of the Big Creek which remains in a natural state.

The planning application is for five estate residential lots with a combined frontage of 1,365.51 feet. It is anticipated that a single dwelling will be constructed near the front of each lot, and each residence will have a standard septic system with municipal water supply. The front and rear yard setbacks are 25 feet respectively, but the emphasis within this EIS is to maximize the protection to the adjacent provincially significant wetland through various storm water controls and natural landscaping techniques.

This EIS has been compiled to assess the impacts of the proposed lot severance and residential development on the adjacent Big Creek Marsh. An EIS for this property was completed for the applicant by Dillon Consulting Limited in July 2001, October 26, 2011 and July 4, 2012. It should be noted that field visits did occur to document the limit of various vegetation communities, the limit of the crop field, top of bank and the edge of the wetland.

The Essex Region Conservation Authority (ERCA) did provide comments dated July 22, 2014, for the most recent submission and as a result this EIS has been updated in an effort to address these comments. Therefore, the purpose of this EIS addendum is to address these comments where applicable and present new information and mitigation measures that lessens the impacts on the adjacent Big Creek Marsh.

2.0 EXISTING ENVIRONMENTAL CONDITIONS

Regional Context and Study Approach

The Site is located to the southwest corner of the Town of Amherstburg, immediately east of Big Creek, which provides habitat for a variety of migratory and resident birds, as well as amphibians and reptiles. This creek is very popular for fishermen and hunters, and evidence of these activities was seen during recent field work. The water level within this stretch of Big

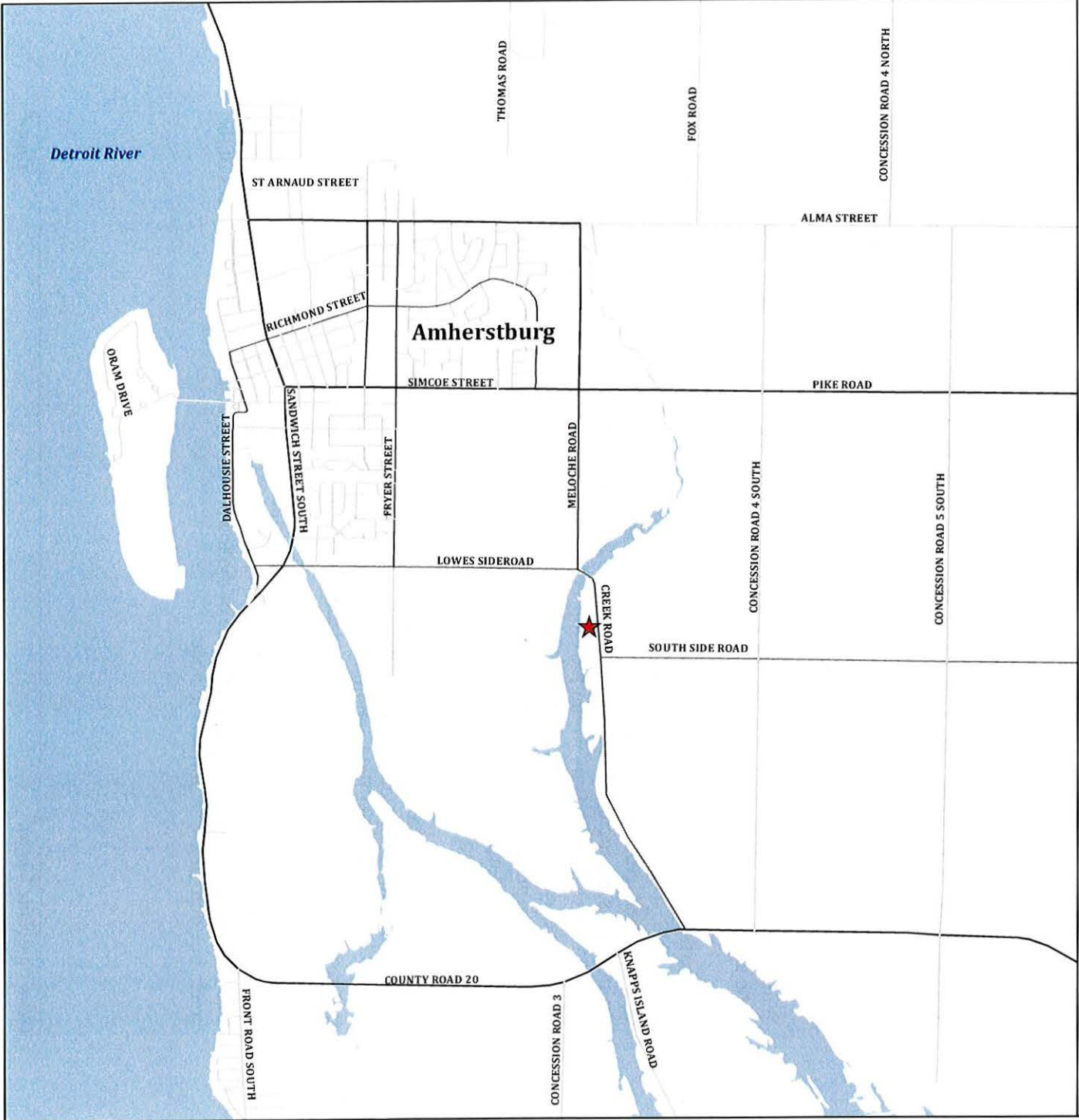
Creek is controlled by a series of pumps that are located downstream near Lake Erie. During all recent site visits, the water levels were low and extensive mud flats were present, adjacent to the DiCecco property. It should also be noted that at the west end of the property, there is a distinct top-of-bank that is 4 to 6 feet higher than the adjacent marsh and with exception of one isolated swale at the north end of the farm field, evidence of flooding of the crop field during the growing season has not been observed.

Background information was collected using previous DCL reports that were written in October, 2000 and July 2001, as well on September 21, 2011. During this visit, temperatures were in the mid 20s, and despite the lateness of the season, it was appropriate to observe late fall flora and animal activity. Field studies have also occurred in the spring and summer of 2012, with site visits occurring on May 4 and June 8, 2012. During both visits, temperatures were over 20°C with clear to cloudy conditions and a slight breeze on both visits. The field effort to date for the September 2011, May and June 2012 visits is approximately 12 hours.

An Environmental Impact Statement
for the DiCecco Property

Town of Amherstburg,
County of Essex, Ontario

Figure 1: General Site Location



Legend

- ★ General Site Location
- Arterial Roads
- Collector Roads
- Local Roads
- Waterbodies



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Development\Mapping\General Site Location.mxd

3.0 SIGNIFICANT AREAS

As indicated earlier, the Big Creek provincially significant wetland is located along the western boundary of the site. According to OMNR, this wetland was evaluated in 2009. The owner of the DiCecco property did grant permission for OMNR to visit the property, however OMNR declined. In this regard, the limits of the wetland on the subject property were determined by OMNR using air photos and by standing on Creek Road, as well at the bridge crossing at Lowe Side Road. However, the distance from Creek Road to the edge of the wetland is 245 feet at its closest point, while from the Lowes Side Road bridge, this distance increases to 1,000 feet, therefore, it is unlikely that proper delineation of the wetland could occur. Further details of determining a better approximation of the wetland edge limit are provided in Section 4.1

4.0 PHYSIOGRAPHY AND SOILS

The site is located within the Essex Clay Plain which is essentially till plains that are smoothed by shallow deposits of lacustrine clay. Creek Road does serve as the high point of the site; however, undulations in topography are common across the property, and the troughs within these areas are wetter in the early spring. An inspection of these wetter areas found that all were planted with crops by late May, and crop seedlings were growing well.

With regard to surface drainage, flows are gradual from east to west, and there does not appear to be any signs of erosion (i.e., gullies) entering Big Creek.

The Perth clay is the only soil type that occurs on this property, and it is described by Richards, et.al. (1939) as a dark grey-brown clay over light brown clay loam with either mottled grey loam or compacted grey clay in the lower horizons. The natural soil drainage is fair, but poorly drained spots are included in the mapping. This soil type is typically used for general farming or cash crops. Soil analysis within the crop field found the topsoil layer in the southern half to be a silty clay that was very slippery when wet over a coarser grained silty loam. Stones and gravels were present, but not sufficient to interfere with cultivation operations. The owner of the property did mention that parts of the property had been used as a batching plant many years ago, and bits of concrete and asphalt were still present in the south end of the crop field.

Some areas of the field were flooded during the site visit on September 21, 2011 due to the high amount of rainfall received in the Windsor area during September visit, but the May 4 and June 8, 2012 visits found that field conditions were very dry. The May 2012 visit found that the soil had been tilled, while the June visit found that a soybean crop had been planted.

An inspection of the soils closer to the shoreline of the wetland, which is approximately 4.0 to 6.5 feet lower than the property, found it to have a high silt level. Muskrat activity (i.e., burrows) along the bank had exposed some of the lower soil horizons to the erosive forces of the creek, but slumping was minimal to none.

4.1. Vegetation Communities on Site

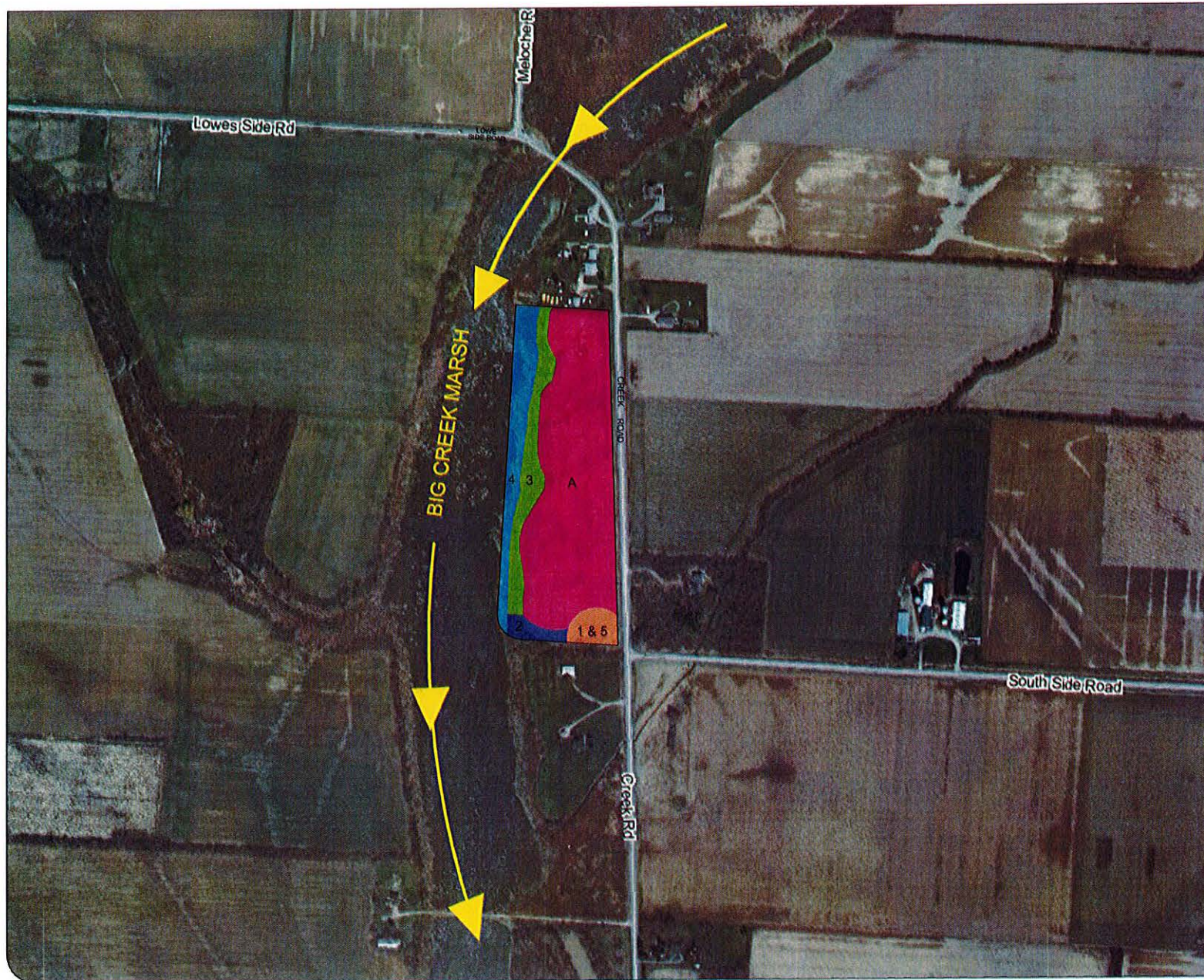
As indicated earlier, the majority of the property is in active agricultural production with common field crops (i.e., soybean) being grown (see **Figure 2**). However, the southern edge of the property has not been cropped since 2001, and is now covered in a combination of grey dogwood thicket and/or old field vegetation. The western edge of the property, which includes the bank of Big Creek has a dense, thicket of shrubs and tall grasses (i.e., common reed grass), and has become more established and thicker compared to its condition in 2001.

In order to get a better representation of the limit of the top-of-bank and wetland and shrub thicket vegetation, as well as the edge of the active agricultural field, Dillon Consulting Limited had a surveyor mark the edge of these features (see **Figure 3**). The top-of-bank is very distinctive in the field, as there is a defined 4 to 6.5 foot drop into the adjacent creek with vegetation west of this edge consisting of a dense mat of common reed grass (*Phragmites communis*) that is 6.5 to 10 feet tall and provides a protective “wall or shield” from any activity occurring on the subject site. Indeed, only a few “gaps” occur within this “wall of vegetation”, with a small ad-hoc trail located near the southwest corner of the property, and several smaller openings located in the central and northern parts of this edge.

The vegetation community east of this area is higher in elevation, and for the most part, at the same elevation as the adjacent crop field. Species vary in wetness coefficient in both the overstorey and understorey layers, and it is not uncommon to find black walnut growing in close proximity to grey dogwood along with some of the wetter willow species. It should be noted that while some areas do have a higher moisture regime than others and support predominately wetland species (i.e., spotted jewel weed (*Impatiens capensis*)), this moisture is a result of field drainage flowing in from the east (see **Figure 3**) and not from fluctuations from Big Creek Marsh. As indicated in earlier reports, a distinct terrestrial community (*Fresh-moist lowland deciduous ecosite*) is present adjacent to the wetland community and should not be included in the wetland boundary as defined by the OMNR off-site boundary determination.

The edge of the active agricultural field (**Figure 3**) is also very distinctive, with a clear vegetative boundary between wild flowers, associated with the shrub thicket vegetation of the *Fresh-moist lowland deciduous ecosite* (i.e. wild strawberry (*Fragaria virginiana*), tall goldenrod (*Solidago altissima*) and chicory (*Cichorium intybus*)), and the crop field that is cultivated and planted on an annual basis.

Dillon Consulting Limited also had surveyors establish another line on the property which was a 16 foot buffer limit west of the edge of the active agricultural field. The intent of this line will be discussed in Section 5.0 (i.e. **Assessment of Potential Impacts and Proposed Enhancements**) of this report.



**CREEK ROAD DEVELOPMENT
EAST OF LOWES SIDEROAD
CONSENT APPLICATION
IN THE TOWN OF AMHERSTBURG**

AN ENVIRONMENTAL IMPACT STATEMENT FOR
THE DIOECCO PROPERTY

FIGURE 2
EXISTING CONDITIONS

LEGEND

- A: AGRICULTURAL FIELD
- 1 & 5: GREY DOG WOOD CULTURAL THICKET & DRY-MOIST OLD FIELD
- 2: MANITOBA MAPLE CULTURAL WOODLAND
- 3: FRESH-MOIST LOWLAND DECIDUOUS ECOSITE
- 4: COMMON REED GRASS MINERAL MEADOW MARSH

SCALE: N.T.S.
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MAP DRAWING INFORMATION
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CHECKED BY: HW/KDT
DESIGNED BY: HV

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PROJECT #: 10-4250
STATUS: FINAL
DATE: 06/12/14

A description of each vegetation community is as follows:

Grey dogwood cultural thicket – This community is located along the southern side of the site and occurs within a dry-moist old field community. It includes a farm track that is used to access the soybean field. Grey dogwood (Cornus racemosa) is the dominant shrub, but other shrubs such as smooth sumach (Rhus glabra) also occur. Several seedling black walnuts (Juglans nigra) which have been seeded from larger trees along the southern hedgerow also occur. Other trees include pear (Pyrus sps), white elm (Ulmus americana) and common hackberry (Celtis occidentalis). This community continues westward towards Big Creek Marsh, where it rapidly changes to a cultural woodland community that is dominated by Manitoba maple (Acer negundo).

Manitoba maple cultural woodland community - This community is found on the south side of the property, and is dominated by semi-mature specimens of Manitoba maple which are leaning to the north. An inspection of the understory found it to be sparse with only white avens (Guem canadense), garlic mustard (Alliaria officinalis), poison ivy (Rhus radicans) and wild grape (Vitis riparia) present. Evidence shows that this area may have been cultivated at one time as there were the remnants of furrows within the top soil layer.

Fresh-moist lowland deciduous ecosite – This community is located above the top-of-bank of Big Creek and due to the underlying Perth clay (which has fair drainage) the majority of this community remains dry for the majority of the growing season. Trees include Manitoba maple, red ash, hackberry, black walnut, silver maple, crack willow and cottonwood. The shrub layer is dominant as a thick layer of grey dogwood has become established making it very difficult to gain access to the wetland which is located immediately to the west. In some areas, common reed grass (Phragmites communis) has become established and has spread eastward along the lower bank and occasionally into the crop field.

Common reed grass mineral meadow marsh – This community is located below the top-of-bank, and periodically becomes submerged depending on the water levels in Lake Erie. This layer is dominated by common reed grass, but other riparian species, including lake sedge (Carex lacustris), swamp milkweed (Asclepias incarnata), manna grass (Glyceria grandis), common cattail (Typha latifolia) and duckweed (Lemna minor). The substrate is very spongy, and is composed of many layers of semi-rotted vegetation that have accumulated after each growing season.

Dry-moist old field – This community is within the grey dogwood thicket and consists of grasses (i.e., tall fescue, red fescue, orchard grass, timothy, and Kentucky bluegrass) and typical old field flowers including Canada goldenrod (Solidago canadensis), chicory (Cichorium intybus), Canada thistle (Cisium arvense), yellow sweet clover (Melilotus officinalis), broad-leaved plantain (Plantago major), New England aster (Aster novae-angliae), yellow rocket (Barbarea vulgaris), wild carrot (Daucus carota), black-eyed Susan (Rudbeckia hirta). This area also includes piles of rubble including concrete, scrap lumber, pipes and asphalt.

A list of plants found within the communities of the subject property is summarized in **Appendix A**. These plants have been identified through site visits in 2000, 2001, 2011 and

2012. These plants are very common in the area, and many of them are considered introduced. Invasive plants included garlic mustard, which was most noticeable around the southwest pathway, dame's rocket (Hesperis matronalis) and common buckthorn which was common in the Manitoba maple cultural woodland community as well as in the Fresh-moist lowland deciduous ecosite. As indicated, common reed grass has dominated the vegetation community along Big Creek, especially in those areas where the water level is shallow.

4.2. Wildlife Communities

Big Creek Marsh has one of the most extensive shoreline marshes in Southwestern Ontario, and provides one of the longest inland continuous habitat reaches from Lake Erie. It also provides an important function of regulating storm water flows during the spring freshet or other high water periods. In terms of fish habitat, it provides warm-water fish habitat for a variety of species including northern pike, carp, sunfish and cyprinid species.

As the Site is adjacent to Big Creek and a floodplain setting, it does have the potential to support a variety of wildlife species including birds and mammals. Incidental observations during fieldwork found evidence of white-tailed deer (Odocoileus virginianus), striped skunk (Mephitis mephitis), grey squirrel (Sciurus carolinensis), muskrat (Ondatra zibethicus), raccoon (Procyon lotor), and cottontail rabbit (Sylvilagus floridanus). The invasive Chinese mystery snail (Bellamya chinensis) was also found washed up on the shoreline of the creek.

Attempts were made to look for more secretive wildlife species such as herpetofauna (i.e., reptiles and amphibians) and small rodents by looking under old boards and a rubble pile that was found in the southeast corner of the property.

Several American toads (Bufo americanus) and leopard frogs (Rana pipiens) were observed foraging for crickets along the western soybean field edge, and two eastern garter snakes were found within the rubble pile in the fall visit of 2011. In 2012, Green frogs (R. clamitans) were heard calling within the shoreline area of the marsh, and a Dekay brown snake (Storeria dekayi) was found along the western edge of the property.

At the request of OMNR, the rubble piles was examined more thoroughly as they occasionally do provide summer refuge for snakes, or if they are tall and extend deep into the ground below the frost level, can become winter hibernaculum sites for various snake species. In examining this particular rubble pile on three occasions, it was noticed that it has a low profile (i.e., less than 3.0 feet high), is at grade and due to the open nature of the rubble would not make it suitable for winter hibernaculum. Information regarding this identified feature was sent to the Aylmer District OMNR office for review. On November 23, 2012, Dillon received a letter from OMNR that stated:

“The Ministry of Natural Resources (MNR) has reviewed the additional information provided by you with respect to the above property relative to its potential to have protected habitat for species at risk. We have determined that the identified feature would not be protected habitat for species at risk. Activities associated with the development project, as currently proposed, are therefore not likely to contravene the Endangered Species Act, 2007 (ESA).”

The Big Creek marsh is a well known birding area, especially the area south of County Road 20 which features inland marshes and staging areas. Species that were foraging approximately 100 feet from the DiCecco property shoreline on a regular basis included great egret (Casmerodius albus), Canada goose (Branta canadensis), mute swan (Cygnus olor), wood duck (Aix sponsa), mallard (Anas platyrhynchos), and great blue heron (Ardea herodias). Species along the shoreline and soybean field included marsh wren (Cistothorus palustris), American robin (Turdus migratorius), cardinal (Cardinalis cardinalis), grey catbird (Dumetella carolinensis), savannah sparrow (Passerculus sandwichensis), American goldfinch (Carduelis tristis), turkey vulture (Cathartes aura), American crow (Corvus brachyrhynchos) and red-winged blackbird (Agelaius phoeniceus).

Evidence of hunting activity was also found on or adjacent to the DiCecco property. This included a small boat, loaded with Canada geese decoys, spent shotgun shells along the shoreline, and an abandoned blind approximately 50 feet off-shore. Waste fishing line was also found hung up in the some of the overhanging trees as well as one broken, bait trap.

4.3. Potential for occurrence of Natural features and areas as described in Section 2.1 of the Provincial Policy Statement (2014)

According to the Provincial Policy Statement (2014), there are several sections regarding Natural Heritage, which should be considered to protect the long-term prosperity, environmental health of this property. In this regard, the following sections may apply to this property if they occur.

Section 2.1.1., “Natural features and areas shall be protected for the long term”.

Section 2.1.4 “Development and site alteration shall not be permitted in: significant wetlands in Ecoregions 5E, 6E and 7E”.

Section 2.1.6 “Development and Site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements”.

Section 2.1.7 “Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

Section 2.1.8 “Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological functional of the adjacent lands have been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Section 2.1.9 “Nothing in policy 2.1 is intended to limit the ability of agricultural uses to continue”.

As part of the ecological evaluation, The Natural Heritage Information Centre (NHIC) was checked for those sensitive species that may occur within a one square kilometer of the site. As

Big Creek formed the centroid of this search, the list is lengthy and included a total of three snakes, two fish and thirty five plant species.

From reviewing this information, many of the records were more than 25 years, and contained species names dating back to 1901 or earlier. Records that were less than 25 years old included milksnake (Lampropeltis triangulum), Butler's garter snake (Thamnophis butleri), eastern ribbon snake (T. sauritus), spotted sucker (Minytrema melanops), Frank' sedge (Carex frankii), coast barnyard grass (Echinochloa walteri), swamp rose mallow (Hibiscus moscheutos), and red mulberry (Morus rubra).

With regard to the snake species, all require extensive grasslands to forage upon in search of prey. While these snakes could be found along the grasslands bordering the Big Creek Marsh, the majority of the site is composed of common field crops which would not provide large amounts of prey items compared to other natural areas. That being said, observations of snake activity occurring within the rubble pile, occurred on every visit since September 2011. Characterization of the rubble pile itself also occurred and this information was forwarded to the Aylmer District OMNR office for comment. As described earlier in this document, the OMNR "determined that the identified feature (i.e. rubble pile) would not be protected habitat for species at risk".

With regard to fish species, the spotted sucker was captured in Big Creek in 1986, but no other sightings have been seen since. Drainage in the site is directed towards Big Creek via various farm swales that flow into the thick mat of common reed grass at the wetland edge and then into the channel. Potential contaminants from the site including silt and farm chemicals (i.e., pesticides and fertilizers) would be intercepted and bound by the root systems of common reed grass. Therefore, impacts to fish species would be minimal.

During a site visit in 2001 with staff from ERCA, special attention was made to all mulberry shrubs on site to determine if they were red mulberry (which is a small shrub that is protected under Ontario's Endangered Species Act). The inspection of the leaves found that all plants were that of the introduced white mulberry (M. alba). The other plant species listed (i.e., Frank's sedge, coast barnyard grass and swamp rose mallow) were not found, and even if they did exist at one time would have been overwhelmed by the various invasive species that occur on this property.

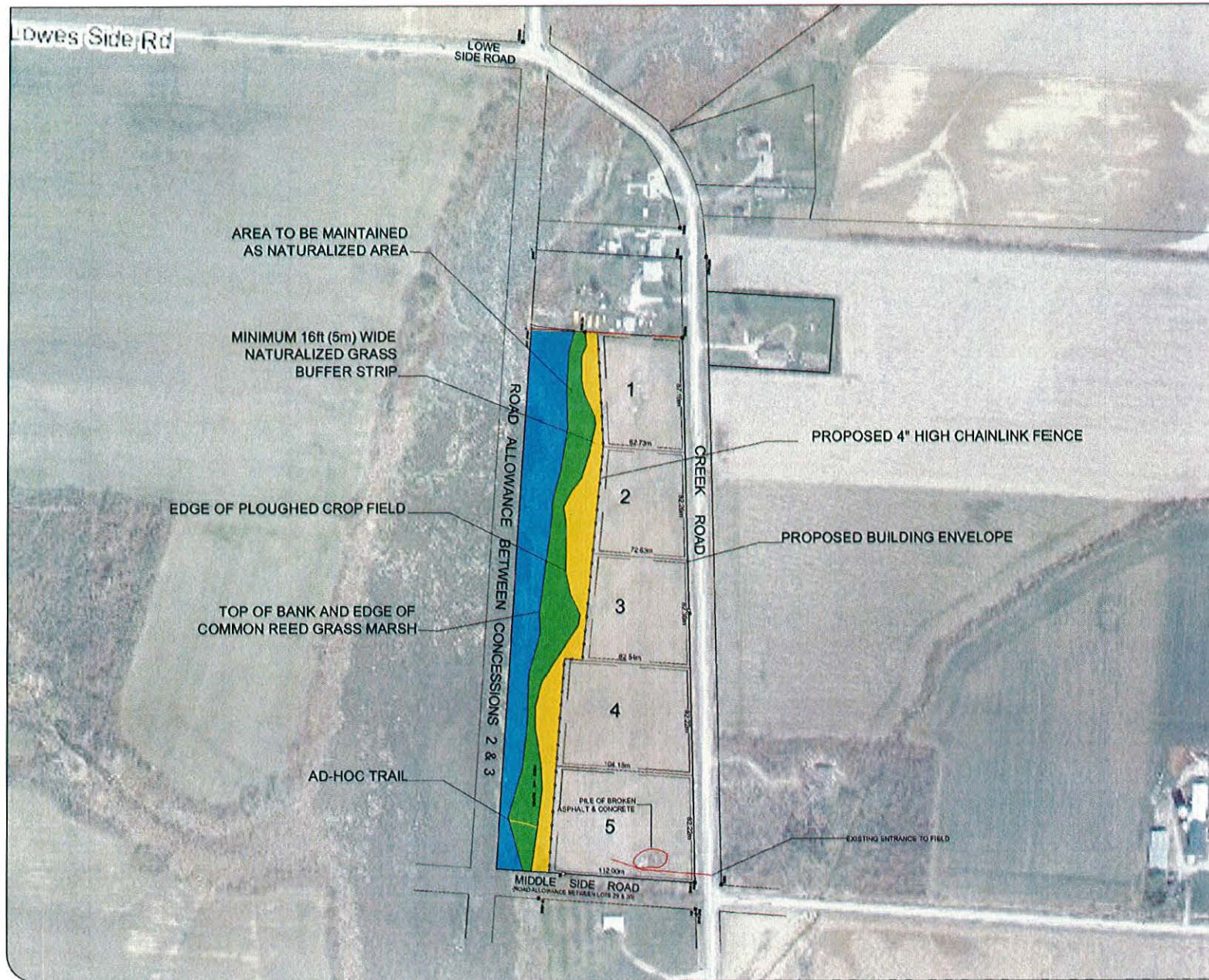
4.4. Anthropogenic Activity on the Property

Anthropogenic activity refers to human-made or human-modified materials or communities that have altered or modified the natural biotic (i.e., vegetation cover) or abiotic features (i.e., topography) in some manner (Lee et al, 1998).

In the case of this site, a portion of the site was once used as a batching site, but is now uses extensively for agricultural uses. Along the Big Creek marsh coastline, larger trees and shrubs have been cut back on various occasions to gain better access to the shoreline, but now the extensive growth of common reed grass has made an effective barrier between the aquatic marsh community and the adjacent terrestrial/agricultural use.

4.5. Development Plan for the Property

The proposed development plan for this property includes 5 lots, each with a frontage of 273.10 feet (*Figure 4*). The northern-most lot will have a depth of 205.80 feet, while the southern-most lot will have a depth of 367.5 feet. Driveway access will be from Creek Road. All residences will have a separate septic system, but the water supply will be from municipal services.



**CREEK ROAD DEVELOPMENT
EAST OF LOWES SIDEROAD
CONSENT APPLICATION
IN THE TOWN OF AMHERSTBURG**

FIGURE 3
SURVEY OF MARKED FEATURES ON THE
DICECCO PROPERTY AND PROPOSED LOCATION
OF 16 ft. (5m) BUFFER STRIP

LEGEND

- PROPOSED 4" HIGH CHAINLINK FENCE
- BUILDING ENVELOPES
- NATURALIZED AREA
- COMMON REED GRASS MARSH
- MINIMUM 16 ft (5m) WIDE NATURALIZED GRASS BUFFER STRIP

SCALE: N.T.S.

MAP DRAWING INFORMATION
All information shown on this drawing is for information purposes only.

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PROJECT #: 10-4250
STATUS: FINAL
DATE: 09/17/14



CREEK ROAD DEVELOPMENT
 DICECCO LANDS
 TOWN OF AMHERSTBURG

AN ENVIRONMENTAL IMPACT STATEMENT FOR
 THE DICECCO PROPERTY

FIGURE 4
 PROPOSED SEVERANCE PARCELS

LEGEND

- LANDS TO BE RETAINED
- LANDS TO BE SEVERED
- PROPOSED NEW PROPERTY LINE WITH 4" HIGH CHAINLINK FENCE
- WESTERN LIMIT OF 5m GRASS BUFFER
- TOP OF BANK

* Consents required for each lot created



MAP DRAWING INFORMATION
 All information shown on this drawing is for information purposes only.

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PROJECT #: 10-4250
 STATUS: FINAL
 DATE: 09/12/14

5.0 ASSESSMENT OF POTENTIAL IMPACTS AND PROPOSED ENHANCEMENTS

5.1. Groundwater and Surface Regimes

As the proposed development will only consist of five lots, the groundwater and surface water impacts are unlikely to alter flows on the site or downstream. However, there will be a slight increase to the impermeable surfaces due to the construction of the residences and driveways.

5.2. Impacts to Vegetation

The removal of vegetation for residential construction will only occur in those areas where house and driveway construction will occur, which will be limited to the east edge of the property. The removal of shrub thicket communities in the southern portion of the site is only applicable to one lot, and this will only occur when the characterization of the rubble pile is complete, and clearance from OMNR to remove it has been issued.

However, possible impacts which may result from the presence of permanent residents including increased human access to the shores of Big Creek Marsh, could result in littering, trampling of riparian plant species or destruction of wildlife habitat.

5.3. Impacts to Aquatic Habitat

Aquatic habitat is present only to the western edge of the subject property, and it is well protected from the existing agricultural use by a distinct top-of-bank, and an extensive mat of common reed grass that extends 33 – 50 feet into the shallow marsh. Further protection to the aquatic habitat and the PSW is provided by a thick layer of trees and shrubs located above the top-of-bank. It should be noted that in this part of Big Creek, the water depth is fairly shallow and encounters with mud flats and submerged vegetation is common. Any intrusion into this area from the marsh itself is virtually impossible by foot or motorized boat, as the substrate is very spongy and the water levels are too shallow. Canoe or row boats could be operated, but launching such craft would be difficult from the DiCecco property.

Furthermore, it is the intent of the owner of this property, that the existing Fresh-moist lowland deciduous ecosite (which is located along the western limits of the site, and adjacent to Big Creek marsh), will not be disturbed.

5.4. Impacts to Storm water drainage

A well defined ditch does occur on the west side of Creek Road, so any flows east of this point are directed into the road side ditch, and not across the DiCecco property. As indicated earlier, storm water drainage on the site is dictated by the natural topography of the site, which is level to gently rolling, and drains from the east to the west towards Big Creek Marsh. While most of the drainage of the field is achieved through natural infiltration, some field drainage does accumulate in several troughs that, although are cultivated and cropped, do eventually outlet near Big Creek via heavily vegetated swales that, in turn, drain into the marsh.

5.5. Proposed Enhancements

In their letter dated November 15, 2011, the Essex Region Conservation Authority (ERCA) stated in their comment (c) *“that the rear lot lines proposed for this development extend to the western most lot line for the subject property. This means that these 5 proposed lots will include the portion of the PSW on the subject property”*. ERCA also cites that with regard to the Provincial Policy Statement (PPS) – *“Development and site alteration shall not be permitted in significant wetlands in Ecoregions 5E, 6E and 7E”*. Finally, ERCA quotes Section 3.4.2 (3) of the Town’s Official Plan that states *“Lands designated ‘Natural Environment’ shall be retained in their natural state and for conservation or wildlife habitat enhancement. Site alteration and/or development of these areas shall not be permitted unless it has been demonstrated to the satisfaction of Council and ERCA that there will be no negative impacts on the natural features and or their ecological functions. However, no development and or site alteration shall be allowed in the habitat of endangered and threatened species”*.

In preparing this addendum, Dillon Consulting Limited has reviewed the development concept with the owner and modified it in a manner so that the creation of 5 residential lots will not extend into the existing PSW, and that no development and/or site alteration shall be allowed in the habitat of endangered and threatened species.

In order to achieve this, the western limit of the development concept will be located at a point within the existing soybean field which is at least 16 feet east of the existing edge of the crop field (see **Figure 3**). In our opinion, this point is not within the PSW, and because it is cropped on a regular basis, does not constitute habitat of endangered and threatened species.

To provide added protection to the existing PSW, the western 16 foot strip (approximately) of crop field from the south to the north end of the field will be taken out of crop protection, and planted with a pasture grass mix at least one year prior to any site construction. This strip would then be conveyed to the Town for public ownership.

To reduce the possibility of human access into the wetland, it is proposed that a fence, without gates, will be installed along the eastern limit of the approximately 16 foot strip. The ownership would become the responsibility of the Town and it is recommended that the fence be inspected on an annual basis to ensure that new openings have not been created by local residents.

To ensure that storm water drainage from the development does not impact Big Creek marsh, each lot will have a site specific Storm Water Plan, while an Erosion and Sedimentation Control Plan will be established for all 5 lots. The intent of the Erosion and Sedimentation Control Plan is to prevent any migration of silt into the Big Creek Marsh, the Fresh-moist lowland deciduous ecosite or the new approximately 16 foot wide grass strip.

6.0 SUMMARY

Dillon Consulting Limited (DCL) has conducted field work on several different occasions to determine the flora and fauna that occur on the site. While the majority of the property has been cropped with common field crops on an annual basis, the western edge of the property which is adjacent to Big Creek Marsh (a provincially significant wetland) is the main focus of this Environmental Impact Statement.

The land owner is requesting the approval of five estate size residential lots that would front onto Creek Road. These lots would not extend westward into the wetland.

To ensure that intrusion into natural areas including the wetland, the rear lot line would be fenced with no gates.

To further reduce the impact to the wetland, a grass strip of approximately 16 feet would be conveyed to the Town. The intent of this buffer is that it remains in a naturalized grassed condition to allow for natural succession to occur.

With respect to the above mentioned Section 2.1 Natural Heritage of the PPS (2014), the following conclusions have been reached based on site visits that have been conducted on this property.

Section 2.1.1., “Natural features and areas shall be protected for the long term”.

Conclusion – *The natural features on this property are located along the western property edge and include the Big Creek Marsh which has been identified as a provincially significant wetland. The owner of the property has agreed that this feature will remain in a natural state and will be protected for the long term.*

Section 2.1.4 “Development and site alteration shall not be permitted in significant wetlands in Ecoregions 5E, 6E and 7E”.

Conclusion – *No development and site alteration will occur within Big Creek Marsh and steps have been taken to renaturalize portions of the existing crop field to further protect this natural feature.*

Section 2.1.6 “Development and Site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements”.

Conclusion – *Evidence of fish activity has been observed along Big Creek Marsh and large fish (i.e., common carp) have been seen during field work; however, development and site alteration will not occur within Big Creek Marsh and the adjacent wetland community (which is dominated by common reed grass) will remain in place.*

Section 2.1.7 “Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

Conclusion – No habitat of endangered and threatened species occur within the proposed development area of the site, as the majority of the site is being used for common field crops and would not be protected habitat for species at risk. Furthermore, provisions will be made (during or once agricultural ceases) to increase the natural buffer to Big Creek Marsh that may provide habitat for species at risk in this localized area.

Section 2.1.8 “Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological functional of the adjacent lands have been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Conclusion – The ecological function of the adjacent lands has been conducted over several field visits over several years to determine the significance of each vegetation community and the potential for it to support various floral and faunal communities. It has been determined that the natural communities that consist of upland deciduous woodlands, shrub thickets and common reed grass marsh meadows combined, serve as a natural buffer from cultural activities (i.e., agriculture) on the east side of the property and would likely provide similar protection once agricultural activity ceases. To increase this protection, planted buffers consisting of native grasses will provide added protection once the proposed development occurs.

In conclusion, it is the opinion of Dillon Consulting Limited, that the creation of five lots on this property is an appropriate land use and will not have a negative impact on the subject property and the adjacent Big Creek Marsh.

7.0 REFERENCES

- Essex Region Conservation Authority, 2011. DiCecco Environmental Impact Assessment (EIA) Review. Letter dated November 15, 2001.
- N.R Richards, A.G. Caldwell and F.F. Morwick 1939. Soil Survey of Essex County: Report No. 11 of the Ontario Soil Survey. Reprinted in 1989. OMAF.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

APPENDIX A

LIST OF VASCULAR PLANTS FOUND
ON DICECCO PROPERTY

Family	Scientific Name	Common Names	Coefficient Conservation	Coefficient Wetness	SRank	Grey dogwood shrub thicket	Crop field and old field	Reed grass mineral meadow marsh	Fresh-moist lowland deciduous ecosite
PTERIDOPHYTES									
EQUISETACEAE	<i>Equisetum arvense</i>	Field Horsetail	0	0	S5	X	X		
GYMNOSPERMS									
PINACEAE	<i>Picea pungens</i>	Colorado Spruce	0		SE				X
	<i>Pinus nigra</i>	Austrian Pine	0	-5	SE2				
ANGIOSPERMS - MONOCOTYLEDONS									
GRAMINEAE	<i>Bromus inermis ssp. inermis</i>	Smooth Brome	0	5	SE5	X	X		X
	<i>Dactylis glomerata</i>	Orchard Grass	0	3	SE5	X	X		
	<i>Echinochloa crusgalli</i>	Barnyard grass	-	-3	S5	X	X		
	<i>Festuca arundinacea</i>	Tall Fescue	-	2	S5	X	X		
	<i>Festuca rubra</i>	Red Fescue	-	1	S5	X	X	X	X
	<i>Panicum capillare</i>	Witch Grass	0	0	S5		X		
	<i>Phleum pratense</i>	Timothy	0	3	SE5	X	X		
	<i>Phragmites</i>	Common reed	0	-4	S5			X	X
	<i>Setaria pumila</i>	Yellow Foxtail	0	0	SE5	X	X		
	<i>Setaria viridis</i>	Green Foxtail	-	5	S5	X	X		X
ANGIOSPERMS - DICOTYLEDONS									
ACERACEAE	<i>Acer negundo</i>	Manitoba Maple	0	-2	S5	X	X	X	X
	<i>Acer saccharinum</i>	Silver Maple	5	-3	S5				
ANACARDIACEAE	<i>Rhus radicans ssp. rydbergii</i>	Western Poison-ivy	0	0	S5	X		X	X
	<i>Rhus glabra</i>	Smooth Sumac	1	5	S5	X			X
APIACEAE	<i>Daucus carota</i>	Wild Carrot	0	5	SE5	X	X		X
APOCYNACEAE	<i>Vinca minor</i>	Periwinkle	0	5	SE5	X			

Family	Scientific Name	Common Names	Coefficient Conservation	Coefficient Wetness	SRank	Grey dogwood shrub thicket	Crop field and old field	Reed grass mineral meadow marsh	Fresh-moist lowland deciduous ecosite
ASTERACEAE	<i>Ambrosia artemisiifolia</i>	Common ragweed	0	3	S5	X	X		X
	<i>Ambrosia trifida</i>	Giant ragweed	0	-1	S5	X	X		X
	<i>Arctium minus ssp. minus</i>	Common Burdock	0	5	SE5	X	X		X
	<i>Aster ericoides</i>	Heath aster	4	4	S5	X	X		
	<i>Aster lacuis</i>	Smooth aster	7	5	S5	X	X		
	<i>Aster lateriflorus var. lateriflorus</i>	One-sided Aster	3	-2	S5	X	X		
	<i>Aster novae-angliae</i>	New England Aster	2	-3	S5	X	X	X	X
	<i>Aster piniceus</i>	Swamp aster	6	-5	S5			X	X
	<i>Cichorium intybus</i>	Chicory	0	5	SE5		X		X
	<i>Cirsium arvense</i>	Canada Thistle	0	3	SE5	X	X		
	<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	2	-2	S5	X	X		
	<i>Solidago altissima var. altissima</i>	Tall Goldenrod	1	3	S5	X	X		
	<i>Sonchus arvensis ssp. arvensis</i>	Field Sow-thistle	0	1	SE5	X	X		X
	<i>Taraxacum officinale</i>	Common Dandelion	0	3	SE5	X	X		X
BERBERIDACEAE	<i>Berberis vulgaris</i>	Common Barberry	0	3	SE5	X			
BRASSICACEAE	<i>Alliaria petiolata</i>	Garlic Mustard	0	0	SE5	X	X		X
	<i>Hesperis matronalis</i>	Dame's Rocket	0	5	SE5	X			
CORNACEAE	<i>Cornus foemina ssp. racemosa</i>	Grey Dogwood	2	-2	S5	X	X	X	X
	<i>Cornus stolonifera</i>	Red-osier Dogwood	2	-3	S5			X	
DIPSACACEAE	<i>Dipsacus sylvestris</i>	Teasel	-	5	S5	X	X		

Family	Scientific Name	Common Names	Coefficient Conservation	Coefficient Wetness	SRank	Grey dogwood shrub thicket	Crop field and old field	Reed grass mineral meadow marsh	Fresh-moist lowland deciduous ecosite
FABACEAE	<i>Robinia pseudo-acacia</i>	Black Locust	0	4	SE5		X		
	<i>Trifolium pratense</i>	Red Clover	0	2	SE5	X	X		X
GERANIACEAE	<i>Geranium robertianum</i>	Herb Robert	0	5	SE5				X
JUGLANDACEAE	<i>Juglans nigra</i>	Black Walnut	5	3	S4	X			X
MALVACEAE	<i>Abutilon</i>	Velvet leaf	-	4	S5	X	X		
	<i>Malva neglecta</i>	Cheeses	0	5	SE5	X	X		X
	<i>Theophrastic Hibiscus trionum</i>	Flower-of-an hour	-	5	S5	X	X		
MORACEAE	<i>Morus alba</i>	White mulberry	-	0	S5	X			X
OLEACEAE	<i>Fraxinus pennsylvanica</i>	Red Ash	3	-3	S5	X		X	X
	<i>Ligustrum vulgare</i>	Common Privet	0	1	SE5	X			
	<i>Syringa vulgaris</i>	Common Lilac	0	5	SE5	X			
OXALIDACEAE	<i>Oxalis stricta</i>	Upright Yellow Wood-sorrel	0	3	S5	X	X		
PLANTAGINACEAE	<i>Plantago lanceolata</i>	Ribgrass	0	0	SE5	X	X		X
	<i>Plantago major</i>	Common Plantain	0	-1	SE5		X		
POLYGONACEAE	<i>Rumex crispus</i>	Curly Dock	0	-1	SE5	X	X		X
PRIMULACEAE	<i>Lysimachia nummularia</i>	Moneywort	0	-4	SE5	X	X	X	
RHAMNACEAE	<i>Rhamnus cathartica</i>	Common Buckthorn	0	3	SE5	X			X
	<i>Rhamnus frangula</i>	Glossy Buckthorn	0	-1	SE5	X			X

Family	Scientific Name	Common Names	Coefficient Conservation	Coefficient Wetness	SRank	Grey dogwood shrub thicket	Crop field and old field	Reed grass mineral meadow marsh	Fresh-moist lowland deciduous ecosite
ROSACEAE	<i>Crataegus mollis</i>	Downy Hawthorn	4	-2	S5	X			
	<i>Crataegus monogyna</i>	English Hawthorn	0	5	SE5	X			
	<i>Crataegus punctata</i>	Dotted Hawthorn	4	5	S5	X			
	<i>Fragaria virginiana ssp. virginiana</i>	Common Strawberry	2	1	S5	X	X		
	<i>Geum canadense</i>	White avens	3	0	S5	X			
	<i>Malus pumila</i>	Common Apple	0	5	SE5	X			X
	<i>Prunus virginiana</i>	Choke Cherry	2	1	S5	X			X
	<i>Pyrus communis</i>	Pear	-	5	S5	X			
	<i>Rosa rubiginosa</i>	Sweetbrier Rose	0	5	SE4	X	X		
	<i>Rubus allegheniensis</i>	Common blackberry	2	2	S5	X			X
	<i>Rubus idaeus ssp. melanolasius</i>	Wild Red Raspberry	0	-2	S5	X			X
SALICACEAE	<i>Populus deltoids</i>	Cottonwood	4	-1	S5	X			
	<i>Salix exigua</i>	Sandbar Willow	3	-5	S5			X	X
SCROPHULARICEAE	<i>Veronica officinalis</i>	Common speedwell	-	5	S5	X	X		
SOLANACEAE	<i>Solanum dulcamara</i>	Bittersweet Nightshade	0	0	SE5	X	X	X	X
TILIACEAE	<i>Tilia americana</i>	Basswood	4	3	S5				X
ULMACEAE	<i>Celtis occidentalis</i>	Hackberry	8	1	S4	X			X
	<i>Ulmus americana</i>	White Elm	3	-2	S5	X		X	X
VITACEAE	<i>Parthenocissus</i>	Pear	-	5	S5	X			X
	<i>Vitis riparia</i>	Riverbank Grape	0	-2	S5	X		X	X

Coefficient of Conservatism: Numeric value between 0 and 10 which indicates the degree of faithfulness a plant displays to a specific habitat or set of environmental conditions. Conservative plant species, such as those which are only found in relatively pristine natural habitats such as bogs or prairies, are assigned a high coefficient of conservatism; other plant species which grow in a wide variety of habitats and can tolerate high levels of cultural disturbance are assigned low values.

Coefficient Wetness: Lower negative numbers imply greater correlation with wetland conditions whereas higher positive numbers imply greater correlation with upland conditions.

SRank: Provincial ranks used by the Natural Heritage Information Centre to set protection priorities for rare species and natural communities. By comparing the provincial ranks, the status, rarity, and the urgency of conservation, needs can be ascertained. [S1 – Critically imperiled in Ontario; S2 – Imperiled in Ontario; S3 – Vulnerable in Ontario; S4 – Apparently secure in Ontario; S5 – Secure in Ontario; SE – Exotic]



**SCHEDULE "G" TO BY-LAW 2016-74
"CORRESPONDENCE - ERCA"**

Partner Municipalities September 23, 2015

- Town of Amherstburg
- Town of Essex
- Town of Kingsville
- Town of Lakeshore
- Town of Lasalle
- Municipality of Leamington
- Township of Pelee
- Town of Tecumseh
- City of Windsor

Ms. Rebecca Belanger, Manager of Planning Services
Town of Amherstburg
271 Sandwich St. S.
Amherstburg ON N9A 4L2

Dear Ms. Belanger:

RE: Application for Consent B-16-19/14 CREEK RD
ARN 37295900002800; PIN: 705700257
Applicant: DICECCO GIUSEPPE

The following is provided for your information and consideration as a result of our review of the above referenced Application for Consent B-16-19/14. We note that we have commented on a similar application for the creation of 4 new lots and provided correspondence on this previous application on February 17, 2015. Many of our comments on this application are consistent with the comments submitted to the Town on February 17, 2015.

SECTION 28 CONSERVATION AUTHORITIES ACT

For the owner's information, we note that the above noted lands are subject to our Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulations under the *Conservation Authorities Act*, (Ontario Regulation No. 158/06). The subject parcel falls within the regulated area of the following watercourses/waterbodies: Big Creek. The property owner will be required to obtain a Permit and/or Clearance from the Essex Region Conservation Authority prior to any construction or site alteration or other activities affected by the regulations. We note that we are in receipt of an application for permit (435/14) dated June 5, 2014.

We also note that the Department of Fisheries and Oceans (DFO) drain classification system may also be applicable should future works be proposed in the vicinity of the existing watercourse, such as the installation of a culvert or drainage outlet. These types of proposals would need to be reviewed in accordance with the Fisheries Act and may need Federal Authorization with respect to potential fish habitat issues, depending on the proposal. We note that previous partnership agreements between the Department of Fisheries and Oceans (DFO) and Conservation Authorities have lapsed. DFO and Conservation Ontario are now working to develop a new Memorandum of Understanding for a partnership under the new Fisheries Protection Program. In the interim, projects will need to be self-assessed by the proponent through the DFO website available at www.dfo-mpo.gc.ca/new-ppe/index-eng.html. Through the self-



Ms. Belanger
September 23, 2015

assessment process, you will be able to determine in any proposed works require a formal authorization under the federal *Fisheries Act*.

WATER RESOURCES MANAGEMENT

As noted in previous correspondence from February 17, 2015 we are concerned with the potential impact of the quality and quantity of runoff in the downstream watercourse due to future development on this site. We are optimistic that our concerns regarding stormwater management will be addressed as a component of our permit process and the details of the Drainage Letter dated July 16, 2015 as a component of this application. We therefore request inclusion of the following conditions in the Development Agreement:

1. That the developer undertakes an engineering analysis to identify stormwater quality and quantity measures as necessary to control any increases in flows in downstream watercourses, up to and including the 1:100 year design storm, to the satisfaction of the Municipality and the Essex Region Conservation Authority.
2. That the developer installs stormwater management measures identified above, as part of the development of the site, to the satisfaction of the Municipality and the Essex Region Conservation Authority.
3. That the developer obtains the necessary permit or clearance from the Essex Region Conservation Authority prior to undertaking site alterations and/or construction activities.

NATURAL HERITAGE POLICIES OF THE PPS, 2014

Also noted in previous correspondence on this file, most recently February 17, 2015 and July 22, 2014, the subject property is within, and/or is adjacent to (within 120 metres of), a natural heritage feature that is identified as a significant wetland (Big Creek), significant valleyland, significant wildlife habitat, significant area of natural and scientific interest under the Provincial Policy Statement (PPS, 2014).

The "Environmental Impact Statement for the DiCecco Property, Addendum Report, Revised - September 17, 2014" which was submitted by Dillon Consulting Ltd., contains the appropriate provisions for ensuring that the natural heritage policies of the PPS, 2014 are addressed by this application. Our previous recommendations to the Committee of Adjustment on February 17, 2015 are consistent today. Specifically, that we request the Municipality to include the following conditions into the Development Agreement:

1. That the new lots will not extend into the PSW or buffer lands and that the proponent will convey all natural/naturalized lands (identified in Figure 3 of the EIA study) outside of the defined residential lots to the Municipality as per correspondence received from the Town dated February 17, 2015, and
2. That the proponent establish the identified 16 foot grassed buffer strip area, and install the prescribed 4 foot high fence (with no access gates) as described in the EIA (dated September 17, 2014), and
3. That the developer undertakes an engineering analysis to identify stormwater quality and quantity measures as necessary to control any increases in flows in downstream watercourses, up to and including the 1:100 year design storm, to the satisfaction of the Municipality and the Essex Region Conservation Authority.
4. That the developer installs stormwater management measures identified above, as part of the development of these sites, to the satisfaction of the Municipality and the Essex Region Conservation Authority.



Ms. Belanger
September 23, 2015

5. That the proponent complies with the Erosion and Sedimentation Control Plan submitted by Dillon Consulting dated June 6, 2014, and completes and installs the Storm Water Management measures identified above, to the satisfaction of the Municipality and the Essex Region Conservation Authority.
6. That the developer obtains the necessary permit from the Essex Region Conservation Authority prior to undertaking site alterations and/or construction activities.

FINAL RECOMMENDATION:

Our recommendation to the Committee of Adjustment is that the proposed application be approved subject to full implementation of all identified conditions.

In addition, we request to receive a copy of the decision on this application for our files.

If you should have any questions or require any additional information, please do not hesitate to contact the ERCA Watershed Planner, Michael Nelson by phone at (519) 776-5209 ext. 347 or by e-mail at mnelson@erca.org.

Thank you.

Sincerely,



Mike Nelson
Watershed Planner
/mn



SCHEDULE "H" TO BY-LAW 2016-74
"TRANSFER OF BUFFER ZONE"

LRO # 12 Transfer

Received as CE734798 on 2016 09 16 at 12:36

The applicant(s) hereby applies to the Land Registrar.

yyyy mm dd Page 1 of 2

Properties

PIN 70570 - 0257 LT Interest/Estate Fee Simple Split
Description PT LT 29 CON 3 MALDEN, PT 6 ON PL 12R-26713, AMHERSTBURG
Address VACANT LAND
AMHERSTBURG

Consideration

Consideration \$ 1.00

Transferor(s)

The transferor(s) hereby transfers the land to the transferee(s).

Name DICECCO, GIUSEPPE
Address for Service 859 Front Road North, Amherstburg, Ontario N9V 2V6

I am at least 18 years of age.

I am not a spouse

This document is not authorized under Power of Attorney by this party.

Transferee(s)

Capacity

Share

Name THE CORPORATION OF THE TOWN OF AMHERSTBURG
Address for Service 251 Sandwich Street South, Amherstburg, Ontario N9V 2A5

Signed By

Luigi Di Pierdomenico 285 Sandwich St. S. acting for Signed 2016 09 16
Amherstburg Transferor(s)
N9V 2A7
Tel 5197362126
Fax 5197362787

I am the solicitor for the transferor(s) and the transferee(s) and this transfer is being completed in accordance with my professional standards.

I have the authority to sign and register the document on behalf of all parties to the document.

Luigi Di Pierdomenico 285 Sandwich St. S. acting for Signed 2016 09 16
Amherstburg Transferee(s)
N9V 2A7
Tel 5197362126
Fax 5197362787

I am the solicitor for the transferor(s) and the transferee(s) and this transfer is being completed in accordance with my professional standards.

I have the authority to sign and register the document on behalf of all parties to the document.

Submitted By

DIPIERDOMENICO LAW FIRM 285 Sandwich St. S. 2016 09 16
Amherstburg
N9V 2A7
Tel 5197362126
Fax 5197362787

The applicant(s) hereby applies to the Land Registrar.

Fees/Taxes/Payment

Statutory Registration Fee	\$62.85
Provincial Land Transfer Tax	\$0.00
Total Paid	\$62.85

File Number

Transferor Client File Number : 16-6452

LAND TRANSFER TAX STATEMENTS

In the matter of the conveyance of: 70570 - 0257 PT LT 29 CON 3 MALDEN, PT 6 ON PL 12R-26713, AMHERSTBURG

BY: DICECCO, GIUSEPPE

TO: THE CORPORATION OF THE TOWN OF AMHERSTBURG

%(all PINs)

1. REBECCA BELANGER

I am

- (a) A person in trust for whom the land conveyed in the above-described conveyance is being conveyed;
- (b) A trustee named in the above-described conveyance to whom the land is being conveyed;
- (c) A transferee named in the above-described conveyance;
- (d) The authorized agent or solicitor acting in this transaction for THE CORPORATION OF THE TOWN OF AMHERSTBURG described in paragraph(s) (c) above.
- (e) The President, Vice-President, Manager, Secretary, Director, or Treasurer authorized to act for _____ described in paragraph(s) () above.
- (f) A transferee described in paragraph () and am making these statements on my own behalf and on behalf of _____ who is my spouse described in paragraph () and as such, I have personal knowledge of the facts herein deposed to.

3. The total consideration for this transaction is allocated as follows:

(a) Monies paid or to be paid in cash	1.00
(b) Mortgages (i) assumed (show principal and interest to be credited against purchase price)	0.00
(ii) Given Back to Vendor	0.00
(c) Property transferred in exchange (detail below)	0.00
(d) Fair market value of the land(s)	0.00
(e) Liens, legacies, annuities and maintenance charges to which transfer is subject	0.00
(f) Other valuable consideration subject to land transfer tax (detail below)	0.00
(g) Value of land, building, fixtures and goodwill subject to land transfer tax (total of (a) to (f))	1.00
(h) VALUE OF ALL CHATTELS - items of tangible personal property	0.00
(i) Other considerations for transaction not included in (g) or (h) above	0.00
(j) Total consideration	1.00

4.

Explanation for nominal considerations:

g) Transfer to a municipality pursuant to subdivision or development agreement, condominium approval or other municipal purposes: Municipality permitted the land owner to divide land holdings into 5 different parcels. A 6th parcel of the land holdings is transferred to the Municipality as a condition of the division of the land holdings at inception. Thus the reason for the Transfer to the Municipality.

5. The land is subject to encumbrance

PROPERTY Information Record

A. Nature of Instrument: Transfer
 LRO 12 Registration No. CE734798 Date: 2016/09/16

B. Property(s): PIN 70570 - 0257 Address VACANT LAND Assessment -
 AMHERSTBURG Roll No

C. Address for Service: 251 Sandwich Street South,
 Amherstburg, Ontario N9V 2A5

D. (i) Last Conveyance(s): PIN 70570 - 0257 Registration No. CE14400
 (ii) Legal Description for Property Conveyed : Same as in last conveyance? Yes No Not known

E. Tax Statements Prepared By: Luigi Di Pierdomenico
 285 Sandwich St. S.
 Amherstburg N9V 2A7

**SCHEDULE "I" TO BY-LAW 2016-74
"EROSION & SEDIMENTATION
CONTROL PLAN"**



MEMO

TO: Antonietta Giofu, P. Eng., Director, Engineering and Public Works, Town of Amherstburg
Rebecca Belanger, Planner, Town of Amherstburg
Tim Byrne, Director, Watershed Management Services, Essex Region Conservation Authority (ERCA)

FROM: Dillon Consulting Limited

DATE: June 6, 2014

SUBJECT: Stormwater Management Plan and Erosion and Sediment Control Plan for the DiCecco Property, Town of Amherstburg

OUR FILE: 10-4250

1.0 INTRODUCTION

Dillon Consulting Limited (Dillon) was retained by Mr. Joe DiCecco to prepare a stormwater assessment for the proposed development of his 14.19 acre (5.74 ha) property located on the west side of Creek Road, immediately north of the intersection of South Side Road and Creek Road. Approximately 3.80 ha will be developed for five residential lots; the remaining 1.94 ha will remain as naturalized areas and/or form part of Big Creek and will not be developed. The legal description of the property is Part Farm Lot 26, Concession 3.

The majority of the subject property has historically been cropped with soybeans and/or other cash crops. The west side of the site is bound by the Big Creek which is a Provincially Significant Wetland (PSW); the south side is adjacent to the unopened South (Middle) Sideroad road allowance and the north side is adjacent to a machine shop, several estate residential lots and a storage area for school buses. The eastern boundary fronts Creek Road. The east side of Creek Road is primarily under agricultural production with a few residential dwellings located adjacent to the road.

Five residential lots are proposed for development. It is anticipated that a single family dwelling will be constructed near the front (east side) of each lot and each residence will have a municipal water supply and an on-site septic system in the rear yard of the property.

1.1 Stormwater Management Criteria

Relevant to the stormwater management assessment and design, the following were referenced when determining appropriate design criteria:

- The Town of Amherstburg Development Manual (May 2009)
- Essex Region Conservation Authority (ERCA) comments dated August 15, 2012 – Subject: EIA Amherstburg; Mr. Joe DiCecco, Multi-lot Residential-Big Creek PSW
- The Town of Amherstburg comments dated January 11, 2013 – Subject: DiCecco Proposed Residential Development

This report will assess existing stormwater drainage areas; anticipated peak flows generated from the site and proposed mitigation measures protecting runoff water quality. The report will demonstrate that any negative potential impacts to the natural heritage features downstream will be mitigated by the proposed stormwater management measures. The report will also include recommendations for sediment and erosion control during the construction phase of the development.

The proposed stormwater management systems will be designed to convey both the minor (5 year return period) and the major (100 year return period) systems. An assessment of the existing and proposed condition peak flows will be included.

2.0 EXISTING CONDITIONS

The developable portion of the existing site has a total area of approximately 3.80 ha and is currently used for cash crop production (agricultural). The surface water on-site is conveyed westerly via sheet flow and shallow concentrated flow to Big Creek. The site has mild rolling topography with characteristic slopes of 1.0 to 2.5%. Refer to the **Figure A** contained in **Appendix B** for additional details.

The soils on site are a mix of Bottom Land and Perth Clay Loam which are a mix of silt with some clay and sand. Runoff properties utilized in the stormwater assessment, including the rational method coefficients (C), were referenced from the MTO Drainage Management Manual (1997) which also recommends a rational method runoff coefficient of 0.35 for cultivated rural lands with flat topography (0-5% slopes). However, based on previous discussions with the Town it was recommended that a rational method runoff coefficient of 0.20 be utilized for assessing agricultural lands. This lower coefficient will be utilized in this stormwater assessment as it represents a more conservative existing condition (i.e. peak flows under existing conditions will be lower).

2.1 Existing Conditions Rational Method Calculations

The development area has been subdivided into five drainage areas, corresponding to each proposed lot. Based on the catchment drainage characteristics (size, slope, etc.), a time of concentration of 10 minutes was assumed to be representative and conservative. Both the *Federal Aviation Administration - Airport Formula* (1970) and the *SCS Velocity (Uplands) Method* (1975, 1986) were reviewed but were determined not to be appropriate for the site.

Precipitation data for this study was obtained from Environment Canada. The Windsor A climate station (Station ID: 6139525) IDF data was utilized in the rational method calculation. A summary of the 2 year, 5 year and 100 year peak flows are outlined in **Table 1**. Additional details related to the existing conditions peak flow assessment are contained in **Appendix A**.

Table 1: Existing Condition Peak Flows

Return Period	Drainage Areas				
	EX-01	EX-02	EX-03	EX-04	EX-05
2 Year Peak Flow (l/s)	28.6	31.9	33.8	42.4	44.8
5 Year Peak Flow (l/s)	36.8	41.1	43.6	54.6	57.7
100 Year Peak Flow (l/s)	74.5	83.2	88.1	110.5	116.7

3.0 PROPOSED CONDITIONS

Each lot is proposed to have a single dwelling with a maximum lot coverage area of 5,000ft² (approximately 300m²) and a double car driveway (approximately 300m²). Refer to the **Figure B** contained in **Appendix B** for additional details of the proposed development layout.

3.1 Quantity Assessment

Flows from the proposed lots will be conveyed via sheet flow and shallow concentrated flow to the proposed swales running along the western limit of each respective lot. An easement will not be required as each property's respective swale will service only that lot. The existing drainage pattern (i.e., prevailing fall to the west) will be maintained in the proposed development.

Roof drains will not be directly connected to an outlet and will have the benefit of being routed across the grassed surfaces of the property. This reduces peak flows and helps to maintain the existing condition's water balance increasing the potential for infiltration and evapotranspiration.

The MTO Drainage Management Manual (1997) was referenced for the proposed conditions rational method runoff coefficients and the following was utilized in the stormwater management assessment; refer to **Table 2** for values.

Table 2: Post Development Runoff Coefficients

Land Use	Rational Method "C"
Lawns, typical less than 2 %, Clayey Soils	0.17
Roofs	0.95
Paved surfaces- driveways	0.90

A summary of the 2 year, 5 year and 100 year proposed condition peak flows are outlined in **Table 3**. Additional details related to the proposed conditions peak flow assessment are contained in *Appendix A*.

Table 3: Proposed Condition Peak Flows

Return Period	Drainage Areas				
	EX-01	EX-02	EX-03	EX-04	EX-05
2 Year Peak Flow (l/s)	34.6	37.4	39.0	46.3	48.3
5 Year Peak Flow (l/s)	44.6	48.2	50.3	59.7	62.3
100 Year Peak Flow (l/s)	90.1	97.5	101.7	120.7	126.0

A comparison of the existing conditions and proposed conditions rational method peak flows are outlined in **Table 4**. The percent change for each respective lot is calculated. The percent increase ranges from 7% to 17% with a representative average increase of approximately 12% when considering the five lots in aggregate.

Table 4: Percent Change Comparison of Proposed and Existing Peak Flows

Return Period	EX-01 & PR-01	EX-02 & PR-02	EX-03 & PR-03	EX-04 & PR-04	EX-05 & PR-05
2 Year Peak Flow (l/s)	17%	15%	13%	8%	7%
5 Year Peak Flow (l/s)	17%	15%	13%	8%	7%
100 Year Peak Flow (l/s)	17%	15%	13%	8%	7%

Note: positive percentage change indicates an increase in peak flow

The flows from the site are conveyed to the adjacent Big Creek PSW. This outlet is part of the upstream lands draining into the Big Creek Marsh. The Marsh has a drainage area of approximately 70 km² and is artificially controlled by a system of pumps and control dams connected to Lake Erie. The Marsh has approximately 4.5 million cubic metres of total live storage and is fed by upstream lands with an annual average streamflow of 20,700 million cubic metres, as noted in *Modelling of Hydrologic and Non-Point Source Pollution Regimes in Big Creek Watershed* (Wilson, 2011).

The proposed development is near the mouth of a much larger system. The peak flows from a storm in Big Creek would occur after the peak flow from the development reaches the outlet. Providing peak flow attenuation could be counterproductive in terms of mitigating potential flooding impacts.

Based upon the proposed minor increase in post-development flows and the overall capacity of the receiving system; peak flow attenuation will not be required onsite. An assessment of the proposed grass swales as a stormwater quality control system is outlined below.

3.2. Quality Control

Quality control for stormwater runoff will be provided by a treatment train approach. The treatment train includes routing overland flow over grassed opens spaces; all lot level flows will then be routed through a grassed swale and then outletted across a buffer strip in an undevelopable portion of the lot. The buffer strip will be composed of a native meadow grass mixture. Each of the swale outlets will have a level spreader to convert concentrated flows to sheet flows to maximize the benefit of water quality filtration provided by the buffer strip, as noted in the *Low Impact Development Stormwater Management Planning and Design Guide* (TRCA & CVC, 2010). A level spreader will help in preventing downstream erosion.

In addition to the buffer strip, the upstream grassed swales are also an effective stormwater treatment system for pollutant removal when properly designed, as detailed by in the *Stormwater Management Planning and Design Manual* (MOE, 2003) and summarized below:

The water quality benefits associated with grassed swales depend on the contact area between the water and the swale and the swale slope. Deep narrow swales are less effective for pollutant removal compared to shallow wide swales. Grassed swales are most effective for stormwater treatment when depth of flow is minimized, and channel slope is minimized. Grassed swales with a slope up to 4% can be used for water quality purposes, but effectiveness diminishes as velocity increases.

As a general guideline, grassed swales designed for water quality enhancement should be designed to convey the peak flow from a 4 hour 25 mm Chicago storm with a velocity 0.5 m/s.

A quantitative assessment of the removal efficiencies will not be assessed in this report; however, an assessment of the velocities of the proposed treatment systems will be undertaken. Flow velocity is considered a metric of performance for the proposed stormwater treatment systems (i.e. grassed swale and buffer strip with upstream level spreader).

Properly designed vegetated filter strips have been found to provide removal efficiencies up to 80 % when considering pollutants such as total nitrogen, phosphorus and total suspended solids (TSS) (TRCA & CVC, 2010). The Idaho Department of Environmental Quality *Stormwater Best Management Practices - BMP 37* (2005) recommends that effective buffer strips be at least 20ft (6.1m) wide. The minimum distance from the proposed fence line to the bank of the existing wetland is approximately 8m, exceeding this recommendation.

Based on the multi-treatment approach of this water quality system, substantial and adequate improvement in the removal of nutrients (nitrogen, phosphorus, etc.) and TSS should be provided. All elements of the treatment train provide resistance to flow reducing velocity and promote the settling of solids including attached nutrients. The buffer strip and other upstream grassed areas allow for potential absorption of aqueous nutrients.

3.3. Grassed Swale Assessment

The proposed grass swales were assessed as both an adequate conveyance system for peak flows up to and including the 100 year event and an appropriate stormwater treatment system. There are a total of 10 proposed swales; 2 swales draining to a single outlet for each lot being developed. A table of proposed ditching geometry including cross-sections, longitudinal slope, length, inverts, etc. is outlined in *Appendix A*. Refer to *Appendix B* for a plan schematic of the proposed swales.

To assess the 10 swales, a rating table was created using FlowMaster by Bentley. The cross-sections for all swales were assumed to be uniform. This rating table analysis (1) varied the slope from the proposed minimum to the proposed maximum; and (2) varied the discharge from the smallest peak (quality storm) to the largest peak (100 year event). A generic swale bottom elevation of 175.60 was considered in the analysis.

The highest 100 year peak flow would occur in catchment PR-05 at 126 l/s and the mildest slopes are in catchments PR-01 and PR-02 with longitudinal slope of 0.3%. From this analysis it was found that the worst case maximum peak flow depth in the swales would be 0.16m with a freeboard of 0.14m. However, this combination of minimum slope and maximum peak flow do not occur in the same catchment. It is found that at least 0.14m freeboard will be provided in all proposed swales under normal flow depth conditions, without any backwater effect for all storm events up to and including the 100 year storm.

The peak flows from a quality storm (MOE, 2003) and the 2 year storm range from 6.6 l/s to 48.3 l/s. With the proposed swale geometry, the proposed slope range velocities range from 0.09 m/s to less than 0.30 m/s. Both the MOE (2003) and TRCA & CVC (2010) recommend that the maximum velocity in the swale be limited to 0.5 m/s under the quality storm(s) of concern to provide water quality improvements (i.e. settling of suspended solids). This criterion is met for all proposed swales.

The proposed grassed swales are considered both an adequate conveyance system under the 100 year peak flows and a stormwater quality treatment system.

Refer to *Appendix A* for quality storm peak flow calculations and FlowMaster outputs.

3.4. Level Spreader Assessment

The proposed level spreaders were assessed as both an adequate conveyance system for peak flows up to and including the 100 year event and an appropriate stormwater treatment system (i.e. providing a uniform flow and appropriate flow velocities to the downstream buffer strip). There are a total of 5 proposed level spreaders; 1 for each lot being developed. Refer to *Appendix B* for a schematic plan outlining the location of the proposed level spreaders.

It is proposed that a precast landscape curb be utilized as level spreader. In the stormwater assessment, it was assumed that each level spreader had a length of 1.0 m. An inverted 'Armtac Brooklin Concrete' landscape curb or similar could be used (refer to *Appendix C*). Following the recommendations of *Designing Level Spreaders to Treat Stormwater Runoff* (North Carolina State University, 2001), it should be noted that for the level spreader to operate effectively it is important that the elevation across the spreader be uniform. It is recommended that compacted granular material be used as the base.

To assess the 5 level spreaders, a rating table was created using FlowMaster by Bentley. This rating table analysis varied the upstream depth above the level spreader to estimate flow rates. A generic elevation of 175.40 was considered in the analysis.

For effective operation of the level spreader, minimizing the downstream velocity is critical. It is recommended that a maximum velocity of 4 ft/s (1.2 m/s) be considered when the downstream system cover is grassed (North Carolina State University, 2001). Based on the modelled outputs it was found that all potential peak flows, from the water quality event to the 100 year event, could be conveyed with a velocity of less than 0.75 m/s.

The proposed level spreaders are considered both an adequate conveyance system under the 100 year peak flows and as a part of the stormwater quality treatment system.

Refer to *Appendix A* for FlowMaster outputs.

3.5. Flood Plan Management

ERCA and the Town require that the finished floor grades of the proposed buildings are set a minimum of 300 mm above the 1:100 year storm flood line elevation. The 1:100 year flood line elevation on-site is 176.00. With the additional 300 mm, all finished floor grades (openings) are to be set to a minimum elevation of 176.30. Refer to the **Figure B** contained in *Appendix B* for additional details.

The Town shall confirm this with prospective home owners/builders prior to authorizing construction.

4.0 SEDIMENT AND EROSION CONTROL PLAN

To minimize the potential for impairment of the quality of receiving waters during construction, a sediment and erosion control plan will be implemented. A schematic plan is outlined in *Appendix B* which includes and recommends:

- Installing silt fences prior to commencing construction activities to intercept suspended solids carried by overland flow and to prevent the sediment runoff from directly entering existing water features;
- Using appropriate grading techniques to prevent increased run-off potential and maintain positive drainage (i.e. stable slopes, etc.);
- Planting of grasses on disturbed areas after construction activities have ceased (e.g. construction laydown area); and
- Stockpiled areas shall be protected by silt fencing and located a safe distance from sensitive natural features.

In addition, the contractor shall be responsible for maintaining temporary erosion and pollution control features throughout the project. The contractor is responsible for inspecting all temporary erosion controls daily and after rain events. Accumulated sediment to be removed and disposed of offsite when 50% of capacity is reached. The sediment erosion control measure shall be maintained until a vigorous growth is established in the grassed areas of each lot.

5.0 CONCLUSIONS & RECOMMENDATIONS

Following the findings of this report, it is recommended that the proposed development be constructed with swales as outlined in the preceding text and attached appendices. An assessment of the existing and proposed condition peak flows was undertaken and an increase ranging from 7% to 17% was found. Based upon the receiving system capacity, the minor increase in peak flows and the residential nature of the development, peak flow attenuation was not recommended.

Recommended stormwater mitigation measures included the following treatment train:

- First, routing surface water runoff from impervious (i.e. driveways, roofs, etc.) to open grassed pervious surfaces;
- Secondly, routing flows from the developed lot through the rear yard grassed swale and;
- Thirdly, the concentrated flows from the upstream swales are to be dispersed into sheet flow to maximize the efficiency of the buffer strip water quality treatment.

The mitigation measures noted above were assessed and found to be both an adequate conveyance system for peak flows up to and including the 100 year event and an appropriate stormwater treatment system with velocities minimized to promote settling of suspended solids.

Respectfully submitted,

DILLON CONSULTING LIMITED



Chris Patten, P. Eng.
Municipal Engineer



Ian Wilson, EIT, MASc
Water Resources Specialist

IDW:dt

Attach.

Appendix A
Rational Method Calculations, FlowMaster Outputs &
Design Tables

Existing Site Condition Rational Method "C" Coefficient										
	EX-01		EX-02		EX-03		EX-04		EX-05	
Land Use	Rational "C"	Area (ha)	Rational "C"	Area (ha)	Rational "C"	Area (ha)	Rational "C"	Area (ha)	Rational "C"	Area (ha)
Agricultural	0.2	0.60	0.2	0.67	0.2	0.71	0.2	0.89	0.2	0.94
Total Area		0.60		0.67		0.71		0.89		0.94
Area Wiegthed "C"	0.200		0.200		0.200		0.200		0.200	

Existing Site Conditions Rational Method Peak Flows

Rainfall Intensity: $I = A(T)^B$

Return Period	A	B	Time of Concentration (min)	Intensity = I (mm/hr)
2 yr	24.0	-0.710	10	85.6
5 yr	31.0	-0.709	10	110.4
10 yr	35.7	-0.708	10	126.9
25 yr	41.7	-0.707	10	148.0
50 yr	46.0	-0.707	10	163.3
100 yr	50.4	-0.706	10	178.6

Peak Flow using Rational Method ($Q = 0.00278 \cdot C \cdot I \cdot A$)

Area = A (ha)	EX-01		EX-02		EX-03		EX-04		EX-05	
	0.60	Peak Flow = Q (l/s)	0.67	Peak Flow = Q (l/s)	0.71	Peak Flow = Q (l/s)	0.89	Peak Flow = Q (l/s)	0.94	Peak Flow = Q (l/s)
Return Period	Rational "C"		Rational "C"		Rational "C"		Rational "C"		Rational "C"	
2 yr	0.200	28.6	0.200	31.9	0.200	33.8	0.200	42.4	0.200	44.8
5 yr	0.200	36.8	0.200	41.1	0.200	43.6	0.200	54.6	0.200	57.7
10 yr	0.200	42.3	0.200	47.3	0.200	50.1	0.200	62.8	0.200	66.3
25 yr	0.220	54.3	0.220	60.7	0.220	64.3	0.220	80.6	0.220	85.1
50 yr	0.240	65.4	0.240	73.0	0.240	77.3	0.240	97.0	0.240	102.4
100 yr	0.250	74.5	0.250	83.2	0.250	88.1	0.250	110.5	0.250	116.7

Proposed V-Bottom Drainage Swales

Swale Name	Ex. Grade Upstream (m)	Ex. Grade Downstream (m)	Proposed Upstream Swale Bottom (m)	Proposed Downstream Swale Bottom (m)	Length (m)	Proposed Swale Slope (%)	Side Slopes - East	Side Slopes - West	Catchment
D1-N	176.00	175.50	175.70	175.50	58.0	0.3%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-01
D1-S	176.00	175.50	175.70	175.50	25.0	0.8%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-01
D2-N	176.00	175.55	175.70	175.55	59.0	0.3%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-02
D2-S	176.35	175.55	176.05	175.55	20.0	2.5%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-02
D3-N	176.35	175.50	176.05	175.50	44.0	1.2%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-03
D3-S	176.40	175.50	176.10	175.50	36.0	1.7%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-03
D4-N	176.40	175.80	176.10	175.80	74.0	0.4%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-04
D4-S	176.15	175.80	175.85	175.80	10.0	0.5%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-04
D5-N	175.80	175.40	175.50	175.40	16.0	0.6%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-05
D5-S	177.00	175.40	176.70	175.40	50.0	2.6%	Existing Grade - approx. 1%	hor: vert- 3:1	PR-05

Proposed Level Spreaders

Level Spreader Name	Grade of Level Spreader at Outlet	Ditch Bottom Grade at Outlet (m)	Catchment
LS-1	175.52	175.50	PR-01
LS-2	175.57	175.55	PR-02
LS-3	175.52	175.50	PR-03
LS-4	175.82	175.80	PR-04
LS-5	175.42	175.40	PR-05

Proposed Site Condition Rational Method "C" Coefficient										
Land Use	PR-01		PR-02		PR-03		PR-04		PR-05	
	Rational "C"	Area (ha)	Rational "C"	Area (ha)	Rational "C"	Area (ha)	Rational "C"	Area (ha)	Rational "C"	Area (ha)
Lawns, 2 to 7 %, Clayey Soils	0.17	0.54	0.17	0.61	0.17	0.65	0.17	0.83	0.17	0.88
Roofs	0.95	0.03	0.95	0.03	0.95	0.03	0.95	0.03	0.95	0.03
Paved surfaces- driveways	0.9	0.03	0.9	0.03	0.9	0.03	0.9	0.03	0.9	0.03
Total Area		0.60		0.67		0.71		0.89		0.94
Area Wighted "C"	0.242		0.234		0.231		0.219		0.216	

Proposed Site Conditions Rational Method Peak Flows

Rainfall Intensity: $I = A(T)^B$

Quality Storm: $I = 43C + 5.9$ (MOE, 2003)

Return Period	A	B	Time of Concentration (min)	Intensity = I (mm/hr)
2 yr	24.0	-0.710	10	85.6
5 yr	31.0	-0.709	10	110.4
10 yr	35.7	-0.708	10	126.9
25 yr	41.7	-0.707	10	148.0
50 yr	46.0	-0.707	10	163.3
100 yr	50.4	-0.706	10	178.6

Peak Flow using Rational Method ($Q = 0.00278 \cdot C \cdot I \cdot A$)

Area = A (ha)	PR-01		PR-02		PR-03		PR-04		PR-05	
	0.60	Peak Flow = Q (l/s)	0.67	Peak Flow = Q (l/s)	0.71	Peak Flow = Q (l/s)	0.89	Peak Flow = Q (l/s)	0.94	Peak Flow = Q (l/s)
Return Period	Rational "C"		Rational "C"		Rational "C"		Rational "C"		Rational "C"	
Quality Storm	0.242	6.6	0.234	7.0	0.231	7.2	0.219	8.3	0.216	8.6
2 yr	0.242	34.6	0.234	37.4	0.231	39.0	0.219	46.3	0.216	48.3
5 yr	0.242	44.6	0.234	48.2	0.231	50.3	0.219	59.7	0.216	62.3
10 yr	0.242	51.2	0.234	55.4	0.231	57.8	0.219	68.6	0.216	71.6
25 yr	0.266	65.7	0.258	71.1	0.254	74.2	0.240	88.0	0.238	91.9
50 yr	0.290	79.1	0.281	85.8	0.277	89.3	0.262	105.9	0.259	110.6
100 yr	0.303	90.1	0.293	97.5	0.289	101.7	0.273	120.7	0.270	126.0

Proposed Site and Existing Site Comparison - Percentage Change in Peak Flows

Return Period	PR-01	PR-02	PR-03	PR-04	PR-05
	EX-01	EX-02	EX-03	EX-04	EX-05
2 yr	17%	15%	13%	8%	7%
5 yr	17%	15%	13%	8%	7%
10 yr	17%	15%	13%	8%	7%
25 yr	17%	15%	13%	8%	7%
50 yr	17%	15%	13%	8%	7%
100 yr	17%	15%	13%	8%	7%

*note: positive percentage change indicates an increase in peak flow

Rating Table for Propose V-Bottom Swale: Variable Slope-Discharge

Project Description

Friction Method Manning Formula
 Solve For Normal Depth

Input Data

Channel Slope 0.00300 m/m
 Discharge 6.00 L/s
 Section Definitions

Station (m)	Elevation (m)
0+00.00	175.90
0+00.90	175.60
0+30.90	175.90

Generic cross-section (i.e. same bottom elevation 175.60 m) used in rating table. Cross-section is representative of all proposed swales

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00.00, 175.90)	(0+30.90, 175.90)	0.045

Roughness (n) of 0.045 for cross-section

Channel slope and discharged varied to assess velocity and depth of flow (water surface elevation from generic depth - 175.60 m

Channel Slope (m/m)	Discharge (L/s)	Water Surface Elevation (m)	Velocity (m/s)	Flow Area (m ²)	Wetted Perimeter (m)	Top Width (m)
0.00300	6.00	175.64	0.09	0.07	3.82	3.81
0.00300	30.00	175.67	0.13	0.24	6.99	6.98
0.00300	54.00	175.68	0.15	0.37	8.71	8.69
0.00300	78.00	175.70	0.16	0.48	9.99	9.97
0.00300	102.00	175.71	0.17	0.59	11.05	11.03
0.00300	126.00	175.72	0.18	0.69	11.96	11.94
0.00760	6.00	175.63	0.12	0.05	3.21	3.21
0.00760	30.00	175.66	0.18	0.17	5.86	5.85
0.00760	54.00	175.67	0.21	0.26	7.31	7.29
0.00760	78.00	175.68	0.23	0.34	8.40	8.38
0.00760	102.00	175.69	0.24	0.42	9.28	9.27

Rating Table for Propose V-Bottom Swale: Variable Slope-Discharge

Input Data

Channel Slope (m/m)	Discharge (L/s)	Water Surface Elevation (m)	Velocity (m/s)	Flow Area (m ²)	Wetted Perimeter (m)	Top Width (m)
0.00760	126.00	175.70	0.26	0.49	10.05	10.03
0.01220	6.00	175.63	0.14	0.04	2.93	2.93
0.01220	30.00	175.65	0.22	0.14	5.37	5.36
0.01220	54.00	175.66	0.25	0.22	6.69	6.68
0.01220	78.00	175.67	0.27	0.29	7.68	7.66
0.01220	102.00	175.68	0.29	0.35	8.50	8.48
0.01220	126.00	175.69	0.31	0.41	9.19	9.18
0.01680	6.00	175.63	0.16	0.04	2.76	2.76
0.01680	30.00	175.65	0.24	0.12	5.05	5.05
0.01680	54.00	175.66	0.28	0.19	6.30	6.29
0.01680	78.00	175.67	0.31	0.25	7.23	7.21
0.01680	102.00	175.68	0.33	0.31	8.01	7.99
0.01680	126.00	175.68	0.35	0.36	8.66	8.65
0.02140	6.00	175.63	0.18	0.03	2.64	2.63
0.02140	30.00	175.65	0.27	0.11	4.83	4.82
0.02140	54.00	175.66	0.31	0.18	6.02	6.01
0.02140	78.00	175.67	0.34	0.23	6.92	6.90
0.02140	102.00	175.67	0.36	0.28	7.64	7.63
0.02140	126.00	175.68	0.38	0.33	8.28	8.27
0.02600	6.00	175.62	0.19	0.03	2.54	2.54
0.02600	30.00	175.65	0.29	0.10	4.66	4.65
0.02600	54.00	175.66	0.33	0.16	5.80	5.79
0.02600	78.00	175.66	0.36	0.21	6.66	6.65
0.02600	102.00	175.67	0.39	0.26	7.36	7.35
0.02600	126.00	175.68	0.41	0.31	7.98	7.97

Cross Section for Propose V-Bottom Swale: Variable Slope-Discharge

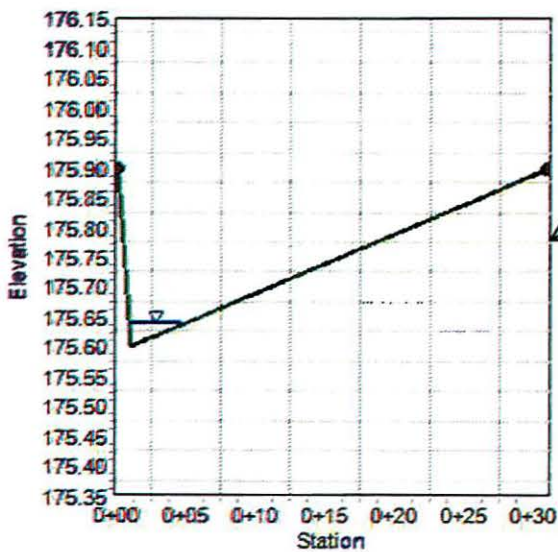
Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope	0.00300	m/m
Normal Depth	0.04	m
Discharge	6.00	L/s

Cross Section Image



Generic cross-section (i.e. same bottom elevation 175.60 m) With minimum flow and slope combination.

Cross Section for Propose V-Bottom Swale: Variable Slope-Discharge

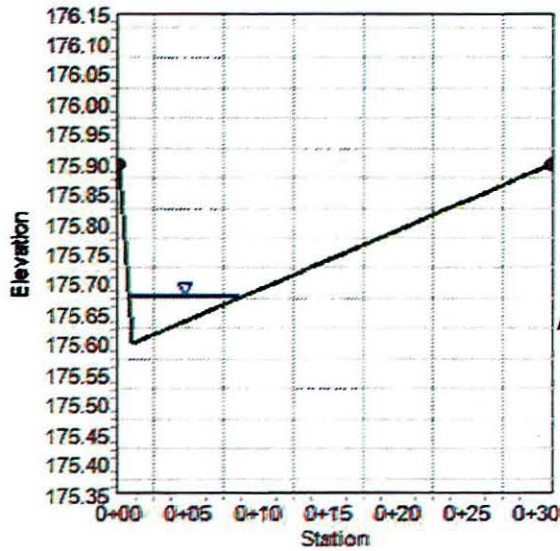
Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 0.02600 m/m
Normal Depth 0.08 m
Discharge 126.00 L/s

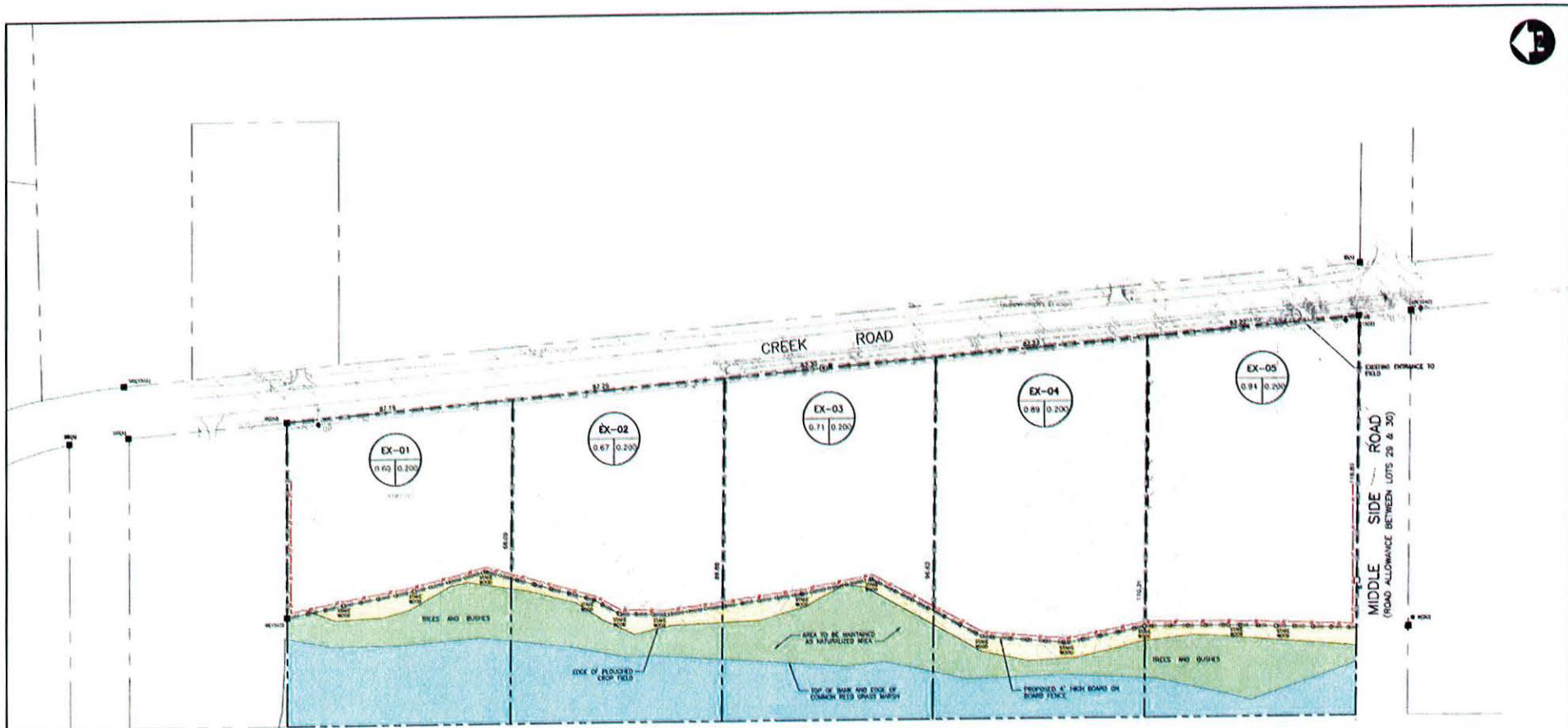
Cross Section Image



Generic cross-section (i.e. same bottom elevation 175.60 m) With maximum flow and slope combination.

Appendix B

Supporting Figures



ROAD ALLOWANCE BETWEEN CONCESSIONS 2 & 3

LEGEND
 - - - - - PROPERTY LINE
 --- --- --- DRAINAGE AREA BOUNDARY
 - - - - - PROPOSED BOARD OR BOARD FENCE
 - - - - - PROPOSED CONSTRUCTION SILT FENCE

NOTE:
 SILT FENCE TO BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED UNTIL THE GRASS ON THE UPSTREAM BANK HAS ESTABLISHED A SUFFICIENT ROOT, REFER TO STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN FOR ADDITIONAL DETAILS.

DA 1
 0.00 0.00
 AREA IN HECTARES BUNNY COEFFICIENT

SCALE 1:750

 DILLON CONSULTING	PROJECT Creek Road Development East of Lowes Sideroad	PROJECT NO. 10-4250-4000
	TITLE PRE DEVELOPMENT DRAINAGE AREAS SEDIMENT & EROSION CONTROL PLAN	FIGURE NO. A
DATE April 2014		

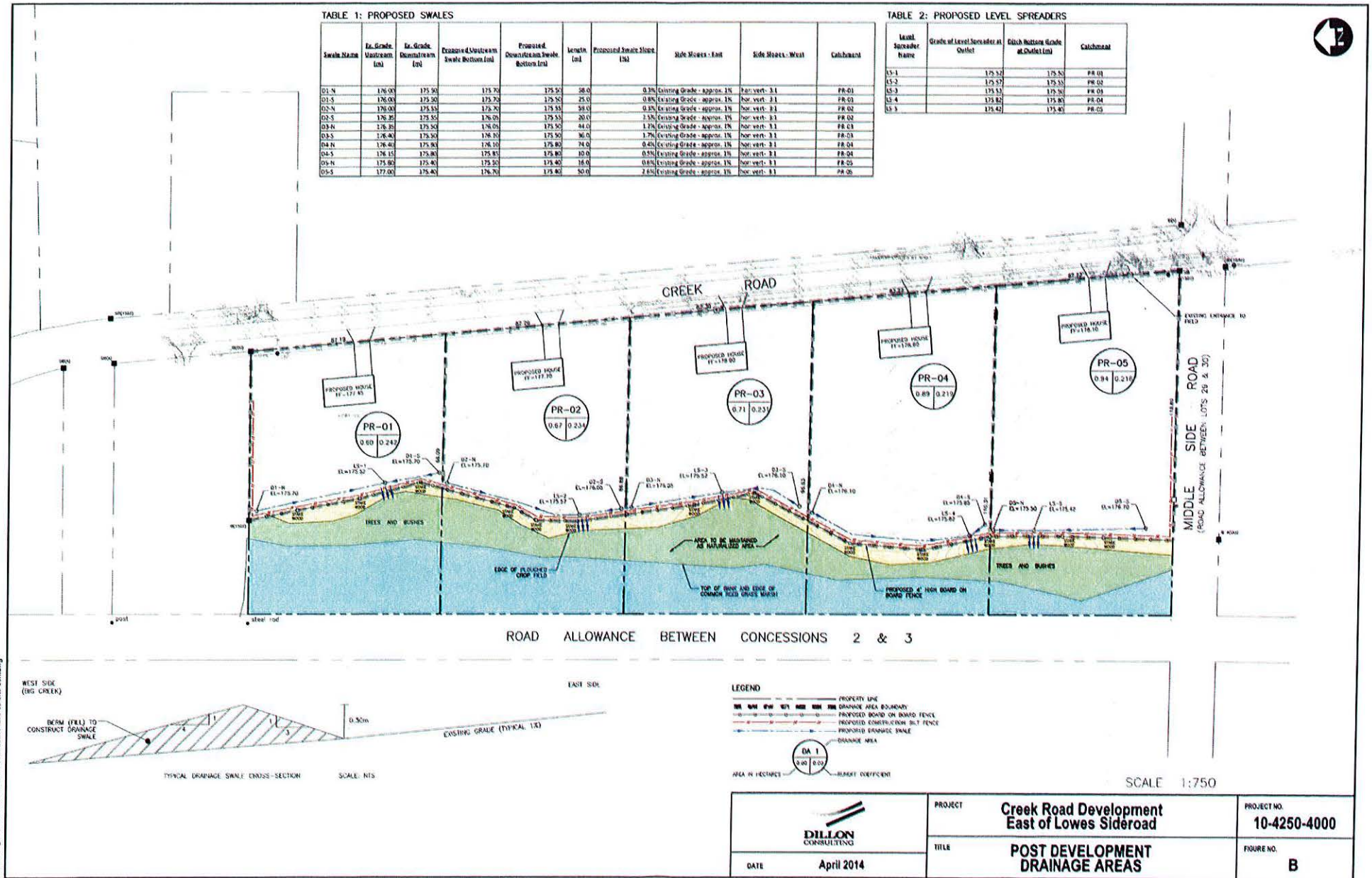
File Name: g:\csh\140250-2\csh\101-contract\140250-2\csh\csh.dwg

TABLE 1: PROPOSED SWALES

Swale Name	Ex. Grade Upstream (m)	Ex. Grade Downstream (m)	Downstream Swale Bottom (m)	Proposed Downstream Swale Bottom (m)	Length (m)	Proposed Swale Slope (%)	Side Slopes - East	Side Slopes - West	Catchment
D1-N	176.00	175.50	175.70	175.50	58.0	0.3%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-01
D1-S	176.00	175.30	175.70	175.50	75.0	0.8%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-01
D2-N	176.00	175.55	175.70	175.55	58.0	0.3%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-02
D2-S	176.35	175.55	176.09	175.55	20.0	2.5%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-02
D3-N	176.35	175.50	176.09	175.50	84.0	1.1%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-03
D3-S	176.40	175.50	176.10	175.50	36.0	1.7%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-03
D4-N	176.40	175.88	176.10	176.00	74.0	0.4%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-04
D4-S	176.15	175.80	175.85	175.80	10.0	0.5%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-04
D5-N	175.90	175.40	175.50	175.40	18.0	0.6%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-05
D5-S	177.00	175.40	176.70	175.40	50.0	2.6%	Existing Grade - approx. 1%	hor. vert. 3:1	PR-05

TABLE 2: PROPOSED LEVEL SPREADERS

Level Spreader Name	Grade of Level Spreader at Outlet	El. at Outlet (m)	Catchment
LS-1	175.57	175.50	PR-01
LS-2	175.57	175.55	PR-02
LS-3	175.51	175.50	PR-03
LS-4	175.82	175.80	PR-04
LS-5	175.42	175.40	PR-05



File Name: p:\cad\114025062-con\114025062-con\104250-05-alle-con.dwg

 DILLON CONSULTING	PROJECT Creek Road Development East of Lowes Sideroad	PROJECT NO. 10-4250-4000
	TITLE POST DEVELOPMENT DRAINAGE AREAS	FIGURE NO. B
DATE April 2014		

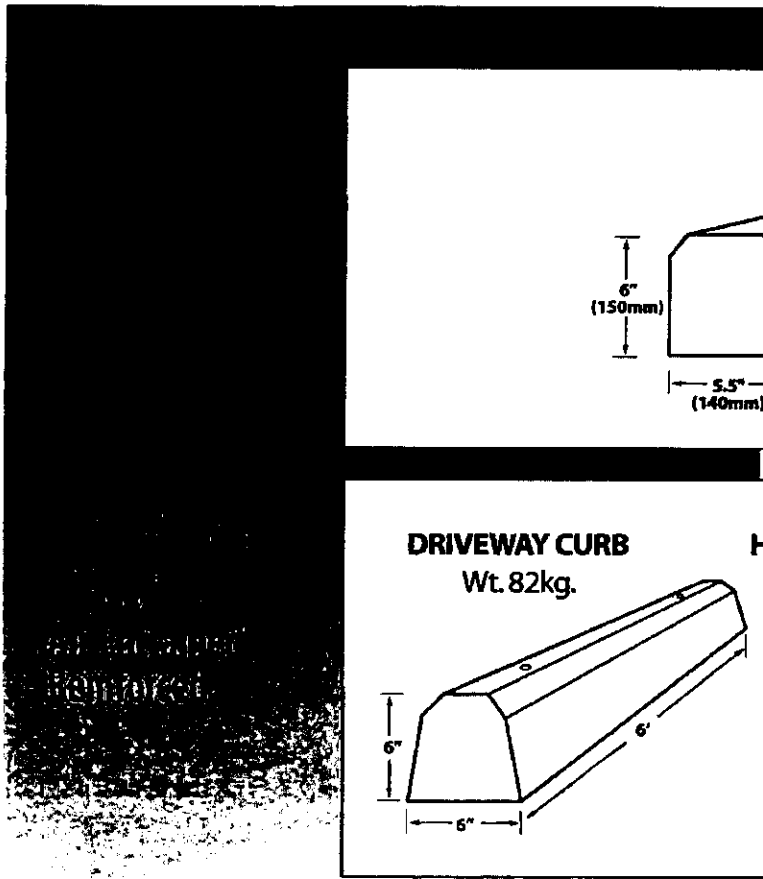
Appendix C
Additional Information



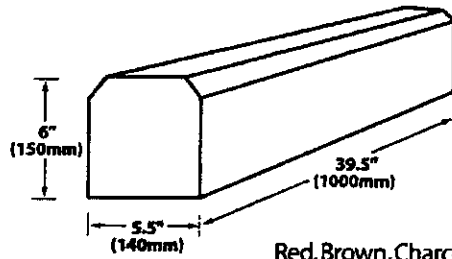
armtec

brooklin
concrete

CURBING



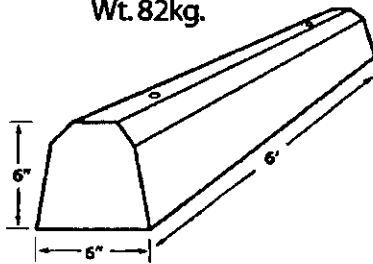
Wt. 44kg.



Red, Brown, Charcoal, Natural

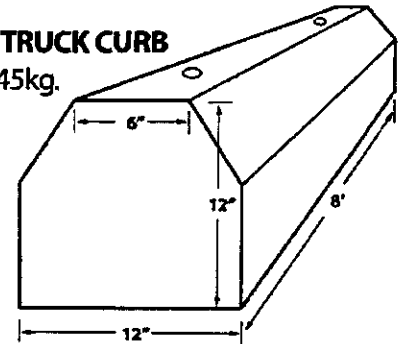
DRIVEWAY CURB

Wt. 82kg.



HEAVY DUTY TRUCK CURB

Wt. 545kg.



For convenient residential use, our Driveway Curb is available in 3 ft and 6 ft lengths. Installation is quick and easy - great for do-it-yourselfers.

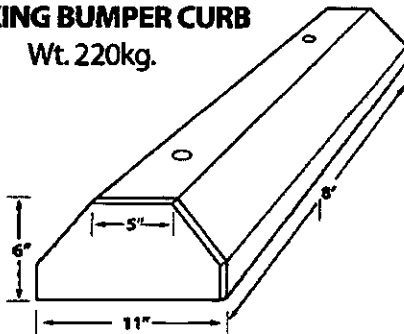
This Heavy Duty Curb is ideal for traffic control problems and stopping trucks and heavy vehicles. As a barrier they are a low cost alternative for directing traffic.

PARKING BUMPER CURBS

Air Entrained Reinforced

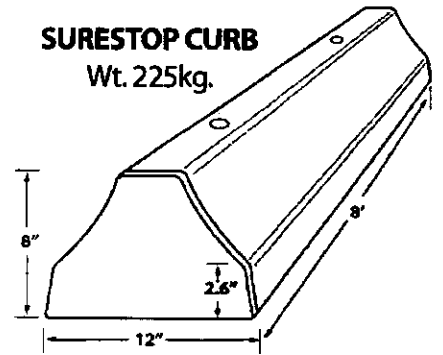
PARKING BUMPER CURB

Wt. 220kg.



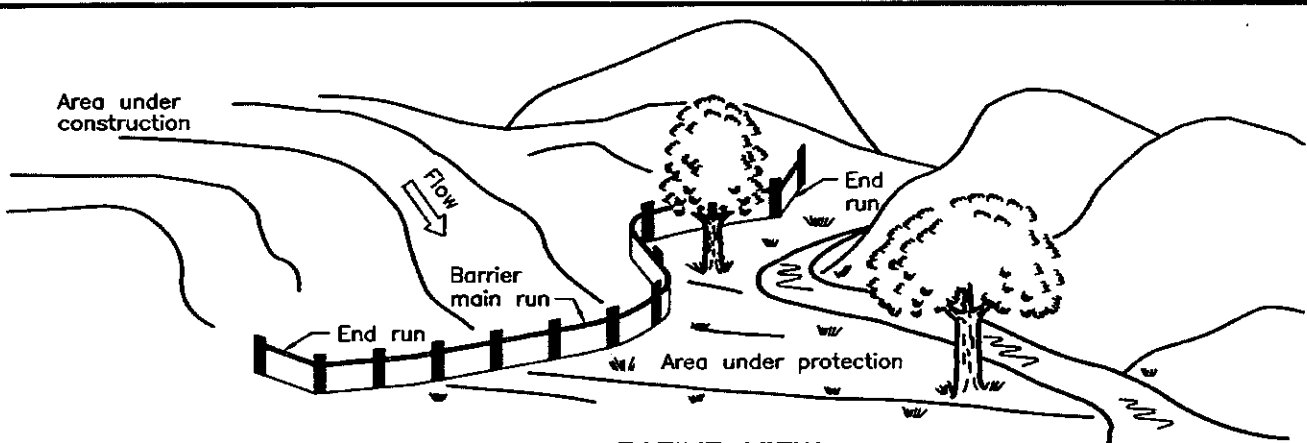
SURESTOP CURB

Wt. 225kg.

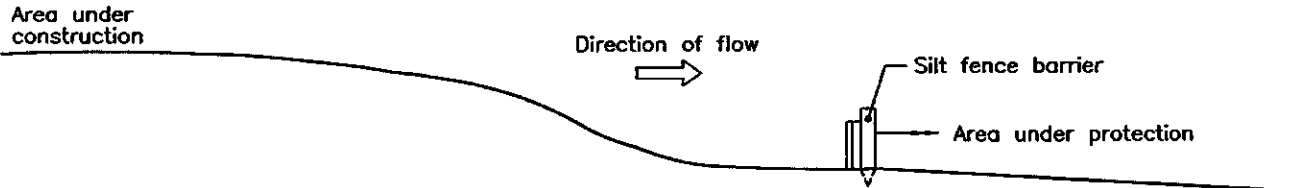


Brooklin's air entrained, steel reinforced Parking Lot Bumpers are engineered for today's cars. The low profile design insures clearance yet the side angles are engineered to transmit the tire impact into the centre base of the curb. The car is arrested gently and the curbs stay put.

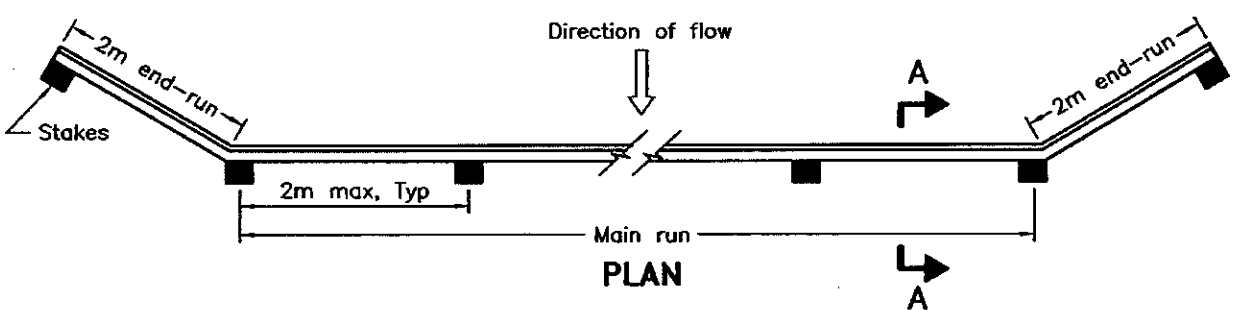
The Surestop Curb has a radius face to gently cup the tires of non-commercial vehicles. This innovative design greatly reduces the vehicles ability to roll over the curb. Available in the popular 200 mm height - standard in most municipalities.



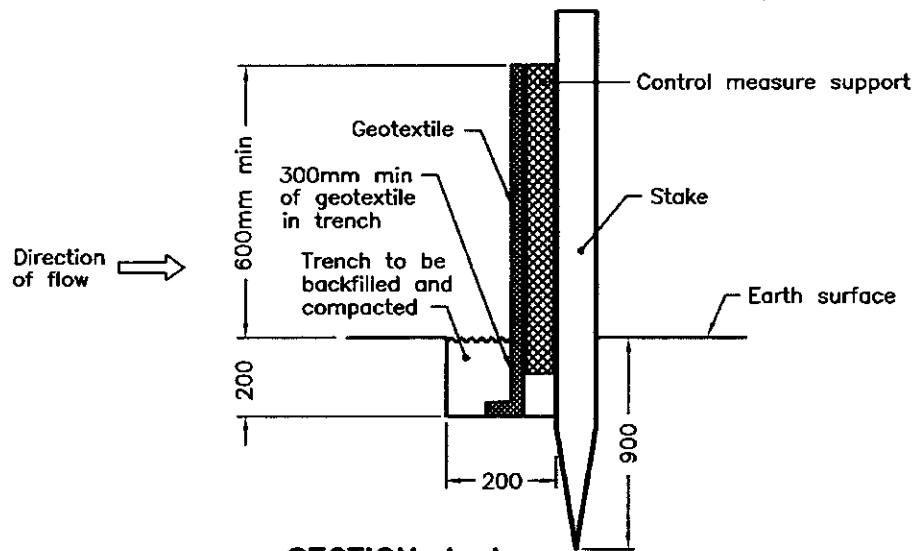
PERSPECTIVE VIEW



SECTION



PLAN



SECTION A-A

NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

Nov 2006 Rev 1

**HEAVY-DUTY
SILT FENCE BARRIER**



OPSD 219.130

**SCHEDULE "J" TO BY-LAW 2016-74
"CORRESPONDENCE - DILLON
CONSULTING"**

Our File: 15-1463

July 16, 2015

VIA EMAIL

The Corporation of the Town of Amherstburg
3295 Meloche Rd.
Amherstburg, Ontario
N9V 2Y8

Attention: Rebecca Belanger
Manager of Planning Services

**Drainage Letter for the
DiCECCO DRAINS
In the Town of Amherstburg
County of Essex**

Dear Ms. Belanger:

Further to our phone conversation held on Friday, July 10, 2015, we hereby provide our letter outlining the proposed drainage improvements to the DiCecco property, Roll No. 590-02800.

Instructions

The Municipality received a Section 4 petition from the landowner of property Roll No. 590-02800 to provide improved drainage for storm runoff as part of the proposed development of their property. The property is planned to be severed into five (5) residential lots that will require new municipal drains to be established for drainage into the adjacent Big Creek Drain.

The Section 4 petition for drainage improvements was signed by the owner of property Roll No. 590-02800 on the 14th October, 2014. At that time, and without any further survey and investigation, the petition was valid under Section 4(1)(b) with the entire property Roll No. 590-02800 representing over 60% of the area requiring drainage. Council accepted the valid petition under Section 4 of the Drainage Act on 18th November 2014 and appointed Dillon Consulting Limited to prepare a report.

During the on-site meeting, it was determined that the proposed drainage works for Lot 1 should be provided under a separate report in order to incorporate the lands and roads to the east that drain through this portion of the property. Therefore, two (2) reports will be submitted for the entire property Roll No. 590-02800 to establish the new drainage works under the provisions of the Drainage Act, to be known as the DiCecco Drain No. 1, Branch No. 1; DiCecco Drain No. 2, Branch No. 2; DiCecco Drain No. 3 and Branch No. 3 as shown on the attached drawings.

...continued



3200
Deziel Drive
Suite 608
Windsor, Ontario
Canada
N8W 5K8
Telephone
(519) 948-5000
Fax
(519) 948-5054

Dillon Consulting
Limited

Watershed Description

The area requiring drainage is in Lot 29, Concession 3 (former Township of Anderdon) between Creek Road and Big Creek. This area is further identified as property Roll No. 590-02800, and is to be eventually subdivided into five (5) separate residential lots as shown on the attached drawings.

Roll numbers have not been assigned to the lots at this time, but they will be assigned as the land development process proceeds. For purposes of this report, we have shown the five (5) lots as Lots 1 to 5 on the attached drawings.

The proposed DiCecco Drain No. 1 and Branch No. 1 would serve Lot 1 as well as lands and roads to the east that is approximately 16.3 acres (6.6 hectares) in size. The proposed DiCecco Drain No. 2 and Branch No. 2 would serve Lots 2 and 3 that are approximately 1.7 hectares (4.3 acres) in size. The proposed DiCecco Drain No. 3 and Branch No. 3 would serve Lots 4 and 5 that are approximately 2 hectares (5 acres) in size.

Survey and Existing Conditions

Our survey and examination of the surrounding lands was carried out on 9th August 2013 as part of the pre-development planning stage. The survey comprised the recording of topographic data and examining the area for available options necessary to provide sufficient drainage.

In review of the topographic survey data, there is an existing broad swale across the proposed residential Lot 1 which has naturally formed due to storm water runoff from Creek Road and the properties east of Creek Road within the watershed limits. The overall topography of the entire property Roll No. 590-02800 is rolling. Individual lot grading and servicing plans that address the proposed residential development are to be provided by the developer.

During the on-site meeting, it was discovered that there is a private tile that crosses Creek Road and outlets into Big Creek through the proposed residential Lot 1. On the 24th April 2015, this private tile was located within the road limits and determined to be a 150 mm diameter clay tile which provides outlet to properties on the east side of Creek Road.

Based on information obtained from the site meetings, topographic survey and review of additional information provided by landowners, we understand currently there is no legal drainage outlet under the Drainage Act for all properties within the area requiring drainage as identified on the attached plan drawings.

Design Considerations

In preparing our design for the proposed drainage systems, we have considered the type of soil, topography and the use of the land. The Drainage Guide for Ontario, as published by the Ontario Ministry of Agriculture and Food, establishes the standards to which tile drainage systems should be designed for enclosed drains. They express the standard as "a drainage coefficient" which is the rate at which water is to be removed from an area expressed in mm/24 hours. The Ministry recommends a drainage coefficient of 38 mm

...continued

(1 ½ inches) per 24 hours to permit surface and subsurface drainage to enter the covered drains. We have applied this standard to all drains not including the road crossing.

The new culvert for the Creek Road crossing is designed for an upstream drainage area of approximately 5.9 hectares (14.6 acres), and to accommodate the runoff from a rainfall event having a frequency of occurrence of once in 10 years.

The runoff capture is consistent with current design standards, but it should be clearly understood that runoff generated from large storms or fast snow melt will sometimes exceed the capacity of any tile drainage system designed to any of these standards and will result in ponding in the low areas for short periods of time.

The works include three (3) new outlets to Big Creek. The outlet requirements and designs will be determined in consultation with the Essex Region Conservation Authority (ERCA) to limit the impacts to the creek and banks.

Recommendations

DiCecco Drain No. 1 (DiCecco Property)

Supply and install new 450 mm diameter 320 kPa, non-perforated high density polyethylene (HDPE) piping including Class 'B' bedding approximately 5.0 m south of the north property line of Lot 1 from the road allowance to the outlet to Big Creek. Works include the stripping and replacing of topsoil, supply and installation of two (2) new HDPE catchbasins and stone erosion protection for a spillway outlet into Big Creek complete with a rodent gate.

DiCecco Drain No. 1 (Creek Road Allowance – Section 26 costs)

Supply and install new 600 mm diameter 320 kPa, non-perforated high density polyethylene (HDPE) piping including Class 'B' bedding, granular backfill and asphalt restoration across Creek Road as shown on the attached drawings. Works include infilling of existing 450 mm CSP culvert across Creek Road, supply and installation of one (1) new concrete ditch inlet catchbasin and one (1) new concrete catchbasin on both sides of Creek Road and stone erosion protection around the catchbasin inlets.

Branch No. 1 (DiCecco Property)

Supply and install new 150 mm diameter 320 kPa, perforated high density polyethylene (HDPE) piping by tiling machine method complete with filter sock approximately 5.0 m east of the proposed chain-link fence along the west limits of the DiCecco property serving Lot 1. Works include the stripping and replacing of topsoil, supply and installation of three (3) new HDPE catchbasins, construction of a grassed swale above the new tile drain and construction of an earth berm west of the new tile drain.

DiCecco Drain No. 2 (DiCecco Property)

Supply and install new 150 mm diameter 320 kPa, perforated high density polyethylene (HDPE) piping by tiling machine method complete with filter sock approximately 5.0 m east of the proposed chain-link fence along the west limits of the DiCecco property

...continued

serving Lot 2 and 3. Works include the stripping and replacing of topsoil, supply and installation of three (3) new HDPE catchbasins, construction of a grassed swale above the new tile drain and construction of an earth berm west of the new tile drain.

Also to supply and install new 200 mm diameter 320 kPa, non-perforated high density polyethylene (HDPE) piping complete with Class 'B' bedding and stone erosion protection for a spillway outlet into Big Creek complete with rodent gate.

Branch No. 2 (DiCecco Property)

Supply and install new 150 mm diameter 320 kPa, perforated high density polyethylene (HDPE) piping by tiling machine method complete with filter sock approximately 5.0 m east of the proposed chain-link fence along the west limits of the DiCecco property serving Lot 3. Works include the stripping and replacing of topsoil, supply and installation of one (1) new HDPE catchbasins, construction of a grassed swale above the new tile drain and construction of an earth berm west of the new tile drain.

DiCecco Drain No. 3 (DiCecco Property)

Supply and install new 150 mm diameter 320 kPa, perforated high density polyethylene (HDPE) piping by tiling machine method complete with filter sock approximately 5.0 m east of the proposed chain-link fence along the west limits of the DiCecco property serving Lot 4 and 5. Works include the stripping and replacing of topsoil, supply and installation of two (2) new HDPE catchbasins, construction of a grassed swale above the new tile drain and construction of an earth berm west of the new tile drain.

Also to supply and install new 200 mm diameter 320 kPa, non-perforated high density polyethylene (HDPE) piping complete with Class 'B' bedding and stone erosion protection for a spillway outlet into Big Creek complete with rodent gate.

Branch No. 3 (DiCecco Property)

Supply and install new 150 mm diameter 320 kPa, perforated high density polyethylene (HDPE) piping by tiling machine method complete with filter sock approximately 5.0 m east of the proposed chain-link fence along the west limits of the DiCecco property serving Lot 5. Works include the stripping and replacing of topsoil, supply and installation of one (1) new HDPE catchbasins, construction of a grassed swale above the new tile drain and construction of an earth berm west of the new tile drain.

Lot Grading

Each lot is to maintain their individual storm drainage on the subject property. Individual lot drainage shall be directed (via overland sheet flow or side yard swales) to the proposed municipal drains along the west limits of their properties as shown on the attached drawings. Individual side lot swales, per the Town of Amherstburg Development Manual, are to be established to ensure runoff is contained within each lot and directed to the proposed drains along the west limits of the properties.

The proposed grades for the new municipal drains along the west limits of the DiCecco property will be established within the final drainage reports. Final grading plans for ...continued

each lot, as provided by the developer and/or property owner, shall conform to these grades to ensure individual lot drainage is properly maintained within each property until runoff reaches the specific site outlet to the Big Creek.

Access and Future Maintenance

Access to the drainage works shall be from Creek Road and the unopened road allowance for South Sideroad off of Creek Road. A working corridor and future maintenance corridor will be established under the drainage reports for any works or repair and or maintenance to be carried out by the municipality.

Conclusion

With the adoption of the completed drainage reports, the DiCecco Drains and Branch Drains will have status under the Drainage Act providing legal outlets for the DiCecco property, Creek Road and landowners identified within the watershed limits east of Creek Road into Big Creek by way of three (3) new municipal drain outlets. In accordance with Section 4 of the Drainage Act, the Town of Amherstburg Road Authority will be required to sign the Section 4 petition in addition to the owners of the DiCecco property, Roll No. 590-02800, for the proposed works on Creek Road and to make the petition valid. The proposed DiCecco Drain No. 1 is designed to accommodate the lands and roads upstream of the DiCecco property (Lot 1) to ensure any proposed development will not negatively affect the overall storm runoff of these lands and roads.

The recommended municipal tile drains along the west limits of the property, as shown on the attached schematic plan, will ensure sufficient individual lot drainage is maintained. Final lot grading is to be provided by the developer and/or property owner and reviewed by the municipality to ensure lot grading is properly directed to the west limits as shown.

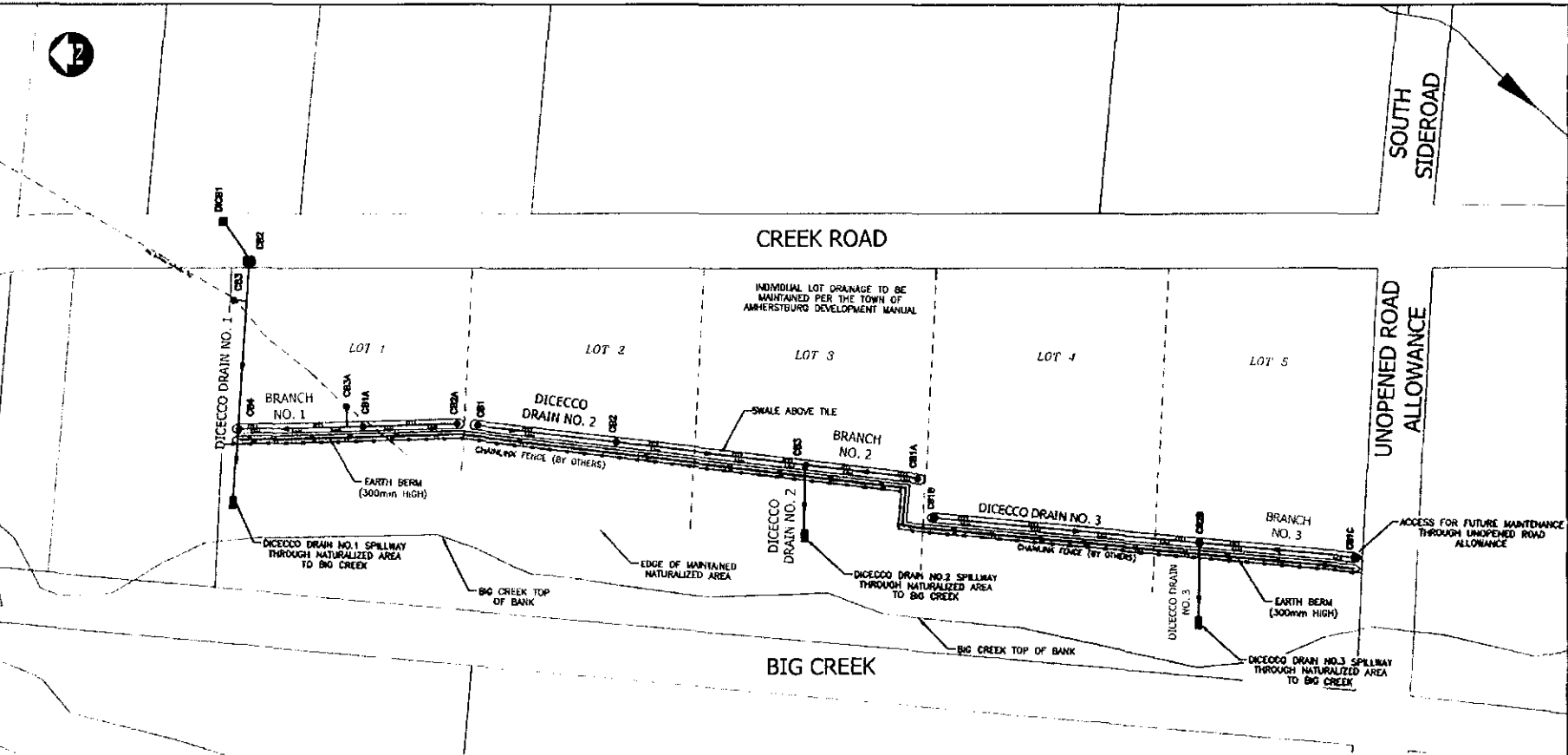
Following your review and comment of the recommended works identified in this letter and on the attached drawings, final drainage reports will be completed and submitted to the Town of Amherstburg. If you have any questions or concerns, please feel free to contact us.

Yours sincerely,

DILLON CONSULTING LIMITED



Chris Thibert, P. Eng.
Project Engineer
CDT:dt
Attach.



SCHEMATIC PLAN
SCALE: N.T.S.

NOTE
FINAL LOT GRADING TO BE PROVIDED BY DEVELOPER AND/OR PROPERTY OWNER AND REVIEWED BY MUNICIPALITY. ALL INDIVIDUAL LOT DRAINAGE TO BE MAINTAINED AND DIRECTED TO THE WEST LIMITS OF THE PROPERTY

DRAFT

Conditions of Use
This report is prepared for the client and is not to be used for any other purpose without the written consent of the engineer. The engineer is not responsible for any errors or omissions in this report.

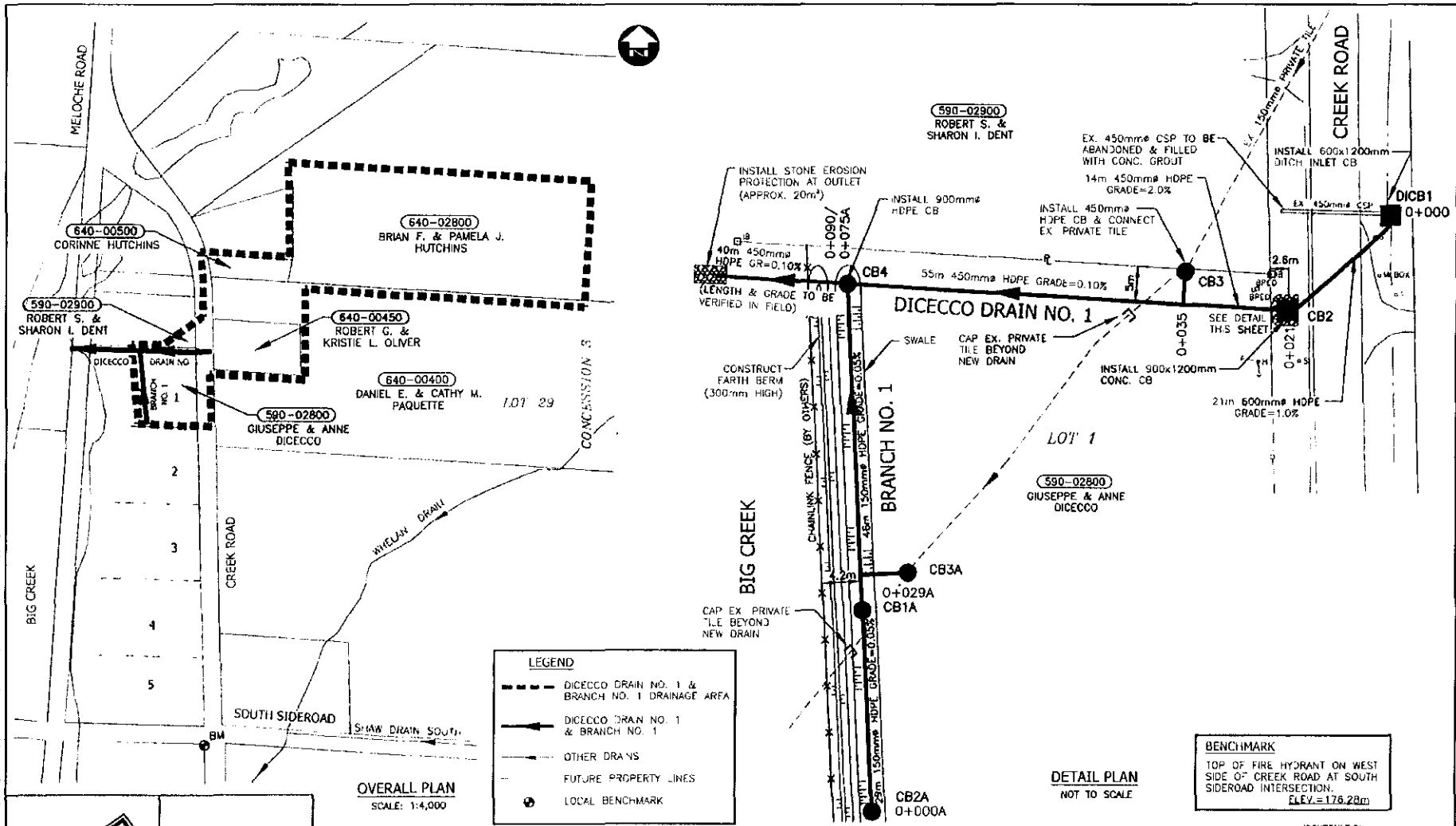
1	CLIENT REVIEW	JULY 16, 2015	CDT
2			
3			

DESIGN	CDT	REVISIONS	FRF
DRAWN	WLB	CHECKED BY	TRO
DATE	JUL 16, 2015		
AS SHOWN			

DILLON
ENGINEERS & ARCHITECTS
INCORPORATED
15 1463
DRAINAGE ENGINEER
STATE OF NEW YORK

Drainage Report for the
DICECCO DRAINS
Town of Amherstburg
SHEET TITLE
SCHEMATIC PLAN
DATE
1 of 4

Jul 16, 2015 - 8:00am C:\projects\amherstburg\dwg\amherstburg\151463-01-100-100-100.dwg



JUL 16, 2015, 1:00pm, C:\projects\15-1463\working\dwg\15-1463-01.dwg, 15-1463-01.dwg, 15-1463-01.dwg

DRAFT

OVERALL PLAN
SCALE: 1:4,000

DETAIL PLAN
NOT TO SCALE

LEGEND	
	DICECCO DRAIN NO. 1 & BRANCH NO. 1 DRAINAGE AREA
	DICECCO DRAIN NO. 1 & BRANCH NO. 1
	OTHER DRAINS
	FUTURE PROPERTY LINES
	LOCAL BENCHMARK

Conditions of Use
 This drawing is prepared for the specific project and site conditions shown. It is not to be used for any other project or site without the written consent of the engineer. The engineer is not responsible for any errors or omissions in this drawing.

NO.	DESCRIPTION	DATE	BY	CHKD.
1	CLIENT REVIEW	JULY 16, 2015	CD	

DESIGN	DATE
CUT	JULY 16, 2015
WLB	

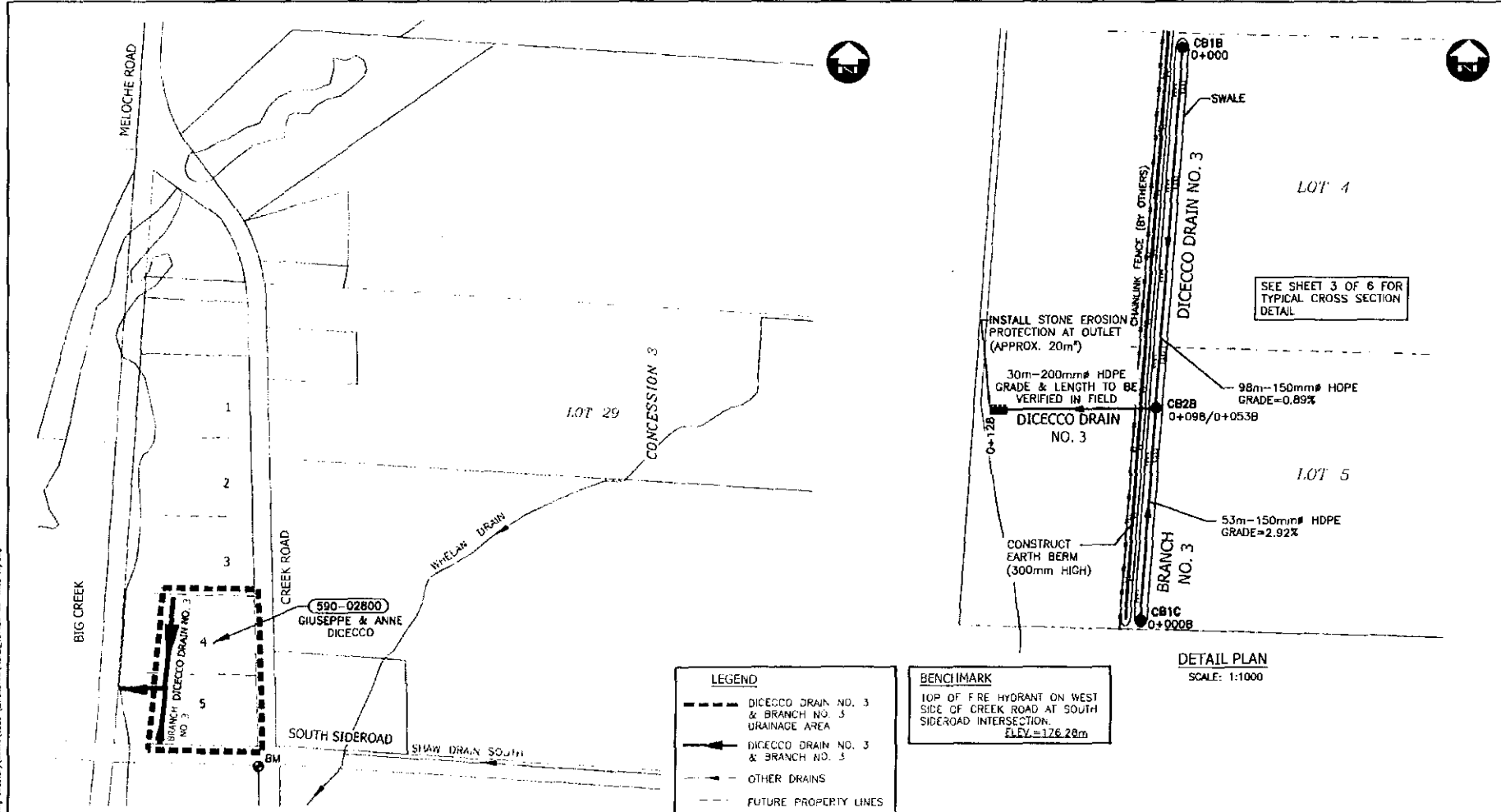
REVISIONS	DATE
AS SHOWN	

DILLON
 ENGINEERS & ARCHITECTS
 15-1463

BENCHMARK
 TOP OF FIRE HYDRANT ON WEST SIDE OF CREEK ROAD AT SOUTH SIDEROAD INTERSECTION.
 ELEV.=176.28m

'SCHEDULE G'	
Drainage Report for the DICECCO DRAIN NO. 1 & BRANCH NO. 1 Town of Amherstburg	
OVERALL PLAN & DETAIL PLAN	
2 of 4	

Jun 16, 2015 - © Dillon Engineering Limited, 15440-10-1007 (1) 1/16



LEGEND

- DICECCO DRAIN NO. 3 & BRANCH NO. 3 URINAGE AREA
- DICECCO DRAIN NO. 3 & BRANCH NO. 3
- OTHER DRAINS
- FUTURE PROPERTY LINES
- LOCAL BENCHMARK

BENCHMARK
 TOP OF FIRE HYDRANT ON WEST SIDE OF CREEK ROAD AT SOUTH SIDEROAD INTERSECTION.
 ELEV. = 176.28m

OVERALL PLAN
 SCALE: 1:4,000

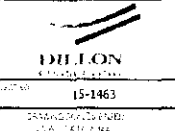
DETAIL PLAN
 SCALE: 1:1000

DRAFT

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NO.	DESCRIPTION	DATE	BY
1	CLIENT REVIEW	JULY 16, 2015	CDT
2	AS SHOWN		

CLIENT	STATION #1
CDT	FRF
DESIGN	D-14-1551
WLB	TRO
DATE	JULY 16, 2015
PROJECT NO.	15-1463



'SCHEDULE G'
 Drainage Report for the
DICECCO DRAIN NO. 2 & 3
 & BRANCH NO. 2 & 3
 Town of Amherstburg
 SHEET TITLE
DICECCO DRAIN NO. 3 & BRANCH NO. 3
OVERALL PLAN & DETAIL PLAN
 SHEET NO.
 4 of 4

Janine Mastronardi

From: Todd Hewitt
Sent: Tuesday, February 17, 2015 9:31 AM
To: Janine Mastronardi
Subject: RE: Feb. 24, 2015 Committee of Adjustment Notice Circulation- 1 Additional Application

Janine,

EPW comments are as follows.

A/2/15 – No comments

B/13/14 – No Comments

B/16-19/14 – All comments still remain as previously discussed as part of this application and development agreement.
These include watermain, drainage, septic systems etc.

Regards,
Todd

From: Janine Mastronardi
Sent: February-13-15 10:24 AM
To: Antonietta Giofu; Todd Hewitt; Eric Chamberlain; Dwayne Grondin; Stephen Brown; Randy Sinasac; Brad Amlin; 'bbratt@essexpowerlines.ca'; 'malzner@essexpower.ca'; 'mnelson@erca.org'; 'cchiasson@erca.org'; 'djennifer@erca.org'; regs@erca.org
Subject: FW: Feb. 24, 2015 Committee of Adjustment Notice Circulation- 1 Additional Application

Good morning,

Please find attached one additional application to the Committee of Adjustment for the February 24th meeting for your review and comment. We would appreciate any comments you may have in writing no later than **February 17, 2015**.

Thank you,
Janine

From: Janine Mastronardi
Sent: Tuesday, February 10, 2015 11:57 AM
To: 'Antonietta Giofu (agiofu@amherstburg.ca)'; Todd Hewitt; Eric Chamberlain; 'Grondin, Dwayne (dgrondin@amherstburg.ca)'; 'Brown, Stephen (sbrown@amherstburg.ca)'; 'Sinasac, Randy (rsinasac@amherstburg.ca)'; 'Brad Amlin'; 'bbratt@essexpowerlines.ca'; 'malzner@essexpower.ca'; 'mnelson@erca.org'; 'cchiasson@erca.org'; 'djennifer@erca.org'; regs@erca.org
Subject: Feb. 24, 2015 Committee of Adjustment Notice Circulation

Good morning,

Please find attached the applications to the Committee of Adjustment for the February 24th meeting for your review and comment. Many of you have already submitted notes on consent file B/13/14 so unless your comments have changed we can use the previously submitted comments.

We would appreciate any comments you may have in writing no later than **February 17, 2015**.

From:
Sent:
To:
Cc:
Subject:

Rebecca,

With respect to the DiCecco consent for severances, EPW will expect that the proponent will be required to enter into a development agreement for the 5 properties as previously discussed. The development agreement must include:

- The installation of a 150mm watermain from the bridge over Big Creek to South Sideroad.
- The Drainage Act process will be completed for both the Drainage along the North end of the property as well as the drainage along the PSW
- That tertiary Septic systems are installed on all properties as per council directive.
- That in the event that a sanitary sewer is extended / provided to this area, the homes would be expected to connect to the sewer, regardless of the age or operation of their current septic system.
- Stormwater will be addressed as per the approved SWM plan
- All driveway entrances must be approved through Public Works

Regards,
Todd

Todd Hewitt
Manager of Engineering and Operations
Town of Amherstburg
512 Sandwich St South, Amherstburg, ON, N9V 3R2
Tel: 519-736-3664 ext 313 Fax: 519-736-7080

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