

REGULAR MEETING OF COUNCIL AGENDA

Monday, November 26, 2018, 7:00 PM

Council Chambers

2021 Division Road N

Kingsville, Ontario N9Y 2Y9

Pages

- A. CALL TO ORDER
- B. MOMENT OF SILENCE AND REFLECTION
- C. PLAYING OF NATIONAL ANTHEM
- D. DISCLOSURE OF PECUNIARY INTEREST

When a member of Council has any pecuniary interest, direct or indirect, in any matter which is the subject of consideration at this Meeting of Council (or that was the subject of consideration at the previous Meeting of Council at which the member was not in attendance), the member shall disclose the pecuniary interest and its general nature, prior to any consideration of the matter.

E. MATTERS SUBJECT TO NOTICE

- 1. PUBLIC MEETING--Licensing, Regulating and Registration of Dogs Proposed By-law Amendment
 - R. Baines, Deputy Clerk-Administrative Services
 - i) Notice of Consideration of Amendments to Licensing, Regulating and Registration of Dogs By-law, dated October 9, 2018.
 - ii) Report dated November 26, 2018;
 - iii) Proposed By-law 122-2018, being a by-law to amend By-law 103-2003, as amended, being a By-law to provide for the licensing, regulating and registration of dogs with the Town of Kingsville

Recommended Action

That Council receives this report and adopt By-law 122-2018 amending the Licensing, Regulating and Registration of Dogs By-law 103-2003, as amended.

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- PUBLIC MEETING--Application for Zoning By-law Amendment ZBA/25/18 by Jeremy Capussi 140 Main St. E, Pt. of Lot 1, Concession 1 ED, Pts. 1 & 2, RP 12R 14569
 - R. Brown, Manager of Planning Services
 - i) Notice of Complete Application and Public Meeting: Zoning By-law Amendment, dated November 6, 2018;
 - ii) Report dated November 16, 2018;
 - iii) Proposed By-law 123-2018, being a By-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

Recommended Action

It is recommended that Council approve zoning amendment application ZBA/25/18 to rezone a portion of the lands (Phase One) located at 140 Main St E. from Residential Zone 1 Urban – holding 'R1.1(h)' to a site-specific Residential Zone 4 Urban Exception 5 'R4.1-5' to permit:

One apartment dwelling, maximum 3 storey, maximum 24 units with a partial fourth storey amenity area;

Permit a reduced front yard setback of 3.9 m (12 ft.);

Permit a reduced easterly side yard setback of 2.8 m (9 ft.), and adopt the implementing by-law.

- 3. PUBLIC MEETING--Application for Zoning Amendment ZBA/20/18 by Robert & Barbara Dick & Helena Koop Owners Heather Scott Authorized Applicant 101 Mill St. W Part of Lot 1 & 2, Concession 1 WD Roll No. 3711 160 000 02710
 - K. Brcic. Town Planner
 - i) Notice of Complete Application and Public Meeting: Zoning By-law Amendment, dated November 6, 2018;
 - ii) Report dated November 19, 2018;
 - iii) Powerpoint presentation by Applicant;
 - iv) Proposed By-law 125-2018, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

Recommended Action

It is recommend that Council approve zoning amendment application ZBA/20/18 to amend the current 'Residential Zone 1 Urban Exception 20 (R1.1-20)' zoning of the lands known as 101 Mill Street West, in the Town of Kingsville, to revise the permitted uses as follows:

The existing uses as follows:

Those uses permitted under Section 6.1 Residential Zone 1 Urban (R1.1);

80

An inn, an assembly hall, a banquet facility and a gift shop.

OR;

The proposed use as follows:

A holistic health centre and an accessory gift shop;

and adopt the implementing by-law.

F. AMENDMENTS TO THE AGENDA

G. STAFF REPORTS

1. Hillview Crescent Parking - Traffic By-Law Revision

107

T. Del Greco, Manager of Municipal Services

Recommended Action

That Council approves an amendment of the Kingsville Traffic By-Law (21-2005) to include the addition of "No Parking" signs on the south side of Hillview Crescent from Division Street North to the eastern property line of 55 Hillview Crescent.

2. Special Needs Signage Requests

110

G. A. Plancke, Director of Municipal Services

Recommended Action

That Council receive the information specific to the installation of "Special Needs" signage and further that Council direct administration to formalize a Special Needs Sign Installation Policy based in accordance with the following stipulations:

- A physician's statement identifying the extent of the disability.
- Concurrence from the parents of their understanding that the sign will only remain in place for a predefined period (Typically five (5) year increments), and will be removed when the child reaches a specified age (typically thirteen (13) years of age), or no reconfirmation from the parents requesting the sign that the requirement for the sign is still valid after the initial five (5) year installation period.(Age confirmation may include a sworn statement of the child's date of birth).
- Written acknowledgement from the parents of their understanding that the sign is no guarantee of their child's safety and that they remain responsible for the monitoring of their child's activities.
- A commitment to notify the municipality in a timely manner of any
 positive changes in their child's impairments (for example,
 cochlear implants, use of a hearing aids etc. for children with
 hearing impairments).
- A commitment to notify the municipality in a timely manner of any

relocation to another place of residence. 114 3. Kingsville Range Light Relocation G. A. Plancke, Director of Municipal Services Recommended Action That Council receive the information as presented, and to accept the donation of the Kingsville Range Light as donated by the Kingsville Historical Park Museum Board of Directors provided that: The sum of \$33,000 be included into the 2019 Capital budget for expenses related to the relocation, and permanent placement of the "Kingsville Lighthouse". 118 4. **Pedestrian Cross Walk Requests** G. A. Plancke, Director of Municipal Services **Recommended Action** That Council receive the information provided, and that \$24,000 be included within the 2019 Capital budget deliberations for the installation of two (2) Pedestrian Crossovers to be located at the intersection of Division St. S. and Pearl St. and 44 Main St. E. respectively and that; Council direct administration to develop a Pedestrian Crossover Policy as a guidance document to govern supplemental requests for Pedestrian Crossovers for discussion a future date Council. 128 5. Final Acceptance / Royal Oak at the Creek Phase 8a G. A. Plancke, Director of Municipal Services Recommended Action Municipal Services recommends that Council concur with the request of the Developer's Engineer and endorsed by the Director of Municipal Services for the Town to grant "Final Acceptance" of the roadway and infrastructure for the Royal Oak at the Creek Phase 8a subdivision. 131 Application for Site Plan Approval SPA/13/18 by 2623991 Ontario Ltd. 609 6. Road 3 E Part of Lot 4, Con 2 ED, Part 1, RP 12R 11488, Part 2, RP 12R 22191 R. Brown, Manager of Planning Services Recommended Action It is recommended that:

Council approve Phase one of the proposed greenhouse development for a medical marihuana production facility, subject to the conditions outlined in the site plan agreement, for a 5.78 ha (13.78 ac.) greenhouse with auxiliary warehouse and supporting facilities and authorize the Mayor and Clerk to sign the site plan agreement and register said agreement on title.

and

Council require a security deposit equal to 50% of the total cost of the odour control system, lighting control system and Road 3 E road improvements (Phase One only) to be deposit with the Town prior to release of any building permits.

7. Committee of Adjustment & Planning Advisory Committee Composition

297

R. Brown, Manager of Planning Services

Recommended Action

It is recommended that Council:

Discontinue the Planning Advisory Committee for 2019;

Modified the membership of the Committee of Adjustment to include lay people only, and

Consider utilizing any interested PAC members to replace open positions on the Committee of Adjustment.

8. 2014 – 2018 Committee Review Report

300

J. Astrologo, Director of Corporate Services

Recommended Action

That Council maintain the remuneration payment for the following statutorily mandated Committees: Accessibility Advisory, Committee of Adjustment/Fenceviewers/Property Standards, Compliance Audit Committee, Planning Advisory Committee, and Police Services Board;

And That remuneration be maintained for the following Committees in which there is only a Council appointee (if these Committees will be reestablished for the 2018-2022 Council Term): Business Improvement Association (BIA), Erie Shores Community Transit Committee, Essex Region Conservation Authority, Joint Management Board of the Union Water Supply System, Kingsville Historical Park Inc., Kingsville Leamington Animal Control Committee, Marina Committee, Migration Community Hall Board of Directors, Pelee Island Transportation Services Advisory Committee, Personnel Committee, Port of Kingsville Co-Tenancy Management Committee, and Striking Committee;

And That Council discontinue the stipend paid to all other Committees and ensure that the volunteers and are provided with some form of non-monetary recognition from the Town in appreciation for their services;

And that Council provide direction to Administration regarding which Committees should be advertised for the upcoming Council Term;

And that Council provide direction to Administration with respect to amending the Terms of Reference for various advisory Committees, by mandating a minimum of 4 meetings per year without establishing a maximum number of meetings.

9. Policy to Appoint an Alternate to Essex County Council

J. Astrologo, Director of Corporate Services

Recommended Action

That Council receives Staff Report CS-22-2018, entitled, "Policy to Appoint an Alternate to Essex County Council" for information;

And That Council adopts the Corporate Services Policy entitled, Appointment of an Alternate to County Council;

And That Council directs the Clerk commence the process to appoint the Alternate immediately following the Inaugural Meeting so that the necessary by-law can be passed at the December 10, 2018 Regular Meeting of Council.

H. BUSINESS/CORRESPONDENCE-ACTION REQUIRED

1. Correspondence of residents of Olinda Sideroad dated October 29, 2018 with attached Petition to level and resurface Olinda Sideroad and service storm drains (SEE: Agenda Item L-2)

340

Recommended Action

That Council receive Petition of Residents of Olinda Sideroad, dated October 31, 2018 together with accompany cover correspondence dated October 29, 2018, and refer same to Administration for report.

I. MINUTES OF THE PREVIOUS MEETINGS

1. Regular Meeting of Council--November 13, 2018

342

2. Regular 'Closed Session' Meeting of Council--November 13, 2018

Recommended Action

That Council adopts Regular Meeting of Council Minutes dated November 13, 2018 and Regular 'Closed Session' Meeting of Council Minutes dated November 13, 2018.

J. MINUTES OF COMMITTEES AND RECOMMENDATIONS

1. Kingsville B.I.A.- September 11, 2018

361

Recommended Action

That Council receive Kingsville B.I.A. Meeting Minutes dated September 11, 2018.

2. Kingsville Municipal Heritage Advisory Committee--October 10, 2018

365

Recommended Action

That Council receive Kingsville Municipal Heritage Advisory Committee Meeting Minutes, dated October 10, 2018.

K. BUSINESS CORRESPONDENCE - INFORMATIONAL

1. Cheryl and Paul Lowes--Correspondence dated November 6, 2018 RE: Drainage issues

368

 Windsor-Essex County Health Unit (WECHU) Board of Health -- Cannabis Resolution Recommendation passed at its Board of Health Meeting held on October 18, 2018 369

Recommended Action

That Council receives Business Correspondence-Informational items 1 and 2.

L. NOTICES OF MOTION

1. Deputy Mayor Queen may move, or cause to have moved:

That Administration investigate and report back to the new Council elect, the feasibility of adopting a policy similar to the recently approved policy of Secondary Suites to help ease the affordable housing shortage, based on compliance on both Building Code and Fire regulations

2. Councillor Patterson may move, or cause to have moved:

That a petition signed by the residents of the Olinda Sideroad be forwarded to management regarding the Olinda Sideroad as a safety concern.

3. Councillor Patterson may move, or cause to have moved:

That the Town's Council representatives discuss with Essex County Council to consider that the speed limit on County Road 27 from Highway 3 going northeast to County Road 34 in Cottam be reduced from 80 km to 60 km, to the 50 km sign.

M. UNFINISHED BUSINESS, ANNOUNCEMENTS AND UPDATES

N. BYLAWS

1. By-law 122-2018

373

Being a by-law to amend By-law 103-2003, as amended, being a By-law to provide for the licensing, regulating and registration of dogs within the Town of Kingsville

To be read a first, second and third and final time

2. By-law 123-2018

374

Being a by-law to amend the By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville (ZBA/25/18; 140 Main St. East)

To be read a first, second and third and final time

3. By-law 125-2018

377

Being a By-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville (ZBA/20/18; 74 Laurel St.)

To be read a first, second and third and final time

4. By-law 126-2018

380

Being a by-law to designate a certain property, including land and buildings, known as The Old Fire Hall (30 Main Street East, Kingsville) as being of cultural heritage value or interest under the provisions of the *Ontario Heritage Act*, R.S.O. 1990, c.O.18 as amended

To be read a first, second and third and final time.

O. CLOSED SESSION

 Section 239(2)(c) a proposed or pending acquisition or disposition of land by the municipality; being an update report of CAO P. Van Mierlo-West regarding the Agreement of Purchase and Sale with the Greater Essex County District School Board

P. REPORT OUT OF CLOSED SESSION

Q. CONFIRMATORY BY-LAW

1. By-law 127-2018

384

Being a by-law to confirm the proceedings of the Council of The Corporation of the Town of Kingsville at its November 26, 2018 Regular Meeting of Council

To be read a first, second and third and final time.

R. ADJOURNMENT



2021 Division Road North Kingsville, Ontario N9Y 2Y9 (519) 733-2305 www.kingsville.ca kingsvilleworks@kingsville.ca

NOTICE OF CONSIDERATION OF AMENDMENTS TO LICENSING, REGULATING AND REGISTRATION OF DOGS BY-LAW

TAKE NOTICE that the Council of the Town of Kingsville will consider amendments to the following by-law:

• Licensing, Regulating and Registration of Dogs By-law 103-2003 as amended

at its Regular Meeting to be held on:

Monday, November 26, 2018 at 7:00 p.m. at Kingsville Council Chambers 2021 Division Road North

The proposed amendment includes a reduction in the length of time a dog can be tethered from 12 hours to 4 hours in a 24-hour period.

A summary of the Proposed Amendments pertaining to the above-mentioned By-law will be available online (www.kingsville.ca) on Friday, November 23, 2018. Anyone wishing to appear before Council to speak to this matter may advise the Clerk in writing not later than 12:00 noon on the Wednesday prior to the meeting. Comments which are made at the meeting or in writing will become part of the public record which is available for anyone to view on the Town of Kingsville website.

DATED at Kingsville, Ontario this 9th day of November, 2018.

J. Astrologo, Director of Corporate Services / Clerk The Corporation of the Town of Kingsville 2021 Division Road North Kingsville, Ontario N9Y 2Y9 www.kingsville.ca



2021 Division Road North Kingsville, Ontario N9Y 2Y9 (519) 733-2305 www.kingsville.ca kingsvilleworks@kingsville.ca

Date: November 26, 2018

To: Mayor and Council

Author: Roberta Baines, Deputy Clerk – Administrative Services

RE: Licensing, Regulating and Registration of Dogs Proposed By-law

Amendment

Report No.: CS-2018-21

AIM

To provide Council with an overview of the draft licensing, regulating and registration of dogs proposed by-law amendment and to make recommendation to Council for the adoption of the proposed by-law amendment, reducing the length of time that a dog can be tethered in a 24-hour period from twelve (12) hours to four (4) hours.

BACKGROUND

At the September 24, 2018 Regular Meeting of Council, the following motion was carried:

Moved by Councillor Susanne Coghill, Seconded by Deputy Mayor Gord Queen:

562-2018 That Administration prepare an amending by-law for Council's consideration

to amend Section 8(f)(iii) of By-law 57-2015 to reduce the length of time that a dog can be tethered from twelve (12) hours per day to no more than four

(4) hours in a 24-hour period and that a public meeting be held.

DISCUSSION

Currently, By-law 57-2015, which amends By-law103-2003 prohibits the tethering of dogs for more than twelve (12) hours in a 24-hour period. In accordance with the above motion, a draft by-law was prepared.

Both Melanie Coulter, Executive Director of the Windsor-Essex Humane Society, and the Town's Animal Control Officer, David Walsh were consulted about this proposed change. Both indicated support for the reduction in the tethering limits. They stated that enforcing a 12-hour limit can be difficult and that a 4-hour limit is easier to enforce. They also indicated

that in their experience, the public supports shorter tethering time limits. In Essex County alone, four out of seven municipalities have a four-hour tethering limit in their by-law.

Attached is By-law 122-2018 amending the Dog Licensing, Regulation and Registration of Dogs By-law 103-2003. The amendments contained in the amending by-law are as follows:

- Section 8(f) (iii) be deleted and replaced with a reduced time limit of 4 hours; and
- Second paragraph of section 8(f) be deleted and replaced with language reflecting the reduction to four (4) hours

Also attached to the by-law is the Provincial Offences Short Form of wording used to describe the offence and the set fine. The wording has been changed to reflect the new reduced tethering time limit. The Provincial Offences Short Form wording for set fines under Part 1 of the *Provincial Offences Act, 1990*, as amended is subject to approval by the Province after the first, second and third and final reading of the by-law by Council.

LINK TO STRATEGIC PLAN

Maintain and improve the health, safety and well-being of our residents.

FINANCIAL CONSIDERATIONS

None

CONSULTATIONS

Melanie Coulter, Windsor-Essex County Humane Society Director David Walsh, Animal Control Office

RECOMMENDATION

That Council receives this report and adopt By-law 122-2018 amending the Licensing, Regulating and Registration of Dogs By-law 103-2003, as amended.

<u>Roberta Baines</u>

Roberta Baines, B.A. Deputy Clerk – Administrative Services

Jennífer Astrologo

Jennifer Astrologo, B.H.K. (Hons), LL.B. Director of Corporate Services/Clerk

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer

AMENDED BY BY-LAW 118-2003

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 103 - 2003

Being a by-law to provide for the licensing, regulating and registration of dogs within the Town of Kingsville and to authorize the Municipal Council to require the muzzling of a dog after it has bitten a person or domestic animal.

WHEREAS the Municipal Act, S. O. 2001, c. 25, Section 11 (1) 9, authorizes a local municipality to pass by-laws respecting animals which includes the power to require the muzzling of a dog after it has bitten a person or domestic animal;

AND WHEREAS the Municipal Act, S.O. 2001, Chapter M.25, Section 11 (2) 9, empowers and authorizes a local municipality to licence, regulate, and require the registration of dogs and to impose a licence fee on the owners of dogs, including the imposition of a higher licence fee in the case where more than one dog, either male or female, or dogs that are at least six months old and have been spayed or neutered and are owned by any one person in any one household.

AND WHEREAS the Municipal Act, S.O. 2001, Chapter M.25, Section 11, Subsections 1 and 2 provides where a Municipal Council passes a by-law regulating or prohibiting animals being at large or trespassing, may provide for;

- a) the seizure and impounding of animals,
- b) the sale of impounded animals if they are not claimed within a reasonable time, if the expenses of the municipality respecting the impounding of the animals is not paid, or at such time and manner as is provided in the By-law and,
- c) The establishment of procedures for the voluntary payment of penalties out of court where it is alleged that the By-law respecting the animals being at large or trespassing has been contravened.

If payment is not made in accordance with the procedures established mentioned above, the fine is recoverable under the Provincial Offences Act, R.S.O., 1990, c. P. 33, as amended.

NOW THEREFORE the Municipal Council of The Corporation of the Town of Kingsville enacts as follows:

PART I

Regulations respecting the licensing, regulating and registration of dogs

- 1. For the purposes of this Part of the By-law the following definitions are applicable:
 - (a) "Council" means the Council of the Corporation of the Town of Kingsville;
 - (b) "Dog" means any dog, male or female, upon reaching the age of three (3) months after birth;
 - (c) "Male dog" includes all spayed female dogs;
 - (d) "Female Dog" means only such female dogs as have not been proven by production of a Veterinary Surgeon's Certificate to have been spayed;
 - (e) "Spayed Female Dog" means only such dog for which a Veterinary Surgeon's Certificate, in writing, is produced showing that such dog has been spayed;

- (f) "Kennel" includes any building, part of a building, or area used for keeping dogs that is registered or eligible for registration under The Animal Pedigree Act and means a kennel of pure-bred dogs registered in the Register of the Canadian Kennel Club (C.K.C.), the American Kennel Club (A.K.C.), the Field Dog Stud Book (F.D.S.B.) or the United Kennel Club (U.K.C.) of Kalamazoo, Michigan;
- (g) "Leash" shall not be longer than 2 metres.

2.

- (h) "Owner" of a dog includes a person who possesses or harbours a dog, and where the owner is a minor, the person responsible for the custody of the minor, and for the purposes of this definition "owns" and "owned" shall have a corresponding meaning;
- (i) "Clerk" means the Clerk for the Town of Kingsville;
- (j) "Town of Kingsville" means the new and restructured municipality known as The Corporation of the Town of Kingsville created by an Order of the Province of Ontario made under the Municipal Act, R.S.O. 1990, c. M.45 Subsection 25.2(4) and dated November 19, 1997 and being composed of the former Municipalities the Township of Gosfield North, the Township of Gosfield South and the Town of Kingsville and includes its employees, servants and agents;
- (k) "Animal Control Officer" means the Animal Control Officer for the Town of Kingsville and includes the terms "dog catcher" and "dog pound keeper" meaning a person duly appointed by the Municipal Council for seizing and impounding dogs running at large in the Town of Kingsville and on the request of the owner or occupant of private property, for seizing and impounding dogs trespassing on such private property. Such person may be one and the same "Animal Control Officer" as duly appointed by The Corporation of the Municipality of Leamington;
- (1) "Municipal Pound" means a jointly-shared pound facility located in the North part of Lot 12, Concession 3, Eastern Division of the Town of Kingsville and maintained on behalf of The Corporation of the Town of Kingsville in cooperation with The Corporation of the Municipality of Learnington.
- (m) "Joint Area Animal Control Committee" mean collectively those persons appointed by the Municipalities of Learnington and Kingsville to oversee the maintenance and operation of the "Municipal Pound" and to authorize, regulate and oversee the actions and requirements of the "Animal Control Officer" for the said Joint Area Municipalities.
- (a) No person shall own or harbour a dog that has not been registered within the Town of Kingsville without registration within the Town of Kingsville and for which a dog tag has not been annually obtained prior to March 15th upon payment of a license fee to the Town of Kingsville, in accordance with the Municipal Fees Bylaw as amended from time to time by the Municipal Council of the Town of Kingsville;
- (b) No person shall harbour, keep or cause to be kept within the limits of the Town of Kingsville more than three (3) dogs unless a Kennel Licence has been issued by the Municipality;
- (c) The owner of a Kennel of dogs that is registered or eligible for registration with an Association incorporated under The Animal Pedigree Act (Canada) shall on or before March 15 of each year pay an annual Kennel Licence Fee as fixed in the Municipal Fees By-law for the Kennel instead of a licence fee for each dog.

- (d) Upon providing the Animal Control Officer with satisfactory evidence that a person is blind, hearing impaired or physically impaired, and is the owner of a dog used to assist that person in overcoming the impairment, a dog licence and dog tag may be issued at no charge.
- 3. (a) A tag shall be supplied by the Town of Kingsville for each dog in respect of which a licence fee is paid hereunder and the owner shall keep the tag securely fixed on the dog at all times during the year and until a tag is provided for the following year;
 - (b) No person who owns or harbours a dog shall permit a dog tag to be affixed to such dog unless the tag was issued for use upon such dog;
 - (c) The dog tag shall bear a serial number and the year in which it was issued and a record shall be kept by the Clerk for the Town of Kingsville or by such other officer designated for that purpose showing the name and address of the owner and the serial number of the tag.

ANIMAL CONTROL

- 4. (a) No person who owns or harbours a dog shall allow such dog to run at large within the municipality;
 - (b) A dog shall be deemed to be running at large if found in any place other than the premises of the owner or the place that it is habitually kept, and not under the control of any person;
 - (c) The Animal Control Officer is authorized to seize and impound any dog found running at large in the municipality.
- 5. The Animal Control Officer shall impound in the Joint Municipal Pound all dogs seized under clause 4 (c) pursuant to the requirements of the Animals for Research Act, R.S.O. 1990, chapter A.22;
- 6. The owner of a dog impounded pursuant to Clause 4 (c) may re-claim said dog prior to its disposal upon payment to the Animal Control Officer of a re-claim or impound fee, as determined from time to time by the Joint Area Animal Control Committee.
- 7. The Animal Control Officer may sell any dog impounded pursuant to Clause 4(c) after the expiration of a redemption period as provided in the Animals for Research Act, R.S.O. 1990, chapter A.22 for a fee as determined from time to time by the Joint Area Animal Control Committee;
- 8. Any person who owns a dog shall:
 - (a) treat it in a humane manner;
 - (b) treat it so that offensive odours and the transfer of disease are minimized;
 - (c) provide the necessary food, water, housing or attention as required to keep the animal in good health and free from harm; and
 - (d) remove forthwith any excrement of the said animal and dispose of it in a sanitary manner.
 - (e) the Owner of every dog or dogs shall keep the same under physical control by means of a Leash held by the same person at all times when the dog is in any place other than the premises of the Owner.

- Every person who violates any provision of this Part is guilty of an offence and upon conviction shall be liable to a fine not exceeding Five Hundred Dollars (\$500.00) for each offence, exclusive of costs, and such fine and costs shall be recoverable under the provisions of the Provincial Offences Act, R. S. O., 1990, c. P. 33, as amended.
- Part I shall be deemed to have come into full force and effect on final passing of this By-law by the Council;
- Any by-laws inconsistent with Part I of this By-law are and the same are hereby repealed.

PART II

Regulations Respecting Dogs That Have Bitten

- 1. For the purposes of this Part of the By-law the following definitions are applicable:
 - (a) "Council" means the Council of the Corporation of the Town of Kingsville;
 - (b) "Committee of Council" means a Committee of the Council of The Corporation of the Town of Kingsville;
 - (c) "Muzzle" means a humane fastening or covering device of adequate strength over the mouth to prevent a dog from biting.
 - (a) Where the Animal Control Officer has reason to believe that a dog has bitten a person or a domestic animal, the Town Clerk shall serve a notice upon the owner requiring the owner to muzzle the dog except when the dog is on the premises of the owner and in a confined area;
 - (b) The Notice referred to in (a) above shall be served on the owner in the same manner as the notice of hearing is served in Section 5;
 - (c) Upon the service of the Notice referred to in (a) above, the owner shall muzzle the dog except when the dog is in a confined area on the premises of the owner.
- 3. The Notice referred to in Section 2 shall include:

5.

- (a) A statement that the Town Clerk has reason to believe that the owner's dog has bitten a person or a domestic animal;
- (b) That the owner shall muzzle the dog except when the dog is in a confined area on the premises of the owner;
- (c) A statement that the owner may request and is entitled to a hearing before a Committee of Council which may exempt the owner from the muzzling requirement.
- 4. The Town Clerk shall, if requested by the Owner, schedule a hearing before a Committee of Council for the Town of Kingsville pursuant to the provisions of the Statutory Powers Procedure Act, R.S.O. 1990, c.S.22 and the Municipal Act, S.O. 2001 to determine whether the dog has bitten a person or a domestic animal and Council or a Committee thereof may exempt the owner from the muzzling requirement or both.
 - (a) Prior to holding a hearing referred to in Section 4 above, the Town Clerk shall cause a notice of hearing to be served on the owner.

- (b) The notice of hearing may be served on the owner by the Town Clerk by handing it to the owner, but where the notice of hearing cannot be given or served by reason of the owner's absence from his premises or by reason of his evading service, the notice of hearing may be given or served:
 - (i) by handing it to an apparently adult person on the owner's premises;
 - (ii) by posting it up in a conspicuous place upon some part of the owner's premises; or
 - (iii) by sending it by prepaid registered mail to the owner at the address where he/she resides.
- 6. The notice of hearing shall include:
 - (a) a statement of the facts which leads the Town Clerk to believe that the owner's dog has, without provocation, bitten a person or a domestic animal;
 - (b) a statement setting out the time and place at which the Committee of Council will hold a public hearing to determine whether such dog has bitten a person or a domestic animal and whether or not such a dog shall be exempted from the muzzling requirement;
 - (c) a statement that if the owner does not attend the hearing, the Committee will proceed with the hearing in the absence of the owner and the owner will not be entitled to any further notice in the proceedings.
- 7. The owner may, if he/she wishes, be represented by counsel or an agent at such hearing and shall have the right to adduce evidence and to submit argument to show that the dog has not bitten a person or a domestic animal and/or to exempt the dog from the muzzling requirement, and to cross examine any witness adverse in interest to him/her, and in the event that the owner's dog is not exempted from the muzzling requirement, the Committee shall at the request of the owner, deliver written reasons for the decision.
- 8. At the time and place set forth in the notice referred to in sections 5 and 6, the Committee shall consider all of the evidence and shall make a declaration that the dog of the owner:
 - (a) has bitten a person or domestic animal or has not bitten a person or domestic animal; and
 - (b) shall be muzzled, except when the dog is in a confined area on the premises of the owner, or shall be exempt from the muzzling requirement.
- 9. Any notice or other document shall be served on the owner by the Town Clerk by handing it to the owner, but when the notice or documents cannot be given or served by reason of the owner's absence from the premises or by reason of his evading service, the notice may be given or served:
 - (i) by handing it to an apparently adult person on the owner's premises;
 - (ii) by posting it in a conspicuous space upon some part of the owner's premises, or
 - (iii) by sending it by prepaid registered mail to the owner at the address where he/she resides.
- 10. Every person who keeps a dog which requires muzzling pursuant to this By-law shall immediately notify the Town Clerk after he has transferred the ownership of the dog to any other person or has begun keeping the dog at a new location.

- 11. This Part shall not apply to a police work dog.
- 12. Any notice required by this Part to be given by prepaid registered mail shall be deemed to have been received by the person to whom it was addressed on the fifth (5th) day after the day of such mailing.
- 13. Every person who violates any provision of this Part is guilty of an offence and upon conviction shall be liable to a fine not exceeding \$500.00 for each offence, exclusive of costs, and such fine and costs shall be recoverable under the provisions of the Provincial Offences Act, R.S.O. 1990, c. P. 33, as amended.
- 14. Part II shall be deemed to have come into full force and effect on final passing of this Bylaw by Council.
- 15. Any by-laws inconsistent with Part II of this By-law be and the same are hereby repealed.

READ a FIRST and SECOND time this 27th day of October, 2003.

READ a THIRD time and FINALLY PASSED this 27th day of October, 2003.

MAYOR, Patrick M. O'Neil

Acting CLERK, Linda Burling

DWN OF KINGSVILLE BEING A BY-LAW TO PROVIDE FOR THE LICENSING, REGULATING AND REGISTRATION OF DOGS WITHIN THE TOWN OF KINGSVILLE AND TO AUTHORIZE THE MUNICIPAL COUNCIL TO REQUIRE THE MUZZLING OF A DOG AFTER IT HAS BITTEN A PERSON OR DOMESTIC ANIMAL
THE CORPORATION OF THE TOWN OF KINGSVILL BY-LAW NO. 103-2003 OF DO COUI

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OR DEFINING OFFENCE	COLUMN 3 SET FINE (includes costs)
_	Fail to register a dog	Part I, Section 2(a)	\$100.00
2.	Fail to obtain a dog tag for a dog	Part I, Section 2(a)	\$100.00
· ·	Fail to pay prescribed licence fee for a dog	Part I, Section 2(a)	\$100.00
4.	Harbour more than three dogs without a Kennel Licence	Part I, Section 2(b)	\$200.00
വ	Keep more than three dogs without a Kennel Licence	Part I, Section 2(b)	\$200.00
6.	Cause to be kept more than three dogs without a Kennel Licence	Part 1, Section 2(b)	\$200.00

7.	Fail to pay annual Kennel Licence Fee	Part I, Section 2(c)	\$100.00
α	Fail to keep dog tag securely fixed on a	Section 3(a)	\$100.00
5	bop		
6	Permit a dog tag to be affixed to a dog other than the dog to which it was issued	Part I, Section 3(b)	\$100.00
10.	Permit dog to run at large	Part I, Section 4(a)	\$100.00
11.	Fail to treat a dog in a humane manner	Part I, Section 8(a)	\$300.00
12.	Fail to treat a dog so that offensive odours and transfer of disease are minimized	Part I, Section 8(b)	\$300.00
13.	Fail to provide a dog with necessary food	Part I, Section 8 (c)	\$300.00
14.	Fail to provide a dog with necessary water	Part I, Section 8 (c)	\$300.00

15.	Fail to provide a dog with necessary housing	Part I, Section 8(c)	\$300.00
16.	Fail to provide a dog with necessary attention	Part I, Section 8 (c)	\$300.00
17.	Fail to maintain a dog in good health and free from harm	Part I, Section 8(c)	\$300.00
18.	Fail to remove dog excrement forthwith	Part I, Section 8(d)	\$100.00
19.	Fail to dispose of dog excrement in a sanitary manner	Part I, Section 8(d)	\$100.00
20.	Fail to muzzle a dog upon receipt of notice	Part II, Section 2(c)	\$300.00
21.	Fail to notify Town Clerk of transfer of ownership of a dog subject to muzzling requirement	Part II, Section 10	\$300.00

\$300.00	No103-2003, a certified copy of which has been
Part II, Section 10	d Part 2, Section 13 of By-law
Fail to notify Town Clerk of change of location of a dog subject to muzzling requirement	Production for the offences indicated above are Part 1, Section 10 and Part 2, Section 13 of By-law No.103-2003, a certified copy of which has been
22.	1

Penalty Provision for the offences indicated filed.

"COPY ONLY"

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 118 - 2003

Being a by-law to amend By-law 103-2003, being a By-law to provide for the licensing, regulating and registration of dogs within the Town of Kingsville and to authorize the Municipal Council to require the muzzling of a dog after it has bitten a person or domestic animal.

WHEREAS By-law 103-2003 is the Town of Kingsville By-law providing for the registration, regulation and licensing of dogs within the Municipality;

AND WHEREAS the Council of The Corporation of the Town of Kingsville deems it expedient to amend By-law 103-2003 to add the words "or other device" at Part I, Section 8, subsection (e) as hereinafter more particularly set forth.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- 1. THAT Part I, Section 8, subsection (e) of By-law No. 103-2003 is hereby amended to read:
 - "the Owner of every dog or dogs shall keep the same under physical control by means of a Leash or other device held by the same person at all times when the dog is any place other than the premises of the Owner."
- THAT this By-law shall come into force and effect upon third reading and being finally passed.

READ a FIRST and SECOND time this 15th day of December, 2003.

READ a THIRD time and FINALLY PASSED this 15th day of December, 2003.

MAYOR, Nelson Santos

LadaBurling
ACTING-CLERK, Kinda Burling

ONTARIO COURT OF JUSTICE

PROVINCIAL OFFENCES ACT

PART I

IT IS ORDERED pursuant to the provisions of the Provincial Offences Act and the

rules for the Ontario Court of Justice that the amount set opposite each of the

offences in the schedule of offences under the Provincial Statutes and Regulations

thereunder and Municipal By-law No. 103-2003 of the Town of Kingsville, attached

hereto is the set fine including costs, for those offences. This Order is to take effect

March 30, 2004.

Dated at London this 30th day of March, 2004.

Alexander M. Graham Regional Senior Justice

West Region

OFFICE OF THE REGIONAL SENIOR JUSTICE ONTARIO COURT OF JUSTICE WEST REGION

COURT HOUSE 15TH FLOOR, UNIT "G" 80 DUNDAS STREET LONDON, ONTARIO N6A 6B3



CABINET DU JUGE PRINCIPAL REGIONAL COUR DE JUSTICE DE L'ONTARIO REGION DE L'OUEST

TELEPHONE/TÉLÉPHONE (519) 660-2292 FAX/TÉLÉCOPIEUR (519) 660-3138

March 30, 2004

Ms. Linda Burling, Acting Clerk Corporation of the Town of Kingsville 2021 Division Road North Kingsville ON N9Y 2Y9

Dear Ms. Burling:

Re: Set Fines - Provincial Offences Act - Part I Town of Kingsville

Enclosed herewith are copies of Orders, and copies of schedules of set fines for the By-Laws listed below, the By-laws indicated in the schedules:

23-2001 25-2001 31-2000 30-2000 23-2000 103-2003 72-2001 69-2003 28-1999

The setting of the fines does not constitute my approval of the short form of wording used to describe the offences.

I have forwarded the originals of the Orders and the schedules of the set fines to the Ontario Court of Justice in Windsor, together with a certified copy of the By-law.

Yours truly,

Alexander M. Graham Regional Senior Justice West Region

Enclosures /ec

MAY 1 9 2001

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 118 - 2003

Being a by-law to amend By-law 103-2003, being a By-law to provide for the licensing, regulating and registration of dogs within the Town of Kingsville and to authorize the Municipal Council to require the muzzling of a dog after it has bitten a person or domestic animal.

WHEREAS By-law 103-2003 is the Town of Kingsville By-law providing for the registration, regulation and licensing of dogs within the Municipality;

AND WHEREAS the Council of The Corporation of the Town of Kingsville deems it expedient to amend By-law 103-2003 to add the words "or other device" at Part I, Section 8, subsection (e) as hereinafter more particularly set forth.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- THAT Part I, Section 8, subsection (e) of By-law No. 103-2003 is hereby amended to read:
 - "the Owner of every dog or dogs shall keep the same under physical control by means of a Leash or other device held by the same person at all times when the dog is any place other than the premises of the Owner."
- 2. THAT this By-law shall come into force and effect upon third reading and being finally passed.

READ a FIRST and SECOND time this 15th day of December, 2003.

READ a THIRD time and FINALLY PASSED this 15th day of December, 2003.

MAYOR Nelson Santos

ACTING-CLERK, Vinda Burling

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW NO. 57-2015

Being a By-law to amend By-law No. 103-2003 as amended, being a By-law to provide for the licensing, regulating and registration of dogs within the Town of Kingsville

WHEREAS By-law No. 103-2003 is the Town of Kingsville by-law being a By-law for licensing, regulating and registration of dogs within the Town of Kingsville was adopted by the Town of Kingsville Council ("Council") on October 27, 2003;

WHEREAS paragraph 9 of subsection 11(3) of the *Municipal Act, 2001, S.O. 2001, c. 25,* as amended, provided that By-laws may be passed by local municipalities respecting animals;

WHEREAS By-law No. 103-2003 was subsequently amended and updated by By-Law 118-2003;

WHEREAS it is the desire of the Council of the Corporation of the Town of Kingsville to further amend By-law 103-2003, as amended;

NOW THEREFORE THE COUNCIL FOR THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- 1. That Part 1, Section 1 of By-law No. 103-2003, as amended with the addition of the following definitions:
 - "1. (n) "By-law Enforcement Officer" means an enforcement officer appointed by Council for the Town of Kingsville to enforce by-laws of the Town of Kingsville;
 - 1.(o) "Choke Collar", "Choke Chain" or "Prong Collar" means a collar that tightens, constricts or pinches a dog's neck when tension is applied and may inflict pain or discomfort on an animal;
 - 1.(p) "Extreme Weather" means a cold warning, heat warning or other weather warning alert issued by Environment Canada for weather in the Town of Kingsville, including and not limited to extreme cold or hot weather, snow storms, freezing rain, heaving rainfall, hurricanes, tornadoes and/or strong winds;
 - 1.(q) "Tethered" for the purposes of this By-law, means the fastening of a rope, chain, cord or similar restraining device to a dog's collar or halter so that the animal can only range in an area limited to the length of such rope, chain, cord or similar restraining device;
 - 1. (r) "Un-sanitary condition" means a condition that results in an accumulation of fecal matter, odour, insect infestation or rodent attractions which endanger the health of any person or dog, or that would disturb the enjoyment, comfort or convenience of any person or that endangers or is likely to endanger the health of any person or dog."
- 2. That Section 1.(g) of By-law No. 103-2003, as amended be deleted and replaced by the following:

- "1.(g) "Leash" generally means a rope, chain or other restraining material that is attached to a collar or halter worn by a dog and that is capable of restraining the animal on which it is being used;"
- 3. That Part 1 Animal Control, Section 8 of By-law No. 103-2003, as amended is hereby amended to add the following subsections:
 - "8. (f) No person shall keep a dog tethered on a rope, chain, cord or similar restraining device unless:
 - (i) The tether shall be a minimum of three metres in length and not permit the dog to go beyond the limits of the dog owner's property;
 - (ii) The dog has unrestricted movement within the range of such tether;
 - (iii) The dog is not tethered for longer than twelve hours per day;
 - (iv) The dog has access to water, shade and shelter while tethered; and
 - (v) The dog cannot injure itself as a result of the tethering

For the purposes of Section 8. (f)(iii) when the same dog is observed to be tethered in the same location on at least two (2) subsequent occasions in the twenty-four (24) hour period that follows an initial observation of the dog in that location, then there shall be a rebuttable presumption that the dog has been tethered in that location for more than twelve (12) hours cumulatively in the twenty-four (24) hours period since the initial observation.

- 8. (g) Not withstanding Subsection 8. (f), no person shall keep a dog tethered where a choke collar, a choke chain or a prong collar forms part of the tether or a rope, chain, cord or similar restraining device is tied directly around a dog's neck.
- 8.(h) No person shall allow a dog to be outside the passenger cab of a motor vehicle on a roadway, regardless of whether the motor vehicle is moving or parked;
- 8. (i) Not withstanding Section 8 (h), a person may allow a dog to be outside the passenger cab of a motor vehicle, including riding in the back of a pick up truck or flat bed truck if the dog is:
 - (i) In a fully enclosed trailer;
 - (ii) In a topper enclosing the bed area of a truck;
 - (iii) Contained in a ventilated kennel or similar device securely fastened to the bed of the truck; or
 - (iv) Securely tethered in such a manner that the dog is not standing on bare metal, cannot jump or be thrown from the vehicle, is not in danger of strangulation and cannot reach the outside edges of a vehicle.
- 8. (j) The owner of a dog shall not leave a dog unattended in a motor vehicle if the weather conditions are not suitable for containment of an animal.

A Police Officer, Peace Officer, or By-Law Enforcement Officer who has reasonable grounds to believe that a dog left unattended in a motor vehicle is in imminent physical danger may take steps to remove the dog from the vehicle and shall not be held liable for any damage to the vehicle by so doing.

8.(k) No person shall allow a dog to remain outdoors during Extreme Weather unless the dog has access to shelter that will adequately protect the dog from the conditions."

This By-law shall come into force and effect from the date of passing by the Council of The Corporation of the Town of Kingsville.

READ a FIRST, SECOND and THIRD TIME and FINALLY PASSED this 8th day of June, 2015.

MAYOR, Nelson Santos

CLERK, Dan DiGiovanni

ONTARIO COURT OF JUSTICE

PROVINCIAL OFFENCES ACT

PART I

IT IS ORDERED pursuant to the provisions of the Provincial Offences Act and the

rules for the Ontario Court of Justice that the amount set opposite each of the

offences in the schedule of offences under the Provincial Statutes and

Regulations thereunder and Municipal By-law No. 103-2003, As Amended, of the

Town of Kingsville, attached hereto are the set fines for those offences. This

Order is to take effect September 4, 2015.

Dated at London this 4th day of September 2015.

Stephen J. Fuerth

Regional Senior Justice

West Region

PART 1 PROVINCIAL OFFENCES ACT

THE CORPORATION OF THE TOWN OF KINGSVILLE BY-LAW NO. 103-2003, AS AMENDED BY BY- LAW NO. 57 -2015

BEING A BY-LAW TO PROVIDE FOR THE LICENSING, REGULATING AND REGISTRATION OF DOGS WITHIN THE TOWN OF KINGSVILLE AND TO AUTHORIZE THE MUNICIPAL COUNCIL TO REQUIRE THE MUZZLING OF A DO AFTER IT HAS BITTEN A PERSON OR DOMESTIC ANIMAL

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
1.	Fail to register a dog	Part 1, Section 2(a)	\$100.00
2.	Fail to obtain a dog tag for a dog	Part 1, Section 2(a)	\$100.00
3.	Fail to pay prescribed licence fee for a dog	Part 1, Section 2(a)	\$100.00
4.	Harbour more than three dogs without a Kennel Licence	Part 1, Section 2(b)	\$200.00
5.	Keep more than three dogs without a Kennel Licence	Part 1, Section 2(b)	\$200.00

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
6.	Cause to be kept more than three dogs without a Kennel Licence	Part 1, Section 2(b)	\$200.00
7.	Fail to pay annual Kennel Licence Fee	Part 1, Section 2(c)	\$100.00
8.	Fail to keep dog tag securely fixed on a dog	Part 1, Section 3(a)	\$100.00
9.	Permit a dog tag to be affixed to a dog other than the dog to which it was issued	Part 1, Section 3(b)	\$100.00
10.	Permit a dog to run at large	Part 1, Section 4(a)	\$100.00
11.	Fail to treat a dog in a humane manner	Part 1, Section 8(a)	\$300.00

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
12.	Fail to treat a dog so that offensive odours and transfer of disease are minimized	Part 1, Section 8(b)	\$300.00
13.	Fail to provide a dog with necessary food	Part 1, Section 8(c)	\$300.00
14.	Fail to provide a dog with necessary water	Part 1, Section 8(c)	\$300.00
15.	Fail to provide a dog with necessary housing	Part 1, Section 8(c)	\$300.00
16.	Fail to provide a dog with necessary attention	Part 1, Section 8(c)	\$300.00
17.	Fail to maintain a dog in good health and free from harm	Part 1, Section 8(c)	\$300.00

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
18.	Fail to remove dog excrement forthwith	Part 1, Section 8(d)	\$100.00
19.	Fail to dispose of dog excrement in a sanitary manner	Part 1, Section 8(d)	\$100.00
20.	Fail to muzzle a dog upon receipt of notice	Part II, Section 2(c)	\$300.00
21.	Tether dog on a tether that is less than three meters in length	Part 1, Section 8(f)(i)	\$200.00
22.	To tether a dog that is restricted from movement within range of the tether	Part 1, Section 8(f)(ii)	\$200.00
23.	To tether a dog for longer than 12 hours per day	Part 1, Section 8(f)(iii)	\$200.00

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
24.	Fail to tether a dog without access to water, shade and shelter	Part 1, Section 8(f)(iv)	\$200.00
25.	To tether a dog which may injure itself as a result of the tethering	Part 1, Section 8(g)	\$200.00
26.	To allow a dog to be outside the passenger cab of a motor vehicle on a roadway, regardless of whether it is moving or parked	Part 1, Section 8(h)	\$200.00
27.	Fail to keep a dog in a fully enclosed trailer when allowing a dog to be outside the passenger cab of a motor vehicle	Part 1, Section 8(i)(i)	\$200.00
28.	Fail to keep a dog in a topper enclosing the bed area of a truck when allowing a dog to be outside the passenger cab of a motor vehicle	Part 1, Section 8(i)(ii)	\$200.00
29.	Fail to keep a dog contained a ventilated kennel or similar device securely fastened to the bed of a truck when allowing a dog to be outside the passenger cab of a motor vehicle	Part 1, Section 8(i)(iii)	\$200.00

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
30.	Fail to securely tether a dog in such a manner that the dog cannot jump or be thrown from the vehicle, is not in danger of strangulation and cannot reach the outside edges of a vehicle	Part 1, Section 8(i)(iv)	\$200.00
31.	To allow a dog to be left unattended in a motor vehicle when the weather conditions are not suitable for containment of an animal	Part 1, Section 8(j)	\$200.00
32.	Allow a dog to remain outdoors during extreme weather when the dog has no access to shelter	Part 1, Section 8(k)	\$200.00
33.	Fail to notify Town Clerk of transfer of ownership of a dog subject to muzzling requirement	Part II, Section 10	\$300.00
34.	Fail to notify Town Clerk of change of location of a dog subject to muzzling requirement	Part II, Section 10	\$300.00

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 122- 2018

Being a by-law to amend By-law 103-2003 as amended, being a By-law to provide for the licensing, regulating and registration of dogs with the Town of Kingsville

WHEREAS By-law No. 103-2003 is the Town of Kingsville by-law being a by-law for licensing, regulating and registration of dogs within the Town of Kingsville was adopted by the Town of Kingsville Council on October 27, 2003;

WHEREAS paragraph 9 of subsection 11(3) of the *Municipal Act, 2001* S.O. 2001, c. 25, as amended, provided that By-laws may be passed by local municipalities respecting animals;

WHEREAS By-law No. 103-2003 was subsequently amended and updated by By-laws 118-2003 and 57-2015;

AND WHEREAS it is the desire of the Council of the Corporation of the Town of Kingsville to further amend By-law 103-2003, as amended;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- THAT the licensing, regulating and registration of dogs by-law 103-2003 as amended, be further amended by deleting section 8 (f) (iii), and replacing with the following:
 - "The dog is not tethered for longer than four hours per day";
- 2. **AND THAT** the licensing, regulating and registration of dogs by-law 103-2003 as amended, be further amended by deleting the second paragraph of section 8 (f), and replacing with the following:
 - "For the purposes of Section 8 (f)(iii) when the same dog is observed to be tethered in the same location on at least two (2) subsequent occasions in the twenty four-hour (24) hour period that follows an initial observation of the dog in that location, then there shall be a rebuttable presumption that the dog has been tethered in that location for more than four (4) hours cumulatively in the twenty four (24) hour period since the initial observation".
- 3. **THAT** this By-law shall come into force and effect on the 26th day of November 2018.

READ a FIRST, SECOND and THIRD time and FINALLY PASSED this 26th day of November, 2018.

PART 1 PROVINCIAL OFFENCES ACT

THE CORPORATION OF THE TOWN OF KINGSVILLE BY-LAW NO. 103-2003, AS AMENDED BY BY-LAW 122-2018

BEING A BY-LAW TO PROVIDE FOR THE LICENSING, REGULATING AND REGISTRATION
OF DOGS WITHIN THE TOWN OF KINGSVILLE AND TO AUTHORIZE THE MUNICIPAL
COUNCIL TO REQUIRE THE MUZZLING OF A DOG AFTER IT HAS BITTEN A PERSON OR DOMESTIC ANIMAL

ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 OFFENCE CREATING PROVISION OF DEFINING OFFENCE	COLUMN 3 SET FINE
1.	To tether a dog for longer than 4 hours per day	Part 1, Section 8(f)(iii)	\$200.00

NOTE: The general penalty provisions for the offence listed above is Section 61 of the Provincial Offences Act, 1990, c. P. 33.



2021 Division Road North Kingsville, Ontario N9Y 2Y9 Phone: (519) 733-2305 www.kingsville.ca

NOTICE OF COMPLETE APPLICATION AND PUBLIC MEETING: ZONING BY-LAW AMENDMENT

APPLICATION: ZONING BY-LAW AMENDMENT FILE ZBA/25/18

(Section 34 of the Planning Act, R.S.O. 1990, C.P. 13)

SITE PLAN APPROVAL FILE SPA/11/18

(Section 41 of the Planning Act, R.S.O. 1990, C.P. 13)

OWNER: Jeremy Capussi

LOCATION OF PROPERTY: 140 Main St E

Pt. of Lot 1, Concession 1, ED

PURPOSE OF APPLICATION:

The Town of Kingsville has received the above-noted applications for lands located on the north side of Main St. East, east of Spruce St. N. The subject property is designated 'Residential' by the Official Plan and zoned 'Residential zone 1 Urban – holding (R1.1(h))' under the Kingsville Comprehensive Zoning By-law.

The subject land is a 1.45 ha (3.6 ac.) vacant residential parcel (shown in red). The applicant is proposing a multiple phase development on the site. The proposal shown on the attached plan includes three phases. Phase 1 is a mixed use commercial /residential with half of the ground floor used for commercial and the remaining three storey building used for 24 residential units. Phase 2 would be a six storey building with 36 residential units. The final phase at the rear of the property will be developed for low density residential compatible with the abutting lands. The lands are current zoned Residential R1.1(h) holding and will require amendment to a suitable classification to permit the proposed development. Site plan approval will also be required and is proposed on a phased approach.

A **PUBLIC MEETING** OF COUNCIL will be held on:

WHEN: November 26, 2018

WHERE: Town of Kingsville Municipal Building (Council Chambers)

TIME: 7:00 p.m.

Your comments on these matters are important. If you have comments on this application, they may be forwarded by email, or letter mail to the attention of: **Robert Brown, Manager, Planning Services**, 2021 Division Road North, Town of Kingsville, ON N9Y 2Y9. Comments and opinions submitted on these matters, including your name and address, may become part of the public record and may be viewed by the general public and may be published in a planning report or reproduced in a Council agenda and/or minutes.

IF A PERSON or public body would otherwise have an ability to appeal the decision of Council for the Town of Kingsville to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submission to the Town of Kingsville before the zoning by-law is adopted, the person or public body is not entitled to appeal the decision.

IF A PERSON or public body does not make oral submissions at a public meeting, or make written submission to Council before the zoning by-law is adopted or the zoning by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to add the person or public body as a party.

ADDITIONAL INFORMATION relating to this matter is available for review at the Kingsville Municipal Office during regular office hours.

DATED AT THE TOWN OF KINGSVILLE on November 06, 2018. Robert Brown, H. Ba, MCIP, RPP 519-733-2305 (x 250) rbrown@kingsville.ca





2021 Division Road North Kingsville, Ontario N9Y 2Y9 (519) 733-2305 www.kingsville.ca kingsvilleworks@kingsville.ca

Date: November 16, 2018

To: Mayor and Council

Author: Robert Brown, H. Ba, MCIP, RPP

Manager, Planning Services

RE: Application for Zoning By-law Amendment ZBA/25/18 by

Jeremy Capussi

140 Main St. E, Pt. of Lot 1, Concession 1 ED, Pts. 1 & 2, RP 12R 14569

Report No.: PDS 2018-058

AIM

To provide the Mayor and Council with information regarding a proposed Zoning By-law Amendment request on lands located at 140 Main St. E owned by Jeremy Capussi.

BACKGROUND

The subject lands is a 1.45 ha (3.6 acre) located on the north side of Main St. E., east of Spruce St. N. The applicant is proposing a multiple phase development on the site. Phase 1 would be a mixed commercial residential building, three storey with the front half of the ground floor used for medical related commercial uses. The balance of the ground floor and the two upper floors would be residential (24 units). A partial fourth floor would be used for amenity space for the residential tenants. Phase 2 would be an additional multi storey (up to six) residential building with a total of 36 units. The final phase would be reserved for future low density residential but would require plans on abutting lands to be formalized prior to proceeding as the lots would need street frontage for access. Phase 1 and 2 would require a zoning amendment to permit the proposed development and set specific regulations for the site. Phase 3 would remain in the current zone. (Appendix A)

At the October 23, 2018 meeting of the Planning Advisory Committee the proposal was presented and public comment received. As a result PAC only endorsed the approval of Phase 1 with additional detail being required prior to any endorsement of future phases.

The applicant had no objection to proceeding forward to Council for approval of Phase 1 only at this time as such in order to proceed with the development the following approvals would be required:

- i) A zoning amendment (Phase 1 lands only) to:
 - a. permit a mixed use commercial residential building with up to 24 residential units, maximum four-storeys;
 - b. establish site-specific zoning regulations for the proposed uses.
- ii) Site Plan approval of each of the proposed phases.

The applicant has indicated that they would like to secure the zoning on the property prior to finalizing the site plan as there may be additional feedback from the public and Council which would lead to changes to the concept plan. Ideally, it is always preferred to approve zoning and site plan together. However, with the recent change to Town policy notice will be provided to surrounding landowners when significant site plan approvals come forward. This will allow for continued consultation and input on the final plan as part of the final approval process.

DISCUSSION

Provincial Policy Statement (PPS), 2014:

PPS, Section 1.1.3.1 states that, "Settlement areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted." Section 1.1.3.3 further outlines that, "Planning authorities shall identify appropriate locations and promote opportunities for intensification and redevelopment where this can be accommodated taking into account existing building stock or areas, including brownfield sites, and the availability of suitable existing or planned infrastructure and public service facilities required to accommodate projected needs.

Comment: Multiple unit development, such as that proposed, has been very limited for quite some time making the availability of this particular type of housing in short supply. The subject lot has been vacant for some time. Proposed higher density residential is generally common and best suited to locations along arterial roads such as Main St. E. The lot will also not require extension of services and takes advantage of existing lands within the Kingsville Settlement area.

2) County of Essex Official Plan

The County OP is very similar to that of PPS in terms of applicable policies and encouragement of intensification of development within the Settlement Area boundaries. The proposed development would be consistent with the County Official Plan.

3) Town of Kingsville Official Plan

The subject lands are designated Residential and permit all forms of residential development along with commercial development which is supportive of the residential area. The applicant has completed a Planning Justification Report. The text portion of the document is included as Appendix 'B'.

Comment: There are several examples of commercial develops along Main St. E. now including doctor, dentist and professional offices. Much of the higher density residential development in Kingsville is also located along the main corridors either Division St. or Main St. E.

At full build out (including Phase 1 and 2) the density would be 60 units per hectare which is at the low end of the 124 unit maximum per hectare considered high density residential.

Section 3.6.1 Residential – Goals item d) states "encourage the development of a greater variety of housing types.

Comment: This is one of the more important points in the assessment of this proposal as much of the development in Kingsville in the last ten years has been generally low density single detached, semi-detached and townhouse development. Although Kingsville does have a good stock of designated residential lands, the inventory of serviced, shovel ready property is limited to approximately a 4 to 5 year supply, based on the current growth rate and development of only low density residential. The addition of up to 60 residential units in a mixed commercial/residential setting expands the variety of housing and does not impact on the current supply of serviced residential lands.

Section 3.6.1 Policies item i) outlines the following, "when considering applications to amend the Zoning By-law to permit a medium or high density residential development, the Town shall have regard to the following:

 the need for the proposed development as identified through an analysis of housing supply and demand;

Comment: It is important to provide opportunities for the construction of all forms of housing. There has only recently been limited construction of condominium type development in Kingsville and there has been little to no rental housing construction in the last 20 years. This has resulted in a very low vacancy rate and generating a significant demand. The primary form of housing in Kingsville has been singles, semis and limited townhouses with the majority being individual freehold ownership. The applicant has not indicated the units will be rental or condo however regardless it provides additional housing stock variety which is very limited at present.

ii) the density and form of adjacent development;

Comment: The subject parcel is located in the heart of Kingsville along one of its two main corridors. The area between Spruce St. N and Wigle Ave has been an area of interest or area of transition for sometime as is evident by the presence of mixed uses including, multiple residential, institutional (KDHS) mixed commercial residential and standalone professional commercial. Phase One attempts to maintain setback from existing residential to the west. The future Phase Two and Three will also be developed in respect of their abutting land uses.

iii) the adequacy of, and extent of uncommitted reserve capacity in the municipal potable treatment and supply system, the municipal sanitary

sewage treatment and collection system, storm drainage and roads to service the proposed development;

Comment: A storm water management plan has been submitted for Phase One of the development however knowing the general potential for full build out and concerns express as part of the public consultation the Town will require that the plan consider storm water for the full build out as part of the final site plan approval. It is equally important that water and sanitary capacity are confirmed prior to development.

iv) the adequacy of school, park and community facilities to serve the proposed development;

Comment: There is no lack of school, parks or community facilities within walking or short driving distance of the property.

v) the adequacy of off-street parking facilities to serve the proposed development;

Comment: All required parking for the new development will be provided on-site in the form of at grade spaces in compliance with the applicable zoning requirements for the proposed mix of uses.

vi) the provision of adequate buffering measures deemed necessary to protect and provide general compatibility with the adjacent lands uses; and

Comment: The development has been laid out in such a way to either maintain separation from abutting sensitive uses or provide buffering by way of landscaping or fencing or a combination of both.

vii) accessibility in relation to the location of arterial and collector roads;

Comment: The property is located on Main Street E. which is the Town's main arterial road. A traffic study was completed in 2017 as part of the original commercial proposal which anticipated higher traffic volumes. Weekday AM peak hour resulted in 103 two-way trips for the site, weekday PM peak hour generated 232 two-trips and Saturday peak resulted in 71 two-way trips. This volume also included anticipated growth from other pending projects in the area and growth through to 2022. The authors of the study have provided a memo of revision (Appendix C) to note that with the reduced commercial component and increased residential the overall traffic volumes will actually decrease.

The study concludes that the, 'site-related traffic will have a negligible impact upon the study area intersections and that the road network will be able to adequately accommodate the increase in traffic resulting from the development proposal.' (See Appendix D)

The addition of any development along Main St. E. will add traffic to what is clearly a busy street. The development was assessed based on full build out so there will be the ability to assess a lesser impact prior to any approval of future phases. The other factor to consider is the location of the development is very supportive of walkability being centrally located between the downtown to the west and large format commercial to the east. Kingsville is a small community and very walkable.

This is something that planning policy strongly supports and encourages and I believe helps to maintain that small community feeling that is so dear to the existing residents and the principle reason for continuing to attract residents to Kingsville.

Item j) further states that all medium and high-density residential development will be subject to site plan control pursuant to the Planning Act;

Comment: A revised Phase One (Appendix E) only plan has been prepared and reviewed.

4) Comprehensive Zoning By-law

The subject property is zoned Residential Zone 1 Urban, holding (R1.1(h). The intended amendment would be to rezone Phase One to a site-specific Residential Zone 4 Urban to permit the following:

- i) One apartment building, 4 storey, maximum 24 units total);
- ii) Neighborhood Commercial which is defined as uses supportive of, compatible with and required in close proximity to residential use and may include but not be limited to a bank, clinic, day nursery, office, personal service establishment, convenience store or commercial plaza;
- iii) Revision of the required R4.1 front yard setback from 8 m (26 ft.) to 3.9 m (12 ft.);
- iv) Reduction of the required R4.1 easterly side yard setback from 4.5 m (14.5 ft.) to 2.8 m (9 ft.);
- v) Addition of site-specific provision to permit a total height of three storey, plus one additional storey for enclosed amenity space.

It is recommended that the uses permitted be refined to exclude commercial plaza and convenience store and replaced with medical clinic and accessory pharmacy which would be similar to what was permit at 200 Main St. E. to the east. The zoning will apply to Phase One only. Phase Two and Three will remain in its current zone until final development plans for those lands are determined.

5) Proposed Site Layout

The attached Phase One concept plan and elevations (Appendix E & E2) shows the proposed location of the building, parking, landscaping and access points. The applicant is seeking only approval of Phase One consistent with the Planning Advisory Committee's endorsement. Final site plan submission will be provided once the requested zoning is approved and any final comment addressed to the satisfaction of the Town and residents.

During the public consultation it was noted that the Town should consider possible road widening in this area given the proposed front yard setback of the building. In reviewing this suggestion it was discovered that the road allowance width in this area is actually about 2.4 m (8 ft.) less than the standard 20 m (66 ft.). As such it will be a requirement

of the site plan approval that the applicant convey lands along the frontage of the subject property to the Town to increase the road allowance width.

LINK TO STRATEGIC PLAN

Manage growth through sustainable planning.

FINANCIAL CONSIDERATIONS

Development on the property will increase assessment once complete. The construction itself will also generate permit fees and development charges.

CONSULTATIONS

Public Consultations

In accordance to O. Reg 545/06 of the *Planning Act*, property owners within 120m of the subject site boundaries received the Notice of Public meeting by mail. The Planning Advisory Committee notice was also posted in the Kingsville Reporter. When the applicant first proposed development on the site they held a public open house in June of 2017 at the Kingsville Arena. The development at that time was primarily commercial. The feedback related to this included:

What will the traffic impact be Height of the buildings Impact to view Shading from the buildings Service capacity Details of proposed uses Timing Lighting Type of landscaping

Since June 2017 the applicant has reviewed the plans for the site and moved toward a more residential focused development with a smaller commercial footprint limited to the front portion of the property along Main St. E. There have been additional comments and questions about the revised plan. Many of the comments are similar in nature to the June 2017 proposal but also included several questions of a more construction impact nature such as noise, dust, property damage to abutting lands etc.

The public comment received to date is attached as Appendix F.

Comment was received from the Greater Essex County District School Board regarding the proposed setbacks along the easterly lot line and the potential shadow impact on the school board lands. The Boards concern is impact on the property not as it sits today but rather what impact the proposal could have on the sale and development of the property in the future once KDHS is relocated.

Comment: A shadow cast study was completed and is attached as Appendix G. There is some additional buffering along the easterly side as the result of lands owned and used by

Hydro One. Shadow cast on the property for Phase One only impacts on the parking lot area at present. Phase Two, with the taller building would have some added impact but again it would only impact on either Migration Hall or the open space at the rear. The Future development of the school site is a consideration however, it is anticipated as higher density residential and it is assumed that Migration Hall would remain in place.

Planning Advisory Committee (PAC)

A PAC meeting was held October 23, 2018. Public comment echoed many of the same issues that have been raised with development along Main St. E. including traffic impact, effect on abutting residential properties, service capacity and storm water management.

PAC - 05 - 2018

Moved by, Gord Queen seconded by Murray McLeod that the Planning Advisory Committee endorse Phase One only of the multiple phase development moving forward to Council for consideration of the requested zoning by-law amendment on the site known as 140 Main Street East.

Agency & Administrative Consultations

In accordance with O. Reg 545/06 of the *Planning Act*, Agencies and Town Administration received the Notice of Public Meeting by email.

Agency or Administrator	Comment					
Essex Region Conservation Authority Watershed Planner	ERCA comment is attached as Appendix 'H'. The applicant has completed work on the site to address species at risk. (Lower probability of SAR)					
Town of Kingsville Management Team	 The property will require new service connections, at the applicant's expense sized appropriately to the proposed use Storm water management is required The final building design will be subject review under the Building Code Act A fire safety plan and lock box will be required for the building Information of the required service connections has been provided to the Town. The Phase One storm water management plan has been reviewed and is acceptable to the Town. A road widening across the frontage of the property will also be required at the site plan approval stage 					

RECOMMENDATION

It is recommended that Council approve zoning amendment application ZBA/25/18 to rezone a portion of the lands (Phase One) located at 140 Main St E. from Residential Zone 1 Urban – holding 'R1.1(h)' to a site-specific Residential Zone 4 Urban Exception 5 'R4.1-5' to permit:

One apartment dwelling, maximum 3 storey, maximum 24 units with a partial fourth storey amenity area;

Permit a reduced front yard setback of 3.9 m (12 ft.);

Permit a reduced easterly side yard setback of 2.8 m (9 ft.), and

adopt the implementing by-law.

Robert Brown

Robert Brown, H. Ba, MCIP, RPP Manager, Planning Services

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 123-2018

Being a By-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

WHEREAS By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

AND WHEREAS the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

AND WHEREAS there is an Official Plan in effect in the Town of Kingsville and this By-law is deemed to be in conformity with the Town of Kingsville Official Plan;

NOW THEREFORE THE COUNCIL FOR THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

1. That Subsection 6.4.1 e) RESIDENTIAL ZONE 4 URBAN (R4.1) EXCEPTIONS is amended with the addition of the following new subsection:

6.4.1.5 'RESIDENTIAL ZONE 4 URBAN EXCEPTION 5 (R4.1-5)'

a) For lands shown as R4.1-5 on Map 66 Schedule "A" of this By-law.

b) Permitted Uses

- i) One Apartment building;
- ii) Neighbourhood Commercial excluding a convenience store or commercial plaza
- iii) Medical clinic & accessory pharmacy

c) Permitted Buildings and Structures

- Those buildings and structures permitted under Section 6.4.1.5 b);
- ii) Buildings and structures accessory to the R4.1-5 permitted uses.

d) Zone Provisions

All lot and building requirements for the permitted buildings and structures shall be in accordance with Section 6.4.1 c) of this Bylaw.

Notwithstanding Section 6.4.1 c) of the by-law to the contrary the following shall apply:

- i) Front yard setback for a permitted apartment building shall be 3.9 m, minimum;
- ii) Easterly side yard setback for a permitted apartment building shall be 2.8 m, minimum;
- iii) Maximum number of dwelling units for a permitted apartment building shall be 24;

iv) Maximum height for a permitted apartment building shall be 11.5 m or three storeys whichever is less.

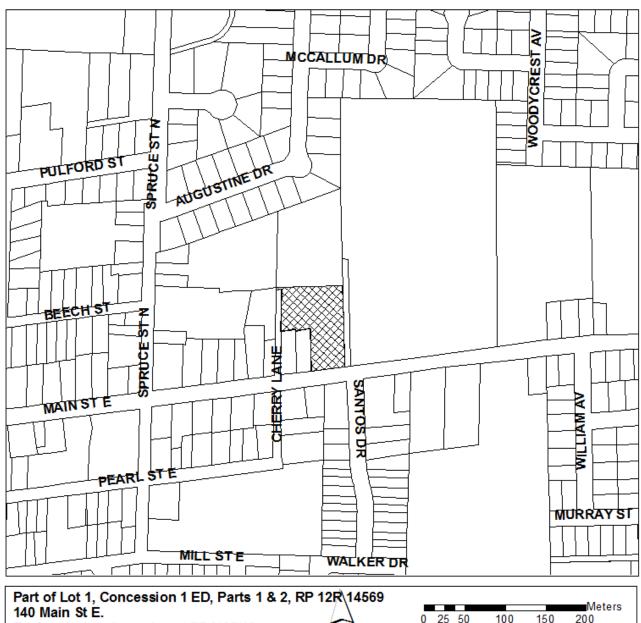
Notwithstanding item 6.4.1.5 d) iv) an additional storey is permitted for the provision of amenity space for the occupants of the apartment building and shall be limited to a total floor area of not more than 60% of the total building footprint of the first floor.

- 2. Schedule "A", Map 66 of By-law 1-2014 is hereby amended by changing the zone symbol on lands known municipally Part of Lot 1, Concession 1 ED, Parts 1 and 2, RP 12R 14569 and locally known as 140 Main Street East as shown on Schedule 'A' cross-hatched attached hereto from 'Residential Zone 1 Urban holding R1.1 (h)' to 'Residential Zone 1 Urban Exception 5 (R4.1-5)'.
- 3. This by-law shall come into force and take effect from the date of passing by Council and in accordance with Section 34 of the Planning Act.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 26th DAY OF NOVEMBER, 2018.

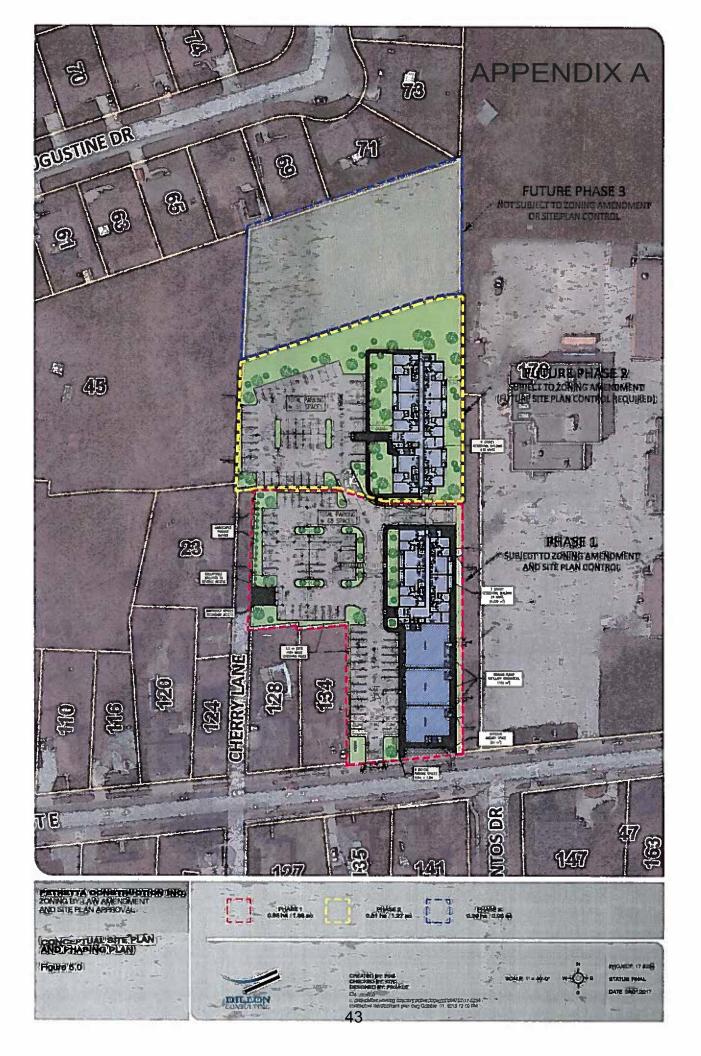
MAYOR, Nelson Santos
CLERK. Jennifer Astrologo

Schedule 'A'



0 25 50 200 100 150 Zoning By-law Amendment ZBA/25/18 N

Schedule "A", Map oo or by-iam . ___ as shown on Schedule 'A' in cross-hatch attached hereto from 1000 holding R1.1 (h)' to 'Residential Zone 4 Urban Exception 5 (R4.1-5)' Schedule "A", Map 66 of By-law 1-2014 is hereby amended by changing the zone symbol as shown on Schedule 'A' in cross-hatch attached hereto from 'Residential Zone 1 Urban -



Appendix B



PETRETTA CONSTRUCTION INC.

Zoning By-Law Amendment and Site Plan Approval

140 Main Street East, Kingsville

Planning Justification Report

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PETRETTA CONSTRUCTION INC.



1.0 INTRODUCTION

1.1 Purpose

Dillon Consulting Limited (Dillon) has been retained by Petretta Construction Inc., herein referred to as the "Applicant", to assist in obtaining the necessary planning approvals associated with the proposed residential development located at 140 Main Street East in Kingsville, Ontario (refer to *Figure 1.0 - Location Map*).

The subject site is designated accordingly in the County of Essex Official Plan, Town of Kingsville Official Plan and Zoning By-law 1-2014:

County of Essex Official Plan - Schedule A-2: Land Use

Primary Settlement Area

(Refer to Figure 2.0 – County of Essex Official Plan: Land Use Designation).

<u>Town of Kingsville Official Plan</u> – Schedule A-2: Land Use

Residential

(Refer to Figure 3.0 - Town of Kingsville Official Plan: Land Use Designation).

Town of Kingsville Zoning By-law 1-2014 - Schedule "A" - Map 66

Residential Zone 1.1 - Holding (R1.1(h))

(Refer to Figure 4.0 – Town of Kingsville Zoning By-law 1-2014: Existing Zoning Designation).

The applicant is requesting that Council approve an amendment to the Town of Kingsville Zoning By-law 1-2014 to permit the proposed residential development on the front 1.07 hectares (2.64 acres) of the subject site (Phase 1 & 2). In addition, the applicant is requesting Site Plan Control Approval for the first phase (Phase 1) of the proposed residential development. The applicant has submitted applications to this effect.

Refer to Appendix A – Planning Applications

1.2 Description of Site

The subject site is located at 140 Main Street East, east of Cherry Lane, south of Augustine Drive, and west of Kingsville District High School (refer to *Figure 1.0 - Location Map*) and is more specifically described as Part of Lot 1, Concession 1, R-Plan 14569 in the Town of Kingsville. The total site area under application is 1.46 hectares (3.61 acres), having approximately 41.1 m (135 ft) of frontage onto Main Street East. There are two existing driveway access points to the subject site, one at Main Street East and one at Cherry Lane. The subject site is currently vacant and underutilized.





1.3 Proposed Development

The applicant wishes to develop the subject site for a variety of residential housing types, including multi-unit and single detached dwellings, through a phased approach (refer to *Figure 5.0 - Conceptual Site Plan and Phasing Plan*). The first phase (Phase 1) would entail the development of a three (3) storey multi-unit residential building with ancillary commercial uses on the main floor and associated parking on the 0.56 hectares (1.38 acres) southern portion of the subject site which fronts onto Main Street East. The second phase (Phase 2) would entail the future development of a six (6) storey multi-unit residential building and associated parking on .51 hectares (1.27 acres) of the subject site, immediately to the north of Phase 1. The third phase (Phase 3) would entail the future development of a proposed right-of-way and four (4) single detached residential dwellings on 0.38 hectares (0.96 acres) at the north end of the subject site, abutting the existing single detached residential dwellings north of the subject site.

Phase 1 - 3 Storey Mixed Use Building

Phase 1 proposes the development of a three (3) storey/mixed use multi-unit residential building, consisting of 24 residential units and three (3) ground floor ancillary neighbourhood commercial units, located on the 0.56 hectares (1.38 acres) southern portion of the subject site which fronts onto Main Street East (refer to *Figure 5.0 - Conceptual Site Plan and Phasing Plan*).

The proposed three (3) storey multi-use residential building of Phase 1 will have a total gross floor area (GFA) of approximately 1,410 m² (15,187 ft²), subdivided as follows:

- First Floor:
 - o Four (4) Residential Units (2 units at 125.4 m² (1,350 ft²) and 2 units at 99.8 m² (1,075 ft²));
 - Three (3) ancillary neighbourhood commercial units totalling approximately 696.7 m² (7,500 ft²) (Uses to include Medical Clinic (approx. 232.2 m² (2,500 ft²)), Pharmacy (approx. 232.2 m² (2,500 ft²)), and Accessory Retail (approx. 232.2 m² (2,500 ft²)).
- Second Floor:
 - Ten (10) Residential Units (5 units at 125.4 m² (1,350 ft²) and 5 units at 99.8 m² (1,075 ft²));
- Third Floor:
 - o Ten (10) Residential Units (5 units at 125.4 m² (1,350 ft²) and 5 units at 99.8 m² (1,075 ft²)).

The Phase 1 development concept calls for the provision of 72 parking spaces, including a total of 4 barrier-free spaces. In addition, two loading spaces combined with a garbage enclosure space, and 4 Bicycle parking spaces are to be provided. Buffering from the residential properties to the west will be enhanced with fencing and landscaping, including tree plantings where possible.

Refer to Appendix B - Conceptual 'Phase 1' Building Elevations



Phase 2 - 6 Storey Residential Building

Phase 2 (0.51 hectares (1.27 acres)) proposes the future development of a six (6) storey multi-unit residential building consisting of approximately 36 units and associated parking immediately north of the proposed Phase 1 development. The Phase 2 proposed future development would consist of residential units with no ancillary neighbourhood commercial uses. Access for the proposed multi-unit residential building of Phase 2 is to be through reciprocal access with Phase 1. The exact gross floor area (GFA) of the proposed multi-unit residential building of Phase 2 is to be confirmed at the time of the Site Plan Control Approval for this phase.

Phase 3 – Future Single Detached Residential

Phase 3 proposes the construction of an east-west right-of-way and four (4) single detached residential units immediately to the north of Phase 2. The proposed east-west right-of-way is envisioned to connect the subject site with the future redevelopment of the Kingsville District High School lands to the east, and existing vacant lands to the west, while providing a future secondary east-west connection. The lot size and orientation of the four (4) single-detached residential units proposed in Phase 3 are to complement the existing single detached residential units to the north of the subject site, enabling for a transition from the abutting low density residential uses.

Planning Applications

A Zoning By-Law Amendment application is required to permit the proposed multi-unit residential developments of Phase 1 and Phase 2. The applicant is requesting an amendment from the existing 'Residential Zone 1.1 - Holding (R1.1(h))' to a site specific 'Residential Zone 4 (R4.1)' category for the lands pertaining to Phase 1 and Phase 2 to permit the proposed residential development.

The proposed single detached dwellings in Phase 3 do not currently require a Zoning By-law Amendment but will require a Removal of Holding once the applicant is ready to proceed with the development of this phase.

Site Plan Control Approval is required to ensure that the proposed development complies with all development standards established by the Municipality. The applicant is requesting Site Plan Control Approval for only the first phase (Phase 1) at this time, to permit the development of a three (3) storey multi-unit residential development. Additional Site Plan Control Approval will be required for Phase 2 at the time of development.

The proposed Zoning By-Law Amendment will allow for the infill redevelopment of currently underutilized vacant lands along the arterial road of Main Street East, while providing a mix of housing options in an established neighbourhood.

Refer to Figure 5.0 - Conceptual Site Plan and Phasing Plan



EXISTING LAND USE 2.0

Subject Site 2.1

The physical attributes of the site are as follows:

- A total site area of 1.46 ha (3.61 acres);
- An irregularly-shaped parcel with frontage on Main Street East;
- · Vacant property which is generally flat; and
- No structures or buildings on the site.

Surrounding Land Use 2.2

The surrounding land uses are varied as shown in Figure 6.0 - Surrounding Land Uses and are described as follows:

North (to McCallum Street)

- Single Detached Residential Dwellings (R1.1)
- Town-Home Residential Dwellings (R2.1 and R3.1)

East (to Jasperson Drive)

- Migration Hall (EG)
- Kingsville District High School (EG)
- Vacant Lands (R1.1(h))
- Single Detached Residential Dwellings (R1.1)
- Chartwell Kingsville Retirement Residence (R3.1)
- Town-Home Residential Dwellings (R2.1)
- Multi-Unit Residential Building (R3.1)
- Commercial Uses (C4) including, but not limited to:
 - o Zehrs Great Food
 - o Subway
 - o Spartan Nutrition
 - o TD Canada Trust

South (to Mill Street East)

- Southshore Dental Office (R1.1)
- Single Detached Residential Dwellings (R1.1)
- Multi-Unit Residential Dwelling (R3.1)
- Town-Home Residential Dwellings (R2.1)
- St. John De Brebeuf Elementary School (EG)

PETRETTA CONSTRUCTION INC.

Zoning By-law Amendment and Site Plan Approval August 2018 - 17-5234 49



Vacant Lands (R1.1(h))

West (to Watermill Street)

- Single Detached Residential Dwellings (R1.1)
- First Lutheran Church (EG)
- St. John DeBrebeuf Chruch (I)
- Multi-Unit Residential Dwellings (R3.1)
- Downtown Kingsville Commercial Corridor (C2, C3, and C4) including, but not limited to:
 - Annabelle's Tea Room & Restaurant
 - **Erie Shores Family Dentistry**
 - o McGregor Sims Law Office
 - o Super 7 Food Store
 - o LifeLabs Medical Laboratory Services
 - o Loop, Schauer, Chapman & Associates LLP
 - o Domino's Pizza
 - o Little Caesars Pizza
 - o A&A Flooring
 - o Guardian Pharmacy
 - **Pinstripes Ladies Fashions**

PLANNING EVALUATION

To determine the feasibility and appropriateness of the proposed development, a comprehensive evaluation of the potential planning issues and impacts has been undertaken. The scope and level of detail of the planning evaluation has been based on:

- Provincial Policy Statement 2014;
- Official Plan policies and criteria;
- · Zoning By-Law regulations;

3.0

- Public Information Centre (PIC) comments;
- · Comments received by Town of Kingsville;
- · Background Studies; and
- Visual inspections of the site and surrounding lands.

Recognizing that overlaps exist between the various policies and criteria in the Official Plan, the approach used attempts to consolidate the relevant policies and criteria, and identify and evaluate the potential planning and land use related issues associated with the proposed residential development.

3.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) promotes the development of 'Strong Healthy Communities' through the redevelopment of lands for an appropriate mix of uses, which includes residential uses, as described in the following section of this report.

As per section 4.0 of the PPS, the proposed uses "shall be consistent with" the PPS and as a broad and general document, the applicants must, through analysis of the policies, determine how the proposed use is appropriate and advances the provinces' interests. The PPS shall be read in its entirety and all relevant policies are to be applied to each situation. Our analysis suggests that the proposed development is consistent with the PPS in the following ways, they are:

1.0 - Building Strong, Healthy Communities

- 1.1 Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use
 Patterns
 - (a) The proposed development encourages the use of cost effective and efficient development patterns to utilize the existing lands, and sustains the financial well-being of the municipality over the long term by creating opportunities for increased residential municipal taxes;
 - (b) Currently there are limited amounts of multi-unit developments within the area. The proposed rental/condo dwelling units will expand the range of housing types along the Main Street East corridor to meet current demand and long-term needs of both the immediate area and the Municipality as a whole;



- (c) The proposed land use pattern ensures that no adverse environmental or public safety concerns will result;
- (e) The proposed development promotes a cost-effective development pattern by minimizing land consumption and servicing costs; and
- (f) The proposed development will improve accessibility for persons with disabilities and older persons by identifying, preventing and removing land use barriers which restrict their full participation in society, through the development of accessible housing options within a safe and community-oriented neighbourhood. The development is located within walking proximity to the Town's central commercial area, various community spaces, parks and schools, which provides opportunities for residents of all ability to easily access the many amenities of the Municipality. Connections to the existing sidewalk along Main Street East will be provided to further promote accessibility and walkability.
- 1.1.2 The proposal utilizes lands within the Town of Kingsville that have been identified for development and growth. The lands are within the settlement area, and promote intensification and redevelopment of currently underutilized vacant lands.

1.1.3 Settlement Areas

- 1.1.3.1 The proposed development promotes growth and vitality within a Settlement Area;
- 1.1.3.2
 - (a) The proposed development promotes a dense land use pattern which efficiently uses land and resources, and supports active transportation; and
 - (b) The proposal provides for a range of uses and opportunity for intensification and redevelopment of lands.
- 1.1.3.3 The subject site presents an appropriate location for intensification and redevelopment due to availability of suitable existing infrastructure and public service facilities to accommodate projected needs;
- 1.1.3.4 The proposed development facilitates intensification and redevelopment while avoiding risks to public health and safety; and
- 1.1.3.6 The proposed residential development allows for new development to take place in designated growth areas adjacent to the existing built-up area in a compact form, with a mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities.

1.3 Employment

1.3.1

- (a) The proposed development provides an appropriate mix and range of employment uses to meet the long-term needs of the Municipality;
- (b) The proposal provides opportunity for a diversified economic base which supports a wide range of economic activities and ancillary uses; and



(c) The proposal encourages compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities.

1.4 Housing

1.4.1 The proposed development provides for an appropriate range and mix of housing types and densities required to meet projected requirements of current and future residents of the regional market area.

1.4.3

- (b) The proposal is a form of residential intensification and redevelopment that meets the social, health and wellbeing requirements of current and future residents, including those with special needs;
- (c) The proposal is located in an area where appropriate levels of infrastructure and public services are available; and
- (d) The proposed residential development promotes increased densities which efficiently use land, resources, infrastructure, and public service facilities and supports the use of active transportation in the area.

1.6.6 Sewage, Water and Stormwater

1.6.6.1

- (a) The proposed development promotes the efficient use and optimization of existing municipal sewage and water services. A review of the existing services in the vicinity indicates that this development can be serviced adequately;
- (b) The proposal ensures that sewage and water services provided comply with all regulatory requirements and protect human health and the natural environment; and
- (d) Sewage and water services for the proposed development have been integrated with land use considerations as part of the planning process for this proposal.
- 1.6.6.7 A Stormwater Management Report is currently being prepared for the proposed development which will ensure that the development promotes stormwater management best practices, including attenuation and low impact development.

1.6.7 Transportation Systems

- 1.6.7.4 The proposed development promotes a dense land use pattern with on-site neighbourhood commercial uses which minimizes the length and number of vehicle trips, and encourages the use of active transportation methods; and
- 1.6.7.5 The proposal has integrated the consideration of transportation methods available within the proposed land uses.



1.7 Long-Term Economic Prosperity

1.7.1

- (a) The proposed development promotes opportunities for economic development and investment within the municipality;
- (b) The proposal optimizes the use of vacant lands, infrastructure, and public service facilities available within the subject site; and
- (c) The proposed development enhances the vitality of the Kingsville downtown area and Main Street East corridor by introducing a mix of additional residential units and neighbourhood commercial uses.

1.8 Energy Conservation, Air Quality and Climate Change

1.8.1

- (a) The proposed development promotes compact form and support for the Main Street East corridor;
- (b) The proposal enables the use of active transportation for access to the subject site; and
- (e) The proposal improves the mix of housing and ancillary commercial uses within the Main Street East corridor to shorten commute journeys and decrease transportation congestion.

Refer to Appendix C - Provincial Policy Statement - Policies.

3.2 County of Essex Official Plan

The subject site is currently designated 'Primary Settlement Area' in the County of Essex Official Plan, which provides for a broad range of land uses. The Official Plan policies state that settlement areas are directed to be the focus of growth and development in lower tier municipalities.

Our analysis suggests that the proposed development is consistent with the County of Essex Official Plan in the following ways, they are:

1.5 Goals for a Healthy County

- (c) The proposed development is located within a Primary Settlement Area, and promotes intensification and investment to the surrounding areas.
- (d) The proposal assists to encourage reduced greenhouse gas emissions and energy consumption in the County by promoting built forms and transportation systems;
- (e) The proposed residential development creates a more compact, pedestrian-oriented development within a fully serviced urban settlement area; and
- (f) The proposed development provides a broad range of housing choices and is located in close proximity to existing employment and leisure opportunities for a growing and aging population;

2.10 Sewage and Water Systems

(a) The proposed development will be on full municipal sewage and water services;



2.13 Energy, Air Quality & Green Infrastructure

- (a) The proposed development will include sidewalks and connections to the neighbouring streets which will provide walking and cycling opportunities for the residents;
- (b) The increased density of the proposal as well as the addition of ancillary commercial uses will assist to reduce the distance and number of vehicle trips by the residents of the area; and
- (d) The proposal incorporates compact form, and efficiently uses land through a mixture of housing types.

3.2 Settlement Areas

3.2.2 Goals

- (a) The proposal promotes private re-investment in the Primary Settlement Area, through the development of new housing opportunities;
- (b) The proposed development supports and promotes healthy, diverse and vibrant settlement areas within the municipality;
- (c) It provides a broad range of housing types within the Primary Settlement Area that is compact, pedestrian oriented and available for residents from all cultural, social and economic backgrounds; and
- (e) The development is efficient in its use of land, resources, water and sanitary sewage treatment facilities, other infrastructure and public service facilities including schools; and
- (i) The proposal promotes residential intensification within the Primary Settlement Area.

3.2.4 Primary Settlement Areas

3.2.4.1

- (a) The proposed development promotes growth and public/private investment in the Town of Kingsville;
- (b) The development will have a healthy mixture of housing types and densities on full municipal sewage, water and stormwater management services; and
- (j) The proposed development utilizes a cost-effective development pattern which minimizes land consumption and reduces servicing costs.

3.2.6 General Settlement Area Policies

(a) The proposal is a residential intensification project within Primary Settlement Areas, which is supported by the County of Essex.

3.2.7 Intensification & Redevelopment

The proposed development is an efficient use of land and municipal infrastructure which will help to improve the vitality of the surrounding urban area and bring economic and social benefits to the community. The development promotes residential intensification and redevelopment by offering a range of housing choices and ancillary neighbourhood commercial uses, through the optimization and efficient use of land and existing infrastructure within the area.

55



The proposal meets the intent of the County's requirement that 15 percent of all new residential development within each local municipality occur by way of residential intensification and redevelopment.

Refer to Appendix D – County of Essex Official Plan: Policies and Figure 2.0 – County of Essex Official Plan: Land Use Designations

3.3 Town of Kingsville Official Plan

The subject site is currently designated 'Residential' in the Town of Kingsville Official Plan, which permits for a broad range of residential uses, along with ancillary uses which serve the needs of a residential community. Based on our analysis, we believe that the proposed residential development is consistent with the following policies found in the Official Plan, they are:

Section 2 – General Development Policies

2.1 Land Use Planning Principles

- (a) The proposed development promotes compact development within a designated and fully serviced urban settlement area;
- (b) The proposal provides a broad range of housing and employment opportunities for a growing and aging population;
- (c) The proposed development promotes intensification and redevelopment within a built-up area that is supported by appropriate levels of infrastructure and public service facilities. Currently, much of the higher density residential developments are located along the Main Street East corridor and this development will meet the intensification and promote the further development of the corridor.
- (e) The proposed development promotes an improved balance between residential and employment growth by encouraging a mix of multi-unit residential and ancillary commercial uses on one site within the downtown core; and
- (f) The proposal enhances the downtown area of Kingsville by providing a broad range of commercial services and housing and employment opportunities in higher densities within a mixed use environment.

2.8 Site Suitability

- (a) A geotechnical report will be completed under separate cover to ensure that soil and drainage conditions are suitable to permit the proposed multi-unit residential development;
- (b) A stormwater management and functional servicing report will be completed, under separate cover, to ensure that the existing municipal services and utilities can adequately accommodate the proposed development;
- (c) The current road system is adequate to accommodate the projected increases in traffic, as demonstrated by the corresponding Traffic Impact Assessment (provided under separate cover);
- (d) The subject site fronts on a public road which is of a reasonable standard of construction; and



Section 3 - Land Use Plan

3.6 Residential

Goals

- (b) The proposed development provides a variety of housing types and proposed density of 44 units per hectare, which falls below the maximum density of 50 units per hectare;
- (c) The proposed development encourages infilling of the existing development pattern of the Town and of Main Street East:
- (d) The proposal encourages the development of a greater variety of housing types; and
- (g) The proposal provides an ideal opportunity to increase the housing supply through residential intensification;

Policies

- (h) The proposed residential development consists of multi-unit and single detached units, distributed over three phases. There are very few condominium type developments currently available in the area which has resulted in a very low vacancy rate. The overall density of the proposed residential development is approximately 44 units per hectare, which falls below the maximum density of 50 units per hectare of the 'Medium Density Residential' criteria;
- (i) The proposed development is appropriate as medium density residential uses:
 - The proposed multi-unit residential dwellings are compatible with existing single detached and multi-unit residential uses and institutional uses in close or adjacent parcels of land;
 - ii) The subject site is located along Main Street East, an arterial road, east of local Cherry Lane. The Traffic Impact Study, completed under separate cover, indicates that the surrounding roads have sufficient capacity to handle the expected minimal increases in traffic;
 - iii) The proposed development will be on municipal services, including water and sewage, and will meet the requirements of the Ministry of the Environment;
 - iv) The proposal provides adequate off-street parking facilities to serve the proposed multi-unit residential development;
 - v) Adequate landscaping, buffering and building setbacks have been provided to adequately protect the privacy of surrounding residential properties; and
 - vii) The proposal conforms with the Provincial Policy Statement on Housing, as discussed in Section 3.1 of this report;
- (j) The proposed multi-unit apartment building will be subject to site plan control pursuant to Section 41 of the Planning Act, R.S.O. 1990;



Section 8.15 – Site Plan Control

The proposed multi-unit residential dwellings of Phase 1 and Phase 2 will require Site Plan Control Approval. Application for Site Plan Control Approval for Phase 1 is included as part of this submission package, while applications for Phase 2 will be submitted at the time of development.

Refer to Appendix E - Kingsville Official Plan Policies, Figure 3.0 - Town of Kingsville Official Plan: Land **Use Designations**

Town of Kingsville Zoning By-Law 1-2014 3.4

To permit the proposed development of multi-unit residential dwellings, a Zoning By-law Amendment is required for the lands comprising Phase 1 and Phase 2 from the existing Residential Zone 1 - Holding (R1.1(h)) to a site specific Residential Zone 4 (R4.1) zoning category, similar to 'Residential Zone 4 Urban Exception 2 (R4.1-2). The single detached residential units proposed in Phase 3 are permitted under the current Residential Zone 1 - Holding (R1.1(h)) zoning category. As such, a Zoning By-Law Amendment is not required for the lands pertaining to Phase 3 at this time. A Zoning By-Law Amendment for Removal of Holding will be required for the Phase 3 lands at the time of development.

The proposed medium and low density residential uses are complimentary to the other uses currently permitted in the surrounding area. The applicant plans to utilize the site for a variety of residential buildings, including a 24-unit, three-storey mixed-use building, a six-storey residential building with approximately 36 units, and 4 single detached dwelling units along a proposed new right-of-way.

To permit the development of multi-unit residential dwellings in Phase 1 and Phase 2, the following site specific provisions are proposed for the applicable lands, including;

- **Permitted Uses:**
 - o Those uses permitted under Section 6.4.1; and
 - Neighbourhood Commercial Uses.
- **Permitted Buildings and Structures:**
 - o Those Buildings and Structures permitted under Section 6.4.1; and
 - o Apartment Buildings.
- **Zone Regulations:**
 - Maximum Building Height 22 meters (Multi Unit Buildings only);
 - o Front Yard Depth 3.9 meters (Multi Unit Buildings only); and
 - Interior Side Yard Width 2.8 meters (Multi Unit Buildings only).

The Phase 1 building footprint has a proposed side yard setback of approximately 2.8 metres (9.1 feet), and a front yard setback of approximately 3.9 meters (13 feet). The proposed side yard setback will provide a buffer from the secondary school to the east, including landscaping and fencing, and will also



permit the development to maximize parking and access to the site. The proposed front yard setback will provide a buffer from the right-of-way and align with the existing setbacks of residential properties to the west.

The proposed multi-unit buildings are oriented on the eastern side of the subject property, which will act as physical buffers with the existing institutional use to the east. This orientation will also minimize the "overlook" of balconies from the proposed multi-unit buildings on the existing residential uses to the west, while enabling the associated parking to provide an additional buffer. The physical buffering between proposed parking areas and adjacent residential properties will be enhanced with fencing and landscaping, including tree plantings where possible.

Off-street parking is to be provided well in excess of the requirements set forth in the Town of Kingsville Zoning By-Law 1-2014, including provisions for accessible spaces. The total proposed units for the conceptual multi-unit residential development of Phase 1 is estimated at 24 units, requiring 30 spaces (calculated at 1.25 spaces per unit – Dwelling, Apartment Building). The proposed ancillary neighbourhood commercial uses of Phase 1 require approximately 27 spaces, based on proposed uses of Medical Office, Pharmacy, and Accessory Retail (calculated at 6 spaces per practitioner - Medical Office, and 1 space per 22.5m² (242 ft²) GFA - Pharmacy / Retail Store). While the exact development layout of Phase 2 and Phase 3 will be determined at time of development, the conceptual site plan demonstrates that adequate off-street parking can be accommodated on site.

The suggested site specific Residential Zone 4 (R4.1) rezoning is the most appropriate for the proposed residential development as it allows for the range of residential uses and densities proposed within an area prime for residential intensification and infill. Furthermore, maintaining the existing Residential Zone 1 - Holding (R1.1(h)) designation on the Phase 3 lands of the development will enable the transition from the existing low-density, single detached dwellings to the north of the subject site, to the proposed medium density, multi-unit residential in Phases 1 and 2.

Refer to Appendix F - Town of Kingsville Zoning By-law Policies and Figure 4.0 - Town of Kingsville Zoning By-law 1-2014: Existing Zoning Designation

Public Information Centre (PIC) *3.* 5

In addition to the requirements of the Planning Act, a Public Information Centre (PIC) was organized on behalf of the applicant on Wednesday June 28, 2017. It invited residents within 300 m of the proposed development to review conceptual plans, provide initial comment, and obtain stakeholder input on the planning and design process. The event was attended by 29 residents who expressed comments and concerns, formally recorded by Dillon Consulting Limited and conveyed to the Town of Kingsville.

The initial development proposal presented to the public at this PIC meeting was received with mixed response. Residents expressed support for the proposed uses, while also providing questions pertaining



to certain elements of the development, such as potential traffic impacts, and the proposed character of future (Phase 2) site development.

Since the PIC meeting, the applicant has made significant modifications to the development proposal in consideration of the concerns raised by surrounding residents. As discussed in previous sections of this report, the applicant now plans to develop the site for multi-unit residential dwellings, with limited ancillary neighbourhood commercial uses at a scale significantly reduced from the original proposal. Low density development is proposed in Phase 3 to further enhance compatibility with surrounding uses. Furthermore, a corresponding Traffic Impact Study was completed to demonstrate that no adverse traffic impacts will result from the proposed development.

Refer to Appendix G - Public Information Centre - Meeting Summary Report

Additional Studies

3.6

Traffic Impact Study

Dillon Consulting Limited was retained to conduct a Traffic Impact Study (TIS) for the proposed residential development to fulfill the requirements outlined by the Town of Kingsville. The study was prepared in accordance with the Town of Kingsville TIS Guidelines and the particulars identified by the Town of Kingsville Public Works Department.

The study concludes that no adverse impact will occur to the flow of traffic along Main Street East as a result of the proposed multi-unit residential development. The study also demonstrates that under future conditions, site traffic volumes will continue to operate within capacity at right-of-way intersections without the need for additional lanes or signal timing adjustments.

For full details and assessment, refer to Traffic Impact Study, provided under separate cover as part of this submission.



4.0 CONCLUSIONS

Based on an extensive review of the technical planning and policy related issues, the proposed residential development is appropriate for the site and consistent with good planning principles. We recommend that the Zoning By-Law Amendment and Site Plan Control Approval applications, as submitted, be approved for the following reasons:

- 1. The proposed development is "consistent" with the Provincial Policy Statement for the reasons identified in Section 3.1 of this report.
- 2. The proposed development is "consistent" with the diverse residential uses permitted under the Settlement Area designation of the County of Essex Official Plan policies.
- 3. The proposed development is "consistent" with the intent of the Residential policies of the Town of Kingsville Official Plan.
- 4. Phase 1 and Phase 2 of the proposed residential development will require a site-specific Zoning By-law Amendment to a Residential Zone 4 (R4.1) category to permit the proposed multi-unit residential dwellings and ancillary commercial uses. It has been shown that the proposed zoning amendment is consistent with the intent of the Town of Kingsville Zoning By-law 1-2014. In particular, it has been shown that:
 - Full municipal services and emergency services are available;
 - Off-street parking is provided in excess of the minimum requirements, including provisions for accessible spaces;
 - Site access is available without compromising the integrity of the local road network; and
 - The proposed development is compatible with the surrounding land uses (land use, scale, massing, landscaping, etc.).
- 5. The Background Studies provide the technical rationale for the approval of the Zoning By-law Amendment.
- 6. The development proposal is feasible for the following reasons:
 - The proposal provides an ideal opportunity to increase the housing supply through residential infill and intensification. The proposed development provides a much needed increase in condo/rental style units to the currently deficient unit housing stock;
 - The provision of a mix and range of housing is in accordance with the Provincial Policy Statement policies on Housing;
 - The proposed development will consist of single detached and apartment style units that will
 not exceed the maximum density thresholds, however a site specific requirement is needed
 to address the proposed increase in height, and reductions to front and rear yard setbacks;



- Full municipal services can be provided to the site including:
 - Sanitary & Storm Sewers;
 - Water;
 - Hydro; and
 - Gas
- Adequate off-street parking is provided, including provisions for accessible spaces, as set forth in the Town of Kingsville Zoning By-Law 1-2014;
- The applicant is providing 4 bicycle parking spaces to encourage multi-modal transportation for access to the proposed residential development;
- Traffic distribution is not of concern, as indicated in the Traffic Impact Study, prepared by Dillon Consulting, under separate cover, given the low volume of traffic projected to be generated by the development;
- The proposed use is compatible with the surrounding area in terms of scale, massing, height, siting, orientation, setbacks, parking and landscaped areas;
- The concerns of surrounding residents and business owners have been given careful consideration and addressed;
- The proposal improves the mix of housing and ancillary commercial uses within the Main Street East corridor to shorten commute journeys and decrease transportation congestion;
- The proposal encourages compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities;
- Appropriate landscaping and fencing of at least 5 feet (1.5m) has been proposed within the concept plan as a natural buffer to adjacent sensitive uses (low density residential); and
- An application for Site Plan Control Approval has been submitted for Phase 1 as part of the Planning Approval process.
- 7. The proposed ancillary neighbourhood commercial uses will expand the availability of medical service amenities and other similar personal service uses in the community so that the needs of local residents can be satisfied. The proposed development should be considered a necessary infrastructure in the community as there are limited residential options of similar variety in the town to service the local population.

Karl Tanner, MA MCIP RPP

APPENDIX C

MEMO



TO: Robert Brown, H. Ba., MCIP, RPP - Manager of Planning Services

Town of Kingsville

FROM: Mike Walters, P.Eng. DATE: October 23, 2018

SUBJECT: 140 Main Street East, Town of Kingsville

Review of Revised Development Concept on Site Trips

OUR FILE: 17-5234

1.0 Introduction

In May 2017, Dillon prepared a traffic impact study (TIS) in support of Official Plan and Zoning By-law Amendment applications for a proposed retail/commercial development located at 140 Main Street East in the Town of Kingsville. That study found that the proposed retail/commercial development would have a negligible impact on operations at intersections within the immediate vicinity of the site and that the existing road network will be able to adequately accommodate the increase in traffic resulting from the development proposal.

The development concept assessed as part of the May 2017 TIS consisted of two phases. The first phase included two buildings containing a total of 1,440 m² (15,500 ft²) of space. The first building was envisioned to include:

- 3,000 ft² Event Centre (meeting hall/business space intended for private functions or meetings);
- 2,500 ft² Pharmacy;
- 2,500 ft² Walk-in Clinic; and
- 2,000 ft² Restaurant.

The second building was envisioned to include 5,500 ft² of event centre space.

Office space was assumed for Phase 2 of the development, which was envisioned for an area of approximately 2.1 acres.

While the Phase 2 plans have been put on hold for the time being, the client is seeking to modify the Phase 1 plans to eliminate the restaurant and event centre space, and replace it with 2,500 ft² of professional office space and 24 residential units.

This memorandum has been prepared to give Town staff an indication of the difference in site trips that could be expected as result of this change in land use for the Phase 1 component of the development.

2.0 Previous TIS Trip Generation Estimates

Table 1 summarizes the expected number of trips that were forecast for the site in the May 2017 TIS report.

Table 1: Previous Site Trip Generation

Space	Land Use	ITE Code	Weekday AM peak hour			Weekday PM peak hour			Saturday peak hour		
			In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
2,500 ft ²	Pharmacy w/o Drive Thru	880	5	2	7	10	11	21	13	14	27
2,000 ft ²	High Turnover (Sit-Down) Restaurant	932	12	10	22	12	8	20	15	13	28
2,500 ft ²	Medical Clinic ¹	720	5	1	6	3	8	11	5	4	9
8,500 ft ²	Private Club ²	710	24	3	27	15	73	88	2	2	4
Internal capture (Clinic/Pharmacy trips)			-2	0	-2	-1	-3	-4	-2	-2	-4
Phase 2	Office	710	38	5	43	16	80	96	4	3	7
	Total		82	21	103	55	177	232	37	34	71

Notes:

1. 'Medical Office' ITE code used

2. 'Office' ITE code used

The total number of site trips envisioned for the site was 103 in the weekday AM peak hour, 232 in the weekday PM peak hour and 71 in a Saturday mid-day peak hour. A number of those site trips were related to Phase 2 of the development. Extracting the Phase 2 trips out, leaves 60 weekday AM peak hour trips, 136 weekday PM peak hour trips and 64 Saturday mid-day peak hour trips for Phase 1.

3.0 Revised Phase 1 Site Trips

In the revised concept for Phase 1, the following uses (and sizes) are proposed:

- 2,500 ft² Pharmacy;
- 2,500 ft² Walk-in Clinic;
- 2,500 ft² Office Space; and
- 24 residential units.

Table 2 summarizes the trips that can be expected for Phase 1 based on the revised development concept.

Table 2: Revised Phase 1 Site Trip Generation

Space	Land Use	ITE Code	Weekday AM peak hour			Weekday PM peak hour			Saturday peak hour		
			In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
2,500 ft ² Pharmacy w/o Drive Thru		880	5	2	7	10	11	21	13	14	27
2,500 ft ²	Medical Clinic ¹	720	5	1	6	3	8	11	5	4	9
2,500 ft ²	Office Space ²	712	4	1	5	2	4	6	1	1	2
Internal capture (Clinic/Pharmacy trips)			-2	0	-2	-1	-3	-4	-2	-2	-4
24 units	Mid-rise residential units	221	2	6	8	7	4	11	8	9	17
	Total		14	10	24	21	24	45	25	26	51

Notes:

- 1. 'Medical Office' ITE code used
- 2. 'Small Office Building' ITE code used

Phase 1 is now anticipated to generate 24 weekday AM peak hour trips, 45 weekday PM peak hour trips and 51 Saturday mid-day peak hour trips. All of these site trip estimates for Phase 1 are less than the

trips assumed for Phase 1 under the previous development concept. Therefore, it can be expected that the traffic impact stemming from the revised development concept for Phase 1 will be less than that concluded in the May 2017 traffic impact study report.

4.0 Summary

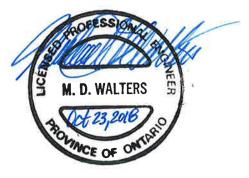
In May 2017, Dillon prepared a traffic impact study (TIS) in support of Official Plan and Zoning By-law Amendment applications for a proposed retail/commercial development located at 140 Main Street East in the Town of Kingsville. That study found that the proposed retail/commercial development would have a negligible impact on operations at intersections within the immediate vicinity of the site and that the existing road network will be able to adequately accommodate the increase in traffic resulting from the development proposal.

Phase 1 of the development concept has been revised to eliminate the restaurant and event centre space, and replace it with professional office space and 24 residential units.

Under the previous development concept, Phase 1 was forecast to generate 60 weekday AM peak hour trips, 136 weekday PM peak hour trips and 64 Saturday mid-day peak hour trips. The revised development concept is expected to generate 24 weekday AM peak hour trips, 45 weekday PM peak hour trips and 51 Saturday mid-day peak hour trips in Phase 1. During each peak hour (weekday AM, weekday PM and Saturday mid-day), the number of site trips is expected to less than that previously forecasted. As a result, the traffic impact from the revised Phase 1 concept of the development proposal is anticipated to be less than that found in the May 2017 traffic impact study report.

Yours sincerely,

DILLON CONSULTING LIMITED



Mike Walters, P.Eng. Transportation Engineer

6.0

Summary and Conclusions

- Dillon has been retained by the client to carry out a traffic impact study in support of a proposed retail/commercial development on a 3.6 acre Greenfield area of land located at 140 Main Street East in Kingsville, Ontario.
- 2. The development is envisioned to be constructed in 2 phases. Phase 1 involves the development of the 1.5 acre southern portion of the site into a commercial retail plaza consisting of a single multi-use building with a GFA of approximately 10,000 ft² and a second single-use building with a GFA of approximately 5,500 ft². Building 1 will be subdivided into an event centre, pharmacy, walk-in clinic and restaurant. Building 2 will have a proposed use similar to an event centre. Phase 2 of the development proposal, which will be on the 2.1 acre northern portion of the site, has been assumed to be office space.
- The site proposes a parking supply of 73 spaces (including 6 barrier-free spaces) and two loading spaces across the two phases. Vehicle access to the site will be via a full-movement driveway on the north side of Main Street East between Cherry Lane and Santos Drive.
- Existing peak period traffic volumes were surveyed by Dillon at the study area intersections on Saturday, March 4, 2017 from 11:00 AM to 3:00 PM and again on Tuesday, March 7, 2017 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.
- Traffic volumes associated with the development proposal at 342 Main Street East, which involves
 the construction of 95 residential apartment dwelling units and 13,489 ft² of retail and office, were
 included in the future background volumes.
- A compounded growth rate of 2% per annum over a period of 5 years to 2022 was applied to the through volumes along Main Street East.
- The development proposal is envisioned to generate approximately 103, 232 and 71 two-way trips during the weekday morning, weekday afternoon and Saturday peak hours, respectively.
- Based upon the minimum standards in Zoning By-law 1-2014, the site is required to provide a
 minimum of 64 vehicle, 3 bicycle and 2 loading spaces. The development proposal shows a supply
 of 73 vehicle, 3 bicycle and 2 loading spaces for the site across the two construction phases.
- The capacity analysis results demonstrate that site-related traffic will have a negligible impact upon the study area intersections and that the road network will be able to adequately accommodate the increase in traffic resulting from the development proposal.

PETRETTA CONSTRUCTION INC.

140 Main Street East, Kingsville, ON - Traffic Impact Study Report May 2017 – 17-5234



Site Traffic Volumes 3.3

3.3.1 Trip Generation

The Institute of Transportation Engineers (ITE) document Trip Generation Manual, 9th Edition was used to estimate the number of site trips that will be generated by the site. Table 1 summarizes the calculated site trip generation.

Table 1: Site Trip Generation

Space	Land Use	ITE Code	Weekday AM peak hour			Weekday PM peak hour			Saturday peak hour		
			In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
CRU 2	Pharmacy w/o Drive Thru	880	5	2	7	10	11	21	13	14	27
CRU 4	High Turnover (Sit-Down) Restaurant	932	12	10	22	12	8	20	15	13	28
CRU 3	Medical Clinic ¹	720	5	1	6	3	8	11	5	4	9
CRU 1+ Building 2	Private Club ²	710	24	3	27	15	73	88	2	2	4
Internal capture (Shopping trips)		-2	0	-2	-1	-3	-4	-2	-2	-4	
Phase 2	Office	710	38	5	43	16	80	96	4	3	7
	Total		82	21	103	55	177	232	37	34	71

- 1. 'Medical Office' ITE code used
- 2. 'Office' ITE code used

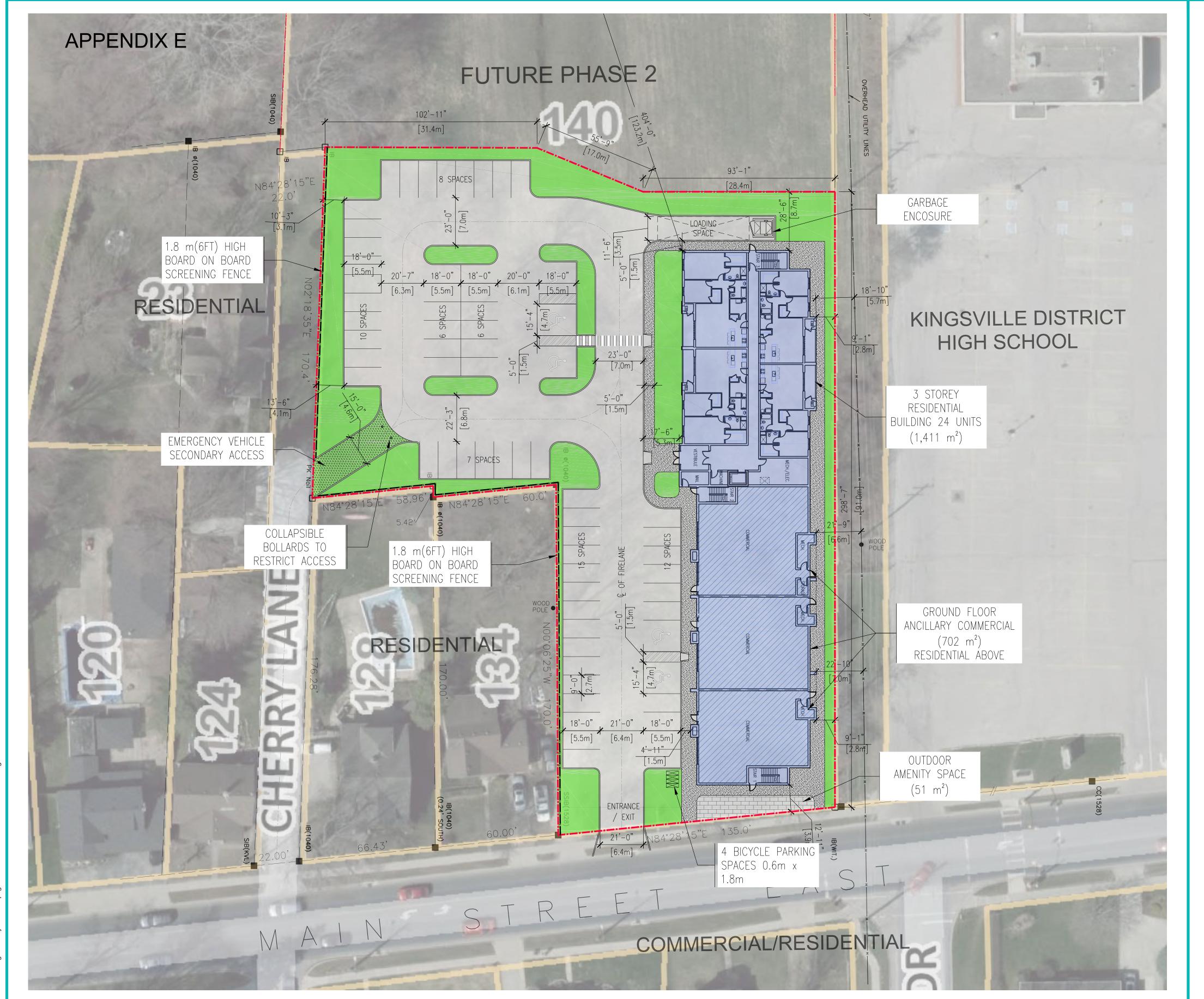
The development is envisioned to generate approximately 103, 232 and 71 two-way trips during the weekday morning, weekday afternoon and Saturday peak hours, respectively.

The proposed pharmacy will be a smaller facility with a GFA of only 2,500 ft² and is anticipated to be a local facility that will largely serve as an ancillary use to the medical clinic, enabling patients at the clinic to fill prescriptions and obtain medication after their appointment. As such, the majority of trips to the pharmacy are expected to be made by customers who are already on site and would therefore not represent additional driveway traffic. To reflect this internal trip-making, a 40% reduction was made to pharmacy trips, which is considered to be conservatively low given the anticipated ancillary nature of the pharmacy.

PETRETTA CONSTRUCTION INC.

140 Main Street East, Kingsville, ON - Traffic Impact Study Report May 2017 - 17-5234







SPC-XXX/18

SITE STATISTICS:

TOTAL SITE AREA

= 0.56 ha (1.38 ac)

ZONING PROPOSED

RESIDENTIAL ZONE 4 (R4.1)MULTIPLE UNIT APARTMENT BUILDING

	REQUIRED	PROPOSED
MIN. LOT AREA	950m²	5,585m²
MIN. LOT FRONTAGE	25m	41.1m
MIN. OPEN SPACE	30%	30%
MAX. LOT COVERAGE	45%	25%
MIN. FRONT YARD DEPTH	8m	3.9m
MIN. REAR YARD DEPTH	10m	123.2m
MIN. INTERIOR SIDE YARD WIDTH	4.5m	2.8m
MAX. BUILDING HEIGHT	11m	T.B.D.
PARKING	56 SPACES	67 SPACES
DWELLING, APARTMENT BUILDING (1.25 SPACES/UNIT)	30 SPACES	40 SPACES
MEDICAL OFFICE (6 SPACES/PRACTITIONER)	6 SPACES	7 SPACES
PHARMACY/RETAIL STORE (1 SPACE/22.5m² GFA)	20 SPACES	20 SPACES
LOADING PARKING SPACES	1 SPACE	1 SPACE
BICYCLE PARKING SPACES	2 SPACES	4 SPACES
BARRIER FREE PARKING SPACES	2 SPACES	5 SPACES

LEGEND

PROPERTY BOUNDARY



AMENITY SPACE / PATIO

3 STOREY RESIDENTIAL BUILDING



BICYCLE PARKING SPACES

GROUND FLOOR ANCILLARY COMMERCIAL

EMERGENCY ACCESS (REINFORCED GRASS SURFACE)



SIDEWALKS / HARD LANDSCAPING



SOFT LANDSCAPING

ADDITIONAL NOTES:

i) MINIMUM DRIVING AISLE WIDTH = 6.1 m (20 ft);

ii) MINIMUM PARKING SPACE SIZE = 2.7 m (9 ft) x 5.5 m (18 ft);

iii) MINIMUM BARRIER FREE PARKING SPACE SIZE = 4.7 m (15.4ft) x 5.5 m (18ft),

WITH 1.5m SHARED MANEUVERING AISLE

iv) MINIMUM LOADING PARKING SPACE SIZE = 3.5 m (11.5ft) x 13.5 m (44ft); v) MINIMUM BICYCLE PARKING SPACE SIZE = 0.6 m (2ft) x 1.8 m (6ft);

vi) TOTAL FENCING LENGTH - 135m(444 ft)

'					SURVEY	N/A	N/A	
					DESIGN	AUG 03/18	PSG/KDT	
					DRAFTING	AUG 03/18	PSG	
					PRE-TENDER			
DILLON								
CONSULTING					4.0	000		
3200 Deziel Drive, Suite 608, Windsor, ON N8W 5K8	1	MUNICIPAL REVIEW	OCT 2/18	PSG/MAM	1:2,	,000		
Phone: (519) 948-5000 Fax (519) 948-5054	No.	ISSUED FOR	DATE	BY				

140 MAIN STREET EAST SITE PLAN CONTROL 140 MAIN STREET EAST **OVERALL SITE PLAN**

PETRETTA CONSTRUCTION INC.

17-5234-2000 SHEET NO.





APPENDIX F

Robert Brown

From: John Morand <morandjb@gmail.com>

Sent: October-21-18 10:10 AM

To: Robert Brown

Subject: Re: Zoning By-Law Amendment ZBA/25/18 (Sec.34 of the Planning Act, R.S.O. 1990, C.P.

13)

Attention: Robert Brown

I am opposed to this amendment and any development of this property at this time. My concern is over the impact that this proposal will have on storm and sanitary sewers as well as adding to further traffic congestion on Main Street.

I am disappointed and concerned over the development proceeding east of the high school. This was a bad decision. Furthermore, there are plans to relocate the present high school and the future development of the vacated property will present concerns.

Are these identified in the town master plan? A review and revision should project a long term vision and incremental amendments or deviations should not be taken lightly.

Let us not repeat mistakes made in the past. In particular, I cite the developments on the lake front at the foot of Lansdowne Ave. and Division Street. Those dwellings should not have been permitted and the property should have been reserved for park space.

Similarly, preserving the property subject to this amendment as green, forested park space should be given serious consideration.

John Morand 66 Augustine Drive, Kingsville, Ontario N9Y 1C5

Robert Brown

Sent:

From: noreply@kingsville.ca on behalf of Henry Van Vliet 519-733-3764

<a href="mailto:
<a href="mailto:
<a hr

To: Robert Brown

Subject: 140 Main St. E. Kingsville

I am writing you regarding correspondence being circulated about an application for rezoning of the above property. This property was the subject of a similar application for rezoning about a year ago. I do not have a copy of this letter but, understand that is is for commercial and residential multiple units. We are strongly against this, as issues of traffic flow, sanitary sewage disposal and storm drainage control have not been addressed by the town. We live on 29 Santos Dr., and are greatly concerned about traffic congestion, especially in the morning and early afternoon. We find it difficult to make a left turn onto Main St. Also storm drainage is an issue, especially with the amount of rainfall that we have been getting in very short period of time. Look at the recent problem in Amherstburg. We on Santos, do not want to have to pay to have a new storm drain installed like the residents on Wigle a few years ago. The correspondence calls for one building as a start with additional building planned in the future. We feel that the whole package should be looked at. Not just the initial stage, as the next stage will not have the need for further notice to the neighbours. We know all about changes made to the original application for zoning of the Dental Centre afterwards which were done. ie size almost doubled. Trees cut down which were supposed to stay.

Please advise why the Town has not notified us of this meeting which is supposed to be held on Oct. 23, 2018. What options, as nearby residents, do we have? Can you circulate this to our councillors? Thanks

Origin: https://www.kingsville.ca/en/do-business/building-and-planning.aspx

This email was sent to you by Henry Van Vliet 519-733-3764<havanvliet@cogeco.ca> through https://www.kingsville.ca/.

Robert Brown

From:

bob lane <bob.lane@cogeco.ca>

Sent:

October-05-18 1:07 PM

To:

Robert Brown

Subject:

Zoning bylaw amendment ZBA/25/18 Jeremy Capussi 140 Main Street E.

I have received the notice of the open house of the advisory committee meeting on October 23rd. I was not notified of the Jun e open house.

My wife and I own the adjoining property at 45 Spruce St. N.. At the time I purchased the property at the rear in the 1970s I had access by way of the extension of Cherry Lane, but the council at the time gave that to the property owner at the end of the Lane. This left my 2.2 acre property with no access to any road except through my lot at 45 Spruce, which has only 43 feet of frontage, of which my house takes up 30 feet or more. When Jerry Capussi bought the Thomas girls property on Main Street, he contacted me about buying the rear section of my property to combine with his, which would make about 5 acres and presumably would be sufficient to develop. I told him I would sell the rear of my property, but not for the \$30,000.00 he was offering. He said he would get back to me but never has.

It would seem to me to be bad planning to land lock 2 acres in the middle of the town when it has access to other property being considered for development. I have another meeting on October 23rd so I don't know whether I can make to open house.

I would appreciate your comments as to why my property has been left out of the plans.

Robert Lane 45 Spruce St. N. 519 733-2690



Virus-free. www.avast.com

SHADOW ANALYSIS - PHASE 1 140 MAIN STREET EAST, KINGSVILLE

APPENDIX G





Shadow Study - March 21, 9:30am



Shadow Study - March 21, 12:30pm



Shadow Study - March 21, 3:30pm



Shadow Study - March 21, 6:30pm

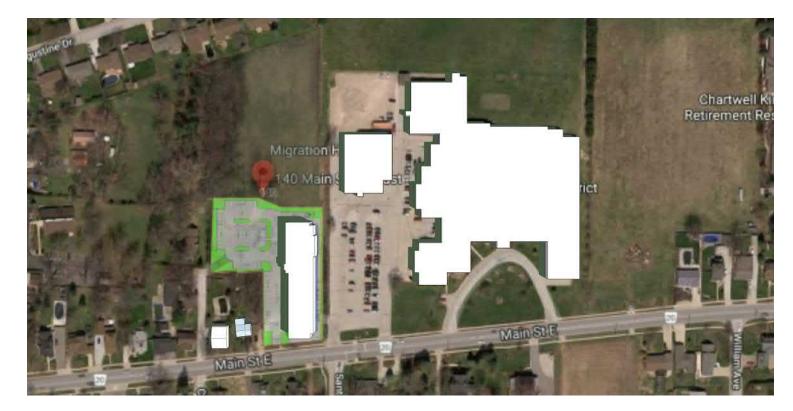
SHADOW ANALYSIS - PHASE 1

140 MAIN STREET EAST, KINGSVILLE





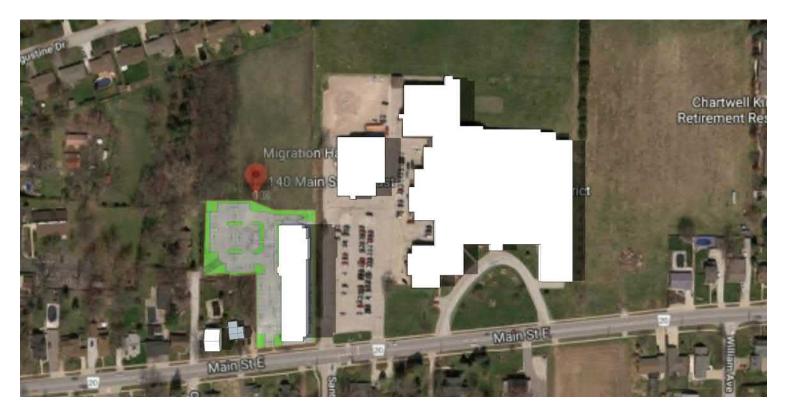
Shadow Study - June 21 9:30am



Shadow Study - June 21 12:30pm



Shadow Study - June 21 3:30pm



Shadow Study - June 21 6:30pm

SHADOW ANALYSIS

140 MAIN STREET EAST, KINGSVILLE





Shadow Study - December 21 9:30am



Shadow Study - December 21 12:30pm



Shadow Study - December 21 3:30pm



Shadow Study - December 21 6:30pm

Essex Region Conservation

the place for life



APPENDIX H

September 07, 2018

Mr. Robert Brown, Manager of Planning Services The Corporation of the Town of Kingsville 2021 Division Road North Kingsville ON N9Y 2Y9 planning@erca.org P.519.776.5209 F.519.776.8688 360 Fairview Avenue West Suite 311, Essex, ON N8M 1Y6

Dear Mr. Brown:

RE: Zoning By-Law Amendment ZBA-25-18, & Site Plan Control SPA-11-18

140 MAIN ST E

ARN 371122000000100; PIN: 751750603

Applicant: Jeremy Capussi

The following is provided for your information and consideration as a result of our review of Zoning By-Law Amendment ZBA-25-18, and Application for Site Plan Control SPA-11-18. The applicant is proposing a 3 storey mixed commercial residential building with medical related uses on the main floor. We acknowledge that this overall development may include 3 phases of development, however only Phase 1 of this development is subject to this Site Plan Control application at this time.

DELEGATED RESPONSIBILITY TO REPRESENT THE PROVINCIAL INTEREST IN NATURAL HAZARDS (PPS, 2014) AND REGULATORY RESPONSIBILITIES OF THE CONSERVATION AUTHORITIES ACT

The following comments reflect our role as representing the provincial interest in natural hazards encompassed by Section 3.1 of the Provincial Policy Statement of the Planning Act as well as our regulatory role as defined by Section 28 of the Conservation Authorities Act.

We have reviewed our floodline mapping for this area and it has been determined this site is **not** located within a regulated area that is under the jurisdiction of the ERCA (Section 28 of the *Conservation Authorities Act*). As a result, a permit is not required from ERCA for issues related to Section 28 of the *Conservation Authorities Act*, Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation under the *Conservations Authorities Act*, (Ontario Regulation No. 158/06).

WATERSHED BASED RESOURCE MANAGEMENT AGENCY

The following comments are provided in an advisory capacity as a public commenting body on matters related to watershed management.



Mr. Brown September 07, 2018

We recommend that the municipality ensure that the release rate for this development is controlled to the capacity available in the existing storm sewers/drains. In addition, that stormwater quality and stormwater quantity are addressed up to and including the 1:100 year storm event and be in accordance with the guidance provided by the Stormwater Management Planning and Guidance Manual, prepared by the Ministry of the Environment (MOE, March 2003) and any other Municipal requirements (e.g., Development Standards Manual). We further recommend that the stormwater management analysis be completed to the satisfaction of the Municipality.

We do not require further consultation on this file with respect to stormwater management.

PLANNING ADVISORY SERVICE TO MUNICIPALITIES - NATURAL HERITAGE POLICIES OF THE PPS. 2014

The following comments are provided from our perspective as a service provider to the Municipality on matters related to natural heritage and natural heritage systems. The comments in this section do not necessarily represent the provincial position and are advisory in nature for the consideration of the Municipality as the planning authority.

Our information indicates that the subject lands may support habitat of endangered species and threatened species. As per Section 2.1.7 of the PPS 2014 – "Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements." In accordance with the above PPS Policy, it is the property owner's responsibility to ensure that all issues related to the provincial Endangered Species Act and associated regulations have been addressed. Inquiries regarding the applicability of the Endangered Species Act to the property should be made to Aylmer District office of the provincial Ministry of Natural Resources and Forestry (MNRF) via e-mail: ESA.Aylmer@ontario.ca and through following the attached MNRF Technical Bulletin: Aylmer District Species at Risk Screening Process, for further clarification.

Our review of the application confirms that all other aspects of the natural heritage policies of the PPS 2014 have been addressed, we would therefore have no objections to this application.

FINAL RECOMMENDATION

We have no objections to these applications for Zoning and Site Plan Control.



Mr. Brown September 07, 2018

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

Corinne Chiasson Resource Planner

/cor





2021 Division Road North Kingsville, Ontario N9Y 2Y9 Phone: (519) 733-2305 www.kingsville.ca

NOTICE OF COMPLETE APPLICATION AND PUBLIC MEETING: ZONING BY-LAW AMENDMENT

APPLICATION: ZONING BY-LAW AMENDMENT FILE ZBA/20/18

(Section 34 of the Planning Act, R.S.O. 1990, C.P. 13)

OWNERS: Robert & Barbara Dick & Helena Koop

APPLICANT: Heather Scott

LOCATION OF PROPERTY: 101 Mill St. W

PURPOSE OF APPLICATION:

The Town of Kingsville has received the above-noted application for lands located in the southwest corner of the intersection of Mill St. W and Laurel St. The subject parcel is designated 'Residential' by the Official Plan and is zoned 'Residential Zone 1 Urban Exception 20 (R1.1-20)' under the Kingsville Comprehensive Zoning By-law.

The parcel is a 1.12 ha (2.77 ac.) residential lot with a large unique single detached dwelling and a detached garage/carriage house. The property was rezoned many years ago to permit an inn, assembly hall, banquet facility and gift shop. Although it has operated as an inn the other uses have not materialized. A prospective purchaser is looking to buy the property with the hope of operating a day spa and holistic wellness centre in the main dwelling and living in the garage/carriage house.. A zoning amendment would be necessary to address the addition of the proposed uses and possibly establish specific regulations such as setbacks and parking.

A **PUBLIC MEETING** OF COUNCIL will be held on:

WHEN: November 26, 2018

WHERE: Town of Kingsville Municipal Building (Council Chambers)

TIME: 7:00 p.m.

Your comments on these matters are important. If you have comments on this application, they may be forwarded by email, or letter mail to the attention of: **Robert Brown, Manager, Planning Services**, 2021 Division Road North, Town of Kingsville, ON N9Y 2Y9. Comments and opinions submitted on these matters, including your name and address, may become part of the public record and may be viewed by the general public and may be published in a planning report or reproduced in a Council agenda and/or minutes.

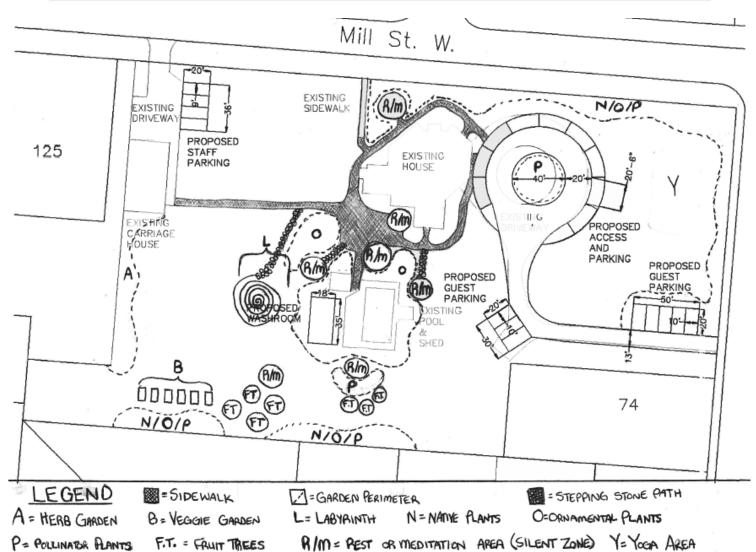
IF A PERSON or public body would otherwise have an ability to appeal the decision of Council for the Town of Kingsville to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submission to the Town of Kingsville before the zoning by-law is adopted, the person or public body is not entitled to appeal the decision.

IF A PERSON or public body does not make oral submissions at a public meeting, or make written submission to Council before the zoning by-law is adopted or the zoning by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to add the person or public body as a party.

ADDITIONAL INFORMATION relating to this matter is available for review at the Kingsville Municipal Office during regular office hours.

DATED AT THE TOWN OF KINGSVILLE on November 06, 2018. Kristina Brcic, MSc, BURPI 519-733-2305 (x 249) kbrcic@kingsville.ca







2021 Division Road North Kingsville, Ontario N9Y 2Y9 (519) 733-2305 www.kingsville.ca kingsvilleworks@kingsville.ca

Date: November 19, 2018

To: Mayor and Council

Author: Kristina Brcic, Town Planner

RE: Application for Zoning Amendment - ZBA/20/18 by

Robert & Barbara Dick & Helena Koop – Owners

Heather Scott – Authorized Applicant

101 Mill St. W

Part of Lot 1 & 2, Concession 1 WD

Roll No. 3711 160 000 02710

Report No.: PDS 2018-060

AIM

To provide the Mayor and Council with information regarding a proposed Zoning By-law Amendment request on lands located at 101 Mill Street West.

BACKGROUND

The Town of Kingsville has received the above-noted application for lands located in the southwest corner of the intersection of Mill St. W and Laurel St. The subject parcel is designated 'Residential' by the Official Plan and is zoned 'Residential Zone 1 Urban Exception 20 (R1.1-20)' under the Kingsville Comprehensive Zoning By-law.

The parcel is a 1.12 ha (2.77 ac.) residential lot with a large unique single detached dwelling and a detached garage/carriage house. The property was rezoned many years ago to permit an inn, assembly hall, banquet facility and gift shop. Although it has operated as an inn, the other uses have not materialized. A prospective purchaser is looking to buy the property with the hope of operating a day spa and holistic wellness centre in the main dwelling with some activities located on the lawn, while residing in the garage/carriage house. (Full details of the proposal can be found in Appendix D).

In order to proceed with the proposal two approvals are required as follows:

- i) a zoning amendment to address the addition of the proposed uses, and
- ii) site plan approval to address parking, outline any specific locations for the outdoor uses and any additional structures on the property.

DISCUSSION

1) Provincial Policy Statement (PPS), 2014

PPS, Section 1.1.3.1 states that, "Settlement areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted." Section 1.1.3.3 further outlines that, "Planning authorities shall identify appropriate locations and promote opportunities for intensification and redevelopment where this can be accommodated taking into account existing building stock or areas, including brownfield sites, and the availability of suitable existing or planned infrastructure and public service facilities required to accommodate projected needs." Section 1.1.3.6 states that "New development taking place in *designated growth areas* should occur adjacent to the existing built-up area and shall have a compact form, mix of uses and densities that allow for the efficient use of land, *infrastructure* and *public service facilities*."

Comment: The property was rezoned many years ago to permit an inn, assembly hall, banquet facility and gift shop but has since only ever operated as an inn. The prospective purchasers see great potential in both the property and existing heritage buildings to establish a holistic health centre. The requesting zoning amendment would allow for the adaptive reuse of this unique property, which is currently on the heritage inventory list.

2) County of Essex Official Plan

The County OP is very similar to that of PPS in terms of applicable policies and encouragement of intensification of development within the Settlement Area boundaries. The proposed development would be consistent with the County Official Plan.

3) Town of Kingsville Official Plan

The subject lands are designated Residential and permit all forms of residential development along with commercial development which is supportive of the residential area. The applicant has submitted a Business Proposal Report, found in Appendix D, outlining the proposed adaptive reuse of the property.

Section 3.6.1 Residential - Policies item b) states that "other uses which are considered necessary and complimentary to serve residential areas, such as schools, parks, churches, day care centres, home occupations and essential buildings and structures for public utilities, may be permitted where they are compatible with the residential area;".

Comment: The prospective owner of the property plans to live in the carriage house while the main house will be utilized for the holistic wellness centre and accessory gift shop, as mentioned in the Business Proposal Report. The proposed uses are more in line with home occupations that may be found in the surrounding neighbourhood, compared to some of the existing permitted uses of the property, such as an assembly and banquet hall. Adaptive reuse of such heritage buildings are common practice and lead to continued maintenance of the heritage property and grounds. The subject property will in fact retain a residential quality to it with the prospective owner planning to reside in the existing carriage house, located to the west of the main dwelling. Planning Staff have recommended that the existing permitted uses cannot coincide with the proposed holistic health centre, as that would diminish the residential quality of the property and surrounding neighbourhood. As such, it was explained to the prospective owners that the property may be utilized in either the former use or the newly proposed holistic health centre. Therefore, the proposed zoning amendment would be compatible with the residential area.

4) Comprehensive Zoning By-law

The subject property is zoned 'Residential Zone 1 Urban Exception 20 (R1.1-20)'. The intended amendment would be to amend the current site-specific zone to make the following changes:

R1.1-20	Current	Proposed
Permitted	i) Those uses permitted under	Holistic Health Centre and an
Uses	Section 6.1 Residential Zone 1	accessory gift shop
	Urban (R1.1);	, 5
	ii) An <i>inn</i> , an assembly hall, a	
	banquet and a gift shop.	
Permitted	i) Those buildings and structures	
Buildings and	permitted under Section 6.1 in	
Structures	the (R1.1) zone;	
	ii) One <i>dwelling unit</i> above a	
	garage;	
	iii) One single detached	
	dwelling;	
	iv) Buildings and structures	
	accessory to the permitted uses.	
Zone	i) All lot and building	Shall not change the residential
Provisions	requirements for the permitted	character of the existing dwelling.
	buildings and structures shall be	Meet minimum parking requirements
	in accordance with Section 6.1.;	for the permitted uses.
	ii) Notwithstanding the	The owner of the property must live on
	provisions of Section 6.1, an inn,	site.
	an assembly hall and a facility	Cannot be combined with any other
	shall have minimum front, rear, interior side and an exterior side	home occupation.
	yard dimension of 15 m.	

The proposed amendment will allow either the existing Permitted Uses, or the proposed Holistic Health Centre with an accessory gift shop in order to govern the scale of uses on the property. Having these uses occurring simultaneously would not be suitable for this neighbourhood or zone. The owner will be required to enter into a site plan agreement with the Town to address parking and storm water drainage on the property. To keep the residential component of the property, it will be required that the owner reside on the property and that any additional home occupations will not be permitted. Furthermore, the owner of the property will be required to maintain the residential character of the existing dwelling and all other provisions of the By-law must be in compliance.

The proposed amendment to the Town of Kingsville Comprehensive Zoning By-law 1-2014 will include the addition of a definition for *Holistic Wellness Centre* under section 3.6.19.1 and will read as follows:

3.6.19.1 <u>Holistic Wellness Centre</u> – shall mean a building or part thereof, in which facilities or offices are provided for the practice of alternative and traditional medical treatments and may include, but not be limited to, Yoga, Chiropractic, Podiatrist, Chiropodist, Meditation Classes, Reflexology, Massage, Chinese Medicine, Naturopathy, Acupuncture, Iridology, Homeopathy and Shamanism.

In addition to the proposed zoning amendment a technical correction is being undertaken for the lands known as 74 Laurel Street. The property was severed from 101 Mill St. W in 2014, at which time a minor variance was approved as a condition of the consent to only permit the standard 'Residential Zone 1 Urban (R1.1)' uses. This is not a sustainable method of regulating permitted uses as there is no readily accessible reference, such as a zoning map, to the minor variance approval. Since the zoning on 101 Mill St W. is under consideration, it presented an opportunity to update this and the owners of 74 Laurel are in agreement.

LINK TO STRATEGIC PLAN

Manage growth through sustainable planning.

FINANCIAL CONSIDERATIONS

There may be some increase in assessment depending on the scale of proposed uses on the site.

CONSULTATIONS

Public Consultations

In accordance to O. Reg 545/06 of the *Planning Act*, property owners within 120m of the subject site boundaries received the Notice of Public meeting by mail. To date comments were received in both support and against the proposed zoning by-law amendment.

The public comment received to date is attached as Appendix E.

Agency & Administrative Consultations

In accordance with O. Reg 545/06 of the *Planning Act*, Agencies and Town Administration received the Notice of Public Meeting by email.

Agency or Administrator	Comment					
Essex Region Conservation	ERCA comment is attached as Appendix 'C'.					
Authority Watershed Planner	No objections					
Town of Kingsville Management Team	 Change of use will be required for any use changes. Site plan Approval required to establish parking requirements and stromwater drainage. Property is listed on the Inventory of Heritage Properties of Interest but is not currently designated 					

RECOMMENDATION

It is recommend that Council approve zoning amendment application ZBA/20/18 to amend the current 'Residential Zone 1 Urban Exception 20 (R1.1-20)' zoning of the lands known as 101 Mill Street West, in the Town of Kingsville, to revise the permitted uses as follows:

The existing uses as follows:

Those uses permitted under Section 6.1 Residential Zone 1 Urban (R1.1); An inn, an assembly hall, a banquet facility and a gift shop.

OR;

The proposed use as follows:

A holistic health centre and an accessory gift shop;

and adopt the implementing by-law.

<u>Kristina Brcic</u>

Kristina Brcic, MSc, BURPI Town Planner

<u>Robert Brown</u>

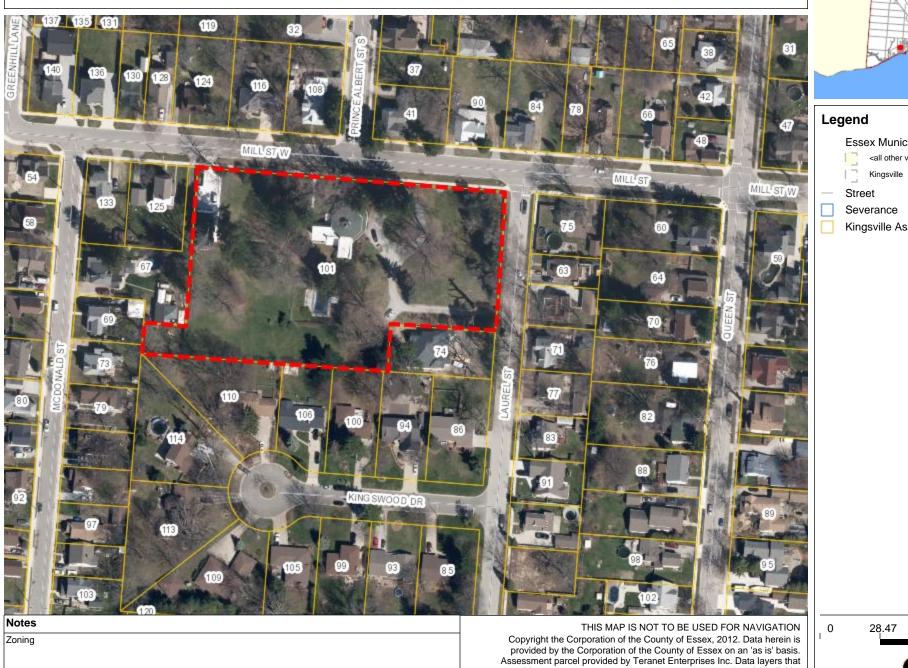
Robert Brown, H. Ba, MCIP, RPP Manager, Planning Services

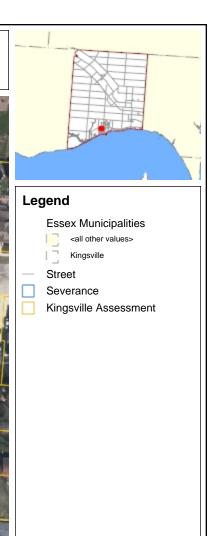
<u>Peggy Van Mierlo-West</u>

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer



101 Mill St W



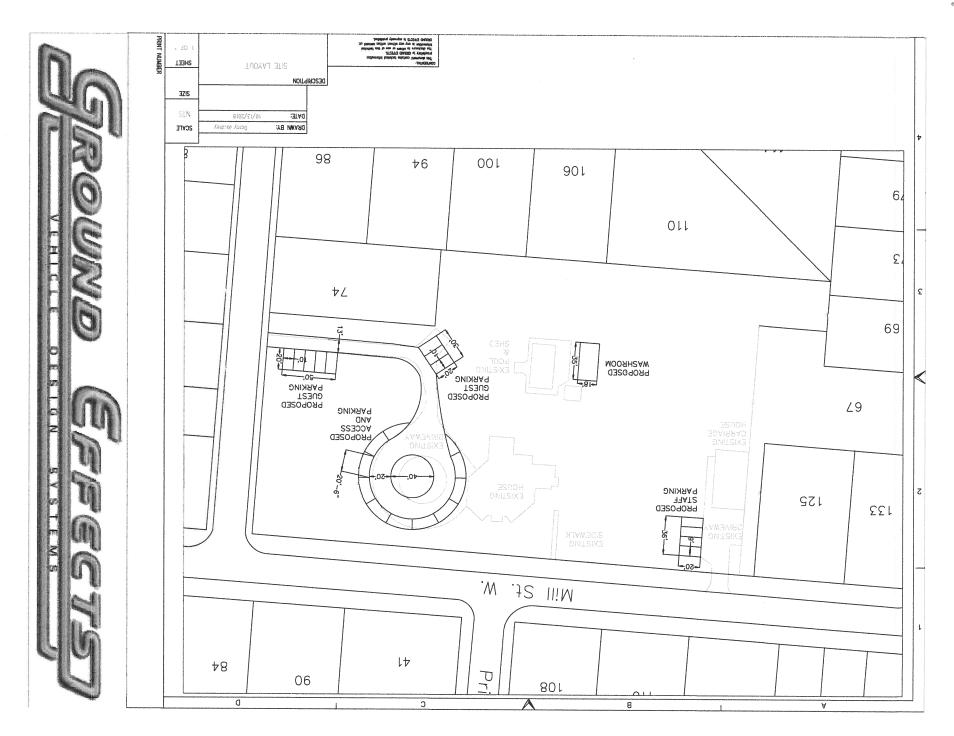


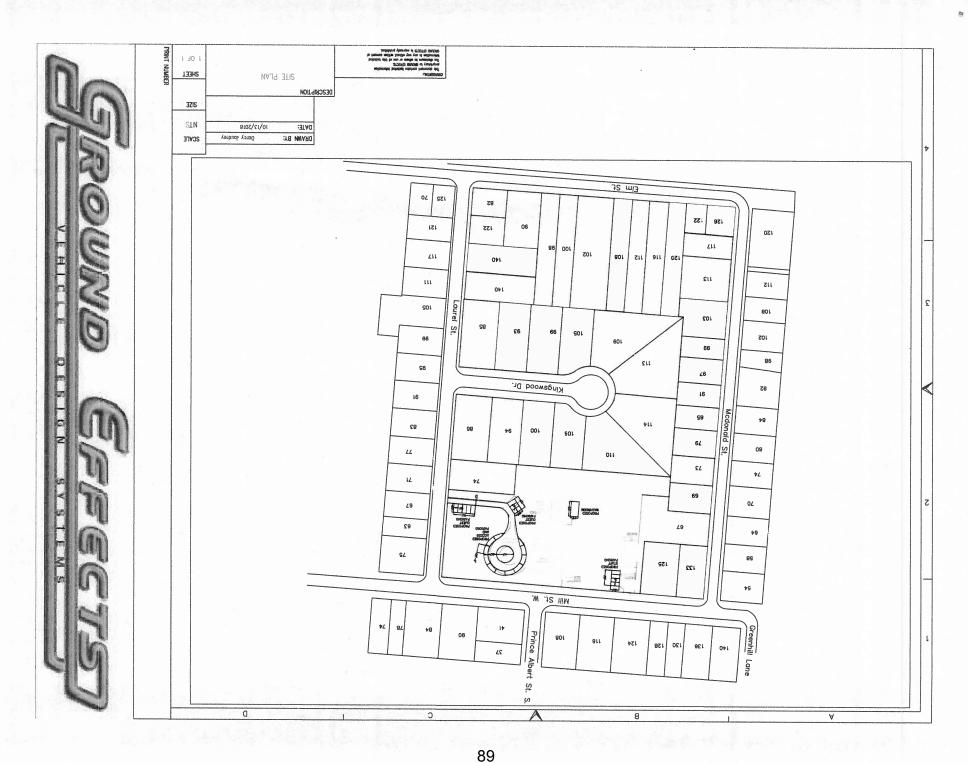
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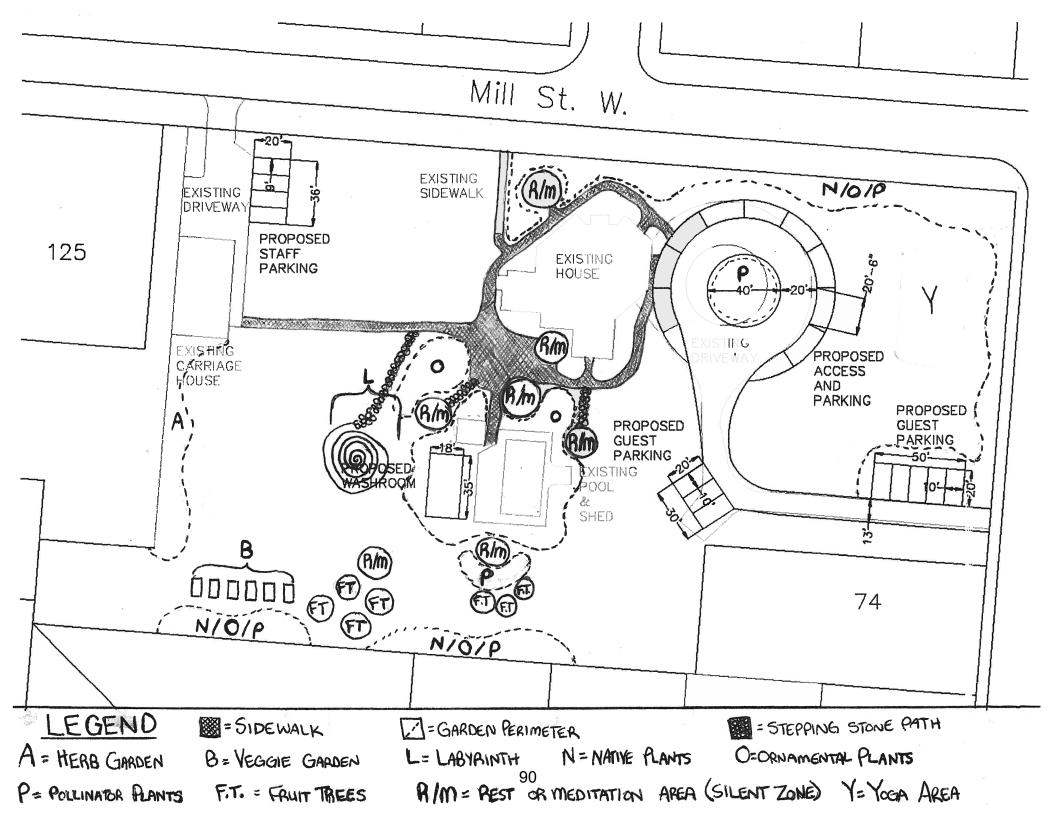
9/4/2018

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appear on this map may or may not be accurate, current, or otherwise reliable.







Essex Region Conservation

the place for life

planning@erca.org P.519.776.5209 F.519.776.8688 360 Fairview Avenue West Suite 311, Essex, ON N8M 1Y6

September 12, 2018

Mr. Robert Brown, Manager of Planning Services Planning & Development Services Department The Corporation of the Town of Kingsville 2021 Division Road North Kingsville ON N9Y 2Y9

Dear Mr. Brown:

RE: Zoning By-Law Amendment ZBA-20-18

101 MILL ST W

ARN 371109000002300; PIN: 751830371

<u>Applicant: Robert & Barbara Dick & Helena Koop</u>

The following is provided for your information and consideration as a result of our review of Zoning By-Law Amendment ZBA-20-18. We understand that the applicants are requesting to add "day spa and holistic wellness centre" to the permitted uses under the current Residential Zone 1 Urban Exception 20 (R1.1-20).

DELEGATED RESPONSIBILITY TO REPRESENT THE PROVINCIAL INTEREST IN NATURAL HAZARDS (PPS, 2014) AND REGULATORY RESPONSIBILITIES OF THE CONSERVATION AUTHORITIES ACT

The following comments reflect our role as representing the provincial interest in natural hazards encompassed by Section 3.1 of the Provincial Policy Statement of the Planning Act as well as our regulatory role as defined by Section 28 of the Conservation Authorities Act.

We have reviewed our floodline mapping for this area and it has been determined this site is **not** located within a regulated area that is under the jurisdiction of the ERCA (Section 28 of the Conservation Authorities Act). As a result, a permit is not required from ERCA for issues related to Section 28 of the Conservation Authorities Act, Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation under the Conservations Authorities Act, (Ontario Regulation No. 158/06).

WATERSHED BASED RESOURCE MANAGEMENT AGENCY

The following comments are provided in an advisory capacity as a public commenting body on matters related to watershed management.

Our office has reviewed the proposal and has no concerns relating to stormwater management.



Mr. Brown September 12, 2018

PLANNING ADVISORY SERVICE TO MUNICIPALITIES - NATURAL HERITAGE POLICIES OF THE PPS. 2014

The following comments are provided from our perspective as a service provider to the Municipality on matters related to natural heritage and natural heritage systems. The comments in this section do not necessarily represent the provincial position and are advisory in nature for the consideration of the Municipality as the planning authority.

The subject property is not within or adjacent to any natural heritage feature that may meet the criteria for significance under the Provincial Policy Statement (PPS 2014). Based on our review, we have no objection to the application with respect to natural heritage policies.

FINAL RECOMMENDATION

We have no objections to this Zoning By-law Amendment.

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

Corinne Chiasson Resource Planner

/cor



Proposal for Amendment of Zoning at 101 Mill St.

Aug. 22nd 2018

Dear Councilors and Community Members,

We, (Heather and Jordan Scott, residents of Kingsville) are applying to add an *accessory use* for the Kingswood Inn at 101 Mill Street, Kingsville for the purpose of opening a Day Spa and Holistic Wellness Center. We intend to uphold the integrity of the historical architecture of the manor as well as the natural features of the property, and welcome the citizens of Kingsville to enjoy the tranquil environment for relaxation and rejuvenation. It is important to us to maintain the heritage of the building and fence, but we will make minor interior renovations. We would like to make the building accessible so we plan to add a ramp for people who use wheelchairs and turn a kitchenette into an accessible washroom. Please consider the following as our proposal for a zoning amendment.

Current Zoning:

- R 1.1-20
- Permitted Uses include: an inn, an assembly hall, a banquet facility and a gift shop
- Permitted Buildings & Structures include: those permitted under Section 6.1 in the (R1. 1) zone; one dwelling unit above a garage; one single detached dwelling; buildings and structures accessory to the permitted uses.

Request for an Accessory Use:

- Addition of Personal Service Shop to cite-specific zoning
- Allows for personal services of holistic health nature (massage therapy, consultations, reiki etc.)

Purpose of Property: Day Spa & Holistic Wellness Center

- 4 treatment rooms for: massage therapy, reiki, holistic health consultations, facials, shamanic healing
 - o Room 1: 170 sq ft
 - o Room 2: 208 sq ft
 - o Room 3: 228 sq ft
 - o Room 4: 178 sq ft
- Pool and gardens accessible for relaxation and meditation (designated as whisper/silence areas)
- Yoga classes in Great Room (15-person occupancy max)
 - o 698 sq ft
- Refreshments Room offering tea and juice before/after treatments or yoga class
 - o 415 sq ft
- Gift Shop offering locally crafted teas and wellness products
 - o 266 sq ft

- Great Room and/or Gardens occasionally used for classes, workshops, seminars, ceremonies and photo shoots
- 4 Treatment rooms double as guest rooms for occasional retreats (approximately 4 per year)

Alterations to Property:

- 10' (width-wise) extension of round-about portion of driveway from Laurel Street to accommodate flow of traffic and fire safety requirements
- 9' (width-wise) extension of current parking lot from Laurel St. driveway to accommodate one more parking space
- 50' x 20' gravel driveway added to North side of driveway from Laurel Street, offering 5 more parking spaces
- 20' x 36' parking lot addition to existing driveway from Mill St. to accommodate 4 staff parking spaces
- Outdoor building for poolside washroom and shower (Maximum dimensions: 18' x 35')

Parking:

- Minimum space required for Personal Service Shop is 1/14 m2 (150 ft2) GFA
- 18 generous guest parking spaces (20' x 10') with an additional barrier free parking space
- We will add a bicycle lock-up rack
- 4 generous staff parking spaces (20' x 9') will be added onto existing driveway off of Mill Street, in addition to the 2 currently available
- 2 residential parking spaces are provided for both residents in the garage
- 14 parking spaces will be offered to yoga students at various times (3x/day maximum)
- 4 clients maximum will occupy our parking spaces at any given time
- Cycling & walking to classes and/or treatments will be strongly encouraged, and walking/cycling tour maps will be offered to all guests
- Overflow parking may be facilitated at the municipal parking lot on Pearl Street, 2.5 blocks away

Considerations of Neighbours:

- An ambiance of quiet serenity is carefully ensured by signage and staff on grounds
- Garden and pool areas for meditation and relaxation are designated as "Whisper,"
 "Silence," and "Quiet" zones
- Business Activity will take place during regular business hours (9-6 daily), with indoor evening yoga classes (7 pm 8:30 pm) sparingly
- Current lamp posts on property provide sufficient lighting for the parking lot
- Small foot-path lanterns (solar powered, low-to-ground) will light main pathways on grounds
- Neighbours at 74 Laurel have been notified of our intentions and we will provide a privacy shield (shrubbery or fencing) as they deem fit

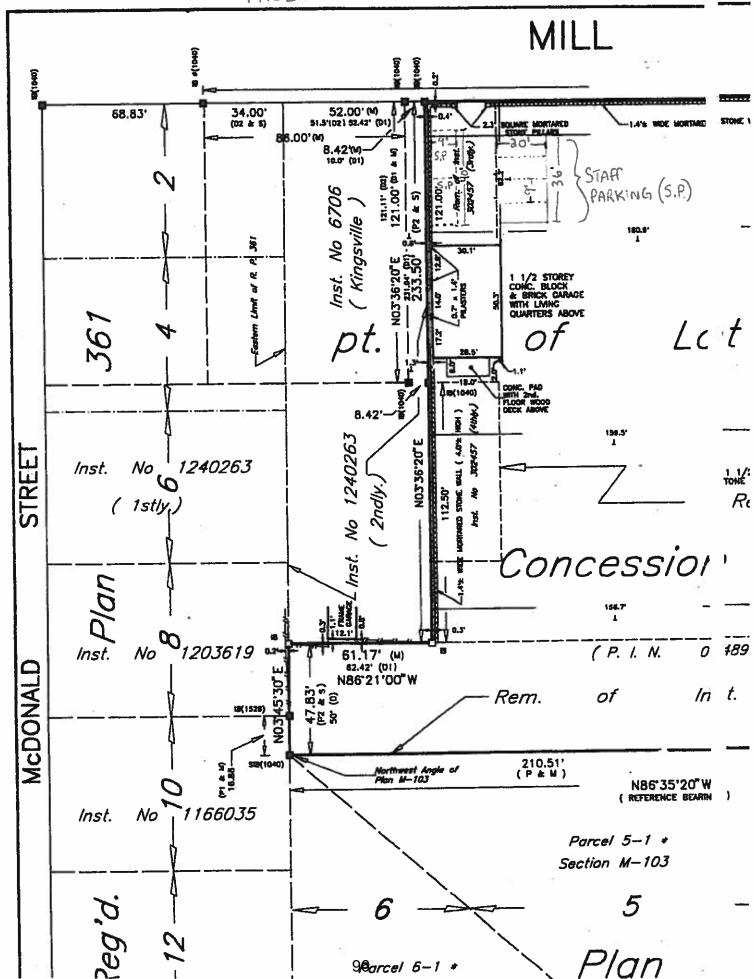
 More trees/flowering shrubbery will be planted along inside of fence on Mill St. to beautify space and reduce view of parked cars

Staff:

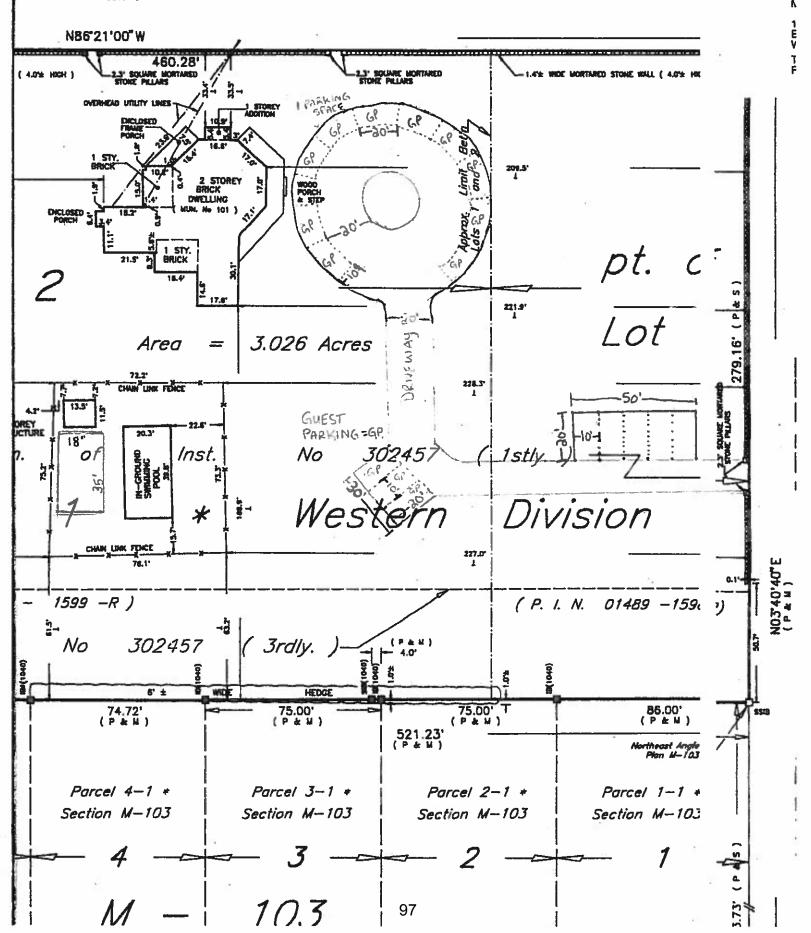
- A receptionist; gift shop clerk and spa manager; will be employed by the Day Spa
- Various Practitioners will be contracted to offered their services (4 at any given time)
- Landscaping, maintenance and House-keeping providers will be contracted
- One partner, Jordan Scott is a resident and practitioner who will be working and living on-site

We feel that the community will benefit from the opening of a Day Spa for several reasons. We believe that making holistic (physical, psychological and spiritual) wellness services accessible to our community is of the utmost importance, particularly for those who have difficulty travelling to care for such needs. We understand that wellness requires maintenance, so we are prepared to provide education and continued support to our guests. By partnering with neighbouring businesses including Bed & Breakfasts, restaurants, bars, shops and galleries we can promote one another and expand Kingsville's overall economic success. This Day Spa will provide employment opportunity for community members of the holistic wellness field which is an industry on the rise. We are excited to add a new attraction with historical significance to Kingsville's growing community that will enhance the experience and immersion of those visiting from out of town, as well as those who call this town home!

It is our intention to provide a tranquil environment for active community members to nurture their whole selves while simultaneously maintaining a valuable piece of Kingsville's history. We believe that the Day Spa will be a sanctuary for our community members to find respite and discover their path to holistic wellness with the support of caring practitioners and experts in the field of wellness.



STREET



THENCH! YOU WELLE GIRE

J. T. (Terry) Yanchus To HAN =

10 Talbot St. E. THIS ORICINAL.

Wheatley, Ontario NOP 2P0

Tel: (519) 825-4616 Fax: (519) 825-7232

IEAL PROPERTY REPORT VRTS

ASSOCIATION OF OUTARIE LAND SURVEYORS PLAN SUBMISSION FORM



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ORIGINAL COPY SUED BY THE SURVEYOR la secordansa wiib leggialian 1826, Section 25(3)

PLAN OF SURVEY

* WESTERN DIVISION CONCESSION

IN THE

TOWN of KINGSVILLE ESSEX, ONTARIO

© VERHAEGEN - STUBBERFIELD - HARTLEY - BREWER - BEZAIRE INC. - 1996

SCALE : 1"=40'

BEARING REFERENCE

BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO THE NORTHERN LIMIT OF A PLAN REGISTERED IN THE REGISTRY OFFICE FOR ESSEX (12) AS M-103 HAVING A BEARING OF N86'35'20"W.

LEGEND

DENOTES 1" X 1" X 4'-0" STANDARD IRON BAR
DENOTES 1" X 1" X 2'-0" SHORT STANDARD IRON BAR
DENOTES 5/8" X 5/8" X 2'-0" IRON BAR
DENOTES 3/4" diameter X 2'-0" ROUND IRON BAR
DENOTES SURVEY MONUMENT FOUND
DENOTES SURVEY MONUMENT SET AND MARKED 1528
DENOTES WITNESS 1 DENOTES PERPENDICULAR (0) DENOTES INST. No 302457
DENOTES SET (M) DENOTES MEASURED (01) DENOTES INST. No 1240263
DENOTES SET PROPORTIONALLY (D2) DENOTES INST. No 6708 (KINGSVILLE)
DENOTES PLAN M-103 (00) DENOTES ORIGIN UNKNOWN **SS18** 19 18 6 WIT. (S/P) (P) DENOTES PLAN M-103 (OU) DENOTES ORIGIN UNKNOWN
(P1) DENOTES PLAN OF SURVEY BY 1528 DATED JUNE 26, 1992 (PLAN FILE A-6003)
(P2) DENOTES PLAN OF SURVEY BY 1040 DATED APRIL 15, 1986 (PLAN FILE 2A-289)
(1528) DENOTES VERHAEGEN STUBBERFIELD HARTLEY BREWER BEZAIRE INC., O.L.S.
(1040) DENOTES WILLIAM J. SETTERINGTON, O.L.S.

THIS PLAN MUST BE READ IN CONJUNCTION WITH PART 2, THE SURVEY REPORT DATED JUNE 3, 1996 THIS REPORT WAS PREPARED FOR ROBERT DICK

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

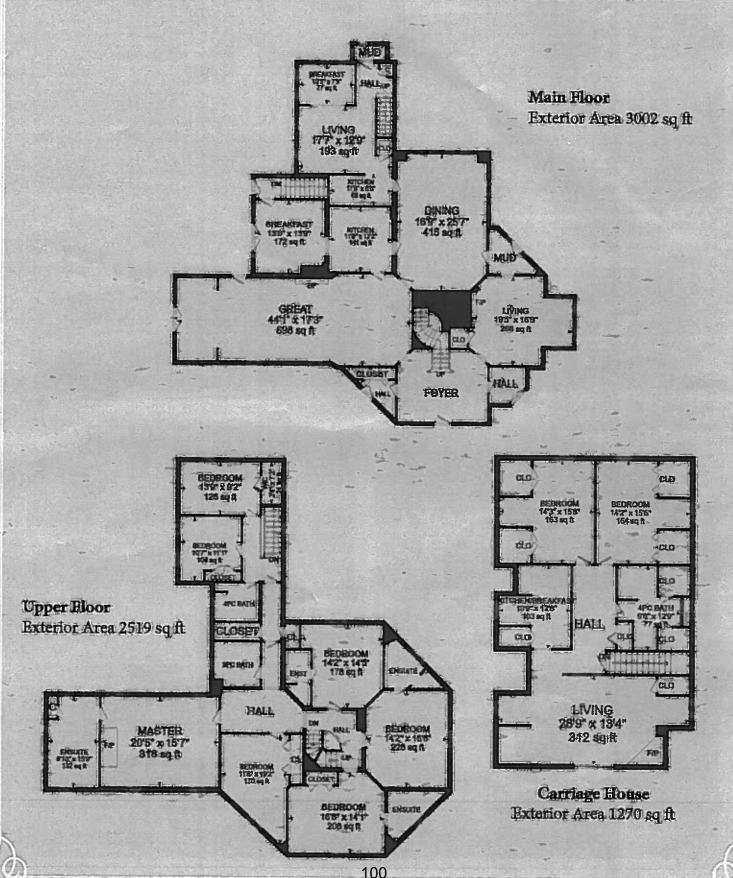
THE FIELD SURVEY REPRESENTED ON THIS PLAN WAS COMPLETED ON THE 28th DAY OF MAY, 1998

THIS IS NOT AN ORIGINAL COPY UNLESS EMBOSSED WITH SURVEYOR'S SEAL"



FLOOR PLANS

101 MILL ST. W. TOTAL EXTERIOR AREA ABOVE GRADE 6791 SQ FT (MAIN BUILDING)



Appendix E - Public Comments

 From:
 John Kolbrich

 To:
 Kristina Brick

 Ce:
 Marge Kolbrich

 Subject:
 Re: Zoning of 101 Mill St W

 Date:
 November-17-18 6:44:12 AM

Re: Zoning By Law Amendment 101 Mill Street W. Kingsville, Ont.- File ZBA/20/18 (Section 34 of the Planning Act R.S.O. 1990, C.P.13)

From:

John & Margaret Kolbrich 74 Laurel Street Kingsville, Ont.

My wife Margaret Kolbrich and myself reside at 74 Laurel Street, which is the corner lot of the original property referred above and the the closest property that any re-zoning would directly impact. We respect and like our neighbors, Robert and Barbara Dick very much and we wish them the best in the successful sale of their property. We must however express our protest to the proposed zoning changes in the use of the property at 101 Mill Street. W. The reasons for our protest are as follows:

- 1. The proposed changes are not conducive to the peace and quite we are entitled to as tax payers in a strictly Residentially zoned area, due to the potential auto traffic/noise that would flow in and out of the property up to 7 days a week with business hours from morning till night. The driveway of the subject property passes within 10 feet of our master bedroom, and the proposed parking of a cars are all very close to our home...the potential for continuous motor vehicle noise, driving in and out, parking, backing up, starting cars, revving of engines, potential honking and chirping of horns and alarms, etc., will drastically and negatively impact the quality of our life, peace, and value of our home over time. In addition to the day to day traffic, required maintenance like snow removal which could occur during very early morning hours in order to accommodate business hours during the winter months would totally impact our ability to sleep and enjoy the peace and quiet we currently have. Image a snow blower or scraper going buy your bedroom at 4AM as this is when commercial operators go out and clean lots etc. The potential for this is there and we cannot risk this sort of disturbance taking place.
- 2. From our understanding, currently, the zoning calls for a single proprietor to run the facilities with no outside staff as a bed and breakfast, banquet hall etc.... The key is the limited staff, which hence limits the amount of potential business and resulting in and out traffic and commercial activity. Currently with limited parking and very limited traffic there is little impact on our peace and quiet and we have no objections to the currently zoning... The changes call for full time staff of 4 employees plus x number of practitioners plus the proprietors all potentially working at the same time drawing in many potential and continuous commercial customers. From the preliminary information we received, it shows yoga classes with up to 15 people attending, regularly scheduled retreats for larger groups, 4 regular treatment rooms for hourly services, plus additional built, all having the potential to draw a lot of people, all pretty much driving their cars and passing by our bedroom window from 9AM to 9PM 7 days a week. This is not conducive to a residentially zoned area!
- 3. Future use should this property be rezoned- Another very real concern of ours is, should this property be rezoned for a high volume business with Multi employees, contract labor providing continuous services and permitted expanded parking, and if the proposed buyer decides to sell the property in the future to another business owner, the zoning is now in place and we would have to live with whatever new business comes in, since the zoning is already in place. This would be the ultimate failure of the town council to authorize this rezoning now, and not know or be able to regulate a future owner in some future business as staffing, parking, and traffic will be zoned already.
- 4. Security to our home: As a normal course of being in a residential area, we expect visitors to our, and our neighbor's homes. We view our current neighborhood as very safe and secure with minimal risk for crime, etc. Visitors are typically known that visit our neighborhood, but a commercial venture with a large volume of outside customers brought into our residential area has the potential of attracting all kinds of unknown patrons, and could have the potential of attracting some who could be there for illegitimate reasons. This potential could put our home being the closest, as well as the neighborhood in general at risk of increased crime etc. We are not being alarmist, but we are looking at everything that this change could potentially have as a negative impact on our life from peace and quiet, to safety and property value... When it comes to property value, a common sense test is to ask yourself, if we were to decide to sell our home, would it negatively impact our sale by having a commercially zoned property next door inside this all residential area? I think the reasonable person would agree this could directly affect the sale-able value of our home due to the negative impact of traffic and noise. We purchased and built in this neighborhood due to the peace and quiet. As tax payers, we do not feel this should be altered by allowing a business to earn revenue at our expense. There are many Yoga and Health related business already in Commercially zoned areas within the town and this business should not be an exception and should be placed in an area that is conducive to commerce, traffic, and noise etc...

We wanted our concerns to be noted and recorded in the public record so we may have a voice in this matter and legal appeal if required. We are meeting with our lawyer on Tuesday (Nov. 20th) for further legal counsel and will be attending the council meeting on Nov. 26 to further voice our objections in person.

Should you have any questions please feel free to contact us at 407-497-2654

Respectfully,

John & Margaret Kolbrich

We Love what we do and we Love our Students

Thanks and Regards,

John Kolbrich, President

Cell (407) 497-2654

Oviedo School of Music, LLC 561 E. Mitchell Hammock Rd Suite 400 Oviedo, FL 32765 (407)359-2828

East Orlando School of Music, (Avalon School & Music Center) 11333 Lake Underhill Rd. Suite 104 Orlando, FL 32825 (407)447-7272

Avalon School of Music II, LLC 12001 Avalon Lake Dr. S. Suite E1 Orlando, FL 32828 (407)770-0323

Orlando School of Music, LLC 4968 E. Colonial Dr. Orlando, FL 32803 (321)281-8386

Westchase Music School 11301 Countryway Blvd Tampa, FL 33626 (813)925-0102

jkolbrich@avalonmusiccenter.com www.AvalonSchoolofMusic.com www.OrlandoSchoolofMusic.com www.EastOrlandoSchoolofMusic.com www.OviedoSchoolofMusic.com www.WestchaseMusicSchool.com

On Nov 14, 2018, at 3:14 PM, Kristina Brcic <kbr/>kbrcic@kingsville.ca> wrote:

Good afternoon John

Below is the specific zoning for 101 Mill St W



2021 Division Road North Kingsville, Ontario N9Y 2Y9 Phone: (519) 733-2305 www.kingsville.ca

NOTICE OF COMPLETE APPLICATION AND PUBLIC MEETING: ZONING BY-LAW AMENDMENT

APPLICATION:

ZONING BY-LAW AMENDMENT FILE ZBA/20/18

(Section 34 of the Planning Act, R.S.O. 1990, C.P. 13)

OWNERS:

Robert & Barbara Dick & Helena Koop

APPLICANT:

Heather Scott

LOCATION OF PROPERTY:

101 Mill St. W

PURPOSE OF APPLICATION:

The Town of Kingsville has received the above-noted application for lands located in the southwest corner of the intersection of Mill St. W and Laurel St. The subject parcel is designated 'Residential' by the Official Plan and is zoned 'Residential Zone 1 Urban Exception 20 (R1.1-20)' under the Kingsville Comprehensive Zoning By-law.

The parcel is a 1.12 ha (2.77 ac.) residential lot with a large unique single detached dwelling and a detached garage/carriage house. The property was rezoned many years ago to permit an inn, assembly hall, banquet facility and gift shop. Although it has operated as an inn the other uses have not materialized. A prospective purchaser is looking to buy the property with the hope of operating a day spa and holistic wellness centre in the main dwelling and living in the garage/carriage house.. A zoning amendment would be necessary to address the addition of the proposed uses and possibly establish specific regulations such as setbacks and parking.

A **PUBLIC MEETING** OF COUNCIL will be held on:

WHEN:

November 26, 2018

WHERE:

Town of Kingsville Municipal Building (Council Chambers)

TIME:

7:00 p.m.

Your comments on these matters are important. If you have comments on this application, they may be forwarded by email, or letter mail to the attention of: **Robert Brown, Manager, Planning Services**, 2021 Division Road North, Town of Kingsville, ON N9Y 2Y9. Comments and opinions submitted on these matters, including your name and address, may become part of the public record and may be viewed by the general public and may be published in a planning report or reproduced in a Council agenda and/or minutes.

IF A PERSON or public body would otherwise have an ability to appeal the decision of Council for the Town of Kingsville to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submission to the Town of Kingsville before the zoning by-law is adopted, the person or public body is not entitled to appeal the decision.

IF A PERSON or public body does not make oral submissions at a public meeting, or make written submission to Council before the zoning by-law is adopted or the zoning by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the epinion of the Tribunal, there are reasonable grounds to add the person or public body as a party.

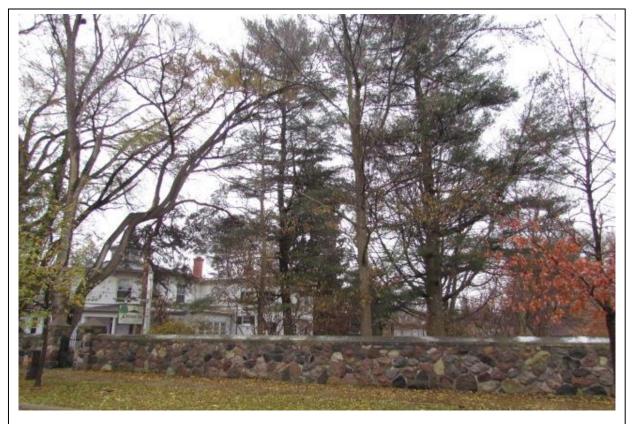
ADDITIONAL INFORMATION relating to this matter is available for review at the Kingsville Municipal Office during regular office hours.

DATED AT THE TOWN OF KINGSVILLE on November 06, 2018.

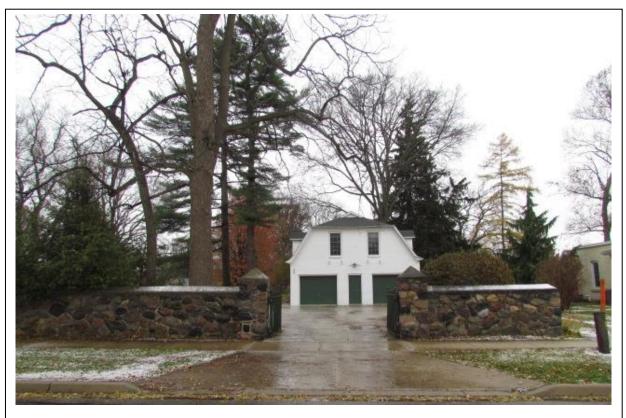
Kristina Brcic, MSc, BURPI 519-733-2305 (x 249) kbrcic@kingsville.ca

and July agree with it. Prayer St. Kingsville

Appendix F - Site Pictures



Looking south across the subject property onto the main dwelling.



Looking south across the subject property onto the garage/carriage house.

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 125-2018

Being a By-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

WHEREAS By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

AND WHEREAS the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

AND WHEREAS there is an Official Plan in effect in the Town of Kingsville and this By-law is deemed to be in conformity with the Town of Kingsville Official Plan;

NOW THEREFORE THE COUNCIL FOR THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- 1. That Section 3.6.19.1 Holistic Wellness Centre is added as follows:
 - 3.6.19.1 <u>Holistic Wellness Centre</u> shall mean a *building* or part thereof, in which facilities or offices are provided for the practice of alternative and traditional medical treatments and may include, but not be limited to, Yoga, Chiropractic, Podiatrist, Chiropodist, Meditation Classes, Reflexology, Massage, Chinese Medicine, Naturopathy, Acupuncture, Iridology, Homeopathy and Shamanism.
- 2. That Section 6.1.1.20 'RESIDENTIAL ZONE 1 URBAN EXCEPTION 20 (R1.1-20)' is deleted and replaced with the following:

6.1.1.20 'RESIDENTIAL ZONE 1 URBAN EXCEPTION 20 (R1.1-20)'

a) For lands shown as R1.1-20 on Map 68 Schedule "A" of this By-law.

b) Permitted Uses

- i) Those *uses permitted* under Section 6.1 Residential Zone 1 Urban (R1.1):
- ii) An inn, an assembly hall, a banquet and a gift shop, OR;
- iii) A holistic health centre and an accessory gift shop.

c) Permitted Buildings and Structures

- i) Those *buildings* and *structures permitted* under Section 6.1 in the (R1.1) zone;
- ii) One dwelling unit above a garage:
- iii) One single detached dwelling;
- iv) Buildings and structures accessory to the permitted uses.

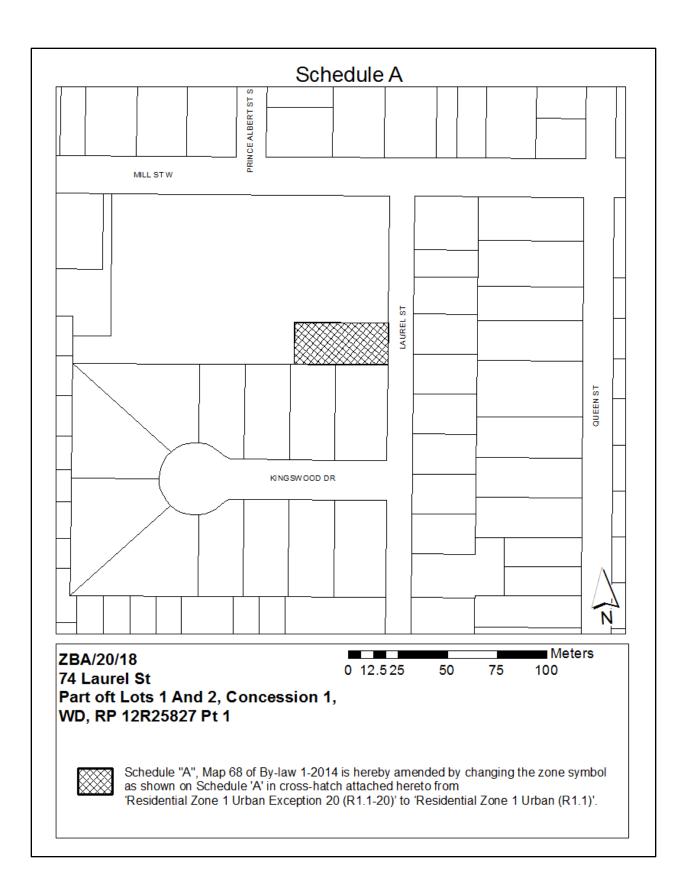
d) Zone Provisions

i) All *lot* and *building* requirements for the *permitted buildings* and *structures shall* be in accordance with Section 6.1.;

- ii) Notwithstanding the provisions of Section 6.1 of By-law No. 1-2014 to the contrary, an *inn*, an assembly hall and a banquet facility shall have a minimum front, rear, interior side and an exterior side yard dimension of 15 m, and as permitted in clause (b) ii), shall:
 - a) Be subject to an executed site plan control agreement between the landowner and the Municipality
 - b) Not change the residential character of the dwelling;
 - c) Be owner occupied;
 - d) Provide and maintain *parking spaces* in accordance with the executed site plan agreement;
 - e) Not have a portion of a *guest room* located below grade or within a *basement*, walkout basement or *cellar*.
 - f) Not be combined with any other *home occupation*, *group home* or *boarding house*.
- iii) Notwithstanding the provisions of Section 6.1 of By-law No. 1-2014 to the contrary, a *holistic health centre* as *permitted* in clause (b) iii), *shall*:
 - a) Be subject to an executed site plan control agreement between the landowner and the Municipality;
 - b) Not change the residential character of the dwelling;
 - c) Be owner occupied;
 - d) Provide and maintain *parking spaces* in accordance with the executed site plan agreement;
 - e) Have a maximum of 4 guest rooms;
 - f) Not have a portion of a *guest room* located below grade or within a *basement*, walkout basement or *cellar*.
 - g) Not be combined with any other home occupation, group home or boarding house.
- 3. Schedule "A", Map 68 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 1,013.7 sq. m (10,911.8 sq. ft.) portion of land, known municipally as 74 Laurel Street, in Part of Lots 1 And 2, Concession 1, WD, RP 12R25827 Pt 1, as shown on Schedule 'A' in cross-hatch attached hereto from 'Residential Zone 1 Urban Exception 20 (R1.1-20)' to 'Residential Zone 1 Urban (R1.1)'.
- This by-law shall come into force and take effect from the date of passing by Council and shall come into force in accordance with Section 34 of the Planning Act.

READ a FIRST, SECOND and THIRD time and FINALLY PASSED this 26th day of November, 2018.

MAYOR, Nelson Santos
CLERK, Jennifer Astrologo





Date: November 19, 2018

To: Mayor and Council

Author: Tim Del Greco, Manager of Municipal Services

RE: Hillview Crescent Parking - Traffic By-Law Revision

Report No.: MS 2018 - 49

AIM

To provide Council with a recommendation regarding Hillview Crescent on-street parking.

BACKGROUND

During the November 13, 2018 Regular Meeting of Council, the following recommendation was made:

Addition of 'No Parking' signs on both sides of Hillview Crescent starting from Division Street North and heading west for a distance of 150 meters.

This recommendation was provided in response to requests by residents of Hillview Crescent as parking on the roadway has created issues with sight lines and the ability to see oncoming traffic at the curve. The majority of feedback received from residents during the annual Traffic By-Law Open House indicated strong support of this proposal.

Attached in Appendix A is a map of the roadway for your reference.

DISCUSSION

In response to the above recommendation, Council passed the following motion:

593-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Tony Gaffan

That Council defer the discussion of the recommendation to amend Kingsville Traffic Bylaw 21-2005 to add 'No Parking' signs on both sides of Hillview Crescent starting from Division St. North and heading west for a distance of 150 meters, to the next Regular Meeting of Council. Municipal Services has since completed a further review of the roadway in order to determine an alternative recommendation. Vehicles parked on the south side of Hillview Crescent can obstruct sight lines for drivers in both directions at the curve. Parking on the north side of the roadway does not create any sight line obstructions. Therefore, the recommendation is to prohibit parking on the south side only.

LINK TO STRATEGIC PLAN

To promote a safe community.

FINANCIAL CONSIDERATIONS

Approximately \$300 will be required in order to implement the appropriate signage. Funding will be derived from the Public Works Operational Budget.

CONSULTATIONS

Municipal Services

RECOMMENDATION

That Council approves an amendment of the Kingsville Traffic By-Law (21-2005) to include the addition of "No Parking" signs on the south side of Hillview Crescent from Division Street North to the eastern property line of 55 Hillview Crescent.

Tim Del Greco

Tim Del Greco, P.Eng Manager of Municipal Services

G. A. Plancke

G.A. Plancke, Civil Eng. Tech (Env.) Director of Municipal Services

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer



Kingsville Mapping



NO PARKING







appear on this map may or may not be accurate, current, or otherwise reliable.



Date: September 11, 2018

To: Mayor and Council

Author: G.A. Plancke / Director of Municipal Services

RE: Special Needs Signage Requests

Report No.: MS 2018 - 37

AIM

To provide Council with relevant information and historical experience with respect to the installation and requests for "Special Needs" signage.

BACKGROUND

Resolution 535-2018

That Administration prepare a report outlining a policy for specialty signs that can be attached to assessment roll numbers of the homes requesting the signs and to incorporate a procedure to follow up after the sale of the property requesting the signage, or after a certain period of time has lapsed, to determine whether the sign is still necessary.

Resolution 545-248

That Council refer the request of C. Heinrichs for the installation of a specialty sign to Administration for a report.

DISCUSSION

The Federally adopted Manual on Uniform Traffic Control Devices (MUTCD) and the Ontario Traffic Manual (OTM) states the following about warning signs:

"The purpose of a warning sign is to provide advance warning to the road user of unexpected conditions on or adjacent to the roadway that might not be readily apparent."



Warning signs that convey the message "Blind Child", "Deaf Child" or "Autistic Child" (or variables) are <u>not</u> recognized by the Province of Ontario or Government of Canada as official traffic control devices and in many areas are no longer installed on public streets across the country.

These types of signs have historically been installed in the past in Kingsville, Gosfield South and Gosfield North respectively, however the signs that were installed in neighborhoods are being left in place until they are no longer serviceable (as is permitted by the MUTCD and Ontario reflectively guidelines), or the Town becomes aware that the family for which the signage was originally installed has moved from the neighborhood. At that time, the signs are removed.

Public agencies across Canada have a variety of policies on these types of signs. Some agencies will install upon request, since a compelling point can be made that a motorist in a residential neighborhood may not be aware that a special needs child is living in the area, which meets criteria for a warning sign, as noted above.

Many advocacy groups for individuals with these issues have mixed opinions on the use of these signs. Some even object to the notion of defining a child by their disability: "Blind Child", "Deaf Child" or Autistic Child", which is partly forced by the need to convey a readily understood message that can fit on a standard-sized street sign.

The need to convey a readily understood message also does not account for the possibility that any particular child may have several issues: They may have impaired vision and impaired hearing, for one example.

In addition, not only there is no quantifiable "standard" of any of these impairments (a child may have very poor vision, but still be able to discern some objects, another may be able to hear some sounds frequencies, but not others, but some impairments are progressive, becoming worse, or better with time and medical care.

Lastly, there is the real issue that the families of these children may move without notice to the Town, which is ultimately responsible for the installation, maintenance, and removal of the sign.

Many of the public agencies that continue to install these signs require some or all of the following from the family making the request for the sign as part of their respective Sign Installation Procedure Policies.

- A physician's statement identifying the extent of the disability.
- Concurrence from the parents of their understanding that the sign will only remain in place for a predefined period (Typically five (5) year increments), and will be removed when the child reaches a specified age (typically thirteen (13) years of age), or no reconfirmation from the parents requesting the sign that the requirement for the sign is still valid after the initial five (5) year installation period.
 - (Age confirmation may include a sworn statement of the child's date of birth).
- Written acknowledgement from the parents of their understanding that the sign is no guarantee of their child's safety and that they remain responsible for the monitoring of their child's activities.
- A commitment to notify the public agency in a timely manner of any positive changes in their child's impairments (for example, cochlear implants, use of a hearing aids etc. for children with hearing impairments).
- A commitment to notify the public agency in a timely manner of any relocation to another place of residence.

These stipulations may require a commitment of disclosing personal information that many parents are uncomfortable and or unwilling to provide, and it requires close tracking from the governing public agency utilizing various forms including roll numbers, and ownership information.

Municipal Policy on "Special Needs" signage:

The Town of Kingsville does not currently have a working policy governing the installation of "Special Needs" signage.

"Blind Child', "Deaf Child", or "Autistic Child", or other variations on signage for special needs children are <u>not</u> recognized by the Province of Ontario or the Government of Canada, and have not been approved administratively for installation by Municipal Services since amalgamation.

Many local municipalities struggle with the installation of these signs administratively, and are reluctant to install them for the many reasons listed previously.

There is little to no evidence that these signs provide any benefit to the safety of children. There is no evidence that these signs result in any behavioral changes by drivers.

Reports from many highway research programs indicate the "Non-uniform signs, should not be permitted at any time, and the removal of any non-standard signs should carry a high priority". In addition, nearly 80% of the crashes involving children resulted from an illegal or unsafe act by the child. In reality, no traffic control device could be expected to protect a child.

Pediatric trauma physicians have cited the studies, and concur that children – particularly young children should actively be discouraged from playing near, or on streets, and that parents have the primary responsibility for ensuring the safety of their children in and around their homes. Even into their teens, and even without accounting for impairments, children have difficulty judging the approach speeds of oncoming vehicles.

The Association of Psychological Sciences based in London England make a finding that "Our study is the first to demonstrate that the neural mechanisms for detection of looming (on-coming traffic) are not fully developed until adulthood". http://pss.sagepub.com/content/22/4/429.full.pdf+html

Addressing the Safety of Young Children

Unnecessary signs confuse and annoy drivers and foster a disrespect for all signs. Signs used in accordance with the MUTCD and OTM can and should be posted for school zones and pedestrian crossings, as well as near established playgrounds and other recreational areas, where a need exists.

The Town of Kingsville has an adopted a Traffic Calming Policy, which is designed to ensure motorists are driving at an appropriate speed, or if there is a significant amount of non-local traffic using the neighborhood streets, which further exasperates the concerns of parents in certain areas and circumstance.

The Traffic Calming Policy can be an effective means of addressing the concerns that parents and families have for their special needs children.

Parents have a vital role in providing for their children's safety and may, in fact be the most effective means of addressing safety concerns. They have the ability to teach children that it is not safe to play in or around the street, and to discourage children from doing so without adult supervision.

LINK TO STRATEGIC PLAN

To promote a safe community.

FINANCIAL CONSIDERATIONS

None at this time

CONSULTATIONS

Manual on Uniform Traffic Control Devices Ontario Traffic Manual The Association of Psychological Sciences City of London Municipality of Anchorage

RECOMMENDATION

That Council receive the information specific to the installation of "Special Needs" signage and further that Council direct administration to formalize a Special Needs Sign Installation Policy based in accordance with the following stipulations:

- A physician's statement identifying the extent of the disability.
- Concurrence from the parents of their understanding that the sign will only remain in place for a predefined period (Typically five (5) year increments), and will be removed when the child reaches a specified age (typically thirteen (13) years of age), or no reconfirmation from the parents requesting the sign that the requirement for the sign is still valid after the initial five (5) year installation period.
 - (Age confirmation may include a sworn statement of the child's date of birth).
- Written acknowledgement from the parents of their understanding that the sign is no guarantee of their child's safety and that they remain responsible for the monitoring of their child's activities.
- A commitment to notify the municipality in a timely manner of any positive changes in their child's impairments (for example, cochlear implants, use of a hearing aids etc. for children with hearing impairments).
- A commitment to notify the municipality in a timely manner of any relocation to another place of residence.

Respectfully submitted,

G.A. Plancke G.A. Plancke **Director of Municipal Services**

Peggy Van Mierlo-West Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer



Date: September 20, 2018

To: Mayor and Council

Author: G.A. Plancke / Director of Municipal Services

RE: Kingsville Range Light Relocation

Report No.: MS 2018 - 39

AIM

To advise Council on the logistics and estimated costs to relocate the Kingsville Range Light from its current location at the Kingsville Historical Park Museum site to a new Town owned waterfront location.

BACKGROUND

The Kingsville Range Light or "Kingsville Lighthouse" was constructed in 1889 and was in operation as the back Range Light until the end 1936.

The Lighthouse has been relocated a few times since 1936, most recently in 1973 where it was relocated from its site on Park St. to Lakeside Park where it remained until November of 1991 at which time it was again relocated to the grounds of the Kingsville Historical Park Museum.

It was extensively renovated in 2003, and has remained largely untouched other than required maintenance activities since that time.

During the Sept 10, 2018, regular Meeting of Council, a delegation representative from the Kingsville Historical Park Museum identified the desire of the Board of Directors to donate the Kingsville Range Light or "Kingsville Lighthouse" back to the Town after a twenty seven (27) year tenure at the Kingsville Historical Park Museum site located at 163 Lansdowne Avenue in Kingsville centre.

Resolution 517- 2018 stated:

That Council refer the request of K. Gunning on behalf of the Board of Directors of Kingsville Historical Park Inc. regarding the possible donation of the Kingsville Range Light (lighthouse structure) to the Town of Kingsville, to Administration for a Report.

DISCUSSION

Municipal Services has obtained some preliminary cost estimates in order to provide Council with an accurate cost of accepting the donation of the Lighthouse, inclusive of relocation expenses, foundation preparation and servicing as required.

The cost to relocate (Physically moving) the Lighthouse has been quoted at \$15,000. The cost to install a new block foundation, permits, and provide site serving (hydro) has been estimated at \$15,000.

Municipal Services endorses a potential location suitable to relocate the Lighthouse, which is attached for Council information as (Appendix A).

The Grovedale House property / Mettawas Park area has been identified as the most suitable location to permanently place the Lighthouse.

The Lighthouse would make an excellent addition to the Mettawas Park development plans currently underway, and would be a fitting reminder of the marine heritage this Town enjoys.

The Lighthouse could be installed in keeping with its original function; in clear site of approaching boats into the harbour in conjunction with the current range lights. It could become a new landmark for marine travellers in general.

LINK TO STRATEGIC PLAN

Promote the betterment, self-image and attitude of the community.

FINANCIAL CONSIDERATIONS

Assuming there are no major unanticipated or unforeseen expenditures, the cost to relocate and permanently place the Lighthouse at its new location is estimated to be \$30,000. An additional 10% contingency would be included to address minor unforeseen issues.

A 2019 Capital budget line item of \$33,000 needs to be included to cover the expense of relocation should Council agree to accept the donation.

CONSULTATIONS

Desjardins House Movers Chief Building Official – Pete Valore Municipal Services Kingsville Historical Park Museum

RECOMMENDATION

That Council receive the information as presented, and to accept the donation of the Kingsville Range Light as donated by the Kingsville Historical Park Museum Board of Directors provided that:

The sum of \$33,000 be included into the 2019 Capital budget for expenses related to the relocation, and permanent placement of the "Kingsville Lighthouse".

G.A Plancke

G.A. Plancke Director of Municipal Services

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer





Date: September 25, 2018

To: Mayor and Council

Author: G.A. Plancke / Director of Municipal Services

RE: Pedestrian Cross Walk Requests

Report No.: MS 2018 - 41

AIM

To provide Council with appropriate information regarding the request to install pedestrian crosswalks.

BACKGROUND

Resolution **556-2018**

That Council refer correspondence of Kingsville BIA dated September 18, 2018 (request for additional crosswalk for pedestrian crossing on Main St. East near the parking lot at the Unico Building) to Administration for a report to be brought back to Council.

Resolution 613-2018

That Administration be directed to prepare a fulsome report to identify potential locations for legal pedestrian crosswalks in the entire municipality, including, but not limited to, the location at Division Street South and Pearl Street and those areas identified in correspondence received from the Kingsville BIA

DISCUSSION

Pedestrian Cross-walks or "Crossovers" – (PXOs) are recognized within the Ontario Traffic Manual (OTM) Book 15- Pedestrian Crossing Treatments, and consistent with the intent of the Highway Traffic Act (HTA) with respect to pedestrian crossing applications.

Before considering the installation of pedestrian crossovers, the municipality must review numerous factors including pedestrian and vehicle volumes, vehicle speeds, crossing distance, road user characteristics and visibility to ensure that the operation of crossovers do not create notable traffic disruptions.

Pedestrian crossovers are only installed on roadways with a maximum-posted speed of 60km/hr.

The two specific requests for PXOs – Division St S. @ Pearl St, and 44 Main St. E. have been identified as areas of concerns for pedestrians and drivers alike.

Division St. S. and Main St E are categorized as Arterial Roads and experience more than 6,000 and 10,000 vehicle trips per day on average respectively.

Approximately 2% (equal to 120 - 200) of these vehicles are classified as D or A class commercial trucks.

The Division St. S. and Main St. E speed limit is established at 50km/hr as posted and assumed as an urban setting speed limit as defined within the HTA.

The request to place centreline bollard style "Yield to Pedestrian" signs similar to those currently in use in the Town of Essex and LaSalle as a suitable or modified version of a PXO is not compliant with OTM Book 15 and should <u>not</u> to be considered as a viable PXO option.

This type of installation is not defensible under the HTA, and could place the Town in greater liability than having nothing in place at all.

In discussions with the Town of Essex, they report their installations are completely compliant to OTM Book 15 with respect to pavement markings and signage (except centreline bollard) however do not have the required flashing LED lights. The cost per installation in Essex was less than \$3000.00 per PXO.

The Municipality of Learnington just completed the installation of fourteen (14) compliant hard wired and illuminated PXOs complete with sidewalk and road improvements at a cost of greater than \$45,000 per installation.

In order to comply with the minimum requirements of OTM Book 15 for a new PXO, the following can be assumed:

The Division St. S. @ Pearl St. is a Level 2 Type B – Intersection (2-way) candidate (Appendix A).

Any OTM compliant design to include a new PXO at this location would require a new painted crosswalk, new painted yield bars, two (2) new bi-directional LED structures, and appropriate signage to meet the specific requirements listed in OTM Book 15.

In addition, requirements to meet accessibility standards as per the Accessibility for Ontarians with Disabilities Act (AODA) would also need to be included.

There are no identified visibility concerns at this location due to on street parking. No parking spaces would be impacted by this installation. (Aerial rendering / Appendix B)

The preliminary cost estimate for a solar-powered bi-directional LED structure installation, signage, and pavement markings as required at this location is \$6000.00. A hard-wired solution would add an additional \$2000.00 to this project. Dedicated PXO illumination would add an additional \$4000.00 to this project. Total installation cost of **\$12,000.00**



The location identified @ 44 Main St E. is consistent to a Level 2 Type B – Midblock (2-lane, 2 way) type installation. (Appendix C).

This location has historically been used as an "unofficial" midblock PXO for many years.

Any OTM compliant design to include a new PXO at this location would require a new painted crosswalk, new painted yield bars, two (2) new bi-directional LED structures, and appropriate signage to meet the specific requirements listed in OTM Book 15.

In addition, requirements to meet accessibility standards as per the Accessibility for Ontarians with Disabilities Act (AODA) would also need to be included.

It was determined during design review that two (2) existing parking spaces would need to be eliminated on the south side in order to comply with regulatory site distances to the new PXO.

(Aerial rendering / Appendix D)

The preliminary cost estimate for a solar-powered bi-directional LED structure installation, signage, and pavement markings as required at this location is \$6000.00. A hard-wired solution would add an additional \$2000.00 to this project. Dedicated PXO illumination would add an additional \$4000.00 to this project. Total installation cost of **\$12,000.00**

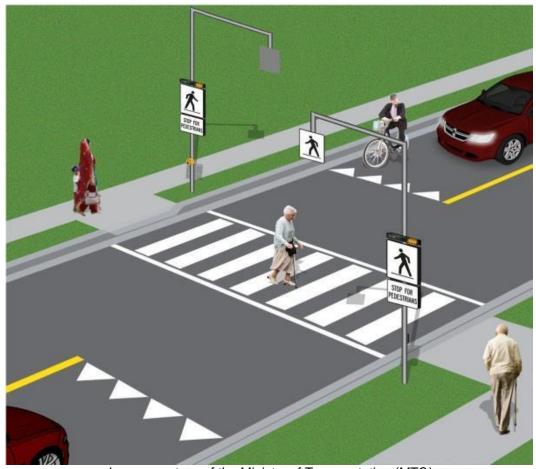


Image courtesy of the Ministry of Transportation (MTO)

LINK TO STRATEGIC PLAN

To promote a safe community.

FINANCIAL CONSIDERATIONS

The preliminary budget estimate for a new Division St. S. @ Pearl St. PXO has been established at an upset limit of \$12,000.00.

The preliminary budget estimate for a new PXO located at 44 Main St. E. has been established at an upset limit of \$12,000.00.

Total PXO project cost \$24,000.00

CONSULTATIONS

Ontario Traffic Manual Book 15 – Pedestrian Crossing Treatments Town of Essex – Chris Nepszy – Director of Infrastructure and Engineering Municipality of Leamington – Allan Botham – Manager of Engineering

RECOMMENDATION

That Council receive the information provided, and that \$24,000 be included within the 2019 Capital budget deliberations for the installation of two (2) Pedestrian Crossovers to be located at the intersection of Division St. S. and Pearl St. and 44 Main St. E. respectively and that;

Council direct administration to develop a Pedestrian Crossover Policy as a guidance document to govern supplemental requests for Pedestrian Crossovers for discussion a future date Council.

Respectfully Submitted,

G.A. Plancke

G.A. Plancke

Director of Municipal Services

<u>Peggy Van Mierlo-West</u>

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer

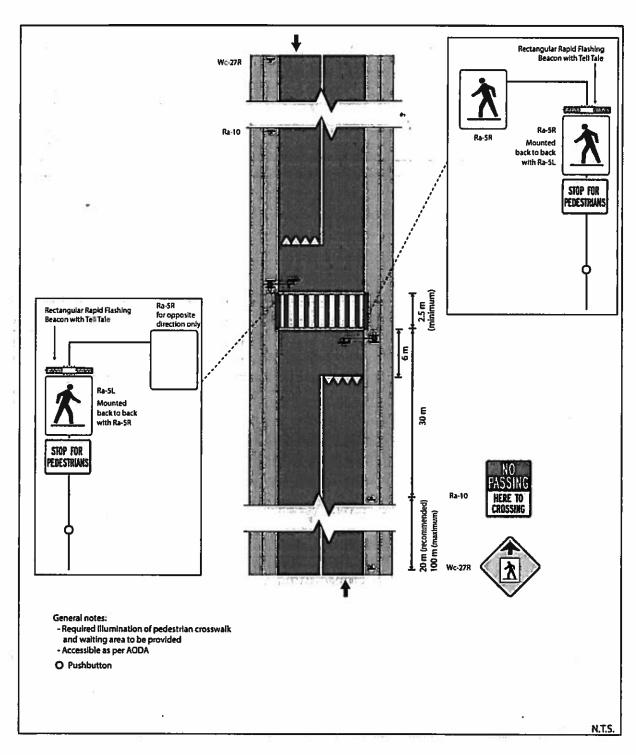


Figure 21: Pedestrian Crossover Level 2 Type B - Mid-block (2-lane, 2-way)

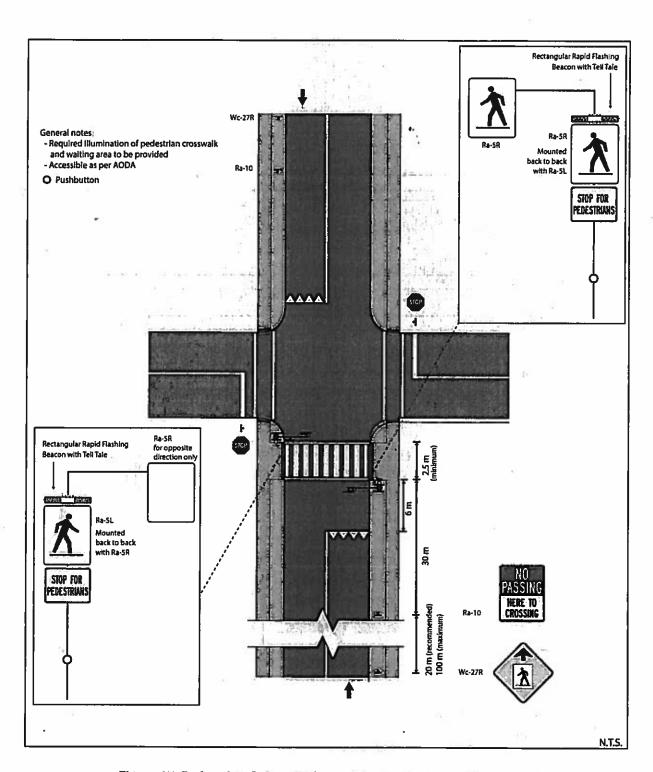
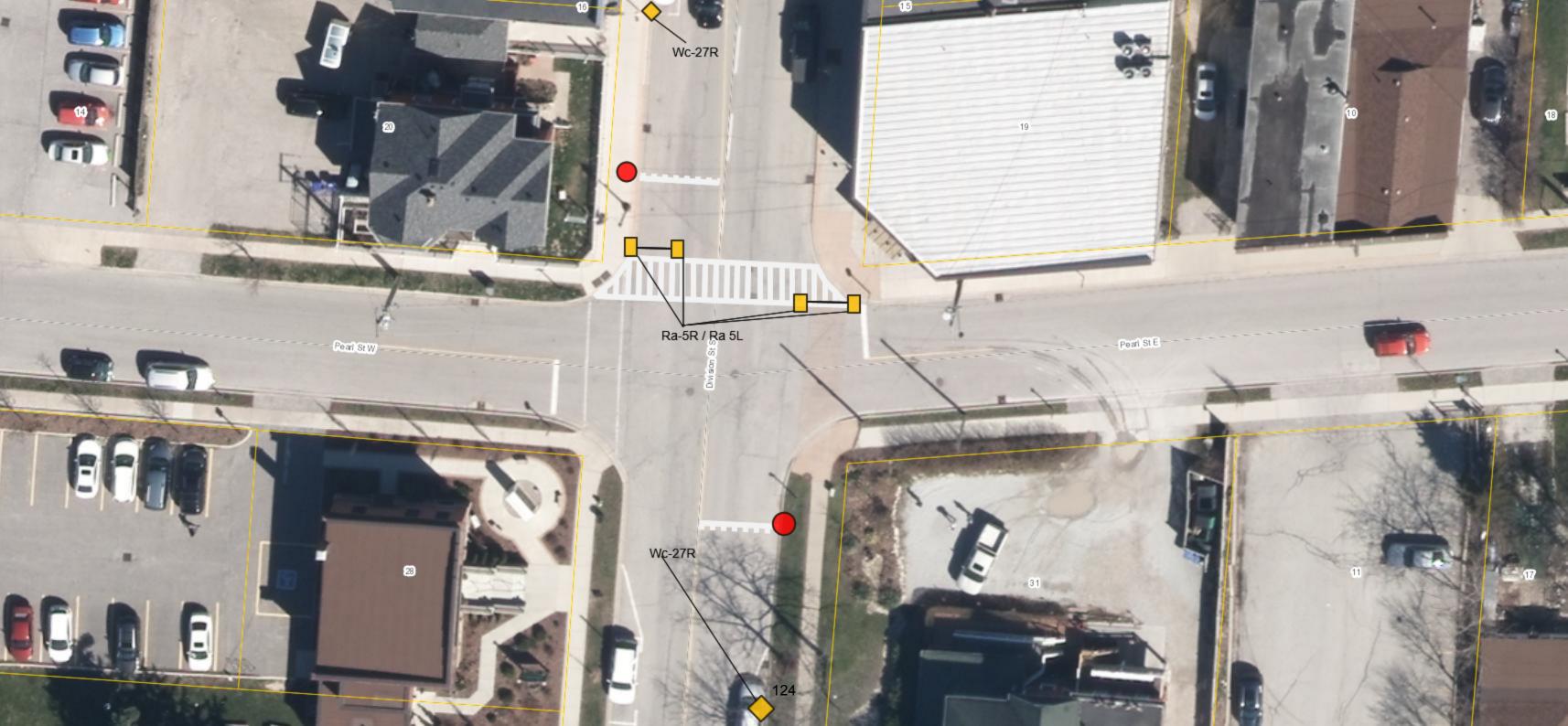
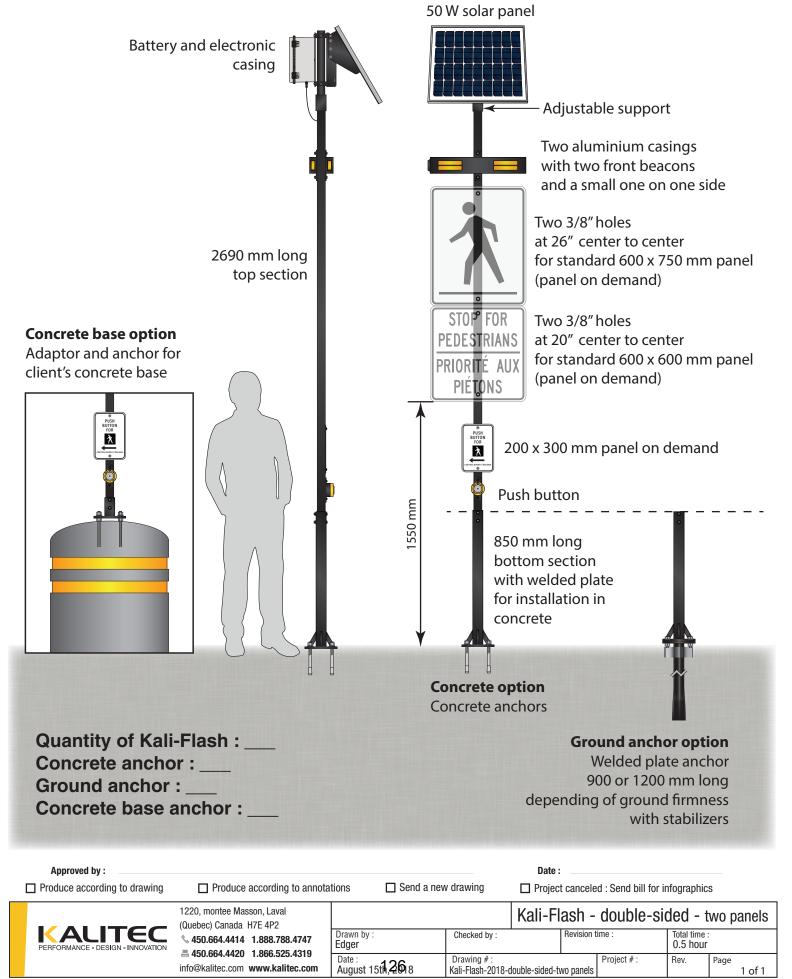


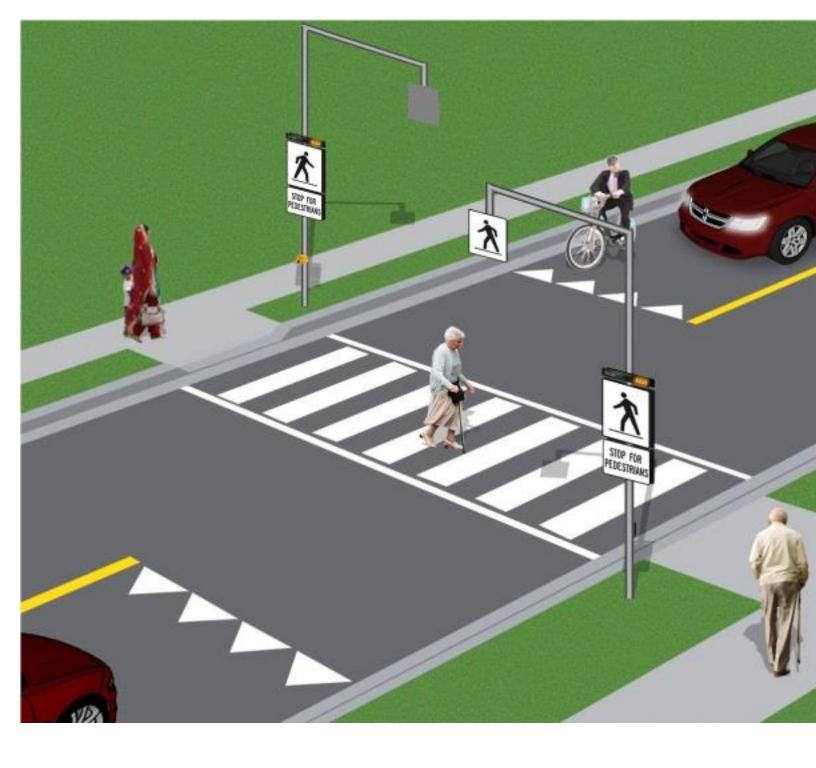
Figure 27: Pedestrian Crossover Level 2 Type B - Intersection (2-way)





Double-sided structure







Date: October 10, 2018

To: Mayor and Council

Author: G.A. Plancke / Director of Municipal Services

RE: Final Acceptance / Royal Oak at the Creek Phase 8a

Report No.: MS 2018 - 46

AIM

To recommend Final Acceptance of the Royal Oak at the Creek Phase 8a development.

BACKGROUND

In a formal written request via email to Municipal Services, the Developer's Engineer (Robert Filipov, P.Eng. / Amico Engineering) has requested that the listed phase of subdivision be granted Final Acceptance and that all securities be returned to the Developer, Amico Properties Inc.

As per the Town's current Development Standards Manual, The Developer is to formally request "Final Acceptance" from the Director of Municipal Services in order for the Town to accept the subdivision (phase) as complete.

Provided the Director endorses the request, a Resolution of Council officially accepting the subdivision (phase) is to be passed in order to transfer responsibility of the roadway and infrastructure to the Municipality.

Once the Resolution has been passed, the Developer is no longer obligated to maintain or repair the infrastructure in the subdivision (phase).

DISCUSSION

All infrastructure has been satisfactorily constructed and installed, and all outstanding infrastructure deficiencies for this subdivision (phase) as well as any Development Agreement requirements for this phase of development have been satisfied.

The request of the Developer's Engineer is supportable at this time.

LINK TO STRATEGIC PLAN

Manage growth through sustainable planning.

FINANCIAL CONSIDERATIONS

None at this time.

CONSULTATIONS

Gudrin Beggs / Amico Properties Inc. Robert Filipov P.Eng. / Amico Engineering Municipal Services Development Services

RECOMMENDATION

Municipal Services recommends that Council concur with the request of the Developer's Engineer and endorsed by the Director of Municipal Services for the Town to grant "Final Acceptance" of the roadway and infrastructure for the Royal Oak at the Creek Phase 8a subdivision.

G.A. Plancke

G.A. Plancke

Director of Municipal Services

<u>Peggy Van Mierlo-West</u>

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer



October 10, 2018

The Corporation of the Town of Kingsville 2021 Division Road North Kingsville, ON N9Y 2Y9

Attention:

G.A. Plancke, Civil Eng Tech (Env) Director of Municipal Services

Dear Sir:

RE: Royal Oak at the Creek Phase 8A Final Acceptance of Services

We certify that all Services constructed in association with Royal Oak at the Creek Phase 8A are complete and built in accordance with the Plans and Specifications for this development. All known deficiencies, defects or faults in the Services have been corrected and there is no outstanding work on this project.

We request that this subdivision be granted Final Acceptance and that all securities be returned to the Developer, Amico Properties Inc. Should you have any questions or comments, I can be contacted at (519) 737-1577 Ext. 267.

Sincerely,

Amico Engineering Inc.



Robert Filipov, P.Eng. Senior Engineer

C.c. Gudrin Beggs – Amico Properties Inc.

2199 Blackacre Drive, Oldcastle, Ontario NOR ILO . Telephone: (519) 737-6299 Fax: (519) 737-1929



Date: November 15, 2018

To: Mayor and Council

Author: Robert Brown, H. Ba, MCIP, RPP

Manager, Planning Services

RE: Application for Site Plan Approval SPA/13/18 by

2623991 Ontario Ltd. 609 Road 3 E Part of Lot 4, Con 2 ED, Part 1,

RP 12R 11488, Part 2, RP 12R 22191

Report No.: PDS 2018-057

AIM

To provide Council with details on the development of a multiple phase medical marihuana production facility on lands located on the south side of Road 3 E, in the Town of Kingsville.

BACKGROUND

The subject lands is a 38 ha (97 ac.) farm parcel with an existing dwelling and two outbuildings. The property was the focus of an Official Plan Amendment to permit a new build greenhouse for the growing of medical cannabis and Zoning By-law amendment to permit the establishment of a medical marihuana production facility. The applicant is now proceeding with the site plan approval stage of the development. The property will be developed in four phases from west to east. Phase 1 will include an 11,412 sq. m (122,840 sq. ft.) warehouse, hot water tank, cold water tank and 5.58 ha (13.78 ac.) greenhouse. Additional phases will be constructed as necessary. Storm water management will be accommodated in a pond at the rear of the property. Servicing is proposed via a corridor from Road 2 E to Road 3 E. Water capacity has been confirmed for Phase one, additional phases will require future confirmation. The development will include on-site worker housing.

While the plan does show the possible full build-out there is a small portion of an existing lot at 691 Road 3 E which the applicant has applied to sever and convey as a lot addition to the subject parcel. This will require additional approvals i.e Official Plan Amendment and Zoning By-law amendment to match that of the larger parcel. As requested by the

neighbours and directed by Council a public information meeting was held September 26 to get input into the final detail on the plan such as fencing, berms and landscaping.

DISCUSSION

1.0 Provincial Policy Statement

There are no issues of Provincial significance raised by this application.

2.0 Official Plan

The subject property is designated 'Agriculture' and subject to the policies under Section 3.1 of the Official Plan for the Town of Kingsville. The proposed site plan layout and associated agreement to establish conforms to the Official Plan.

3.0 Comprehensive Zoning By-Law – Town of Kingsville

The subject property is zoned 'Agricultural Zone Exception 69 (A1-69)'. The attached site plan has been reviewed and the proposed new development will be in compliance with all provisions of the Town of Kingsville Zoning By-law 1-2014 the site-specific regulations outlined by under the A1-69 Zone.

More specifically the zoning implements the odour control requirements for a medical marihuana production facility. This involves the installation of the required 'air treatment control' system. The system must be designed by a qualified person and result in no perceptible odour at the property line of the subject parcel. The applicant must also provide a maintenance schedule for the system and demonstrate that the system is operational prior to beginning operations.

The odour control provisions are implemented and regulated through the zoning bylaw. Non-compliance will result in a zoning order to comply with fines and provincial prosecution possible should corrective actions not be taken. The odour control plan itself will be attached as an Appendix to the site plan agreement for ease of tracking and reference in the future.

The specific odour control that is being utilized in the operation is a broad spectrum high-intensity UV light targeted on a hydrated quad-metallic catalyst which utililzes ambient moisture to generate hydro-peroxides and hydrooxides that are propelled into the cultivation facility, to provide active microbial and odour mitigation. This is designed to eliminate odours at the source. One unit per 92.9 sq. m (1,000 sq.ft.) is required with a total of 496 units located throughout the growing areas. See Appendix A) The applicant will also be providing additional detail at the meeting of Council.

Heating of the greenhouse is done with traditional hot water piping. Cooling of the greenhouse in the summer months is done in the opposite fashion using a separate radiate cold water piping system. The facility will still use limited roof venting however by eliminating the odours at source in the greenhouse odour migration beyond the greenhouse should not occur.

4.0 Site Plan

In order to provide for the best overall layout on the subject property several discussions have taken place with the applicant. On September 26th a public open house was held at the Unico Centre to provide landowners within 500 m of the subject property the opportunity to ask questions and provide input to the applicant. The majority of the questions were centered around certain details related to the use and the function of the overall operation.

Traffic impact on Road 3 was of significant interest and did result in the completion of a comprehensive Traffic Impact Study (Appendix B) for the road which outlines the overall growth in traffic volume that would result as the complex builds out. The TIS also noted improvements that would be necessary as a result. The suggested improvements for Road 3 E as part of the initial phase will be a widening and asphalting of the existing road surface along the full length of the subject property frontage. This work will be completed once the first phase is constructed. As subsequent phases come forward traffic will be reviewed and the need for further improvements assessed at that time. The most noteworthy improvement would be the addition of a left turn lane at the intersection of Road 3 E and Division Rd N. The specific timing of this work will depend on the volume of traffic from the subject property as well as the future impact of the closing of Jack Miner Public School which currently has a significant impact on the intersection during certain peak times.

One common element of MMPF locations and a concern during the zoning process was the addition of fencing to the properties to satisfy Health Canada security requirements. The applicant has shown fencing on the property around the perimeter but excluding the bunkhouse. Berming and trees will be provided along areas where fencing is close to the road way or existing off-site residential dwellings. However, as Health Canada will determine what is acceptable and based on the solid wall design of the growing area fencing may not be required to the extent it is shown.

The overall plan for Phase one includes 5.58 ha (13.78 ac.) of greenhouse, a 1.140 (2.82 ac.) warehouse and support facility, service area, hot and cold water tanks, parking area and bunkhouse all detailed on the attached site plan (Appendix C). Placement of the greenhouse is in compliance with the minimum 100 m setback for growing areas however the flowering area, which is the principle source of odour generation, is actually located an additional 172 metres from the nearest dwelling at 573 Road 3 E.

Lighting in the greenhouse will be controlled through the design of the structure itself which will be solid walls verse the traditional clear greenhouse sidewalls and use of a breathable, triple layer retractable curtain on the ceiling of the greenhouse which will be peaked glass. (Appendix D)

Servicing of the site will include a new 300 mm water line to be installed from Road 2 E to Road 3 E. Stantec Consulting has reviewed the needs for the operation and indicated that there is capacity to supply Phase one of the development. (Appendix

E) Stantec also noted that the Town should consider upsizing the water line to 400 mm as it would help to maintain and improve supply in the area particularly given the ongoing potential for additional greenhouse development. The Town will be responsible for the upsizing from 300 mm to 400 mm and a portion of the connection from the end of the service to the subject property to Road 3 E or approx. 300m of water line. The costs associated with this upsizing and extension will need to be subject to consideration in the 2019 budget deliberations.

Sanitary service will be via a force main from the facility to an existing line on Road 2 E into the existing gravity system at the end of Hazel Crescent. Both the sanitary and water will require a corridor between Road 2 E and Road 3 E. This will consist of a conveyance of 20 m from abutting lands owned by the applicant to the Town from Road 3 E to the southwest corner of the subject property. From this point a 10 m wide corridor will be provided via an easement in favour of the Town along the west side of the subject lands.

MMPFs require a significant amount of security given the nature of what they produce. It was not raised as an issue specific to this site however there has been some concern noted that security camera placement and coverage could impact abutting property owners privacy. With this in mind it was requested that a security plan be submitted showing the placement of security cameras on the site. It will also be a provision in the site plan agreement that all cameras are to be positions as to not impact on abutting landowners properties.

Site Plan Security Deposit

The principle concern with the establishment of MMPFs in the Town of Kingsville has been the uncertainty of odour control and grow light issues. Through the site plan approval process the Town can require the submission of various securities for on or off-site requirements. Most often this may include road improvements, signalization, service connections, landscaping, fencing or any other item or issue that the Town views as necessary to insure a development is constructed as outlined. Site plan securities have to-date not represented a significant amount however with the initial uncertainty it is advisable to increase the amount collected given the potential impact. A 50% deposit is recommended based in part on the standard requirements in subdivision agreements which require securities for the installation of roads and services. Those deposits are typically 50% of the total costs.

As this does represent a significant amount to the developer the site plan agreement will be structured in such as way that securities can be released as requirements are reviewed to the satisfaction of the Town. This particular agreement would have three main points, odour control, lighting and the Road 3 E road improvements. As the approval is only for Phase One of the development new securities will be required as further phases seek approval for development.

LINK TO STRATEGIC PLAN

Support growth of the business community.

FINANCIAL CONSIDERATIONS

The proposed development represents a substantial investment in the community and will result in a significant increase in assessment to the subject lands. The Town will incur some cost associated with the water line upsizing and partial extension however this will be offset with improved overall quality of supply of water to existing customers in the area.

CONSULTATIONS

Public Consultations

During the Zoning Amendment approval process abutting landowners expressed an interest in being involved in the site plan review and approval stage of the development. Council directed staff to provide that opportunity. As such a public open house was held by the applicant on September 26, 2018 at the Unico Centre. There were a total of 14 people who attended the meeting. Most of the questions centered around the general operations of the proposed facility.

In addition land owners within 500 m of the subject property were provided with notice of the November 26th meeting in order to provide any addition comment to Council which is consistent with Council recently requested change to the site plan approval process for major developments.

Agency & Administrative Consultations

Applicable agencies and Town Administration were circulated for comment by email.

Agency or Administrator	Comment
Essex Region Conservation Authority Watershed Planner	 Full comment is attached as Appendix 'F'; Storm water management will be required along with necessary permit and clearance. Natural Heritage policies of PPS 2014 were reviewed, an EIA will be required as the proposed development is within 120 m of natural heritage feature on the property. An EIA was completed on the abutting feature in 2016. This was recirculated to ERCA who has indicated that that report is acceptable to address the EIA requirement. ERCA also noted that the subject property in within a Significant Groundwater Recharge Area (SGRA) This was addressed by the applicant to the satisfaction of the Town as per ERCA recommendation
Town of Kingsville Management Team	 No concerns with the requested site plan. The proposed building needs to comply with the requirements of the OBC. Municipal Services has reviewed the storm water management plan and has no objection to the proposed development moving forward subject to

- conditions outlined in the agreement.
- The servicing plans, as outlined in Section 4.0 of the this report, have been reviewed and are satisfactory to the Town.
- The upsizing and extension of the water line will be part of the 2019 budget considerations.
- Municipal Services has reviewed the requested Traffic Impact Study and provided an outline of requirements and timing to the applicant. The requirements for Phase 1 are included in the site plan agreement. Further improvements will be addressed as subsequent phases come forward for review and approval.

RECOMMENDATION

It is recommended that:

Council approve Phase one of the proposed greenhouse development for a medical marihuana production facility, subject to the conditions outlined in the site plan agreement, for a 5.78 ha (13.78 ac.) greenhouse with auxiliary warehouse and supporting facilities and authorize the Mayor and Clerk to sign the site plan agreement and register said agreement on title, and

Council require a security deposit equal to 50% of the total cost of the odour control system, lighting control system and Road 3 E road improvements (Phase One only) to be deposit with the Town prior to release of any building permits.

<u>Robert Brown</u>

Robert Brown, H. Ba, MCIP, RPP Manager, Planning Services

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer









urban-gro

Providing Product Solutions for the Commercial Cannabis Cultivator



Air Purification Systems

PROTECTING YOUR GROW

Our patented Element Air treatment systems are the most practical and effective solutions for airborne and surface microbial contaminants, including powdery mildew, total yeast and mold (TYM) and Cannabis odors. Element Air has been independently verified to reduce bacterial and other microbial contaminants by 99+%.

The Element Air technology utilizes broad spectrum. high-intensity UV lights targeted on a hydrated quad-metallic catalyst which utilizes ambient moisture to generate hydro-peroxides and hydroxides that are propelled into the cultivation facility, to provide active microbial and odor mitigation.

As opposed to other units promoted to the Cannabis market which utilize a similar technology, Photocatalytic Oxidation (PCO), which only sanitize the air that is passed directly in its path, Element Air is an active purification system. It purifies the ducts and general growing spaces, while also removing odor at the source.

BENEFITS OF ELEMENT AIR SYSTEMS:

- Several different module types:
- Reduce airborne microbes by 99%
- Reduce airborne VOC's, including airborne Cannabis terpenoids and other odors
- Helps eliminate airborne bacteria, mold and odors
- Actively "scrubs" ducting, air and surfaces with airborne hydro-peroxides
- Completely safe for workers and plants
- · Made for greenhouse and Indoor cultivation environments
- Food grade stainless steel construction for years of trouble free service
- 1 year warranty





urban-gro.com

sales@urban-gro.com

720.390.3880



ELEMENT AIR TOWER

Available in free standing floor units or horizontal/vertical wall mount:

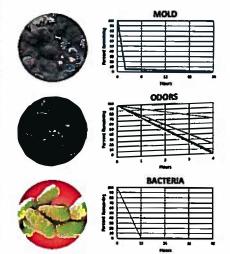
Material: Stainless Steel

Depth: 18"
Width: 20"

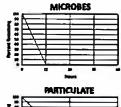
Height: 78"

Weight: 70 lbs.

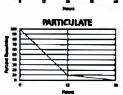
Electrical: 1100/2.8 A















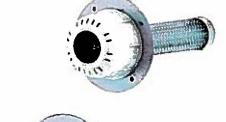
ELEMENT AIR UV

Dimensions: 5" probe, 5.5" plate

9" probe, 5.5" plate 14" probe, 5.5" plate

Weight: 4 lbs.
Electrical: 24VAC

In-duct unit (fixed mount)



ELEMENT AIR IN-DUCT

Dimensions:

5" probe, 5.5" diameter plate 9" probe, 5.5" diameter plate 14" probe, 5.5" diameter plate

Weight:

6 lbs.

Electrical:

24VAC

In-duct unit (fixed mount)



ELEMENT AIR IN-DUCT PLUS

Dimensions: 12" probe, 6.5" x 7.5" plate

Weight: 6 lbs.
Electrical: 24VAC
In-duct unit (fixed mount)



ELEMENT AIR LIGHT COMMERCIAL

Dimensions: 2.25" W x 10.5" L x 1.75" D

2.25"Wx13.5"Lx1.75"D

Weight: 1 lbs. Electrical: 24VAC

Dimensions:

2.25"W x 18.5"L x 1.75"D

Weight: 2 lbs.

Electrical: 24VAC





urban-gro.com

sales@urban-gro.com

720.390.3880



Element Air

ADVANCED OXIDATION TEST RESULTS 2000-2016

RGF first developed its Advanced Oxidation Technology over 20 years ago. Over one million RGF cells are in use around the world. RGF has licensed its technology to many Fortune 500 companies for use in medical, food, military, residential, commercial, marine, hospitality and government applications. RGF cells in various products have been tested and/or approved or registered by:

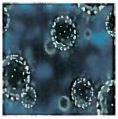
•ETL, TUV, EU, CSA ·U.S. Military

 Chinese Government Japanese Government (TV commercials) Canadian Government

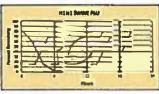
 U.S. Government ·European Union ·USDA & FSIS

•Electric Power Research Institute

In addition, RGF cells have been specified in the Norovirus & MRSA protection plans of America's largest restaurant chains, hotel chains, theme parks, cruise lines, public schools and hospitals. The following is a summary of some of the testing and studies performed by third party independent labs and universities. RGF products are not medical devices and no medical claims are made.



The H1N1 flu virus, or swine flu, caused a worldwide pandemic in 2009-2010. It is now considered a seasonal flu, which continues to circulate seasonally worldwide. Spread of the H1N1 virus occurs in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing by people with influenza. Sometimes people may become infected by touching Items - such as a surface or object -

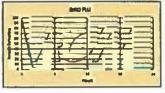


with flu viruses on it and then touching their mouth or nose. Kansas State University completed preliminary testing on RGF's Photohydroionization® (PHI-Cell®) and Reflective Electromagnetic Energy (REME® Cell) technologies with 99+% inactivation of H1N1 Swine Flu on a stainless steel surface.

Tested by Kansas State University Inactivation Rate 99+%

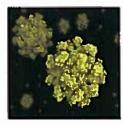


Avian influenza is an infection caused by avian (bird) influenza (flu) viruses. Avian influenza is very contagious among birds and can make some domestic birds, including chickens, ducks and turkeys, very sick and kill them. Of the few avian influenza viruses that have crossed the species barrier to infect humans, H5N1 has had the largest number of detected cases of severe disease and death in humans. Of the human cases asso-



ciated with the H5N1 outbreaks in poultry and wild birds in Asia, Europe, the Near East and Africa, more than half of those people reported infected with the virus died. Source: CDC: Center for Disease Control and Prevention

Tested by Kansas State University Inactivation Rate 99+%



Norovirus is a highly contagious virus and as few as 10 viral particles may be sufficient to infect an Individual, infections of the virus can occur by consuming contaminated food or water, by touching contaminated surfaces, or from person-to-person transmission. Norovirus is named after the original strain "Norwalk virus," which caused an outbreak of gastroenteritis in a school in Norwalk, Ohio in 1968. The most common Norovirus outbreak



settings include healthcare facilities, restaurants and catered events, on cruise ships and in schools. 50% of all food-borne outbreaks of gastroenteritis can be attributed to norovirus.

Tested by Midwest Research Institute Inactivation Rate 99+%



Methicillin-Resistant Staphylococcus Aureus (MRSA) is a type of bacterium responsible for difficult to treat Infections due to its resistance to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as oxacitlin, penicillin and amoxicillin. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers)



who have weakened immune systems. in the community, most MRSA infections are skin infections. In medical facilities, MRSA causes life-threatening bloodstream infections, pneumonia and surgical site infections. RGF along with a major hospital participated in a two-year study evaluating PHI technology, which resulted in a 33.4% reduction in infections.

Tested by Kansas State University Inactivation Rate 99+%



Streptococcal (strep) infections are caused by group A streptococcus, a bacterium responsible for a variety of health problems. Most infections are relatively mild illnesses, such as "strep throat". These bacteria spread through direct contact with mucus from the nose or throat of people who are sick with an infection, or through contact with infected wounds or sores on the skin. Source: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES



Tested by Kansas State University Inactivation Rate 96+%



Pseudomonas Sp.

The bacterial genus *Pseudomonas* includes plant pathogenic bacteria such as *P. syringae*, the opportunistic human pathogen *P. aeruginosa*, the ubiquitous soil bacterium *P. putida*, and some species that are known to cause spoilage of unpasteurized milk and other dairy products.

Source: CDC: Center for Disease Control and Prevention





Listeria Monocytogenes

Listeria Monocytogenes is a bacterium that causes listeriosis. They are commonly found in soil and water. Most human infections follow consumption of contaminated food such as uncooked meats; unpasteurized milk and cheeses, and cooked or processed foods such as ready-to-eat meats. Unlike most bacteria, Listeria is able to grow at refrigerated temperatures. The disease primarily affects older adults, pregnant women, newborns, and adults with weakened immune systems.

Source: CDC Centers for Disease Control

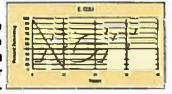
Tested by Kansas State University Inactivation Rate 99+%

Tested by Kansas State University Inactivation Rate 99+%



Escherichia coli

Escherichia coli, usually abbreviated E. coli, are a large and diverse group of bacteria, which are found in in the lower intestines of mammals. Some strains such as enterohaemorrhagic E. coli (EHEC) that are pathogenic can cause severe foodborne illness. Outbreaks are most often linked to raw or undercooked meat products, raw milk, and fecal contamination of vegetables. Source: CDC: Center for Disease Control and Prevention



Tested by Kansas State University Inactivation Rate 99+%



Salmonella

Salmonella is the name of a group of bacteria and is one of the most common causes of food poisoning in the United States. Every year one million people are infected, with more than 19,000 hospitalizations and 380 deaths. Source: Food Safety /CDC Center for Disease Control



Tested by Kansas State University Inactivation Rate 99+%



Clostridium difficile (C-Diff)

Clostridium difficile, also known as C-diff or *C. difficile*, is a gram-positive bacterium that can cause an inflammation known as colitis. It is considered a healthcare-associated infection (HAI). C-Diff infection rates have been on the rise and are becoming more severe and difficult to treat.



Tested by Kansas State University Inactivation Rate 99+%



Tuberculosis

Tuberculosis is caused by the bacterium Mycobacterium tuberculosis. It typically attacks the lungs, but can also affect other parts of the body. It is spread through the air when people with infection cough, sneeze, or otherwise transmit their saliva through the air. Most infections are asymptomatic and latent, but about one in ten latent infections eventually progresses to

active disease which, if left untreated, kills more than 50% of those so infected Source: Centers for Disease Control

It typ-, It is other-matic es to

Tested by Kansas State University Inactivation Rate 99+%



Legionella

Legionella is a group of pathogenic bacteria that is one of the most frequent causes of waterbome disease in humans. One type of pneumonia caused by Legionella is called legionellosis, or commonly known as Legionnaires' disease. The disease is transmitted when people breathe in a mist or vapor with the bacteria. Source: CDC Centers for Disease Control



Tested on Pan Saver by Kansas State University Inactivation Rate 99+%



Streptococcus Pneumoniae

S. pneumonia is an exclusively human pathogen and is spread from person-to-person by respiratory droplets, meaning that transmission generally occurs during coughing or sneezing to others within 6 feet of the carrier. The bacteria can cause many types of illnesses, including meningitis, ear infections, sinus infections, and bacteremia. Health experts estimate that



more than 10 million mild infections (throat and skin) like these occur every year.

Source: CDC Centers for Disease Control

Tested by Kansas State University Inactivation Rate 99+%



Bacteria/Mold/Yeast

The purpose of these tests was to evaluate the effect RGF's Advanced Oxidation Technology has on mold, yeast and bacteria (TPC). This test was performed utilizing a standard 2,000 sq. ft. home and 3,000 sq. ft. simulated home.



Reduction %

Bacteria 99%

Mold 97- 98%

- Vegetable sulfide

Yeast 90+%

Tested by California Microbiology Center



Chemical Compounds

Gas Chromatograph/Mass Spectrometer test performed by Nelap Accredited Lab on airborne chemical compound reduction using RGF's AOT.

Hydrogen Sulfide - Rotten eggs Methyl mercaptan - Rotten cabbage

Butyl Acetate - Sweet banana Methyl Metharcyline - Plastic



Carbon Disulfide

📕 Hydrogen Sulfide 80% 💹 Methyl mercaptan 100% 📈 Carbon Disulfide 30% 🦰 Butyl Acetate 100% 📉 Methyl Metharcyline 100%

Tested by GC/MS Nelap Accredited Independent Lab

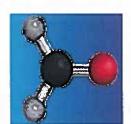


Odors

The purpose of this test was to evaluate to what effect the RGF's AOT unit has on cleaning chemicals, pet odors, and perfume odors. This test was performed utilizing two 500 cubic foot test chambers and a ten-person odor panel. The qualitative assessments of the ten-person odor panel were then used as a means to determine the odor reduction.



Tested by C&W Engineering (Independent PE Firm)



Formaldehyde

Reduction %

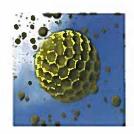
Formaldehyde is a colorless, flammable, strong-smelling chemical that is used in building materials and to produce many household products. It is commonly used as an industrial fungicide, germicide and disinfectant. When formaldehyde is present in the air at levels exceeding 0.1 ppm. some people may experience adverse effects including burning sensations

Cleaning chemicals 55+% Pet odors 72% Perfume odors 63+% Smoke odors 70%



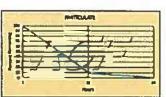
in the eyes, nose, and throat, watery eyes, coughing, nausea, as well as skin initation. The purpose of this test was to evaluate the effect RGF's Advanced Oxidation Technology has on formaldehyde.

Tests by Kansas State University | Formaldehyde levels less than 0.05 ppm in 4 hours



Suspended Particulate Reduction-REME®

The REME® Cell was evaluated for particulate reduction in a particle test chamber. Particle counts where reduced to ISO Class 4 levels (10,000 -0.1um) within 12 hours of exposure to the REME® Cell. After 24 hours of treatment, ISO Class 3 levels (1,000 - 0.1um) were achieved. Typical HEPA filtration is effective down to .3um



Tested by Kansas State University Inactivation Rate 99+%



Electrical / Ozone / EMF

All RGF AOP devices have been thouroghly tested for electrical safety, ozone *i* emf - Electro Magnetic Frequency and have passed Federal Safety Standards.

Tested by: TUV, ETL, UL, CSA, NEI China, RGF Labs. The Japanese Government, GSA, and Electrical Power Research Institute.

Note: Many household appliances emit some ozone and emf in safe low levels such as fluorescent lights, motors, computers, copy machines, refrigerators, blenders, electronic air filters, air conditioners, electric fans, microwave ovens, etc.

Sneeze Test - RGF PHI and REME®

A testing protocol concept was used which included a "Sneeze Simulation Machine" and "Sneeze" chamber. A sneeze can travel at up to 100 mph, so lung capacity, sneeze pressure, and liquid volume had to be taken into consideration to properly simulate a human sneeze. This was accomplished and the test proceeded with outstanding results. An average of 99% reduction of sneeze germs was achieved with PHI/REME® in a double blind test, at three feet from the sneeze source.

Simulated Sneeze Lab Test at three feet in a 250 cu ft Bio Test Chamber. An independent PE double blind study.



Tested by: Kansas State University, inactivation 99%

SAFETY

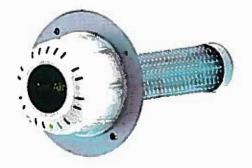
It is a normal reaction to question the long term safety of any product that is effective and uses new or "breakthrough" technology. This type of question has become common as our litigious society has taught us to question things that significantly outperform existing methods or products.

The RGF advanced oxidation technologies that produced the results found on the pages of this report certainly fall into the category of breakthrough technology. This is evident by its outstanding test results across the entire range of microbes,

The breakthrough in the RGF advanced oxidation technologies is not found in the final product (hydroperoxides), but rather in the method by which they are produced. The active ingredient created by the RGF products is a group of oxidants known as Hydroperoxides. Hydroperoxides have been a common part of our environment for over 3.5 billion years. Hydroperoxides are created in our atmosphere whenever three components are present: unstable oxygen molecules, water vapor and energy (electro magnetic).

Hydroperoxides are very effective (as demonstrated by the test results in this book) at destroying harmful microbials. As oxidants, they do this by either destroying the microbe through a process known as ceil lysing or by changing its molecular structure and rendering it harmless (which is the case in VOC's and odors). The amount of hydroperoxides required to accomplish this task in a conditioned space is well below the level that is constantly in our outside air. The advanced oxidation technology found in RGF's Guardian Air product family has brought the oxidants found in the outside air into the conditioned space of your home, office, business, etc.

There is no known case of hydroperoxides ever creating a health risk. Considering we have been exposed to hydroperoxides in nature since the day man stepped on the planet, it is a reasonable assumption that hydroperoxides do not constitute a health risk. Over the past 20 plus years RGF has more than one million Advanced Oxidation products successfully used worldwide.





Discialmer:

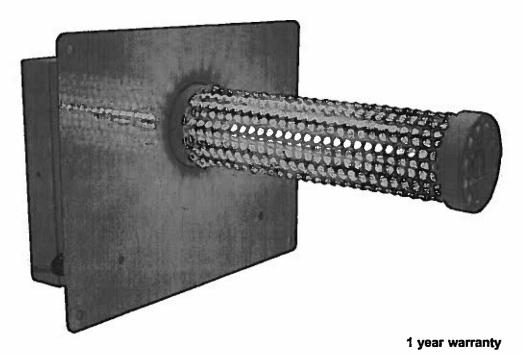
All the above tests were performed on RGF Advanced Oxidation products with Advanced Oxidation Plasma of less than .02 ppm unless noted otherwise. They were conducted by independent accredited labs and university studies. They were funded and conducted by RGF's major clients to assure third party credibility. RGF products are not medical devices and no medical claims are made.





In-Duct High Output

A Photohydroionization® (PHI) Technology



REDUCES

- Microbials
- Mold
- Bacteria
- Pathogens
- Odors/VOCs

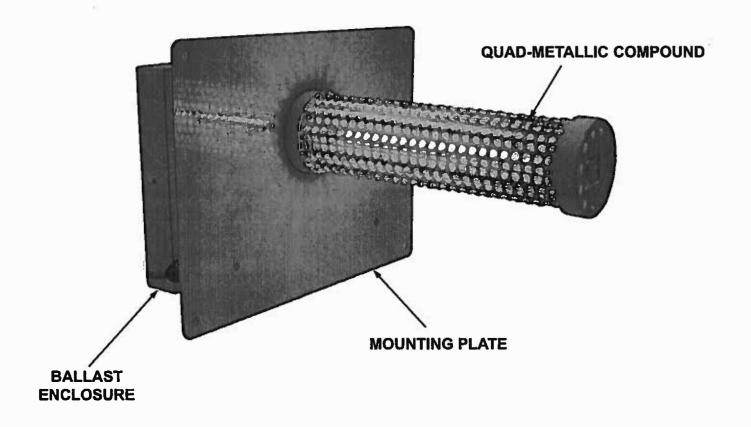
APPLICATIONS

- Greenhouses
- Cultivation rooms
- Large harvest rooms
- Processing rooms

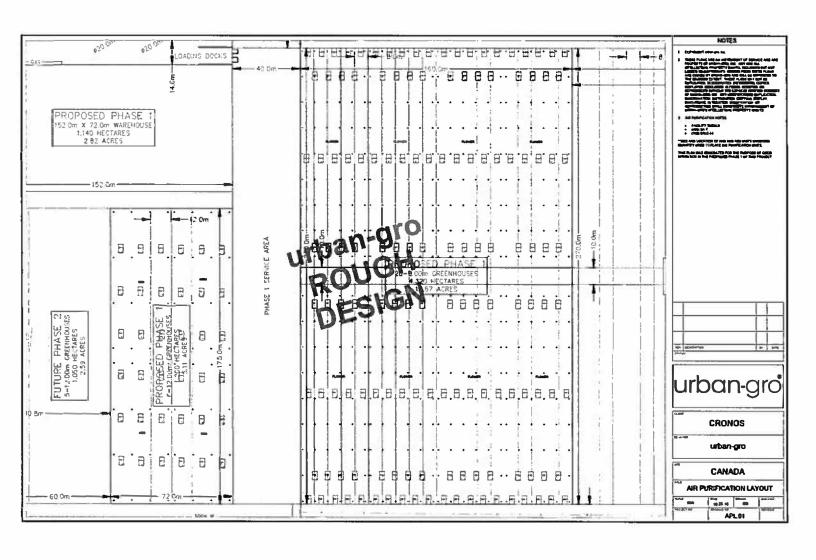
Most facilities do not check the air for microorganisms on a daily or monthly basis. Bacteria and mold can continuously breed within the environment and on plants. RGF[®] developed this air treatment system to provide continuous protection in sensitive air spaces.

Air passes through a REME® / PHI oxidation chamber, which destroys airborne microbes with high intensity UV light rays targeted on a quad-metallic compound. The process develops a highly charged atmosphere of hydroxyl radicals, hydro-peroxides and super oxide ions. This atmosphere oxidizes contaminants in the air with friendly oxidizers. By friendly oxidizers, we mean oxidizers that revert back to oxygen and hydrogen after the oxidation process. No chemical residue or dangerous compounds are emitted from the system. Airborne contaminants in the form of bacteria, mold, and yeast continue to be one of the least addressed issues in most facilities.

In-Duct High Output



ftem #	Replacement Cell	Electrical	Dimensions	Ship Wt.
EAID-COM	EAIDHO-14C-RC (1)	24 VAC	12" probe / 6.5" x 7.5" plate	6 lbs.





Element Air Throughout Facility to Meet Nevada's Microbial Testing

Deep Roots Harvest | Mesquite, Nevada

Deeps Roots Harvest is located in a 40,000 square foot building that is approximately eight years old in Mesquite, Nevada. Mesquite is a small town on the Nevada / Utah border most commonly known by travelers on Interstate 70. The building is in a rural desert area and does not have any immediate neighbors.

The primary issue for this Deep Roots, and many other cultivators in Nevada, is passing microbial testing. The State of Nevada has one of the strictest testing regimens in the United States, and this facility was experiencing a 20% fail rate. Deep Roots Harvest made improvements to their cultivation and harvest process but were still not passing consistently the first time.

Deep Roots had worked with urban-gro before, and they called urban-gro to address this issue. Deep Roots adopted urban-gro's recommendation to install Element Air.

But what was Deep Roots' strategy?

- First, Deep Roots started in their dry, cure and harvest rooms. They immediately experienced success in those areas: not only were they performing better on the microbial testing they were seeing allergens eliminated that had previously impacted their workers. Almost immediately workers had fewer sick days and took less breaks.
- Second, Deep Roots Harvest added Element Airs to flower and veg spaces. They started ordering units in late 2017 and continue to add them to the facility.
- They have now added to their dispensaries to reduce impact of allergens and odors on employees, customers and neighbors.

In their words...

"I have used Element Airs in my facility for last four years with great success. I use them to control odor and microbials in my grow rooms and common areas. I also use them in the trim, packaging, and cure rooms to control VOCs to help create a better work environment for the trimmers and packages."



Passing Strict Microbial Testing with Element Air

North Las Vegas Organics (NLVO) | North Las Vegas, Nevada

NLVO is new 25,000 square foot indoor cultivation facility. It has been operating since 2015. NLVO has eight flower rooms, one multi-tier veg room, and an industrial area. The facility is located in an area that is both industrial and highly trafficked with many commercial businesses in the neighborhood.

The State of Nevada has one of the strictest testing regimens for microbials of any state. Many facilities experienced fail rates between 20% - 100%. When NLVO first opened, they had a moderate fail rate.

urban-gro has been advising NLVO on numerous cultivation best practices and solutions. The customer already knew about Element Air as a solution for odor control and allergen removal but was very interested in Element Air to improve their microbial testing results.

In 2017, NLVO installed Element Air units throughout their facility. They started in post harvest areas, hallways and moved to flower and veg rooms. Within an 8-week period, NLVO began passing microbial testing almost consistently. When product passes the first time, as NLVO was now doing routinely, it can be brought to market for sale.

Additionally, with the use of Element Air, the facility has received no odor complaints from either the city or its neighbors.

State of Nevada Testing Protocol

- If a strain fails, it can be resubmitted for a second test.
- If it passes on the second test it can be sold at a significantly lesser price for concentrates.
- If it fails both times it must be destroyed.

In their words...

"Element Air helps our facility pass Nevada's testing for microbials. Since installation, we rarely have a second test due to microbials."



Successful Odor Suppression Contributes to Municipal Approval to Expand Facility

The Medicine Room | Winslow, Arizona

The Medicine Room is in a 8,000 square foot greenhouse built in 2014. This cultivation facility is located near tribal land.

In October 2015, complaints of odors emitted from the facility were received by the community development department in early October 2015. The facility's' former owners said they would install charcoal odor absorbing devices to reduce the odor. The charcoal odor absorbing devices were installed in late 2016, but complaints of odors were received again by the City of Winslow. Specifically, the tribe was upset about odor from the facility, especially in the summer.

The complaints of strong odor led to the city code compliance officer citing the business in accordance with Winslow Municipal Code Chapter 17.40. The ordinance states, "There shall be no emission of dust, fumes, vapors, or odors into the environment from the facility."

With this unfortunate development, The Medicine Room turned to urban-gro for help. After touring the facility, urban-gro recommended the purchase eight Element Air units. These eight units were placed at key locations of exhaust. As an active purification system, it was able to make a significant difference, and the technology eliminated the odor at the source.

City of Winslow official inspected the facility to evaluate any remaining odor issues. With this improvement in facility operations and operating as a Good Neighbor with adjacent homes, businesses and tribal lands, The Medicine Room secured the permits required to expand into a second 15,000 square foot facility.

Construction of the addition is currently under and will also include several Element Air units throughout.

In their words...

"I've used the Element Air towers for a little over 1 year now. In my 8k square foot greenhouse they have not only removed the outgoing odor so that local shops and tribes are not complaining anymore about our cannabis facility, they have allowed us to begin expansion on another 15k square foot indoor facility. They've help clear the air in my post-harvest rooms as well, so employees are working harder and not taking as many breaks. Great units! I'll be getting them for Phase 2"

148



MUCCI FARMS

Greenhouse Development 609 Road 3E, Town of Kingsville

Traffic Impact Study

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		Inbound Bus Movement	
	_	Outbound Bus Movement	
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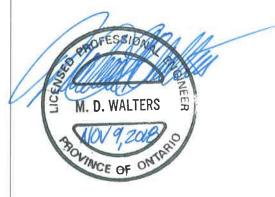
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Introduction 1

Purpose 1.1

1.0

Dillon Consulting Limited ("Dillon") has been retained by Mucci Farms to undertake a Traffic Impact Study (TIS) to assess a proposed greenhouse development at 609 Road 3E in the Town of Kingsville. The property is currently agricultural farm land. The development application involves the construction of a number of greenhouses and warehouses for the production of cannabis. Figure 1 illustrates the site location in the context of Kingsville; Figure 2 illustrates the existing conditions of the site.

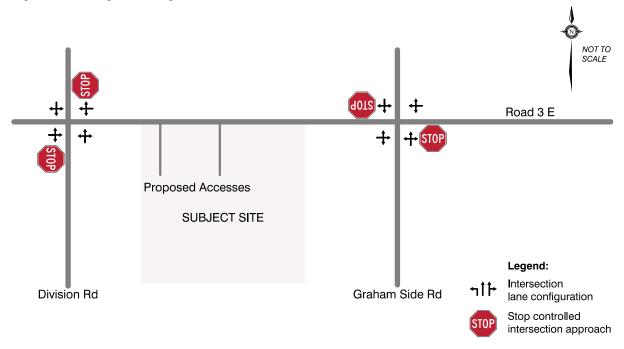
This report documents the anticipated change to traffic volumes and intersection operations due to the proposed development; provides an assessment of the need for modifications to traffic control and/or roadway infrastructure; reviews the acceptability of the current road surface on Road 3E; assesses the proposed site driveways from a geometrics and sight distance perspective; and comments on the anticipated travel behaviour associated with migrant workers and its impact on the road network.

Figure 1: Site Location





Figure 2: Existing Site Configuration



Proposed Development 1.2

The proposed site plan is presented in Appendix A. The subject site is currently agricultural farm land. The proposed site plan includes: greenhouses and warehouses related to the production of cannabis. Also included is a proposed bunkhouse which will house migrant workers on-site. The greenhouses will be phased in over the course of the next 4+ years. It is currently envisioned that the greenhouses, and related warehouse facilities, will be constructed over four phases. The following four subsections describe the anticipating phasing of facilities on site.

Phase 1 1.2.1

This initial phase will see the construction of 26 greenhouses covering 13.78 acres and a warehouse covering 2.82 acres. It will also include the construction of a bunkhouse for the workers who are expected to reside on-site. This construction is expected to occur in 2019.

Two site driveways will also be constructed during this initial phase. The easternmost driveway will function as the main driveway on the site. It will allow motorists to access the site parking lot (containing 117 parking spaces) as well as the warehouse. At the northeast corner of the warehouse, there will be a loading area for truck deliveries. Both employees who drive to the site and truck drivers bringing supplies to the site will utilize this driveway.



The westernmost driveway will largely function as a means of access to the bunkhouse. An internal connection farther south on the site will allow motorists to travel between the bunkhouse and the warehouse and parking lot situated to the east.

Phase 2 1.2.2

This second phase will involve the construction of 25 additional greenhouses covering 13.26 acres. This construction is expected to occur in 2020. No additional site driveways will be constructed during this second phase.

1.2.3 Phase 3

This third phase will include the construction of 26 additional greenhouses covering 13.78 acres and an additional warehouse covering 2.82 acres. This will increase the number of warehouses on site to two (2). This construction is expected to occur in 2021.

1.2.4 Phase 4

This fourth and final phase will see the construction of 25 additional greenhouses covering 13.26 acres. This construction is expected to occur in 2022.

Scope of Analyses 1.3

This report documents the following:

- Existing traffic volumes, and traffic projections for the main site driveway and two study area intersections under baseline conditions and with development of the full site;
- Intersection capacity analyses under baseline conditions, future background conditions and total future conditions:
- A review of the proposed site driveways from a geometric and sight line perspective;
- A review of the site's impact on Road 3E as it relates to the suitability of the posted speed limit, road width and road surface type; and,
- A review of migrant workers and their travel behaviour.

Turning movement traffic counts were completed at the intersections of Road 3E and Division Road and Road 3E and Graham Side Road. Automated traffic counts were also undertaken at a midblock location along Road 3E, just east of municipal address 295 Road 3E.

Traffic projections and intersection analyses were completed for the two commuter peak hours of a typical weekday (the weekday AM and PM peak hours). Even though some workers at the site will arrive at the site prior to the AM peak hour, the majority of traffic generated by the site will occur during the weekday AM and PM peak hours.



The analyses were conducted for five distinct horizon years which are consistent with the planned phasing of construction on the site (Phase 1 – 2019, Phase 2 – 2020, Phase 3 – 2021 and Phase 4 – 2022) as well as a five-year horizon (2027) following full build out.

Existing Conditions 2.0

Existing Transportation Network Characteristics 2.1

The following describes the existing road network in the immediate study area:

- Road 3E is a local roadway under the jurisdiction of the Town of Kingsville. It is an east-west roadway which extends to the east to the municipal border with Learnington (and following that, extends as Mersea Road 3 and Wilkinson Drive to Erie Street) and to the west to Arner Townline (County Road 23). In the vicinity of the site, Road 3E is largely rural in nature. Between Division Road and Graham Side Road, it largely functions to provide access to homes as well as the Jack Miner Public School (located just east of Division Road). The posted speed limit on Road 3E is 60 km/h. In the vicinity of the site, it has a rural two-lane cross-section consisting of one lane per direction plus intermittent gravel shoulders. The roadway has a tar and chip surface.
- Division Road is under the jurisdiction of the County of Essex as County Road 29. It is the main north-south roadway extending from Highway 3 to the north to the Town of Kingsville built-up area to the south. It functions to provide both access to a number of land uses as well as carry through traffic between Highway 3 and Kingsville. South of Highway 3, it has a posted speed limit of 60 km/h for approximately 650 metres. Beyond that point, the speed limit is 80 km/h to a point approximately 700 metres north of the Road 3E intersection. At that location, the posted speed limit is reduced to 60 km/h until approximately 170 metres of the Road 2E intersection (where the posted speed limit is further reduced to 50 km/h). In the vicinity of the Road 3E intersection, Division Road has a rural two-lane cross-section consisting of one lane per direction plus partially paved shoulders.
- Graham Side Road is a local roadway under the jurisdiction of the Town of Kingsville. It is a north-south roadway which extends from Road 4E (north of Highway 3) to Seacliff Drive (County Road 20). As a local roadway, it primarily functions to provide access to adjacent properties. It does not have a posted speed limit, meaning a default 80 km/h speed limit will apply to this rural roadway. In the vicinity of the Road 3E intersection, it has a rural two-lane cross-section consisting of one lane per direction plus gravel shoulders.

The intersection of Road 3E and Division Road operates under two-way STOP control, with Division Road traffic having the right-of-way (meaning Road 3E traffic has to stop at the intersection). The Graham Side



Road intersection with Road 3E also operates under two-way STOP control, but Graham Side Road traffic has to stop (as Road 3E traffic has the right-of-way).

Existing Traffic Volumes 2.2

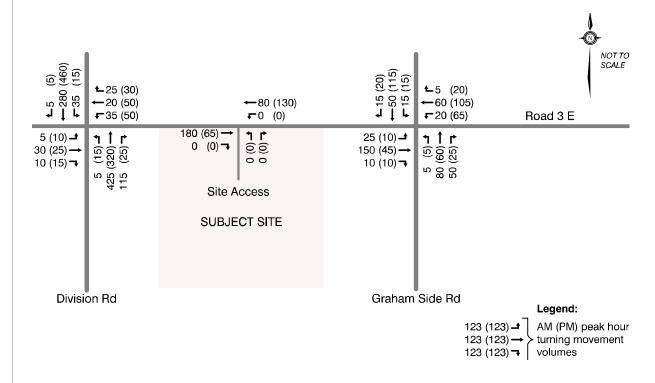
Turning movement count (TMC) traffic data were collected by Dillon at the intersections of Road 3E and Division Road and Road 3E and Graham Side Road. Automated traffic recording equipment was also installed on Road 3E just to the east of municipal address 295 Road 3E. This equipment collected twoway traffic volumes for a 24-hour period.

The intersection turning movement counts were collected on Tuesday, October 30, 2018 between the hours of 7:00 AM and 9:00 AM (weekday AM peak period) and between the hours of 4:00 PM and 6:00 PM (weekday PM peak period).

The 24-hour traffic volumes were recorded between Monday, October 29, 2018 (starting at 3:00 PM) and Tuesday, October 30, 2018 (ending at 3:00 PM).

Figure 3 illustrates the existing peak hour traffic volumes. Detailed count data are provided in Appendix B.

Figure 3: Existing Traffic Volumes



Existing Intersection Operations 2.3

Existing peak hour operations at the two Road 3E intersections were analyzed based on the methodology outlined in the Highway Capacity Manual (HCM), 2010 edition, facilitated using Synchro analysis software. The v/c ratio, level of service, average vehicle delay and 95th percentile queue length were noted. LOS definitions are provided in Appendix C. The analysis results are presented in Table 1. Analysis worksheets are provided in *Appendix D*.

	DI-		Individua	al moveme	ent(s)	
Intersec ti on	Peak hour	Movement	v/c	LOS	Delay (s/veh)	95 th %ile queue <i>(m)</i>
		Eastbound	0.18	С	21.0	0.6
	Weekday	Westbound	0.32	С	24.1	1.3
	AM	Northbound	0.00	Α	7.9	0.0
Road 3E at		Southbound	0.04	Α	8.8	0.1
Division Road		Eastbound	0.20	С	21.1	0.7
	Weekday	Westbound	0.52	D	31.9	2.8
	PM	Northbound	0.02	Α	8.4	0.0
		Southbound	0.01	Α	8.1	0.0
		Eastbound	0.02	Α	7.4	0.1
	Weekday	Westbound	0.02	Α	7.6	0.0
	AM	Northbound	0.23	В	12.2	0.9
Road 3E at		Southbound	0.15	В	12.3	0.5
Graham Side Road		Eastbound	0.01	Α	7.5	0.0
	Weekday	Westbound	0.05	Α	7.4	0.1
	PM	Northbound	0.16	В	12.1	0.6
		Southbound	0.29	В	13.9	1.2

Table 1: Existing Peak Hour Operations at Road 3E Intersections

All approaches to both Road 3E intersections currently operate at LOS C or better (and well under capacity) during the weekday AM and PM peak hours, with the exception of the westbound approach at Division Road in the weekday PM peak hour. This movement is currently operating at LOS D with a volume-to-capacity (v/c) ratio of 0.52.

Future Background Conditions 3.0

Future Background Traffic Volumes 3.1

Future background traffic volumes reflect the volume of traffic that is anticipated to be on the road network during the horizon years without the subject development in place. Typically this is comprised of two factors:

The application of a growth rate to reflect general background traffic growth on the road network; and,

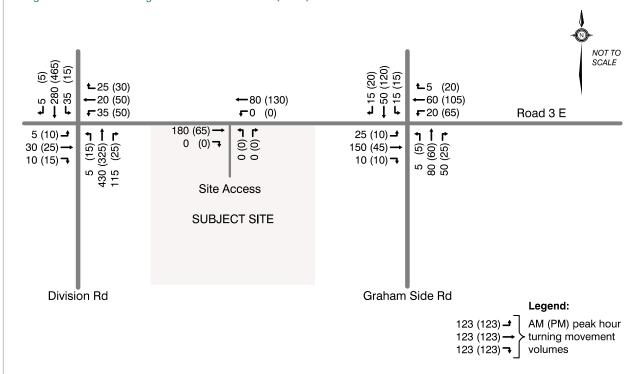


The application of site-specific traffic volumes for any background developments in the immediate vicinity of the site.

Town staff have advised that there are no other background developments currently underway within the study area.

To determine future background traffic volumes, an annual background growth rate of 1% was applied to through movements on Graham Side Road. An annual growth rate of 1.5% was applied to through movements on Division Road. These rates were based on traffic volume growth information gleaned from the County Road 20 Environmental Assessment study (which derived future traffic growth rates from the County of Essex transportation model). Growth along Road 3E itself is expected to be minimal due to outside influences (since there are other higher order east-west roadways that through traffic would typically use). As a result, and to be conservative, an annual growth rate of 0.5% was applied to Road 3E through movements as well as turning movements to and from Road 3E at the Division Road and Graham Side Road intersections. The resulting future background traffic volumes for the various horizon years are illustrated in Figure 4 through 8.

Figure 4: Future Background Traffic Volumes (2019)





123 (123) \rightarrow turning movement

123 (123) **¬** volumes

Figure 5: Future Background Traffic Volumes (2020)

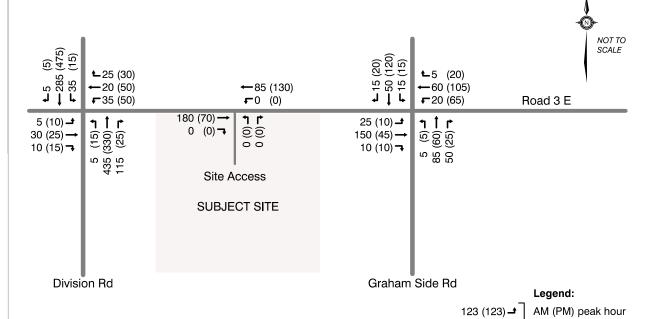


Figure 6: Future Background Traffic Volumes (2021)

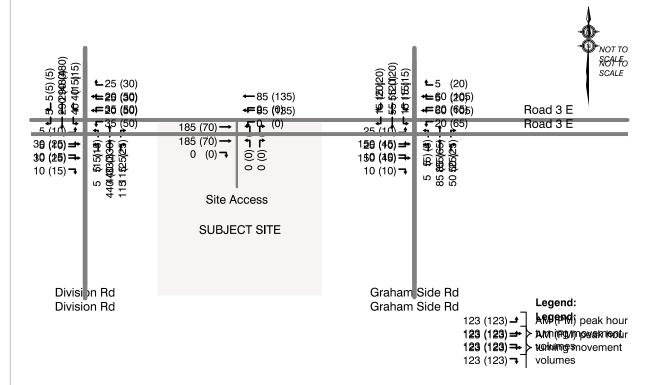


Figure 7: Future Background Traffic Volumes (2022) NOT TO SCALE **1** 15 (20) ← 55 (120) ← 15 (15) **-**25 (30) **1**−5 (20) **t**5 (**1**295 (4 -20 (50) **←**85 (135) **←**60 (105) **₹**35 (50) **-20** (65) **₽**0 (0) Road 3 E 185 (70) - 1 1 5 (10) -25 (10) 🚅 ኀ † ሶ ኀየተ 30 (25) → 10 (15) ¬ 0 (0) 7 (15) (335) (25) <u></u> 150 (50) → (5) 00 10 (10) → 50 -Site Access SUBJECT SITE Division Rd Graham Side Rd Legend: 123 (123) **-** AM (PM) peak hour 123 (123) → > turning movement 123 (123) **¬** volumes Figure 8: Future Background Traffic Volumes (2027) NOT TO SCALE (5) (520) (20) **-**25 (30) **1**−5 (20) 5 **←** 25 (55) ←85 (135) **←**65 (110) **₹**35 (50) **₽**0 (0) **-20 (65)** Road 3 E 190 (70) -5 (10) -25 (10) 🛨 ጎ 🏲 ተ ጎ 1 ሶ 30 (25) → 10 (15) ¬ 0 (0) 7 00 (15) (360) (25) 155 (50) --- (5) 10 (10) **→** 90 10 20 20 Site Access SUBJECT SITE Division Rd Graham Side Rd Legend: 123 (123) **-** AM (PM) peak hour 123 (123) **-** turning movement 123 (123) **¬** volumes



Future Background Intersection Operations

Future background intersection operations were assessed using the same methodology as the existing conditions analyses. The analysis results are presented in *Table 2*.

Table 2: Future Background Peak Hour Intersection Operations

		Deal	Individual movement(s)				
Horizon Year	Intersec ti on	Peak hour	Movement	v/c	LOS	Delay (s/veh)	95 th %ile queue <i>(m)</i>
2019	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.18 0.32 0.00 0.04	C C A	21.1 24.4 7.9 8.8	0.6 1.3 0.0 0.1
	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.20 0.53 0.02 0.01	C D A	21.5 32.7 8.5 8.1	0.7 2.9 0.0 0.0
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.23 0.15	A A B B	7.4 7.6 12.2 12.3	0.1 0.0 0.9 0.5
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.16 0.30	A A B B	7.5 7.4 12.1 14.1	0.0 0.1 0.6 1.2
	Road 3E at Division Road Road 3E at Graham Side Road	Weekday AM	Eastbound Westbound Northbound Southbound	0.18 0.33 0.00 0.04	C D A A	21.5 25.0 7.9 8.8	0.7 1.4 0.0 0.1
2020		Weekday PM	Eastbound Westbound Northbound Southbound	0.20 0.54 0.02 0.01	C D A A	22.0 34.2 8.5 8.1	0.7 3.0 0.0 0.0
2020		Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.24 0.15	A A B B	7.4 7.6 12.3 12.3	0.1 0.0 0.9 0.5
		Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.16 0.30	A A B B	7.5 7.4 12.1 14.1	0.0 0.1 0.6 1.2
2021	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.19 0.34 0.00 0.05	C D A A	22.1 26.0 7.9 8.9	0.7 1.4 0.0 0.1
	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.21 0.55 0.02 0.01	C D A A	22.2 34.6 8.5 8.1	0.8 3.0 0.0 0.0



		Peak	Individual movement(s)					
Horizon Year	Intersec ti on	hour	Movement	v/c	LOS	Delay (s/veh)	95 th %ile queue <i>(m,</i>	
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.24 0.17	A A B B	7.4 7.6 12.3 12.3	0.1 0.0 0.9 0.6	
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.17 0.30	A A B B	7.5 7.4 12.2 14.1	0.0 0.1 0.6 1.2	
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.19 0.35 0.00 0.05	C D A A	22.6 26.8 7.9 8.9	0.7 1.5 0.0 0.1	
2022	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.21 0.56 0.02 0.01	C E A A	22.7 36.1 8.6 8.1	0.8 3.1 0.0 0.0	
2022	Road 3E at Graham Side Road	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.24 0.16	A A B B	7.4 7.6 12.3 12.4	0.1 0.0 0.9 0.6	
		Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.17 0.30	A A B B	7.5 7.5 12.3 14.2	0.0 0.1 0.6 1.3	
	Road 3E at Division Road	Weekday AM	Eastbound Westbound Northbound Southbound	0.21 0.41 0.00 0.05	C D A A	24.7 31.1 8.0 9.0	0.8 1.8 0.0 0.1	
2007		Weekday PM	Eastbound Westbound Northbound Southbound	0.24 0.65 0.02 0.02	D E A A	25.7 46.8 8.7 8.2	0.9 4.0 0.1 0.1	
2027	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.26 0.16	A A B B	7.4 7.6 12.8 12.6	0.1 0.0 1.0 0.6	
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.17 0.34	A A B B	7.5 7.5 12.4 14.8	0.0 0.1 0.6 1.5	

In the 2019 horizon year, all movements at the two study area intersections will continue to operate at LOS C or better during both peak hours with the exception of the westbound approach at Division Road; which will continue to operate at LOS D and have a v/c ratio of 0.53. These same operations (LOS C or better for all but one intersection movement; the weekday PM peak hour westbound approach at Division Road) will largely continue in subsequent horizon years (2020 and 2021).



In the 2022 horizon year, all intersection movements will operate at LOS C or better, with the exception of the westbound approach to the Division Road intersection. This movement will operate at LOS D during the AM peak hour and LOS E during the PM peak hour. During both peak hours, the westbound approach will still operate well under capacity at 0.35 in the AM peak hour and 0.56 in the PM peak hour.

In the 2027 horizon year, the eastbound movement at the Road 3E and Division Road intersection will pass the LOS C threshold during the weekday PM peak hour, and operate at LOS D, with a v/c ratio of 0.24. The westbound movement will continue to operate at LOS D and E during the AM and PM peak hours respectively, but still operate under capacity.

4.0 | Site Traffic

4.1 Proposed Development

The proposed site plan is presented in *Appendix A*. The subject site is currently agricultural farm land. The development proposal consists of 102 greenhouses, 2 warehouses, and a bunkhouse which can hold up to 120 persons (who work and reside on-site). A parking lot containing approximately 117 parking spaces is envisioned.

The site will have two driveways. The main site driveway (located to the east) will provide access for employees who drive to the site, as well as trucks which come to the site to pick up finished goods (cannabis) and bring site supplies (e.g., fertilizer). The western site driveway will function to provide access to the bunkhouse. Buses will use this driveway to pick-up and drop-off bunkhouse residents once a week (typically on Friday evenings). These buses (anticipated to be no more than 6 in total) will transport bunkhouse workers into Kingsville to allow them to purchase groceries and supplies, and to do banking and run other miscellaneous errands. An internal connection between the western driveway and the site parking lot to the east will exist, but is not expected to be heavily used by vehicles.

While most migrant workers will take advantage of the bus transportation to get to/from town on Friday evenings, there will still be some workers who choose to travel into town on their own on other evenings/nights. Many of these workers (who travel into town on non-Fridays) will travel by bicycle. To facilitate this, and minimize these workers from cycling on Road 3E, an internal private connection from the site to the south is envisioned to allow some workers to get to Road 2E near the Kratz Road intersection. Further discussion on migrant worker travel is provided in *Section 8.0*.



4.2 Trip Generation

The number of vehicle trips generated by the proposed development was estimated using a first principles approach. During Phase 1, there will be approximately 80 workers on site. This will consist of 40 greenhouse workers and 40 warehouse workers. Approximately 60% of the workers will drive themselves to the site. This translates into 48 vehicle trips (which will consist of 40 warehouse worker trips and 8 greenhouse worker trips). The remaining 32 greenhouse worker trips will arrive at the site by private bus.

The same 60/40 vehicle/bus split amongst workers was applied to the subsequent phases (Phases 2-4). Phase 2 and Phase 3 are expected to generate 60 additional workers (30 greenhouse and 30 warehouse workers) each. Phase 4 is envisioned to generate 50 additional workers (25 greenhouse and 25 warehouse workers). At full build-out (Phase 4), a total of 250 workers (125 greenhouse and 125 warehouse workers) are expected to be on the site.

In addition to trips made to the site by workers, there will be some trucks that will travel to/from the site. A maximum of two (2) tractor-trailer trucks will arrive at the site on a daily basis to bring greenhouse supplies (e.g., fertilizer). Once Phase 3 is constructed, this will increase to three (3) tractor-trailer truck trips per day. At full build-out (Phase 4), the number of tractor-trailer truck trips per day will be a maximum of four (4). These truck trips will likely occur outside of the typical weekday AM and PM peak hours (i.e., late morning or early afternoon).

Courier trucks will arrive on site to pick up finished product (cannabis). Phase 1 is expected to generate six (6) courier trucks a day. These trucks will tend to arrive at varying times of the day. For analysis purposes, it was assumed that two of the trucks arrive and depart during the weekday AM peak hour, two of them arrive and depart during the weekday PM peak hour, and the remaining two arrive and depart the site at times in between the peak hours. Once Phase 2 is completed, the number of daily courier trucks will increase to eight (8). Phase 3 will generate an additional two trucks, bringing the daily total to 10 trucks. At full build-out (Phase 4), there will be 12 courier trucks on site on a daily basis.

Table 3 summarizes the number of trips that are expected to be generated by the development.



Table 3: Trip Generation

Phase	Trin Tuno	Magnituda	Mode of	Weekday AM Peak Hour			Weekday PM Peak Hour		
Phase	Trip Type	Magnitude	Travel	In	Out	Total	In	Out	Total
	Warehouse Employees	40 workers	Vehicle	40	0	40	0	40	40
	Croophouse Employees	8 workers	Vehicle	8	0	8	0	8	8
1	Greenhouse Employees	32 workers	Bus	1	0	1	0	1	1
	Courier Trucks	2 trucks per peak hour	Truck	2	2	4	2	2	4
		Ph	ase 1 Totals	51	2	53	2	51	53
	Warehouse Employees	30 workers	Vehicle	30	0	30	0	30	30
	Greenhouse Employees	6 workers	Vehicle	6	0	6	0	6	6
2	Greenhouse Employees	24 workers	Bus	1	0	1	0	1	1
	Courier Trucks	1 truck per peak hour	Truck	1	1	2	1	1	2
		ase 2 Totals	38	1	39	1	38	39	
	Warehouse Employees	30 workers	Vehicle	30	0	30	0	30	30
	Greenhouse Employees	6 workers	Vehicle	6	0	6	0	6	6
3		24 workers	Bus	1	0	1	0	1	1
	Courier Trucks	1 truck per peak hour	Truck	1	1	2	1	1	2
		Ph	ase 3 Totals	38	1	39	1	38	39
	Warehouse Employees	25 workers	Vehicle	25	0	25	0	25	25
	Greenhouse Employees	5 workers	Vehicle	5	0	5	0	5	5
4	Greenhouse Employees	20 workers	Bus	1	0	1	0	1	1
	Courier Trucks	1 truck per peak hour	Truck	1	1	2	1	1	2
		Ph	ase 4 Totals	32	1	33	1	32	33
			Site Totals	159	5	164	5	159	164

Upon full build-out, the proposed development is anticipated to generate approximately 164 trips during both the weekday AM and PM peak hours.

4.3 Trip Distribution and Assignment

Employee vehicle trips were distributed based on information provided by Mucci Farms regarding the anticipated origins of site workers. For workers that will drive to the site, it was assumed that:

- 30% will be from Kingsville;
- 30% will be from Leamington; and,
- 40% will be from other communities.

Workers residing in Kingsville were assumed to take Division Road north and make the right turn on to Road 3E to access the site.

For workers residing in Leamington, 80% were assumed to approach the site on Road 3E in the westbound direction from east of Graham Side Road. The remaining 20% would approach the site from the south and make the northbound left turn on to Road 3E from Graham Side Road.



For workers residing in other communities (which constitutes the remaining 40%), the following was assumed:

- 70% (28%) will be from areas to the northwest (e.g., Windsor, Essex, Tecumseh, LaSalle);
- 15% (6%) will be from areas to the west (e.g., Amherstburg, Harrow); and
- 15% (6%) will be from areas to the northeast (e.g., Tilbury, Chatham).

Workers from areas to the northwest were assumed to arrive at the site via a southbound left turn on to Road 3E from Division Road.

Of the workers from the communities to the west, 75% were assumed to travel south of Division Road and make the southbound left turn on to Road 3E to access the site. The remaining 25% were assumed to travel north on Division Road and make the northbound right turn on to Road 3E to access the site.

Workers from areas to the northeast were assumed to travel down Graham Side Road and make the southbound right turn on to Road 3E to access the site.

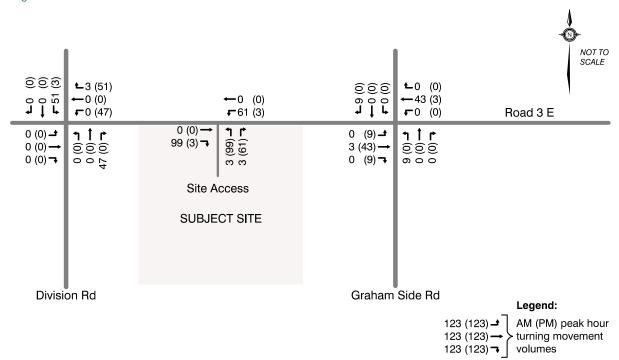
Buses carrying greenhouse employees are likely to come from the Leamington area (to the east). It was assumed that these buses will approach the site on Road 3E in the westbound direction from east of Graham Side Road.

Courier trucks which will pick up finished product from the site are envisioned to originate from Leamington as well as the Windsor area. This split was assumed to be 50/50, based on information provided by Mucci Farms. The courier trucks that originate from Leamington will travel westbound on Road 3E from east of Graham Side Road to access the site. The other courier trucks (originating from the Windsor area) are expected to travel down Highway 3 and turn south on to Division Road. From there, they will proceed south and make the southbound left turn on to Road 3E to access the site.

Figure 9 illustrates the intersection traffic volumes projected to be generated by the site.



Figure 9: Site Traffic Volumes



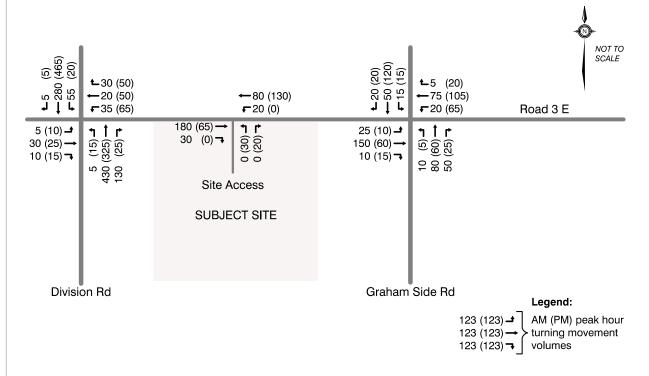
Total Future Conditions

5.1 Total Future Traffic Volumes

5.0

Total future traffic volumes represent the level of traffic that would be anticipated with the full development of the site, and were calculated by adding the site traffic volumes to the projected future background traffic volumes. The resulting total future traffic volumes for the various horizon years are illustrated in *Figure 10* through *Figure 14*.

Figure 10: Total Future Traffic Volumes (2019)



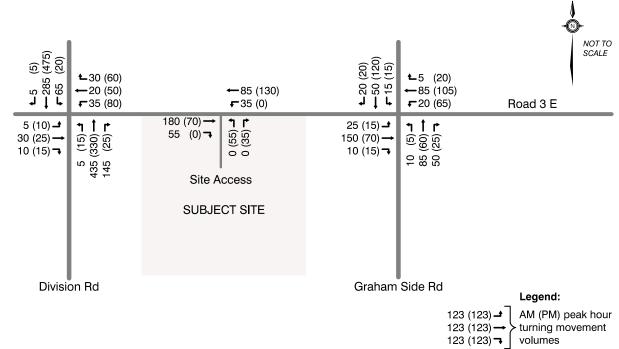
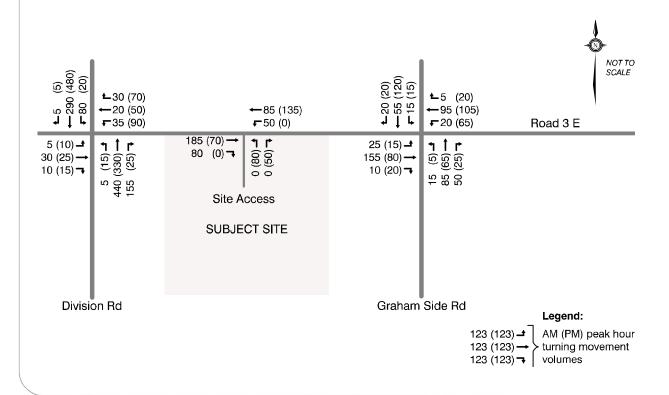


Figure 12: Total Future Traffic Volumes (2021)





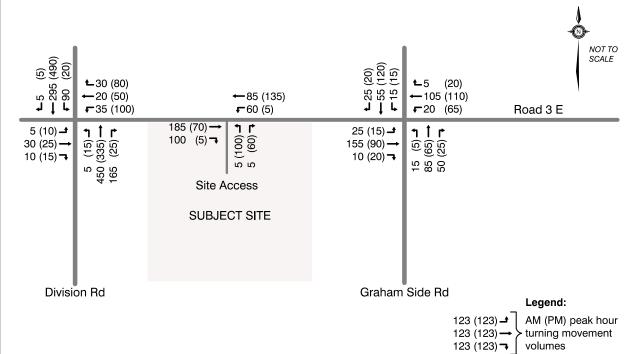
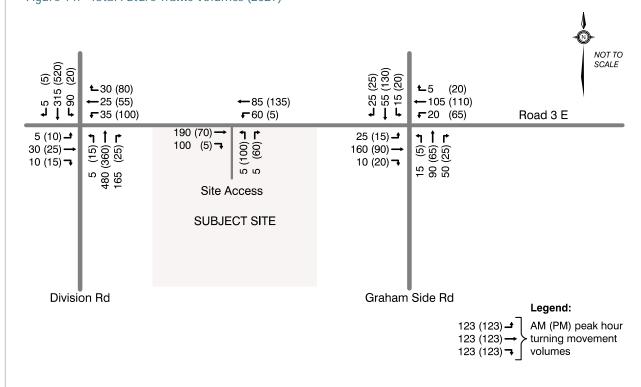


Figure 14: Total Future Traffic Volumes (2027)



5.2 Total Future Intersection Operations

Total future intersection operations were assessed using the same methodology as the existing and future background conditions analyses. The analysis results are summarized in *Table 4*.

Table 4: Total Future Peak Hour Intersection Operations

		Individual movement(s)					
Horizon Year	Intersec ti on	Peak hour	Movement	v/c	LOS	Delay (s/veh)	95 th %ile queue <i>(m)</i>
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.20 0.35 0.00 0.06	C D A A	23.3 27.4 7.9 9.0	0.7 1.5 0.0 0.2
2019	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.21 0.66 0.02 0.02	C E A A	22.2 40.0 8.5 8.1	0.8 4.2 0.0 0.1
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.24 0.16	A A B B	7.4 7.6 12.5 12.3	0.1 0.0 0.9 0.6
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.17 0.31	A A B B	7.5 7.5 12.3 14.4	0.0 0.1 0.6 1.3
	Road 3E at Division Road	Weekday AM	Eastbound Westbound Northbound Southbound	0.22 0.38 0.00 0.07	D D A A	25.3 30.2 7.9 9.1	0.8 1.7 0.0 0.2
2020		Weekday PM	Eastbound Westbound Northbound Southbound	0.21 0.77 0.02 0.02	C F A A	23.0 52.4 8.5 8.1	0.8 5.8 0.0 0.1
2020	Road 3E at Graham Side Road	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.25 0.16	A A B B	7.5 7.6 12.8 12.5	0.1 0.0 1.0 0.6
		Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.17 0.32	A A B B	7.5 7.5 12.6 14.8	0.0 0.1 0.6 1.3
2021	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.24 0.43 0.00 0.09	D D A A	27.7 33.6 7.9 9.2	0.9 2.0 0.0 0.3
2021	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.22 0.85 0.02 0.02	C F A A	23.4 64.2 8.5 8.1	0.8 7.1 0.0 0.1

		Peak		Individua	al moveme	ent(s)	
Horizon Year	Intersec ti on	hour	Movement	v/c	LOS	Delay (s/veh)	95 th %ile queue <i>(m)</i>
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.27 0.18	A A B B	7.5 7.6 13.2 12.8	0.1 0.0 1.1 0.6
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.19 0.32	A A B C	7.5 7.6 12.9 15.1	0.0 0.1 0.7 1.4
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.26 0.46 0.00 0.11	D E A A	30.4 37.9 7.9 9.4	1.0 2.2 0.0 0.4
2002	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.23 0.94 0.02 0.02	C F A A	24.1 81.9 8.6 8.1	0.8 8.7 0.0 0.1
2022	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.27 0.18	A A B B	7.5 7.6 13.3 12.9	0.1 0.0 1.1 0.7
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.19 0.33	A A B C	7.5 7.6 13.1 15.5	0.0 0.2 0.7 1.4
	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.28 0.53 0.00 0.11	D E A A	33.6 47.0 8.0 9.5	1.1 2.7 0.0 0.4
2027	Division Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.25 1.06 0.02 0.02	D F A A	27.0 118.9 8.7 8.2	1.0 10.7 0.1 0.1
2027	Road 3E at	Weekday AM	Eastbound Westbound Northbound Southbound	0.02 0.02 0.29 0.19	A A B B	7.5 7.6 13.6 13.0	0.1 0.0 1.2 0.7
	Graham Side Road	Weekday PM	Eastbound Westbound Northbound Southbound	0.01 0.05 0.19 0.37	A A B C	7.5 7.6 13.1 16.1	0.0 0.2 0.7 1.7

With the introduction of site traffic, all approaches to the Road 3E and Graham Side Road intersection will continue to operate at LOS C or better.

At the Road 3E and Division Road intersection, the westbound approach will experience increasing delays during the future horizon years. During the PM peak hour – the more critical of the two peak hours for the westbound approach – the westbound approach will gradually increase from LOS E and a



v/c ratio of 0.66 in 2019 to LOS F and a v/c ratio of 1.06 in 2027. In 2027, the westbound approach will also reach LOS E in the AM peak hour, but still operate under capacity (v/c = 0.53).

To address the anticipated future capacity issues on the westbound approach at Road 3E and Division Road, two forms of mitigation were examined: the implementation of a westbound left turn lane and signalization of the intersection.

By constructing a westbound left turn lane at the intersection, the v/c ratio for the westbound left turn movement would be 0.65 and the westbound shared through / right turn movement would be 0.41. The level of service on the westbound left turn movement would still be high at LOS F, but the westbound through / right turn movement would operate at LOS C. Even though the movements will operate within capacity, the expected level of service is less than desirable. Before commencing with this alternative form of mitigation, some additional investigation would be required to determine the feasibility of constructing this lane as it relates to lane alignment through the intersection and the potential impact to roadside drainage facilities, property, and other infrastructure. The right-of-way on Road 3E appears to be around 17 metres while the right-of-way on Road 3W (the west leg of the intersection) is approximately 20 metres.

Signalization of the intersection was also considered. If the intersection was signalized, it would operate at LOS B overall during the weekday PM peak hour in 2027. The v/c ratio on the westbound approach would be around 0.47 (depending on the ultimate signal timings implemented). All other intersection approaches could operate well within capacity under signalized conditions.

To confirm whether traffic control signals are warranted, signal warrant calculations have been completed. Given that 8 hours of turning movement count were not available, the turning movement count data that was collected for the purposes of operational analyses at the intersection was used in conjunction with the Transportation Association of Canada (TAC) signal warrant methodology (which is based on 6 hours of traffic count data). These calculations found that the intersection would not warrant signalization under either existing conditions or five years beyond full build out (2027). Appendix E contains the signal warrant calculations.

Given that signals are not warranted at the Road 3E and Division Road intersection, a westbound left turn lane should be considered to mitigate operations on the westbound approach in the future.

Left turn lane warrants were also completed for the northbound and southbound approaches to the Road 3E and Division Road intersection and the eastbound and westbound approaches to the Road 3E and Graham Side Road intersection. Table 5 summarizes the findings of the left turn lane warrant analyses for the total future horizon year of 2027.



		Road at Divisio				Road Graham S	3E at Side Road	
	AM Pea	k Hour	PM Pea	ak Hour	AM Pea	ak Hour	PM Pea	ak Hour
Movement	SB left	NB left	SB left	NB left	EB left	WB left	EB left	WB left
Design speed				80 kr	m/h			
Advancing volume, V _A (vph)	410	655	550	405	190	130	130	200
Left turn volume, V _{LT} (vph)	90	5	20	15	25	20	15	65
% left turns in V _A	22%	1%	4%	4%	13%	15%	12%	33%
Opposing volume, V ₀ (vph)	655	410	405	550	130	190	200	130
Left turn lane warranted?	Yes	No	Yes	Yes	No	No	No	No
Storage length	30 m	N/A	15 m	15 m	N/A	N/A	N/A	N/A

The left turn lane warrant analyses found that both a southbound left turn lane and northbound left turn lane would be warranted in the ultimate horizon year of 2027 at the Road 3E and Division Road intersection. No left turn lanes were found to be warranted at the Road 3E and Graham Side Road intersection.

It was further found that the southbound left turn lane is warranted at the Road 3E and Division Road intersection based on existing (2018) volumes.

Total future conditions at the main site driveway are summarized in *Table 6*. The western site driveway will only be used by buses that transport bunkhouse residents to/from town at the end of each week, and therefore will see very limited usage. These buses make these trips after the weekday PM peak hour on Fridays when traffic volumes are lessened on Road 3E and the surrounding road network.



Table 6: Total Future Driveway Operations

Horizon	Peak —	li	ndividual m	ovement(s)	
Year	hour	Movement	v/c	LOS	Delay (s/veh)	95 th %ile queue <i>(m</i>
	Weekday AM	Eastbound Westbound Northbound	0.00 0.02 0.00	A A A	0.0 7.7 0.0	0.0 0.0 0.0
2019	Weekday PM	Eastbound Westbound Northbound	0.00 0.00 0.00 0.06	A A A	0.0 0.0 0.0 9.5	0.0 0.0 0.2
2000	Weekday AM	Eastbound Westbound Northbound	0.00 0.03 0.00	A A A	0.0 7.8 0.0	0.0 0.1 0.0
2020	Weekday PM	Eastbound Westbound Northbound	0.00 0.00 0.12	A A A	0.0 0.0 9.8	0.0 0.0 0.4
2021	Weekday AM	Eastbound Westbound Northbound	0.00 0.04 0.00	A A A	0.0 8.0 0.0	0.0 0.1 0.0
2021	Weekday PM	Eastbound Westbound Northbound	0.00 0.00 0.17	A A B	0.0 0.0 10.2	0.0 0.0 0.6
2022	Weekday AM	Eastbound Westbound Northbound	0.00 0.05 0.02	A A B	0.0 8.0 10.9	0.0 0.2 0.1
2022	Weekday PM	Eastbound Westbound Northbound	0.00 0.00 0.21	A A B	0.0 7.4 10.6	0.0 0.0 0.8
2027	Weekday AM	Eastbound Westbound Northbound	0.00 0.05 0.02	A A B	0.0 8.1 10.9	0.0 0.2 0.1
2027	Weekday PM	Eastbound Westbound Northbound	0.00 0.00 0.21	A A B	0.0 7.4 10.6	0.0 0.0 0.8

The main site driveway is expected to operate well during both peak hours in all time horizon years. The northbound driveway approach will operate no worse than LOS B.

Given the peaking characteristics of the movements at the main site driveway, left turn lane warrant analyses were only conducted for the weekday AM peak hour (representing the highest concentration of westbound left turn movements at the driveway). In the 2027 horizon year, the westbound left turn volume, when considered in conjunction with the westbound advancing volume and eastbound opposing volume on Road 3E, would not warrant an exclusive westbound left turn lane at the main site driveway. *Table 7* summarizes these left turn lane warrant analyses.



Table 7: Left Turn Lane Warrant Analyses at Main Site Driveway (2027)

	Road 3E at Main Site Driveway
	AM Peak Hour
Movement	WB left
Design speed	80 km/h
Advancing volume, V _A (<i>vph</i>)	145
Left turn volume, V _{LT} (vph)	60
% left turns in V _A	41%
Opposing volume, V _O (vph)	285
Left turn lane warranted?	No
Storage length	N/A

Review of Site Driveways 6.0

The site plan was reviewed from the perspective of geometrics and sight lines at the proposed site driveways. Specifically, the following elements were reviewed:

- The ability to accommodate tractor-trailer truck turning movements to/from Road 3E at the main site driveway; and
- Sight lines on Road 3E at the site driveways.

Truck Access at Main Site Driveway 6.1

The main site driveway is 10 metres wide while the western site driveway (servicing the bunkhouse) is 6 metres wide. The driveway corner radii are 15 metres. According to the Town of Kingsville Development Manual the maximum driveway width for a greenhouse development is 12 metres (for a two-way driveway). Both driveways do not exceed this maximum width.

The largest vehicle that would utilize the main site driveway is a tractor-trailer (WB-20) truck. Truck turning simulations, using AutoTURN, were completed at the driveway. Those turning simulations (shown in Figure 15 and Figure 16) found that the proposed driveway dimensions are sufficient to accommodate this truck.



Figure 15: Inbound WB-20 Truck Movement

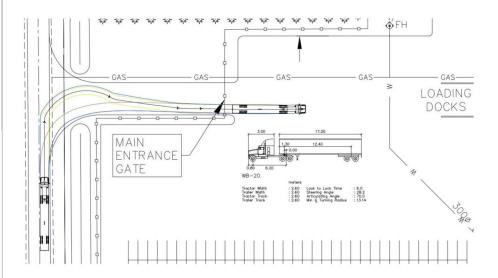
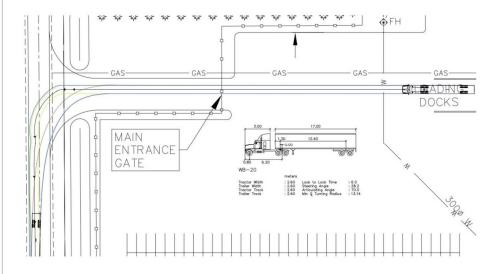


Figure 16: Outbound WB-20 Truck Movement



At the western site driveway, the largest vehicle that would access and egress the bunkhouse area would be a bus (typically a city bus). Turning simulations (shown in *Figure 17* and *Figure 18*) with a city bus found that the dimensions of the western site driveway are sufficient to accommodate this bus.



Figure 17: Inbound Bus Movement

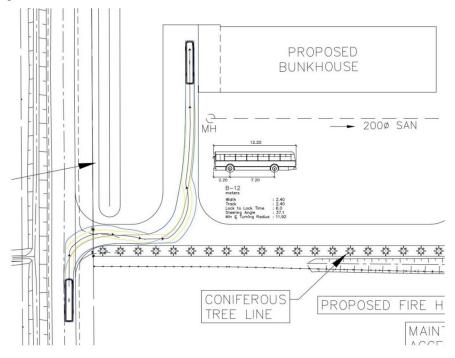
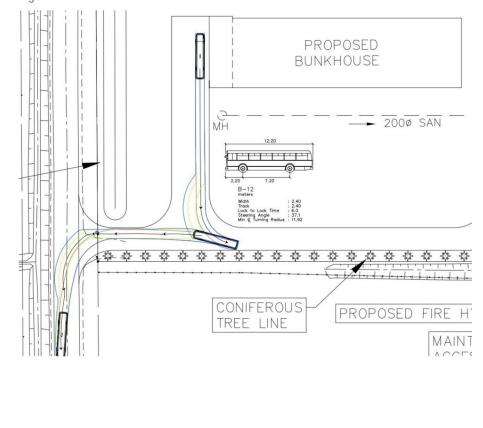


Figure 18: Outbound Bus Movement





Sight Lines at Main Site Driveway

6.2

There are no horizontal or vertical curves on Road 3E of any significance in the vicinity of the site.

The TAC document *Geometric Design Guide for Canadian Roads, June 2017* was referenced for sight distance requirements.

The posted speed limit on Road 3E is 60 km/h. Based on this speed limit, a design speed of no more than 80 km/h should be expected on Road 3E. A design speed of 80 km/h corresponds to a stopping sight distance of 130 metres. For a vehicle to perform the left turn movement from the site driveway on to Road 3E, a sight distance of 170 metres is required (for passenger cars). If the vehicle making the left turn movement is a combination truck (e.g., tractor-trailer truck), this value is 250-260 metres.

As noted earlier, Road 3E has no horizontal curves to obstruct sight lines. Nor are there any vertical curves of significance which would create sight line issues. A vehicle positioned at the main site driveway should have enough sight distance in both directions to meet the sight distance requirements identified in the *Geometric Design Guide for Canadian Roads*.

7.0 Review of Road 3E

As requested by Town of Kingsville staff, there was a need to review the road width, posted speed limit and road surface on Road 3E in the vicinity of the site to determine whether existing conditions would be acceptable following the development of the subject site. This review is contained in the following subsections.

7.1 Road 3E Width

In the vicinity of the subject site, the pavement width is approximately 6.65 metres. There are gravel shoulders on either side of Road 3E. The shoulder on the north side is approximately 0.89 metres while the south side shoulder is approximately 0.86 metres. Altogether, there is a total width of 8.4 metres on Road 3E (including gravel shoulders).

The right-of-way on Road 3E in the vicinity of the site is approximately 20 metres. Section 4.1.2 of the Town of Kingsville Development Manual outlines the pavement widths for two different types of roadways: local urban roads and semi-urban roads. It does not identify pavement width requirements for rural roads. The required pavement width for semi-urban roads is 8.5 metres (measured from pavement edge to pavement edge). Given that the tar and chip road surface threshold has already been exceeded, the Town of Kingsville should consider paving the subject section of Road 3E. Given that no requirements have been outlined by the Town of Kingsville for paved rural roads, it is recommended that



the semi-urban road pavement width (8.5 metres, as illustrated in drawing S22 of the Town of Kingsville Development Manual) be considered by the Town once it paves Road 3E between Division Road and Graham Side Road.

7.2 Posted Speed Limit

The posted speed limit on Road 3E is 60 km/h. This speed limit is consistent with many other roadways which provide access to greenhouses within Kingsville and Leamington. A lower speed limit is not required along Road 3E due to the greenhouse development proposed.

7.3 Road Surface

8.0

The Canadian Practice in the Design, Use, and Application of Bituminous Surface Treatments published by the Canadian Strategic Highway Research Program (C-SHRP) was referenced to determine the vehicular volume thresholds for a tar and chip road surface (such as the existing surface on Road 3E). That document noted that chip sealed roadways have a maximum daily traffic volume threshold of 1,000 vehicles.

As noted in *Section 2.2*, existing 24-hour traffic volumes were collected on Road 3E. The existing daily volume on Road 3E between Division Road and Graham Side Road is 1,635.

Given that the traffic volumes on Road 3E have already exceeded the vehicular volume threshold for a tar and chip sealed roadway, the Town of Kingsville should consider upgrading Road 3E to a paved surface.

Travel by Migrant Workers after Hours

Mucci Farms has arranged for a bus to pick up migrant workers who reside on site on Friday evenings and bring them into town (to allow them to purchase groceries, do banking, and other personal activities). Most migrant workers will take advantage of this transportation to get to/from town. However, there will still be some workers who choose to travel into town on their own on other evenings/nights. Many of these workers (who travel into town on non-Fridays) will travel by bicycle. While most migrant workers will utilize the bus service on Friday nights, Mucci Farms estimates that no more than 10 workers a day will travel into town on non-Friday evenings/nights.

To account for this travel behaviour, and to minimize the amount of cyclists on Road 3E, an internal connection on site is envisioned to direct these workers to the Road 2E and Kratz Road intersection. There is currently illumination at the Road 2E and Kratz Road intersection. From this location, the migrant workers will most likely travel 425 metres to the west to the Road 2E and Jasperson Drive intersection. In 2017, Road 2E was re-paved to provide paved shoulders, which cyclists can utilize



between Kratz Road and Jasperson Drive. At Jasperson Drive, they will travel south towards County Road 20. Approximately 275 metres to the south of the Road 2E and Jasperson Drive intersection is the south driveway to the Kingsville Arena Complex. That driveway connects to a multi-use pathway on the west side of Jasperson Drive. Migrant workers can make use of that pathway to travel south towards County Road 20. Once they reach Peachwood Drive, the multi-use pathway becomes a sidewalk. At that point, they would need to travel (as cyclists) on the west side of the roadway. This section of Jasperson Drive currently has illumination. Jasperson Drive has an urban cross-section (curb and gutter) through this stretch. Many of the destinations of migrant workers are within close proximity to the County Road 20 and Jasperson Drive intersection. The workers would be expected to take the same route (in reverse) when travelling back to the greenhouse site.

Given the magnitude of cyclists that are expected to travel into town from the site, and the presence of illumination and multi-use pathways along the route between the County Road 20 and Jasperson Drive intersection and the Road 2E and Kratz Road intersection, additional bicycle facilities or roadway illumination is not deemed necessary.

Following the construction of the greenhouses, some monitoring of migrant worker travel behaviour should be undertaken to confirm that the magnitude and route choice are consistent with that noted herein.

9.0 Summary

Dillon Consulting Limited ("Dillon") has been retained by Mucci Farms to undertake a traffic impact study (TIS) assessing a proposed greenhouse development at 609 Road 3E in the Town of Kingsville. The development application involves the construction of a number of greenhouses and warehouses for the production of cannabis.

This report documents the anticipated change to traffic volumes and intersection operations due to the proposed development; provides an assessment of the need for modifications to traffic control and/or roadway infrastructure; reviews the acceptability of the current road surface on Road 3E; assesses the proposed site driveways from a geometrics and sight distance perspective; and comments on the anticipated travel behaviour associated with migrant workers and its impact on the road network.

9.1 Proposed Development

The proposed development includes the construction of greenhouses and warehouses related to the production of cannabis. Also included is a proposed bunkhouse which will house migrant workers onsite. The greenhouses will be phased in over the course of the next 4+ years. It is currently envisioned that the greenhouses, and related warehouse facilities, will be constructed over four phases as follows:



- Phase 1 (2019) 26 greenhouses, 1 warehouse and 1 bunkhouse;
- Phase 2 (2020) 25 greenhouses;
- Phase 3 (2021) 26 greenhouses, 1 warehouse; and,
- Phase 4 (2022) 25 greenhouses.

Also during Phase 1, the two site driveways will be constructed. The easternmost driveway will function as the main driveway on the site. It will allow motorists to access the site parking lot (containing 117 parking spaces) as well as the warehouse. At the northeast corner of the warehouse, there will be a loading area for truck deliveries. Both employees who drive to the site and truck drivers bringing supplies to the site will utilize this driveway.

The westernmost driveway will largely function as a means of access to the bunkhouse. An internal connection farther south on the site will allow motorists to travel between the bunkhouse and the warehouse and parking lot situated to the east.

9.2 Summary of Traffic Operations

The study area for analyses included the Road 3E intersections with Division Road and Graham Side Road, as well as the proposed site driveways.

The study analyses considered the AM and PM peak hours of a typical weekday.

Under existing conditions, all approaches to both Road 3E intersections currently operate at LOS C or better (and well under capacity) during the weekday AM and PM peak hours, with the exception of the westbound approach at Division Road in the weekday PM peak hour. This movement is currently operating at LOS D with a volume-to-capacity (v/c) ratio of 0.52.

Under future background conditions (without the development) in 2019, all movements at the two study area intersections will continue to operate at LOS C or better during both peak hours with the exception of the westbound approach at Division Road; which will continue to operate at LOS D and have a v/c ratio of 0.53. These same operations (LOS C or better for all but one intersection movement; the weekday PM peak hour westbound approach at Division Road) will largely continue in subsequent horizon years (2020 and 2021).

In the 2022 horizon year, all intersection movements will operate at LOS C or better, with the exception of the westbound approach to the Division Road intersection. This movement will operate at LOS D during the AM peak hour and LOS E during the PM peak hour. During both peak hours, the westbound approach will still operate well under capacity at 0.35 in the AM peak hour and 0.56 in the PM peak hour.



In the 2027 horizon year, the eastbound movement at the Road 3E and Division Road intersection will pass the LOS C threshold during the weekday PM peak hour, and operate at LOS D, with a v/c ratio of 0.24. The westbound movement will continue to operate at LOS D and E during the AM and PM peak hours respectively, but still operate under capacity.

Once the site is fully built out, there will be approximately 250 employees. Each peak hour (AM and PM) will generate 164 vehicle trips.

With the introduction of site traffic, all approaches to the Road 3E and Graham Side Road intersection will continue to operate at LOS C or better.

At the Road 3E and Division Road intersection, the westbound approach will experience increasing delays during the future horizon years. During the PM peak hour – the more critical of the two peak hours for the westbound approach – the westbound approach will gradually increase from LOS E and a v/c ratio of 0.66 in 2019 to LOS F and a v/c ratio of 1.06 in 2027. In 2027, the westbound approach will also reach LOS E in the AM peak hour, but still operate under capacity (v/c = 0.53). To address the anticipated future capacity issues on the westbound approach, a westbound left turn lane is recommended. Signalization of the intersection was also considered; however, the traffic volumes are not sufficiently high to warrant traffic control signals.

The main site driveway is expected to operate well during both peak hours in all time horizon years. The northbound driveway approach will operate no worse than LOS B. Left turn lane warrant analyses found that:

- Northbound and Southbound left turn lanes are warranted at the Road 3E and Division Road intersection, with 15 metres and 30 metres of storage respectively;
- No left turn lanes are warranted at the Road 3E and Graham Side Road intersection; and,
- A westbound left turn lane is not warranted on Road 3E at the main site driveway.

9.3 Site Driveways

The main site driveway is 10 metres wide while the western site driveway (servicing the bunkhouse) is 6 metres wide. The driveway corner radii are 15 metres. According to the Town of Kingsville Development Manual the maximum driveway width for a greenhouse development is 12 metres (for a two-way driveway). Both driveways do not exceed this maximum width.

Truck turning simulations, using AutoTURN, were completed for both site driveways. These simulations found that the proposed driveway dimensions are sufficient to accommodate the anticipated truck turning movements.



Based on the sight distance requirements identified in the *Geometric Design Guide for Canadian Roads*, there should be adequate sight distance at the proposed site driveway locations.

9.4 Road 3E Review

The posted speed limit on Road 3E is 60 km/h. This speed limit is consistent with many other roadways which provide access to greenhouses within Kingsville and Leamington. A lower speed limit is not required along Road 3E due to the greenhouse development proposed.

The vehicular volume threshold for a tar and chip road surface (such as the existing surface on Road 3E) is 1,000 vehicles per day. Since the existing traffic volumes on Road 3E have already exceeded this threshold, the Town of Kingsville should consider upgrading Road 3E to a paved surface.

The current pavement width in the vicinity of the subject site is approximately 6.65 metres. There are gravel shoulders on either side of Road 3E. The shoulder on the north side is approximately 0.89 metres while the south side shoulder is approximately 0.86 metres. Altogether, there is a total width of 8.4 metres on Road 3E (including gravel shoulders).

The Town of Kingsville Development Manual does not identify pavement width requirements for rural roads. The required pavement width for semi-urban roads is 8.5 metres (measured from pavement edge to pavement edge). Given that the tar and chip road surface threshold has already been exceeded, the Town of Kingsville should consider paving the subject section of Road 3E. It is recommended that the semi-urban road pavement width (8.5 metres, as illustrated in drawing S22 of the Town of Kingsville Development Manual) be considered by the Town once it paves Road 3E between Division Road and Graham Side Road.

9.5 Migrant Worker Travel

Mucci Farms has arranged for a bus to pick up migrant workers who reside on site on Friday evenings and bring them into town (to allow them to purchase groceries, do banking, etc.). Most migrant workers will take advantage of this transportation to get to/from town. However, there will still be some workers who choose to travel into town by bicycle on their own on other evenings/nights. It is estimated that no more than 10 workers a day will travel into town on non-Friday evenings/nights.

Given the magnitude of cyclists that are expected to travel into town from the site, and the presence of illumination and multi-use pathways along the route between the County Road 20 and Jasperson Drive intersection and the Road 2E and Kratz Road intersection, additional bicycle facilities or roadway illumination is not deemed necessary.

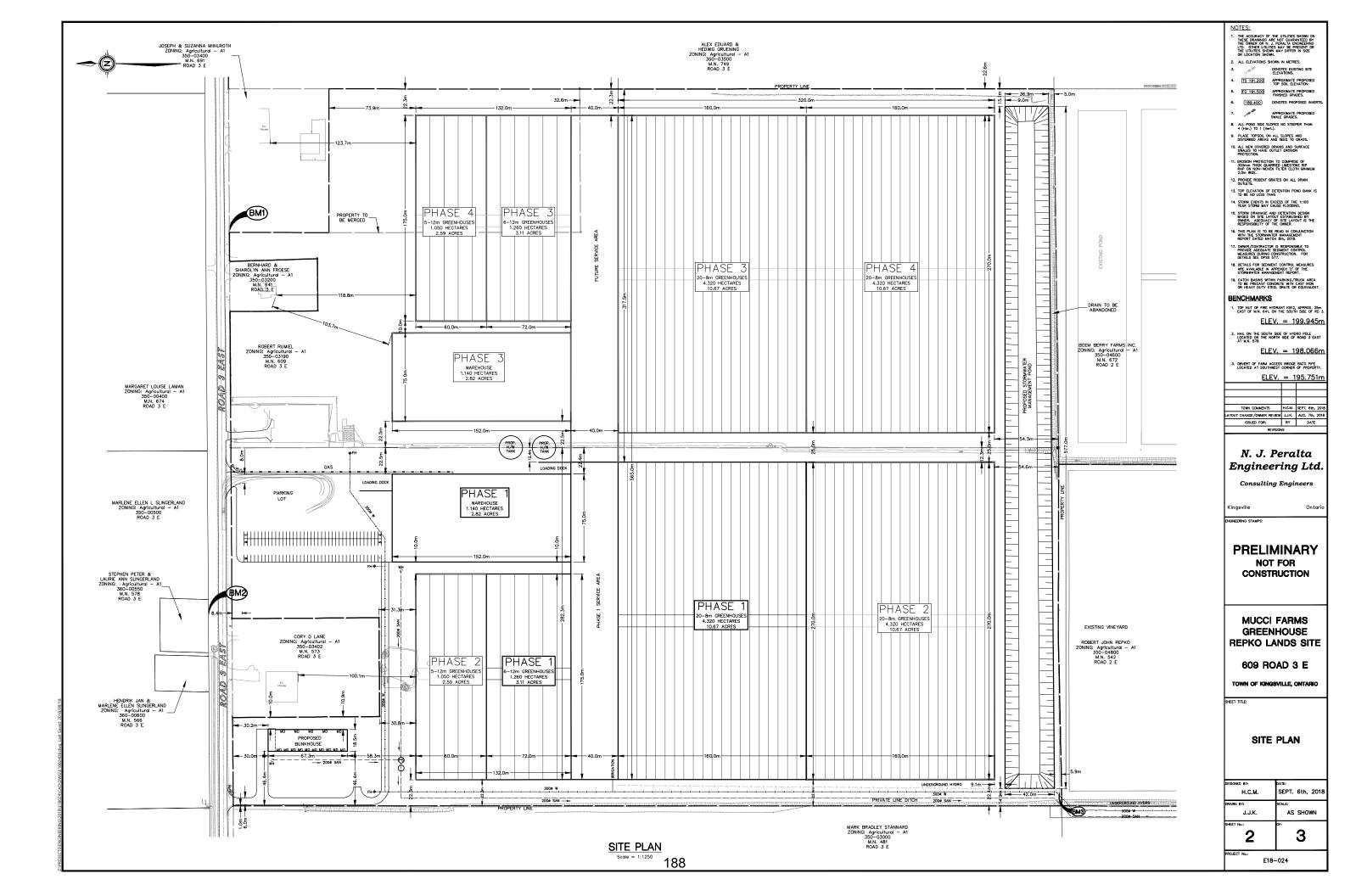


Following the construction of the greenhouses, some monitoring of migrant worker travel behaviour should be undertaken to confirm that the magnitude and route choice are consistent with that noted herein.

Appendix A

Proposed Site Plan





Appendix B

Traffic Volume Data



									1	Гuesday	, Octobe	r 30, 201	8 - Road	3E at D	ivision F	Road Tra	iffic Cou	ints								
Time		R	oad 3E I	Eastbou	nd			R	oad 3E V	Vestbou	nd			Divis	ion Roa	d Northi	oound			Divis	ion Road	d Southl	oound		Tota	al
Period	U	L	Т	R	P1	P2	U	L	Т	R	P1	P2	U	L	Т	R	P1	P2	U	L	Т	R	P1	P2	Vehicles	Peds
7:00 AM	0	2	3	1	0	0	0	14	3	10	0	0	0	0	121	23	0	0	0	11	34	1	0	0	223	0
7:15 AM	0	1	4	2	0	0	0	5	4	3	0	0	0	0	127	14	0	0	0	4	44	1	0	0	209	0
7:30 AM	0	2	10	2	0	0	0	3	3	9	0	0	0	1	118	20	0	0	0	11	70	2	0	0	251	0
7:45 AM	0	0	7	5	0	0	0	1	6	3	0	0	0	3	89	27	0	0	0	12	98	0	0	0	251	0
8:00 AM	0	2	7	3	0	0	0	25	8	12	0	0	0	1	89	54	0	0	0	10	66	1	0	0	278	0
8:15 AM	0	1	10	3	0	0	0	17	6	5	0	0	0	2	71	12	0	0	0	3	76	0	0	0	206	0
8:30 AM	0	1	8	2	0	0	0	6	2	8	0	0	0	7	58	7	0	0	0	5	78	1	0	0	183	0
8:45 AM	0	1	6	7	0	0	0	11	2	0	0	0	0	2	50	10	0	0	0	4	74	1	0	0	168	0
4:00 PM	0	1	3	4	0	0	0	15	14	4	0	0	0	7	75	9	0	0	0	3	95	3	0	0	233	0
4:15 PM	0	0	2	6	0	0	0	17	6	6	0	0	0	5	67	9	0	0	0	7	100	0	0	0	225	0
4:30 PM	0	0	5	2	0	0	0	16	8	6	0	0	0	4	80	1	0	0	0	2	120	3	0	0	247	0
4:45 PM	0	3	4	4	0	1	0	7	10	4	1	0	0	2	73	10	0	0	0	6	104	2	0	0	229	2
5:00 PM	0	3	6	5	0	0	0	16	13	15	0	0	0	3	77	9	0	0	0	6	116	1	0	0	270	0
5:15 PM	0	2	9	2	0	0	0	13	17	6	0	0	0	6	88	6	0	0	0	3	120	0	0	0	272	0
5:30 PM	0	1	4	4	0	0	0	13	8	4	0	0	0	3	64	5	0	0	0	3	121	4	0	0	234	0
5:45 PM	0	0	5	4	0	0	0	14	3	8	0	0	0	1	53	4	0	0	0	4	129	1	0	0	226	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	4	0

									Tu	Tuesday, October 30, 2018 - Road 3E at Graham Side Road Traffic Counts																
Time		R	load 3E I	Eastbou	ınd			R	load 3E l	Eestbou	nd			Grahai	m Sidero	ad Nort	hbound			Grahar	n Sidero	ad Sout	hbound		Tota	ıl
Period	U	L	Т	R	P1	P2	U	L	Т	R	P1	P2	U	L	Т	R	P1	P2	U	L	Т	R	P1	P2	Vehicles	Peds
7:00 AM	0	2	6	2	0	0	0	0	4	1	0	0	0	3	17	2	0	0	0	1	6	3	0	0	47	0
7:15 AM	0	1	14	2	0	0	0	3	7	1	0	0	0	3	27	3	0	0	0	1	10	0	0	0	72	0
7:30 AM	0	5	22	2	1	0	0	5	6	0	0	0	0	0	18	13	0	0	0	3	10	1	0	0	85	1
7:45 AM	0	0	21	1	0	0	0	8	11	3	0	0	0	3	20	16	0	0	0	6	16	2	0	0	107	0
8:00 AM	0	5	24	2	0	0	0	3	10	0	0	0	0	1	24	9	0	0	0	5	8	2	0	0	93	0
8:15 AM	0	4	25	1	0	0	0	3	6	1	0	0	0	0	19	12	0	0	0	0	17	3	0	0	91	0
8:30 AM	0	3	8	4	0	0	0	7	12	1	0	0	0	2	13	2	0	0	0	4	20	1	0	0	77	0
8:45 AM	0	3	8	0	0	0	0	2	11	1	0	0	0	2	10	10	0	0	0	3	8	1	0	0	59	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:00 PM	0	2	5	3	0	0	0	22	33	4	0	0	0	1	12	6	0	0	0	2	24	0	0	0	114	0
4:15 PM	0	0	9	1	0	0	0	7	19	6	0	0	0	0	18	2	0	0	0	5	18	3	0	0	88	0
4:30 PM	0	0	2	3	0	0	0	13	16	6	0	0	0	1	17	5	0	0	0	2	24	3	0	0	92	0
4:45 PM	0	1	9	3	0	0	0	12	21	3	0	0	0	0	12	7	0	0	0	4	33	4	1	0	109	1
5:00 PM	0	3	11	1	0	0	0	30	30	9	0	0	0	2	19	6	0	0	0	5	35	6	0	0	157	0
5:15 PM	0	2	12	2	0	0	0	10	23	3	0	0	0	2	13	7	0	0	0	6	25	6	0	3	111	3
5:30 PM	0	0	11	0	0	0	0	8	15	3	0	0	0	1	16	5	0	0	0	3	22	2	0	0	86	0
5:45 PM	0	1	8	1	0	0	0	6	12	0	0	0	0	2	17	5	0	0	0	3	25	6	0	0	86	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0

Appendix C

Level of Service Definitions



LEVEL OF SERVICE1

Level of Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. This concept was introduced in the 1965 *Highway Capacity Manual* as a criteria for interrupted flow conditions. The 2000 *Highway Capacity Manual* changed the basis for measuring Level of Service at intersections to control delay².

Six Levels of Service are defined with LOS A representing the best operating conditions, and LOS F the worst (briefly described below). It should be noted that there is often significant variability in the amount of delay experienced by individual drivers.

- LOS A: This Level of Service describes the highest quality of traffic flow and is referred to as free flow. The approach appears open, turning movements are easily made and drivers have freedom of operation. Control delay is less than 10 seconds/vehicle.
- LOS B: This Level of Service is referred to as a stable flow. Drivers feel somewhat restricted and occasionally may have to wait to complete the minor movement. Control delay is 10-15 seconds/vehicle for unsignalized intersections and 10-20 seconds/vehicle for signalized intersections.
- LOS C: At this level, the operation is stable. Drivers feel more restricted and may have to wait, with queues developing for short periods. Control delay is 15-25 seconds/vehicle at unsignalized intersections and 20-35 seconds/vehicle at signalized intersections.
- LOS D: At this level, traffic is approaching unstable flow. The motorist experiences increasing restriction and instability of flow. There are substantial delays to approaching vehicles during short peaks within the peak period, but there are enough gaps to lower demand to permit occasional clearance of developing queues and prevent excessive back-ups. Control delay is 25-35 seconds/vehicle at unsignalized intersections and 35-55 seconds/vehicle at signalized intersections.
- LOS E: At this level capacity occurs. Long queues of vehicles exist and delays to vehicles may extend. Control delay is 35-50 seconds/vehicle at unsignalized intersections and 55-80 seconds/vehicle at signalized intersections.
- LOS F: At this Level of Service, the intersection has failed. Capacity of the intersection has been exceeded. Control delay exceeds 50 seconds/vehicle at unsignalized intersections and exceeds 80 seconds/vehicle at signalized intersections.

¹ Transportation Research Board: Highway Capacity Manual 1965, 2000

² Control delay is defined as the component of delay that results when a control signal causes a lane group to reduce speed or to stop; it is measured by comparison with the uncontrolled condition.

Appendix D

Synchro Analysis Worksheets



Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIN	VVDL	4	VVDIX	NDL	4	NDI	JDL	4	JUIN
Traffic Vol., veh/h	5	30	10	35	20	25	5	425	115	35	280	5
Future Vol, veh/h	5	30	10	35	20	25	5	425	115	35	280	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Jiup -	Jiop -	None	- Jiop	310p	None	-	-	None	-	-	None
Storage Length	_	_	NOTIC	_	_	None	_	_	-	_	_	INOTIC
Veh in Median Storage	÷. # -	0	_	_	0	_	_	0	_	_	0	_
Grade, %	<i>-</i>	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mymt Flow	5	33	11	38	22	27	5	462	125	38	304	5
IVIVIIIL I IOVV	J	- 33	11	- 30		- 21	J	702	123	30	304	J
Major/Miner	Minaro			\line=1			Mole 1			Anican		
	Minor2	000		Minor1	000		Major1	^		Major2		^
Conflicting Flow All	942	980	307	940	920	525	309	0	0	587	0	0
Stage 1	383	383	-	535	535	-	-	-	-	-	-	-
Stage 2	559	597	- / 22	405	385	/ 22	4.10	-	-	4 4 0	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	2 210	6.12	5.52	2 240	2 240	-	-	2 240	-	-
Follow-up Hdwy	3.518	4.018				3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	243	250	733	244	271	552	1252	-	-	988	-	-
Stage 1	640	612	-	529	524	-	-	-	-	-	-	-
Stage 2	513	491	-	622	611	-	-	-	-	-	-	-
Platoon blocked, %	200	227	722	207	257	EEO	1252	-	-	000	-	-
Mov Cap-1 Maneuver	208	237	733	207	257	552	1252	-	-	988	-	-
Mov Cap-2 Maneuver	208	237	-	207	257	-	-	-	-	-	-	-
Stage 1	636	584 488	-	526 552	521 583	-	-	-	-	-	-	-
Stage 2	465	400	-	352	ეგვ	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	21			24.1			0.1			1		
HCM LOS	С			С								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR I	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1252	-	-	274	274	988	-	_			
HCM Lane V/C Ratio		0.004	-	-		0.317		-	-			
HCM Control Delay (s))	7.9	0	-	21	24.1	8.8	0	-			
HCM Lane LOS		Α	Α	-	С	С	Α	Α	-			
HCM 95th %tile Q(veh	1)	0	-	_	0.6	1.3	0.1	-	-			

Intersection						
Int Delay, s/veh	0					
		EDD	WDI	WDT	NDI	NDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	\$	•	•	4	¥	•
Traffic Vol, veh/h	180	0	0	80	0	0
Future Vol, veh/h	180	0	0	80	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	0	0	87	0	0
NA ' /NA' NA			4 ' 0		P 4	
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	283	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	87	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1377	-	707	845
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	936	-
Platoon blocked, %	-	_		_		
Mov Cap-1 Maneuver	_	_	1377	_	707	845
Mov Cap-2 Maneuver	_	_	-	_	707	-
Stage 1	_	_	_	-	837	_
Stage 2			_	_	936	_
Staye 2	-	-	-	-	730	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	1	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	1377	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s)		0	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		-	-	-	0	-

Movement	Intersection												
Traffic Vol, vel/h		6.1											
Traffic Vol, veh/h	Movement	FBI	FBT	FBR	WBI	WRT	WBR	NBI	NBT	NBR	SBI	SBT	SBR
Traffic Vol, veh/h				LBR	1100		TI DIC	HUL		HDR	ODL		ODI
Future Vol, veh/h		25		10	20		5	5		50	15		15
Conflicting Peds, #/hr O O O O O O O O O													
Sign Control Free Pree Pree Pree Pree Pree Pree Pree	·												
RT Channelized None		Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Veh in Median Storage, # - 0		-	-	None	-	-	None						None
Grade, % - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - 0 - 0 - 0 - 0 2 3 1 6 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2<	Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Peak Hour Factor 92 92 92 92 92 92 92 9	Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2	Grade, %	-		-	-	0	-	-		-	-		
Mymit Flow 27 163 11 22 65 5 5 87 54 16 54 16 Major/Minor Major1 Major2 Minor1 Minor2 Conflicting Flow All 70 0 0 174 0 0 370 337 169 405 340 68 Stage 1 - - - - - 223 223 - 112 112 - 228 - 112 112 - 228 - 112 112 - 223 223 - 112 112 - 228 - - 223 223 - 112 112 - 223 228 - - 26.22 7 112 6.52 6.22 7.12 6.52 6.22 7.12 6.52 6.22 7.12 6.52 6.22 7.12 6.52 6.22 7.12 6.52 6.22 7.12 6.52 <td></td> <td></td> <td>92</td> <td></td> <td>92</td> <td>92</td> <td>92</td> <td>92</td> <td>92</td> <td></td> <td></td> <td></td> <td></td>			92		92	92	92	92	92				
Major/Minor Major1 Major2 Minor1 Minor2 Conflicting Flow All 70 0 0 174 0 0 370 337 169 405 340 68 Stage 1 - - - - - 223 223 - 112 112 - - 223 223 - 112 112 - - 223 223 - 112 112 - - 223 223 - 112 112 - - 223 223 - 112 112 - - 223 223 - 112 112 - - 228 - - 26.22 Critical Hdwy Stg 1 - - 4.12 - - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 556 582													
Conflicting Flow All	Mvmt Flow	27	163	11	22	65	5	5	87	54	16	54	16
Conflicting Flow All													
Conflicting Flow All	Major/Minor N	/lajor1			Major2			Minor1			Minor2		
Stage 1	Conflicting Flow All	70	0	0	174	0	0	370	337	169	405	340	68
Critical Hdwy 4.12 - 4.12 - - 7.12 6.52 6.22 7.12 6.52 6.22 Critical Hdwy Stg 1 - - - - - 6.12 5.52 - 6.12 5.52 - Critical Hdwy Stg 2 - - - - - 6.12 5.52 - 6.12 5.52 - Follow-up Hdwy 2.218 - - 2.218 - - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1531 - 1403 - - 587 584 875 556 582 995 Stage 1 - - - - - 856 801 - 715 715 - Platoon blocked, % - - - - - 520 563 875 448 561 995 Mov Cap-1 Maneuver 1531 - 1403 - - 520 563 875 448 561 <t< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>223</td><td>223</td><td>-</td><td>112</td><td>112</td><td>-</td></t<>		-	-	-	-	-	-	223	223	-	112	112	-
Critical Hdwy Stg 1 - - - - 6.12 5.52 - 6.12 5.52 - Critical Hdwy Stg 2 - - - - - 6.12 5.52 - 6.12 5.52 - Follow-up Hdwy 2.218 - - 2.218 - - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1531 - 1403 - - 587 584 875 556 582 995 Stage 1 - - - - - 856 801 - 715 715 - Platoon blocked, % - - - - - 856 801 - 715 715 - Mov Cap-1 Maneuver 1531 - 1403 - - 520 563 875 448 561 995 Mov Cap-2 Maneuver - - - - 764 705 - 875 790 - Stage 1 </td <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>		-	-	-	-	-	-						-
Critical Hdwy Stg 2 - - - - 6.12 5.52 - 6.12 5.52 - Follow-up Hdwy 2.218 - - 2.218 - - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1531 - 1403 - - 587 584 875 556 582 995 Stage 1 - - - - 780 719 - 893 803 - Stage 2 - - - - - 856 801 - 715 715 - Plation blocked, % - - - - - - - 856 801 - 715 715 - <t< td=""><td>•</td><td>4.12</td><td>-</td><td>-</td><td>4.12</td><td>-</td><td>-</td><td></td><td></td><td>6.22</td><td></td><td></td><td>6.22</td></t<>	•	4.12	-	-	4.12	-	-			6.22			6.22
Follow-up Hdwy 2.218 - 2.218 - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1531 - 1403 - 587 584 875 556 582 995 Stage 1 - 7 5 7 5 7 584 875 556 582 995 Stage 1 - 7 5 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		-	-	-	-	-	-			-			-
Pot Cap-1 Maneuver	, ,		-	-	-	-	-						
Stage 1 - - - - 780 719 - 893 803 - Stage 2 - - - - - 856 801 - 715 715 - Platoon blocked, % -<	. ,		-	-		-	-						
Stage 2 - - - - 856 801 - 715 715 - Platoon blocked, % - <t< td=""><td></td><td>1531</td><td>-</td><td>-</td><td>1403</td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td>995</td></t<>		1531	-	-	1403	-	-						995
Platoon blocked, %		-	-	-	-	-	-						-
Mov Cap-1 Maneuver 1531 - 1403 - - 520 563 875 448 561 995 Mov Cap-2 Maneuver - - - - - 520 563 - 448 561 - Stage 1 - - - - 764 705 - 875 790 - Stage 2 - - - - - 772 788 - 576 701 - Approach EB WB NB SB SB B		-		-	-			856	801	-	/15	/15	-
Mov Cap-2 Maneuver - - - - 520 563 - 448 561 - Stage 1 - - - - - 764 705 - 875 790 - Stage 2 - - - - - 772 788 - 576 701 - Approach EB WB NB NB SB HCM Control Delay, s 1 1.8 12.2 12.3 HCM LOS B B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 - - 1403 - - 581 HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 1		1501		-	1400			F00	F/2	075	4.40	F/4	005
Stage 1 - - - - 764 705 - 875 790 - Stage 2 - - - - - 772 788 - 576 701 - Approach EB WB NB SB HCM Control Delay, s 1 1.8 12.2 12.3 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBR SBLn1 Capacity (veh/h) 646 1531 - - 1403 - - 581 HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B				-	1403								
Stage 2 - - - - 772 788 - 576 701 - Approach EB WB NB SB HCM Control Delay, s 1 1.8 12.2 12.3 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 - - 1403 - - 581 HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B				-	-								
Approach EB WB NB SB HCM Control Delay, s 1 1.8 12.2 12.3 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 - - 1403 - - 581 HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B		-	-	-	-	-	-						
HCM Control Delay, s 1 1.8 12.2 12.3 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 1403 581 HCM Lane V/C Ratio 0.227 0.018 0.015 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B	Staye 2	-	-	-	-	-	-	112	700	-	3/0	701	-
HCM Control Delay, s 1 1.8 12.2 12.3 HCM LOS B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 1403 581 HCM Lane V/C Ratio 0.227 0.018 0.015 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B													
Minor Lane/Major Mvmt NBLn1 EBL EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 - - 1403 - - 581 HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B													
Minor Lane/Major Mvmt NBLn1 EBL EBR WBL WBT WBR SBLn1 Capacity (veh/h) 646 1531 - - 1403 - - 581 HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B		1			1.8								
Capacity (veh/h) 646 1531 1403 581 HCM Lane V/C Ratio 0.227 0.018 0.015 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B	HCM LOS							В			В		
Capacity (veh/h) 646 1531 1403 581 HCM Lane V/C Ratio 0.227 0.018 0.015 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B													
HCM Lane V/C Ratio 0.227 0.018 - - 0.015 - - 0.15 HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A A A B	Minor Lane/Major Mvm	t ſ	VBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
HCM Control Delay (s) 12.2 7.4 0 - 7.6 0 - 12.3 HCM Lane LOS B A A - A A - B			646	1531	-	-	1403	-	-	581			
HCM Lane LOS B A A - A A - B					-	-		-	-				
						-			-				
HCM 95th %tile Q(veh) 0.9 0.1 0 0.5					Α	-		Α	-				
	HCM 95th %tile Q(veh)		0.9	0.1	-	-	0	-	-	0.5			

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	25	15	50	50	30	15	320	25	15	460	5
Future Vol, veh/h	10	25	15	50	50	30	15	320	25	15	460	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	- -	- -	None	-	- -	None	-	-		-	-	None
Storage Length	_	_	-	_		- TWOTIC	_	_	-	_	_	-
Veh in Median Storage	. # -	0	_	_	0	_	_	0	_	_	0	-
Grade, %	-	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mymt Flow	11	27	16	54	54	33	16	348	27	16	500	5
IVIVIIIL I IOVV	- 11		10	- 34	- 34	- 33	10	570	21	10	300	
Major/Minor	Minora			Minort		_	Major1			Majora		
	Minor2	0.40		Minor1	004		Major1	0		Major2		0
Conflicting Flow All	972	942	503	950	931	362	505	0	0	375	0	0
Stage 1	535	535	-	394	394	-	-	-	-	-	-	-
Stage 2	437	407	-	556	537		-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318			3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	232	263	569	240	267	683	1060	-	-	1183	-	-
Stage 1	529	524	-	631	605	-	-	-	-	-	-	-
Stage 2	598	597	-	515	523	-	-	-	-	-	-	-
Platoon blocked, %	,						40	-	-		-	-
Mov Cap-1 Maneuver	180	253	569	208	257	683	1060	-	-	1183	-	-
Mov Cap-2 Maneuver	180	253	-	208	257	-	-	-	-	-	-	-
Stage 1	519	514	-	619	594	-	-	-	-	-	-	-
Stage 2	508	586	-	465	513	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	21.1			31.9			0.4			0.3		
HCM LOS	С			D								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1060			277	271	1183					
HCM Lane V/C Ratio		0.015	-	_		0.521		_	_			
HCM Control Delay (s)		8.4	0	_	21.1	31.9	8.1	0	_			
HCM Lane LOS		Α	A	_	C	D	Α	A	_			
HCM 95th %tile Q(veh)	0	-		0.7	2.8	0		_			
	,				J.,	2.0						

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	7	LUIN	1100	4	¥	HOR
Traffic Vol, veh/h	65	0	0	130	0	0
Future Vol, veh/h	65	0	0	130	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	_	_	0	0	-
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	71	0	0	141	0	0
IVIVIIIC I IOW	7 1	U	U	171	U	U
Major/Minor M	ajor1	N	Major2	N	Minor1	
Conflicting Flow All	0	0	71	0	212	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	141	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1529	-	776	991
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1529	-	776	991
Mov Cap-2 Maneuver	-	-	_	-	776	-
Stage 1	_	_	_	-	952	_
Stage 2	_	_	_	_	886	_
olugo 2					000	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
	-	ADLIII.	LDI			VVDI
Capacity (veh/h) HCM Lane V/C Ratio		-		-	1529	-
		-	-	-	-	-
HCM Long LOS		0		-	0	
HCM Lane LOS		Α	-	-	A	-
HCM 95th %tile Q(veh)		-	-	-	0	-

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			44	
Traffic Vol, veh/h	10	45	10	65	105	20	5	60	25	15	115	20
Future Vol, veh/h	10	45	10	65	105	20	5	60	25	15	115	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	-, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	49	11	71	114	22	5	65	27	16	125	22
Major/Minor N	/lajor1		1	Major2			Minor1			Vinor2		
Conflicting Flow All	136	0	0	60	0	0	418	355	55	390	349	125
Stage 1	-	-	-	-	-	-	77	77	-	267	267	-
Stage 2	-	-	-	-	-	-	341	278	-	123	82	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1448	-	-	1544	-	-	545	571	1012	569	575	926
Stage 1	-	-	-	-	-	-	932	831	-	738	688	-
Stage 2	-	-	-	-	-	-	674	680	-	881	827	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1544	-	-	419	538	1012	481	542	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	419	538	-	481	542	-
Stage 1	-	-	-	-	-	-	925	824	-	732	654	-
Stage 2	-	-	-	-	-	-	506	646	-	783	820	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2.5			12.1			13.9		
HCM LOS	•••			2.0			В			В		
Minor Lane/Major Mvm	t N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	CDI n1			
	it l											
Capacity (veh/h)		607	1448	-	-	1544	-	-	566			
HCM Control Dolay (s)		0.161		-		0.046	-		0.288			
HCM Control Delay (s) HCM Lane LOS		12.1 B	7.5	0	-	7.4	0	-	13.9			
HCM 95th %tile Q(veh)	١	0.6	A 0	A	-	0.1	A -	-	B 1.2			
HOW FOUT WHIE Q(VEH)		0.0	U	-	•	0.1	-	-	1.2			

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIT	******	4	WDIX	HUL	4	HUIK	ODL	4	ODIT
Traffic Vol, veh/h	5	30	10	35	20	25	5	430	115	35	280	5
Future Vol, veh/h	5	30	10	35	20	25	5	430	115	35	280	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	22	27	5	467	125	38	304	5
Major/Minor I	Minor2			Minor1			Major1		1	Major2		
Conflicting Flow All	947	985	307	945	925	530	309	0	0	592	0	0
Stage 1	383	383	-	540	540	-	-	-	-	-	-	-
Stage 2	564	602	-	405	385	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	241	248	733	242	269	549	1252	-	-	984	-	-
Stage 1	640	612	-	526	521	-	-	-	-	-	-	-
Stage 2	510	489	-	622	611	-	-	-	-	-	-	-
Platoon blocked, %	207	225	722	205	255	E 40	1252	-	-	004	-	-
Mov Cap-1 Maneuver	206	235	733	205	255 255	549	1252	-	-	984	-	-
Mov Cap-2 Maneuver	206 636	235 583	-	205 523	518	-	-	-	-	-	-	-
Stage 1 Stage 2	462	486	-	551	582	-	-	-	-	-	-	-
Staye 2	402	400	_	331	502	_	<u>-</u>	-	-	-	-	-
A managash	ED			MD			ND			CD		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	21.1			24.4			0.1			1		
HCM LOS	С			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1252	-	-	272	271	984	-	-			
HCM Lane V/C Ratio		0.004	-	-		0.321		-	-			
HCM Control Delay (s))	7.9	0	-	21.1	24.4	8.8	0	-			
HCM Lane LOS	,	A	Α	-	С	C	A	Α	-			
HCM 95th %tile Q(veh	1)	0	-	-	0.6	1.3	0.1	-	-			

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			4	¥	
Traffic Vol, veh/h	180	0	0	80	0	0
Future Vol, veh/h	180	0	0	80	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	_	-	0	0	-
Grade, %	0	-	_	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	0	0	87	0	0
	.,,			0,		
	lajor1		Major2		/linor1	
Conflicting Flow All	0	0	196	0	283	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	87	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver	-	-	1377	-	707	845
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	936	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1377	-	707	845
Mov Cap-2 Maneuver	-	-	-	-	707	-
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	936	-
J						
Annroach	EB		WB		ND	
Approach					NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		_	_	_	1377	_
HCM Lane V/C Ratio		_	_	_		_
HCM Control Delay (s)		0	-	-	0	-
HCM Lane LOS		A	_	-	A	-
HCM 95th %tile Q(veh)		_	-	-	0	-

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	150	10	20	60	5	5	80	50	15	50	15
Future Vol, veh/h	25	150	10	20	60	5	5	80	50	15	50	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	-, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	163	11	22	65	5	5	87	54	16	54	16
Major/Minor N	/lajor1		1	Major2		1	Minor1			Vinor2		
Conflicting Flow All	70	0	0	174	0	0	370	337	169	405	340	68
Stage 1	-	-	-	-	-	-	223	223	-	112	112	-
Stage 2	-	-	-	-	-	-	147	114	-	293	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1531	-	-	1403	-	-	587	584	875	556	582	995
Stage 1	-	-	-	-	-	-	780	719	-	893	803	-
Stage 2	-	-	-	-	-	-	856	801	-	715	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1403	-	-	520	563	875	448	561	995
Mov Cap-2 Maneuver	-	-	-	-	-	-	520	563	-	448	561	-
Stage 1	-	-	-	-	-	-	764	705	-	875	790	-
Stage 2	-	-	-	-	-	-	772	788	-	576	701	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.8			12.2			12.3		
HCM LOS							В			В		
Minor Lane/Major Mvm	ıt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SRI n1			
Capacity (veh/h)	1	646	1531	-	- LDK	1403	-	- VVDIC	581			
HCM Lane V/C Ratio		0.227		-		0.015	-	-	0.15			
HCM Control Delay (s)		12.2	7.4	0	-	7.6	0		12.3			
HCM Lane LOS		12.2 B	Α.4	A	_	7.0 A	A	_	12.3 B			
HCM 95th %tile Q(veh))	0.9	0.1	-		0			0.5			
1.10141 70th 70th Q(VCH)		0.7	J. 1						0.0			

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	25	15	50	50	30	15	325	25	15	465	5
Future Vol, veh/h	10	25	15	50	50	30	15	325	25	15	465	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	27	16	54	54	33	16	353	27	16	505	5
	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	982	952	508	960	941	367	510	0	0	380	0	0
Stage 1	540	540	-	399	399	-	-	-	-	-	-	-
Stage 2	442	412	-	561	542	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	2 210	6.12	5.52	2 240	-	-	-	- 010	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318		-	-	2.218	-	-
Pot Cap-1 Maneuver	228 526	259 521	565	236 627	263 602	678	1055	-	-	1178	-	-
Stage 1 Stage 2	526	594	-	512	520	-	-	-	-	-	-	-
Platoon blocked, %	374	394	-	312	320	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	176	249	565	204	253	678	1055	-	-	1178	-	-
Mov Cap-1 Maneuver	176	249	505	204	253	- 070	1000			- 1170		
Stage 1	516	511		615	591	_	-					_
Stage 2	504	583	_	462	510	_	_	_		_	_	_
2.a.go 2	301	300		.02	3.3							
Approach	EB			WB			NB			SB		
HCM Control Delay, s	21.5			32.7			0.3			0.3		
HCM LOS	21.5 C			J2.7			0.0			0.0		
TIOWI LOO				J								
Minor Lane/Major Mvm	nt	NBL	NBT	NRR	EBLn1V	WRI n1	SBL	SBT	SBR			
Capacity (veh/h)		1055	1101	TUDIC	272	267	1178		JDIN.			
HCM Lane V/C Ratio		0.015				0.529		_				
HCM Control Delay (s))	8.5	0		21.5	32.7	8.1	0				
HCM Lane LOS		Α	A	_	C C	52.7 D	A	A	_			
HCM 95th %tile Q(veh	1)	0	-	-	0.7	2.9	0	-	-			
(10)	•											

Intersection						
Int Delay, s/veh	0					
		EDD	WDL	WDT	NDI	NIDD
	EBT •	EBR	WBL	WBT	NBL	NBR
Lane Configurations	}	0	0	120	Y	0
Traffic Vol, veh/h Future Vol, veh/h	65 65	0	0	130 130	0	0
·			0		0	
Conflicting Peds, #/hr	0 [roo	0 Eroo	0 Fron	0 Fron	0 Stop	O Ctop
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	0	0	141	0	0
Major/Minor Ma	ajor1	N	Major2	ľ	Minor1	
Conflicting Flow All	0	0	71	0	212	71
Stage 1	-	-	- ' -	-	71	- , .
Stage 2	_		_	_	141	_
Critical Hdwy	_	_	4.12	-	6.42	6.22
Critical Hdwy Stg 1	_	_	7.12	_	5.42	-
Critical Hdwy Stg 2	_			_	5.42	_
Follow-up Hdwy	_	_	2.218		3.518	
Pot Cap-1 Maneuver	_		1529		776	991
Stage 1	_	_	1327	_	952	771
Stage 2		<u>-</u>	_	-	886	
Platoon blocked, %	-	-	-	-	000	-
			1529		774	991
Mov Cap-1 Maneuver	-	-	1529	-	776	
Mov Cap-2 Maneuver	-	-	-	-	776	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	886	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
		IDI. 1			14/51	14/5-
Minor Lane/Major Mvmt		VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	1529	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s)		0	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		-	-	-	0	-

Intersection												
Int Delay, s/veh	7.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	45	10	65	105	20	5	60	25	15	120	20
Future Vol, veh/h	10	45	10	65	105	20	5	60	25	15	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	49	11	71	114	22	5	65	27	16	130	22
Major/Minor N	/lajor1		1	Major2			Minor1			Minor2		
Conflicting Flow All	136	0	0	60	0	0	420	355	55	390	349	125
Stage 1	-	-	-	-	-	-	77	77	_	267	267	-
Stage 2	-	-	-	-	-	-	343	278	-	123	82	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1448	-	-	1544	-	-	544	571	1012	569	575	926
Stage 1	-	-	-	-	-	-	932	831	-	738	688	-
Stage 2	-	-	-	-	-	-	672	680	-	881	827	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1544	-	-	415	538	1012	481	542	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	415	538	-	481	542	-
Stage 1	-	-	-	-	-	-	925	824	-	732	654	-
Stage 2	-	-	-	-	-	-	499	646	-	783	820	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2.5			12.1			14.1		
HCM LOS	• • •			2.0			В			В		
Minor Lanc/Major Muse	+ N	IDI 51	EDI	EDT	EDD	WDI	WDT	WDD	CDI n1			
Minor Lane/Major Mvm	t I	VBLn1	1440	EBT	EBR	WBL	WBT	WBR :				
Capacity (veh/h)		607	1448	-	-	1544	-	-	565			
HCM Control Dolay (c)		0.161		-		0.046	-		0.298			
HCM Control Delay (s) HCM Lane LOS		12.1 B	7.5	0	-	7.4	0	-				
HCM 95th %tile Q(veh)		0.6	A 0	A	-	0.1	A -	-	B 1.2			
How Four 70the Q(Ven)		0.0	U	-	-	0.1	-		1.2			

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDI	VVDL	4	VVDIX	NDL	4	אטוו	JUL	4	JUIN
Traffic Vol, veh/h	5	30	10	35	20	25	5	435	115	35	285	5
Future Vol, veh/h	5	30	10	35	20	25	5	435	115	35	285	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None		-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	22	27	5	473	125	38	310	5
Major/Minor I	Minor2			Minor1			Major1		- 1	Major2		
Conflicting Flow All	959	997	313	957	937	536	315	0	0	598	0	0
Stage 1	389	389	-	546	546	-	-	-	-	-	-	-
Stage 2	570	608	-	411	391	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	237	244	727	237	265	545	1245	-	-	979	-	-
Stage 1	635	608	-	522	518	-	-	-	-	-	-	-
Stage 2	506	486	-	618	607	-	-	-	-	-	-	-
Platoon blocked, %	000	004	707	000	054	E 45	10.45	-	-	070	-	-
Mov Cap-1 Maneuver	202	231	727	200	251	545	1245	-	-	979	-	-
Mov Cap-2 Maneuver	202	231 579	-	200	251 515	-	-	-	-	-	-	-
Stage 1	631 458	483	-	519 547	578	-	-	-	-	-	-	-
Stage 2	408	403	-	347	3/8	-	-	-	-	-	-	-
Amanaaah	ED			WD			ND			CD		
Approach	EB			WB			NB 0.1			SB		
HCM Control Delay, s	21.5			25			0.1			1		
HCM LOS	С			D								
		N.S.	NET	NES	EDI (VD1 (05:	057	055			
Minor Lane/Major Mvn	nt	NBL	NBT	NBK	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1245	-	-	267	266	979	-	-			
HCM Lane V/C Ratio		0.004	-	-		0.327		-	-			
HCM Control Delay (s))	7.9	0	-	21.5	25	8.8	0	-			
HCM Lane LOS		A	Α	-	C	D	Α	Α	-			
HCM 95th %tile Q(veh	I)	0	-	-	0.7	1.4	0.1	-	-			

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	LUK	WDL	₩ <u>₩</u>	₩.	אטוז
Traffic Vol, veh/h	180	0	0	85	0	0
Future Vol, veh/h	180	0	0	85	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
-	Free	Free	Free	Free	Stop	Stop
RT Channelized	riee -	None		None	Stop -	None
			-			None -
Storage Length	- # 0	-	-	-	0	
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	0	0	92	0	0
Major/Minor Major/Minor	ajor1	N	Major2	N	/linor1	
Conflicting Flow All	0	0	196	0	288	196
Stage 1	-	-	170	-	196	-
Stage 2	_	_	_	-	92	
Critical Hdwy	_		4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	4.12	-	5.42	0.22
Critical Hdwy Stg 2		-	_		5.42	
	-	-	2.218		3.518	
Follow-up Hdwy	-	-				
Pot Cap-1 Maneuver	-	-	1377	-	702	845
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1377	-	702	845
Mov Cap-2 Maneuver	-	-	-	-	702	-
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	932	-
Approach	EB		WB		NB	
	0		0		0	
HCM Control Delay, s	U		U			
HCM LOS					Α	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		_	_		1377	-
HCM Lane V/C Ratio		_	_	_	-	_
HCM Control Delay (s)		0	_	_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		-	_	_	0	_
115W 75W 75W 70W Q(VOII)						

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	150	10	20	60	5	5	85	50	15	50	15
Future Vol, veh/h	25	150	10	20	60	5	5	85	50	15	50	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	163	11	22	65	5	5	92	54	16	54	16
Major/Minor N	Major1		1	Major2		1	Minor1			Minor2		
Conflicting Flow All	70	0	0	174	0	0	370	337	169	408	340	68
Stage 1	-	-	-	-	-	-	223	223	-	112	112	-
Stage 2	-	-	-	-	-	-	147	114	-	296	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1531	-	-	1403	-	-	587	584	875	554	582	995
Stage 1	-	-	-	-	-	-	780	719	-	893	803	-
Stage 2	-	-	-	-	-	-	856	801	-	712	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1403	-	-	520	563	875	442	561	995
Mov Cap-2 Maneuver	-	-	-	-	-	-	520	563	-	442	561	-
Stage 1	-	-	-	-	-	-	764	705	-	875	790	-
Stage 2	-	-	-	-	-	-	772	788	-	569	701	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.8			12.3			12.3		
HCM LOS							В			В		
Minor Lane/Major Mvm	t N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	CRI n1			
	it I					1403	VVDI	WDR .				
Capacity (veh/h) HCM Lane V/C Ratio		643 0.237	1531	-	-	0.015			579 0.15			
HCM Control Delay (s)		12.3	7.4	0	-	7.6	0	-	12.3			
HCM Control Delay (s)		12.3 B	7.4 A	A	-	7.6 A	A	-	12.3 B			
HCM 95th %tile Q(veh))	0.9	0.1	A	-	0	- A		0.5			
HOW 75th 70the Q(Veh)		0.7	U. I	_		U		-	0.5			

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	25	15	50	50	30	15	330	25	15	475	5
Future Vol, veh/h	10	25	15	50	50	30	15	330	25	15	475	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2 11	27	2 16	54	2 54	33	2 16	359	27	2 16	516	5
Mvmt Flow	- 11	21	10	54	54	33	10	339	21	10	310	3
	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	999	969	519	977	958	373	521	0	0	386	0	0
Stage 1	551	551	-	405	405	-	-	-	-	-	-	-
Stage 2	448	418	-	572	553	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	2 210	6.12 3.518	5.52	3.318	2 210	-	-	2.218	-	-
Follow-up Hdwy Pot Cap-1 Maneuver	3.518	4.018 254	3.318 557	230	4.018 257	673	1045	-	-	1172	-	-
Stage 1	519	515	337	622	598	0/3	1043	-	-	11/2	-	
Stage 2	590	591		505	514		_	_				
Platoon blocked, %	370	371		303	017			_	_		_	_
Mov Cap-1 Maneuver	170	244	557	198	247	673	1045	-	_	1172	_	_
Mov Cap-2 Maneuver	170	244	-	198	247		-	_	-	-	-	-
Stage 1	509	505	-	610	586	-	-	-	-	-	-	-
Stage 2	499	579	-	455	504	-	-	-	-	-	-	-
, in the second												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	22			34.2			0.3			0.2		
HCM LOS	C			D D			0.5			0.2		
TIOW EOS	0											
Minor Lane/Major Mvm	nt	NBL	NBT	MRD	EBLn1V	MRI n1	SBL	SBT	SBR			
	ιι		NDI	NDI				301	JUK			
Capacity (veh/h) HCM Lane V/C Ratio		1045 0.016	-	-	266	260 0.543	1172	-	-			
HCM Control Delay (s)		8.5	0	<u>-</u>	22	34.2	8.1	0	-			
HCM Lane LOS		6.5 A	A	-	C	34.2 D	Α	A	-			
HCM 95th %tile Q(veh)	0	-		0.7	3	0	-				
HOW FOUT FOUT Q (VCH	1)	- 0			0.7	J	J					

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	^			4	¥	
Traffic Vol, veh/h	70	0	0	130	0	0
Future Vol, veh/h	70	0	0	130	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	141	0	0
Major/Minor Ma	ajor1	N	Major2	1	Minor1	
Conflicting Flow All	0	0	76	0	217	76
Stage 1	-	U	70	-	76	-
Stage 2	-	-	-	-	141	-
Critical Hdwy		-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	_	_	4.12	_	5.42	0.22
Critical Hdwy Stg 2	_				5.42	_
Follow-up Hdwy	_	_	2.218		3.518	
Pot Cap-1 Maneuver	_	_	1523	_	771	985
Stage 1	_	_	1020	_	947	703
Stage 2	_	_	_	_	886	_
Platoon blocked, %	_	_		_	000	
Mov Cap-1 Maneuver	_	_	1523	_	771	985
Mov Cap-2 Maneuver	_	_	1020	_	771	-
Stage 1	_	_	_	_	947	_
Stage 2	_	_	_	_	886	_
Stage 2					000	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)					1523	_
HCM Lane V/C Ratio		_	_	_	-	_
HCM Control Delay (s)		0	_	_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		-	-	-	0	-
/ 5011 / 50110 (2(1011)					J	

Intersection												
Int Delay, s/veh	7.7											
		EDT	EDD	MDI	MOT	MIDD	NIDI	NDT	NDD	0.01	ODT	000
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		_	4			4	
Traffic Vol, veh/h	10	45	10	65	105	20	5	60	25	15	120	20
Future Vol, veh/h	10	45	10	65	105	20	5	60	25	15	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	49	11	71	114	22	5	65	27	16	130	22
Major/Minor	Major1		_	Major2		ı	Minor1			Minor2		
Conflicting Flow All	136	0	0	60	0	0	420	355	55	390	349	125
Stage 1	130	-	U	-	-	-	77	77	- 55	267	267	125
Stage 2		_			-		343	278	-	123	82	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	4.12	-		4.12	-		6.12	5.52	0.22	6.12	5.52	0.22
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-		2.218	-		3.518		3.318	3.518	4.018	
Pot Cap-1 Maneuver	1448	-	-	1544	-	-	544	571	1012	569	575	926
Stage 1	1440	_		1344			932	831	1012	738	688	720
Stage 2	-	-	-	-	-	-	672	680	-	881	827	-
Platoon blocked, %	_	_		_	_	_	012	000	_	001	027	
Mov Cap-1 Maneuver	1448	-	-	1544	-	-	415	538	1012	481	542	926
Mov Cap-1 Maneuver	1440	_		1344	-	_	415	538	1012	481	542	720
Stage 1	-	-	-	-	-	-	925	824	-		654	-
Stage 2	-	-		-	-	-	499	646	-	783	820	-
Staye 2	-	-	<u>-</u>	-	-	-	477	040	-	103	020	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2.5			12.1			14.1		
HCM LOS							В			В		
Minor Lane/Major Mvr	nt I	VBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SRI n1			
Capacity (veh/h)	116 1	607	1448	LDI		1544	VVDI	VVDIX	565			
HCM Lane V/C Ratio		0.161		-		0.046	-					
	١	12.1	0.008	_	-		-		0.298			
HCM Control Delay (s HCM Lane LOS)		7.5	0	-	7.4	0	-				
	,)	B	A	А	-	A	Α	-	B 1 2			
HCM 95th %tile Q(veh	1)	0.6	0	-	-	0.1	-	-	1.2			

Intersection						
Int Delay, s/veh 3.4						
Movement EBL EBT EBR WBL WBT WI	BR NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	DIC NOL	4	HUIT	ODL	4	ODIT
	25 5	440	115	40	290	5
	25 5	440	115	40	290	5
Conflicting Peds, #/hr 0 0 0 0 0	0 0	0	0	0	0	0
	Stop Free	Free	Free	Free	Free	Free
	one -	-	None	-	-	None
Storage Length		-	-	-	-	-
Veh in Median Storage, # - 0 0		0	-	-	0	-
Grade, % - 0 0		0	-	-	0	-
	92 92	92	92	92	92	92
Heavy Vehicles, % 2 2 2 2 2	2 2	2	2	2	2	2
Mvmt Flow 5 33 11 38 22	27 5	478	125	43	315	5
Major/Minor Minor2 Minor1	Major1		ľ	Major2		
Conflicting Flow All 979 1017 318 977 957 5	541 320	0	0	603	0	0
Stage 1 404 404 - 551 551		-	-	-	-	-
Stage 2 575 613 - 426 406		-	-	-	-	-
,	.22 4.12	-	-	4.12	-	-
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52		-	-	-	-	-
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52		-	-	-	-	-
	318 2.218	-	-	2.218	-	-
	541 1240	-	-	975	-	-
Stage 1 623 599 - 519 515		-	-	-	-	-
Stage 2 503 483 - 606 598		-	-	-	-	-
Platoon blocked, %	F41 1040	-	-	075	-	-
	541 1240	-	-	975	-	-
0, 4 (40 5/7 54/ 540		-	-	-	-	-
Stage 2 455 480 - 532 566	-	-	-	-	-	-
Stage 2 400 - 332 300	<u> </u>	-		-		-
A	ND			CD		
Approach EB WB	NB			SB		
HCM Control Delay, s 22.1 26	0.1			1.1		
HCM LOS C D						
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBL		SBT	SBR			
1 3 7	257 975	-	-			
HCM Lane V/C Ratio 0.004 0.189 0.3		-	-			
3 1 7	26 8.9	0	-			
HCM Lane LOS A A - C	D A	Α	-			
HCM 95th %tile Q(veh) 0 0.7	1.4 0.1	-	-			

Intersection						
Int Delay, s/veh	0					
		EDD	WDI	WDT	NDI	NDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	105	0	0	<u>ર્</u> ન	Y	0
Traffic Vol, veh/h	185	0	0	85	0	0
Future Vol, veh/h	185	0	0	85	0	0
Conflicting Peds, #/hr	0	_ 0	0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	0	0	92	0	0
Major/Minor NA	oior1	n	Majora		Minort	
	ajor1		Major2		Minor1	201
Conflicting Flow All	0	0	201	0	293	201
Stage 1	-	-	-	-	201	-
Stage 2	-	-	-	-	92	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-		3.318
Pot Cap-1 Maneuver	-	-	1371	-	698	840
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1371	-	698	840
Mov Cap-2 Maneuver	-	-	_	-	698	-
Stage 1	_	_	_	_	833	_
Stage 2	_	_	_	_	932	_
Juge 2					752	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Long/Major Maret		IDI -1	FDT	EDD	WDI	WDT
Minor Lane/Major Mvmt		IBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	1371	-
HCM Lane V/C Ratio		-	_	-	-	-
HCM Control Delay (s)		0	-	-	0	-
			-	-	0 A 0	-

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	150	10	20	60	5	5	85	50	15	55	20
Future Vol, veh/h	25	150	10	20	60	5	5	85	50	15	55	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	:,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	163	11	22	65	5	5	92	54	16	60	22
Major/Minor N	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	70	0	0	174	0	0	376	337	169	408	340	68
Stage 1	_	-	-	_	-	-	223	223	-	112	112	-
Stage 2	-	-	-	-	-	-	153	114	-	296	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1531	-	-	1403	-	-	581	584	875	554	582	995
Stage 1	-	-	-	-	-	-	780	719	-	893	803	-
Stage 2	-	-	-	-	-	-	849	801	-	712	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1403	-	-	508	563	875	442	561	995
Mov Cap-2 Maneuver	-	-	-	-	-	-	508	563	-	442	561	-
Stage 1	-	-	-	-	-	-	764	705	-	875	790	-
Stage 2	-	-	-	-	-	-	755	788	-	569	701	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.8			12.3			12.3		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SRI n1			
Capacity (veh/h)	it I	642	1531	LDI	LDK -	1403	-	VVDK -	592			
HCM Lane V/C Ratio		0.237		-		0.015			0.165			
HCM Control Delay (s)		12.3	7.4	0	-	7.6	0	-				
HCM Control Delay (s)		12.3 B	7.4 A	A	-	7.6 A	A	-	12.3 B			
HCM 95th %tile Q(veh))	0.9	0.1	A	-	0	- A		0.6			
HOW 75th 70the Q(Veh)		0.7	U. I	_		U		-	0.0			

Movement	Intersection												
Traffic Vol, vel/h		5.5											
Traffic Vol, veh/h	Movement	FRI	FRT	FRR	WRI	WRT	WRR	NRI	NRT	NRR	SBI	SRT	SBR
Traffic Vol, veh/h		LUL		LDI	WDL		VVDIC	TVDL		NOR	ODL		ODI
Future Vol, veh/h	0	10		15	50		30	15		25	15		5
Conflicting Peds, #/hr Stop Sto													
Sign Control Stop Stop Stop Stop Stop Stop Stop Stop Free None	· · · · · · · · · · · · · · · · · · ·												
RT Channelized -													
Veh in Median Storage, # 0 - - 0 0 3 0 0 0 0 0 <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>None</td>					•								None
Grade, %	Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Peak Hour Factor	Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Mymmt Flow 11 27 16 54 54 33 16 359 27 16 522 5 Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1005 975 525 983 964 373 527 0 0 386 0 0 Stage 1 557 557 - 405 405 -<	Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Major/Minor Minor2 Minor1 Major1 Major2	Heavy Vehicles, %												
Conflicting Flow All 1005 975 525 983 964 373 527 0 0 386 0 0	Mvmt Flow	11	27	16	54	54	33	16	359	27	16	522	5
Conflicting Flow All 1005 975 525 983 964 373 527 0 0 386 0 0													
Conflicting Flow All 1005 975 525 983 964 373 527 0 0 386 0 0	Major/Minor I	Minor2			Minor1		ı	Major1		ľ	Major2		
Stage 1 557 557 - 405 405 - - - Stage 2 448 418 - 578 559 - - - - Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 - - - Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 - - - Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 - - - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 2.218 - Follow-up Hdwy 3.518 4.018 3.318 4.018 3.318 2.218 - Follow-up Hdwy		1005	975			964			0			0	0
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>405</td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td>						405			-	-			-
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 - <t< td=""><td>O .</td><td>448</td><td>418</td><td>-</td><td>578</td><td>559</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	O .	448	418	-	578	559	-	-	-	-	-	-	-
Critical Hdwy Sig 2 6.12 5.52 - 6.12 5.52 -	,			6.22			6.22	4.12	-	-	4.12	-	-
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 2.218 Pot Cap-1 Maneuver 220 251 552 228 255 673 1040 - 1172 Stage 1 515 512 - 622 598				-			-	-	-	-	-	-	-
Pot Cap-1 Maneuver 220 251 552 228 255 673 1040 - - 1172 - -	, ,			-			-	-	-	-	-	-	-
Stage 1 515 512 - 622 598 -									-	-		-	-
Stage 2 590 591 - 501 511				552			673	1040	-	-	1172	-	-
Platoon blocked, %							-	-	-	-	-	-	-
Mov Cap-1 Maneuver 169 241 552 196 245 673 1040 - - 1172 - - Mov Cap-2 Maneuver 169 241 - 196 245 -		590	591	-	501	511	-	-	-	-	-	-	-
Mov Cap-2 Maneuver 169 241 - 196 245 - </td <td></td> <td>1/0</td> <td>0.44</td> <td>FFC</td> <td>107</td> <td>0.45</td> <td>/70</td> <td>1040</td> <td>-</td> <td>-</td> <td>1170</td> <td>-</td> <td>-</td>		1/0	0.44	FFC	107	0.45	/70	1040	-	-	1170	-	-
Stage 1 505 502 - 610 586 -							6/3	1040	-	-	11/2	-	-
Stage 2 499 579 - 451 501 -							-	-	-	-	-	-	-
Approach EB WB NB SB HCM Control Delay, s 22.2 34.6 0.3 0.2 HCM LOS C D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 263 258 1172 - - HCM Lane V/C Ratio 0.016 - - 0.207 0.548 0.014 - - HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -				-			-	-	-	-	-	-	-
HCM Control Delay, s 22.2 34.6 0.3 0.2 HCM LOS C D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 263 258 1172 - - HCM Lane V/C Ratio 0.016 - - 0.207 0.548 0.014 - - HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -	Stage 2	499	5/9	-	451	100	-	<u>-</u>	-	-	-	-	-
HCM Control Delay, s 22.2 34.6 0.3 0.2 HCM LOS C D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 263 258 1172 - - HCM Lane V/C Ratio 0.016 - - 0.207 0.548 0.014 - - HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 263 258 1172 - - HCM Lane V/C Ratio 0.016 - - 0.207 0.548 0.014 - - HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 263 258 1172 - - HCM Lane V/C Ratio 0.016 - - 0.207 0.548 0.014 - - HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -								0.3			0.2		
Capacity (veh/h) 1040 263 258 1172 HCM Lane V/C Ratio 0.016 0.207 0.548 0.014 HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -	HCM LOS	С			D								
Capacity (veh/h) 1040 263 258 1172 HCM Lane V/C Ratio 0.016 0.207 0.548 0.014 HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -													
HCM Lane V/C Ratio 0.016 0.207 0.548 0.014 HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -	Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
HCM Control Delay (s) 8.5 0 - 22.2 34.6 8.1 0 -	Capacity (veh/h)		1040	-	-	263	258	1172	-	-			
, , ,			0.016	-	-	0.207		0.014	-	-			
HCM Lane LOS A A - C D A A -			8.5	0	-		34.6	8.1	0	-			
	HCM Lane LOS		Α	Α	-	С	D	Α	Α	-			
HCM 95th %tile Q(veh) 0 0.8 3 0	HCM 95th %tile Q(veh	1)	0	-	-	8.0	3	0	-	-			

Intersection						
Int Delay, s/veh	0					
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽			4	Y	
Traffic Vol, veh/h	70	0	0	135	0	0
Future Vol, veh/h	70	0	0	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
J	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	147	0	0
Major/Minor Ma	lor1		Majora	,	Minor1	
	ajor1		Major2		Minor1	7.
Conflicting Flow All	0	0	76	0	223	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	147	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver	-	-	1523	-	765	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	765	985
Mov Cap-2 Maneuver	-	-	-	-	765	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	_	_	880	-
5.ago 2					300	
	E.D.		14.5		r i c	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
	- 1	VDLIII	LDI	LDI		VVDI
Capacity (veh/h) HCM Lane V/C Ratio		-		-	1523	-
ncivi i ane V/C Rallo		-	-	-	-	-
		0				
HCM Control Delay (s)		0	-	-	0	-
		0 A	-	-	0 A 0	-

Intersection												
Int Delay, s/veh	7.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	EDL		EDK	WDL		WDK	INDL		INDIX	SDL		SDK
Lane Configurations Traffic Vol, veh/h	10	4 5	10	65	4	20	5	↔ 65	25	15	♣ 120	20
Future Vol, veh/h	10	45	10	65	105	20	5	65	25	15	120	20
Conflicting Peds, #/hr	0	0	0	00	0	0	0	00	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	Siup -	310p	None	310p	Siup -	None
Storage Length	_	_	INOTIC	_	_	TVOIC	_	_	TVOITE	_	_	INOTIC
Veh in Median Storage	. # -	0	_	_	0	_	_	0	_	_	0	_
Grade, %	-	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mymt Flow	11	49	11	71	114	22	5	71	27	16	130	22
									_,		.00	
Major/Minor	Major1			Major2			liner1		,	Minora		
	Major1	^		Major2	^		Minor1	255		Minor2	240	100
Conflicting Flow All	136	0	0	60	0	0	420	355	55	393	349	125
Stage 1	-	-	-	-	-	-	77 343	77 278	-	267 126	267 82	-
Stage 2	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Sta 1			-	4.12	-	-	6.12	5.52	0.22	6.12	5.52	0.22
Critical Hdwy Stg 1 Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-		2.218	-	-	3.518	4.018		3.518		3.318
Pot Cap-1 Maneuver	1448	-	-	1544	-	_	544	571	1012	566	575	926
Stage 1	1440	-		-	-	-	932	831	1012	738	688	720
Stage 2			-	_	_	_	672	680	_	878	827	
Platoon blocked, %		_	_		_	_	012	500		370	JLI	
Mov Cap-1 Maneuver	1448	_	_	1544	-	-	415	538	1012	474	542	926
Mov Cap-2 Maneuver	-	-	_	-	_	-	415	538	-	474	542	-
Stage 1	-	_	-	_	-	-	925	824	-	732	654	-
Stage 2	-	-	-	-	-	-	499	646	-	775	820	-
J.												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2.5			12.2			14.1		
HCM LOS	1.2			2.0			В			В		
TOW LOO										U		
Minor Lane/Major Mvm	nt I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SRI n1			
	it I			LDI	LDI		וטוו	WDIX.				
Capacity (veh/h) HCM Lane V/C Ratio		603 0.171	1448 0.008	-	-	1544 0.046	-	-	564 0.299			
HCM Control Delay (s)		12.2	7.5	0	-	7.4	0		14.1			
HCM Lane LOS		12.2 B	7.5 A	A	-	7.4 A	A	-	14.1 B			
HCM 95th %tile Q(veh)	0.6	0	- A	-	0.1	- A	-	1.2			
HOW FOUT MILE Q(VEH)	0.0	U		-	U. I	-		1.2			

Note Section Section
Movement
Traffic Vol, veh/h
Traffic Vol, veh/h 5 30 10 35 20 25 5 450 115 40 295 5 Future Vol, veh/h 5 30 10 35 20 25 5 450 115 40 295 5 Conflicting Peds, #/hr 0
Future Vol, veh/h 5 30 10 35 20 25 5 450 115 40 295 5 Conflicting Peds, #/hr 0 <t< td=""></t<>
Conflicting Peds, #/hr 0
Sign Control Stop Stop Stop Stop Stop Stop Free Roman Storage Length - - - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 2 2 2 2 2
RT Channelized - None - None - None - None Storage Length -
Storage Length - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Veh in Median Storage, # - 0
Grade, % - 0 - - 92
Peak Hour Factor 92
Mvmt Flow 5 33 11 38 22 27 5 489 125 43 321 5 Major/Minor Minor2 Minor1 Major1 Major2 Majo
Momit Flow 5 33 11 38 22 27 5 489 125 43 321 5 Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 996 1034 324 994 974 552 326 0 0 614 0 0 Stage 1 410 410 - 562 562 - </td
Conflicting Flow All 996 1034 324 994 974 552 326 0 0 614 0 0 Stage 1 410 410 - 562 562 - <
Conflicting Flow All 996 1034 324 994 974 552 326 0 0 614 0 0 Stage 1 410 410 - 562 562 -
Conflicting Flow All 996 1034 324 994 974 552 326 0 0 614 0 0 Stage 1 410 410 - 562 562 -
Stage 1 410 410 - 562 562 -
Stage 2 586 624 - 432 412 -
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - - 4.12 - - Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 -
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 2.218
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 2.218
· · · · · · · · · · · · · · · · · · ·
Pot Cap-1 Maneuver 223 232 717 224 252 533 1234 965
Stage 1 619 595 - 512 510
Stage 2 496 478 - 602 594
Platoon blocked, %
Mov Cap-1 Maneuver 188 218 717 187 237 533 1234 965
Mov Cap-2 Maneuver 188 218 - 187 237
Stage 1 615 563 - 509 507
Stage 2 448 475 - 528 562
Approach EB WB NB SB
HCM Control Delay, s 22.6 26.8 0.1 1
HCM LOS C D
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR
Capacity (veh/h) 1234 253 251 965
HCM Lane V/C Ratio 0.004 0.193 0.346 0.045
HCM Control Delay (s) 7.9 0 - 22.6 26.8 8.9 0 -
HCM Lane LOS A A - C D A A -
HCM 95th %tile Q(veh) 0 0.7 1.5 0.1

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<u>₽</u>	LUK	WDL	₩ <u>₩</u>	₩.	אטוז
Traffic Vol, veh/h	185	0	0	85	0	0
Future Vol, veh/h	185	0	0	85	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	
Sign Control RT Channelized	Free -	None		None	Stop	Stop None
	-	None -	-	none -	0	None -
Storage Length			-			
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	0	0	92	0	0
Major/Minor Ma	ajor1	N	Major2	N	/linor1	
Conflicting Flow All	0	0	201	0	293	201
Stage 1	-	Ū	201	-	201	201
Stage 2	-	-		-	92	-
Critical Hdwy	_	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1		-	4.12	-	5.42	0.22
	-	-	-	-	5.42	
Critical Hdwy Stg 2	-	-	-	-		-
Follow-up Hdwy	-	-	2.218		3.518	
Pot Cap-1 Maneuver	-	-	1371	-	698	840
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1371	-	698	840
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	932	-
Annroach	EB		WB		NB	
Approach						
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		_			1371	
HCM Lane V/C Ratio		_	_	_	-	_
HCM Control Delay (s)		0	_	_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		-			0	
How roun rounc Q(von)						

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	150	10	20	60	5	5	85	50	15	55	15
Future Vol, veh/h	25	150	10	20	60	5	5	85	50	15	55	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	163	11	22	65	5	5	92	54	16	60	16
Major/Minor N	Major1		1	Major2		1	Minor1			Minor2		
Conflicting Flow All	70	0	0	174	0	0	373	337	169	408	340	68
Stage 1	-	-	-	-	-	-	223	223	-	112	112	-
Stage 2	-	-	-	-	-	-	150	114	-	296	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1531	-	-	1403	-	-	584	584	875	554	582	995
Stage 1	-	-	-	-	-	-	780	719	-	893	803	-
Stage 2	-	-	-	-	-	-	853	801	-	712	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1403	-	-	513	563	875	442	561	995
Mov Cap-2 Maneuver	-	-	-	-	-	-	513	563	-	442	561	-
Stage 1	-	-	-	-	-	-	764	705	-	875	790	-
Stage 2	-	-	-	-	-	-	763	788	-	569	701	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.8			12.3			12.4		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	CRI n1			
	it I					1403		WDR .				
Capacity (veh/h) HCM Lane V/C Ratio		643 0.237	1531	-	-	0.015	-		578 0.16			
		12.3	7.4	0	-	7.6	0	-	12.4			
HCM Control Delay (s) HCM Lane LOS		12.3 B	7.4 A	A	-	7.6 A	A	-	12.4 B			
HCM 95th %tile Q(veh))	0.9	0.1	А	-	0	A -	-	0.6			
HOW 75th 70the Q(Veh)		0.7	U. I	_		U		-	0.0			

New Note N
Movement EBL EBR EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR
Lane Configurations
Traffic Vol, veh/h 10 25 15 50 50 30 15 335 25 15 490 5 Future Vol, veh/h 10 25 15 50 50 30 15 335 25 15 490 5 Conflicting Peds, #/hr 0
Future Vol, veh/h 10 25 15 50 50 30 15 335 25 15 490 5 Conflicting Peds, #/hr 0 <
Conflicting Peds, #/hr 0
Sign Control Stop Stop Stop Stop Stop Stop Free
RT Channelized - None - None - None - None Storage Length -
Storage Length -
Veh in Median Storage, # 0 - - 1 0 - - - - - - - - - - - - - - - - - - -
Peak Hour Factor 92 93 36 93 36 36 99 980 378 538 0 0 391 0 0 Stage 1 568 568 568 - 410 410
Heavy Vehicles, % 2
Mymt Flow 11 27 16 54 54 33 16 364 27 16 533 5 Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1021 991 536 999 980 378 538 0 0 391 0 0 Stage 1 568 568 - 410 410 - </td
Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1021 991 536 999 980 378 538 0 0 391 0 0 Stage 1 568 568 - 410 410 -
Conflicting Flow All 1021 991 536 999 980 378 538 0 0 391 0 0 Stage 1 568 568 - 410 410 - <
Conflicting Flow All 1021 991 536 999 980 378 538 0 0 391 0 0 Stage 1 568 568 - 410 410 - <
Conflicting Flow All 1021 991 536 999 980 378 538 0 0 391 0 0 Stage 1 568 568 - 410 410 - <
Stage 1 568 568 - 410 410 -
Stage 2 453 423 - 589 570 -
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 -
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 -
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 2.218 Pot Cap-1 Maneuver 215 246 545 222 250 669 1030 - 1168 Stage 1 508 506 - 619 595 Stage 2 586 588 - 494 505
Pot Cap-1 Maneuver 215 246 545 222 250 669 1030 - - 1168 - - Stage 1 508 506 - 619 595 - - - - - - - - Stage 2 586 588 - 494 505 - - - - - - -
Stage 1 508 506 - 619 595 -
Stage 2 586 588 - 494 505
5
Platoon blocked, %
11 0 111 1/1 00/ 5/5 100 6/2 //2 1000
Mov Cap-1 Maneuver 164 236 545 190 240 669 1030 1168
Mov Cap-2 Maneuver 164 236 - 190 240
Stage 1 498 496 - 607 583
Stage 2 495 576 - 444 495
Approach EB WB NB SB
HCM Control Delay, s 22.7 36.1 0.3 0.2
HCM LOS C E
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR
Capacity (veh/h) 1030 257 252 1168
HCM Lane V/C Ratio 0.016 0.211 0.561 0.014
HCM Control Delay (s) 8.6 0 - 22.7 36.1 8.1 0 -
HCM Lane LOS A A - C E A A -
HCM 95th %tile Q(veh) 0 0.8 3.1 0

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	7			4	¥	
Traffic Vol, veh/h	70	0	0	135	0	0
Future Vol, veh/h	70	0	0	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	147	0	0
Major/Minor M	ajor1	N	Major2	ı	Minor1	
Conflicting Flow All	0	0	76	0	223	76
Stage 1	-	-	-	-	76	-
Stage 2	_	_	_	_	147	
Critical Hdwy	_	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1	_		- 1.12	_	5.42	0.22
Critical Hdwy Stg 2	_	_	_	_	5.42	_
Follow-up Hdwy	_	_	2.218	_	3.518	3.318
Pot Cap-1 Maneuver	-	-	1523	-	765	985
Stage 1	-	-	-	-	947	-
Stage 2	_	_	_	-	880	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	_	_	1523	-	765	985
Mov Cap-2 Maneuver	-	-	_	-	765	-
Stage 1	_	_	_	-	947	-
Stage 2	-	-	-	-	880	-
J.I.g						
A	ED		WD		ND	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	1523	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s)		0	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		-	-	-	0	-
,						

Intersection												
Int Delay, s/veh	7.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	50	10	65	105	20	5	65	25	15	120	20
Future Vol, veh/h	10	50	10	65	105	20	5	65	25	15	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	54	11	71	114	22	5	71	27	16	130	22
Major/Minor N	Major1		ľ	Major2			Minor1		N	Minor2		
Conflicting Flow All	136	0	0	65	0	0	425	360	60	398	354	125
Stage 1	-	-	-	-	-	-	82	82	-	267	267	-
Stage 2	-	-	-	-	-	-	343	278	-	131	87	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1448	-	-	1537	-	-	540	567	1005	562	571	926
Stage 1	-	-	-	-	-	-	926	827	-	738	688	-
Stage 2	-	-	-	-	-	-	672	680	-	873	823	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1537	-	-	411	534	1005	470	538	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	411	534	-	470	538	-
Stage 1	-	-	-	-	-	-	919	820	-	732	654	-
Stage 2	-	-	-	-	-	-	499	646	-	770	816	-
J												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			2.6			12.3			14.2		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBLn1			
Capacity (veh/h)		598	1448	-	-	1537	-	-	560			
HCM Lane V/C Ratio				-		0.046	-		0.301			
HCM Control Delay (s)		12.3	7.5	0	-	7.5	0	-				
HCM Lane LOS		В	A	A	-	Α	A	-	В			
HCM 95th %tile Q(veh))	0.6	0	-	-	0.1	-	-	1.3			

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIT	WDL	4	WER	HUL	4	HUIT	ODL	4	ODIT
Traffic Vol, veh/h	5	30	10	35	25	25	5	480	120	40	315	5
Future Vol, veh/h	5	30	10	35	25	25	5	480	120	40	315	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	27	27	5	522	130	43	342	5
Major/Minor	Minor2			Minor1			Major1		N	Major2		
Conflicting Flow All	1055	1093	345	1050	1030	587	347	0	0	652	0	0
Stage 1	431	431	-	597	597	-	-	-	-	-	-	-
Stage 2	624	662	-	453	433	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318			3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	204	214	698	205	233	510	1212	-	-	935	-	-
Stage 1	603	583	-	490	491	-	-	-	-	-	-	-
Stage 2	473	459	-	586	582	-	-	-	-	-	-	-
Platoon blocked, %			,				40:-	-	-		-	-
Mov Cap-1 Maneuver	166	200	698	168	218	510	1212	-	-	935	-	-
Mov Cap-2 Maneuver	166	200	-	168	218	-	-	-	-	-	-	-
Stage 1	599	550	-	487	488	-	-	-	-	-	-	-
Stage 2	420	456	-	512	549	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	24.7			31.1			0.1			1		
HCM LOS	С			D								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1212			231	228	935	-	-			
HCM Lane V/C Ratio		0.004	-	-		0.405		-	-			
HCM Control Delay (s))	8	0	-	24.7	31.1	9	0	-			
HCM Lane LOS		Α	Α	-	С	D	Α	Α	-			
HCM 95th %tile Q(veh	1)	0	-	-	0.8	1.8	0.1	-	-			

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Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
		LDK	WDL			אטוו
Lane Configurations	100	0	0	4	Y	0
Traffic Vol, veh/h	190	0	0	85	0	0
Future Vol, veh/h	190	0	0	85	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	207	0	0	92	0	0
WWITH FIOW	207	U	U	92	U	U
Major/Minor	Major1	N	Major2	N	Minor1	
Conflicting Flow All	0	0	207	0	299	207
Stage 1	-	-	-	-	207	-
Stage 2	_	_	_	_	92	<u>-</u>
	-	-				
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver	-	-	1364	-	692	833
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	_		-		
Mov Cap-1 Maneuver	_	_	1364	-	692	833
Mov Cap 1 Maneuver	-	_	-	_	692	-
					828	
Stage 1	-	-	-	-		-
Stage 2	-	-	-	-	932	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
	U		U			
HCM LOS					Α	
Minor Lane/Major Mvn	nt N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-		-	1364	-
HCM Lane V/C Ratio				-	1304	-
	١	0	-		0	
HCM Long LOS)		-	-		-
HCM Lane LOS		Α	-	-	A	-
HCM 95th %tile Q(veh	1)	-	-	-	0	-

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Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	155	10	20	65	5	10	90	50	15	55	15
Future Vol, veh/h	25	155	10	20	65	5	10	90	50	15	55	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	168	11	22	71	5	11	98	54	16	60	16
Major/Minor N	Major1			Major2			Minor1			Vinor2		
Conflicting Flow All	76	0	0	179	0	0	384	348	174	422	351	74
Stage 1	-	-	-	-	-	-	228	228	-	118	118	-
Stage 2	-	-	-	-	-	-	156	120	-	304	233	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518		3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1523	-	-	1397	-	-	574	576	869	542	573	988
Stage 1	-	-	-	-	-	-	775	715	-	887	798	-
Stage 2	-	-	-	-	-	-	846	796	-	705	712	-
Platoon blocked, %		-	-	10	-	-				,		
Mov Cap-1 Maneuver	1523	-	-	1397	-	-	504	555	869	428	552	988
Mov Cap-2 Maneuver	-	-	-	-	-	-	504	555	-	428	552	-
Stage 1	-	-	-	-	-	-	760	701	-	869	785	-
Stage 2	-	-	-	-	-	-	756	783	-	557	698	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.7			12.8			12.6		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBLn1			
Capacity (veh/h)		626	1523	-		1397	-	-	567			
HCM Lane V/C Ratio			0.018	-		0.016	-	-	0.163			
HCM Control Delay (s)		12.8	7.4	0	-	7.6	0	-				
HCM Lane LOS		В	Α	A	-	Α	A	-	В			
HCM 95th %tile Q(veh))	1	0.1	-	-	0	-	-	0.6			

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Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	25	15	50	55	30	15	360	25	20	520	5
Future Vol., veh/h	10	25	15	50	55	30	15	360	25	20	520	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	2,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	27	16	54	60	33	16	391	27	22	565	5
Major/Minor I	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1095	1062	568	1070	1051	405	570	0	0	418	0	0
Stage 1	612	612	-	437	437	-	-	-	-	-	-	-
Stage 2	483	450	_	633	614	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52		6.12	5.52			_	_	-	_	_
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	_	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	191	223	522	199	227	646	1002	-	-	1141	-	-
Stage 1	480	484	-	598	579	-	-	-	-	-	-	-
Stage 2	565	572	-	468	483	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	138	212	522	168	216	646	1002	-	-	1141	-	-
Mov Cap-2 Maneuver	138	212	-	168	216	-	-	-	-	-	-	-
Stage 1	470	470	-	585	567	-	-	-	-	-	-	-
Stage 2	470	560	-	415	469	-	-	-	-	-	-	-
3												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	25.7			46.8			0.3			0.3		
HCM LOS	23.7 D			±0.0			0.0			0.0		
Minor Lane/Major Mvm	nt	NBL	NBT	NDD	EBLn1V	M/DI n1	SBL	SBT	SBR			
	π		INDI	NDK				SDI	SDR			
Capacity (veh/h)		1002	-	-	228	225	1141	-	-			
HCM Control Dolay (c)		0.016	-	-	25.7	0.652 46.8		-	-			
HCM Control Delay (s) HCM Lane LOS			0	-			8.2	0	-			
HCM 95th %tile Q(veh	١ -	0.1	A	-	D 0.9	E 4	0.1	A -	-			
HOW YOU WINE Q(VEN)	0.1	-	-	0.9	4	U. I	-	-			

Intersection						
Int Delay, s/veh	0					
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽ P	EDK	WDL	wbi €	NBL	NDK
Traffic Vol, veh/h	70	0	0	135	T	0
Future Vol, veh/h	70	0	0	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		- -	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,		-	-		0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	147	0	0
Major/Minor Ma	olor1	N	Malara		Minor1	
	ajor1		Major2 76		Minor1	76
Conflicting Flow All	0	0		0	223 76	
Stage 1	-	-	-	-	147	-
Stage 2 Critical Hdwy		-	4.12		6.42	6.22
	-	-	4.12	-	5.42	0.22
Critical Hdwy Stg 1 Critical Hdwy Stg 2	-	-	-		5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver		_	1523	-	765	985
Stage 1	-	-	1023	-	947	700
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-	-	_	000	-
Mov Cap-1 Maneuver	_	_	1523	-	765	985
Mov Cap-2 Maneuver	-	-	1023	-	765	700
Stage 1	-	-	-	-	947	-
	-	-		-	880	-
Stage 2	-	-	-	-	000	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-			1523	-
HCM Lane V/C Ratio		_	_	_	1020	_
HCM Control Delay (s)		0		_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		-	-	-	0	-

Intersection												
Int Delay, s/veh	8.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIN	WDL	₩	WDIX	NDL	4	NDIX	JUL	4	JUIN
Traffic Vol, veh/h	10	50	10	65	110	20	5	65	25	20	130	25
Future Vol, veh/h	10	50	10	65	110	20	5	65	25	20	130	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	54	11	71	120	22	5	71	27	22	141	27
Major/Minor N	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	142	0	0	65	0	0	439	366	60	404	360	131
Stage 1	-	-	-	-	-	-	82	82	-	273	273	-
Stage 2	-	-	-	-	-	-	357	284	-	131	87	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018		3.518	4.018	3.318
Pot Cap-1 Maneuver	1441	-	-	1537	-	-	528	562	1005	557	567	919
Stage 1	-	-	-	-	-	-	926	827	-	733	684	-
Stage 2	-	-	-	-	-	-	661	676	-	873	823	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1441	-	-	1537	-	-	391	529	1005	466	534	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	391	529	-	466	534	-
Stage 1	-	-	-	-	-	-	919	820	-	727	650	-
Stage 2	-	-	-	-	-	-	477	642	-	770	816	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			2.5			12.4			14.8		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt I	VBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		592	1441	-	-	1537	-	-	558			
HCM Lane V/C Ratio		0.174		-		0.046	-	-	0.341			
HCM Control Delay (s)		12.4	7.5	0	-	7.5	0	-				
HCM Lane LOS		В	Α	Α	-	Α	Α	-	В			
HCM 95th %tile Q(veh))	0.6	0	-	-	0.1	-	-	1.5			

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIT	WDL	4	WER	HUL	4	HUIT	ODL	4	ODIT
Traffic Vol, veh/h	5	30	10	35	20	25	5	430	130	55	280	5
Future Vol, veh/h	5	30	10	35	20	25	5	430	130	55	280	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	22	27	5	467	141	60	304	5
Major/Minor	Minor2			Minor1			Major1		N	Major2		
Conflicting Flow All	999	1045	307	997	977	538	309	0	0	608	0	0
Stage 1	427	427	-	548	548	-	-	-	-	-	-	-
Stage 2	572	618	-	449	429	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318			3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	222	229	733	223	251	543	1252	-	-	970	-	-
Stage 1	606	585	-	521	517	-	-	-	-	-	-	-
Stage 2	505	481	-	589	584	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	184	210	733	182	231	543	1252	-	-	970	-	-
Mov Cap-2 Maneuver	184	210	-	182	231	-	-	-	-	-	-	-
Stage 1	602	541	-	518	514	-	-	-	-	-	-	-
Stage 2	457	478	-	504	540	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	23.3			27.4			0.1			1.4		
HCM LOS	С			D								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1252	-	-	245	246	970	-	-			
HCM Lane V/C Ratio		0.004	-	-		0.353		-	-			
HCM Control Delay (s))	7.9	0	-	23.3	27.4	9	0	-			
HCM Lane LOS		Α	Α	-	С	D	Α	Α	-			
HCM 95th %tile Q(veh	1)	0	-	-	0.7	1.5	0.2	-	-			

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽	LDIN	1100	<u>₩</u>	¥	HUIK
Traffic Vol, veh/h	180	30	20	80	0	0
Future Vol, veh/h	180	30	20	80	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
•	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None	-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,		_	_	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
	2	2	2	2	2	2
Heavy Vehicles, %						
Mvmt Flow	196	33	22	87	0	0
Major/Minor M	ajor1	N	Major2	ľ	Minor1	
Conflicting Flow All	0	0	229	0	344	213
Stage 1	-	-	-	-	213	-
Stage 2	-	-	_	-	131	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	_	-	_	5.42	-
Critical Hdwy Stg 2	_	_	_	-	5.42	_
Follow-up Hdwy	_	_	2.218		3.518	
Pot Cap-1 Maneuver	_		1339	_	652	827
Stage 1	-	-	1337	-	823	027
Stage 2		-	_	_	895	-
	-	-	-		893	-
Platoon blocked, %	-	-	1220	-	/ / 1	007
Mov Cap-1 Maneuver	-	-	1339	-	641	827
Mov Cap-2 Maneuver	-	-	-	-	641	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	895	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.5		0	
HCM LOS	U		1.5		A	
TICIVI LOS						
Minor Lane/Major Mvmt	1	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	1339	-
HCM Lane V/C Ratio		-	-	-	0.016	-
HCM Control Delay (s)		0	-	-	7.7	0
HCM Lane LOS		Α	-	-	Α	Α
HCM 95th %tile Q(veh)		-	-	-	0	-

Intersection Int Delay, s/veh 6.1
Configurations
Traffic Vol, veh/h 25 150 10 20 75 5 10 80 50 15 50 20
Traffic Vol, veh/h 25 150 10 20 75 5 10 80 50 15 50 20 Future Vol, veh/h 25 150 10 20 75 5 10 80 50 15 50 20 Conflicting Peds, #/hr 0
Future Vol, veh/h
Conflicting Peds, #/hr 0
Sign Control Free Free Free Free Free Free Free Free Free Stop Stop
RT Channelized - None - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0
Veh in Median Storage, # - 0
Grade, % - 0 - - 0 2 92<
Peak Hour Factor 92
Heavy Vehicles, % 2 3 2 3 3 4 169 422 357 85 Stage 1 - -
Momt Flow 27 163 11 22 82 5 11 87 54 16 54 22 Major/Minor Major1 Major2 Minor1 Minor2 Minor2 Conflicting Flow All 87 0 0 174 0 0 390 354 169 422 357 85 Stage 1 - - - - 223 223 - 129 129 - Stage 2 - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Major/Minor Major1 Major2 Minor1 Minor2 Conflicting Flow All 87 0 0 174 0 0 390 354 169 422 357 85 Stage 1 - - - - 223 223 - 129 129 - Stage 2 - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Conflicting Flow All 87 0 0 174 0 0 390 354 169 422 357 85 Stage 1 - - - - - 223 223 - 129 129 - Stage 2 - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Conflicting Flow All 87 0 0 174 0 0 390 354 169 422 357 85 Stage 1 - - - - - 223 223 - 129 129 - Stage 2 - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Conflicting Flow All 87 0 0 174 0 0 390 354 169 422 357 85 Stage 1 - - - - - 223 223 - 129 129 - Stage 2 - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Stage 1 - - - - - 223 223 - 129 129 - Stage 2 - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Stage 2 - - - - - 167 131 - 293 228 - Critical Hdwy 4.12 - 4.12 - 7.12 6.52 6.22 7.12 6.52 6.22
Critical Hdwy 4.12 4.12 7.12 6.52 6.22 7.12 6.52 6.22
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 -
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 -
Follow-up Hdwy 2.218 2.218 3.518 4.018 3.318 3.518 4.018 3.318
Pot Cap-1 Maneuver 1509 1403 569 571 875 542 569 974
Stage 1 780 719 - 875 789 -
Stage 2 835 788 - 715 715 -
Platoon blocked, %
Mov Cap-1 Maneuver 1509 1403 500 550 875 435 549 974
Mov Cap-2 Maneuver 500 550 - 435 549 - Stage 1 764 705 - 858 776 -
J
Stage 2 747 775 - 576 701 -
Approach EB WB NB SB
HCM Control Delay, s 1 1.5 12.5 12.3
HCM LOS B B
Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1
Capacity (veh/h) 629 1509 1403 582
HCM Lane V/C Ratio 0.242 0.018 0.015 0.159
HCM Control Delay (s) 12.5 7.4 0 - 7.6 0 - 12.3
HCM Lane LOS B A A - A A - B HCM 95th %tile Q(veh) 0.9 0.1 0.6

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol., veh/h	10	25	15	65	50	50	15	325	25	20	465	5
Future Vol, veh/h	10	25	15	65	50	50	15	325	25	20	465	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	27	16	71	54	54	16	353	27	22	505	5
Major/Minor	Minor2			Minor1			Major1		ľ	Major2		
Conflicting Flow All	1005	964	508	972	953	367	510	0	0	380	0	0
Stage 1	552	552	-	399	399	-	-	-	-	-	-	-
Stage 2	453	412	-	573	554	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	220	255	565	232	259	678	1055	-	-	1178	-	-
Stage 1	518	515	-	627	602	-	-	-	-	-	-	-
Stage 2	586	594	-	505	514	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	163	244	565	199	247	678	1055	-	-	1178	-	-
Mov Cap-2 Maneuver	163	244	-	199	247	-	-	-	-	-	-	-
Stage 1	508	502	-	615	591	-	-	-	-	-	-	-
Stage 2	480	583	-	452	501	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	22.2			40			0.3			0.3		
HCM LOS	С			Ε								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1\	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1055		-	263	274	1178	-	_			
HCM Lane V/C Ratio		0.015	-	-		0.655		-	-			
HCM Control Delay (s))	8.5	0	_	22.2	40	8.1	0	-			
HCM Lane LOS		A	A	-	С	E	А	A	-			
HCM 95th %tile Q(veh	1)	0	-	-	0.8	4.2	0.1	-	-			

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<u>\$</u>			4	¥	
Traffic Vol, veh/h	65	0	0	130	30	20
Future Vol, veh/h	65	0	0	130	30	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	0	0	141	33	22
				• • • •		
NA ' /NA' NA			4 ' 0		. P	
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	71	0	212	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	141	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver	-	-	1529	-	776	991
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1529	-	776	991
Mov Cap-2 Maneuver	-	-	-	-	776	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	886	-
Ü						
Annroach	EB		WB		NB	
Approach						
HCM Control Delay, s	0		0		9.5	
HCM LOS					Α	
Minor Lane/Major Mvmt	N	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		850	-	-	1529	_
HCM Lane V/C Ratio		0.064	_	_	-	_
HCM Control Delay (s)		9.5	_	_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		0.2	_	_	0	_
/ 50.1 / 50.110 (2(1011)		3.2			- 0	

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIX	WDL	4	WER	IVDL	4	HUIT	ODL	4	ODIT
Traffic Vol, veh/h	10	60	15	65	105	20	5	60	25	15	120	20
Future Vol, veh/h	10	60	15	65	105	20	5	60	25	15	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	65	16	71	114	22	5	65	27	16	130	22
Major/Minor N	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	136	0	0	81	0	0	438	373	73	408	370	125
Stage 1	-	-	-	-	-	-	95	95	-	267	267	-
Stage 2	-	-	-	-	-	-	343	278	-	141	103	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1448	-	-	1517	-	-	529	557	989	554	560	926
Stage 1	-	-	-	-	-	-	912	816	-	738	688	-
Stage 2	-	-	-	-	-	-	672	680	-	862	810	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1517	-	-	400	524	989	466	527	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	400	524	-	466	527	-
Stage 1	-	-	-	-	-	-	905	809	-	732	653	-
Stage 2	-	-	-	-	-	-	498	645	-	765	804	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			2.6			12.3			14.4		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		591	1448	_		1517	_	_	551			
HCM Lane V/C Ratio		0.166		-	_	0.047	-	-	0.306			
HCM Control Delay (s)		12.3	7.5	0	-	7.5	0	_	14.4			
HCM Lane LOS		В	А	A	-	Α	A	-	В			
HCM 95th %tile Q(veh))	0.6	0	-	-	0.1	-	-	1.3			
•												

Movement	Intersection												
Movement		4											
Traffic Vol, veh/h		FRI	FRT	FRD	\//RI	\/\/RT	WRD	MRI	NRT	MRD	SRI	SRT	SRD
Traffic Vol, veh/h		LDL		LDK	WDL		WDK	NDL		NDK	JDL		אמכ
Future Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr O O O O O O O O O O O O O		5		10	25		25	5		1/15	65		5
Conflicting Peds, #/hr													
Sign Control Stop Free Free	·												
RT Channelized -													
Storage Length					•						-		
Veh in Median Storage, # - 0			-	-				-	-		-		-
Grade, % - 0 - - 0 - - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 2		2,# -	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor 92 92 92 92 92 92 92 9			0	-	-	0	-	-	0	-	-	0	-
Mymt Flow 5 33 11 38 22 27 5 473 158 71 310 5 Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1042 1096 313 1039 1019 552 315 0 0 631 0 0 Stage 1 455 455 - 562 562 -		92	92	92	92	92	92	92	92	92	92	92	92
Major/Minor Minor2 Minor1 Major1 Major2 Major2 Major1 Major2 Major2 Major2 Major3 Major4 Alpha Al	Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Conflicting Flow All 1042 1096 313 1039 1019 552 315 0 0 631 0 0	Mvmt Flow	5	33	11	38	22	27	5	473	158	71	310	5
Conflicting Flow All 1042 1096 313 1039 1019 552 315 0 0 631 0 0													
Conflicting Flow All 1042 1096 313 1039 1019 552 315 0 0 631 0 0	Major/Minor I	Minor2			Minor1			Major1			Major2		
Stage 1 455 455 - 562 562			1096			1019			0			0	0
Stage 2 587 641 - 477 457													
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td>· ·</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	· ·			-			-	-	-	-	-	-	-
Critical Hdwy Stg 2 6.12 5.52 - <td></td> <td>7.12</td> <td>6.52</td> <td>6.22</td> <td>7.12</td> <td>6.52</td> <td>6.22</td> <td>4.12</td> <td>-</td> <td>-</td> <td>4.12</td> <td>-</td> <td>-</td>		7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 2.218 Pot Cap-1 Maneuver 208 213 727 209 237 533 1245 - 951 Stage 1 585 569 - 512 510	Critical Hdwy Stg 1		5.52	-	6.12	5.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver 208 213 727 209 237 533 1245 -	Critical Hdwy Stg 2		5.52	-		5.52	-	-	-	-	-	-	-
Stage 1									-	-		-	-
Stage 2				727			533	1245	-	-	951	-	-
Platoon blocked, %				-			-	-	-	-	-	-	-
Mov Cap-1 Maneuver 169 193 727 166 214 533 1245 - - 951 - - Mov Cap-2 Maneuver 169 193 - 166 214 -		496	469	-	569	568	-	-	-	-	-	-	-
Mov Cap-2 Maneuver 169 193 - 166 214 - </td <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td>					_				-	-		-	-
Stage 1 581 517 - 509 507 -	· · · · · · · · · · · · · · · · · · ·						533	1245	-	-	951	-	-
Stage 2 448 466 - 477 516 -							-	-	-	-	-	-	-
Approach EB WB NB SB HCM Control Delay, s 25.3 30.2 0.1 1.7 HCM LOS D D D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1245 - - 226 228 951 - - HCM Lane V/C Ratio 0.004 - - 0.216 0.381 0.074 - - HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -				-			-	-	-	-	-	-	-
HCM Control Delay, s 25.3 30.2 0.1 1.7 HCM LOS D D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1245 - - 226 228 951 - - HCM Lane V/C Ratio 0.004 - - 0.216 0.381 0.074 - - HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -	Stage 2	448	466	-	4//	516	-	-	-	-	-	-	-
HCM Control Delay, s 25.3 30.2 0.1 1.7 HCM LOS D D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1245 - - 226 228 951 - - HCM Lane V/C Ratio 0.004 - - 0.216 0.381 0.074 - - HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1245 - - 226 228 951 - - HCM Lane V/C Ratio 0.004 - - 0.216 0.381 0.074 - - HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -					WB			NB					
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1245 - - 226 228 951 - - HCM Lane V/C Ratio 0.004 - - 0.216 0.381 0.074 - - HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -	•							0.1			1.7		
Capacity (veh/h) 1245 226 228 951 HCM Lane V/C Ratio 0.004 0.216 0.381 0.074 HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -	HCM LOS	D			D								
Capacity (veh/h) 1245 226 228 951 HCM Lane V/C Ratio 0.004 0.216 0.381 0.074 HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -													
HCM Lane V/C Ratio 0.004 - - 0.216 0.381 0.074 - - HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -	Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
HCM Control Delay (s) 7.9 0 - 25.3 30.2 9.1 0 - HCM Lane LOS A A - D D A A -	Capacity (veh/h)		1245	-	-	226	228	951	-	-			
HCM Lane LOS A A - D D A A -	HCM Lane V/C Ratio		0.004	-	-	0.216	0.381	0.074	-	-			
	HCM Control Delay (s)		7.9	0	-	25.3	30.2	9.1	0	-			
HCM 95th %tile Q(veh) 0 0.8 1.7 0.2				Α	-				Α	-			
	HCM 95th %tile Q(veh	1)	0	-	-	0.8	1.7	0.2	-	-			

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	\$			4	¥	
Traffic Vol, veh/h	180	55	35	85	0	0
Future Vol, veh/h	180	55	35	85	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	Jiop -	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,	# 0	_	-	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	60	38	92	0	0
IVIVIIIL I IOVV	170	00	30	72	U	U
	ajor1		Major2		/linor1	
Conflicting Flow All	0	0	256	0	394	226
Stage 1	-	-	-	-	226	-
Stage 2	-	-	-	-	168	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1309	-	611	813
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	_	1309	_	592	813
Mov Cap-2 Maneuver	-	_	-	_	592	-
Stage 1	_	_	_	_	787	-
Stage 2	_	_	_	_	862	_
Stage 2					002	
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.3		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
	J	NDLIII	LDI	LDK		VVDI
Capacity (veh/h)		-	-	-	1309	-
HCM Lane V/C Ratio		-	-	-	0.029	-
HCM Long LOS		0	-	-	7.8	0
HCM Lane LOS		Α	-	-	A	Α
HCM 95th %tile Q(veh)		-	-	-	0.1	-

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	150	10	20	85	5	10	85	50	15	50	20
Future Vol, veh/h	25	150	10	20	85	5	10	85	50	15	50	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	163	11	22	92	5	11	92	54	16	54	22
Major/Minor I	Major1		1	Major2		ľ	Minor1			Minor2		
Conflicting Flow All	97	0	0	174	0	0	400	364	169	435	367	95
Stage 1	-	-	-	-	_	_	223	223	-	139	139	-
Stage 2	-	-	-	-	-	-	177	141	-	296	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1496	-	-	1403	-	-	560	564	875	531	562	962
Stage 1	-	-	-	-	-	-	780	719	-	864	782	-
Stage 2	-	-	-	-	-	-	825	780	-	712	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1496	-	-	1403	-	-	491	543	875	421	541	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	491	543	-	421	541	-
Stage 1	-	-	-	-	-	-	764	705	-	847	769	-
Stage 2	-	-	-	-	-	-	737	767	-	569	701	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.4			12.8			12.5		
HCM LOS				1.7			12.0 B			12.3 B		
TIOW LOO										<i>-</i>		
Minor Lane/Major Mvm	nt I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBL n1			
Capacity (veh/h)		620	1496	-		1403	-	-	571			
HCM Lane V/C Ratio		0.254		_		0.015	_		0.162			
HCM Control Delay (s)		12.8	7.5	0	_	7.6	0	_	40 5			
HCM Lane LOS		12.0 B	7.5 A	A	_	Α.	A	_	12.3 B			
HCM 95th %tile Q(veh)	1	0.1	-	_	0	-	_	0.6			
115W 75W 76W Q(VCI)	,		0.1			U			0.0			

Intersection
Int Delay, s/veh 10.2
Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR
Lane Configurations
Traffic Vol, veh/h 10 25 15 80 50 60 15 330 25 20 475 5
Future Vol, veh/h 10 25 15 80 50 60 15 330 25 20 475 5
Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0
Sign Control Stop Stop Stop Stop Stop Free Free Free Free Free Free
RT Channelized None None None
Storage Length
Veh in Median Storage, # - 0 0 0 0
Grade, % - 0 0 0 0 -
Peak Hour Factor 92 92 92 92 92 92 92 92 92 92 92 92
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2
Mvmt Flow 11 27 16 87 54 65 16 359 27 22 516 5
Major/Minor Minor2 Minor1 Major1 Major2
Conflicting Flow All 1027 981 519 989 970 373 521 0 0 386 0 0
Stage 1 563 563 - 405 405
Stage 2 464 418 - 584 565
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 4.12
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 2.218 -
Pot Cap-1 Maneuver 213 249 557 226 253 673 1045 1172
Stage 1 511 509 - 622 598
Stage 2 578 591 - 498 508
Platoon blocked, %
Mov Cap-1 Maneuver 154 238 557 193 242 673 1045 1172
Mov Cap-2 Maneuver 154 238 - 193 242
Stage 1 501 496 - 610 586
Stage 2 464 579 - 445 495
Approach EB WB NB SB
HCM Control Delay, s 23 52.4 0.3 0.3
HCM LOS C F
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR
Capacity (veh/h) 1045 254 268 1172
HCM Lane V/C Ratio 0.016 0.214 0.771 0.019
HCM Control Delay (s) 8.5 0 - 23 52.4 8.1 0 -
HCM Lane LOS A A - C F A A -
HCM 95th %tile Q(veh) 0 0.8 5.8 0.1

Intersection						
Int Delay, s/veh	3					
		EDD	WDL	WDT	NDI	NIDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	70	0	0	4	Y	ΩE
Traffic Vol, veh/h	70	0	0	130	55	35
Future Vol, veh/h	70	0	0	130	55	35
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	141	60	38
Major/Minor Ma	ajor1	N	Major2	ı	Vinor1	
Conflicting Flow All	0	0	76	0	217	76
Stage 1	-	-	-	-	76	-
Stage 2	_		_	_	141	_
Critical Hdwy	_	_	4.12	-	6.42	6.22
Critical Hdwy Stg 1	_	_	7.12	_	5.42	-
Critical Hdwy Stg 2	_			_	5.42	_
Follow-up Hdwy	_	_	2.218		3.518	
Pot Cap-1 Maneuver	_	_	1523	_	771	985
Stage 1	_	_	1020	_	947	703
Stage 2	_	_	_	_	886	_
Platoon blocked, %	-		-	-	000	-
Mov Cap-1 Maneuver			1523		771	985
	-	-	1023	-	771	900
Mov Cap-2 Maneuver	-	-	-	-		
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	886	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.8	
HCM LOS					Α	
NA!		IDL 4	COT	ED.	MDI	MET
Minor Lane/Major Mvmt	ľ	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		842	-	-	1523	-
HCM Lane V/C Ratio		0.116	-	-	-	-
HCM Control Delay (s)		9.8	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		0.4	-	-	0	-

Int Delay, s/veh 7.5
Lane Configurations Image: Configuration of Configu
Lane Configurations Image: Configuration of Configu
Traffic Vol, veh/h 15 70 15 65 105 20 5 60 25 15 120 20 Future Vol, veh/h 15 70 15 65 105 20 5 60 25 15 120 20 Conflicting Peds, #/hr 0
Future Vol, veh/h 15 70 15 65 105 20 5 60 25 15 120 20 Conflicting Peds, #/hr 0 <
Conflicting Peds, #/hr 0
Sign Control Free Stop 2 - - - - - - - - - - - - - - - - <t< td=""></t<>
RT Channelized - - None - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 -
Storage Length - 0 - - 0 -
Veh in Median Storage, # - 0 - 0 - - 0 - - 0 - - 0 - 0 - 0 - 0 - 0 - 0 - - 0 -
Peak Hour Factor 92<
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Mvmt Flow 16 76 16 71 114 22 5 65 27 16 130 22
Major/Minor Major1 Major3 Minor1 Minor2
Major/Minor Major1 Major2 Minor1 Minor2
Major/Minor Major1 Major2 Minor1 Minor2
Conflicting Flow All 136 0 0 92 0 0 459 394 84 429 391 125
Stage 1 116 116 - 267 267 -
Stage 2 343 278 - 162 124 -
Critical Hdwy 4.12 4.12 7.12 6.52 6.22 7.12 6.52 6.22
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 -
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 -
Follow-up Hdwy 2.218 2.218 3.518 4.018 3.318 3.518 4.018 3.318
Pot Cap-1 Maneuver 1448 1503 512 542 975 536 545 926
Stage 1 889 800 - 738 688 -
Stage 2 672 680 - 840 793 -
Platoon blocked, %
Mov Cap-1 Maneuver 1448 1503 383 508 975 448 511 926
Mov Cap-2 Maneuver 383 508 - 448 511 -
Stage 1 878 790 - 729 653 - Stage 2 498 645 - 740 783 -
Stage 2 498 645 - 740 783 -
Approach EB WB NB SB
HCM Control Delay, s 1.1 2.6 12.6 14.8
HCM LOS B B
Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1
Capacity (veh/h) 574 1448 1503 535
HCM Lane V/C Ratio 0.17 0.011 0.047 0.315
HCM Control Delay (s) 12.6 7.5 0 - 7.5 0 - 14.8
HCM Lane LOS B A A - A A - B
HCM 95th %tile Q(veh) 0.6 0 0.1 1.3

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDI	WDL	4	WDR	NDL	4	אטוג	JDL	<u>361</u>	JUK
Traffic Vol, veh/h	5	30	10	35	20	30	5	440	155	80	290	5
Future Vol, veh/h	5	30	10	35	20	30	5	440	155	80	290	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None		-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	22	33	5	478	168	87	315	5
Major/Minor	Minor2			Minor1		I	Major1		[Major2		
Conflicting Flow All	1092	1148	318	1086	1066	562	320	0	0	646	0	0
Stage 1	492	492	-	572	572	-	-	-	-	-	-	-
Stage 2	600	656	-	514	494	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	192	199	723	194	222	526	1240	-	-	939	-	-
Stage 1	558	548	-	505	504	-	-	-	-	-	-	-
Stage 2	488	462	-	543	546	-	-	-	-	-	-	-
Platoon blocked, %	150	17/	722	140	10/	E2/	1240	-	-	റാറ	-	-
Mov Cap-1 Maneuver	150 150	176 176	723	149 149	196 196	526	1240	-	-	939	-	-
Mov Cap-2 Maneuver Stage 1	555	486	-	502	501	-	-	-	-	-	-	-
Stage 2	435	459	-	443	484	-	-	-		-	-	-
Jiaye Z	400	407	-	443	404	-	-	-	_	-	-	_
A				\A/D			ND			CD		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	27.7			33.6			0.1			2		
HCM LOS	D			D								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1240	-	-	207	216	939	-	-			
HCM Lane V/C Ratio		0.004	-	-		0.428		-	-			
HCM Control Delay (s))	7.9	0	-	27.7	33.6	9.2	0	-			
HCM Lane LOS	,	A	Α	-	D	D	A	Α	-			
HCM 95th %tile Q(veh	1)	0	-	-	0.9	2	0.3	-	-			

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			4	W	
Traffic Vol, veh/h	185	80	50	85	0	0
Future Vol, veh/h	185	80	50	85	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,	, # 0	-	_	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	201	87	54	92	0	0
IVIVIIIL FIOW	201	07	54	92	U	U
Major/Minor N	/lajor1	I	Major2	1	Minor1	
Conflicting Flow All	0	0	288	0	445	245
Stage 1	-	_	_	-	245	-
Stage 2		_	_	_	200	_
Critical Hdwy	_	_	4.12	-	6.42	6.22
Critical Hdwy Stg 1	_	_		_	5.42	-
Critical Hdwy Stg 2	_	_	_	_	5.42	_
Follow-up Hdwy	_		2.218		3.518	
Pot Cap-1 Maneuver			1274		571	794
Stage 1	-	_	12/4	_	796	174
Stage 2		-	-	-	834	-
Platoon blocked, %		-	-		034	-
-	-	-	1074	-	E 4 E	704
Mov Cap-1 Maneuver	-	-	1274	-	545	794
Mov Cap-2 Maneuver	-	-	-	-	545	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	834	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.9		0	
HCM LOS	U		2.7		A	
HOW EOS					71	
Minor Lane/Major Mvm	t N	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	1274	-
HCM Lane V/C Ratio		-	-	-	0.043	-
HCM Control Delay (s)		0	-	-	8	0
HCM Lane LOS		Α	-	-	Α	Α
HCM 95th %tile Q(veh)					0.1	_
HOW FOUT MINE QIVELLY					U. I	

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIX	VVDL	₩	אטוע	NDL	4	NDI	JDL	- 3 1	JUK
Traffic Vol, veh/h	25	155	10	20	95	5	15	85	50	15	55	20
Future Vol, veh/h	25	155	10	20	95	5	15	85	50	15	55	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	168	11	22	103	5	16	92	54	16	60	22
Major/Minor N	/lajor1		1	Major2		1	Minor1		I	Vinor2		
Conflicting Flow All	108	0	0	179	0	0	419	380	174	451	383	106
Stage 1	-	-	-	-	-	-	228	228	-	150	150	-
Stage 2	-	-	-	-	-	-	191	152	-	301	233	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
	2.218	-	-	2.218	-	-	3.518		3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1483	-	-	1397	-	-	544	552	869	519	550	948
Stage 1	-	-	-	-	-	-	775	715	-	853	773	-
Stage 2	-	-	-	-	-	-	811	772	-	708	712	-
Platoon blocked, %	1402	-	-	1207	-	-	470	Egg	0/0	/10	E20	0.40
Mov Cap-1 Maneuver	1483	-	-	1397	-	-	472 472	532 532	869	410 410	530 530	948
Mov Cap-2 Maneuver Stage 1	-	-	-	-	-	-	760	701	-	836	760	-
Stage 2	-	-	-	-		-	718	759	-	565	698	-
Jiaye Z	-	-	-	-	-	_	710	137	_	303	070	_
Amaraaah	ED			MD			ND			CD		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.3			13.2			12.8		
HCM LOS							В			В		
Minor Lane/Major Mvm	t ſ	VBLn1	EBL	EBT	EBR	WBL	WBT	WBR :				
Capacity (veh/h)			1483	-		1397	-	-	557			
HCM Lane V/C Ratio			0.018	-	-	0.016	-	-	0.176			
HCM Control Delay (s)		13.2	7.5	0	-	7.6	0	-	12.8			
HCM Lane LOS		В	A	Α	-	A	Α	-	В			
HCM 95th %tile Q(veh)		1.1	0.1	-	-	0	-	-	0.6			

Int Delay, Sr/veh 13.1	Intersection												
Movement		13.1											
Traffic Vol, veh/h		FRI	FRT	FRR	WRI	\/\/RT	WRR	NRI	NRT	NRR	SRI	SRT	SRR
Traffic Vol, veh/h		LDL		LDK	WDL		WDK	INDL		אטוז	JDL		אשכ
Future Vol, veh/h		10		15	90		70	15		25	20		5
Conflicting Peds, #/hr													
Sign Control Stop Free Free	· ·												
RT Channelized None None None - N							~						
Storage Length		•									-		
Veh in Median Storage, # - 0		-	-	-	-	-	-	-	-		-	_	-
Grade, % - 0 - - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 2 93 93 <t< td=""><td></td><td>e,# -</td><td>0</td><td>-</td><td>-</td><td>0</td><td>-</td><td>-</td><td>0</td><td>-</td><td>-</td><td>0</td><td>-</td></t<>		e,# -	0	-	-	0	-	-	0	-	-	0	-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2			0	-	-	0	-	-	0	-	-	0	-
Mymit Flow 11 27 16 98 54 76 16 359 27 22 522 5 Major/Minor Minor2 Minor1 Major1 Major2 Major2 Conflicting Flow All 1039 987 525 995 976 373 527 0 0 386 0 0 Stage 1 569 569 - 405 405 -	Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Major/Minor Minor2 Minor1 Major1 Major2 Major2	Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Conflicting Flow All 1039 987 525 995 976 373 527 0 0 386 0 0	Mvmt Flow	11	27	16	98	54	76	16	359	27	22	522	5
Conflicting Flow All 1039 987 525 995 976 373 527 0 0 386 0 0													
Conflicting Flow All 1039 987 525 995 976 373 527 0 0 386 0 0 Stage 1 569 569 - 405 405 Stage 2 470 418 - 590 571 Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 - - - - Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 - - - - Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - Pot Cap-1 Maneuver 209 247 552 224 251 673 1040 - 1172 - Stage 1 507 506 - 622 598 - - - - - Stage 2 574 591 - 494 505 - - - - - Platoon blocked, % - - - - - - Mov Cap-1 Maneuver 148 236 552 191 239 673 1040 - 1172 - - Mov Cap-2 Maneuver 148 236 - 191 239 - - - - - - - Stage 1 497 492 - 610 586 - - - - - - - Stage 2 453 579 - 441 491 - - - - - - - Approach EB WB NB SB	Major/Minor	Minor2			Minor1			Major1		1	Major2		
Stage 1 569 569 - 405 405			987			976			0			0	0
Stage 2	0										-		-
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - 4.12 2 Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52	U			-		571	-	-	-	-	-	-	-
Critical Hdwy Stg 2 6.12 5.52 - <td></td> <td>7.12</td> <td>6.52</td> <td>6.22</td> <td>7.12</td> <td>6.52</td> <td>6.22</td> <td>4.12</td> <td>-</td> <td>-</td> <td>4.12</td> <td>-</td> <td>-</td>		7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - 7.218 Pot Cap-1 Maneuver 209 247 552 224 251 673 1040 - 1172 - 7.514	Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver 209 247 552 224 251 673 1040 - - 1172 - -	Critical Hdwy Stg 2		5.52			5.52	-	-	-	-	-	-	-
Stage 1 507 506 - 622 598 - - - - - - -									-	-		-	-
Stage 2 574 591 - 494 505				552			673	1040	-	-	1172	-	-
Platoon blocked, %				-			-	-	-	-	-	-	-
Mov Cap-1 Maneuver 148 236 552 191 239 673 1040 - - 1172 - - Mov Cap-2 Maneuver 148 236 - 191 239 -		574	591	-	494	505	-	-	-	-	-	-	-
Mov Cap-2 Maneuver 148 236 - 191 239 - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td>									-	-		-	-
Stage 1 497 492 - 610 586 -	·			552			673	1040	-	-	1172	-	-
Stage 2 453 579 - 441 491 -							-	-	-	-	-	-	-
Approach EB WB NB SB HCM Control Delay, s 23.4 64.2 0.3 0.3 HCM LOS C F Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 249 268 1172 - - HCM Lane V/C Ratio 0.016 - - 0.218 0.852 0.019 - - HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -	Ğ						-	-	-	-	-	-	-
HCM Control Delay, s 23.4 64.2 0.3 0.3	Stage 2	453	5/9	-	441	491	-	-	-	-	-	-	-
HCM Control Delay, s 23.4 64.2 0.3 0.3 O.3 HCM LOS C F													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 249 268 1172 - - HCM Lane V/C Ratio 0.016 - - 0.218 0.852 0.019 - - HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -	Approach	EB			WB			NB					
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1040 - - 249 268 1172 - - HCM Lane V/C Ratio 0.016 - - 0.218 0.852 0.019 - - HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -								0.3			0.3		
Capacity (veh/h) 1040 249 268 1172 HCM Lane V/C Ratio 0.016 0.218 0.852 0.019 HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -	HCM LOS	С			F								
Capacity (veh/h) 1040 249 268 1172 HCM Lane V/C Ratio 0.016 0.218 0.852 0.019 HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -													
HCM Lane V/C Ratio 0.016 - - 0.218 0.852 0.019 - - HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -	Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
HCM Lane V/C Ratio 0.016 - - 0.218 0.852 0.019 - - HCM Control Delay (s) 8.5 0 - 23.4 64.2 8.1 0 - HCM Lane LOS A A - C F A A -	Capacity (veh/h)		1040	-	-	249	268	1172	-	-			
HCM Lane LOS A A - C F A A -			0.016	-	-	0.218	0.852	0.019	-	-			
	HCM Control Delay (s))	8.5	0	-	23.4	64.2	8.1	0	-			
HCM 95th %tile Q(veh) 0 0.8 7.1 0.1				Α	-	С	F		Α	-			
	HCM 95th %tile Q(veh	1)	0	-	-	0.8	7.1	0.1	-	-			

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			4	W	
Traffic Vol, veh/h	70	0	0	135	80	50
Future Vol, veh/h	70	0	0	135	80	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	- -	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage		_	_	0	0	_
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	147	87	54
Major/Minor N	1ajor1	1	Major2	1	Minor1	
Conflicting Flow All	0	0	76	0	223	76
Stage 1	-	_	-	-	76	-
Stage 2	_	_	_	_	147	_
Critical Hdwy	_	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1	_		7.12	_	5.42	- 0.22
		-			5.42	
Critical Hdwy Stg 2	-	-	-	-		-
Follow-up Hdwy	-	-	2.218		3.518	
Pot Cap-1 Maneuver	-	-	1523	-	765	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	765	985
Mov Cap-2 Maneuver	-	-	-	-	765	-
Stage 1	-	-	-	-	947	-
Stage 2			-		880	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.2	
HCM LOS					В	
Minor Lane/Major Mvm	+ N	NBLn1	EBT	EBR	WBL	WBT
	l I			EDK		WDI
Capacity (veh/h)		837	-	-	1523	-
HCM Lane V/C Ratio		0.169	-	-	-	-
HCM Control Delay (s)		10.2	-	-	0	-
HCM Lane LOS		В	-	-	Α	-
HCM 95th %tile Q(veh)		0.6	-	-	0	-

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	15	80	20	65	105	20	5	65	25	15	120	20
Future Vol, veh/h	15	80	20	65	105	20	5	65	25	15	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	87	22	71	114	22	5	71	27	16	130	22
Major/Minor N	Major1		-	Major2		ſ	Minor1		ı	Minor2		
Conflicting Flow All	136	0	0	109	0	0	473	408	98	446	408	125
Stage 1	-	-	-	-	-	-	130	130	-	267	267	-
Stage 2	-	-	-	-	-	-	343	278	-	179	141	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1448	-	-	1481	-	-	501	533	958	523	533	926
Stage 1	-	-	-	-	-	-	874	789	-	738	688	-
Stage 2	-	-	-	-	-	-	672	680	-	823	780	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1481	-	-	372	499	958	431	499	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	499	-	431	499	-
Stage 1	-	-	-	-	-	-	864	780	-	729	652	-
Stage 2	-	-	-	-	-	-	498	645	-	718	771	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			2.6			12.9			15.1		
HCM LOS							В			С		
Minor Lane/Major Mvm	nt I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		559	1448	_	_	1481	_		522			
HCM Lane V/C Ratio		0.185		-	_	0.048	-	-	0.323			
HCM Control Delay (s)		12.9	7.5	0	-	7.6	0	-	15.1			
HCM Lane LOS		В	А	A	-	Α	A	-	С			
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	1.4			

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIT	WDL	4	WER	HUL	4	HUIT	ODL	4	ODIT
Traffic Vol, veh/h	5	30	10	35	20	30	5	450	165	90	295	5
Future Vol, veh/h	5	30	10	35	20	30	5	450	165	90	295	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	22	33	5	489	179	98	321	5
Major/Minor	Minor2			Minor1			Major1		N	Major2		
Conflicting Flow All	1136	1198	324	1131	1111	579	326	0	0	668	0	0
Stage 1	520	520	-	589	589	-	-	-	-	-	-	-
Stage 2	616	678	-	542	522	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	179	186	717	181	209	515	1234	-	-	922	-	-
Stage 1	539	532	-	494	495	-	-	-	-	-	-	-
Stage 2	478	452	-	525	531	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	137	161	717	135	181	515	1234	-	-	922	-	-
Mov Cap-2 Maneuver	137	161	-	135	181	-	-	-	-	-	-	-
Stage 1	535	463	-	491	492	-	-	-	-	-	-	-
Stage 2	425	449	-	418	462	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	30.4			37.9			0.1			2.2		
HCM LOS	D			Ε								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1\	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1234			190	199	922	_				
HCM Lane V/C Ratio		0.004	_	_		0.464		_	_			
HCM Control Delay (s))	7.9	0	-	30.4	37.9	9.4	0	-			
HCM Lane LOS		A	A	-	D	E	A	A	-			
HCM 95th %tile Q(veh	1)	0	-	-	1	2.2	0.4	-	-			
	•											

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽			4	¥	
Traffic Vol, veh/h	185	100	60	85	5	5
Future Vol, veh/h	185	100	60	85	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	- -	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,	# 0	_	_	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	201	109	65	92	5	5
IVIVIIIL I IOVV	201	107	03	72	J	J
	ajor1		Major2		/linor1	
Conflicting Flow All	0	0	310	0	478	256
Stage 1	-	-	-	-	256	-
Stage 2	-	-	-	-	222	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1250	-	546	783
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	815	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	516	783
Mov Cap-2 Maneuver	-	-			516	-
Stage 1	_	_	-	-	744	_
Stage 2	_	_	_	_	815	_
Stage 2					010	
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.3		10.9	
HCM LOS					В	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	<u>'</u>	622			1250	1101
HCM Lane V/C Ratio		0.017	-		0.052	-
			-	-		-
HCM Lang LOS		10.9	-	-	8	0
HCM Lane LOS		B	-	-	0.2	A
HCM 95th %tile Q(veh)		0.1	-	-	0.2	-

Int Delay, s/veh	Intersection												
Traffic Vol, vel/h		6.3											
Traffic Vol, veh/h	Movement	FRI	FRT	FRR	WRI	WRT	WRR	NRI	NRT	NRR	SRI	SRT	SRR
Traffic Vol, veh/h		LUL		LDIN	VVDL		WDIX	NDL		NDIX	JDL		JUIN
Future Vol, veh/h	- U	25		10	20		5	15		50	15		25
Conflicting Peds, #/hr O O O O O O O O O													
Sign Control Free Rate (a) None Free Rate (b) None Free Rate (b) None Free Rate (b) None Free Rate (b) None Stop None None -	· · · · · · · · · · · · · · · · · · ·												
RT Channelized None				Free	Free		Free	Stop	Stop	Stop	Stop	Stop	Stop
Veh in Median Storage, # - 0		-	-	None	-	-							
Grade, % - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - 0 - 0 - 0 - 0 2 3 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Peak Hour Factor 92 92 92 92 92 92 92 9	Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2	Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Mymt Flow 27 168 11 22 114 5 16 92 54 16 60 27 Major/Minor Major1 Major2 Minor1 Minor2 Conflicting Flow All 119 0 0 179 0 0 432 391 174 462 394 117 Stage 1 - - - - - 228 228 - 161 161 - Stage 2 - - - 4.12 - - 204 163 - 301 233 - Critical Hdwy Stg 1 - - - - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12 5.52 - 6.12	Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Major/Minor Major1 Major2 Minor1 Minor2 Conflicting Flow All 119 0 0 179 0 0 432 391 174 462 394 117 Stage 1 - - - - - 228 228 - 161 161 - Stage 2 - - - - 204 163 - 301 233 - Critical Hdwy Stg 1 - - - - 6.12 5.52 - 6.12 5.52 - - C Citical Hdwy Stg 2 - - - 6.12 5.52 - 6.12 5.52 - - C 202 Critical Hdwy Stg 2 - - - 6.12 5.52 - 6.12 5.52 - - C 700 701 8.0 4.018 3.318 3.518 4.018 3.318 3.518 4.018 3.318 3.518	Heavy Vehicles, %						2						
Conflicting Flow All 119	Mvmt Flow	27	168	11	22	114	5	16	92	54	16	60	27
Conflicting Flow All 119													
Conflicting Flow All 119	Major/Minor M	lajor1		ľ	Major2		ľ	Minor1		ı	Minor2		
Stage 1	Conflicting Flow All	119	0	0	179	0	0	432	391	174	462	394	117
Critical Hdwy 4.12 - 4.12 - - 7.12 6.52 6.22 7.12 6.52 6.22 Critical Hdwy Stg 1 - - - - - 6.12 5.52 - 6.12 5.52 - Critical Hdwy Stg 2 - - - - 6.12 5.52 - 6.12 5.52 - Follow-up Hdwy 2.218 - - 2.218 - - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1469 - 1397 - 534 545 869 510 542 935 Stage 2 - - - - - 775 715 - 841 765 - Stage 1 - - 1397 - 460 525 869 402 522 935 Mov Cap-1 Maneuver 1469 - 1397 - 460 525 869 402 522 935 Mov Cap-2 Maneuver -<		-	-	-	-	-	-	228	228	-	161	161	-
Critical Hdwy Stg 1 - - - - 6.12 5.52 - 6.12 5.52 - Critical Hdwy Stg 2 - - - - - 6.12 5.52 - 6.12 5.52 - Follow-up Hdwy 2.218 - - 2.218 - - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1469 - - 1397 - - 534 545 869 510 542 935 Stage 2 - - - - - 775 715 - 841 765 - Platoon blocked, % - <t< td=""><td>Stage 2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>204</td><td>163</td><td>-</td><td>301</td><td>233</td><td>-</td></t<>	Stage 2	-	-	-	-	-	-	204	163	-	301	233	-
Critical Hdwy Stg 2 - - - - 6.12 5.52 - 6.12 5.52 - Follow-up Hdwy 2.218 - - 2.218 - - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1469 - 1397 - - 534 545 869 510 542 935 Stage 1 - - - - - 775 715 - 841 765 - Stage 2 - - - 1397 - - 460 525 869 402 522 935 Mov Cap-1 Maneuver 1469 - 1397 - - 460 525 869 402 522 935 Mov Cap-2 Maneuver - - - - - 760 701 - 824 752 - Stage 2 - - -	Critical Hdwy	4.12	-	-	4.12	-	-	7.12		6.22	7.12	6.52	6.22
Follow-up Hdwy 2.218 - 2.218 - 3.518 4.018 3.318 3.518 4.018 3.318 Pot Cap-1 Maneuver 1469 - 1397 - 534 545 869 510 542 935 Stage 1 - 5 - 7 - 775 715 - 841 765 - Stage 2 - 7 - 7 - 798 763 - 708 712 - Platoon blocked, % - 7 - 798 763 - 708 712 - Platoon blocked, % - 7 - 798 763 - 708 712 - Platoon blocked, % - 7 - 798 763 - 708 712 - 708 Mov Cap-1 Maneuver 1469 - 1397 - 460 525 869 402 522 935 Mov Cap-2 Maneuver - 7 - 7 - 7 - 760 701 - 824 752 - Stage 1 - 7 - 7 - 760 701 - 824 752 - Stage 2 - 7 - 7 - 701 750 - 565 698 - 708		-	-	-	-	-	-			-			-
Pot Cap-1 Maneuver 1469 - 1397 - 534 545 869 510 542 935 Stage 1 - - - - 7775 715 - 841 765 - Stage 2 - - - - 798 763 - 708 712 - Plation blocked, % - - - - - 798 763 - 708 712 - Mov Cap-1 Maneuver 1469 - 1397 - 460 525 869 402 522 935 Mov Cap-1 Maneuver - - - - 460 525 869 402 522 935 Mov Cap-1 Maneuver - - - - 460 525 869 402 522 935 Mov Cap-1 Maneuver - - - 700 701 - 824 752 - -	3 0		-	-	-	-	-						
Stage 1 - - - - 775 715 - 841 765 - Stage 2 - - - - 798 763 - 708 712 - Platoon blocked, % -			-	-		-	-						
Stage 2 - - - - 798 763 - 708 712 - Platoon blocked, % - <t< td=""><td></td><td>1469</td><td>-</td><td>-</td><td>1397</td><td>-</td><td>-</td><td></td><td></td><td>869</td><td></td><td></td><td>935</td></t<>		1469	-	-	1397	-	-			869			935
Platoon blocked, %		-	-	-	-	-	-			-			-
Mov Cap-1 Maneuver 1469 - 1397 - - 460 525 869 402 522 935 Mov Cap-2 Maneuver - - - - - - 460 525 - 402 522 - Stage 1 - - - - - 760 701 - 824 752 - Stage 2 - - - - - 701 750 - 565 698 - Approach EB WB NB SB SB - - - 565 698 - - - 12.9 - <		-		-	-			798	763	-	708	712	-
Mov Cap-2 Maneuver - - - - 460 525 - 402 522 - Stage 1 - - - - - 760 701 - 824 752 - Stage 2 - - - - 701 750 - 565 698 - Approach EB WB NB SB NB SB HCM NB		11/0	-	-	4007	-		4/0	F0F	0/0	400	F00	005
Stage 1 - - - - 760 701 - 824 752 - Stage 2 - - - - - 701 750 - 565 698 - Approach EB WB NB NB SB HCM Control Delay, s 1 1.2 13.3 12.9 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBR SBLn1 Capacity (veh/h) 595 1469 - - 1397 - - 561 HCM Lane V/C Ratio 0.274 0.018 - - 0.016 - - 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B				-	1397								
Stage 2 - - - - 701 750 - 565 698 - Approach EB WB NB SB HCM Control Delay, s 1 1.2 13.3 12.9 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBR SBLn1 Capacity (veh/h) 595 1469 - - 1397 - - 561 HCM Lane V/C Ratio 0.274 0.018 - - 0.016 - - 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A A A A - B				-	-								
Approach EB WB NB SB HCM Control Delay, s 1 1.2 13.3 12.9 HCM LOS B B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 595 1469 - - 1397 - - 561 HCM Lane V/C Ratio 0.274 0.018 - - 0.016 - - 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B		-	-	-	-	-	-						
HCM Control Delay, s 1 1.2 13.3 12.9 HCM LOS B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 595 1469 1397 561 HCM Lane V/C Ratio 0.274 0.018 0.016 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B	Staye 2	-	-	-	-	-	-	701	730	-	505	070	-
HCM Control Delay, s 1 1.2 13.3 12.9 HCM LOS B B Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 595 1469 1397 561 HCM Lane V/C Ratio 0.274 0.018 0.016 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B					10.00								
Minor Lane/Major Mvmt NBLn1 EBL EBR WBL WBT WBR SBLn1 Capacity (veh/h) 595 1469 - - 1397 - - 561 HCM Lane V/C Ratio 0.274 0.018 - - 0.016 - - 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B													
Minor Lane/Major Mvmt NBLn1 EBL EBR WBL WBT WBR SBLn1 Capacity (veh/h) 595 1469 - - 1397 - - 561 HCM Lane V/C Ratio 0.274 0.018 - - 0.016 - - 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B	J	1			1.2								
Capacity (veh/h) 595 1469 1397 561 HCM Lane V/C Ratio 0.274 0.018 0.016 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B	HCM LOS							В			В		
Capacity (veh/h) 595 1469 1397 561 HCM Lane V/C Ratio 0.274 0.018 0.016 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B													
HCM Lane V/C Ratio 0.274 0.018 - - 0.016 - - 0.184 HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A A A - B	Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
HCM Control Delay (s) 13.3 7.5 0 - 7.6 0 - 12.9 HCM Lane LOS B A A - A A - B			595	1469	-	-	1397	-	-	561			
HCM Lane LOS B A A - A A - B				0.018	-	-		-	-				
						-			-				
					Α	-		Α	-				
HCM 95th %tile Q(veh) 1.1 0.1 0 0.7	HCM 95th %tile Q(veh)		1.1	0.1	-	-	0	-	-	0.7			

Intersection												
Int Delay, s/veh	17.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDK	WDL	₩ <u>₩</u>	WDK	NDL	ND1 ♣	חטוז	SDL	<u>361</u>	אטכ
Traffic Vol., veh/h	10	25	15	100	50	80	15	335	25	20	490	5
Future Vol, veh/h	10	25	15	100	50	80	15	335	25	20	490	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	- -	Jiop -	None	- -	- -	None	-	-	None	-	-	None
Storage Length	_	_	TVOTIC	_	_	TVOTIC	_	_	-	0	_	- INOTIC
Veh in Median Storage	e.# -	0	_	_	0	_	_	0	_	-	0	_
Grade, %	-	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	27	16	109	54	87	16	364	27	22	533	5
			5									
Major/Minor	Minor2			Minor1		ı	Major1		ı	Major2		
Conflicting Flow All	1060	1003	536	1011	992	378	538	0	0	391	0	0
Stage 1	580	580	530	410	410	3/0	236	-	U	371	-	-
Stage 2	480	423	-	601	582	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	0.22	6.12	5.52	0.22	4. IZ -	-		4. IZ -	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52						_	-
Follow-up Hdwy	3.518	4.018		3.518		3.318	2.218	_	_	2.218	_	_
Pot Cap-1 Maneuver	202	242	545	218	246	669	1030	_	_	1168	_	
Stage 1	500	500	-	619	595	- 507	-	_	_	- 1100	_	_
Stage 2	567	588	-	487	499	_	_	_	_	_	_	_
Platoon blocked, %	307	500		107				_	-		_	_
Mov Cap-1 Maneuver	140	233	545	187	236	669	1030	-	-	1168	-	-
Mov Cap-2 Maneuver	140	233	-	187	236	-	-	_	_	-	_	_
Stage 1	490	491	-	607	583	_	-	_	-	-	-	-
Stage 2	438	576	-	438	490	-	-	-	-	-	-	-
- · · g				,,,,								
Approach	EB			WB			NB			SB		
HCM Control Delay, s				81.9			0.3			0.3		
HCM LOS	C C			F			0.0			0.0		
TIOM LOO				'								
Minor Lane/Major Mvn	nt	NBL	NBT	NRD	EBLn1V	MRI n1	SBL	SBT	SBR			
	iit		NDT	NDK				וטכ	JUK			
Capacity (veh/h) HCM Lane V/C Ratio		1030 0.016	-	-	242 0.225	266	1168 0.019	-	-			
HCM Control Delay (s	١	8.6	-	-	24.1	81.9	8.1	-	-			
HCM Lane LOS)		0 A	-	24.1 C	61.9 F	6. I	-	-			
HCM 95th %tile Q(veh	1)	A 0	A -	-	0.8	8.7	0.1	-	-			
110W 75W 76WE Q(VEI	1)	U	-	-	0.0	0.7	U. I		-			

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<u>₽</u>	LUK	WDL	₩ <u>₩</u>	₩.	אטוז
	7 0	5	C			60
Traffic Vol, veh/h			5	135	100	
Future Vol, veh/h	70	5	5	135	100	60
Conflicting Peds, #/hr	_ 0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	5	5	147	109	65
Major/Minor	loior1		Majora	n	Ninar1	
	lajor1		Major2		Minor1	70
Conflicting Flow All	0	0	81	0	236	79
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1517	-	752	981
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	_	-		-		
Mov Cap-1 Maneuver	_	_	1517	_	749	981
Mov Cap-2 Maneuver	_	_	-	_	749	-
Stage 1	_	_	_	_	940	_
Stage 2	_	_	_	_	871	_
Stage 2					0/1	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		10.6	
HCM LOS					В	
		IDI 1			14/51	14/5-
Minor Lane/Major Mvmt	N	VBLn1	EBT	EBR		WBT
Capacity (veh/h)		822	-		1517	-
HCM Lane V/C Ratio		0.212	-	-	0.004	-
HCM Control Delay (s)		10.6	-	-	7.4	0
HCM Lane LOS		В	-	-	Α	Α
HCM 95th %tile Q(veh)		0.8	-	-	0	-

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIX	WDL	4	WEIT	IIDE	4	HUIN	ODL	4	ODIT
Traffic Vol, veh/h	15	90	20	65	110	20	5	65	25	15	120	20
Future Vol, veh/h	15	90	20	65	110	20	5	65	25	15	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	98	22	71	120	22	5	71	27	16	130	22
Major/Minor N	Major1			Major2		1	Minor1			Minor2		
Conflicting Flow All	142	0	0	120	0	0	490	425	109	463	425	131
Stage 1	-	-	-	-	-	-	141	141	-	273	273	-
Stage 2	-	-	-	-	-	-	349	284	-	190	152	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518		3.318	3.518	4.018	
Pot Cap-1 Maneuver	1441	-	-	1468	-	-	489	521	945	509	521	919
Stage 1	-	-	-	-	-	-	862	780	-	733	684	-
Stage 2	-	-	-	-	-	-	667	676	-	812	772	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1441	-	-	1468	-	-	361	488	945	418	488	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	361	488	-	418	488	-
Stage 1	-	-	-	-	-	-	852	771	-	724	648	-
Stage 2	-	-	-	-	-	-	493	640	-	708	763	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			2.5			13.1			15.5		
HCM LOS							В			С		
Minor Lane/Major Mvm	nt l	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		548	1441	-	-	1468	-	-	511			
HCM Lane V/C Ratio		0.188		-	-	0.048	-	-	0.33			
HCM Control Delay (s)		13.1	7.5	0	-	7.6	0	-	15.5			
HCM Lane LOS		В	A	A	-	A	A	-	С			
HCM 95th %tile Q(veh))	0.7	0	-	-	0.2	-	-	1.4			

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDR	WDL	4	WDR	IVDL	4	NOR	ODL	4	OBIN
Traffic Vol, veh/h	5	30	10	35	25	25	5	480	165	90	315	5
Future Vol, veh/h	5	30	10	35	25	25	5	480	165	90	315	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	11	38	27	27	5	522	179	98	342	5
Major/Minor	Minor2			Minor1			Major1		1	Major2		
Conflicting Flow All	1190	1252	345	1185	1165	612	347	0	0	701	0	0
Stage 1	541	541	-	622	622	-	-	-	-	-	-	-
Stage 2	649	711	-	563	543	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	165	172	698	166	194	493	1212	-	-	896	-	-
Stage 1	525	521	-	474	479	-	-	-	-	-	-	-
Stage 2	458	436	-	511	520	-	-	-	-	-	-	-
Platoon blocked, %	122	140	400	122	144	402	1212	-	-	004	-	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	122	148 148	698	122 122	166 166	493	1212	-	-	896	-	-
Stage 1	521	450	-	471	476	-	-	-	-	-	-	-
Stage 2	405	433		403	449	_	_					
Stage 2	703	700		703	777	-			-	_		_
Amanagah	ED			WD			ND			CD		
Approach Dalassa	EB			WB			NB			SB		
HCM Control Delay, s	33.6			47			0.1			2.1		
HCM LOS	D			Е								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1212	-	-	174	174	896	-	-			
HCM Lane V/C Ratio		0.004	-	-				-	-			
HCM Control Delay (s))	8	0	-	33.6	47	9.5	0	-			
HCM Lane LOS	,	A	Α	-	D	E	A	Α	-			
HCM 95th %tile Q(veh	1)	0	-	-	1.1	2.7	0.4	-	-			

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	LUIX	TTDL	<u>₩</u>	Y	אטוז
Traffic Vol, veh/h	190	100	60	8 5	T 5	5
Future Vol, veh/h						
<u>'</u>	190	100	60	85	5	5
Conflicting Peds, #/hr	_ 0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	207	109	65	92	5	5
IVIVIIIC I IOVV	201	107	00	12	.	<u> </u>
Major/Minor N	Najor1	N	Major2	P	Vinor1	
Conflicting Flow All	0	0	316	0	484	262
Stage 1	-	-	-	-	262	-
Stage 2	_	-	-	-	222	-
Critical Hdwy	_	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1	_	_	- 1.12	_	5.42	-
Critical Hdwy Stg 2	_			_	5.42	
		-	2 210			
Follow-up Hdwy	-		2.218		3.518	3.318
Pot Cap-1 Maneuver	-	-		-	542	777
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	815	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1244	-	512	777
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	_	_	_	_	739	-
Stage 2	_	_	_	_	815	_
Stage 2	_	_	-	_	013	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.3		10.9	
HCM LOS			0.0		В	
HOW EOS						
Minor Lane/Major Mvm	t N	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		617	-	-	1244	-
HCM Lane V/C Ratio		0.018	-		0.052	-
HCM Control Delay (s)		10.9	_	_	8.1	0
HCM Lane LOS		В	_	_	A	A
HCM 95th %tile Q(veh)		0.1			0.2	-

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	25	160	10	20	105	5	15	90	50	15	55	25
Future Vol, veh/h	25	160	10	20	105	5	15	90	50	15	55	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	174	11	22	114	5	16	98	54	16	60	27
Major/Minor N	Major1		1	Major2		1	Minor1			Minor2		
Conflicting Flow All	119	0	0	185	0	0	438	397	180	471	400	117
Stage 1	-	-	-	-	-	-	234	234	_	161	161	-
Stage 2	-	-	-	-	-	-	204	163	-	310	239	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1469	-	-	1390	-	-	529	540	863	503	538	935
Stage 1	-	-	-	-	-	-	769	711	-	841	765	-
Stage 2	-	-	-	-	-	-	798	763	-	700	708	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1469	-	-	1390	-	-	455	519	863	392	518	935
Mov Cap-2 Maneuver	-	-	-	-	-	-	455	519	-	392	518	-
Stage 1	-	-	-	-	-	-	753	696	-	823	752	-
Stage 2	-	-	-	-	-	-	701	750	-	552	693	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.2			13.6			13		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SRI n1			
Capacity (veh/h)	r I	586	1469	LDI	LDIX	1390	-	VVDIX .	555			
HCM Lane V/C Ratio		0.288				0.016			0.186			
HCM Control Delay (s)		13.6	7.5	0	-	7.6	0	-	13			
HCM Lane LOS		13.0 B	7.5 A	A	-	7.6 A	A	-	13 B			
HCM 95th %tile Q(veh))	1.2	0.1	A	-	0	- A	-	0.7			
HOW 75th 70the Q(Veh))	1.2	U. I	_		U			0.7			

Intersection												
Int Delay, s/veh	24											
		EDT	EDD	WDI	WDT	WBR	NDI	NDT	NIDD	CDI	CDT	CDD
Movement	EBL	EBT	EBR	WBL	WBT	WBK	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	10	4	10	100	4	80	15	4	25	20	4	Е
Traffic Vol, veh/h Future Vol, veh/h	10	25 25	15 15	100	55 55	80	15	360 360	25	20	520 520	5 5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	300	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Siup -	Siup -	None	Siup -	Siup -	None	-	-	None	-	-	None
Storage Length	-	-	None	-	-	None	-	-	None -	-	-	None
Veh in Median Storage	- # -	0			0			0	_		0	-
Grade, %	υ, π -	0	_	_	0	_	-	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mymt Flow	11	27	16	109	60	87	16	391	27	22	565	5
WATER TOWN	- 11		10	107	- 00	07	10	0/1			000	
Mainu/Mine	N 41: O			\ 1! 1			11-1-1			11-1		
	Minor2	10/5		Minor1	1051		Major1			Major2		
Conflicting Flow All	1122	1062	568	1070	1051	405	570	0	0	418	0	0
Stage 1	612	612	-	437	437	-	-	-	-	-	-	-
Stage 2	510	450	-	633	614		-	-	-	- 1.10	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	2 210	6.12	5.52	2 210	2 210	-	-	2 210	-	-
Follow-up Hdwy	3.518	4.018			4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	183	223	522	199	227	646	1002	-	-	1141	-	-
Stage 1	480	484	-	598	579	-	-	-	-	-	-	-
Stage 2	546	572	-	468	483	-	-	-	-	-	-	-
Platoon blocked, %	120	212	EJJ	140	216	646	1000	-	-	1141	-	-
Mov Cap 2 Manager	120	212	522	168	216	040	1002			1141	-	-
Mov Cap-2 Maneuver	120		-	168	567	-	-	-	-	-	-	-
Stage 1	470	470 560	-	585 415	469	-	-	-	-	-	-	-
Stage 2	414	UOC	-	415	409	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	27			118.9			0.3			0.3		
HCM LOS	D			F								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1002	-	-	217	241	1141	-	-			
HCM Lane V/C Ratio		0.016	-	-	0.25		0.019	-	-			
HCM Control Delay (s))	8.7	0	-	27	118.9	8.2	0	_			
HCM Lane LOS		A	A	-	D	F	A	A	-			
HCM 95th %tile Q(veh	1)	0.1	-	-	1	10.7	0.1	-	-			

Int Delay, s/veh						
	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<u>₽</u>	LUIX	WDL	<u>₩Ы</u>	₩.	אטוז
Traffic Vol, veh/h	70	5	5	135	100	60
Future Vol, veh/h	70	5		135		60
-			5		100	
Conflicting Peds, #/hr		0	0	0	O Cton	O Ctop
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storag		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	5	5	147	109	65
Major/Minor	Major1	l N	Major2	<u> </u>	Minor1	
Conflicting Flow All	0	0	81	0	236	79
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	_	-	-	5.42	_
Critical Hdwy Stg 2	_	_	_	_	5.42	-
Follow-up Hdwy	-	_	2.218		3.518	
Pot Cap-1 Maneuver		_	1517	_	752	981
•	-	-				
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver		-	1517	-	749	981
Mov Cap-2 Maneuver	-	-	-	-	749	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	871	-
J						
Approach	EB		WB		NB	
HCM Control Delay, s	s 0		0.3		10.6	
HCM LOS					В	
Minor Long/Maior M	not I	UDI 1	EDT	EDD	WDI	WDT
Minor Lane/Major Mv	mt ľ	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		822	-	-	1517	-
LICIAL AND MIC DOLLA		0.212	-	-	0.004	-
HCM Lane V/C Ratio	-1	10.6	-	-	7.4	0
HCM Control Delay (s	5)					
HCM Control Delay (s	5)	В	-	-	Α	Α
			-	-	A 0	A -

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	15	90	20	65	110	20	5	65	25	20	130	25
Future Vol, veh/h	15	90	20	65	110	20	5	65	25	20	130	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	98	22	71	120	22	5	71	27	22	141	27
Major/Minor N	Major1			Major2		ľ	Minor1		- 1	Minor2		
Conflicting Flow All	142	0	0	120	0	0	498	425	109	463	425	131
Stage 1	-	-	-	-	-	-	141	141	-	273	273	-
Stage 2	-	-	-	-	-	-	357	284	-	190	152	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1441	-	-	1468	-	-	483	521	945	509	521	919
Stage 1	-	-	-	-	-	-	862	780	-	733	684	-
Stage 2	-	-	-	-	-	-	661	676	-	812	772	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1441	-	-	1468	-	-	347	488	945	418	488	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	488	-	418	488	-
Stage 1	-	-	-	-	-	-	852	771	-	724	648	-
Stage 2	-	-	-	-	-	-	475	640	-	708	763	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			2.5			13.1			16.1		
HCM LOS							В			С		
Minor Lane/Major Mvm	nt I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		546	1441	-	-	1468		-	513			
HCM Lane V/C Ratio		0.189		_		0.048	_		0.371			
HCM Control Delay (s)		13.1	7.5	0	_	7.6	0	_	16.1			
HCM Lane LOS		В	7.5 A	A	_	Α.	A	_	C			
HCM 95th %tile Q(veh))	0.7	0	-	-	0.2	-	-	1.7			
	,	3.7	- 0			J.2			1.7			

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	5	30	10	35	25	25	5	480	120	40	315	5
Future Volume (vph)	5	30	10	35	25	25	5	480	120	40	315	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.960			0.973			0.998	7722
Flt Protected		0.995			0.980						0.995	
Satd. Flow (prot)	0	1818	0	0	1772	0	0	1833	0	0	1870	0
Flt Permitted		0.950			0.843			0.997			0.892	
Satd. Flow (perm)	0	1736	0	0	1524	0	0	1827	0	0	1677	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			27			30			2	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	33	11	38	27	27	5	522	130	43	342	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	0	0	92	0	0	657	0	0	390	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0	<u> </u>		0.0	<u> </u>		0.0	J		0.0	J
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		16.5			16.5			26.5			26.5	
Actuated g/C Ratio		0.44			0.44			0.70			0.70	
v/c Ratio		0.06			0.13			0.51			0.33	
Control Delay		12.6			11.9			9.2			7.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.6			11.9			9.2			7.6	
LOS		В			В			Α			Α	
Approach Delay		12.6			11.9			9.2			7.6	
Approach LOS		В			В			Α			Α	
Queue Length 50th (m)		2.3			4.0			34.2			18.0	
Queue Length 95th (m)		9.7			14.9			87.9			46.9	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		1012			896			1409			1288	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.05			0.10			0.47			0.30	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 37.	.7											
Natural Cycle: 60												
Control Type: Semi Act-Un	coord											
Maximum v/c Ratio: 0.51												
Intersection Signal Delay: 9				Ir	ntersection	n LOS: A						
Intersection Capacity Utiliz	ation 65.8%			IC	CU Level	of Service	С					
Analysis Period (min) 15												

Splits and Phases: 10: Division Rd & Road 3E

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIX	VVDL	4	VVDIX	NDL	4	NDIX	JDL	4	JUN
Traffic Volume (vph)	10	25	15	50	55	30	15	360	25	20	520	5
Future Volume (vph)	10	25	15	50	55	30	15	360	25	20	520	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.960	1.00	1.00	0.970	1.00	1.00	0.992	1.00	1.00	0.999	1.00
Flt Protected		0.990			0.982			0.998			0.998	
Satd. Flow (prot)	0	1790	0	0	1794	0	0	1865	0	0	1878	0
Flt Permitted	U	0.899	U	U	0.856	U	U	0.971	U	U	0.975	U
Satd. Flow (perm)	0	1625	0	0	1564	0	0	1814	0	0	1835	0
Right Turn on Red	U	1023	Yes	U	1304	Yes	U	1014	Yes	U	1033	Yes
Satd. Flow (RTOR)		16	103		25	103		8	103		1	103
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	27	16	54	60	33	16	391	27	22	565	5
Shared Lane Traffic (%)		21	10	J-1	00	33	10	371	21	22	303	3
Lane Group Flow (vph)	0	54	0	0	147	0	0	434	0	0	592	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)	Loit	0.0	rtigitt	Lort	0.0	rtigitt	Loit	0.0	rtigitt	Lort	0.0	rtigitt
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25	0.77	15	25	0.,,	15	25	0.,,,	15	25	0.77	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL EB	T EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	16.	4		16.4			23.2			23.2	
Actuated g/C Ratio	0.4	1		0.41			0.58			0.58	
v/c Ratio	0.0	8		0.23			0.41			0.56	
Control Delay	11.	6		13.9			9.3			11.4	
Queue Delay	0.	0		0.0			0.0			0.0	
Total Delay	11.			13.9			9.3			11.4	
LOS		В		В			Α			В	
Approach Delay	11.	6		13.9			9.3			11.4	
Approach LOS		В		В			Α			В	
Queue Length 50th (m)	2.			7.4			19.8			31.1	
Queue Length 95th (m)	10.			23.4			50.7			77.6	
Internal Link Dist (m)	8.	0		2009.4			54.4			57.8	
Turn Bay Length (m)											
Base Capacity (vph)	85			827			1337			1351	
Starvation Cap Reductn		0		0			0			0	
Spillback Cap Reductn		0		0			0			0	
Storage Cap Reductn		0		0			0			0	
Reduced v/c Ratio	0.0	6		0.18			0.32			0.44	
Intersection Summary											
Area Type:	ther										
Cycle Length: 60											
Actuated Cycle Length: 40.2											
Natural Cycle: 55											
Control Type: Semi Act-Unco	ord										
Maximum v/c Ratio: 0.56											
Intersection Signal Delay: 11.				itersection							
Intersection Capacity Utilization	on 58.7%		IC	CU Level	of Service	B					

Splits and Phases: 10: Division Rd & Road 3E

Analysis Period (min) 15

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	f		ሻ	f.	
Traffic Volume (vph)	5	30	10	35	25	25	5	480	120	40	315	5
Future Volume (vph)	5	30	10	35	25	25	5	480	120	40	315	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.960			0.970			0.998	
Flt Protected		0.995			0.980		0.950			0.950		
Satd. Flow (prot)	0	1818	0	0	1772	0	1789	1827	0	1789	1880	0
Flt Permitted		0.950			0.843		0.553			0.340		
Satd. Flow (perm)	0	1736	0	0	1524	0	1042	1827	0	640	1880	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			27			30			2	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	33	11	38	27	27	5	522	130	43	342	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	0	0	92	0	5	652	0	43	347	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0	9		0.0	9		3.7	9		3.7	9
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		16.5			16.5		26.4	26.4		26.4	26.4	
Actuated g/C Ratio		0.44			0.44		0.70	0.70		0.70	0.70	
v/c Ratio		0.06			0.13		0.01	0.50		0.10	0.26	
Control Delay		12.5			11.8		6.6	9.1		7.5	6.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.5			11.8		6.6	9.1		7.5	6.9	
LOS		В			В		Α	Α		Α	Α	
Approach Delay		12.5			11.8			9.1			7.0	
Approach LOS		В			В			Α			Α	
Queue Length 50th (m)		2.3			4.0		0.2	33.8		1.6	15.1	
Queue Length 95th (m)		9.7			14.9		1.7	86.6		7.4	38.9	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		1015			898		801	1411		492	1446	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.05			0.10		0.01	0.46		0.09	0.24	
Intersection Summary												
Area Type.	Other											

Other

Area Type: Cycle Length: 60

Actuated Cycle Length: 37.6

Natural Cycle: 60

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.50

Intersection Signal Delay: 8.8 Intersection LOS: A Intersection Capacity Utilization 54.7% ICU Level of Service A

Analysis Period (min) 15



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Lana Craun	EDI	EDT	FDD	WDI	WDT	WDD	,	I NDT	, NDD	CDI	CDT	CDD
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	10	- ♣	15	Ε0	4	20	\	}	٥٦	<u>້</u>	^	
Traffic Volume (vph)	10	25	15	50	55	30	15	360	25	20	520	5
Future Volume (vph)	1000	25	15	50	55	30	15	360	25	20	520	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.970		0.050	0.990		0.050	0.999	
Flt Protected	0	0.990	0	0	0.982	0	0.950	10/5	0	0.950	1000	
Satd. Flow (prot)	0	1790	0	0	1794	0	1789	1865	0	1789	1882	0
Flt Permitted		0.898		0	0.856	0	0.372	40/5		0.514	4000	
Satd. Flow (perm)	0	1624	0	0	1564	0	701	1865	0	968	1882	0
Right Turn on Red		4.6	Yes		0.5	Yes			Yes			Yes
Satd. Flow (RTOR)		16			25			8			1	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)	2.00	1.9	0.00	0.00	122.0	0.00	0.00	4.7	2.00	0.00	4.9	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	27	16	54	60	33	16	391	27	22	565	5
Shared Lane Traffic (%)	•		•	•	4.47		4.	440		00	F70	0
Lane Group Flow (vph)	0	54	0	0	147	0	16	418	0	22	570	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4		_	4			2			2	
Permitted Phases	4			4			2	•		2	•	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase	100	100		10.0	100		10.0	100		10.0	100	
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		16.2			16.2		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.41			0.41		0.57	0.57		0.57	0.57	
v/c Ratio		0.08			0.22		0.04	0.39		0.04	0.53	
Control Delay		11.4			13.6		7.3	9.1		7.2	11.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.4			13.6		7.3	9.1		7.2	11.0	
LOS		В			В		Α	Α		Α	В	
Approach Delay		11.4			13.6			9.0			10.8	
Approach LOS		В			В			Α			В	
Queue Length 50th (m)		2.1			7.1		0.6	18.7		8.0	29.0	
Queue Length 95th (m)		10.1			23.4		3.5	47.8		4.3	72.3	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		865			837		523	1395		723	1406	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.06			0.18		0.03	0.30		0.03	0.41	
Intersection Summary												

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 39.5

Natural Cycle: 50

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.53

Intersection Signal Delay: 10.5

Intersection LOS: B Intersection Capacity Utilization 50.9% ICU Level of Service A

Analysis Period (min) 15



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	5	30	10	35	25	25	5	480	165	90	315	5
Future Volume (vph)	5	30	10	35	25	25	5	480	165	90	315	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.960			0.966			0.998	
Flt Protected		0.995			0.980						0.989	
Satd. Flow (prot)	0	1818	0	0	1772	0	0	1819	0	0	1859	0
Flt Permitted		0.957			0.843			0.997			0.775	
Satd. Flow (perm)	0	1748	0	0	1524	0	0	1814	0	0	1457	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			27			41			1	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	33	11	38	27	27	5	522	179	98	342	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	0	0	92	0	0	706	0	0	445	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0	U		0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		16.7			16.7			25.7			25.7	
Actuated g/C Ratio		0.39			0.39			0.61			0.61	
v/c Ratio		0.07			0.15			0.63			0.50	
Control Delay		13.2			12.8			12.2			10.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.2			12.8			12.2			10.8	
LOS		В			В			В			В	
Approach Delay		13.2			12.8			12.2			10.8	
Approach LOS		В			В			В			В	
Queue Length 50th (m)		2.5			4.3			37.9			22.8	
Queue Length 95th (m)		9.7			14.9			#102.7			61.3	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		879			775			1281			1020	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.06			0.12			0.55			0.44	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 42.4

Natural Cycle: 60

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.63

Intersection Signal Delay: 11.8 Intersection LOS: B
Intersection Capacity Utilization 83.9% ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	10	25	15	100	55	80	15	360	25	20	520	5
Future Volume (vph)	10	25	15	100	55	80	15	360	25	20	520	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.960	1.00	1.00	0.954	1.00	1.00	0.992	1.00	1.00	0.999	1.00
Flt Protected		0.990			0.979			0.998			0.998	
Satd. Flow (prot)	0	1790	0	0	1759	0	0	1865	0	0	1878	0
Flt Permitted		0.905		Ū	0.837			0.970		Ū	0.975	
Satd. Flow (perm)	0	1636	0	0	1504	0	0	1812	0	0	1835	0
Right Turn on Red		1000	Yes	Ū	1001	Yes		1012	Yes	Ū	1000	Yes
Satd. Flow (RTOR)		16	103		44	103		8	103		1	103
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	27	16	109	60	87	16	391	27	22	565	5
Shared Lane Traffic (%)	11	21	10	107	00	07	10	371	21	22	303	J
Lane Group Flow (vph)	0	54	0	0	256	0	0	434	0	0	592	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)	LCII	0.0	Kigiit	LCIL	0.0	Kigiit	Leit	0.0	Rigit	Leit	0.0	Rigit
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		4.0			4.0			4.0			4.0	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25	0.77	15	25	0.77	15	25	0.77	15	25	0.77	15
Turn Type	Perm	NA	13	Perm	NA	13	Perm	NA	13	Perm	NA	13
Protected Phases	r Cilli	4		r Cilli	4		r Cilli	2		r Cilli	2	
Permitted Phases	4	4		4	4		2	Z		2	Z	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase	4	4		4	4		2	Z		Z	Z	
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
` ,		24.0			24.0			10.0 24.0			10.0 24.0	
Minimum Split (s)	24.0 24.0	24.0		24.0 24.0	24.0		24.0 36.0	36.0		24.0	36.0	
Total Split (s)		40.0%								36.0		
Total Split (%)	40.0%			40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		13.0			13.0			20.2			20.2	
Actuated g/C Ratio		0.28			0.28			0.44			0.44	
v/c Ratio		0.11			0.56			0.54			0.73	
Control Delay		11.9			18.4			12.0			16.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.9			18.4			12.0			16.6	
LOS		В			В			В			В	
Approach Delay		11.9			18.4			12.0			16.6	
Approach LOS		В			В			В			В	
Queue Length 50th (m)		2.3			14.6			22.0			34.6	
Queue Length 95th (m)		10.1			40.0			50.7			77.6	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		683			645			1246			1260	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.08			0.40			0.35			0.47	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 45	5.8											
Natural Cycle: 55												
Control Type: Semi Act-Ur	ncoord											
Maximum v/c Ratio: 0.73												
Intersection Signal Delay:					tersection							
Intersection Capacity Utiliz	zation 65.5%			IC	CU Level	of Service	C					
Analysis Period (min) 15												



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	1		ች	1	
Traffic Volume (vph)	5	30	10	35	25	25	5	480	165	90	315	5
Future Volume (vph)	5	30	10	35	25	25	5	480	165	90	315	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970	.,		0.960			0.962			0.998	,,,,,
Flt Protected		0.995			0.980		0.950			0.950		
Satd. Flow (prot)	0	1818	0	0	1772	0	1789	1812	0	1789	1880	0
Flt Permitted		0.957			0.843		0.553			0.276		
Satd. Flow (perm)	0	1748	0	0	1524	0	1042	1812	0	520	1880	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			27			41			2	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	33	11	38	27	27	5	522	179	98	342	5
Shared Lane Traffic (%)			• •					022		, 0	0.2	· ·
Lane Group Flow (vph)	0	49	0	0	92	0	5	701	0	98	347	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)	20.1	0.0	g	2011	0.0	g	2011	3.7	. ug. u	2011	3.7	. ug.n
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		16.7			16.7		25.6	25.6		25.6	25.6	
Actuated g/C Ratio		0.39			0.39		0.61	0.61		0.61	0.61	
v/c Ratio		0.07			0.15		0.01	0.63		0.31	0.31	
Control Delay		13.2			12.8		6.6	12.2		11.4	7.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		13.2			12.8		6.6	12.2		11.4	7.9	
LOS		В			В		Α	В		В	Α	
Approach Delay		13.2			12.8			12.1			8.7	
Approach LOS		В			В			В			Α	
Queue Length 50th (m)		2.5			4.3		0.2	37.5		4.3	15.1	
Queue Length 95th (m)		9.7			14.9		1.7	#99.2		17.7	38.9	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		882			778		732	1285		365	1322	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.06			0.12		0.01	0.55		0.27	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 42.3

Natural Cycle: 60

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.63

Intersection Signal Delay: 11.0 Intersection LOS: B
Intersection Capacity Utilization 70.1% ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	f		ሻ	f)	
Traffic Volume (vph)	10	25	15	100	55	80	15	360	25	20	520	5
Future Volume (vph)	10	25	15	100	55	80	15	360	25	20	520	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.954			0.990			0.999	
Flt Protected		0.990			0.979		0.950			0.950		
Satd. Flow (prot)	0	1790	0	0	1759	0	1789	1865	0	1789	1882	0
Flt Permitted		0.909			0.837		0.365			0.506		
Satd. Flow (perm)	0	1644	0	0	1504	0	687	1865	0	953	1882	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			44			8			1	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		32.0			2033.4			78.4			81.8	
Travel Time (s)		1.9			122.0			4.7			4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	27	16	109	60	87	16	391	27	22	565	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	0	0	256	0	16	418	0	22	570	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0	.		0.0	<u> </u>		3.7	<u> </u>		3.7	J
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		14.4			14.4		23.6	23.6		23.6	23.6	
Actuated g/C Ratio		0.35			0.35		0.57	0.57		0.57	0.57	
v/c Ratio		0.09			0.47		0.04	0.39		0.04	0.53	
Control Delay		11.5			16.0		7.9	9.7		7.8	11.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.5			16.0		7.9	9.7		7.8	11.6	
LOS		В			В		Α	Α		Α	В	
Approach Delay		11.5			16.0			9.6			11.5	
Approach LOS		В			В			Α			В	
Queue Length 50th (m)		2.2			14.0		0.7	20.6		0.9	31.9	
Queue Length 95th (m)		10.1			40.0		3.5	47.8		4.3	72.3	
Internal Link Dist (m)		8.0			2009.4			54.4			57.8	
Turn Bay Length (m)												
Base Capacity (vph)		847			789		493	1340		683	1351	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.06			0.32		0.03	0.31		0.03	0.42	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												

Actuated Cycle Length: 41.7

Natural Cycle: 50

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.53

Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 57.7% ICU Level of Service B

Analysis Period (min) 15

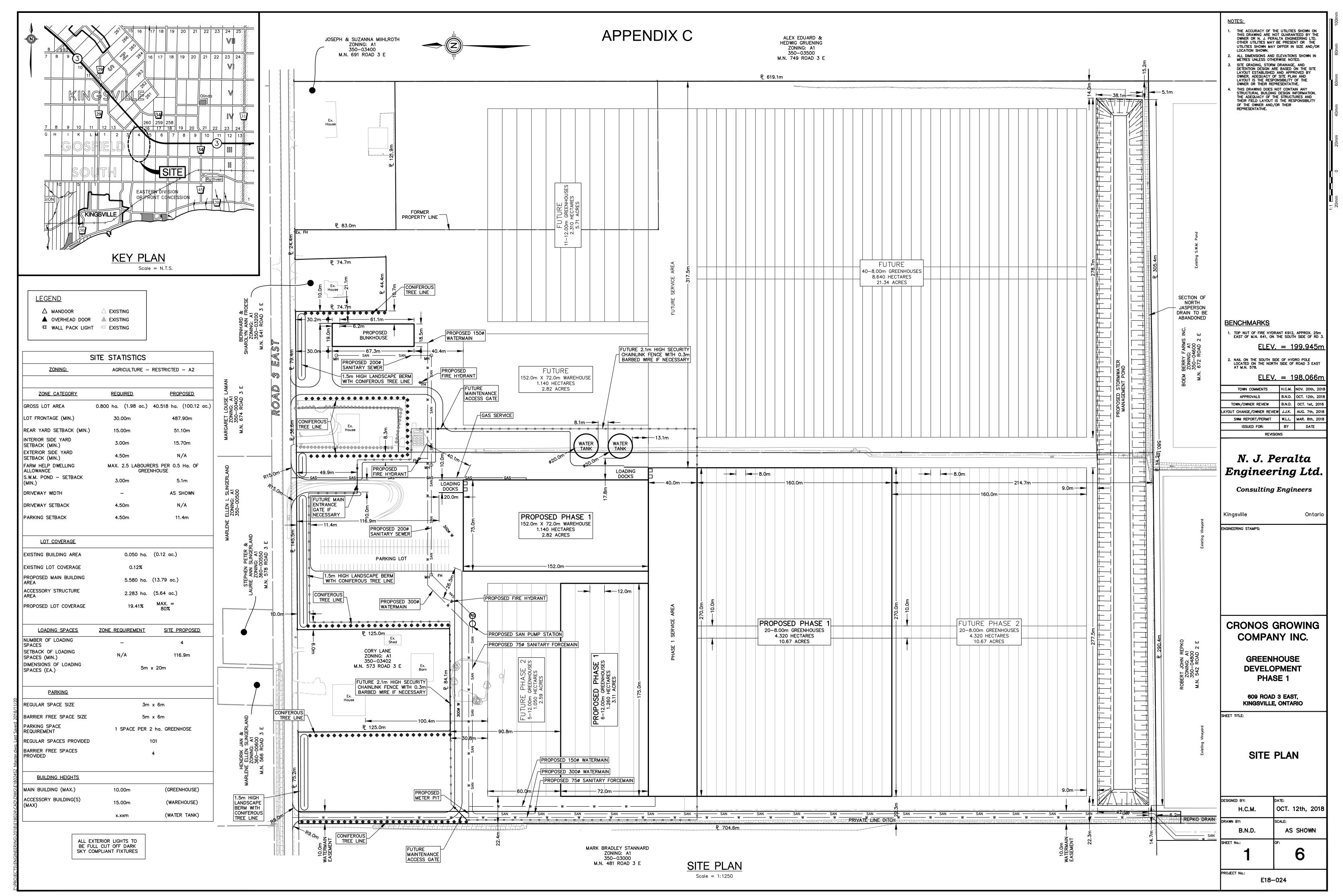


Int Delay, s/veh 3.3	Intersection												
Traffic Vol, veh/h		3.3											
Traffic Vol, veh/h	Movement	FBI	FBT	FBR	WBI	WBT	WBR	NBI	NBT	NBR	SBI	SBT	SBR
Traffic Vol, veh/h				LDIN			WDIC	NDL		NDIX	JDL		ODIN
Future Vol, veh/h Conflicting Peds, #/hr O O O O O O O O O O O O O O O O O O O		5		10			25	5		120	40		5
Conflicting Peds, #/hr Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop Stop	·	~											
Sign Control Stop Free Free	· · · · · · · · · · · · · · · · · · ·												
RT Channelized													Free
Storage Length		•				•					-		
Weh in Median Storage, # 0 - 0 0 - 0 0 - 0 0 - 0 2 <td>Storage Length</td> <td>-</td> <td>-</td> <td>-</td> <td>0</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Peak Hour Factor 92 92 92 92 92 92 92 9		e,# -	0	-	-	0	-	-	0	-	-	0	-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2	Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Mymt Flow 5 33 11 38 27 27 5 522 130 43 342 5 Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1055 1093 345 1050 1030 587 347 0 0 652 0 0 Stage 1 431 431 - 597 597 -	Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Major/Minor Minor2 Minor1 Major1 Major2	Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Conflicting Flow All 1055 1093 345 1050 1030 587 347 0 0 652 0 0	Mvmt Flow	5	33	11	38	27	27	5	522	130	43	342	5
Conflicting Flow All													
Conflicting Flow All 1055 1093 345 1050 1030 587 347 0 0 652 0 0	Major/Minor	Minor2			Minor1			Major1		ľ	Major2		
Stage 1			1093			1030			0			0	0
Stage 2									-	-		-	-
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td>•</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	•			-			-	-	-	-	-	-	-
Critical Hdwy Stg 2 6.12 5.52 - <td></td> <td>7.12</td> <td>6.52</td> <td>6.22</td> <td>7.12</td> <td>6.52</td> <td>6.22</td> <td>4.12</td> <td>-</td> <td>-</td> <td>4.12</td> <td>-</td> <td>-</td>		7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 2.218 Pot Cap-1 Maneuver 204 214 698 205 233 510 1212 - 935 - Stage 1 603 583 - 490 491	Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver 204 214 698 205 233 510 1212 -	Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Stage 1	Follow-up Hdwy	3.518		3.318	3.518	4.018	3.318		-	-	2.218	-	-
Stage 2	Pot Cap-1 Maneuver			698			510	1212	-	-	935	-	-
Platoon blocked, %				-			-	-	-	-	-	-	-
Mov Cap-1 Maneuver 166 200 698 168 218 510 1212 - - 935 - - Mov Cap-2 Maneuver 166 200 - 168 218 -		473	459	-	586	582	-	-	-	-	-	-	-
Mov Cap-2 Maneuver 166 200 - 168 218 - </td <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td>				,					-	-		-	-
Stage 1 599 550 - 487 488 -	· · · · · · · · · · · · · · · · · · ·						510	1212	-	-	935	-	-
Stage 2 420 456 - 512 549 -							-	-	-	-	-	-	-
Approach EB WB NB SB HCM Control Delay, s 24.7 24.8 0.1 1 HCM LOS C C C Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1212 - - 231 168 305 935 - - HCM Lane V/C Ratio 0.004 - - 0.212 0.226 0.178 0.047 - - HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -				-			-	-	-	-	-	-	-
HCM Control Delay, s 24.7 24.8 0.1 1 HCM LOS C C Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1212 - 231 168 305 935 HCM Lane V/C Ratio 0.004 - 0.212 0.226 0.178 0.047 HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -	Stage 2	420	456	-	512	549	-	-	-	-	-	-	-
HCM Control Delay, s 24.7 24.8 0.1 1 HCM LOS C C Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1212 - 231 168 305 935 HCM Lane V/C Ratio 0.004 - 0.212 0.226 0.178 0.047 HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1212 - - 231 168 305 935 - - HCM Lane V/C Ratio 0.004 - - 0.212 0.226 0.178 0.047 - - HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -	Approach	EB			WB			NB			SB		
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1212 - - 231 168 305 935 - - HCM Lane V/C Ratio 0.004 - - 0.212 0.226 0.178 0.047 - - HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -								0.1			1		
Capacity (veh/h) 1212 231 168 305 935 HCM Lane V/C Ratio 0.004 0.212 0.226 0.178 0.047 HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -	HCM LOS	С			С								
Capacity (veh/h) 1212 231 168 305 935 HCM Lane V/C Ratio 0.004 0.212 0.226 0.178 0.047 HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -													
Capacity (veh/h) 1212 231 168 305 935 HCM Lane V/C Ratio 0.004 0.212 0.226 0.178 0.047 HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -	Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1\	VBLn1V	VBLn2	SBL	SBT	SBR		
HCM Lane V/C Ratio 0.004 - - 0.212 0.226 0.178 0.047 - - HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -			1212	-	-						-		
HCM Control Delay (s) 8 0 - 24.7 32.6 19.3 9 0 - HCM Lane LOS A A - C D C A A -	1 3 1			-	-					-	-		
HCM Lane LOS A A - C D C A A -)		0	-					0	-		
HCM 95th %tile Q(veh) 0 0.8 0.8 0.6 0.1					-					Α	-		
	HCM 95th %tile Q(veh	1)	0	-	-	0.8	0.8	0.6	0.1	-	-		

Movement	Intersection												
Movement		4.8											
Traffic Vol, veh/h		FRI	FRT	FRD	\M/RI	WRT	W/RD	MRI	MRT	MRD	CRI	CRT	CRD
Traffic Vol, veh/h		LDL		LDK			WDK	NDL		NDK	JDL		SDK
Future Vol, veh/h		10		15			30	15		25	20		5
Conflicting Peds, #/hr													
Sign Control Stop RT Channelized Stop None Stop None Stop None Stop None Stop None Free None	-												
RT Channelized - None - None <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>~</td></th<>													~
Storage Length		•											
Weh in Median Storage, # 0 - - 0 0 - 0 0 - 0 0 - 0 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 0 418 0 0 0 418 0 0 0 418 0 0 0 418 0 0 0 418 0 0 0 418 0 0 0 0				-	0						-		-
Grade, % - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - 2 2 92		2,# -	0	-		0	-	-	0	-	-	0	-
Peak Hour Factor 92 92 92 92 92 92 92 9			0	-	-	0	-	-	0	-	-	0	-
Mymit Flow 11 27 16 54 60 33 16 391 27 22 565 5 Major/Minor Minor1 Minor1 Major1 Major2 Conflicting Flow All 1095 1062 568 1070 1051 405 570 0 0 418 0 0 Stage 1 612 612 - 437 437 - <td< td=""><td></td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td><td>92</td></td<>		92	92	92	92	92	92	92	92	92	92	92	92
Major/Minor Minor2 Minor1 Major1 Major2	Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Conflicting Flow All 1095 1062 568 1070 1051 405 570 0 0 418 0 0 Stage 1 612 612 - 437 437 Stage 2 483 450 - 633 614	Mvmt Flow	11	27	16	54	60	33	16	391	27	22	565	5
Conflicting Flow All 1095 1062 568 1070 1051 405 570 0 0 418 0 0 Stage 1 612 612 - 437 437 Stage 2 483 450 - 633 614													
Conflicting Flow All 1095 1062 568 1070 1051 405 570 0 0 418 0 0 Stage 1 612 612 - 437 437 Stage 2 483 450 - 633 614	Major/Minor	Minor2			Minor1		1	Major1		1	Major2		
Stage 1 612 612 - 437 437			1062			1051			0			0	0
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	-	-	-	-
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 -	Stage 2	483	450	-	633	614	-	-	-	-	-	-	-
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52	Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 - 2.218 - 2.218 - 5.000 Pot Cap-1 Maneuver 191 223 522 199 227 646 1002 - 1141 - 5.000 Stage 1 480 484 - 598 579	Critical Hdwy Stg 1		5.52	-	6.12	5.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver 191 223 522 199 227 646 1002 - 1141 - - Stage 1 480 484 - 598 579 -	Critical Hdwy Stg 2	6.12	5.52			5.52	-	-	-	-	-	-	-
Stage 1 480 484 - 598 579 -									-	-		-	-
Stage 2 565 572 - 468 483 -				522			646	1002	-	-	1141	-	-
Platoon blocked, % Mov Cap-1 Maneuver 138 212 522 168 216 646 1002 1141 Mov Cap-2 Maneuver 138 212 - 168 216 Stage 1 470 470 - 585 567 Stage 2 470 560 - 415 469 Approach EB WB NB SB HCM Control Delay, s 25.7 28.5 0.3 0.3 Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1002 228 168 282 1141				-			-	-	-	-	-	-	-
Mov Cap-1 Maneuver 138 212 522 168 216 646 1002 - - 1141 - - Mov Cap-2 Maneuver 138 212 - 168 216 -		565	572	-	468	483	-	-	-	-	-	-	-
Mov Cap-2 Maneuver 138 212 - 168 216 - </td <td></td> <td></td> <td>2.42</td> <td>=</td> <td>4.0</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td>			2.42	=	4.0				-	-		-	-
Stage 1 470 470 - 585 567	•						646	1002	-	-	1141	-	-
Stage 2 470 560 - 415 469 -							-	-	-	-	-	-	-
Approach EB WB NB SB HCM Control Delay, s 25.7 28.5 0.3 0.3 HCM LOS D D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1002 - - 228 168 282 1141 - -				-			-	-	-	-	-	-	-
HCM Control Delay, s 25.7 28.5 0.3 0.3 HCM LOS D D D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1002 - - 228 168 282 1141 - -	Stage 2	4/0	560	-	415	469	-	-	-	-	-	-	-
HCM Control Delay, s 25.7 28.5 0.3 0.3 HCM LOS D D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1002 - - 228 168 282 1141 - -													
HCM LOS D D Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1002 - - 228 168 282 1141 - -													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1WBLn2 SBL SBT SBR Capacity (veh/h) 1002 228 168 282 1141								0.3			0.3		
Capacity (veh/h) 1002 228 168 282 1141	HCM LOS	D			D								
Capacity (veh/h) 1002 228 168 282 1141													
	Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
HCM Land V/C Datio 0.016 0.338 0.333 0.338 0.010	Capacity (veh/h)		1002	-	-	228	168	282	1141	-	-		
	HCM Lane V/C Ratio		0.016	-	-	0.238		0.328	0.019	-	-		
HCM Control Delay (s) 8.7 0 - 25.7 36.4 23.9 8.2 0 -)			-						-		
HCM Lane LOS A A - D E C A A -				Α	-					Α	-		
HCM 95th %tile Q(veh) 0.1 0.9 1.3 1.4 0.1	HCM 95th %tile Q(veh	1)	0.1	-	-	0.9	1.3	1.4	0.1	-	-		

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	LDL		LDK	VVDL		WDK	INDL	IND I	MOR	JDL	<u>361</u>	SDK
Lane Configurations Traffic Vol., veh/h	5	4	10	3 5	♣ 25	25	5	480	165	90	315	5
Future Vol, veh/h	5	30	10	35	25	25	5	480	165	90	315	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	400	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Siup -	Siup -	None	310p	310p	None	-	-	None	-	-	None
Storage Length	_	_	-	0	_	TVOTIC -	_	_	-	_	_	TVOTIC
Veh in Median Storage	e.# -	0	_	-	0	_	_	0	_	_	0	_
Grade, %	-	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mymt Flow	5	33	11	38	27	27	5	522	179	98	342	5
		- 00		- 00		LI		UZZ		,,,	UIL	
Major/Minor	Minor2			Minor1			Major1		N	Major2		
		1050			1145			0			0	0
Conflicting Flow All	1190	1252	345	1185	1165	612	347	0	0	701	0	0
Stage 1	541 649	541 711	-	622 563	622 543	-	-	-	-	-	-	-
Stage 2 Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	0.22	6.12	5.52	0.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	<u>-</u>	-	-	-	-	-
Follow-up Hdwy	3.518	4.018		3.518	4.018	3.318	2.218	-		2.218	-	-
Pot Cap-1 Maneuver	165	172	698	166	194	493	1212	-	<u> </u>	896	-	-
Stage 1	525	521	070	474	479	- 773	1212			- 070		
Stage 2	458	436		511	520		_	_	_		_	_
Platoon blocked, %	-100	-100		311	320			_	_		_	_
Mov Cap-1 Maneuver	122	148	698	122	166	493	1212	_	_	896	_	_
Mov Cap 1 Maneuver	122	148	-	122	166	- 175	- 1212	_	_		_	_
Stage 1	521	450	-	471	476	-	-	-	-	-	-	-
Stage 2	405	433	_	403	449	_	_	_	_	-	_	_
g · -		.00		, , ,								
Approach	EB			WB			NB			SB		
HCM Control Delay, s				33.3			0.1			2.1		
HCM LOS	55.0 D			33.3 D			0.1			۷.۱		
TOW LOS	U			J								
Minor Lanc/Major Mur	nt	NDI	NDT	NDD	EDI 51	M/DI 51V	VDI 52	CDI	CDT	CDD		
Minor Lane/Major Mvr	III	NBL	NBT	MRK		VBLn1V		SBL	SBT	SBR		
Capacity (veh/h)		1212	-	-	174	122	248	896	-	-		
HCM Cantral Dalay (a	١	0.004	-	-	0.281		0.219		-	-		
HCM Long LOS)	8	0	-	33.6	47.3	23.5	9.5	0	-		
HCM Lane LOS	۵۱	A	A	-	D	E	С	Α	Α	-		
HCM 95th %tile Q(veh	1)	0	-	-	1.1	1.2	8.0	0.4	-	-		

Intersection												
Int Delay, s/veh	8.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		*	f			4			4	
Traffic Vol, veh/h	10	25	15	100	55	80	15	360	25	20	520	5
Future Vol, veh/h	10	25	15	100	55	80	15	360	25	20	520	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	27	16	109	60	87	16	391	27	22	565	5
Major/Minor	Minor2			Minor1		ı	Major1		1	Major2		
Conflicting Flow All	1122	1062	568	1070	1051	405	570	0	0	418	0	0
Stage 1	612	612	-	437	437	-	-	-	-	-	-	-
Stage 2	510	450	-	633	614	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518		3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	183	223	522	199	227	646	1002	-	-	1141	-	-
Stage 1	480	484	-	598	579	-	-	-	-	-	-	-
Stage 2	546	572	-	468	483	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	120	212	522	168	216	646	1002	-	-	1141	-	-
Mov Cap-2 Maneuver	120	212	-	168	216	-	-	-	-	-	-	-
Stage 1	470	470	-	585	567	-	-	-	-	-	-	-
Stage 2	414	560	-	415	469	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	27			37.7			0.3			0.3		
HCM LOS	D			Е								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1002	-	-	217	168	357	1141	-	-		
HCM Lane V/C Ratio		0.016	-	-			0.411		-	-		
HCM Control Delay (s))	8.7	0	-	27	59	21.9	8.2	0	-		
HCM Lane LOS		A	A	-	D	F	С	A	A	-		
HCM 95th %tile Q(veh	1)	0.1	-	-	1	3.7	1.9	0.1	-	-		
	•											







OBSCURA 10075 FB A+BW

Product information

Main Function From light restriction to total blackout

System Sliding, Hanging

Flame retardant Intended to limit panel-to-panel firespread

Warranty Warranty five (5) years under all types of greenhouse covering, see

Svensson's limited warranty for all terms, conditions, and exclusions in

writing.

Properties	Value	Unit	Test methods
Weight	209	g/m²	
Shading level in direct light, PAR**	99.9	%	Integrated sphere
Shading level in diffused light, PAR**	99.9	%	Integrated sphere
Energy saving	75	%	Svensson method

^{*} Width 50 mm

This product image is for illustrative purposes only and may vary in appearance and design from the delivered product. Although the information in this data sheet has been composed with care, Svensson does not accept any liability in respect of its accuracy. Further information concerning the product and its installation may be obtained from Svensson and its authorized distributors. Svensson's products and name are protected by patent and other intellectual property rights. Products marked FR are flame retardant. No other products delivered by Svensson are flame retardant. AB Ludvig Svensson is an ISO 14001/90001 certified company.

^{**} PAR = 400 - 700 nm, accuracy +/- 1%

^{***} UV-light = 300 - 400 nm

Appendix E



Stantec Consulting Ltd. 100-140 Ouellette Place, Windsor ON N8X 1L9

October 29, 2018 File: 165620102.211

Attention: Mr. Andrew Plancke

Director of Municipal Services

Town of Kingsville 2021 Division Road North Kingsville, Ontario, N9Y 2Y9

Dear Andrew,

Reference: Cronos Growing Company Inc.

Proposed 13.8 Acre Greenhouse Development

575 Road 3 East - Water Availability

We have examined the "Application for Greenhouse Water Supply/Connection" submitted by Mr. George Dekker of Cronos Growing Company Inc. (CGC) with regards to water availability, flow control and onsite storage in support of a proposed greenhouse development and report below.

CGC's application seeks the Town of Kingsville's (Town) approval to use municipal water to service a proposed 13.8-acre cannabis greenhouse development at Municipal No. 575 Road 3 East located immediately west of Graham Sideroad as shown in attached Figure-1.

The proposed devlopment represents Phase 1 of an overall 4-phase plan to expand to an ultimate 54 acres. Since both water delivery and water treatment capacity cannot be reserved for future expansions or developments; considerations of future phases (if contemplated) are not included in this assessment. Future phases (when contemplated) would require CGC to submit a new application at time of expansion with no assurances that additional water delivery and/or treatment capacity will be available.

Per Figure 1, the proposed first phase of the greenhouse development is to be situated on land designated as Municipal No. 575 Road 3 East with Roll No. 371-1350-000-03100 owned by 2623991 Ontario Ltd. operating as CGC.

Background

The proposed site is comprised of vacant, unserviced agricultural farm land bordered by the existing 150mm dia. municipal watermain along Road 3 East.

Evaluation

Per CGC's application and revisions/correspondence thereto, the proposed 13.8-acre greenhouse operation is to be used to grow cannabis having a projected maximum water consumption rate of up to 0.43 lmp. gallons per plant per day (Igpppd) at a projected plant density of up to 14,000 plants per acre (ppa). This arrangement would result in a projected maximum day water demand of approximately 6,000 lgal per acre per day (Igpapd) and a projected total maximum day water demand of approximately 82,800 lmperial gallons per day (Igpd).

To support the above projected total maximum daily water demand will require the municipal water distribution system to be capable of delivering water at a regulated uniform rate of 58 lgpm over a 24-hour period to an on-site fresh-water storage reservoir system having a minimum working capacity of approximately 69,000 Imperial gallons (Igal).

In accordance with Town policies and bylaws controlling greenhouse operations, expansions and developments, the municipal water supply to the entire greenhouse development/operation shall be regulated



October 29, 2018 Mr. Andrew Plancke Director of Municipal Services Page 2 of 4

Reference: Cronos Growing Company Inc.

Proposed 13.8 Acre Greenhouse Development

575 Road 3 East - Water Availability

using an automatic water flow control system (WFCS) together with a properly sized onsite fresh water reservoir system.

Further, greenhouse operations are not to be spread out over multiple land parcels nor are land parcels to have multiple water service connections nor can the municipal water supply be redistributed across property lines by their respective land owners. The above policy does not apply to this initial development; however, it may apply to future expansions.

Note that this assessment purposely ignores the benefit of any supplemental water that is or could be provided by on-site wells and/or recycling initiatives due to reliability of supply issues. A mechanical breakdown, loss of water quality or quantity from onsite wells or bacteriological contamination from recycling leach water would require the municipal water system to be available as backup and capable of supplying the total projected water demand.

Water Availability

Water Treatment Capacity

A total treatment capacity of 82,800 lgpd will be required from the Union Water Supply System (UWSS) as a condition of supporting the proposed 13.8-acre Phase 1 greenhouse development.

An application for sufficient water treatment plant capacity to support the proposed development has been submitted to the UWSS by the Town and is currently under consideration. Final review and approval is on hold pending the submission and approval of this Engineer's report.

Water Delivery Capacity

Based on preliminary site plan drawings prepared by NJ Peralta Engineering Ltd. (Peralta) dated October 1, 2018, the proposed greenhouse development would draw water from the existing 600mm dia. Union trunk watermain running along Road 2 East using a new 300mmm dia. fire-main routed along a proposed north-south easement from Road 2 East near Kratz Sideroad.

With the aid of the UWSS hydraulic computer model using existing and future residential population projections, the existing 600mm dia. Union trunk watermain has sufficient unreserved capacity to deliver the proposed 58 Igpm peak flow rate to support Phase 1 of the greenhouse development without having a significant impact on the remainder of the water distribution system.

Further, with the aid of the UWSS hydraulic computer model, it was observed that there would be a notable benefit to the water distribution system if the proposed 300mm dia. fire-main were looped with the existing 150mmm dia. municipal watermain running along Road 3 East. It is our suggestion that this alternative routing be explored further with consideration towards developing a new municipal right-of-way from Road 2 East to Road 3 East under the site plan control process.

Water Service Connection

Per CGC's application and preliminary site plans prepared by Peralta dated October 1, 2018, it is our opinion that the proposed 1,300-meter-long new 300mm dia. fire-main and 150mm dia. water service connection off the existing 600mm dia. Union trunk watermain along Road 2 East would be sufficient to deliver the projected regulated flow rate of 58 Igpm to the Phase 1 development without experiencing a significant loss in pressure at the new greenhouse structure and adequately service the development.

It is also our opinion that the above noted proposed new 300mm dia. fire-main would also be capable of servicing future expansions (all things being equal) without experiencing a significant loss in pressure at the existing greenhouse structures.



October 29, 2018 Mr. Andrew Plancke Director of Municipal Services Page 3 of 4

Reference: Cronos Growing Company Inc.

Proposed 13.8 Acre Greenhouse Development

575 Road 3 East - Water Availability

In all cases, it will be CGC's responsibility to ensure that the design of the proposed fire-main and water service connection piping is carried out in conjunction with the design of the new WFCS to ensure proper operation can be achieved during both present and future scenarios to prevent a shortage of water to the greenhouse.

Fire Protection

Specific requirements for fire protection <u>have not</u> been assessed in this report. Fire protection requirements are under the jurisdiction of the Kingsville Building Department and its Chief Building Official (CBO). Consideration of any fire protection schemes using a fire-main concept would require a significantly larger municipal water supply and water service connection than that required to supply only the domestic & irrigational demands of the greenhouse operation.

With the aid of the UWSS hydraulic computer model, it was observed that the existing 600mm dia. Union trunk watermain along Road 2 East where it would connect to the proposed 300mm dia. fire-main has sufficient capacity to convey fire flows in excess of 2,000 Igpm while maintaining the required min. 20 psi residual pressure benchmark in the remainder of the water distribution system during maximum day flow conditions.

Further, with the aid of the UWSS hydraulic computer model, it was also observed that the proposed 300mm dia. fire-main would also have sufficient capacity to convey fire flows in excess of the min. 2,000 lgpm everywhere along its north-south routing while maintaining the required min. 20 psi residual pressure benchmark in the remainder of the water distribution system during maximum day flow conditions. Obtaining this fire flow rate would require the use of multiple hydrants strategically located along the proposed fire-main.

Hence, the above water distribution system performance will need to be acknowledged when considering fire protection strategies and alternatives should fire protection be a requirement of the development and the CBO currently or in the future.

Recommendations

Based on the above considerations, it is our recommendation that:

"CGC be granted access to the municipal water distribution system on the existing 600mm dia. Union trunk watermain along Road 2 East to service the proposed 13.8-acre Phase 1 greenhouse development at 575 Road 3 East; and that granting of water treatment and water delivery capacity be contingent on all the following conditions":

- 1. That CGC receive written approval from the UWSS for 82,800 lgpd of water treatment capacity, all to the satisfaction of the Town.
- 2. That CGC receive written approval from the Town for 82,800 lgpd of water delivery capacity.
- 3. That CGC execute an indemnity agreement with the Town with respect to "understanding of water availability" and "limits of liability" for the proposed 13.8-acre greenhouse development.
- 4. That CGC provide and implement a WFCS that will regulate total water inflow into the proposed greenhouse development at one common location at a rate not exceeding 58 Igpm to limit total water delivery volume to the proposed total treatment capacity allocation of 82,800 Igpd over a 24-hour period; all to the satisfaction and technical requirements of the Town.



October 29, 2018 Mr. Andrew Plancke **Director of Municipal Services** Page 4 of 4

Reference: **Cronos Growing Company Inc.**

Proposed 13.8 Acre Greenhouse Development

575 Road 3 East - Water Availability

- 5. That CGC assess the requirements and size of their proposed new fire-main / water service connection supplying the proposed development at the time of its design in conjunction with the requirements of their new WFCS in coordination with each other to ensure proper operation as applicable; all to the satisfaction of the Town.
- 6. That CGC implements and maintains an onsite fresh-water storage reservoir system having a minimum total working capacity of 69,000 Igal or greater to service the proposed 13.8-acre Phase 1 development only and that additional working capacity will be required to service future expansions; all to the satisfaction and technical requirements of the Town.
- 7. That the Town and its Agents retain the right to enter onto private property to ensure that all the above conditions have been complied with.
- 8. Should CGC be granted access to the municipal water system to support the development irrespective of size, while abiding by all of the conditions imposed above; then CGC shall be:
 - a. Given a time limit of 6 months to obtain a building permit from the Town for the proposed development corresponding to the size approved herein from the date of municipal council and/or administration approval or the approval for treatment capacity from the UWSS and delivery capacity from the Town shall lapse:
 - b. Given a time limit of 12 months to use the availed treatment & delivery capacity from the date of issuance of a municipal building permit (subject to condition 1 above) or the approval for treatment capacity from the UWSS and delivery capacity from the Town shall lapse
 - c. Advised that approval is issued for the applicant & property designated in the application and shall not be transferable to another property or to another applicant without the express written consent of the Town and the UWSS.

Please contact me directly should you have any questions or concerns or require additional information.

Sincerely yours,

Stantec Consulting Ltd

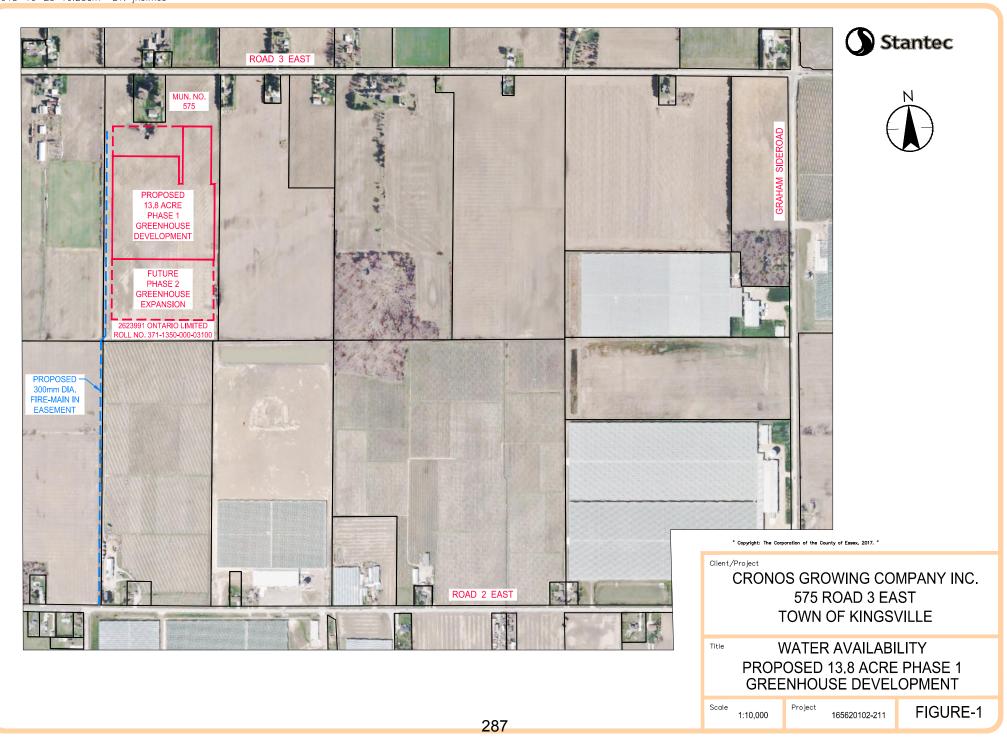
Tony Berardi, P.Eng.

Principal & Sector Leader, Water

Phone: (519) 966-2250 x255

Fax: (519) 966-5523 Cell: (519) 551-3891 tony.berardi@stantec.com Attachment: Figure 1

c. Peter Valore - Chief Building Official - Kingsville Robert Brown - Manager of Planning & Development - Kingsville Rodney Bouchard – General Manager - Union Water Supply System Heide Mikkelsen, P.Eng. – Principal - NJ Peralta Engineering Ltd. George Dekker - Project Manager - Boem Berry Farms Inc. Katrina Brcic, MSc, BURPI - Town Planner - Kingsville



Essex Region Conservation

the place for life

planning@erca.org P.519.776.5209 F.519.776.8688 360 Fairview Avenue West Suite 311, Essex, ON N8M 1Y6

September 20, 2018

Mr. Robert Brown, Manager of Planning Services Planning & Development Services Department The Corporation of the Town of Kingsville 2021 Division Road North Kingsville ON N9Y 2Y9

Dear Mr. Brown:

RE: Application for Site Plan Control SPA-13-18 ROAD 3 E & 609 Road 3 E ARN 371135000003100, 371135000003190; PIN: 751690173, 751690160 Applicant: 2623991 Ontario Ltd.

The following is provided for your information and consideration as a result of our review of Application for Site Plan Control SPA-13-18. From the circulation we understand that the applicant is proposing to develop the above noted lands for a medical marihuana greenhouse operation. This facility will be undertaken in phases and will consist of a greenhouse, warehouse, bunkhouse, stormwater management facilities, and parking areas.

DELEGATED RESPONSIBILITY TO REPRESENT PROVINCIAL INTEREST IN NATURAL HAZARDS, (PPS, 2014) AND REGULATORY RESPONSIBILITIES OF THE CONSERVATION AUTHORITIES ACT

The following comments reflect our role as representing the provincial interest in natural hazards encompassed by Section 3.1 of the Provincial Policy Statement of the Planning Act as well as our regulatory role as defined by Section 28 of the Conservation Authorities Act.

The southern limit of the above noted lands is subject to our Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation under the Conservation Authorities Act, (Ontario Regulation No. 158/06). This area of the property falls within the regulated area of the Jasperson Drain. The property owner will be required to obtain a Permit from the Essex Region Conservation Authority prior to any construction or site alteration or other activities affected by the regulations.

We would advise the owners to submit an Application for Permit to this office along with the associated base cost fee of \$1750.00 (for the first hectare of the development), plus the additional \$400.00 per hectare for the remainder of the development. Submission of the application should be directed to the attention of Ms. Lisa Pavan, Administrative Associate: Watershed Management Services (<u>lpavan@erca.org</u>) or by telephone at 519-776-5209 ext. 346. An Application for Permit and our current fee schedule is available on our website www.erca.org.

Essex Region

Conservation Authority

sustaining the place for life

Mr. Brown September 20, 2018

WATERSHED BASED RESOURCE MANAGEMENT AGENCY

The following comments are provided in an advisory capacity as a public commenting body on matters related to watershed management.

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 therefore request inclusion of the following conditions in the Site Plan Control 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.

The subject property is located within a significant groundwater recharge area (SGRA). Section 2.2.1 of the PPS 2014 states that: "Planning authorities shall protect, improve or restore the quality and quantity of water by: d) maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas and surface water features including shoreline areas" and "e) implementing necessary restrictions on development and site alteration to:

- 1. protect all municipal drinking water supplies and designated vulnerable areas; and
- 2. protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions".

In addition to the policies of the PPS 2014, the County of Essex Official Plan identifies Significant Groundwater Recharge Areas (SGRA) on Schedule C5. Section 2.5.2 b) of the County of Essex Official Plan states that: "Development and site alteration that may be a significant threat will only be permitted within an HVA or SGRA where it has been demonstrated by way of the preparation of a groundwater impact assessment that there will be no negative impact on the HVA or SGRA". The Essex Chatham Kent Groundwater Study was completed in 2004 by Dillon Consulting Ltd and Golder Associates Ltd, which delineated the highly vulnerable aguifers and significant recharge areas and provides background information for any further water budget or hydrologic study requirements.

It is recommended that the Municipality ensuring that these policies are addressed by the subject application and require that the



Mr. Brown September 20, 2018

applicant complete a groundwater impact assessment to the satisfaction of the Municipality.

We have concerns that the lot coverage and required grading works may pose a negative impact to the significant groundwater recharge area. The adjacent natural heritage feature may also have an established hydrogeological link to this significant groundwater recharge area that is as of yet undefined. Therefore, we recommend that a groundwater impact assessment (including a water budget) be considered as a study component in support of this application. Our office does not provide a service for the review of groundwater impact assessments and a consultant may be required by the Municipality to appropriately scope the study requirements for this project.

PLANNING ADVISORY SERVICE TO MUNICIPALITIES - NATURAL HERITAGE POLICIES OF THE PPS. 2014

The following comments are provided from our perspective as a service provider to the Municipality on matters related to natural heritage and natural heritage systems. The comments in this section do not necessarily represent the provincial position and are advisory in nature for the consideration of the Municipality as the planning authority.

The subject property is adjacent to (within 120 metres of) a natural heritage feature that is identified as a significant woodland and/or significant wildlife habitat under the Provincial Policy Statement (PPS, 2014).

Section 2.1.8 of the PPS 2014 states – "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 function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions." The required demonstration of no negative impact, in accordance with the relevant PPS policies outlined above, is most effectively accomplished through the completion of an Environmental Impact Assessment (EIA). We strongly recommended that prior to initiating an EIA that the applicant contacts our office to determine the scale and scope of the analysis.

We therefore ask that the following condition be also included in the Site Plan Control Agreement to satisfy Section 2.1.8 of the PPS:

The owner's consulting ecologist complete an Environmental Impact Assessment (EIA) to the satisfaction of the Planning Authority, in consultation with the Essex Region Conservation Authority.



Mr. Brown September 20, 2018

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

Corinne Chiasson Resource Planner

/cor

Essex Region Conservation

the place for life



planning@erca.org P.519.776.5209 F.519.776.8688 360 Fairview Avenue West Suite 311, Essex, ON N8M 1Y6

Environment Impact Assessment (EIA) Review

DATE: November 08, 2018

ERCA File Number: EIA-9-18 **Municipality:** Kingsville

Property: CON 2 EASTERN DIVISION, LOT 4, ROAD 3 E & 609 Road 3 E, ARN: 371135000003100,

371135000003190, PIN: 751690173, 751690160

Significance: Significant Woodland, Significant Wildlife Habitat

Proposal: Cronos Greenhouse Development

Recommendation: Approve subject to full implementation of all Environmental Impact

Assessment recommendations.

Terms of Reference:

• Adjacent lands to any significant natural heritage feature(s) in accordance with Policy 2.1.8 of the PPS.

The EIA shall include an assessment as to how the proposed development will not have a negative impact on the adjacent Significant Woodland and Significant Wildlife Habitat in accordance with Policy 2.1.8 of the PPS. The EIA should focus on the potential impacts that any proposed stormwater management system may have on the hydrologic regime maintaining the adjacent woodland.

Please refer to the above referenced ERCA File Number when corresponding on this file.

Review and Comment

Please refer to the ERCA EIA Review (EIA-05-16) attached, issued on April 19, 2016, for greenhouse development by Boem Berry Farms on an adjacent property. The subject application (Cronos Greenhouse Development) is currently being proposed by the same proponent and potentially affects the identical natural area as the adjacent Boem Berrry Farms development. Therefore, the previous EIA (EIA-05-16), including all of the same mitigation recommendations contained within, may be applied to the current application.

Full implementation of all recommendations within the EIA should result in no negative impacts to the adjacent natural heritage feature as well as the aquatic environment/drainage system. No further demonstration of no negative impact is required.



November 08, 2018

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I would be pleased to discuss this review further at your convenience. If you should have any questions, or require any additional information please do not hesitate to contact me.

Yours Truly,

Dan Lebedyk

/dl







360 Fairview Avenue West, Suite 311, Essex, ON, Canada, N8M IY6 | P 519-776-5209 | F 519-776-8688 | erca.org | ourgreenlegacy.org

Partner Municipalities

Environment Impact Assessment (EIA) Review

Town of Amherstburg

Town of Essex

Town of Kingsville

Town of Lakeshore

Town of Lasalle

Municipality of Learnington

Township of Pelee

Town of Tecumseh

City of Windsor

ERCA File Number: EIA-05-16

Municipality: Kingsville

DATE: April, 27 2016

Property: 672 ROAD 2 E, ARN: 371135000004600, PIN:751690091

Significance: Significant Woodland, Significant Wildlife Habitat, Species at Risk

Proposal: Boem Berry Farms

Recommendation: Approved subject to full implementation of all

Environmental Impact Assessment recommendations.

Terms of Reference: The following Terms of Reference was established for the Environmental Impact Assessment (EIA) as a result of e-mail and telephone communications exchanged on April 19, 2016. The EIA shall include an assessment as to how the proposed development will not have a negative impact on the adjacent Significant Woodland and Significant Wildlife Habitat in accordance with Policy 2.1.8 of the PPS. The EIA should focus on the potential impacts that the proposed stormwater management system may have on the hydrologic regime maintaining the adjacent woodland. In this case, the EIA should include information on topography, soils and drainage which support the premise that no change in the hydrology supporting the adjacent woodland will take place as a result of the construction of the stormwater management facility.

Review and Comment

a) Was the EIA carried out by qualified professionals in the field of ecology, terrestrial and/or aquatic biology, environmental planning, and/or other relevant sciences?

Yes, the EIA was carried out by BioLogic, Aquatic and Terrestrial Ecosystem Planners.

b) Did the EIA adequately identify and comment on existing significant natural features, linkages, and ecological functions of the site?

Yes, the EIA adequately commented on the existing natural features which consists of an adjacent forested feature in the northeastern corner of the subject property. The EIA included an evaluation of the vegetation communities in accordance with Ecological Land Classification (ELC) protocols, as well as an assessment of the physical environment including soils, drainage and topography. The forested feature is composed of a Dry-Fresh Sugar Maple Deciduous Forest (FOD5-I) vegetation community on very fresh (MR=3) sandy soils. Drainage and slope is away from the forest in a north to south direction.







c) Did the EIA explain the nature of the proposed development adequately enough to identify and assess any potential impacts of the proposed development plan on the existing significant natural feature(s)?

Yes, the EIA included a description of the proposed development including detailed design drawings. The EIA also included an assessment of impacts consistent with the established Terms of Reference above, including a description of the physical environment influencing the existing natural feature. Adjacent lands impacts are confined to the proposal to build greenhouses and associated stormwater management facilities. The stormwater management facility proposal was assessed with respect to its potential impacts to the hydrological regime which supports the adjacent forested natural feature.

d) Did the EIA recommend and discuss actions which would eliminate, mitigate, or compensate (when appropriate) for any/all expected impacts consistent with accepted ecological, planning, engineering and resource management techniques, practices and principles?

The EIA has concluded that due to the well drained sandy soils as well as the physical location of the adjacent forested natural feature upslope of the subject property, the adjacent woodland is an upland woodland. Surface flows from the subject lands are directed away from the feature and as a result, changes on site will not impact the woodland, provided storm runoff is directed away from the woods.

The EIA has also included appropriate mitigation measures which deal with sedimentation issues, including the installation of sediment and erosion control fencing.

e) Did the EIA process include agency consultation in order to obtain input, and did the EIA explain how agency concerns have been addressed?

Yes, the EIA included agency consultation in order to establish the Terms of Reference. The EIA has adequately addressed all items within the Terms of Reference.

f) Are the recommendations in the EIA for the preferred proposed development able to satisfy all applicable legislation?

Yes, has adequately demonstrated no negative impact on the adjacent significant natural heritage feature. Full implementation of all recommendations within the EIA should result in no negative impacts to the adjacent natural heritage feature as well as the aquatic environment/drainage system. No further demonstration of no negative impact is required.



g) What is the final recommendation on the current proposal based on the review of the EIA?

Approve, subject to full implementation of all EIA recommendations.

I would be pleased to discuss this review further at your convenience. If you should have any questions, or require any additional information please do not hesitate to contact me.

Yours Truly,

Dan Lebedyk

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2021 Division Road North Kingsville, Ontario N9Y 2Y9 (519) 733-2305 www.kingsville.ca kingsvilleworks@kingsville.ca

Date: November 16, 2018

To: Mayor and Council

Author: Robert Brown, H. Ba, MCIP, RPP

Manager, Planning Services

RE: Committee of Adjustment & Planning Advisory Committee

Composition

Report No.: PDS 2018-059

AIM

To provide Council with information on possible restructuring of both the Committee of Adjustment and Planning Advisory Committee

BACKGROUND

After amalgamation, Planning Advisory Committees (PAC) across Ontario Towns and Municipalities declined significantly in numbers. Today most Essex County communities do not have PACs. PACs in general were intended to provide a citizen based direction or opinion to Council on significant planning matters. The intended purpose of Kingsville's PAC was to provide a more specific and focused public meeting forum for addressing development proposals which were occupying a significant amount of time at regular Council meetings. This was in turn impacting on the balance of the agenda.

Committees of Adjustments have played a much larger role in the planning process for a much longer time. Their membership composition according to the Planning Act can be made up of 100% Council members or 100% lay people. Typically based on discussion at recent OACA events most Committees in communities similar in size to Kingsville consist of lay people only.

DISCUSSION

Planning Advisory Committee (PAC)

Council has likely noticed that the volume of applications that have been presented to PAC has decreased over the last couple of years. Currently the PAC Terms of Reference

outlines that the use of PAC is up to the discretion of the Manager of Planning Services. The need for an application to be presented to PAC, I believe, is related to how an application is processed. When the Committee was first established applications often moved forward with several requirements outstanding or were made conditions of approval. As local and provincial policy has changed and as the public has looked for greater clarity and certainty prior to a final decision being made, the majority of applications now require a significantly larger percentage of the background work to be completed, reviewed and signed off on. This includes storm water management, traffic impact and improvement, environmental reviews, lighting details, landscaping, odour control, servicing capacity etc. This means that staffs goal for any given application is to provide Council with a much more complete picture prior to the application moving forward for consideration.

In addition applications that have been considered significant in nature have been directed to have an open house prior to any formal meeting with either PAC or Council, This format is intended to provide a more informal, interactive, informative exercise that leads the applicant to develop a much better final product with public ownership. When this process works it produces positive results and provides Council with less negative feedback at the official public meeting. If this process does not work PAC is not the solution, the applicant returning to the drawing board is.

The PAC membership is not at fault for the outcome of a planning application. This is up to individual applicants to provide all of the necessary information and background work to allow Council to make an informed decision without multiple sources of direction.

An additional factor to take into consideration in moving forward is the current membership structure. PAC membership should be limited to lay people only. There is a very strong potential for conflict of interest to occur if Council members continue to serve as PAC members. The principle focus in the terms of reference for PAC outlines that PAC is to provide direction to Council. How does PAC provide unbiased direction to Council if two of its members are Council members? How does the public differentiate between lobbying their Council member(s) and speaking with PAC? Unlike many other committees of Council there must be a clear distinction. At present the optics are blurred. Additional public membership provides a structure that creates a better interaction with ratepayers.

Committee of Adjustment

Similar to PAC there is also potential for conflict of interest with the Committee of Adjustment membership i.e. having two Council members, one of who is the chairperson. This was highlighted with the reconsideration of a consent decision by the Committee in 2015. Council can direct the Committee to reconsider a decision and this again has unclear optics and could put those members in an uncomfortable position.

In May and again in October of 2018 both the Town Planner and Manager of Planning Services attended OACA events. OACA members in attendance were unofficially polled on their Committee membership and most communities of a size similar to Kingsville did not have Council members as part of their Committee of Adjustment.

Similar to PAC the current make-up of the Committee may not have been a concern at the start. However, the importance of a clear separation between Council and other approval authorities has become more critical in order to avoid even the perception of a conflict of interest. Lastly, it has also been observed that ratepayers do not necessarily make the distinction between Council member and Committee member.

LINK TO STRATEGIC PLAN

Effectively manage corporate resources and maximize performance in day-to-day operations.

FINANCIAL CONSIDERATIONS

If PAC were discontinued, there would be some limited reduction in the total Committee honorarium required however, there would be need for some additional training for the restructured Committee of Adjustment that would likely offset that initial savings the first year.

CONSULTATIONS

CAO and Director of Corporate Services

RECOMMENDATION

It is recommended that Council:

Discontinue the Planning Advisory Committee for 2019;

Modified the membership of the Committee of Adjustment to include lay people only, and

Consider utilizing any interested PAC members to replace open positions on the Committee of Adjustment.

Robert Brown

Robert Brown, H. Ba, MCIP, RPP Manager, Planning Services

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer



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Date: October 1, 2018

To: Mayor and Council

Author: Jennifer Astrologo, Director of Corporate Services

RE: 2014 – 2018 Committee Review Report

Report No.: 2018-CS-023

AIM

To provide Council with a review of the committees that operated in the Town of Kingsville during the 2014-2018 Council Term so that Council can make a decision as to which committees ought to be reestablished for the 2018-2022 Council Term and whether to continue to pay committee members a stipend for attendance at meetings.

BACKGROUND

Section 8 of the *Municipal Act, 2001*, (the "*Act*") provides that the powers of a municipality "shall be interpreted broadly so as to confer broad authority on the municipality to enable the municipality to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues." Section 9 of the *Act* reinforces this power by conferring on a municipality, for the purposes of exercising its authority, the capacity, rights, powers and privileges of a natural person.

A municipality's sphere of jurisdiction extends to matters ranging from the governance structure of the municipality down to the health, safety and well-being of persons. Moreover, the *Act* sets out specific municipal powers in a number of areas including: highways, waste management, drainage, culture, parks, recreation and heritage, and animals.

Given the breadth of responsibilities provided for in the *Act*, and those downloaded by more senior levels of government, municipalities need a mechanism to address the needs of their communities. During the 2014-2018 Council Term, council and community members were appointed to 30 different committees and local boards ("Committees"). Many of the Committees operated in an advisory capacity providing recommendations, advice and information to Council on matters within the particular Committee's mandate.

The Committees are a mix of local boards, advisory and ad hoc committees, quasi-judicial boards and external boards/committees. For the purposes of this report, these terms are defined below:

- Local Boards are generally established by legislation and Council appoints
 representatives to sit as members of that board. The board has the authority to
 address their responsibilities as determined under the relevant legislation (i.e.
 Police Services Board, Essex County Library Board).
- Advisory and Ad-hoc Committees provide advice and recommendations to Council as requested on areas within their mandates with no authority for decisionmaking or independent actions (i.e. Parks, Recreation, Arts and Culture Committee, Heritage Advisory Committee). An ad-hoc committee is often established for a specific purpose, which does not usually span the entire term of Council, and is dissolved once that objective is achieved (i.e. Cottam Revitalization Committee).
- Quasi-Judicial Boards are Statutory Committees that have a quasi-judicial function. These committees are responsible for conducting hearings or determining appeals with respect to matters that pertain to their governing legislation (i.e. Committee of Adjustment, Court of Revision).
- External Committees/Boards are those boards and committees which operate
 external to the Town of Kingsville and have the authority to address their
 responsibilities. These boards/committees may be regulated by a higher level of
 government (i.e. Kingsville Historical Park Inc., Pelee Island Transportation
 Services Advisory Committee).

Regardless of which category a Committee falls under, there may be legislation mandating the establishment of the Committee (i.e. Court of Revision, Accessibility Advisory) or permitting its creation (i.e. Heritage Advisory Committee). In those situations, the Committee functions as specified in that piece of legislation.

DISCUSSION

The Town is committed to community engagement through participation of volunteers and council appointees to Committees. In addition to engaging residents, Committees function to assist the Town to meet the needs of its community. As mentioned above, Council made appointments to 30 Committees during the 2014-2018 Council Term. Appendix A sets out the various Committees to which appointments were made during the 2014-2018 Council Term.

Remuneration

Table 1 – Committee Remuneration, breaks down the amounts paid to Committee members, exclusive of applicable statutory payments (Canada Pension Plan and Employer Health Tax), in the 2017 budget year and to the end of September in 2018. The totals listed in Table 1 only account for the meeting attendance stipend paid to members and does not include the cost of the administrative support personnel assigned to the

committee, nor does it include any amounts expended for committee member training or the funds associated with an event that the Committee may host/attend.

Table 1 - Committee Remuneration

	2017 Budget Year	2018 Budget Year (to September 30, 2018)
Volunteer Members	\$40,371.20	\$28,753.40
Council Members	\$37,311.68	\$28,008.76
Total Spent	\$77,682.88	\$56,762.16

With the exception of the Committee of Adjustment/FenceViewers/Property Standards ("Committee of Adjustment) and the Police Services Board, members of paid Committees receive a stipend of \$100 per meeting, regardless of the length of the meeting. Members of the Committee of Adjustment and Police Services Board receive a pre-determined amount for their appointment to those Committees regardless of the number of meetings called. Of the 30 Committees to which appointments were made, the Town paid a meeting stipend to the members of 23 of those Committees (Please refer to Appendix A for more detailed information).

In comparison to our counterparts across the County of Essex, the Town of Kingsville appears to be the only municipality that pays the vast majority of its members. Based on information received from the Clerks of the surrounding municipalities, the following Committees are paid in their municipalities: Committee of Adjustment, Police Services Board, and Property Standards. As for the Accessibility Committees, members are paid in Amherstburg and Lakeshore, but not in Leamington, Tecumseh, or Chatham-Kent.

The Town spends a considerable amount of money on its volunteer committees, which funds can be directed to other municipal programs and/or services. Based on this fact and the information received from the surrounding municipalities, Administration recommends the following with respect to continuing the practice of committee member remuneration¹:

- That members selected to serve on the following Committees are recognized as volunteers and are provided with some form of non-monetary recognition from the Town in appreciation for their services:
 - o **55+**
 - Drainage Advisory
 - Fantasy of Lights
 - Heritage Advisory
 - Migration Festival
 - Parks, Recreation, Arts and Culture ("PRAC")
- That remuneration be maintained for the following statutorily mandated Committees:
 - Accessibility Advisory
 - o Committee of Adjustment/Fenceviewers/Property Standards

¹ This recommendation assumes that there is no change to the number of Committees to which Council will make appointments.

- Compliance Audit Committee
- Planning Advisory Committee
- Police Services Board
- That remuneration be maintained for the following Committees in which there is only a Council appointee:
 - Business Improvement Association (BIA)
 - Erie Shores Community Transit Committee
 - Essex Region Conservation Authority
 - Joint Management Board of the Union Water Supply System
 - Kingsville Historical Park Inc.
 - Kingsville Leamington Animal Control Committee
 - o Marina Committee
 - Migration Community Hall Board of Directors
 - Pelee Island Transportation Services Advisory Committee
 - Personnel Committee
 - Port of Kingsville Co-Tenancy Management Committee
 - Striking Committee

If Council accepts Administration's recommendation, it will have to determine whether the Council appointee to the unpaid Committees remains unpaid or whether Council members will receive a stipend. There are obviously benefits and drawbacks to this decision. If Council members are expected to sit on the various Committees listed in Appendix A, then his/her appointment is not voluntary and therefore a modest stipend can be justified. Moreover, paying Council appointees will likely lead to a fair distribution of "committee work" amongst Council Members. The drawback to this approach is the potential perception of unfairness between the volunteer members on the Committee and their Council counterparts.

Table 2 – Committee Remuneration Savings, outlines the amounts the Town could redirect to other municipal programs or services if the recommendations from Administration are accepted by Council. Although no recommendation has been offered regarding the stipend paid to Council appointees, Table 2 includes the savings that would be realized from eliminating the stipend paid to Council for Council's information and consideration. Although Council compensation is not a subject of this report, Council may want to consider conducting a compensation review whereby the amounts paid to Council members is adjusted to reflect the appointment to Committees.

Table 2 - Committee Remuneration Savings

	2017 Budget Year	2018 Budget Year (to September 30, 2018)
Volunteer Members	\$27,200	\$19,300
Council Members	\$10,000	\$6,300
Total Saved	\$37,200	\$25,600

Committee Function

Many of the Town-established Committees are formed to assist the Town in meeting a need in the community. These Committees provide advice and recommendations to Council to enable it to make decisions for the betterment of the community. Attached at Appendix C are the Terms of Reference for the various Committees in operation during the 2014-2018 Council Term.

During the summer, a survey was prepared and distributed to all Town Committees. The survey contained a number of questions asking its members and the staff support person a series of questions to assess: (a) the committee composition, (b) the understanding of the functions of the individuals appointed to the Committee, and (c) its productivity.

Appendix B lists the number of surveys returned by the members of those Committees. In some instances, not enough surveys from the members were completed to draw any sort of conclusion about the Committee's functioning or the members' understanding of their roles and responsibilities. In other instances, the views and opinions of the members as compared to the administrative support personnel was markedly different. One can conclude from such results that either the persons appointed/assigned to the Committee were not entirely forthcoming in their responses, or that those persons didn't have a clear understanding of a) the Committee's purpose or function, or b) the expectation of the roles and responsibilities of the members and administrative support personnel.

The issue regarding the discrepancy in the views and opinions described above, may stem from the fact that that the roles and responsibilities of committee members and the administrative support have not been clearly conveyed. The Town does not have a policy document or procedure manual to provide guidance on the function and operation as it relates specifically to Committees.

Committee members are expected to be prepared for and attend meetings, abide by the Town's policies and procedures, undertake any work that may be necessary between meeting (i.e. research, special projects), and assist with and participate in the events hosted by their Committee. Likewise, the staff support (or liaison) is expected to prepare and provide the agenda to committee members in accordance with the Procedure By-law, provide guidance and advice to the members, prepare the necessary Council reports, and ensure that any recommendations from the Committee do not contravene the Town's budget, its by-laws or its policies and procedures.

Overall, members and the staff support felt that the number of Committee members for each Committee was adequate to achieve that Committee's objective. Both the members of the Committee of Adjustment and Heritage Advisory Committee suggested that more learning opportunities be provided to members. With respect to PRAC and the Committees that report to it², it is suggested that if Council wishes to continue these Committees that the meeting frequency in the Terms of Reference be adjusted to require a minimum of 4 meetings annually and as needed thereafter. This would provide a minimum meeting expectation to the Committees but give them the flexibility to meet as often or as little as may be necessary to achieve their mandate. This concept could be extended to

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² Communities in Bloom, Migration Festival, 55+ Committee, and Fantasy of Lights

other Committees, such as the Heritage Advisory Committee or the Tourism and Economic Development Committee.

With respect to the Planning Advisory Committee and Committee of Adjustment, the Manager of Planning has a separate report to discuss their function and composition in more detail and obtain Council's direction in this regard.

With respect to the Drainage Committee, it is worth noting that *Drainage Act* provides a mechanism whereby landowners can initiate a procedure to obtain a solution to their drainage problems. Likewise, when drainage issues arise throughout the municipality, the Town can initiate the requisite statutory procedure to resolve that issue. The Terms of Reference state that the Committee is to provide recommendations regarding:

- steps that Council and/or Administration may take to reduce the impacts of agricultural drainage regulation on the Town's farmers either by changing internal procedures or lobbying other levels of government; and
- funding opportunities to reduce the costs associated with environmental aspects of major drainage works.

It does not appear that this Committee has entirely fulfilled its mandate. Accordingly, Administration recommends that Council allow the term of this Committee to expire and that it does not reconstitute this Committee for the start of the 2018-2022 Council Term. If a need for this Committee is demonstrated during the Term of Council, it can be formed at that time.

Based on the foregoing and regardless of whether Council chooses to maintain the current complement of advisory and ad hoc committees, Administration recommends that a conscious effort is made to clearly communicate the roles and responsibilities of all persons involved in a Committee. Communicating these expectations may prove to enhance the effectiveness and efficiency of the Committees at all levels.

LINK TO STRATEGIC PLAN

Effectively manage corporate resources and maximize performance in day-to-day operations.

FINANCIAL CONSIDERATIONS

In 2017, the Town paid \$77,682.88 in remuneration to its committee members. This amount does not include the Canada Pension Plan and Employer Health Tax remittances that the Town must also pay on top of those amounts. To September 30, 2018, the Town paid \$56,762.16 to its committee members.

These amounts are strictly for attendance at meetings, regardless of whether the meeting lasts 20 minutes or 2 hours, and does not include any additional amounts for training, conferences, or events. Further, these amounts do not consider the cost of the municipal staff that provides administrative support to that particular committee.

CONSULTATIONS

Town of Kingsville Committees

RECOMMENDATION

That Council maintain the remuneration payment for the following statutorily mandated Committees: Accessibility Advisory, Committee of Adjustment/Fenceviewers/Property Standards, Compliance Audit Committee, Planning Advisory Committee, and Police Services Board;

And That remuneration be maintained for the following Committees in which there is only a Council appointee (if these Committees will be reestablished for the 2018-2022 Council Term): Business Improvement Association (BIA), Erie Shores Community Transit Committee, Essex Region Conservation Authority, Joint Management Board of the Union Water Supply System, Kingsville Historical Park Inc., Kingsville Leamington Animal Control Committee, Marina Committee, Migration Community Hall Board of Directors, Pelee Island Transportation Services Advisory Committee, Personnel Committee, Port of Kingsville Co-Tenancy Management Committee, and Striking Committee;

And That Council discontinue the stipend paid to all other Committees and ensure that the volunteers and are provided with some form of non-monetary recognition from the Town in appreciation for their services;

And that Council provide direction to Administration regarding which Committees should be advertised for the upcoming Council Term;

And that Council provide direction to Administration with respect to amending the Terms of Reference for various advisory Committees, by mandating a minimum of 4 meetings per year without establishing a maximum number of meetings.

<u>Jennífer Astrologo</u>

Jennifer Astrologo, B.H.K. (hons), LL.B Director of Corporate Services/Clerk

<u>Peggy Van Mierlo-West</u>

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer

Appendix A

Committees and Remuneration

1 55+ Committee Yes Accessibility Advisory Committee Yes Business Improvement Association (BIA)* Yes Communities in Bloom No Committee of Adjustment/FenceViewers/Property Standards Yes (fixed amount) Standards Yes Coutan Revitalization Committee Yes Cottam Revitalization Committee No Court of Revision* No Drainage Advisory Committee Yes Not paid by Town El.L.K. Energy Inc. Board of Directors* Not paid by Town Yes (By ERCA) Fariasy of Lights Yes Essex Region Conservation Authority* Yes (By ERCA) Fariasy of Lights Yes Heritage Advisory Committee Yes Yes Yes Heritage Advisory Committee Yes Yes System* Stingsville Historical Park Inc.* Yes Kingsville Leamington Animal Control Committee* Yes Kingsville Tourism & Economic Development Committee Yes Migration Community Hall Board of Directors* Yes Migration Festival Yes Pelee Island Transportation Services Advisory Yes Pelee Island Transportation Services Advisory Yes Personnel Committee* Yes Personnel Committee* Yes Personnel Committee* Yes Pelanning Advisory Committee Yes Personnel Committee* Yes Pelanning Advisory Committee Yes Pelanning Advisory Committee Yes Pelanning Advisory Committee Yes Police Services Board Yes (fixed amount) Yes Striking Committee* Yes Police Services Board Yes (fixed amount) Yes Striking Committee* Yes Yes Striking Committee* Yes Yes Police Services Board Yes (fixed amount) Yes Striking Committee* Yes	No.	Committee Name	Remuneration
3 Business Improvement Association (BIA)* Yes 4 Communities in Bloom No 5 Committee of Adjustment/FenceViewers/Property Standards Yes (fixed amount) 6 Compliance Audit Committee Yes 7 Cottam Revitalization Committee No 8 Court of Revision* No 9 Drainage Advisory Committee Yes 10 E.L.K. Energy Inc. Board of Directors* Not paid by Town 11 Erie Shores Community Transit Committee* Yes 12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* Yes 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Leamington Animal Control Committee* Yes 19 Kingsville Tourism & Economic Development Committee Yes 20 Marina Committee* No 21 Mettawas Fundraising Committee No	1	55+ Committee	Yes
3 Business Improvement Association (BIA)* Yes 4 Communities in Bloom No 5 Committee of Adjustment/FenceViewers/Property Standards Yes (fixed amount) 6 Compliance Audit Committee Yes 7 Cottam Revitalization Committee No 8 Court of Revision* No 9 Drainage Advisory Committee Yes 10 E.L.K. Energy Inc. Board of Directors* Not paid by Town 11 Erie Shores Community Transit Committee* Yes 12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* Yes 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Leamington Animal Control Committee* Yes 19 Kingsville Tourism & Economic Development Committee Yes 20 Marina Committee* No 21 Mettawas Fundraising Committee No	2	Accessibility Advisory Committee	Yes
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8 Court of Revision* No 9 Drainage Advisory Committee Yes 10 E.L.K. Energy Inc. Board of Directors* Not paid by Town 11 Erie Shores Community Transit Committee* Yes 12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Leamington Animal Control Committee* Yes 19 Kingsville Tourism & Economic Development Committee 20 Marina Committee* No 21 Mettawas Fundraising Committee 22 Migration Community Hall Board of Directors* Yes 23 Migration Festival Yes 24 Parks, Recreation, Arts and Culture Committee (PRAC) Yes 25 Pelee Island Transportation Services Advisory Committee* 26 Personnel Committee* Yes 27 Planning Advisory Committee 28 Police Services Board Yes (fixed amount) 29 Port of Kingsville Co-Tenancy Management Committee*	6	Compliance Audit Committee	Yes
9Drainage Advisory CommitteeYes10E.L.K. Energy Inc. Board of Directors*Not paid by Town11Erie Shores Community Transit Committee*Yes12Essex Region Conservation Authority*Yes (By ERCA)13Fantasy of LightsYes14Fire Master Planning CommitteeYes15Heritage Advisory CommitteeYes16Joint Management Board of the Union Water Supply System*Yes17Kingsville Historical Park Inc.*Yes18Kingsville Leamington Animal Control Committee*Yes19Kingsville Tourism & Economic Development CommitteeYes20Marina Committee*No21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes	7	Cottam Revitalization Committee	No
10 E.L.K. Energy Inc. Board of Directors* Not paid by Town 11 Erie Shores Community Transit Committee* Yes 12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Leamington Animal Control Committee* Yes 19 Kingsville Tourism & Economic Development Committee Yes 20 Marina Committee* No 21 Mettawas Fundraising Committee No 22 Migration Community Hall Board of Directors* Yes 23 Migration Festival Yes 24 Parks, Recreation, Arts and Culture Committee (PRAC) Yes 25 Pelee Island Transportation Services Advisory Committee* 26 Personnel Committee* Yes 27 Planning Advisory Committee 28 Police Services Board Yes (fixed amount) 29 Port of Kingsville Co-Tenancy Management Committee*	8	Court of Revision*	No
11 Erie Shores Community Transit Committee* Yes 12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* Yes 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Leamington Animal Control Committee* Yes 19 Kingsville Tourism & Economic Development Committee Yes 20 Marina Committee* No 21 Mettawas Fundraising Committee No 22 Migration Community Hall Board of Directors* Yes 23 Migration Festival Yes 24 Parks, Recreation, Arts and Culture Committee (PRAC) Yes 25 Pelee Island Transportation Services Advisory Committee* Yes 26 Personnel Committee* Yes 27 Planning Advisory Committee Yes 28 Police Services Board Yes (fixed amount) 29 Port of Kingsville Co-Tenancy Management Committee*	9	Drainage Advisory Committee	Yes
11 Erie Shores Community Transit Committee* Yes 12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* Yes 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Leamington Animal Control Committee* Yes 19 Kingsville Tourism & Economic Development Committee Yes 20 Marina Committee* No 21 Mettawas Fundraising Committee No 22 Migration Community Hall Board of Directors* Yes 23 Migration Festival Yes 24 Parks, Recreation, Arts and Culture Committee (PRAC) Yes 25 Pelee Island Transportation Services Advisory Committee* Yes 26 Personnel Committee* Yes 27 Planning Advisory Committee Yes 28 Police Services Board Yes (fixed amount) 29 Port of Kingsville Co-Tenancy Management Committee*	10	E.L.K. Energy Inc. Board of Directors*	Not paid by Town
12 Essex Region Conservation Authority* Yes (By ERCA) 13 Fantasy of Lights Yes 14 Fire Master Planning Committee Yes 15 Heritage Advisory Committee Yes 16 Joint Management Board of the Union Water Supply System* Yes 17 Kingsville Historical Park Inc.* Yes 18 Kingsville Historical Park Inc.* Yes 19 Kingsville Leamington Animal Control Committee* Yes 20 Marina Committee* No 21 Mettawas Fundraising Committee No 22 Migration Community Hall Board of Directors* Yes 23 Migration Festival Yes 24 Parks, Recreation, Arts and Culture Committee (PRAC) Yes 25 Pelee Island Transportation Services Advisory Committee* Yes 26 Personnel Committee* Yes 27 Planning Advisory Committee Yes 28 Police Services Board Yes (fixed amount) 29 Port of Kingsville Co-Tenancy Management Committee* Yes	11		Yes
13Fantasy of LightsYes14Fire Master Planning CommitteeYes15Heritage Advisory CommitteeYes16Joint Management Board of the Union Water Supply System*Yes17Kingsville Historical Park Inc.*Yes18Kingsville Leamington Animal Control Committee*Yes19Kingsville Tourism & Economic Development CommitteeYes20Marina Committee*No21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes	12		Yes (By ERCA)
15 Heritage Advisory Committee 16 Joint Management Board of the Union Water Supply System* 17 Kingsville Historical Park Inc.* 18 Kingsville Leamington Animal Control Committee* 19 Kingsville Tourism & Economic Development Committee 20 Marina Committee* 20 Marina Committee* 21 Mettawas Fundraising Committee 22 Migration Community Hall Board of Directors* 23 Migration Festival 24 Parks, Recreation, Arts and Culture Committee (PRAC) 25 Pelee Island Transportation Services Advisory Committee* 26 Personnel Committee* 27 Planning Advisory Committee 28 Police Services Board 29 Port of Kingsville Co-Tenancy Management Committee* Yes	13		Yes
Joint Management Board of the Union Water Supply System* Kingsville Historical Park Inc.* Kingsville Leamington Animal Control Committee* Kingsville Tourism & Economic Development Committee Mo Marina Committee* Mo Mettawas Fundraising Committee Migration Community Hall Board of Directors* Migration Festival Parks, Recreation, Arts and Culture Committee (PRAC) Pelee Island Transportation Services Advisory Committee* Personnel Committee* Personnel Committee Police Services Board Port of Kingsville Co-Tenancy Management Committee* Yes Yes Yes Yes Yes Yes Yes	14	Fire Master Planning Committee	Yes
System* Kingsville Historical Park Inc.* Kingsville Leamington Animal Control Committee* Kingsville Tourism & Economic Development Committee Marina Committee* Mother Mettawas Fundraising Committee Migration Community Hall Board of Directors* Migration Festival Parks, Recreation, Arts and Culture Committee (PRAC) Pelee Island Transportation Services Advisory Committee* Personnel Committee* Personnel Committee Police Services Board Port of Kingsville Co-Tenancy Management Committee* Yes	15	Heritage Advisory Committee	Yes
17Kingsville Historical Park Inc.*Yes18Kingsville Leamington Animal Control Committee*Yes19Kingsville Tourism & Economic Development CommitteeYes20Marina Committee*No21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes	16		Yes
18Kingsville Leamington Animal Control Committee*Yes19Kingsville Tourism & Economic Development CommitteeYes20Marina Committee*No21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes	17	1 7	Yes
19Kingsville Tourism & Economic Development CommitteeYes20Marina Committee*No21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes			
20Marina Committee*No21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes			
21Mettawas Fundraising CommitteeNo22Migration Community Hall Board of Directors*Yes23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes			
Migration Community Hall Board of Directors* Migration Festival Parks, Recreation, Arts and Culture Committee (PRAC) Pelee Island Transportation Services Advisory Committee* Personnel Committee* Planning Advisory Committee Police Services Board Port of Kingsville Co-Tenancy Management Committee* Yes Yes Yes Yes			
23Migration FestivalYes24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes	22		Yes
24Parks, Recreation, Arts and Culture Committee (PRAC)Yes25Pelee Island Transportation Services Advisory Committee*Yes26Personnel Committee*Yes27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes		Migration Festival	Yes
Committee* 26 Personnel Committee* 27 Planning Advisory Committee 28 Police Services Board 29 Port of Kingsville Co-Tenancy Management Committee* Yes Yes Yes Yes	24		Yes
27Planning Advisory CommitteeYes28Police Services BoardYes (fixed amount)29Port of Kingsville Co-Tenancy Management Committee*Yes	25	Pelee Island Transportation Services Advisory	Yes
28 Police Services Board Yes (fixed amount) 29 Port of Kingsville Co-Tenancy Management Committee* Yes	26	Personnel Committee*	Yes
29 Port of Kingsville Co-Tenancy Management Committee* Yes	27	Planning Advisory Committee	Yes
, ,	28	Police Services Board	Yes (fixed amount)
	29	Port of Kingsville Co-Tenancy Management Committee*	Yes
	30	Striking Committee*	Yes

^{*}Council Representatives Only

Of the Committees the Town is required to established, those that are statutorily mandated are shaded.

Appendix B Survey Responses

Committee Name	Number of Surveys Returned	Number of Committee Members*
55+ Committee	5	7
Accessibility Advisory Committee	2	6
Communities in Bloom	4	7
Committee of	3	6
Adjustment/Fenceviewers/Property		
Standards		
Drainage Advisory Committee	4	7
Fantasy of Lights	5	8
Heritage Advisory Committee	6	10
Joint Animal Control	2	2
(w/Leamington)		
Mettawas Fundraising Committee	2	5
Migration Festival	3	9
Parks, Recreation, Arts and	4	8
Culture		
Planning Advisory Committee	3	6
Police Services Board	2	4
Tourism and Economic	7	8
Development Committee		

^{*}Includes the Administrative Town staff member assigned to support the Committee

Appendix C - Terms of Reference



TERMS OF REFERENCE 55+ COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: March 9, 2015 Evaluation Date: January 2017 Date of Formation: March 22, 2010

1.0 PURPOSE

The older adults should have the right to multiple opportunities for healthy aging and a full range of supports to assist them. The Committee's purpose is to provide recommendations to the Parks, Recreation, Arts and Culture Committee to improve the quality of life for older adults in the Town.

-And-

To maintain and improve the health, safety and well being of our residents. Increase the number of people attending activities and their diversity and increasing user satisfaction.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Parks and Recreation Program Manager
- 2.1.2 Staff Support: As determined by the Parks and Recreation Program Manager
- 2.1.3 Number of Council Members: One
- 2.1.4 Number of Community Members: Six, who may be representative of the older adult community and/or representatives of agencies who are committed to working toward the betterment of life for older adults in the Town.

2.2 Term: December 1, 2014 to November 30, 2018

2.3 Meeting Frequency: Monthly

2.4 Remuneration: \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall:

- 3.1 Promote and advocate the concept of healthy active living for older adults by encouraging the provision of improved and responsive programming and services by the Town
- **3.2** Increase the awareness of the issues, concerns and challenges faced by older adults from a diversity status, place of origin, marital status, and disability and identify

- outreach methods that may be utilized in order to reach older adults from these diverse communities.
- **3.3** Consult with and request input from other advisory groups and organizations when there are matters of mutual interest or concern.

4.0 REQUIRED SKILLS

Strategy Communications Stakeholder Relations



TERMS OF REFERENCE BUSINESS IMPROVEMENT AREA BOARD OF MANAGEMENT

Authorizing or Mandating Legislation: Municipal Act, 2001, section 204

by virtue of By-law 33-2004, as amended

Procedural By-law: BIA By-law 2 Approved: March 9, 2015 Evaluation Date: January 2017

Date of Formation:

1.0 PURPOSE

The purpose of the board of management is:

- To oversee the improvement, beautification and maintenance of municipally-owned land, buildings and structures in the area beyond that provided at the expense of the municipality generally; and
- To promote the area as a business or shopping area

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Staff Support: BIA Coordinator
- 2.1.2 Number of Council Members: Two
- 2.1.3 Number of Community Members: up to nine
- **2.2 Term:** December 1, 2014 to November 30, 2018, but continue until successors are appointed
- 2.3 Meeting Frequency: monthly
- 2.4 Remuneration: \$100 per attendance

3.0 SCOPE OF WORK

The board of management shall fulfil its purpose through marketing initiatives, business recruitment, streetscape and amenity improvements including seasonal decorations, holding of special events, and advocating on behalf of the interests of the improvement area.

4.0 REQUIRED SKILLS

Strategy Finance/Accounting Communications

Stakeholder Relations Risk Management Business Management



TERMS OF REFERENCE COMMITTEE OF ADJUSTMENT

Authorizing or Mandating Legislation: Planning Act, section 44, by virtue of Zoning By-law 1-2014, as

amended

Procedural By-law: N/A see section 44 of the Planning Act

Approved: November 17, 2014 Evaluation Date: January 2017

1.0 PURPOSE

To authorize certain variances from the provisions of the Town's Zoning By-law, as may be amended from time to time.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Internal: Manager of Planning and Developmental Services
- 2.1.2 Staff Support: As appointed by Manager of Planning and Developmental Services
- 2.1.3 Number of Council Members: Two
- 2.1.4 Number of Community Members: Three

2.2 Term:

- 2.2.1 Council Members: December 1, 2014 to November 30, 2015
- 2.2.2 Community Members: December 1, 2014 to November 30, 2018
 But continue until successors are appointed
- **2.3 Meeting Frequency:** Monthly
- 2.4 Remuneration: \$523.56 Quarterly- regardless of attendance

3.0 SCOPE OF WORK

The Committee shall exercise such powers authorized under section 45 of the Planning Act.

4.0 REQUIRED SKILLS

Communications Risk Management Land Use Planning Critical Thinking/ Analysis Stakeholder Relations Legal



TERMS OF REFERENCE COMMUNITIES IN BLOOM

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: November 9, 2015 Evaluation Date: January 2019 Date of Formation: January 2016

1.0 PURPOSE

To work with the Municipality, Businesses and Individuals to prepare the Town of Kingsville annual Communities in Bloom Judges' Tour;

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community;

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Parks and Recreation Program Manager; Municipal Services; Kingsville BIA; Manager of Municipal Facilities and Property
- 2.1.2 Staff Support: As determined by the Parks and Recreation Program Manager
- 2.1.3 Number of Council Members: Two
- 2.1.4 Number of Community Members: Ten minimum

2.2 Term: January 1, 2016 to November 30, 2018

2.3 Meeting Frequency: Monthly

2.4 Remuneration: None

3.0 SCOPE OF WORK

The Committee shall:

- **3.1** Plan, organize and operate the annual Communities in Bloom tour in collaboration with the Parks and Recreation Department, Municipal Services, Local Businesses and individual homeowners
- **3.2** Act as and recruit volunteers to assist in the operation of the annual Communities in Bloom Tour.
- **3.3** Develop methods and new ideas to maintain the sustainability and build upon the tourism draw of the annual Communities in Bloom Program.

4.0 REQUIRED SKILLS

Strategy Project Management Communications
Risk Management Business Management Stakeholder Relations



TERMS OF REFERENCE COMPLIANCE AUDIT COMMITTEE

Authorizing or Mandating Legislation: Municipal Elections Act, 1996 – section 88.37

Procedural By-law: By-law 55-2016, as amended from time to time

Term: December 1, 2018 to November 14, 2022

Approved: May 14, 2018

1.0 PURPOSE

To fulfill the mandatory requirements of section 88.37 of the Municipal Elections Act, 1996.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Internal: Director of Corporate Services/Clerk
- 2.1.2 Staff Support: Deputy Clerk-Administrative Services
- 2.1.3 Number of Council Members: None

2.2 Number of Community Members:

Three, drawn from the following groups:

- 2.2.1 Accounting and audit-accountants or auditors with experience in preparing or auditing the financial statements of municipal candidates;
- 2.2.2 Academic- college or university professors with expertise in political science or local government administration;
- 2.2.3 Legal; and/or
- 2.2.4 Other individual with knowledge of the campaign financing rules of the Municipal Elections Act, 1996.
- 2.3 Meeting Frequency: As may be required under the Municipal Elections Act.
- **2.4 Remuneration:** \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall perform the following functions relating to a compliance audit as outlined in sections 88.33, 88.34 and 88.36 the Municipal Elections Act, 1996, including:

3.1 Receive and decide whether to grant or reject applications for compliance audit of candidates' and registered third party election campaign finances;

- **3.2** Review reports submitted by the clerk with respect to any contributor who appears to have contravened the contribution limits established in the Municipal Election Act, 1996:
- **3.3** Appointing an auditor, if the application is granted.
- **3.4** Receiving the auditor's report; and
- **3.5** Considering the auditor's report and decide whether legal proceedings should be commenced.

4.0 REQUIRED SKILLS

Finance/Accounting Legal Organization
Communications Critical Thinking/Analysis



TERMS OF REFERENCE COTTAM REVITALIZATION COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 55-2016, as amended from time to time

Approved:

Evaluation Date: January 2018

Date of Formation: September 11, 2017

1.0 PURPOSE

The Committee's key role is to offer advice to the Town of Kingsville about the revitalization and beautification of the Cottam area.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Staff Support: C.A.O, Manager of Parks and Recreation, Manager of Facilities and Properties and Manager of Planning and Development
- 2.1.2 Number of Council Members: Two
- 2.1.3 Number of Community Members: Seven
- 2.2 Term: September 11, 2017 to November 30, 2018
- 2.3 Meeting Frequency: to be determined
- 2.4 Remuneration: none

3.0 SCOPE OF WORK

The purpose of the Committee is to assist the Town of Kingsville to obtain the best outcomes by:

- providing community representatives input
- providing advice on the topics including issues and possible solutions
- providing advice within budget constraints to achieve desired outcomes
- ensuring the views of each of the stakeholders are known and given full consideration
- ensuring that projects are within other relevant Council strategies, policies and legislation

4.0 REQUIRED SKILLS

Strategy Communications Stakeholder Relations



TERMS OF REFERENCE DRAINAGE ADVISORY COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: February 24, 2014 Amended: March 9, 2015

Date of Formation: June 24, 2013 Evaluation Date: January 2017

1.0 PURPOSE

To provide recommendations to Council regarding:

- 1.1 Steps that Council and/or Administration may take to reduce the impacts of agricultural drainage regulation on the Town's farmers either by changing internal procedures or lobbying other levels of government; and
- **1.2** Funding opportunities to reduce the costs associated with environmental aspects of major drainage aspects of major drainage works

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Internal: Drainage Superintendent
- 2.1.2 External:
 - 2.1.2.1 Representative of ERCA
 - 2.1.2.2 Professional Engineer (Drainage)
 - 2.1.2.3 Representative of Ontario Federation of Agriculture
 - 2.1.2.4 Ontario Soil and Crop Improvement Association
 - 2.1.2.5 Representative of Essex County Federation of Agriculture
- 2.1.3 Staff Support: Deputy Clerk-Administrative Services
- 2.1.4 Number of Council Members: Two
- 2.1.5 Number of Community Members: Three persons whose principal income is from farming
- 2.2 Term: December 1, 2014 to November 30, 2018
- 2.3 Meeting Frequency: Quarterly
- 2.4 Remuneration: \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall:

- **3.1** Review the relevant legislation, policies and protocols currently in place municipally, provincially and federally that regulate agricultural drainage.
- **3.2** Detail how much legislation, policies and protocols impact upon the ability of the Town's farmers to farm;
- **3.3** Describe the changes to the legislation, policies and protocols that would best work to mitigate such impact.
- **3.4** Identify funding opportunities that are or may be available to reduce costs associated with environmental aspects of major drainage works.

4.0 REQUIRED SKILLS

Communications Risk Management Critical Thinking/Analysis Stakeholder Relations Land Use Planning



TERMS OF REFERENCE FANTASY OF LIGHTS

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: March 9, 2015 Evaluation Date: January 2017

1.0 PURPOSE

To assist with the planning, organizing and operating of the annual Fantasy of Lights Festival.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community;

Increase the number of people attending activities and their diversity and increasing user satisfaction.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Parks and Recreation Program Manager
- 2.1.2 Staff Support: As determined by the Parks and Recreation Program Manager
- 2.1.3 Number of Council Members: Two
- 2.1.4 Number of Community Members: Six

2.2 Term: December 1, 2014 to November 30, 2018

2.3 Meeting Frequency: Monthly

2.4 Remuneration: \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall:

- 3.1 Plan, organize and operate the annual Fantasy of Lights Festival in collaboration with the Parks and Recreation Department.
- 3.2 Act as and recruit volunteers to assist in the operation of the annual Fantasy of Lights Festival.
- 3.3 Develop methods and new ideas to maintain the sustainability and build upon the tourism draw of the annual Fantasy of Lights Festival.

4.0 REQUIRED SKILLS

Communications Risk Management Project Management



TERMS OF REFERENCE KINGSVILLE ACCESSIBILITY ADVISORY COMMITTEE

Authorizing or Mandating Legislation: Ontarians with Disabilities Act, 2001 section12

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: November 17, 2014 Evaluation Date: January 2017 Formation Date: September 23, 2002

1.0 PURPOSE

To fulfill the requirements as set out in section 12 of the Ontarians with Disabilities Act, 2001.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Staff Support: Deputy Clerk- Administrative Services
- 2.1.2 Number of Council Members: One
- 2.1.3 Number of Community Members: Four, at least 3 of whom shall be persons with disabilities
- 2.2 Term: December 1, 2014 to November 30, 2018
- 2.3 Meeting Frequency: Quarterly
- **2.4 Remuneration:** \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall perfume the functions as set out in section 12 of the Ontarians with Disabilities Act, 2001, including:

- **3.1** Advising Council in each year about the preparation, implementation and effectiveness of its accessibility plan,
- **3.2** Advising Council on the accessibility for persons with disabilities to a building, structure or premises, or part of a building, structure or premises,
 - 3.2.1 That the Council purchases, constructs, or significantly renovates;
 - 3.2.2 For which the Council enters into a new lease, or

- 3.2.3 That a person provides as municipal capital facilities under an agreement entered into with the Council in accordance with section 110 of the Municipal Act, 2001.
- **3.3** Reviewing in a timely manner the site plans and drawings described in section 41 of the Planning Act that the committee selects.
- **3.4** At the request of Council, the Committee shall review and provide advice to Council on the accessibility for persons with disabilities regarding a service performed by the Town; a purchase of service by the Town; and/or the scope and effect of by-law.

4.0 REQUIRED SKILLS

Communications Critical Thinking/ Analysis Stakeholder Relations



TERMS OF REFERENCE KINGSVILLE MUNICIPAL HERITAGE ADVISORY COMMITTEE

Authorizing or Mandating Legislation: Ontario Heritage Act, section 28 Procedural By-law: By-law 105-2011 as amended from time to time

Approved: November 17, 2014
Date of Formation: June 14, 2004
Evaluation Date: January 2017

1.0 PURPOSE

As described in By-law 43-2004 attached hereto.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 External: Researcher
- 2.1.2 Staff Support: Deputy Clerk- Council Services
- 2.1.3 Number of Council Members: One
- 2.1.4 Number of Community Members: No less than 5 members, including Council Member
- 2.2 Term: December 1, 2014 to November 30, 2018
- **2.3 Meeting Frequency:** Monthly
- **2.4 Remuneration:** \$100.00 per attendance

3.0 SCOPE OF WORK

As described in By-law 43-2004 attached hereto

4.0 **REQUIRED SKILLS**

Communications Critical Thinking/Analysis Stakeholder Relations Land Use Planning



TERMS OF REFERENCE KINGSVILLE TOURISM AND ECONOMIC DEVELOPMENT COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: March 9, 2015

Date of Formation: January 12, 2015 Evaluation Date: January 2017

1.0 PURPOSE

To pursue a commitment to improving and promoting the Town's resources in an effort to support its current business profile and attract new and future business potential and investment.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Visitor Information/Tourism Employee
- 2.1.2 Kingsville Business Improvement Area Board of Management Coordinator
- 2.1.3 Staff Support: Deputy Clerk-Administrative Services
- 2.1.4 Number of Council Members: Two, one of whom is the Mayor who shall be the Chair
- 2.1.5 Number of Community Members: Five

2.2 Term: December 1, 2014 to November 30, 2018

2.3 Meeting Frequency: Monthly

2.4 Remuneration: \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall:

- **3.1** Develop activities, promotion, packages, action plans, and communication strategies related to development and tourism and monitor their effectiveness.
- **3.2** Provide a forum for soliciting public input from residents relating to specific development and tourism issues of concern to the Town and report on its finding.

- **3.3** Advise and assist with information to further public understanding of development issues as they arise through the implementation of education and outreach programs.
- **3.4** Consult with the Parks, Recreation, Arts and Culture Committee and the Business Improvement Area Board of Management on issues of common interest.

4.0 REQUIRED SKILLS

Strategy Project Management Communications
Business Management Stakeholder Relations Land Use Planning



TERMS OF REFERENCE MARINA COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 55-2016 as amended from time to time

Approved: April 3, 2017

Evaluation Date: January, 2018 Date of Formation: April 24, 2014

1.0 PURPOSE

To offer advice to town of Kingsville on the operation and improvements of the Marina.

-And-

To maintain and improve the safety, health and well being of our residents.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Deputy Clerk- Administrative Services
- 2.1.2 Staff Support: CAO
- 2.1.3 Manager of Parks and Recreation
- 2.1.4 Manager of Facilities and Properties
- 2.1.5 Number of Council Members: Three
- 2.1.6 Number of Community Members: Two

2.2 Term: December 1, 2014 to November 30, 2018

2.3 Meeting Frequency: Quarterly

2.4 Remuneration: None

3.0 SCOPE OF WORK

The Committee is to assist the Town of Kingsville to obtain the best outcomes by:

- **3.1** Providing site user and community representatives input:
- **3.2** Providing advice on the topics in the Operation Plan including issues and possible solutions;
- **3.3** Monitoring the performance of the operations plan in meeting the objectives of the facility and providing recommendations for improvement;
- **3.4** Providing advice within budget constraints to achieve desired outcomes.
- 3.5 Ensuring the views of each of the stakeholders are know and given full consideration
- **3.6** Ensuring the operations are in line with the Operations Plan for Marina and other relevant Council Strategies, policies and legislation.

4.0 REQUIRED SKILLS

Strategy Stakeholder Relations Finance/Accounting
Business Management

Communications



TERMS OF REFERENCE METTAWAS WATERFRONT PARK FUNDRAISING COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: March 9, 2015

Date of Formation: January 2016

Evaluation Date: One year after the "Date of Formation"

1.0 PURPOSE

To raise funds for the development of the Mettawas Waterfront Park and Trail Project.

-And-

To maintain and improve the health, safety and well being of our residents.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Staff Support: Support by Administration as required
- 2.1.2 Number of Council Members: Maximum of two
- 2.1.3 Number of Community Members: Minimum of five
- **2.2 Term:** XXXX, 2015 to November 30, 2018
- 2.3 Meeting Frequency: Monthly, more frequently if required
- 2.4 Remuneration: None

3.0 SCOPE OF WORK

The committee shall:

- **3.1** Determine fundraising initiatives, community special events and fundraising sponsorship plans as recommendation to the Parks, Recreation and Arts/Culture Committee ("PRACC")
- 3.2 Organize and operate Council directed initiatives, events and plans
- 3.3 Recruit additional volunteers, as may required, to operate initiatives, events and plans
- **3.4** Prepare and submit to the PRAC quarterly reports, with budget estimates and recommendations of community fundraising initiatives, for final recommendation to Council.
- 3.5 Where appropriate, the need for additional information from the applicant and/or staff

The Panning Advisory Committee shall make one of the following recommendations to Council:

3.6 The application is approved;

3.7 The application is refused with reasons; or

4.0 REQUIRED SKILLS

Strategy Project Management Communications
Critical Thinking/Analysis Business Management Organization



TERMS OF REFERENCE MIGRATION FESTIVAL COMMITTEE

Authorizing or Mandating Legislation: None

Procedural By-law: By-law 105-2011 as amended from time to time

Approved: March 9, 2015 Evaluation Date: January 2017

1.0 PURPOSE

To create a memorable, fiscally responsible annual festival to commemorate with the works of Jack Miner and the Town's historic position in terms of the annual migration of birds and water fowl in the area.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community;

Increase the number of people attending activities and their diversity and increasing user satisfaction.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Parks and Recreation Program Manager
- 2.1.2 Staff Support: As determined by the Parks and Recreation Program Manager
- 2.1.3 Number of Council Members: One
- 2.1.4 Number of Community Members: Eleven

2.2 Term: December 1, 2014 to November 30, 2018

2.3 Meeting Frequency: Monthly

2.4 Remuneration: \$100.00 per attendance

3.0 SCOPE OF WORK

The Committee shall:

- 3.1 Plan, organize and operate the annual Migration Festival in collaboration with the Parks and Recreation Department.
- 3.2 Act as and recruit volunteers to assist in the operation of the annual Migration Festival.
- 3.3 Develop methods and new ideas to maintain the sustainability and build upon the tourism draw of the annual Migration Festival.

4.0 REQUIRED SKILLS

Communications Risk Management Project Management



TERMS OF REFERENCE PLANNING ADVISORY COMMITTEE

Authorizing or Mandating Legislation: Planning Act, section 8 Procedural By-law: By-law 105-2011 as amended from time to time

Approved: November 17, 2014
Date of Formation: January 15, 2007
Evaluation Date: January 2017

1.0 PURPOSE

To make recommendations to Council regarding any plan, by-law, application or other document or process authorized or initiated under the Planning Act.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Manager of Planning and Development Services
- 2.1.2 Staff Support: As appointed by Manager of Planning and Development Services
- 2.1.3 Number of Council Members: Two
- 2.1.4 Number of Community Members: Three
- 2.2 Term: December 1, 2014 to November 30, 2018
- **2.3 Meeting Frequency:** At the discretion of the Manager of Planning and Development Services
- **2.4 Remuneration:** \$100.00 per attendance

3.0 SCOPE OF WORK

If, in the opinion of the Manager of Planning and Development Services, it is in the interest of the public that any plan, by-law, application or other document or process authorized or initiated under the Planning Act ("the Act") be introduced to the public for comment prior to any public meeting required under the Act or prior to the matter being considered by Council, the Planning Advisory Committee shall host a public meeting to review the plan, by-law, application or other document or process and shall hear any comments of support or opposition from the public, commenting agencies and staff.

Notice of such meetings shall be given in the same manner as the Regulations made under the Act require, or, if there is no such requirement, notice shall be given as deemed appropriate by the Manager of Planning and Development Services.

In making recommendations to Council regarding such applications, the Planning Advisory Committee shall consider the following:

- **3.1** The ability of the proposal to be consistent with the Provincial Policy Statement;
- **3.2** The ability of the proposal to conform to the County Official Plan;
- **3.3** The ability of the proposal to conform to the Town Official Plan and Zoning By-law;
- **3.4** The effect of the proposal on existing and future development;
- **3.5** The identification of additional issues relating to the proposal, including those presented by members, residents and affected land owners; and
- 3.6 Where appropriate, the need for additional information from the applicant and/or staff

The Panning Advisory Committee shall make one of the following recommendations to Council:

- **3.7** The application is approved;
- **3.8** The application is refused with reasons; or
- **3.9** The application be approved if the concerns articulated by the public, commenting agencies and/or staff are appropriately addressed.

4.0 REQUIRED SKILLS

Communications Risk Management Legal
Critical Thinking/Analysis Stakeholder Relations Land Use Planning



TERMS OF REFERENCE PROPERTY STANDARDS COMMITTEE

Authorizing or Mandating Legislation: Building Code Act, 1992, section 15.6 as a result of Property

Standards By-law 31-1999, as amended

Procedural By-law: N/A see section 15.6 of the Building Code Act, 1992

Approved: November 17, 2014 Evaluation Date: January 2017

Date of Formation: As a result of Property Standards By-law 31-1999 as amended

1.0 PURPOSE

To hear appeals commenced under section 15.3 of the Building Code Act, 1992.

-And-

To promote the general betterment and positive self-image of our community using the identified strengths that exist in the community.

2.0 COMMITTEE PARTICULARS

2.1 Resource:

- 2.1.1 Chief Building Official
- 2.1.2 Property Standards Office
- 2.1.3 Staff Support: As appointed by Manager of Planning and Development Services
- 2.1.4 Number of Council Members: Two
- 2.1.5 Number of Community Members: Three
- 2.2 Term: December 1, 2014 to November 30, 2018
- **2.3 Meeting Frequency:** Upon receipt of appeal of an order made under Property Standards By-law 31-1999, as amended
- **2.4 Remuneration:** \$100.00 per attendance

3.0 SCOPE OF WORK

The committee shall hear appeals commenced under section 15.3 of the Building Code Act, 1992, (the "Act"), and, in accordance with section 15.3(3.1) of the Act, has all the powers and functions of the officer who made the order and the Committee may do any of the following things if, in the Committee's opinion, doing so would maintain the general intent and purpose of the Property Standards By-law and the Official Plan and policy statement:

3.1 Conform, modify or rescind the order to demolish or repair

3.2 Extend the time for complying with the order

4.0 REQUIRED SKILLS

Risk Management

Legal

Critical Thinking/Analysis



2021 Division Road North Kingsville, Ontario N9Y 2Y9 (519) 733-2305 www.kingsville.ca kingsvilleworks@kingsville.ca

Date: November 9, 2018

To: Mayor and Council

Author: Jennifer Astrologo, Director of Corporate Services

RE: Policy to Appoint an Alternate to Essex County Council

Report No.: CS-2018-22

AIM

To provide Council with information regarding the opportunity to appoint an Alternate to attend Essex County Council meetings, in the place of either of the current representatives should they be unable to attend.

BACKGROUND

Amongst several changes that were included in the amendments to the *Municipal Act, 2001,* (the "Act") is the inclusion of Section 268: Temporary replacement, member of upper-tier council. Section 268 provides that,

"... the council of a local municipality **may** appoint one of its members as an alternate member of the upper-tier council, to act in place of a person who is a member of the councils of the local municipality and its upper-tier municipality, when the person is unable to attend a meeting of the upper-tier council for any reason." (**emphasis added**)

The appointment is not mandatory, but is at the option of each lower-tier municipality. The appointment of an Alternate is for the full term of Council and in accordance with the *Act*. However, the Alternate cannot act as the alternate for the Warden of the County.

The County has demonstrated its support and acknowledgement of the power conferred upon its lower-tier municipalities by passing By-law 40-2018 to ensure the consistent treatment of Alternates appointed in accordance with Section 268.

DISCUSSION

The Mayor and Deputy Mayor are the Town's representatives at County Council and if either of them cannot attend a meeting, there is currently no mechanism to replace them for that particular meeting.

The benefits of appointing an Alternate include:

- Ensuring representation from the Town at County Council Meetings; and
- Additional experience at the County Council level for the Alternate.

The drawbacks of appointing an Alternate is the additional work for the Alternate to become familiar with the procedures and business at the County level.

If Council wishes to appoint an Alternate, it must decide on the process in which it selects the Alternate. In this regard, there are two options available: 1) Call for Nominations, or 2) Appointment by Votes.

Both options bear similarities to those contained in the Council Vacancy Policy. Under the Option 1, Council would receive nominations from Council members at an open meeting of Council and a vote would be conducted to elect the Alternate. Upon the election of an Alternate, Council would pass a motion appointing that member as the Alternate for the term of Council.

Under Option 2, the Councillor that received the highest number of votes in the regular municipal election would be given the first right of refusal to be appointed as the Alternate. If refused, the Councillor with the next highest number of votes shall be offered the opportunity to act as the Alternate, and so on until the position is accepted or the list of Councillor is exhausted. The necessary by-law shall be prepared for adoption as soon as possible after the position is accepted. If no one accepts the appointment, no Alternate shall be appointed.

Based on the foregoing, if Council wishes to appoint an Alternate Member to attend County Council Meetings when the Mayor or Deputy Mayor cannot attend, it is recommended that Council select Option 2 as the method for choosing the County Council Alternate.

LINK TO STRATEGIC PLAN

No direct link to the strategic plan.

FINANCIAL CONSIDERATIONS

There are no direct financial considerations for the Town. Any costs associated with an Alternate attending a County Council meeting, will be borne by the County of Essex.

CONSULTATIONS

Essex County Clerks

RECOMMENDATION

That Council receives Staff Report CS-22-2018, entitled, "Policy to Appoint an Alternate to Essex County Council" for information;

And That Council adopts the Corporate Services Policy entitled, Appointment of an Alternate to County Council;

And That Council directs the Clerk commence the process to appoint the Alternate immediately following the Inaugural Meeting so that the necessary by-law can be passed at the December 10, 2018 Regular Meeting of Council.

Jennifer Astrologo

Jennifer Astrologo, B.H.K. (hons), LL.B Director of Corporate Services/Clerk

Peggy Van Mierlo-West

Peggy Van Mierlo-West, C.E.T. Chief Administrative Officer



CORPORATE SERVICES APPOINTMENT OF AN ALTERNATE TO COUNTY COUNCIL POLICY

Policy #: CS- Issued: Reviewed/Revised:

Prepared By: Jennifer Astrologo Reviewed By: Approved By:

1.0 PURPOSE

To establish a procedure to be followed for the appointment of an Alternate Member to Essex County Council following a Municipal Election.

2.0 SCOPE

This policy applies to all Members of Council.

This policy is intended to:

- i. Ensure compliance with the *Municipal Act, 2001*.
- ii. Establish a clear process for the appointment of an Alternate Member to Essex County Council who can attend those Council meetings in the event that the Mayor or Deputy Mayor are unable to attend, for any reason.
- iii. Provide direction in the event that no Member of Council wishes to accept the appointment of Alternate Member to Essex County Council.

3.0 DEFINITIONS

Alternate Member means the Member of Council of the Town appointed by Council who will attend a County Council meeting in the place of the Mayor or Deputy Mayor in the event that either are unable to attend a County Council meeting for any reason.

Clerk means the Clerk, or designate, of the Town as appointed by Council

County Council means the Council of The Corporation of the County of Essex

Inaugural Meeting means the first Council meeting in the Town after the new Council Term commences in which elected members are sworn into office for the Term of Council

Lower Tier means the Council of the Town

Municipal Election means the voting process undertaken by municipalities in accordance with the *Municipal Elections Act, 1996*, to elect members to municipal council and School Board Trustees.

Policy means the Appointment of an Alternate to County Council Policy

Town means The Corporation of the Town of Kingsville.

Upper Tier means the Council of The Corporation of the County of Essex

4.0 REFERENCE DOCUMENTS

Municipal Act, 2001

5.0 RESPONSIBILITIES

The Clerk shall be responsible for interpreting and where appropriate administering the Policy.

This Policy will be reviewed by the Clerk once per Council term, and will be updated in accordance with legislative requirements.

6.0 PROCEDURE

- 6.1 Following the Inaugural Meeting, the Clerk of the Town will contact the newly appointed Councillors in the order of highest votes received in the most recent Municipal Election, until a Councillor agrees to the Alternate Member appointment.
- 6.2 The Councillor who receives the most votes in the most recent Municipal Election has the first right of refusal to be appointed as the Alternate Council Member for the term of Council, to attend the County Council Meetings in the place of the Mayor or Deputy Mayor, when absent.
- 6.3 If the seat of the council member appointed as the Alternate Member becomes vacant, Council of the Town of Kingsville may appoint another of its Councillors as the Alternate Member for the remainder of the Council term, following the same process identified above.
- 6.4 If no Councillor wishes to be appointed as the Alternate Member, no Alternate Member appointment will be made for the term of Council.
- 6.5 The Clerk will prepare the necessary by-law to give effect to an appointment under this Policy.

Exclusions

6.6 The appointed Alternate Member cannot act as the alternate for the Warden of the County

- 6.7 The appointed Alternate Member cannot cover vacancies of the local council where a seat has been declared vacant in accordance with Section 259.
- The appointed Alternate Member shall only attend upper tier Council Meetings when the Mayor or Deputy Mayor cannot attend for any reason.

7.0 REVIEW/REVISIONS

3.

No.	Revision Details (incl. provision #)	Revision By	Date
1.			
2.			

Questions about this Policy can be referred to the Director of Corporate Services.

October 29, 2018

Municipality of Kingsville 2021 Division Road N. Kingsville, Ontario N9Y 2Y9

Att: Municipal Council

It is clear to the residents of and around the Olinda Side Road that the municipality favours downtown Kingsville over the rural areas where the spending of tax dollars is concerned. We are angry with the lack of road maintenance in our area. Ever since Gosfield South amalgamated with Kingsville you have resurfaced the road once with tar and chip. The road base was not repaired or graded prior to resurfacing which was a waste of taxpayer dollars.

The storm drains have never been cleaned and the catch basins are not exposed which is causing roadside erosion when it rains. This issue combined with the ruts and severity of the crown in the road causes concern for safety. There have been many near accidents and tractors and trucks transporting fruit, grain and tomatoes are at risk of tipping over due to the angle of the road.

Municipalities are mandated by the provincial government to maintain our roads and drains and the municipality of Kingsville is not fulfilling that mandate where it is desperately needed. We the residents and taxpayers demand the road base be levelled and resurfaced and that the catch basins be exposed and cleaned to working condition. This is necessary for the safety of everyone using it.

Respectfully submitted,

Residents & taxpayers of Olinda

MUNICIPALITY OF KINGSVILLE

PETITION to level and resurface Olinda Side Road & service storm drains

NAME	ADDRESS	SIGNATURE	DATE SIGNED
Willy, Anna Fehr	3346 Olinda Sd. Rd.	Soma Febr 1	Oct, 3418
George Kroslak	898 Rd-6/Ollada Sd. Rd.	Cog of Kaller	Oct. 31/18
John Kroslak	365 Rd.8	yola Kroxles	04.31/18
Kathie Kroslak	898 Rd. 6/Olinda Sd. Rd.	KOAN Krok	001.31/18
Kathy Kroslak	898 Rd. 6 Olinda Sd. Rd.	Lithy Krolet	Oct 31/18
RUTH HUMBACH	895 Rdb. Ruthven	Keit Hienback	al.31/18
Walterlyunbach	895 Rd.6, Ruthven	W. Humelace	Oct 31/18
Tom KRAUS-	885 RDL DOTHUEN.	VARIOS .	093/18
Rick, Deb Frose	3148 Olinda Sd. Rd.	Fish from	00.31/18
BOB WARE	1844 OLINDASD-RD	Lot Ware	00731/18
Judy FREEMAN	2851 BUNDASD, Rd	Judy James	0013118
Stephen Cook	2920 OLINDA SD. Rd.	Stephen Roy Cit	Dct.31/18
Mitlessen	2855 (hudus) Rd	mo	Oct 31/18
Ernest Warkenby		Canot Washerto	Oct. 31/18
Bill Medel	1704 Rd5 E Rothury.	B Model	Oct 31/8
Esrie Meclel	1700 LOSE Kultur	E. Maclel	0003/18
Annie Bergen	1648 Rd. S E Ruthven	19/By	Oct. 31/18
JOHN NIEFER	3025 OLINDA SD- Rd.	Ohut 1/ich	Dcz 31/18
Swedthan	1788 Lengles Lane		oct31/18
Abe Froese	1660 Rd.5 E Ruthven	Majerry	Oct-31/18
	3249 Olinda Seld, Ruthran	Wells Heronde	Oct. 31/18
Jon Bran	3181 Olover Sa Ra Rather	3	Oct31/18
Kichard Krebs	2918 Olinda Ede Road	Method Koly	Oct 31/18
DANE THIBODEAU	3090 OLINOA S. ROAD.		OCT 3//2018



REGULAR MEETING OF COUNCIL MINUTES

Tuesday, November 13, 2018
7:00 PM
Council Chambers
2021 Division Road N
Kingsville, Ontario N9Y 2Y9

Members of Council Mayor Nelson Santos

Deputy Mayor Gord Queen Councillor Susanne Coghill Councillor Tony Gaffan Councillor Thomas Neufeld Councillor Larry Patterson

Members of

J. Astrologo, Director of Corporate Services

Administration R. Brown, Acting CAO

J. Galea, Human Resources Manager

K. Brcic, Planner

S. Kitchen, Deputy Clerk-Council Services R. McLeod, Director of Financial Services

C. Parsons, Fire Chief

Absent: P. Van Mierlo-West, CAO (on personal business)

A. CALL TO ORDER

Mayor Santos called the Regular Meeting to order at 7:00 p.m.

B. MOMENT OF SILENCE AND REFLECTION

Mayor Santos asked those present to stand and observe a moment of silence and reflection to be followed by the playing of O'Canada.

C. PLAYING OF NATIONAL ANTHEM

D. DISCLOSURE OF PECUNIARY INTEREST

Mayor Santos reminded Council that any declaration is to be made prior to each item being discussed and to identify the nature of the conflict, if any, as the agenda items come forward.

E. MATTERS SUBJECT TO NOTICE

1. PUBLIC MEETING--ZBA/28/18 Application for Zoning By-law Amendment by Esther Vanderheyden for the Estate of Egbert Kruis Part of Lot C, Concession 2, Western Division 1577 Road 3 West Roll No. 3711 380 000 01200

K. Brcic, Town Planner

- i) Notice of Complete Application and Public Meeting: Zoning By-law Amendment ZBA/28/18, dated October 17, 2018;
- ii) Report of K. Brcic, Town Planner, dated November 1, 2018;
- iii) Proposed By-law 119-2018, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

Comments from the audience:

Keith Taylor, 1620 Road 3 West, asked for clarification as to whether bunkhouses are allowed or not allowed. Ms. Brcic responded that bunkhouses are permitted as an accessory use to, or supportive of, a greenhouse.

There were no further comments from anyone in attendance in the audience.

Comments from the Applicant:

Ron Reaume, Solicitor for the Applicant, indicated he is in attendance seeking approval of the Zoning By-law Amendment as recommended in the Planner's Report.

583-2018

Moved By Councillor Thomas Neufeld **Seconded By** Councillor Tony Gaffan

That Council approve Zoning By-law Amendment application ZBA/28/18 to rezone the retained farm lands as a condition of consent File B/06/18 from 'Agriculture (A1)' to 'Agriculture – Restricted (A2)' located in Part of Lot C, Concession 2, WD, locally known as 1577 Road 3 West in the Town of Kingsville, and adopt the implementing by-law.

2. PUBLIC MEETING--ZBA/33/18 Application for Removal of the H – Holding Symbol 1552843 Ontario Ltd. (Sunvalley Estates Subdivision) Part of Lot 10, Concession 2 ED, Lots 29 to 44, Draft Plan 37-T-12001

K. Brcic, Town Planner

- i) Notice of an Intention to Pass an Amending By-law to Remove a Holding Symbol, dated October 26, 2018;
- ii) Report of R. Brown, Manager of Planning and Development Services, dated October 29, 2018;
- iii) Proposed By-law 118-2018, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

Ms. Brcic presented the Planning Report.

Comments from the audience:

Ms. Christina Porrone, 1811 Talbot Road asked what type of housing has been approved to be built, and if the roadway will continue over the ditch on Road 2. Mr. Brown advised that single family dwellings are approved for the subject lands, and explained that the road is an extension of Regent St. and it will not go over the Esseltine Drain as part of this approval. He stated that Regent St. was never intended to connect with the Porrone subdivision. It was always a cul de sac in the original plan.

There were no further questions from anyone in attendance in the audience.

584-2018

Moved By Councillor Thomas Neufeld **Seconded By** Councillor Tony Gaffan

That Council approves the removal of the Holding (h) symbol on the lands outlined in Amending By-law 118-2018 in the Town of Kingsville and adopt the implementing by-law.

CARRIED

F. AMENDMENTS TO THE AGENDA

Deputy Mayor Queen added one notice of motion, Councillor Patterson added two notices of motion and one announcement, and Councillor Gaffan added an item under Unfinished Business.

G. ADOPTION OF ACCOUNTS

1. Town of Kingsville Accounts for the monthly period ended September 30, 2018 being TD cheque numbers 0066522 to 0066783 for a grand total of \$1,373,304.04

585-2018

Moved By Councillor Larry Patterson **Seconded By** Deputy Mayor Gord Queen

That Council approve Town of Kingsville Accounts for the monthly period ended September 30, 2018 being TD cheque numbers 0066522 to 0066783 for a grand total of \$1,373,304.04.

CARRIED

2. Town of Kingsville Accounts for the monthly period ended October 31, 2018 being TD cheque numbers 0066784 to 00667104 for a grand total of \$2,217,212.34

586-2018

Moved By Councillor Larry Patterson Seconded By Councillor Susanne Coghill

That Council approves Town of Kingsville Accounts for the monthly period ended October 31, 2018 being TD cheque numbers 0066784 to 0067104 for a grand total of \$2,217.212.34

CARRIED

H. STAFF REPORTS

- 1. Policy Review- Complaint Processing Policy
 - J. Galea, Human Resources Manager

587-2018

Moved By Councillor Larry Patterson **Seconded By** Deputy Mayor Gord Queen

That Council adopt the Complaint Processing Policy.

CARRIED

2. Uncollectable Property Tax Write Off Under Section 354 of the Municipal Act, 2001

R. McLeod, Director of Financial Services

588-2018

Moved By Councillor Tony Gaffan Seconded By Councillor Susanne Coghill

That Council authorize tax write offs totaling \$404.19.

CARRIED

3. Tax Adjustments Under Sections 357 of the Municipal Act, 2001

R. McLeod, Director of Financial Services

589-2018

Moved By Councillor Tony Gaffan

Seconded By Councillor Susanne Coghill

Council authorize tax reductions totaling \$4,721.61 for the 2018 taxation year.

CARRIED

4. Marsh Sideroad – Cost of Surface Treatment

S. Martinho, Manager of Public Works presented the report in the absence of Mr. Del Greco.

590-2018

Moved By Councillor Susanne Coghill **Seconded By** Councillor Thomas Neufeld

That Council receives Report of Manager of Municipal Services dated September 28, 2018 regarding surface treatment of Marsh Sideroad from County Road 27 to Road 8 West.

CARRIED

5. Annual Traffic By-Law Amendment (2018)

S. Martinho, Manager of Public Works presented the report in the absence of Mr. Del Greco, who was unable to attend this evening.

591-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Susanne Coghill

That Council approves the following amendment to Kingsville Traffic By-Law 21-2005:

Addition of 'No Parking' signs on both sides of Sandybrook Way from Division Street North to 27 Sandybrook Way.

CARRIED

592-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Susanne Coghill

That Council approves the following amendment to Kingsville Traffic By-law 21-2005: Addition of 'No Parking' signs around the island and on the West side of Mettawas Lane going down into the cul de sac (allowing parking on the East side going up) and further, that Council directs that the Town erect directional 'in' and 'out' signage.

CARRIED

593-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Tony Gaffan

That Council defer the discussion of the recommendation to amend Kingsville Traffic By-law 21-2005 to add 'No Parking' signs on both sides of Hillview Crescent starting from Division St. North and heading west for a distance of 150 meters, to the next Regular Meeting of Council.

CARRIED

594-2018

Moved By Councillor Larry Patterson Seconded By Councillor Thomas Neufeld

That Council approves the following amendment to Kingsville Traffic By-law 21-2005:

Addition of 'No Parking' signs on the east/west section of Orchard Boulevard between 823 Orchard Boulevard and 841 Orchard Boulevard.

CARRIED

595-2018

Moved By Councillor Tony Gaffan **Seconded By** Councillor Thomas Neufeld

That Council approves the following amendment to Kingsville Traffic By-law 21-2005:

Addition of 'No Parking' signs on the north side of Road 2 East from County Road 45 to 1604 Road 2 East.

CARRIED

596-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Larry Patterson

That Council approves the following amendment to Kingsville Traffic By-law 21-2005:

Addition of 'No Parking' signs on both sides of Malo Street.

LOST

597-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Tony Gaffan

That Council receives the balance of the Report of Manager of Municipal Services, dated October 1, 2018 RE: Annual Traffic By-law Amendment (2018).

CARRIED

6. Signage Honoring Kingsville's Olympians

S. Martinho, Public Works Manager.

598-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Tony Gaffan

That Council receive the information on the status of signage showing the accomplishments of our local Olympians.

CARRIED

7. Update to Cemetery By-law 120-2018

S. Martinho, Public Works Manager

599-2018

Moved By Councillor Larry Patterson **Seconded By** Councillor Susanne Coghill

That Council read the proposed Cemetery By-law (120-2018) a first and second time at this Regular meeting and direct Administration to move forward with the

process established by the Bereavement Authority of Ontario to obtain approval of said By-law.

CARRIED

I. BUSINESS/CORRESPONDENCE-ACTION REQUIRED

1. December 2018 Regular Meeting of Council Schedule

600-2018

Moved By Councillor Tony Gaffan
Seconded By Deputy Mayor Gord Queen

That Council confirms that the only **Regular** Council Meeting to be held in December is the December 10, 2018 Regular Meeting of Council.

CARRIED

The December Council Meeting Schedule, including the Inaugural and Council Orientation meeting dates, will be advertised.

2. Gosfield North Sportsmen Association--Correspondence dated October 5, 2018 RE: 2018 Pheasant Release Program

601-2018

Moved By Councillor Larry Patterson **Seconded By** Deputy Mayor Gord Queen

That Council authorizes the continuation of the Town of Kingsville partnership with the Gosfield North Sportsmen Association in their Pheasant Release Program by contributing the licence fees collected for the 2018 hunting season.

CARRIED

J. MINUTES OF THE PREVIOUS MEETINGS

1. Regular Meeting of Council--September 24, 2018

602-2018

Moved By Deputy Mayor Gord Queen
Seconded By Councillor Thomas Neufeld

That Council adopt Regular Meeting of Council Minutes, dated September 24, 2018.

CARRIED

2. Regular Meeting of Council--October 9, 2018

603-2018

Moved By Councillor Tony Gaffan

Seconded By Councillor Susanne Coghill

That Council adopt Regular Meeting of Council Minutes, dated October 9, 2018, as amended to correct typographical error.

CARRIED

K. MINUTES OF COMMITTEES AND RECOMMENDATIONS

1. Union Water Supply System Joint Board of Management - July 18, 2018 and July 26, 2018

604-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Larry Patterson

That Council receive Union Water Supply System Joint Board of Management Meeting Minutes dated July 18, 2018 and July 26, 2018.

CARRIED

2. Parks, Recreation, Arts and Culture Committee - August 16, 2018

605-2018

Moved By Councillor Tony Gaffan

Seconded By Deputy Mayor Gord Queen

That Council receive Parks, Recreation, Arts and Culture Committee Meeting Minutes dated August 16, 2018 together with Minutes of the following subcommittee:

CARRIED

3. Police Services Board - August 29, 2018 and September 26, 2018

606-2018

Moved By Councillor Larry Patterson **Seconded By** Councillor Susanne Coghill

That Council receives Police Services Board Meeting Minutes dated August 29, 2018 and September 26, 2018.

CARRIED

4. Planning Advisory Committee - February 20, 2018

607-2018

Moved By Councillor Thomas Neufeld **Seconded By** Councillor Tony Gaffan

That Council receives Planning Advisory Committee Meeting Minutes dated February 20, 2018.

CARRIED

5. Committee of Adjustment - August 21, 2018

608-2018

Moved By Councillor Tony Gaffan Seconded By Deputy Mayor Gord Queen

That Council receives Committee of Adjustment Meeting Minutes dated August 21, 2018.

CARRIED

6. Parks, Recreation, Arts and Culture Committee - September 20, 2018

609-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Susanne Coghill

That Council receives Parks, Recreation, Arts and Culture Committee Meeting Minutes dated September 20, 2018 together with Minutes of the following subcommittees:

Fantasy of Lights - April 24, 2018

Migration Festival - May 15, 2018

CARRIED

7. Tourism and Economic Development Committee - September 12, 2018

610-2018

Moved By Councillor Tony Gaffan **Seconded By** Councillor Susanne Coghill

That Council receives Tourism and Economic Development Committee Meeting Minutes dated September 12, 2018.

CARRIED

Mayor Santos called for a brief recess at 8:28 p.m. and the meeting reconvened at 8:39 p.m.

- L. BUSINESS CORRESPONDENCE INFORMATIONAL
- 1. Minister of Health--Copy of correspondence to Tracey Ramsey M.P. dated September 13, 2018
- 2. Veterans Memories Project--Correspondence dated September 20, 2018 RE: 200 Veterans and 200 Students Dining Together
- 3. Town of Lakeshore--Correspondence dated September 19, 2018 RE: Allowing municipalities to use flashing traffic signals
- 4. Township of Montague--Correspondence dated September 19, 2018 RE: Better Local Government Act

- 5. Township of Amaranth--Correspondence dated September 20, 2018 RE: Licensing Process to Take Water for Commercial Water Bottling Facilities
- 6. Deputy Mayor G. Queen--Correspondence dated October 2018 RE: Past, Current and Proposed Changes to the Town By-law regarding Open Fires within the limits of the Town of Kingsville
- 7. Deputy Mayor G. Queen--Correspondence dated October 16, 2018 RE:
 Ontario Association of Committee of Adjustment and Consent Authorities
 Seminar of October 15 and 16, 2018
- 8. Township of McKellar--Correspondence dated October 24, 2018 RE: Governance Models
- 9. The Royal Canadian Legion Ontario Command--Certificate of Appreciation presented to the Town of Kingsville for supporting the Military Recognition Book-Volume V of The Royal Canadian Legion Ontario Command.
- 10. City of Hamilton--Correspondence dated October 9, 2018 RE: NAFTA-Dairy Supply Management Program
- 11. Ministry of Tourism Culture and Sport--Correspondence dated October, 2018 RE: Invitation for Nomination for the Ontario Medal for Good Citizenship
- 12. Doug Plumb, Kingsville Highland Games Chair--Correspondence dated November 5, 2018 Re: Kingsville Highland Games
- 13. Anna Marie Nantais, Resident--Correspondence dated November 5, 2018 RE: Recently circulated "Warning" Flyer re: greenhouses.

611-2018

Moved By Councillor Thomas Neufeld **Seconded By** Councillor Susanne Coghill

That Council receive Business Correspondence-Informational items 1 to 13.

CARRIED

612-2018

Moved By Councillor Thomas Neufeld

Seconded By Councillor Tony Gaffan

That Council support Town of Lakeshore Resolution number 864-09-2018 requesting the Ministry of Transportation to consider authorizing municipalities to implement flashing traffic lights when appropriate and based upon the time of day when traffic volumes are minimal.

CARRIED

M. NOTICES OF MOTION

1. Councillor Patterson may move, or cause to have moved:

That Administration be directed to prepare a report regarding a pedestrian crosswalk at Division St. South and Pearl St. due to a safety concern.

613-2018

Moved By Councillor Larry Patterson **Seconded By** Deputy Mayor Gord Queen

That Administration be directed to prepare a fulsome report to identify potential locations for legal pedestrian crosswalks in the entire municipality, including, but not limited to, the location at Division Street South and Pearl Street and those areas identified in correspondence received from the Kingsville BIA.

CARRIED

2. Deputy Mayor Queen may move, or cause to have moved:

That Council as a whole receive an update as to the new school project as far as may be completed in open session, and further details that may be available as permitted in closed session.

614-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Larry Patterson

That Council as a whole receive an update report from Administration as to the new school project as far as may be completed in open session, and further details that may be available as permitted in closed session.

3. Deputy Mayor Queen may move, or cause to have moved:

That Administration review and advise Council of any and all emergency processes and procedures that may exist in regard to, but not limited to, the arena.

615-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Susanne Coghill

That Administration review and advise Council of any and all emergency processes and procedures that may exist in regard to, but not limited to, the arena.

CARRIED

4. Deputy Mayor Queen may move, or cause to have moved:

That Council revise the necessary by-laws to permit public input during Council discussion of Site Plan Approvals.

616-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Larry Patterson

That Council direct administration to revise the necessary by-laws and policies to permit public input during Council discussion of Site Plan Approvals.

CARRIED

5. Councillor Neufeld may move, or cause to have moved:

That there be a moratorium put in place on all new greenhouse development West of Division Road, until such time that Council ahs the opportunity to review current site plan controls as it relates to greenhouse development.

617-2018

Moved By Councillor Thomas Neufeld **Seconded By** Deputy Mayor Gord Queen

That Administration, through a report to Council, consider the implementation of an interim control by-law to prohibit all greenhouse development west of Division Road, until such time as Council has the opportunity to review current zoning and Official Plan policies.

CARRIED

- 7. Deputy Mayor Queen may at the next Regular Meeting, move or cause to have moved that Administration investigate and report back to the new Council elect, the feasibility of adopting a policy similar to the recently approved policy of Secondary Suites to help ease the affordable housing shortage, based on compliance on both Building Code and Fire regulations.
- 8. Councillor Patterson may at the next Regular Meeting, move or cause to have moved that a petition signed by residents of the Olinda Sideroad be forwarded to management regarding the Olinda Sideroad as a safety concern.
- 9. Councillor Patterson may at the next Regular Meeting, move or cause to have moved that our Council representatives discuss with Essex County Council to consider that the speed limit on County Road 27 from Highway 3 going northeast to County Road 34 in Cottam be reduced from 80 km to 60 km, to the 50 km sign.

N. UNFINISHED BUSINESS, ANNOUNCEMENTS AND UPDATES

- 1. Councillor Patterson extended a "Thank you" to the election staff for their hard work and professionalism during the election. He said that he received feedback from a number of residents and they all said that the staff were knowledgeable, friendly and respectful.
- 2. Councillor Gaffan expressed his disappointment with the fact that the Division St. S. road construction will not be completed in time for the Town's annual Fantasy of Lights Santa Claus parade event and asked Public Works Manager M. Martinho and Director of Municipal Services A. Plancke to finalize the route for the parade participants.

O. BYLAWS

1. By-law 56-2018

618-2018

Moved By Deputy Mayor Gord Queen

Seconded By Councillor Susanne Coghill

That Council read By-law 56-2018 being a By-law to designate certain lands as a public highway in the Town of Kingsville a first, second and third and final time.

CARRIED

2. By-law 118-2018

619-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Thomas Neufeld

That Council read By-law 118-2018, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville (ZBA/33/18; Part of Lot 10, Concession 2 ED, Lots 29-44, Draft Plan 37-T-12001), a first, second and third and final time.

CARRIED

3. By-law 119-2018

620-2018

Moved By Deputy Mayor Gord Queen **Seconded By** Councillor Tony Gaffan

That Council reads By-law 119-2018, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville (ZBA/28/18; 1577 Road 3 West, Part of Lot C, Concession 2, WD) a first, second and third and final time.

CARRIED

4. By-law 120-2018

621-2018

Moved By Deputy Mayor Gord Queen
Seconded By Councillor Larry Patterson

That Council reads By-law 120-2018, being a By-law to establish rules and regulations to be used in connection with all cemeteries owned and operated by The Corporation of the Town of Kingsville, a first and second time.

CARRIED

P. CLOSED SESSION

622-2018

Moved By Councillor Susanne Coghill **Seconded By** Councillor Tony Gaffan

That Council, pursuant to Section 239(2) of the *Municipal Act, 2001*, enter into Closed Session at 9:00 p.m. to address the following matters:

- 1. Section 239(2)(c) a proposed or pending acquisition or disposition of land by the municipality or local board; pertaining to the acquisition of land for municipal purposes; and
- 2. Section 239(2)(e) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board; being an update regarding the status of an application for expropriation of a portion of waterfront lands.

CARRIED

Q. REPORT OUT OF CLOSED SESSION

Upon rising from Closed Session at 9:21 p.m. Mayor Santos reported as follows:

Closed Session Item P-2--Council received an update regarding the status of an application for expropriation of a portion of waterfront lands; and

Closed Session Item P-1--Council is seeking a recommendation to enter into a donation agreement for a land donation.

623-2018

Moved By Councillor Susanne Coghill **Seconded By** Councillor Tony Gaffan

That Council authorizes The Corporation of the Town of Kingsville to enter into a Donation Agreement with Paul Repko for lands to be used for a municipal dog park, and hereby authorizes the Mayor and Clerk to execute the same.

CARRIED

R. CONFIRMATORY BY-LAW

1. By-law 121-2018

624-2018

Moved By Deputy Mayor Gord Queen Seconded By Councillor Susanne Coghill

That Council reads By-law 121-2018, being a By-law to confirm the proceedings of the Council of The Corporation of the Town of Kingsville at its November 13, 2018 Regular Meeting, a first, second and third and final time.

CARRIED

S. ADJOURNMENT

625-2018

Moved By Councillor Tony Gaffan

Seconded By Councillor Larry Patterson

That Council adjourns this Regular Meeting at 9:22 p.m.

CARRIED



MINUTES

REGULAR MEETING OF KINGSVILLE BIA TUESDAY, SEPTEMBER 11, 2018 AT 6:00 P.M. Carnegie Arts & Visitor Centre, 28 Division St. S, Kingsville, Ontario

A. CALL TO ORDER

Beth Riddiford called the Meeting to order at 6:00 pm with the following persons in attendance:

Members of BIA Board: Beth Riddiford, Roberta Weston, Gord Queen, Heather Brown, Tony Gaffan, Trevo Loop

Regrets: Izabel Muzzin Absent: Brian Sanford

Guests:

Members of Administration: Christina Bedal

B. DISCLOSURE OF PECUNIARY INTEREST

Beth Riddiford reminded members that any declaration and its general nature is to be made prior to each item being discussed.

- C. DELEGATIONS
- D. AMENDMENTS TO THE AGENDA

E. ADOPTION OF ACCOUNTS

BIA Coordinator – Re: BIA Accounts as recorded in the monthly period ending August 2018. **BIA-062-2018** MOTION BY TREVOR LOOP AND SECONDED BY TONY GAFFAN TO APPROVE THE ACCOUNTS FOR AUGUST 2018. **CARRIED**

F. STAFF REPORTS

1. BIA Coordinator Christina Bedal - Re: Monthly Activity

The Coordinator presented her written report.

- 2. COUNCIL REP Gord Queen and Tony Gaffan shared the following points.
 - Town Christmas Tree approved by council
 - KEDC cancelled
 - Meet the Candidate event is September 13
 - BIA Lease approved by council
 - Parks and Rec Consultant is engaged by the town
 - Youth Council Coalition of Canada
 - Outdoor Artwork in parks report in progress
 - Tourism Round table took place
 - Toast of Kingsville is September 26th
 - Applefest is September 29-31
 - Cottam revitalization committee and plan was recognized
 - Veteran banners
 - Lighthouse may move to Mettawas park
- 3 EDDK Heather Brown and Trevor Loop updated that the swine and wine event went well, and EDDK is catering Toast of Kingsville and the KEDC is cancelled. Gift certificate promotion at Christmas time will involve three schools and more members are joining the group.
- 4 CARNEGIE SOCIAL very well attended and very well received as the last social of the year, learning allot and planning for the future is in discussion. Donation will go to Lions project.
- G. BUSINESS/CORRESPONDENCE ACTION REQUIRED
- H. MINUTES OF THE PREVIOUS MEETINGS

BIA-063-2018 – motion to approve the minutes from the August 14, 2018 meeting made by Trevor Loop and seconded by Tony Gaffan. **CARRIED**

I. BUSINESS/ CORRESPONDENCE - INFORMATIONAL

J. NEW AND UNFINISHED BUSINESS

1. Kingsville Pocket Map -

Map has been distributed

2. Lease Amendment Request -

- New lease was approved by Council and signed by BIA Board
- Coordinator to contact CAO to pose question about the shared telephone line and to include a list of furniture to be attached to the lease

3. Flower Program Ideas 2019

 Flower ideas will be provided to Coordinator for next year and process to commence

4. Discover Kingsville Holiday Guide 2018

Coordinator to pursue alternative guide covers

5. Strategic Plan

Survey reviewed and suggestions made by board members

6. BIA Coordinator Vacation

 Week of November 17th and past Coordinator will cover three days at three hours

7. Safety Concerns

- Coordinator to send letter to Police Committee regarding speeding
- Coordinator to send letter to Council requesting cross walks installed

8. Budget 2019

 Coordinator to prepare a document for next meeting and discussion took place regarding items to include

9. Christmas Parade Float

 BIA-064-2018 Motion by Jason Martin and seconded by Trevor Loop to decline hosting a float in the parade. CARRIED

10. Content Insurance

BIA-065-2018 Motion by Tony Gaffan and seconded by Roberta
Weston to obtain content insurance through town provider at \$50/year.
CARRIED

K. Adjournment

BIA-066-2018 Motion by Tony Gaffan and seconded by Roberta Weston to adjourn the meeting at 7:40 p.m. **CARRIED**

CHAIR, Beth Riddiford

RECORDING SECRETARY, Christina Bedal

Kingsville

MINUTES

KINGSVILLE MUNICIPAL HERITAGE ADVISORY COMMITTEE WEDNESDAY, OCTOBER 10, 2018 AT 7:00 P.M Council Chambers, 2021 Division Rd N, Kingsville

A. CALL TO ORDER

Chair Miljan called the Meeting to order at 7:05 p.m. with the following Members in attendance:

MEMBERS OF MUNICIPAL HERITAGE ADVISORY COMMITTEE:

MEMBERS OF ADMINISTRATION:

Dr. L. Miljan
Annetta Dunnion
Kimberly DeYong
Anna Lamarche
Margie Luffman
Corey Gosselin
Elvira Cacciavillani

Sandra Kitchen, Deputy Clerk-Council Services

Absent: D. Truax, on personal business

Absent: Mayor N. Santos, on municipal business

B. DISCLOSURE OF PECUNIARY INTEREST

Dr. Miljan reminded the Committee that any declaration is to be made prior to each items being discussed and to identify the nature of the conflict, if any, as the agenda items come forward.

C. REPORTS

1. Ms. Veronica Brown—Research report:

Ms. Brown presented the following research:

- i) 76 Queen St. built for Charles Smith in 1891
- ii) 64 Queen St. built for Nehemiah Palmer in 1874
- iii) 82 Queen St. built for Edward McVey in 1880
- iv) 98 Queen St. was moved to property for Ezra McDonald in 1896
- v) 102 Queen St. built for Kenneth Rae in 1922
- vi) 108 Queen St. built for Ivan V. Rumball in 1925
- vii) 21 Main St. East built for barber Charles Fields in 1909. From 1920 to 1948 it was the Bell Telephone Exchange, was the Greyhound Bus Depot for a while, and then became The Apex Barber Shop in 1961.



MINUTES

A Request for information about 49 Elm St. was presented. Ms. Brown informed the Committee that the house was built in 1880 for William Davey.

Ms. Brown advised that every Friday in October and for some time in November, she will be at the Charlie Campbell Museum. She is volunteering her time to provide historical information on local properties. She will be there from 9:00 a.m. until 12:00 p.m. and then from 1:00 p.m. to 3:00 p.m.

2. Accounts – ending September 30, 2018

The accounts were received for information.

D. MINUTES OF THE PREVIOUS MEETING

1. Kingsville Heritage Advisory Committee Meeting Minutes — September 12, 2018

MH12-2018 Moved by E. Cacciavillani, seconded by K. DeYong to adopt the minutes of the Kingsville Heritage Advisory Committee Meeting dated September 12, 2018 as presented.

CARRIED

E. BUSINESS CORRESPONDENCE - INFORMATIONAL

- 1. V. Brown—Invoice for Research Services—September 2018
- 2. Kingsville Reporter Invoice for Notice of Passing By-law advertisement (1422 Road 3 E, The John S. Bruner House)
- 3. Pearsall, Marshall, Halliwill & Seaton—Invoice dated October 3, 2018 RE: 192 County Road 14, Kingsville
- Draft Notice of Intention to Designate The Old Fire Hall (for publication in the October 16th edition of the Kingsville Reporter); if no objections, By-law to be considered by Council at its November 26th Regular Meeting

Informational items 1-4 were received for information.

F. NEW AND UNFINISHED BUSINESS

- 1. 49 Elm –The property owner had requested information, however, a site visit could not be arranged. This item will be added to the list of properties awaiting designation for the new committee.
- 2. S. Kitchen will forward the list of properties awaiting heritage plaques to Dr. Miljan so that the plaques can be ordered in November.



MINUTES

G. NEXT MEETING DATE

The next meeting date of the Committee is Wednesday, November 14, 2018.

H. ADJOURNMENT

The meeting adjourned at 7:35 p.m.

CHAIR, Dr. Lydia Miljan

DEPUTY CLERK-COUNCIL SERVICES,
Sandra Kitchen

Consente!"
Nov. 22/18 Sh Mov: 6, 2018 Town of Kingoville 2021 Division Rd. N. Kingoville, ON 1494 249 Re: 1628 Heritage Rd., Conc. 1 WD PT Lot 27 RP 12825121 12R25121 Part 2 Dear Members of Council, We are writing to request your attention to a serious drainage issue which has been an ongoing problem on the front of our property for quite some time and is now worsened due to the high water on Lake bie. Frequent openings of the adjust outlet to the lake are only tongonary (sometimes loss than I day) solutions. Three are 2 serious issus: 1. Farm drainage is at most times is non-existant with water backup causing overal broken tile. 2. Standing water is cousing a significant west rile irrus concern for all adjacent nighbours. We will appreciate your consistence with helping us to woolve our significant drainage issue and look forward to your response. Regards, Cheryl Paul Loures

CC Ken Vech Drainage Superintendent Town of Kingorille

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519-258-2146 | www.wechu.org

Windsor 1005 Ouellette Avenue, Windsor, ON N9A 4J8 Essex 360 Fairview Avenue West, Suite 215, Essex, ON N8M 3G4 Leamington 33 Princess Street, Leamington, ON N8H 5C5

Windsor-Essex County Health Unit (WECHU) BOARD OF HEALTH

Resolution Recommendation – October 5 2018

PROPOSED MOTION

Whereas, the federal government has passed the *Cannabis Act, 2017* to legalize non-medical cannabis, coming into effect on October 17th, 2018, and

Whereas, the Ontario government has amended the provincial *Cannabis Act, 2017* to permit a privatized retail model in Ontario, and

Whereas, cannabis smoke contains many of the same carcinogens, toxins, and irritants found in tobacco smoke with the added psychoactive properties of cannabinoids like THC, and

Whereas, increased density and clustering of cannabis retailers may result in increased access, consumption, and increased risk for chronic disease, mental illness, and injury, and

Whereas, Ontario municipalities will have the one-time opportunity to OPT OUT of cannabis retail outlets in their communities, and

<u>Now therefore be it resolved that</u>, the Windsor-Essex County Board of Health encourages all Windsor-Essex municipalities to OPT OUT of the cannabis retail model as proposed by the provincial government in their respective communities.

<u>FURTHER</u> that the Windsor-Essex County Board of Health encourages the provincial government to establish limits on the number of retailers in a geographic area to prevent clustering and reduce retail outlet density.

FURTHER that, the Windsor-Essex County Board of Health for the Windsor-Essex County Health Unit encourages provincial government to set additional regulations with respect to the proximity of retail outlets in relation to areas which may unfairly target vulnerable populations.

FURTHER that, the provincial government provide local public health units with dedicated funding for public education and health promotion activities as well as the enforcement of cannabis-related regulations under the Smoke-free Ontario Act and **FURTHER** that the Windsor-Essex County Board of Health for the Windsor-Essex County Health Unit encourages all Windsor-Essex municipalities to amend existing smoke-free by-laws to include "cannabis" in the definition, and expand spaces where the use of substances is prohibited (e.g., cannabis consumption venues or vape lounges).

FURTHER that, previous Resolutions passed by the Windsor-Essex County Board of Health are shared with the newly elected provincial government.

<u>Further</u> that the Windsor-Essex Board of health suggests the province providing for the ability of municipalities to create licensing and zoning regulations, which would be reflective of the unique needs of individual communities in addition to increasing the number and distance of buffer zones proposed for retail outlets from vulnerable areas.

<u>AND FURTHER</u> that this resolution be shared with the Honorable Prime Minister of Canada, local Members of Parliament, the Premier of Ontario, local Members of Provincial Parliament, Minister of Health and Long-term Care, Federal Minister of Health, the Attorney General, Chief Medical Officer of Health, Association of Local Public Health Agencies, Ontario Boards of Health, Ontario Public Health Association, the Centre for Addiction and Mental Health, and local community partners.

APPENDIX

Municipal engagement activities to date

Summary of Activities		
Date	Municipality	Activity
November, 2017	Windsor	Presented to city administrators A Public Health Perspective for the Location of Cannabis Retail Storefronts in the City of Windsor: Windsor-Essex County Health Unit Recommendations recommends a minimum distance of 500m to be set between cannabis businesses or production facilities and sensitive areas such as schools, lowincome areas, and mental health and addiction treatment facilities.
May 28, 2018	Leamington	Provided a letter in support of the recommended regulations set out in Council Report LLS-28-18, regarding the regulation of cannabis production and distribution. In addition to supporting the restrictions outlined in the report for the regulation of cannabis production and distribution within the municipality, WECHU provided additional insight into the health implications associated with cannabis exposure and additional measures which should be considered in protecting residents from second-hand cannabis smoke and smoking behaviour, including





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Windsor 1005 Ouellette Avenue, Windsor, ON N9A 4J8
ESSEX 360 Fairview Avenue West, Suite 215, Essex, ON N8M 3G4
Leamington 33 Princess Street, Leamington, ON N8H 5C5

		recommendations for the siting of cannabis- related businesses.
June 20, 2018	Windsor	Participated in meeting with representatives from the City of Windsor administration, Ontario Cannabis Store Vice President and Community Engagement Team, and Windsor Police to discuss proposed cannabis retail locations, operations, and safety of operational measures and provide feedback from a public health perspective.
	Amherstburg	Contributed feedback and recommendations for the Amherstburg Parks Master Plan to establish minimum distance requirements between existing alcohol and cannabis outlets and between all new alcohol/cannabis outlets to playground, youth facilities and recreation areas.
June, 2018	Kingsville	Contributed feedback and recommendations for the <i>Town of Kingsville Official Plan Review: Issues and Policy Directions Report</i> to set minimum distances between cannabis-related businesses and sensitive land use areas.
July 18, 2018	LaSalle	Participated in meeting to discuss legalization implications and needs for the municipality, and present recommendations for zoning of cannabis related businesses and ways to strengthen existing by-laws (e.g. municipal smoking by-laws).
August, 2018	Kingsville	Contributed feedback and recommendations for the <i>Town of Kingsville Application for Zoning By Law Amendment</i> (4.46 Medical Marihuana Production Facilities). Recommendations included establishing minimum distance requirement be increased to no less than 500m between marihuana production facilities and lands zoned for residential, recreational, institutional use and Lake Erie. It was also recommended that facilities should operate with an odour

		abatement protocol to eliminate noxious odour and conduct environmental impact assessments and provide reports to the municipality.
August 29, 2018	Tecumseh	Attended meeting to provide recommendations for zoning and siting of retail locations and recommend ways to strengthen existing by-laws (e.g. municipal smoking by-laws).
September 28, 2018	All municipalities	Presented recommendations for licensing, zoning, and by-law amendments from a public health perspective to all municipal CAOs. Provided recommendations on how to best approach the private retail model implementation in Windsor-Essex and the importance of a unified approach across municipalities.

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 122- 2018

Being a by-law to amend By-law 103-2003 as amended, being a By-law to provide for the licensing, regulating and registration of dogs with the Town of Kingsville

WHEREAS By-law No. 103-2003 is the Town of Kingsville by-law being a by-law for licensing, regulating and registration of dogs within the Town of Kingsville was adopted by the Town of Kingsville Council on October 27, 2003;

WHEREAS paragraph 9 of subsection 11(3) of the *Municipal Act, 2001* S.O. 2001, c. 25, as amended, provided that By-laws may be passed by local municipalities respecting animals;

WHEREAS By-law No. 103-2003 was subsequently amended and updated by By-laws 118-2003 and 57-2015;

AND WHEREAS it is the desire of the Council of the Corporation of the Town of Kingsville to further amend By-law 103-2003, as amended;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- THAT the licensing, regulating and registration of dogs by-law 103-2003 as amended, be further amended by deleting section 8 (f) (iii), and replacing with the following:
 - "The dog is not tethered for longer than four hours per day";
- 2. **AND THAT** the licensing, regulating and registration of dogs by-law 103-2003 as amended, be further amended by deleting the second paragraph of section 8 (f), and replacing with the following:
 - "For the purposes of Section 8 (f)(iii) when the same dog is observed to be tethered in the same location on at least two (2) subsequent occasions in the twenty four-hour (24) hour period that follows an initial observation of the dog in that location, then there shall be a rebuttable presumption that the dog has been tethered in that location for more than four (4) hours cumulatively in the twenty four (24) hour period since the initial observation".
- 3. **THAT** this By-law shall come into force and effect on the 26th day of November 2018.

READ a FIRST, SECOND and THIRD time and FINALLY PASSED this 26th day of November, 2018.

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 123-2018

Being a By-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

WHEREAS By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

AND WHEREAS the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

AND WHEREAS there is an Official Plan in effect in the Town of Kingsville and this By-law is deemed to be in conformity with the Town of Kingsville Official Plan;

NOW THEREFORE THE COUNCIL FOR THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

1. That Subsection 6.4.1 e) RESIDENTIAL ZONE 4 URBAN (R4.1) EXCEPTIONS is amended with the addition of the following new subsection:

6.4.1.5 'RESIDENTIAL ZONE 4 URBAN EXCEPTION 5 (R4.1-5)'

a) For lands shown as R4.1-5 on Map 66 Schedule "A" of this By-law.

b) Permitted Uses

- i) Mixed Use Commercial/Residential building which may include:
 - a medical office/clinic and accessory pharmacy;
 - 2. neighbourhood commercial uses excluding a convenience store or commercial plaza.

c) Permitted Buildings and Structures

- i) Those buildings and structures for the permitted uses under Section 6.4.1.5 b);
- ii) Buildings and structures accessory to the R4.1-5 permitted uses.

d) Zone Provisions

All lot and building requirements for the permitted buildings and structures shall be in accordance with Section 6.4.1 c) of this By-law.

Notwithstanding Section 6.4.1 c) of the by-law to the contrary the following shall apply:

i) Front yard setback for a permitted mixed use commercial /residential building shall be 3.9 m, minimum;

- ii) Easterly side yard setback for a permitted mixed-use commercial/residential building shall be 2.8 m, minimum;
- iii) Maximum number of dwelling units for a permitted mixeduse commercial/residential building shall be 24;
- iv) Maximum commercial floor area 705 sq. m.
- v) Maximum height for a permitted mixed-use commercial /residential building shall be 11.5 m or three storeys whichever is less.

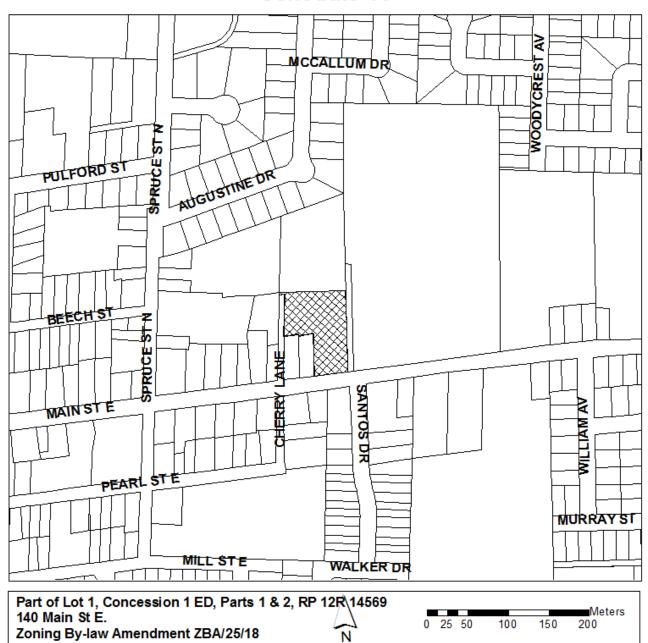
Notwithstanding item 6.4.1.5 d) iv) an additional storey is permitted for the provision of amenity space for the occupants of the mixed-use commercial /residential building and shall be limited to a total floor area of not more than 60% of the total building footprint of the first floor.

- 2. Schedule "A", Map 66 of By-law 1-2014 is hereby amended by changing the zone symbol on lands known municipally Part of Lot 1, Concession 1 ED, Parts 1 and 2, RP 12R 14569 and locally known as 140 Main Street East as shown on Schedule 'A' cross-hatched attached hereto from 'Residential Zone 1 Urban holding R1.1 (h)' to 'Residential Zone 1 Urban Exception 5 (R4.1-5)'.
- 3. This by-law shall come into force and take effect from the date of passing by Council and in accordance with Section 34 of the Planning Act

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 26th DAY OF NOVEMBER, 2018.

MAYOR, Nelson Santos
CLERK. Jennifer Astrologo

Schedule 'A'



Schedule "A", Map 66 of By-law 1-2014 is hereby amended by changing the zone symbol as shown on Schedule 'A' in cross-hatch attached hereto from 'Residential Zone 1 Urban - holding R1.1 (h)' to 'Residential Zone 4 Urban Exception 5 (R4.1-5)'

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 125-2018

Being a By-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville

WHEREAS By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

AND WHEREAS the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

AND WHEREAS there is an Official Plan in effect in the Town of Kingsville and this By-law is deemed to be in conformity with the Town of Kingsville Official Plan;

NOW THEREFORE THE COUNCIL FOR THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- 1. That Section 3.6.19.1 Holistic Wellness Centre is added as follows:
 - 3.6.19.1 <u>Holistic Wellness Centre</u> shall mean a *building* or part thereof, in which facilities or offices are provided for the practice of alternative and traditional medical treatments and may include, but not be limited to, Yoga, Chiropractic, Podiatrist, Chiropodist, Meditation Classes, Reflexology, Massage, Chinese Medicine, Naturopathy, Acupuncture, Iridology, Homeopathy and Shamanism.
- 2. That Section 6.1.1.20 'RESIDENTIAL ZONE 1 URBAN EXCEPTION 20 (R1.1-20)' is deleted and replaced with the following:

6.1.1.20 'RESIDENTIAL ZONE 1 URBAN EXCEPTION 20 (R1.1-20)'

a) For lands shown as R1.1-20 on Map 68 Schedule "A" of this By-law.

b) Permitted Uses

- i) Those *uses permitted* under Section 6.1 Residential Zone 1 Urban (R1.1):
- ii) An inn, an assembly hall, a banquet and a gift shop, OR;
- iii) A holistic health centre and an accessory gift shop.

c) Permitted Buildings and Structures

- i) Those *buildings* and *structures permitted* under Section 6.1 in the (R1.1) zone;
- ii) One dwelling unit above a garage:
- iii) One single detached dwelling;
- iv) Buildings and structures accessory to the permitted uses.

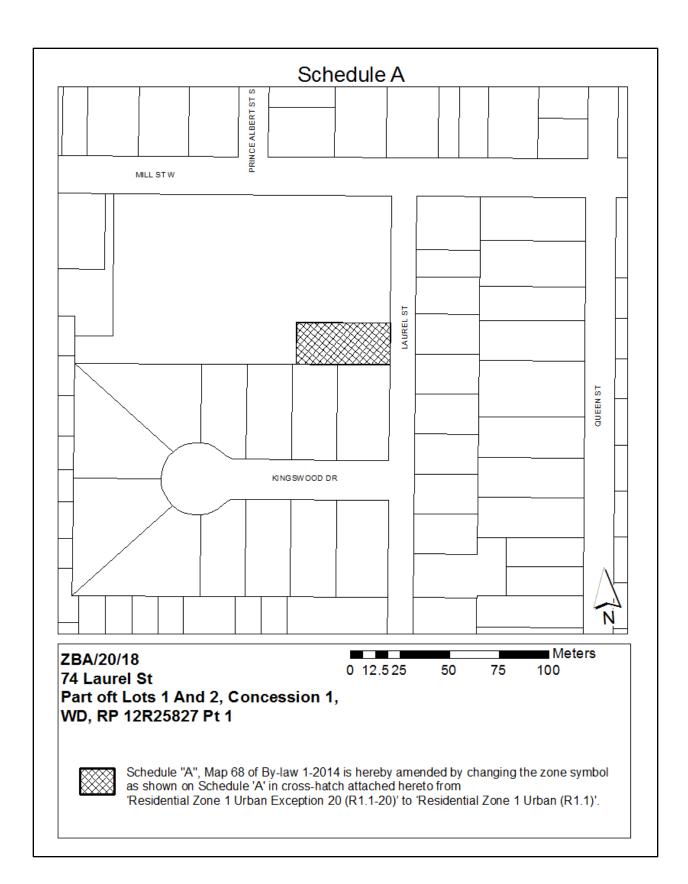
d) **Zone Provisions**

i) All *lot* and *building* requirements for the *permitted buildings* and *structures shall* be in accordance with Section 6.1.;

- ii) Notwithstanding the provisions of Section 6.1 of By-law No. 1-2014 to the contrary, an *inn*, an assembly hall and a banquet facility shall have a minimum front, rear, interior side and an exterior side yard dimension of 15 m, and as permitted in clause (b) ii), shall:
 - a) Be subject to an executed site plan control agreement between the landowner and the Municipality
 - b) Not change the residential character of the dwelling;
 - c) Be owner occupied;
 - d) Provide and maintain *parking spaces* in accordance with the executed site plan agreement;
 - e) Not have a portion of a *guest room* located below grade or within a *basement*, walkout basement or *cellar*.
 - f) Not be combined with any other *home occupation*, group home or boarding house.
- iii) Notwithstanding the provisions of Section 6.1 of By-law No. 1-2014 to the contrary, a *holistic health centre* as *permitted* in clause (b) iii), *shall*:
 - a) Be subject to an executed site plan control agreement between the landowner and the Municipality;
 - b) Not change the residential character of the dwelling;
 - c) Be owner occupied;
 - d) Provide and maintain *parking spaces* in accordance with the executed site plan agreement;
 - e) Have a maximum of 4 guest rooms;
 - f) Not have a portion of a guest room located below grade or within a basement, walkout basement or cellar.
 - g) Not be combined with any other home occupation, group home or boarding house.
- 3. Schedule "A", Map 68 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 1,013.7 sq. m (10,911.8 sq. ft.) portion of land, known municipally as 74 Laurel Street, in Part of Lots 1 And 2, Concession 1, WD, RP 12R25827 Pt 1, as shown on Schedule 'A' in cross-hatch attached hereto from 'Residential Zone 1 Urban Exception 20 (R1.1-20)' to 'Residential Zone 1 Urban (R1.1)'.
- 4. This by-law shall come into force and take effect from the date of passing by Council and shall come into force in accordance with Section 34 of the Planning Act.

READ a FIRST, SECOND and THIRD time and FINALLY PASSED this 26th day of November, 2018.

MAYOR, Nelson Santos
CLERK, Jennifer Astrologo



THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 126 - 2018

Being a by-law to designate a certain property, including land and buildings, known as The Old Fire Hall (30 Main Street East, Kingsville) as being of cultural heritage value or interest under the provisions of the *Ontario Heritage Act*, R.S.O. 1990, c.O.18 as amended

WHEREAS Section 29 of the *Ontario Heritage Act*, R.S.O. 1990, c.O.18, as amended (the "*Act*"), authorizes the council of a municipality to enact by-laws to designate real property, including all the buildings and structures located thereon, to be of cultural heritage value or interest;

AND WHEREAS the Council for The Corporation of the Town of Kingsville (the "Town") has consulted with the Kingsville Municipal Heritage Advisory Committee with respect to the designation of 30 Main Street East, Kingsville as being of cultural heritage value or interest, and authority was granted by Council to designate such property in accordance with the *Act*;

AND WHEREAS the Council for the Town has caused to be served upon the owner of the lands municipally known as 30 Main Street East, Kingsville, and upon the Ontario Heritage Trust, Notice of Intention to Designate the foregoing property and has caused the Notice of Intention to Designate to be published in a newspaper having general circulation in the municipality as required by the *Act*;

AND WHEREAS the statements explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property are set out in Schedule "A" to this By-law;

AND WHEREAS no notice of objection to the proposed designation of the foregoing property has been served on the Clerk of the Town.

NOW THEREFORE the Council for The Corporation of the Town of Kingsville enacts as follows:

- 1. That the property known as The Old Fire Hall and municipally known as 30 Main Street East, Kingsville, including lands and buildings, more particularly described in Schedule "B" attached to this By-law, is hereby designated as being of cultural heritage value or interest under Part IV of the *Ontario Heritage Act*, R.S.O. 1990, c.O.18, as amended;
- 2. That the municipality's solicitor is hereby authorized to cause a copy of this By-law to be registered against the property described in Schedule "B" to this By-law in the proper Land Registry Office;
- 3. That the Clerk is hereby authorized to cause a copy of this By-law to be served upon the owner of the aforesaid property and upon the Ontario Heritage Trust, and to cause notice of this By-law to be published in a newspaper having general circulation in the Town as required by the *Act*;
- 4. That Schedules "A" and "B" hereto form an integral part of this By-law;

5. That this By-law shall come into full force and effect on the final date of passage hereof.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 26^{th} day of November, 2018.

MAYOR, Nelson Santos
CLERK, Jennifer Astrologo

The Corporation of the Town of Kingsville By-law xxx-2018

Schedule "A"
30 Main Street East, Kingsville, Ontario
The Old Fire Hall

Description of Property:

Constructed 1939-1942, The Old Fire Hall is a two-storey brick front and cement block building. It is located on the North side of Main Street East in the Town of Kingsville.

Statement of Cultural Heritage Value or Interest:

The building's cultural heritage value lies in its original use as the Town of Kingsville's Fire Hall, providing a permanent home for the Town's fire truck and firefighting equipment. In addition to the Fire Hall being the first location of the official proper Fire Department from early bucket brigades and the connection of the history of large fires that have devastated Main Street and the downtown Kingsville area.

Early attempts, in 1862, by James King to get grants for firefighting equipment were denied. The first official organized department came to be in 1884, and in 1889, with the installation of a waterworks system by Hiram Walker for Mettawas Hotel, proper firefighting could be undertaken. In 1892, Council passed a by-law defining the fire limits and prohibiting the erection of buildings of inflammable material within said limits.

Kingsville had formed a Fire and Light Committee. Two trucks were eventually purchased and were stored at various places around town along with several hose reel carts. Fire hoses were stored at a location at Chestnut and King. The construction of the Fire Hall provided a place for all firefighting equipment to be housed. The apartments above allowed young firefighters a home, provided a return on investment to the Town and made it easier to dispatch to firefighters' homes. Bells in their homes were activated through the telephone from the Fire Hall.

Plans for the fire hall were obtained by Fire Chief Clinton Fox from a station built in Detroit. The bulk of the Fire Hall was built by the firefighters and volunteers. Saving funds was a theme throughout the building of this Fire Hall. Fundraisers were held and total construction took three years to complete with the Town pitching in money at the end to finish up the apartments above the Fire Hall and finishing work inside the hall itself.

Description of Heritage Attributes:

The building is constructed of cement blocks that were made by members of the fire department and community volunteers. A section of the blocks is engraved with the names of the sitting council members from that time.

The building's symmetry from early garage door entrances are maintained with large window storefronts. There is a bell tower located at the rear of the building.

The iconic setback allowed room for fire trucks to be washed and today serves as a parking area for the businesses located in the building.

The Corporation of the Town of Kingsville By-law 126-2018

SCHEDULE "B"

Description:

LT 5 N/S MAIN ST E PL 184-185 KINGSVILLE; KINGSVILLE

THE CORPORATION OF THE TOWN OF KINGSVILLE

BY-LAW 127 - 2018

Being a By-law to confirm the proceedings of the Council of The Corporation of the Town of Kingsville at its November 26, 2018 Regular Meeting

WHEREAS sections 8 and 9 of the *Municipal Act, 2001* S.O. 2001 c. 25, as amended, (the "Act") provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising the authority conferred upon a municipality to govern its affairs as it considers appropriate.

AND WHEREAS section 5(3) of the Act provides that such power shall be exercised by by-law, unless the municipality is specifically authorized to do so otherwise.

AND WHEREAS it is deemed expedient that the proceedings of the Council of The Corporation of the Town of Kingsville (the "Town") be confirmed and adopted by by-law.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- 1. The actions of the Council at its November 26, 2018 Regular Meeting in respect of each report, motion, resolution or other action taken or direction given by the Council at its meeting, is hereby adopted, ratified and confirmed, as if each resolution or other action was adopted, ratified and confirmed by its separate by-law.
- 2. The Chief Administrative Officer and/or the appropriate officers of the Town are hereby authorized and directed to do all things necessary to give effect to the actions set out in paragraph 1, or obtain approvals, where required, and, except where otherwise provided, the Mayor and the Clerk are hereby directed to execute all documents necessary and to affix the corporate seal to all such documents.
- 3. This By-Law comes into force and takes effect on the day of the final passing thereof.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 26th DAY OF NOVEMBER, 2018.

MAYOR, Nelson Santos
CLERK, Jennifer Astrologo