

#### REGULAR MEETING OF COUNCIL AGENDA

Monday, May 10, 2021, 6:00 PM

**Council Chambers** 

2021 Division Road N

Kingsville, Ontario N9Y 2Y9

#### A. CALL TO ORDER

In light of the ongoing COVID-19 pandemic, this Regular Meeting of Council is being held electronically. Members will meet via electronic participation. Members of the public can view the meeting at www.kingsville.ca/meetings and select the VIDEO icon.

- 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. PRESENTATIONS/DELEGATIONS

1. Mary Ellen Bench-Town of Kingsville's Integrity Commissioner

Ms. Bench will appear before Council to introduce herself and provide a brief presentation.

#### F. MATTERS SUBJECT TO NOTICE

1. Zoning By-law Amendment File ZBA/04/21 byGiuseppe Quadrini380 Inman Side RoadPart Lot 264, Concession NTR, Part 1, RP 12R 25434Roll No. 3711 590 000 07800

K. Brcic, Town Planner

Pages

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1

i) Notice of Complete Application and Public Meeting: Zoning By-law Amendment, dated April 19, 2021;

ii) Report of K. Brcic dated April 26, 2021;

iii) Proposed By-law 41-2021, being a By-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville.

#### Recommended Action

That Council:

Approve zoning by-law amendment application ZBA/04/21 to amend the zoning of the subject parcel, Part Lot 264, Concession NTR, Part 1 RP 12R 25434, known as 380 Inman Side Road in the Town of Kingsville, being 'Agriculture – Exception 52 (A1-52)'; to permit the construction of a residential dwelling and adopt the implementing by-law.

#### G. AMENDMENTS TO THE AGENDA

#### H. ADOPTION OF ACCOUNTS

1. Town of Kingsville Accounts for the monthly period ended April 30, 2021 being TD cheques numbers 0076276 to 0076436 for a grand total of \$750,696.23

#### **Recommended Action**

That Council receives Town of Kingsville Accounts for the monthly period ended April 30, 2021 being TD cheque numbers 0076276 to 0076436 for a grand total of \$750,696.23.

#### I. STAFF REPORTS

#### 1. Main St. East Interim Control By-law

R. Brown, Manager of Planning Services

#### **Recommended Action**

That Council:

Establish a secondary plan study area for the lands outlined in the attached interim control bylaw, Schedule "A", and direct administration to begin preparation of a secondary plan, hereafter referred to as the Main St. E. Secondary Plan Area; and

Approve and adopt the attached interim control by-law, including Schedule "A" affecting only those lands outlined in Schedule "A", and for the time period outlined in the by-law.

#### 2. Road 2 East Reconstruction – Phase 1 Tender Results

T. Del Greco, Manager of Engineering

31

40

|    | <b>Recommended Action</b><br>That Council award the Road 2 East Reconstruction Tender (Phase 1) to<br>J&J Lepera Infrastructures in the amount of \$5,825,000 (excluding HST)<br>and authorize the Mayor and Clerk to execute the requisite agreement. |     |
|----|--|-----|
| 3. | New Playground Equipment – Cottam Rotary Park & Ruthven Park   | 174 |
|    | D. Wolicki, Manager of Municipal Facilities and Property   |     |
|    | <b>Recommended Action</b><br>That Council approve the proposal submitted by New World Park<br>Solutions in the amount of \$54,665.92 (excluding HST) for the supply and<br>installation of playground equipment at Cottam Rotary Park;                 |     |
|    | And that Council approve the proposal submitted by New World Park<br>Solutions in the amount of \$75,820.24 (excluding HST) for the supply and<br>installation of playground equipment at Ruthven Park.  |     |
| 4. | Fleming Wigle Drain Improvements (Section 78 (1))  | 181 |
|    | K. Vegh, Drainage Superintendent   |     |
|    | <b>Recommended Action</b><br>That Council appoint N.J Peralta Engineering to design a drain enclosure<br>for the Mucci Farms development adjacent to the Fleming Wigle Drain   |     |
| 5. | Public Works Support for Enhancements in the BIA District  | 184 |
|    | S. Martinho, Manager of Public Works and Environmental Services  |     |
|    | <b>Recommended Action</b><br>That Council approves allotting up to a maximum of 350 person-hours per<br>annum in the Public Works Department to support enhanced<br>beautification and streetscape works in the BIA district.                          |     |
| 6. | BIA Rent Relief  | 189 |
|    | R. McLeod, Director of Financial and IT Services   |     |
|    | <b>Recommended Action</b><br>That Council waive the Kingsville BIA's rent from March 1, 2021 through<br>December 31, 2021.   |     |
| 7. | Community Safety and Policing Act, 2019 (CPSA): OPP Detachment<br>Board Framework and Proposal   | 192 |
|    | Nelson Santos, Mayor and Chair of Kingsville Police Service Board  |     |
|    | Recommended Action   |     |

That Council receives this report for information, and

Further That Council confirms that the Municipality of Kingsville wishes to maintain representation on the new detachment board and supports the

|    |     | composition of a single detachment board for Essex County to include representation of OPP policed municipalities of Kingsville, Essex, Lakeshore, Tecumseh, Pelee Island and the Caldwell Nation; and  |     |
|----|-----|---|-----|
|    |     | Further That Council endorses in principle the proposed composition for the new Essex County Detachment Board as provided in this report; and   |     |
|    |     | That this resolution and report be circulated to each municipality and current police service board for their information.  |     |
| J. | BUS | INESS/CORRESPONDENCE-ACTION REQUIRED  |     |
|    | 1.  | Municipality of LeamingtonCorrespondence dated April 27, 2021 RE:<br>Dedicated Gas Tax Funds for Public Transportation Program  | 198 |
|    |     | <b>Recommended Action</b><br>That Council endorses the Municipality of Leamington to act as the host<br>municipality for the 2020-2021 Dedicated Gas Tax Funds for Public<br>Transportation Program on the Town of Kingsville's behalf.             |     |
|    | 2.  | S. Sacheli, Chair, Kingsville Municipal Heritage Advisory Committee<br>Correspondence dated April 9, 2021 RE: 49 Division Street North  | 202 |
|    |     | <b>Recommended Action</b><br>That Council instructs the Clerk of the municipality to remove 49 Division<br>St. North from the Register of Properties of Cultural Heritage Value or<br>Interest.   |     |
| K. | MIN | JTES OF THE PREVIOUS MEETINGS   |     |
|    | 1.  | Special Meeting of CouncilApril 19, 2021  | 203 |
|    | 2.  | Regular Meeting of CouncilApril 26, 2021  | 208 |
|    | 3.  | Regular Closed Session Meeting of CouncilApril 26, 2021   |     |
|    |     | <b>Recommended Action</b><br>That Council adopts Special Meeting of Council Minutes dated April 19,<br>2021, Regular Meeting of Council Minutes dated April 26, 2021 and<br>Regular Closed Session Meeting of Council Minutes dated April 26, 2021. |     |
| L. | ΜΙΝ | JTES OF COMMITTEES AND RECOMMENDATIONS  |     |
|    | 1.  | Union Water Supply System Joint Board of ManagementMarch 17, 2021   | 222 |
|    |     | <b>Recommended Action</b><br>That Council receives Union Water Supply System Joint Board of<br>Management Meeting Minutes dated March 17, 2021.   |     |
|    | 2.  | Police Services BoardMarch 24, 2021   | 227 |

That Council receives Police Services Board Meeting Minutes dated March 24, 2021.

#### M. BUSINESS CORRESPONDENCE - INFORMATIONAL

| 1. | Resolutions in Support of Town of Kingsville's Motion RE: Bill C-21, An |
|----|---|
|    | Act to Amend Certain Acts and to Make Certain Consequential             |
|    | Amendments  |

| a.  | Township of HarleyCorrespondence dated April 14, 2021                      | 231 |  |  |  |
|---|--|-----|--|--|--|
| b.  | Municipality of Mattice-Val CoteResolution No. 21-92 passed April 16, 2021 | 232 |  |  |  |
| С.  | Township of ArmourCorrespondence dated April 20, 2021                      | 233 |  |  |  |
| d.  | Municipality of KillarneyCorrespondence dated April 21, 2021               | 235 |  |  |  |
| e.  | Town of MarathonCorrespondence dated April 23, 2021                        | 239 |  |  |  |
| f.  | City of Temiskaming ShoresCorrespondence dated April 27, 2021              | 243 |  |  |  |
| g.  | Township of RamaraCorrespondence dated April 28, 2021                      | 245 |  |  |  |
| Municipality of Chatham-KentCorrespondence dated April 22, 2021 RE: 246<br>Support Healthy, Professional News Media |  |     |  |  |  |

- 3. Town of South Bruce Peninsula--Correspondence dated April 23, 2021 248 RE: Lottery Licensing to Assist Small Organizations
- 4. Ministry of Municipal Affairs and Housing--Invitation from Minister Clark to 250 participate in Townhall session, dated April 27, 2021
- 5. Town of Shelburne--Correspondence dated April 27, 2021 RE: Support for 252 Universal Paid Sickdays
- 6. Town of Fort Erie--Correspondence dated April 27, 2021 RE: Province 253 Investigating and Updating Source Water Protection Legislation
- 7. Municipality of Calvin--Correspondence dated April 27, 2021 RE: Motion 255 for Fire Department support
- 8. Municipality of Calvin--Correspondence dated April 27, 2021 RE: Motion 256 for 3-digit suicide line
- 9. City of Brantford--Correspondence dated April 30, 2021 RE: Request to 257 withdraw prohibition of golf

#### **Recommended Action**

2.

That Council receives Business Correspondence-Informational Items 1 through 9.

#### N. NOTICES OF MOTION

#### O. UNFINISHED BUSINESS, ANNOUNCEMENTS AND UPDATES

1. R. Brown, Manager of Planning Services-Verbal update re: 71 Division Street North, Kingsville.

#### P. BYLAWS

1. By-law 32-2021

Being a By-law to amend By-law 2-2019, as amended, being a By-law to appoint certain members of Council and individuals to boards and committees

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

2. By-law 41-2021

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

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

#### 3. By-law 42-2021

Being a by-law to establish Interim Control on certain land uses within The Corporation of the Town of Kingsville

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

#### Q. CLOSED SESSION

Pursuant to Subsection 239(2) of the *Municipal Act, 2001,* Council will enter into Closed Session to address the following item:

i) Subsection 239(2)(e) litigation or potential litigation affecting the municipality, and Subsection 239(2)(f) advice that is subject to solicitor-client privilege RE: Update RE: Car wash and laundromat operating at 281 Main St. East.

ii) Subsection 239(2)(e) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality; being an update regarding 183 Main St. East, Kingsville.

#### R. REPORT OUT OF CLOSED SESSION

#### S. CONFIRMATORY BY-LAW

1. By-law 43-2021

Being a By-law to confirm the proceedings of the Council of The

258

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Corporation of the Town of Kingsville at its May 10, 2021 Regular Meeting To be read a first, second and third and final time.

#### T. ADJOURNMENT

# Council, Committee and Board Code of Conduct and the Integrity Commissioner

Mary Ellen Bench, BA,JD,CIC.C,CS Town of Kingsville Integrity Commissioner

# Role of the Integrity Commissioner

The Integrity Commissioner is a mandatory accountability officer under the *Municipal Act,* 2001, who acts independent of the Municipality

Roles include:

- Providing advice in response to requests from Members of Council –Members can rely on advice provided in writing and written opinions are binding in a subsequent investigation
- Participating in Council education sessions
- Receiving complaints alleging a breach
- Resolving complaints
- Investigating, reporting and recommending sanctions when it is appropriate to do so
- Advising on related policy development (e.g. Code refresh) when requested to do so
- Reports are submitted to Council

## Council Code of Conduct

The Kingsville Code of Conduct operates along with federal and provincial legislation that governs the conduct of members of Council, being:

- Criminal Code of Canada
- Municipal Act
- Municipal Conflict of Interest Act
- Municipal Elections Act
- Municipal Freedom of Information and Protection of Privacy Act
- Planning Act
- Human Rights Code
- Council approved by-laws and policies

### Key Principles identified in the Code

- A Code of Conduct is a living document that is intended to reflect local values at a given point in time.
- Members of Council shall uphold a high standard of ethical behaviour to ensure that their decision-making is impartial, transparent and free from undue influence.
- Members shall refrain from engaging in conduct that would bring the Municipality or Council into disrepute or compromise the integrity of the Municipality or Council.
- Roles and responsibilities of a Member of Council are complicated and having some guidelines helps

## Who does the Code apply to?

- Members of Council
- Members of Town Committees (Council and citizen members)
- Members of municipal Boards e.g. BIAs, utility boards

- Staff are not covered by this Code of Conduct
- Staff report to the CAO and are governed by policies established by senior management

## Code Direction for Members

The Code of Conduct identifies specific requirements for Members of Council to follow respecting the following:

- Disclosure or use of confidential information
- Respect for Council decisions
- Respect for staff and of their professional advice
- Improper use of influence
- Acceptance of gifts
- The Code is a living document that needs to be refreshed and updated from time to time. The Integrity Commissioner can assist in this.

### Complaints to the Integrity Commissioner

Complaints may be made by any person through a formal submission using the complaint form on the website or a letter, or informally through a phone call or email

As Integrity Commissioner I must assess complaints and determine:

- Is the subject matter within my jurisdiction?
- Is it frivolous and vexatious or does it appear to be substantive?
- Is an informal investigation appropriate?
- If deemed a concern, is a formal investigation, including potential to use powers under the *Public Inquiries Act* warranted?
- Is an application to court under Municipal Conflict of Interest Act justified?

# What rights do you have when someone complains?

- Right to be informed of a complaint
- Right to rely on written advice provided by Integrity Commissioner
- Right to object
- Right to participate in investigation and provide an explanation
- Right to be present for presentation of report following a formal investigation
- Right to retain a personal lawyer
- Right to make submissions, but not to vote, when a report is presented

### Authority of the Integrity Commissioner

- Municipality is required to provide information requested by the Integrity Commissioner and access to municipal books and records is mandated by legislation
- Integrity Commissioner will independently determine if the powers set out in the Public Inquiries Act respecting power to summon witnesses, determine admission of evidence, hold hearings, and refer matters to a court for determination
- Required to refer matters discovered when conducting an inquiry to the appropriate authority and suspend investigation if it interferes with a police investigation

### Limits that apply to Integrity Commissioner

- Can make recommendations to Council; cannot impose penalties
- Cannot investigate matters or file reports between nomination day and voting day
- Duty of confidentiality
- Responsive to inquiries
- Recommend but cannot initiate changes to the Code of Conduct or related policies

# Formal vs. Informal investigations

- Informal investigations do not meet a threshold to lead to a formal investigation and provide an opportunity for the Integrity Commissioner to assume the role of a mediator, and focus on resolving the concern that led to the complaint.
- Results of an informal investigation can be reported to Council in the Integrity Commissioner's Annual Report.
- Formal complaints result in the Integrity Commissioner conducting an independent investigation and taking charge of gathering the available evidence.
- Results of a formal investigation must be reported to Council within 60 days of the investigation.

# Refusal to Investigate

Integrity Commissioner discretion extends to not investigating complaints determined to be:

- Not made in good faith
- No grounds or insufficient grounds to proceed with investigation
- Frivolous and vexatious
- Investigations may be terminated and the complaint disposed of after an investigation has started, if this becomes evident through the investigation

# Role as a Member of Council vs. Role in community /other career

- The reality of a conflict and the optics of a conflict
- Interpretation of the Municipal Conflict of Interest Act and the Council Code of Conduct
- Common law conflicts and private business relationships
- Members of Council should balance duties of office and private affairs in a way that promotes public confidence and also recognizes being a Member of Council is not a full-time office
- The Integrity Commissioner is a resource to use to avoid conflicts

# When to seek advice?

You can rely upon advice in writing from the Integrity Commissioner respecting any conflict concerns you may have as a Member of Council, un the Municipal Act, 2001 (s.223.3).

Examples of matters to consider:

- Do I have a conflict voting on a matter that will enhance the neighbourhood I live in?
- Do I have a conflict voting to fund a charity I or my spouse is associated with?
- What do I do when an issue about the company I work for is on the Council agenda?

### How to Reach the Integrity Commissioner?

Phone: 416-409-5607

Email: Maryellen@benchmunicipal.com



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

Date: April 26, 2021

To: Mayor and Council

- Author: Kristina Brcic, MSc, BURPI Town Planner
- RE: Zoning By-law Amendment File ZBA/04/21 by Giuseppe Quadrini 380 Inman Side Road Part Lot 264, Concession NTR, Part 1, RP 12R 25434 Roll No. 3711 590 000 07800

Report No.: PS 2021-026

#### **RECOMMENDED ACTION**

That Council:

Approve zoning by-law amendment application ZBA/04/21 to amend the zoning of the subject parcel, Part Lot 264, Concession NTR, Part 1 RP 12R 25434, known as 380 Inman Side Road in the Town of Kingsville, being 'Agriculture – Exception 52 (A1-52)'; to permit the construction of a residential dwelling and adopt the implementing by-law.

#### BACKGROUND

The Town of Kingsville has received the above-noted application for lands located in the northeast corner of the intersection of Inman Side Road and County Road 34 E (see Appendix A). The subject parcel is designated 'Agricultural' by the Official Plan and is zoned 'Agricultural -Exception 52 (A1-52)' under the Kingsville Comprehensive Zoning By-law.

The parcel is 0.696 ha (1.72 ac.) in size and contains a storage shed. The applicant is seeking an amendment to the current zoning to permit a dwelling to be constructed on the site.

In 2012 the property owner, the Greater Essex County District School Board (GECDSB), was in the process of selling the property and applied for a zoning amendment to have the property reclassified as Agricultural similar to the surrounding

lands. The GECDSB had used the site for storage of old lighting systems that contained a small amount of PCB chemicals, they were then directed to undertake environmental testing to confirm that there was no contamination on the site since the rezoning would lead to a residential use being permitted. The testing yielded no contamination however no Record of Site Condition (RSC) was filed with the Ministry of Environment, Conservation and Parks. The applicant has since completed the work required to file the RSC and confirmation of the filing has been received by the Town (see Appendix B). In addition, the abutting livestock farmer objected to the zoning on the basis that a dwelling on the site could impact future expansion of his operation. It was finally agreed that a dwelling would not be included as a permitted use and the zoning was approved on a limited basis. The amendment was also approved with a Holding provision that required site plan approval and further confirmation of no contamination on the site. The current zoning under the Kingsville Zoning By-law did not include those same provisions.

#### DISCUSSION

#### 1) Provincial Policy Statement

When reviewing a planning application to determine if it represents sound planning, it is imperative that the proposed development is consistent with the Provincial Policy Statement (PPS): "The Provincial Policy Statement provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment."

Section 2.3.1 states that "Prime agricultural areas shall be protected for long-term use for agriculture".

Comment: There are no issues of Provincial significance raised as a result of the proposed zoning by-law amendment and permitting a residential dwelling on the subject property while maintaining the minimum distance separation from existing livestock operations. Therefore, the application is consistent with the Provincial Policy Statement.

#### 2) Town of Kingsville Official Plan

The Official Plan for the Town of Kingsville designates the subject property as 'Agriculture'.

The policy identifies that "residential uses on existing lots of record in accordance with Section 3.1.1 of this Plan and lots created by the consent process in accordance with Section 7 of this Plan are permitted. The Zoning By-law shall only permit one residence per lot".

Comment: The applicant applied for a Zoning By-law Amendment in order to permit the construction of a single detached dwelling on the property. The application conforms to the goals and policies outlined in the Town's Official Plan.

#### 3) Town of Kingsville Comprehensive Zoning By-law

The subject parcel is currently zoned 'Agriculture - Exception 52 (A1-52)' where there are several uses currently permitted, including but not limited to agriculture, church and digital communications. However, the zoning does not permit any residential use because the site was previously contaminated and not suitable for residential use. The current owner of the property has cleaned up the site and would like to amend the zoning to permit the construction of a residential dwelling on the property.

Comment: The proposed residential use on the property would be very similar to zoning of the properties in the area surrounding the subject property. By amending the existing site specific zoning, the permitted uses will revert back to what is normally permitted in the A1 zone. The zoning of the property will maintain the existing site-specific zone provisions with the exception of the site remediation and holding provision since through a Record of Site Condition, the property has been declared suitable for residential development. Therefore, the proposed amendment has been determined to be good planning.

#### Minimum Distance Separation (MDS)

In the 1970's and 1980's, under the Best Management Practice new livestock operations were simply required to be 1,000 ft. away from the nearest dwelling. This same setback applied to a new dwelling. This setback was not based on any type of science-based evidence and applied regardless of the size of the livestock operation or type of manure storage.

The Ontario Ministry of Agricultural and Rural Affairs (OMAFRA) to provide a much more science-based guidance on the location of new and expanding livestock operations and the location of new dwellings in agricultural areas later developed MDS. Setbacks are now based on the type of livestock, quantity of livestock and the type of manure storage. The goal of MDS is to minimize land use compatibility issues in the agricultural area resulting from the raising of livestock.

MDS has two types of guidelines, MDS I applies to the location of a new dwelling in relation to an existing livestock operation, MDS II applies to the location of a new or expanding livestock operation. In the case of the farm abutting 380 Inman Sd Rd MDS I is the guide which we look to first. MDS calculations were prepared based on a total of sixty cattle, based on the total square foot of livestock capable barns on the neighouring farm. MDS I requires that a new dwelling be located 209 m (685 ft.) (see map in Appendix C) from the nearest barn. The calculations are attached as Appendix C-1. This setback was also mapped to show the area left on the subject parcel for the construction of a dwelling. Although the requirement does impact a significant amount of the lot there still remains space on the lot for the actual dwelling. MDS setbacks only apply to the dwelling.

In addition to reviewing the setback requirements for the dwelling it is also important, in the case of the zoning request such as this, to determine if permitting a dwelling at 380

Inman will impact the existing farms ability to house livestock or more importantly expand. The factor often used to determine this would be to double the current livestock capacity. Calculations were completed (Appendix C-2) for this and a new dwelling at 380 Inman would not impact the neighbouring farms ability to expand by 100%. It should also be noted that there are actually homes closer to the potential livestock operation that would have more of an impact on expansion then a proposed dwelling on the subject parcel.

While MDS is designed to minimize land use compatibility potential, it does not address what is often the larger issue with many livestock operations or even just cash crop, neighbour complaints. With the introduction of non-farm residents into the agricultural area there is inevitability the opportunity for complaints from a person that does not understand normal farm practices. It is worth noting that several years ago, in consultation with OMAFRA on the issue of non-agricultural development in the agricultural area, that OMAFRA actually receives an equal amount of complaints from farmers as they do from non-farmers on normal farm practice issues.

#### LINK TO STRATEGIC PLAN

Manage residential growth through sustainable planning.

#### Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- □ Customer Service: Training, Technology, Staff, Review Standards/Level of service

⊠ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)

- Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- □ A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- □ Economic Development: strengthen tourism/hospitality
- □ COVID economic recovery
- □ Communications: Strategy Policy (social media), Website refresh and other tools, Public engagement
- □ Housing: Migrant Worker Housing Inspections (Building/Fire), regulate, reduce, or increase
- $\hfill\square$  Committees / Boards: Review and Report
- □ Policy Update: Procedural Bylaw
- □ Economic Development: diversify the economy, create local jobs, industrial, Cottam
- □ Infrastructure (non-Municipal): Union Water expansion & governance
- □ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit
- □ No direct link to Council priorities

#### FINANCIAL CONSIDERATIONS

There will be an increase in the assessment value of the property as a result of the construction of a residential dwelling.

#### 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. At the time of writing one letter in support has been submitted (see Appendix D). In addition, an adjacent land owner phoned to discuss their displeasure with the application to permit a dwelling since they are not permitted to create residential lots off their farm lands, and they intend to have a cattle operation on the farm. It was explained that lot creation in Agricultural lands are not permitted as per the PPS and that the minimum distance separation (MDS) formula was conducted and there is space on the subject lot in which a residential dwelling may be constructed without impeding on the setback from the proposed livestock operation (see Appendix C for MDS setback map).

#### Agency & Administrative Consultation

In accordance with O. Reg 545/06 of the Planning Act, Agencies and Town Administration received the Notice of Public Meeting by mail and/or email. At the time of writing, the following comments have been received.

#### 1) Essex Region Conservation Authority (ERCA)

- ERCA has no objection to the Application for a Zoning By-Law Amendment.
- See full comment in Appendix E.

#### 2) Town of Kingsville Management Staff

• It was requested by IES that driveway access be restricted to Inman Side Road. Any access County Rd 34 would require a permit from the County and is unlikely to be granted given the availability of access to Inman Side Road.

#### 3) Essex County

• No comments received

#### Krístína Brcíc

Kristina Brcic, MSc, BURPI Town Planner

<u>Robert Brown</u> Robert Brown, H. Ba, MCIP, RPP Manager, Planning Services





#### Appendix B

#### Ontario 💞

Ministry of the Environment, Conservation and Parks

Environmental Permissions Branch

135 St. Clair Avenue West 1<sup>st</sup> Floor Toronto ON M4V 1P5 Tel.: 416 314-8001 Fax: 416 314-8452 Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des permissions environnementales

135, avenue St. Clair Ouest Rez-de-chaussée Toronto ON M4V 1P5 Tél : 416 314-8001 Téléc. : 416 314-8452

Via Email

February 17, 2021

GIUSEPPE QUADRINI 459 COUNT ROAD 34 KINGSVILLE ON NOP 2G0

Dear Giuseppe Quadrini:

#### Record of Site Condition Number 227629 Has Been Filed in the Environmental Site Registry for 380 Inman Side Road, Kingsville

Pursuant to paragraph 3 of subsection 168.4(3.1) of the *Environmental Protection Act*, this is a written acknowledgment that Record of Site Condition (RSC) number 227629 has been filed in the Environmental Site Registry on February 17, 2021.

An electronic copy of this RSC can be viewed and downloaded from the Environmental Site Registry located here:

https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/searchFiledRsc search?request locale=en

If you have any questions or require additional information, please contact Thomas Cruttwell, Brownfields Unit, Environmental Permissions Branch, at 416-710-7582.

Regards,

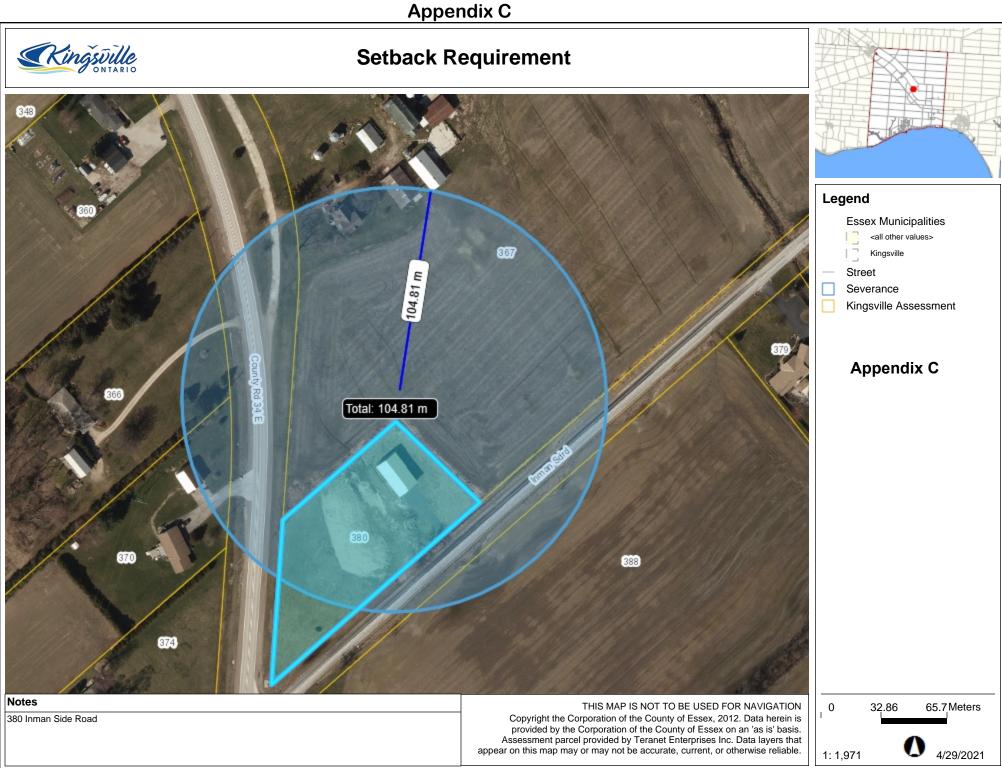
Samy Centul

Thomas Cruttwell Director Subsection 168.4(3), *Environmental Protection Act* 

Attachment

c: CHRISTOPHER PARE, DRAGUN CORPORATION District Manager, Sarnia District Office, MECP

File No.: 21-100





#### **Appendix C-1**

#### Minimum Distance Separation I

Boyd Prepared By: Rick Faber, Grand Valley Fortifiers Ltd

**Description:** 

| Application Date:  | Monday, October 30, 2017   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| Municipal File Number:   |  |  |  |  |  |  |  |  |
| Proposed Application:  | Building permit for the construction of a dwelling (farm or non-farm)<br>Type A Land Use   |  |  |  |  |  |  |  |
| Applicant Contact Inform<br>Joe Quadrini<br>459 Ct road 34<br>RR # 2<br>Ruthven, ON, Canada I<br>Phone #1: 519-839-464 | County of Essex, Town of Kingsville<br>GOSFIELD, Concession: TALBOT ROAD WEST NORTH SIDE, Lot: 264<br>NOP 2G0 Roll Number: 371159000007800 |  |  |  |  |  |  |  |

#### Calculation Name: Farm 1 Description:

Farm Contact Information Robert kenneth Boyd Location of existing livestock facility or anaerobic digester County of Essex, Town of Kingsville

GOSFIELD, Concession: TALBOT ROAD WEST NORTH SIDE, Lot: 264

Roll Number: 371159000000100

Total Lot Size: 70 ac

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

| Manure<br>Type | Type of Livestock/Manure  | Existing<br>Maximum<br>Number |      | Estimated<br>Livestock Barn<br>Area |
|----------------|---|-------------------------------|------|-------------------------------------|
| Solid          | Beef, Cows, including calves to weaning (all breeds), Confinement | 60                            | 60.0 | 6,000 ft <sup>2</sup>               |

1 The livestock/manure information has not been confirmed with the property owner and/or farm operator.

| Existing Manu   | re Storag                             | e: V       | 3. Solid,                         | outsi | de, no cover, >= 3                       | 30% | DM   |  |
|---|---------------------------------------|------------|-----------------------------------|-------|--|-----|--|--|
| Design Capaci   | ty (NU):                              |            |                                   | 6     | 0.0                                      |     |  |  |
| Potential Desig   | yn Capac                              | ity (N     | IU):                              | 18    | 80.0                                     |     |  |  |
| (Odour Potential)   | Factor B<br>(Size)<br><b>387.87</b>   | X          | Factor<br>(Manure 1<br><b>0.7</b> | ype)  | Factor E<br>(Encroaching Land L<br>1.1 = | ,   | Building Base Distance F'<br>(minimum distance from livestock barn)<br><b>209 m (686 ft)</b> | (actual distance from livestock barn) <b>TBD</b> |
|   |                                       |            |                                   |       |  |     | Storage Base Distance 'S'<br>(minimum distance from manure storage)<br><b>209 m (686 ft)</b> | (actual distance from manure storage)            |
| Preparer Inforr<br>Rick Faber<br>Grand Valley<br>Box 1825<br>Blenheim, O<br>Phone #1: 5<br>Email: rick.fa | / Fortifiers<br>N, Canad<br>19-676-24 | a N0<br>93 |                                   |       |  |     |  |  |
| Signature of Pre  |                                       | ick F      | <i>Ric</i>                        | k,    | Faber                                    |     | Date   | November 7 2017                                  |
|   | ED.                                   |            |                                   |       |  |     |  |  |

NOTE TO THE USER: The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.



#### **Appendix C-2**

#### **Minimum Distance Separation II**

Worksheet 1 Prepared By: Robert Brown, Manager, Planning Services, Town of Kingsville

| Description:                           | Potential Expansion      |              |   |
|--|--------------------------|--------------|---|
| Application Date:                      | Thursday, April 29, 2021 |              |   |
| Municipal File Number:                 | ZBA/04/2021              |              |   |
| Applicant Contact Inform               | nation                   |              | ect Livestock Facilities<br><, Town of Kingsville |
| 367 County Rd 34<br>Cottam, ON, Canada |                          | GOSFIELD, Co | ncession: NTR, Lot: 264                           |
|  |                          | Roll Number: | 371159000000100                                   |

#### **Calculation Name:** Description:

Farm 1 Potential Expansion

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

| Manure<br>Type | Type of Livestock/Manure  | Existing<br>Maximum<br>Number | Existing<br>Maximum<br>Number<br>(NU) | Total<br>Maximum<br>Number | Total<br>Maximum<br>Number<br>(NU) | Estimated<br>Livestock<br>Barn Area |
|----------------|---|-------------------------------|---------------------------------------|----------------------------|------------------------------------|-------------------------------------|
| Solid          | Beef, Cows, including calves to weaning (all breeds), Confinement | 60                            | 60.0                                  | 120                        | 120.0                              | 1,115 m²                            |

#### Manure Storage: V1. Solid, inside, bedded pack

| Existing design capacity (NU):         | 60.0  |
|--|-------|
| Design capacity after alteration (NU): | 120.0 |

| Factor      |         | Factor E | 3 | Factor        | -       | Factor D      |   | Building Base Distance F'              |
|-------------|---------|----------|---|---------------|---------|---------------|---|--|
| (Odour Pote | ential) | (Size)   |   | (Orderly Expa | ansion) | (Manure Type) |   | (minimum distance from livestock barn) |
| 0.7         | Х       | 336.55   | Х | 0.8737        | Х       | 0.7           | = | 144 m (473 ft)                         |

n (473 ft)

Storage Base Distance 'S' (minimum distance from manure storage)

#### 144 m (473 ft)

#### **MDS II Setback Distance Summary**

| Description                     | Minimum<br>Livestock<br>Barn Setback<br>Distance | Actual<br>Livestock<br>Barn Setback<br>Distance | Minimum<br>Manure Storage<br>Setback<br>Distance | Actual Manure<br>Storage Setback<br>Distance |
|---------------------------------|--|---|--|--|
| Type A Land Uses                | 144 m  | 209 m   | 144 m  | 209 m  |
|                                 | 473 ft   | 686 ft  | 473 ft   | 686 ft                                       |
| Type B Land Uses                | 288 m<br>945 ft                                  | TBD   | 288 m<br>945 ft                                  | TBD  |
| Nearest lot line (side or rear) | 14 m   | 138 m   | 14 m   | 138 m  |
|                                 | 47 ft  | 453 ft  | 47 ft  | 453 ft                                       |
| Nearest road allowance          | 29 m   | 64 m  | 29 m   | 64 m   |
|                                 | 95 ft  | 210 ft  | 95 ft  | 210 ft                                       |

i



#### **Preparer Information**

Robert Brown Manager, Planning Services Town of Kingsville 2021 Division St N Kingsville, ON, Canada N9Y 2Y9 Phone #1: 519-733-2305 Email: rbrown@kingsville.ca

Signature of Preparer:

Robert Brown, Manager, Planning Services

Date:

NOTE TO THE USER: The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.

| From: | Norm and Betty Zorzit               |
|-------|-------------------------------------|
| To:   | Kristina Brcic                      |
| Cc:   |                                     |
| Date: | Saturday, April 24, 2021 5:22:12 PM |

Hello. My name is Norm Zorzit. My wife Betty & I live on the southeast corner of the Inman Side Road and County Rd. 34 East. We are totally in favour of having this parcel of land amended to allow a dwelling to be constructed on this site. We both recall when the lighting fixtures were stored on the loading dock in sealed metal barrels on this site. I was present at the meeting at the former Gosfield North council along with many neighbours. This meeting took place approximately January or February of 1997. At this meeting, we were assured that there would be no danger of any environmental hazards. I know Mr. Quadrini personally and am aware of the soil and water testing he has had done on this property. In closing I would like to re-state that we are in favour of Mr. Quadrinis' request. Thank you....Norm & Betty Zorzit...

#### **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

March 09, 2021

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

Dear Mr. Brown:

RE: Zoning By-Law Amendment ZBA-04-2021 380 INMAN SIDE RD ARN 371159000007800; PIN: Applicant: Giuseppe Quadrini

The following is provided as a result of our review of Zoning By-Law Amendment ZBA-04-2021. The parcel is 0.696 ha (1.72 ac.) in size and contains a storage shed. The applicant is seeking an amendment to the current zoning to permit a dwelling to be constructed on the site.

#### DELEGATED RESPONSIBILITY TO REPRESENT THE PROVINCIAL INTEREST IN NATURAL HAZARDS AND REGULATORY RESPONSIBILITIES ASSOCIATED WITH THE CONSERVATION AUTHORITIES ACT

The following comments reflect our role as representing the provincial interest in natural hazards as outlined 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.

#### SECTION 1.6.6.7 Stormwater Management (PPS, 2020)

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



Page 1 of 2

Amherstburg / Essex / Kingsville / Lakeshore / LaSalle / Leamington / Pelee Island / Tecumseh / Windsor

Mr. Brown March 09, 2021

#### PLANNING ADVISORY SERVICE TO PLANNING AUTHORITIES - NATURAL HERITAGE POLICIES OF THE PPS, 2020

The following comments are provided from our perspective as an advisory service provider to the Planning Authority on matters related to natural heritage and natural heritage systems as outlined in Section 2.1 of the Provincial Policy Statement of the *Planning Act*. The comments in this section do not necessarily represent the provincial position and are advisory in nature for the consideration of the Planning Authority.

The subject property is not within or adjacent to any natural heritage feature that may meet the criteria for significance as defined by the PPS. Based on our review, we have no objection to the application with respect to the natural heritage policies of the PPS.

#### FINAL RECOMMENDATION

With the review of background information and aerial photograph, ERCA ha no objection to this application for Zoning By-law Amendment.

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

Sincerely,

Vitra Chodha *Resource Planner* /vc



Page 2 of 2

# BY-LAW 41-2021

# 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** the application conforms to the Official Plan of the Town of Kingsville;

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

1. That Subsection 7.1 e) AGRICULTURAL EXCEPTION REGULATIONS is amended by deleting Subsection 7.1.52 and replacing with the following:

# 7.1.52 'AGRICULTURE EXCEPTION 52 (A1-52)'

For lands shown as A1-52 on Map 9 Schedule "A" of this By-law.

- a) Permitted Uses
  - i) Those uses *permitted* under Section 7.1 Agriculture (A1).
- b) Permitted Buildings and Structures
   i) Those buildings and structures permitted in Section 7.1.
- c) Zone Provisions

Notwithstanding Subsection 7.1 *Zone* Provisions, the following *shall* apply to lands within the A1-52 *zone*:

- i) Minimum Lot area 7,000 m<sub>2</sub>;
- ii) Minimum Lot frontage 100 meters;
- iii) Minimum Front yard Setback 20 meters;
- iv) Minimum Interior Side yard 1.5 meters;
- v) Minimum Exterior Side yard 15 meters;
- vi) Maximum Height of All Buildings/structures 10 meters.
- 2. 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 10<sup>TH</sup> DAY OF May, 2021.

MAYOR, Nelson Santos

CLERK, Jennifer Astrologo



# **Town of Kingsville Council Summary Report** 2021

# Cheque Distributions for the Month of: **Department Summary:**

APRIL

| Dept. No.     | Department Name                          |          | Amount     |
|---------------|--|----------|------------|
| -             | TD Canada Trust - RM Visa                | \$       | 15,756.67  |
| -             | TD Canada Trust - JN Visa                | \$       | 46.76      |
| -             | TD Canada Trust - NS Visa                | \$       | -          |
| 000           | Default - Clearing                       | \$       | 91,246.57  |
| 110           | Council                                  | \$       | 1,412.13   |
| 112           | General Administration                   | \$       | 17,661.56  |
| 114           | Information Technology                   | \$<br>\$ | 3,259.11   |
| 120           | Animal Control                           | \$       | 496.16     |
| 121           | Fire                                     | \$<br>\$ | 32,584.37  |
| 122           | OPP                                      | \$       | 2,245.56   |
| 124           | Building                                 | \$       | 10,450.70  |
| 130           | Transportation - Public Works            | \$       | 278,308.32 |
| 131           | Sanitation                               | \$       | 113,285.45 |
| 151           | Cemetery                                 | \$       | 1,401.38   |
| 170           | Arena                                    | \$       | 18,892.76  |
| 171           | Parks                                    | \$<br>\$ | 4,277.19   |
| 172           | Fantasy of Lights                        | \$       | 114.28     |
| 173           | Marina                                   | \$<br>\$ | 232.47     |
| 174           | Migration Festival                       |          | -          |
| 175           | Recreation Programs                      | \$       | 306.46     |
| 176           | Communities in Bloom                     | \$       | -          |
| 177           | Highland Games                           | \$       | -          |
| 178           | Facilities                               | \$       | 5,420.73   |
| 180           | Planning                                 | \$       | 104.09     |
| 181           | BIA                                      | \$       | 384.80     |
| 184           | Accessibility Committee                  | \$<br>\$ | -          |
| 185           | Tourism & Economic Development Committee | \$       | 877.12     |
| 186           | Heritage Committee                       | \$       | 435.43     |
| 201           | Environmental - Water                    | \$       | 29,518.08  |
| 242           | Kingsville/Lakeshore West Wastewater     | \$       | 113,798.33 |
| 243           | Cottam Wastewater                        | \$<br>\$ | 8,179.75   |
| Total of Curr | ent Expenditures:                        | \$       | 750,696.23 |

### **Total Number of Current Cheques Issued:**

\*Note HST Rebate details are omitted, but are included in the totals

# **Comparison Data:**

# **Total of Approved Expenditures:**

Total Number of Cheques Issued:

\* denotes monies recouped, refunded or billed to third party

161

# **APRIL 2020** 1,335,901.09

\$

#### TOWN OF KINGSVILLE CHEQUE DISTRIBUTION

TD Canada Trust - RM Visa

| Cheque | * Date    | Vendor Name               | Description                   | G/L Account       | Amount      |
|--------|-----------|---------------------------|-------------------------------|-------------------|-------------|
| 76432  | 4/21/2021 | AMO                       | WEBINARS - L L                | 01-110-102-60253  | \$98.31     |
| 76432  | 4/21/2021 | AMCTO                     | AMCTO CONFERENCE - J A        | 01-112-098-60254  | \$498.62    |
| 76432  | 4/21/2021 | LSO STORE                 | TRNG - MUN LAWYER J A         | 01-112-098-60254  | \$213.70    |
| 76432  | 4/21/2021 | AMCTO                     | TRNG - RECORDS MGMT R B       | 01-112-098-60254  | \$325.63    |
| 76432  | 4/21/2021 | Amazon.ca*LU2W497G3       | ADMIN - OFFICE SUPPLIES       | 01-112-099-60301  | \$7.10      |
| 76432  | 4/21/2021 | INDEED                    | AD - SOLICITOR                | 01-112-099-60306  | \$476.40    |
| 76432  | 4/21/2021 | SHOPPERS DRUG MART #6032  | RETIREMENT - B M              | 01-112-099-60317  | \$157.11    |
| 76432  | 4/21/2021 | Amazon.ca Prime Member    | MEMBERSHIP FEE                | 01-112-099-60320  | \$8.13      |
| 76432  | 4/21/2021 | Amazon.ca*342AQ8KU3       | CROSSING GUARD - VEST         | 01-112-099-60368  | \$24.89     |
| 76432  | 4/21/2021 | AMZN Mktp CA*UR9VT7EH3    | BYLAW - FACE MASKS (COVID)    | 01-112-360-72057  | \$22.90     |
| 76405  | 4/20/2021 | Everbridge Inc            | EVERBRIDGE RENEWAL            | 01-114-099-60309  | \$6,410.88  |
| 76432  | 4/21/2021 | MODITECH RESCUE SOLUTI    | FIRE - SOFTWARE               | 01-114-099-60309  | \$1,074.56  |
| 76432  | 4/21/2021 | COMODO                    | SFTWRE LICENSE-NEW DEVICES    | 01-114-099-60309  | \$621.54    |
| 76432  | 4/21/2021 | FIREHOUSE TRAINING        | TRNG - HIGH RISE SAFETY J D   | 01-121-072-60118  | \$152.64    |
| 76432  | 4/21/2021 | PSHSA PSHSA               | TRNG - DESIGNATED OFFICER     | 01-121-098-60254  | \$183.17    |
| 76432  | 4/21/2021 | AMZN Mktp CA*668X41ON3    | FIRE - 64GB SD CARDS          | 01-121-099-60301  | \$24.63     |
| 76432  | 4/21/2021 | AMZN Mktp CA*FT5BF4F83    | FIRE - 64GB SD CARDS          | 01-121-099-60301  | \$24.63     |
| 76432  | 4/21/2021 | AMZN Mktp CA*GT3ZI19R3    | FIRE - MULTI-CARD READER      | 01-121-099-60301  | \$19.99     |
| 76432  | 4/21/2021 | AMZN Mktp CA*8Y6WW5123    | FIRE - WINDOW TOOL            | 01-121-099-60316  | \$118.01    |
| 76432  | 4/21/2021 | TERRAPURE ENVIRONMENTA    | FIRE - TETRACHLORIDE REMOVAL  | 01-121-099-60317  | -\$66.22    |
| 76432  | 4/21/2021 | PAUL CONWAY SHIELDS IN HO | FIRE - RECRUIT LEATHER SHIELD | 01-121-099-60701  | \$923.90    |
| 76432  | 4/21/2021 | WIRELESS ACCESSORIES UNLI | FIRE - RADIOS & PAGERS        | 01-121-099-60702  | \$159.31    |
| 76432  | 4/21/2021 | TREE TIME INC             | TREES                         | 01-130-099-60425  | \$106.54    |
| 76432  | 4/21/2021 | UW CONFERENCE CENTRE 2    | TRNG - ECDEV K L              | 01-175-099-60254  | \$1,170.24  |
| 76432  | 4/21/2021 | PAYPAL *ECONOMICDEV       | EDAC MEMBER - N C             | 01-175-099-60254  | \$26.31     |
| 76432  | 4/21/2021 | COGECO CONNEXION          | 103 PARK ST                   | 01-178-135-60327  | \$119.89    |
| 76432  | 4/21/2021 | TRIMHOUSE INC             | P&R - BASEBOARD               | 01-178-155-60315  | \$611.67    |
| 76432  | 4/21/2021 | COGECO CONNEXION          | 37 BEECH ST                   | 01-178-172-60327  | \$129.95    |
| 76436  | 4/21/2021 | ZOOM.US 888-799-9666      | PLNG - ZOOM WEBINARS          | 01-180-099-60317  | \$32.36     |
| 76436  | 4/21/2021 | ZOOM.US 888-799-9666      | PLNG - ZOOM WEBINARS          | 01-180-099-60317  | \$53.93     |
| 76432  | 4/21/2021 | UW CONFERENCE CENTRE 2    | TRNG - ECDEV N C              | 01-185-098-60254  | \$1,170.24  |
| 76432  | 4/21/2021 | ONTARIO WATER WORKS AS    | WTR TRAINING CREDIT           | 02-201-098-60254  | -\$50.88    |
| 76432  | 4/21/2021 | AWWA.ORG                  | 2021 MEMBERSHIP - S M         | 02-201-099-60320  | \$287.37    |
| 76432  | 4/21/2021 | AWWA.ORG                  | 2021 MEMBERSHIP - A P         | 02-201-099-60320  | \$287.37    |
| 76432  | 4/21/2021 | LSI DBA GOVDEALS          | ES - WATER METERS             | 02-201-099-63015  | \$331.85    |
|        |           |                           |                               | Total For RM Visa | \$15,756.67 |

TD Canada Trust - JN Visa

| Cheque | * | Date      | Vendor Name     | Description               | G/L Account       | Amount  |
|--------|---|-----------|-----------------|---------------------------|-------------------|---------|
| 76433  |   | 4/21/2021 | JACKS GASTROPUB | MTG - TOURISM INITIATIVES | 01-112-099-60317  | \$46.70 |
|        |   |           |                 |                           | Total For JN Visa | \$46.76 |

| Cheque | * | Date      | Vendor Name              | Description                   | G/L Account      | Amount     |
|--------|---|-----------|--------------------------|-------------------------------|------------------|------------|
| 76283  | * | 4/20/2021 |                          | RFND DEP - 188 COUNTY RD 27 W | 01-000-000-21410 | \$2,000.00 |
| 76285  | * | 4/20/2021 |                          | RFND DEP - 186 DIVISION ST N  | 01-000-000-21410 | \$2,000.00 |
| 76288  | * | 4/20/2021 |                          | RFND DEP - 481 COUNTY RD 34 W | 01-000-000-21410 | \$2,000.00 |
| 76289  | * | 4/20/2021 |                          | RFND DEP - 905 WRIDE AVE      | 01-000-000-21410 | \$2,000.00 |
| 76292  | * | 4/20/2021 |                          | RFND DEP - 2014 ROAD 3 E      | 01-000-000-21410 | \$2,000.00 |
| 76301  | * | 4/20/2021 |                          | RFND DEP - 409 ROAD 9 E       | 01-000-000-21410 | \$2,000.00 |
| 76305  | * | 4/20/2021 | County Wide Tree Service | TREE REMOVAL - 1520 ROAD 5 E  | 01-000-006-13199 | \$3,900.00 |
| 76306  | * | 4/20/2021 |                          | RFND DEP - 609 ROAD 3 E       | 01-000-000-21410 | \$1,000.00 |
| 76306  | * | 4/20/2021 |                          | RFND DEP - 609 ROAD 3 E       | 01-000-000-21410 | \$1,000.00 |
| 76306  | * | 4/20/2021 |                          | RFND DEP - 609 ROAD 3 E       | 01-000-000-21410 | \$1,000.00 |
| 76306  | * | 4/20/2021 |                          | RFND DEP - 609 ROAD 3 E       | 01-000-000-21410 | \$1,000.00 |
| 76310  | * | 4/20/2021 |                          | RFND DEP - 609 ROAD 3 E       | 01-000-000-21410 | \$1,000.00 |
| 76312  | * | 4/20/2021 |                          | RFND DEP - 1288 ROAD 2 W      | 01-000-000-21410 | \$2,000.00 |
| 76313  | * | 4/20/2021 |                          | RFND-PAVILION APR 23-25, 2021 | 01-000-030-21383 | \$97.20    |
| 76315  | * | 4/20/2021 |                          | RFND DEP - 4029 GRAHAM SDRD   | 01-000-000-21410 | \$1,000.00 |
| 76321  | * | 4/20/2021 |                          | RFND DEP - 2020 ROAD 5 E      | 01-000-000-21410 | \$2,000.00 |
| 76329  | * | 4/20/2021 |                          | RFND DEP - 7 PARK LANE        | 01-000-000-21410 | \$2,000.00 |
| 76329  | * | 4/20/2021 |                          | RFND DEP - 1520 ROAD 5 E      | 01-000-000-21410 | \$2,000.00 |
| 76333  | * | 4/20/2021 |                          | RFND DEP - 5 WOODLAND ST      | 01-000-000-21410 | \$1,000.00 |

|       |   |           |                           |                                |                      | <b>.</b>    |
|-------|---|-----------|---------------------------|--------------------------------|----------------------|-------------|
| 76335 | * | 4/20/2021 |                           | RFND DEP - 696 HERITAGE RD     | 01-000-000-21410     | \$2,000.00  |
| 76336 | * | 4/20/2021 |                           | RFND DEP - 808 COUNTY RD 20    | 01-000-000-21410     | \$2,000.00  |
| 76337 | * | 4/20/2021 |                           | RFND DEP - 965 BRIARWOOD CRES  | 01-000-000-21410     | \$1,000.00  |
| 76341 | * | 4/20/2021 | I.B.E.W. #636             | REMITTANCE - MAR 21-APR 3 2021 | 01-000-000-21006     | \$1,623.29  |
| 76345 | * | 4/20/2021 |                           | RFND DEP - 106 HARBOURVIEW DR  | 01-000-000-21410     | \$2,000.00  |
| 76349 | * | 4/20/2021 |                           | RFND DEP - LOT 15 COUNTY RD 8  | 01-000-000-21410     | \$2,000.00  |
| 76350 | * | 4/20/2021 |                           | RFND DEP - 257 ROAD 10         | 01-000-000-21410     | \$2,000.00  |
| 76353 | * | 4/20/2021 |                           | RFND PAP - 201 BERNATH ST      | 01-000-031-21418     | \$1,985.86  |
| 76355 | * | 4/20/2021 |                           | RFND DEP - 1971 ROAD 3 E       | 01-000-000-21410     | \$1,000.00  |
| 76355 | * | 4/20/2021 |                           | RFND DEP - 1532 CTY RD 34 E    | 01-000-000-21410     | \$1,000.00  |
| 76355 | * | 4/20/2021 |                           | RFND DEP - 37 MAIN ST E        | 01-000-000-21410     | \$2,000.00  |
| 76356 | * | 4/20/2021 |                           | RFND DEP - 103 ERIE ST         | 01-000-000-21410     | \$1,000.00  |
| 76367 | * | 4/20/2021 |                           | RFND DEP - 289 COUNTY RD 14    | 01-000-000-21410     | \$2,000.00  |
| 76368 | * | 4/20/2021 |                           | RFND DEP - 2502 DIVISION RD N  | 01-000-000-21410     | \$1,000.00  |
| 76369 | * | 4/20/2021 |                           | RFND DEP - 50 COUNTY RD 27 W   | 01-000-000-21410     | \$2,000.00  |
| 76371 | * | 4/20/2021 |                           | RFND DEP - 1544 HERITAGE       | 01-000-000-21410     | \$1,000.00  |
| 76385 | * | 4/20/2021 | Reg Clark Trucking Ltd.   | BRUSHING - CENTRE 4TH DRAIN    | 01-000-023-14080     | \$1,611.88  |
| 76385 | * | 4/20/2021 | Reg Clark Trucking Ltd.   | BRUSHING - CENTRE 4TH DRAIN    | 01-000-023-14080     | \$16,577.20 |
| 76388 | * | 4/20/2021 | 5 5                       | RFND DEP - 1221 HERITAGE RD    | 01-000-000-21410     | \$2,000.00  |
| 76389 |   | 4/20/2021 | Royal Benefits Inc        | BENEFITS CLAIM - MAR 2021      | 01-000-006-12002     | \$45.96     |
| 76401 |   | 4/20/2021 | Southpoint Publishing Inc | AD - MARCH 2021                | 01-000-030-21307     | \$427.14    |
| 76401 |   | 4/20/2021 | Southpoint Publishing Inc | AD - MARCH 2021                | 01-000-030-21307     | \$166.11    |
| 76401 |   | 4/20/2021 | Southpoint Publishing Inc | AD - MARCH 2021                | 01-000-030-21307     | \$166.11    |
| 76401 |   | 4/20/2021 | Southpoint Publishing Inc | AD - MARCH 2021                | 01-000-030-21307     | \$166.11    |
| 76402 | * | 4/20/2021 | , ,                       | RFND DEP - 481 ROAD 3 E        | 01-000-000-21410     | \$2,000.00  |
| 76404 | * | 4/20/2021 |                           | RFND DEP - 2190 SEACLIFF DR    | 01-000-000-21410     | \$2,000.00  |
| 76415 | * | 4/20/2021 |                           | RFND DEP - 86 WIGLE UNIT 14&22 | 01-000-000-21410     | \$2,000.00  |
| 76415 | * | 4/20/2021 |                           | RFND DEP - 86 WIGLE UNIT 19&28 | 01-000-000-21410     | \$2,000.00  |
| 76420 | * | 4/20/2021 |                           | RFND DEP - 2980 SOUTH TALBOT   | 01-000-000-21410     | \$1,000.00  |
| 76420 | * | 4/20/2021 |                           | RFND DEP - 2980 SOUTH TALBOT R | 01-000-000-21410     | \$1,000.00  |
| 76420 | * | 4/20/2021 |                           | RFND DEP - 2980 SOUTH TALBOT R | 01-000-000-21410     | \$1,000.00  |
| 76420 | * | 4/20/2021 |                           | RFND DEP - 2980 SOUTH TALBOT R | 01-000-000-21410     | \$1,000.00  |
| 76420 | * | 4/20/2021 |                           | RFND DEP - 2980 SOUTH TALBOT R | 01-000-000-21410     | \$1,000.00  |
| 76429 | * | 4/21/2021 | HYDRO ONE                 | 1 Conc Lot22 Moroun Pump St    | 01-000-023-14080     | \$448.95    |
| 76429 | * | 4/21/2021 | HYDRO ONE                 | Streetlights - Dimar Dr        | 01-000-006-13199     | \$30.76     |
|       |   |           |                           |                                | Total For Department | \$91,246.57 |
| 440   |   |           |                           |                                |                      | . ,         |

| Cheque | * | Date      | Vendor Name                          | Description                    | G/L Account          | Amount     |
|--------|---|-----------|--------------------------------------|--------------------------------|----------------------|------------|
| 76280  |   | 4/20/2021 | Association of Municipalities of Ont | TRNG - LAND USE PLAN'G TNE KDE | 01-110-105-60253     | \$183.17   |
| 76280  |   | 4/20/2021 | Association of Municipalities of Ont | TRNG - LAND USE PLAN'G TNE KDE | 01-110-104-60253     | \$183.17   |
| 76318  |   | 4/20/2021 | Eat Drink Dine Kingsville            | BIODEGRADABLE PICNIC SUPPLIES  | 01-110-099-60300     | \$1,000.00 |
| 76434  |   | 4/21/2021 | Telus Mobility                       | CELL PHONE - MAR 28-APR 27/21  | 01-110-099-60327     | \$45.79    |
|        |   |           |                                      |                                | Total For Department | \$1,412.13 |

| Cheque | * Date    | Vendor Name                   | Description                    | G/L Account      | Amount     |
|--------|-----------|-------------------------------|--------------------------------|------------------|------------|
| 76276  | 4/20/2021 | Actuarial Solutions Inc.      | EFB ACCOUNTING DISCLOSURES     | 01-112-099-60326 | \$2,035.20 |
| 76287  | 4/20/2021 | BMA Management Consulting Inc | 2020 BMA STUDY                 | 01-112-099-60320 | \$1,272.00 |
| 76297  | 4/20/2021 | CDW Canada                    | MONITORS & BACKUPS-HIRES/TREAS | 01-112-099-60358 | \$1,605.57 |
| 76297  | 4/20/2021 | CDW Canada                    | MONITORS & BACKUPS-HIRES/TREAS | 01-112-099-60358 | \$501.45   |
| 76320  | 4/20/2021 | Ergonow Incorporated          | ASSESSMENT -                   | 01-112-099-60319 | \$112.78   |
| 76351  | 4/20/2021 | LBC Capital                   | RECP PRINTER-APR15-MAY14/21    | 01-112-099-60311 | \$72.30    |
| 76351  | 4/20/2021 | LBC Capital                   | CAO COPIER - APR 17-MAY 16/21  | 01-112-099-60311 | \$16.99    |
| 76351  | 4/20/2021 | LBC Capital                   | CLERKS COPIER-APR 17-MAY 16/21 | 01-112-099-60311 | \$227.80   |
| 76351  | 4/20/2021 | LBC Capital                   | TREASURY COPIER-APR17-MAY16/21 | 01-112-099-60311 | \$227.80   |
| 76363  | 4/20/2021 | Monarch Office Supply         | OFFICE SUPPLIES - MAR 2021     | 01-112-099-60301 | \$746.99   |
| 76389  | 4/20/2021 | Royal Benefits Inc            | BENEFITS CLAIM - MAR 2021      | 01-112-072-60222 | \$1,926.02 |
| 76389  | 4/20/2021 | Royal Benefits Inc            | BENEFITS CLAIM - MAR 2021      | 01-112-072-60223 | \$286.49   |
| 76396  | 4/20/2021 | SHI CANADA ULC                | SOFTWARE LICENSING - NEW HIRES | 01-112-099-60358 | \$2,061.20 |
| 76396  | 4/20/2021 | SHI CANADA ULC                | SOFTWARE LICENSING - NEW HIRES | 01-112-360-72057 | \$2,061.20 |
| 76398  | 4/20/2021 | Shred-It International ULC    | RECORDS ARCHIVE DESTRUCTION    | 01-112-099-60317 | \$213.18   |
| 76406  | 4/20/2021 | Thomson Reuters Canada        | WESTLAW SUBSCRIPTION-MAR 2021  | 01-112-099-60320 | \$142.67   |
| 76408  | 4/20/2021 | Town of Essex                 | TRNG - LOTTERY LICENSE JSE SKI | 01-112-098-60254 | \$508.80   |
| 76425  | 4/21/2021 | Cogeco                        | 2021 DiVISION RD N             | 01-112-099-60327 | \$310.05   |
| 76427  | 4/21/2021 | Enbridge Gas Inc.             | 2021 Division Rd N - Town Hall | 01-112-099-60314 | \$344.82   |
| 76429  | 4/21/2021 | HYDRO ONE                     | 2021 Division Admin #J027150   | 01-112-099-60314 | \$2,739.53 |
| 76434  | 4/21/2021 | Telus Mobility                | CELL PHONE - MAR 28-APR 27/21  | 01-112-099-60327 | \$183.17   |
| 76435  | 4/21/2021 | Town of Kingsville (water)    | 2021 Division Admin            | 01-112-099-60314 | \$65.55    |

| Cheque | * | Date      | Vendor Name                    | Description                    | G/L Account          | Amount     |
|--------|---|-----------|--------------------------------|--------------------------------|----------------------|------------|
| 76279  |   | 4/20/2021 | Applied Computer Solutions Inc | MARCH SUPPORT                  | 01-114-099-60310     | \$222.60   |
| 76279  |   | 4/20/2021 | Applied Computer Solutions Inc | WIRELESS RADIO MAINTENANCE     | 01-114-099-60309     | \$52.10    |
| 76297  |   | 4/20/2021 | CDW Canada                     | MONITORS & BACKUPS-HIRES/TREAS | 01-114-099-60302     | \$752.18   |
| 76300  |   | 4/20/2021 | Cisco Systems Canada Co        | WEBEX SUBSCRIPTION-APR17-MAY16 | 01-114-099-60309     | \$50.03    |
| 76307  |   | 4/20/2021 | CSI Power & Environment Inc.   | MAINTENANCE UPS SERVER RM 1/3  | 01-114-099-60309     | \$2,041.30 |
| 76340  |   | 4/20/2021 | Tony lacobelli                 | CARD ACCESS SYSTEM LANDYARDS   | 01-114-099-60309     | \$49.32    |
| 76434  |   | 4/21/2021 | Telus Mobility                 | CELL PHONE - MAR 28-APR 27/21  | 01-114-099-60327     | \$91.58    |
|        |   |           |                                |                                | Total For Department | \$3,259.11 |

| Cheque | * | Date      | Vendor Name                         | Description                    | G/L Account          | Amount   |
|--------|---|-----------|-------------------------------------|--------------------------------|----------------------|----------|
| 76291  | * | 4/20/2021 |                                     | RFND - DOG TAG 848             | 01-120-064-41140     | \$20.00  |
| 76317  | * | 4/20/2021 |                                     | RFND-DUPLICATE DOG TAG PURCHSE | 01-120-064-41140     | \$20.00  |
| 76322  |   | 4/20/2021 | Erie Veterinary Hospital            | CAT VOUCHER PROGRAM            | 01-120-280-60377     | \$75.00  |
| 76364  |   | 4/20/2021 | Municipality of Leamington          | ANIMAL CTRL-TRAP'G JAN/FEB2021 | 01-120-280-60124     | \$356.16 |
| 76416  |   | 4/20/2021 | Windsor Essex County Humane Society | STRAY CAT PROGRAM - MAR 2021   | 01-120-280-60125     | \$25.00  |
|        |   |           |                                     |                                | Total For Department | \$496.16 |

| Cheque | * Date    | Vendor Name                       | Description                    | G/L Account          | Amount      |
|--------|-----------|-----------------------------------|--------------------------------|----------------------|-------------|
| 76277  | 4/20/2021 | A.J. Stone Company Ltd.           | FIRE - BELTS                   | 01-121-099-60316     | \$932.34    |
| 76295  | 4/20/2021 | Canadian Safety Equipment Inc.    | FIRE - SEATBELT CUTTER         | 01-121-099-60316     | \$124.25    |
| 76299  | 4/20/2021 | Cintas Canada Limited             | FIRE - MATS KING               | 01-121-099-60315     | \$83.17     |
| 76304  | 4/20/2021 | Commercial Truck Equipment Co     | 218 - DOOR SEALS               | 01-121-099-60316     | \$380.58    |
| 76304  | 4/20/2021 | Commercial Truck Equipment Co     | 122 - DISCHARGE GAUGE          | 01-121-099-60316     | \$251.99    |
| 76309  | 4/20/2021 |                                   | FIRE - WATER FOR REHAB         | 01-121-099-60317     | \$34.05     |
| 76309  | 4/20/2021 |                                   | FIRE - 216 PART                | 01-121-099-60316     | \$27.65     |
| 76311  | 4/20/2021 | DeLage Landen                     | FIRE COPIER LEASE - MAY 2021   | 01-121-099-60311     | \$137.83    |
| 76327  | 4/20/2021 | Fireservice Management Ltd.       | EQUIPMENT REPAIR               | 01-121-099-60316     | \$127.97    |
| 76327  | 4/20/2021 | Fireservice Management Ltd.       | EQUIPMENT REPAIR               | 01-121-099-60316     | \$78.78     |
| 76327  | 4/20/2021 | Fireservice Management Ltd.       | EQUIPMENT REPAIR               | 01-121-099-60316     | \$94.70     |
| 76343  | 4/20/2021 | Inland Liferafts & Marine Limited | FIRE - SUIT REPAIR             | 01-121-099-60316     | \$157.38    |
| 76348  | 4/20/2021 | Kingsville Home Hardware          | FIRE - FUEL & CABLE TIES       | 01-121-099-60340     | \$50.84     |
| 76348  | 4/20/2021 | Kingsville Home Hardware          | FIRE - FUEL & CABLE TIES       | 01-121-099-60316     | \$22.87     |
| 76348  | 4/20/2021 | Kingsville Home Hardware          | FIRE-FUEL & ELEC TAPE, STORAGE | 01-121-099-60340     | \$243.98    |
| 76348  | 4/20/2021 | Kingsville Home Hardware          | FIRE-FUEL & ELEC TAPE, STORAGE | 01-121-099-60316     | \$20.50     |
| 76348  | 4/20/2021 | Kingsville Home Hardware          | FIRE - TOOL BOX                | 01-121-099-60316     | \$72.70     |
| 76360  | 4/20/2021 | Minister of Finance (Fire)        | ARIS - LICENSE ABSTRACTS       | 01-121-099-60320     | \$250.00    |
| 76361  | 4/20/2021 | M&L Supply                        | FIRE - BATTERY                 | 01-121-099-60316     | \$569.02    |
| 76363  | 4/20/2021 | Monarch Office Supply             | OFFICE SUPPLIES - MAR 2021     | 01-121-099-60301     | \$110.28    |
| 76380  | 4/20/2021 | Purolator Courier Service         | FIRE - COURIER SERVICES        | 01-121-099-60305     | \$18.42     |
| 76389  | 4/20/2021 | Royal Benefits Inc                | BENEFITS CLAIM - MAR 2021      | 01-121-072-60222     | \$288.90    |
| 76390  | 4/20/2021 | Safedesign Apparel Ltd.           | FIRE - BUNKER GEAR             | 01-121-099-60701     | \$13,344.24 |
| 76391  | 4/20/2021 | Sam's Service Facility            | FIRE - CAR 1 SERVICE           | 01-121-099-60316     | \$134.31    |
| 76409  | 4/20/2021 | Town of LaSalle                   | DISPATCHING - Q1 2021          | 01-121-100-60715     | \$13,348.50 |
| 76422  | 4/20/2021 | Xerox Canada Ltd.                 | XEROX - FEB 25 - MAR 25/2021   | 01-121-099-60311     | \$63.86     |
| 76423  | 4/21/2021 | Allstream Business Inc            | Fire Emergency Calls           | 01-121-099-60327     | \$45.79     |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                 | 120 Fox St                     | 01-121-099-60314     | \$225.87    |
| 76427  | 4/21/2021 | Enbridge Gas Inc.                 | 120 Fox St                     | 01-121-099-60314     | \$534.32    |
| 76427  | 4/21/2021 | Enbridge Gas Inc.                 | 1720 Division Rd N             | 01-121-099-60314     | \$346.96    |
| 76428  | 4/21/2021 | Gosfield North Communications     | COTTAM FIRE HALL               | 01-121-099-60327     | \$126.46    |
| 76434  | 4/21/2021 | Telus Mobility                    | CELL PHONE - MAR 28-APR 27/21  | 01-121-099-60327     | \$249.31    |
| 76435  | 4/21/2021 | Town of Kingsville (water)        | 1720 Division Rd N             | 01-121-099-60314     | \$86.55     |
|        |           |                                   |                                | Total For Department | \$32,584.37 |

| Cheque | * | Date      | Vendor Name                          | Description                  | G/L Account      | Amount   |
|--------|---|-----------|--------------------------------------|------------------------------|------------------|----------|
| 76299  |   | 4/20/2021 | Cintas Canada Limited                | OPP - MATS                   | 01-122-099-60315 | \$107.45 |
| 76374  |   | 4/20/2021 | Ontario Association of Police Servic | OAPSB ANNUAL AGM - N SANTOS  | 01-122-098-60253 | \$712.32 |
| 76387  |   | 4/20/2021 | Ricoh Canada                         | OPP - LEASE & COPIES FEB-MAR | 01-122-099-60311 | \$343.83 |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc                    | 41 Division St S             | 01-122-099-60314 | \$655.79 |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.                    | 41 Division St S             | 01-122-099-60314 | \$265.81 |

| 76428 | 4/21/2021 | Gosfield North Communications | OPP - TALBOT ST COTTAM | 01-122-099-60327     | \$122.75   |
|-------|-----------|-------------------------------|------------------------|----------------------|------------|
| 76431 | 4/21/2021 | Reliance Home Comfort         | 41 Division St S       | 01-122-099-60314     | \$37.61    |
|       |           |                               |                        | Total For Department | \$2,245.56 |

| Cheque | * | Date      | Vendor Name                    | Description                    | G/L Account          | Amount      |
|--------|---|-----------|--------------------------------|--------------------------------|----------------------|-------------|
| 76334  |   | 4/20/2021 | The Harrow News & County Print | BUSINESS CARDS - W MILLS       | 01-124-099-60301     | \$76.27     |
| 76359  |   | 4/20/2021 | Wayne Mills Consulting         | BLDG - INSPECTIONS MAR 15-26   | 01-124-072-60120     | \$4,823.42  |
| 76359  |   | 4/20/2021 | Wayne Mills Consulting         | BLDG - INSPECTIONS MAR 29-APR9 | 01-124-072-60120     | \$5,311.87  |
| 76434  |   | 4/21/2021 | Telus Mobility                 | CELL PHONE - MAR 28-APR 27/21  | 01-124-099-60327     | \$239.14    |
|        |   |           |                                |                                | Total For Department | \$10,450.70 |

| Cheque | * Date    | Vendor Name                          | Description                    | G/L Account      | Amount      |
|--------|-----------|--------------------------------------|--------------------------------|------------------|-------------|
| 76281  | 4/20/2021 | B&T Waechter Holdings Ltd (Cdn Tire) | PW - 20-04 FLOOR MATS          | 01-130-099-60316 | \$30.52     |
| 76293  | 4/20/2021 | Caduceon Enterprises Inc.            | SAMPLE - ESSELTINE DRAIN       | 01-130-360-71547 | \$62.28     |
| 76298  | 4/20/2021 | Chapman Signs                        | PW - STREET SIGNS              | 01-130-132-60428 | \$775.43    |
| 76305  | 4/20/2021 | County Wide Tree Service             | TREE REMOVAL - 116 ELM ST      | 01-130-099-60426 | \$4,029.69  |
| 76314  | 4/20/2021 | Dillon Consulting                    | BRIDGE#18-REHABILITATION       | 01-130-360-71825 | \$21,910.36 |
| 76314  | 4/20/2021 | Dillon Consulting                    | RD#11 IRWIN DR - CULVERT       | 01-130-360-71962 | \$385.20    |
| 76319  | 4/20/2021 | Economy Rental Centre                | PW - SMALL CHAINSAW            | 01-130-099-60357 | \$437.52    |
| 76319  | 4/20/2021 | Economy Rental Centre                | PW - WELDING WIRE              | 01-130-099-60335 | \$144.96    |
| 76323  | 4/20/2021 | E.R.(Bill) Vollans Ltd.              | PW - TIRES FOR KIOTI'S         | 01-130-122-60421 | \$787.59    |
| 76323  | 4/20/2021 | E.R.(Bill) Vollans Ltd.              | PW - 13-02 SMALL PARTS         | 01-130-099-60316 | \$141.68    |
| 76324  | 4/20/2021 | Essex Region Conservation Auth       | PERMIT - BRIDGE#18             | 01-130-360-71825 | \$500.00    |
| 76338  | 4/20/2021 | Hurricane SMS Inc                    | DRAINAGE WORK - RIDGEVIEW      | 01-130-099-60427 | \$892.94    |
| 76346  | 4/20/2021 | Kelcom Radio Division                | AVL & RADIOS FOR FLEET - APR   | 01-130-099-60460 | \$761.93    |
| 76348  | 4/20/2021 | Kingsville Home Hardware             | PW - SWEEPER PARTS             | 01-130-110-60422 | \$18.31     |
| 76348  | 4/20/2021 | Kingsville Home Hardware             | PW - TOLIET FLAPPER            | 01-130-099-60315 | \$7.62      |
| 76348  | 4/20/2021 | Kingsville Home Hardware             | PW - TOILET LEVER ARM          | 01-130-099-60315 | \$8.13      |
| 76348  | 4/20/2021 | Kingsville Home Hardware             | PW - SHOP LIGHT BULBS          | 01-130-099-60315 | \$10.67     |
| 76351  | 4/20/2021 | LBC Capital                          | PW COPIER-APR 17-MAY 16/21     | 01-130-099-60301 | \$43.81     |
| 76352  | 4/20/2021 | Leamington Int. Trucks               | 12-01 - REPAIR BRAKES          | 01-130-099-60316 | \$2,563.09  |
| 76357  | 4/20/2021 | McTague Law Firm                     | LAND EXPROPRIATION-JASPERSON   | 01-130-360-71925 | \$1,162.20  |
| 76357  | 4/20/2021 | McTague Law Firm                     | LAND EXPROPRIATION - MAIN ST W | 01-130-360-71546 | \$331.64    |
| 76363  | 4/20/2021 | Monarch Office Supply                | OFFICE SUPPLIES - MAR 2021     | 01-130-099-60301 | \$50.84     |
| 76370  | 4/20/2021 | N.J. Peralta Engineering Ltd.        | ENG SERV - JASPERSON DR        | 01-130-360-71925 | \$50,828.07 |
| 76382  | 4/20/2021 | Queens Auto Supply                   | PW - DRILL BIT                 | 01-130-099-60335 | \$3.04      |
| 76382  | 4/20/2021 | Queens Auto Supply                   | PW - PIPE WRENCH SET           | 01-130-099-60357 | \$20.51     |
| 76383  | 4/20/2021 | Rapid Drainage Ltd                   | DAYLIGHTING - ROAD 2 E         | 01-130-360-72024 | \$3,934.60  |
| 76384  | 4/20/2021 | RC Spencer Associates Inc.           | ENG SERVICES - ESSELTINE DRAIN | 01-130-360-71547 | \$19,904.24 |
| 76384  | 4/20/2021 | RC Spencer Associates Inc.           | ENG SERVICES - ESSELTINE DRAIN | 01-130-360-71547 | \$7,418.30  |
| 76389  | 4/20/2021 | Royal Benefits Inc                   | BENEFITS CLAIM - MAR 2021      | 01-130-072-60223 | \$1,151.88  |
| 76394  | 4/20/2021 | Shepley Road Maintenance Ltd.        | 2021 RURAL ROAD PROGRAM        | 01-130-360-72109 | \$57,059.09 |
| 76395  | 4/20/2021 | Sherway Contracting                  | MAIN ST W RECONSTRUCTION       | 01-130-360-71546 | \$74,243.78 |
| 76399  | 4/20/2021 | SkyMobile                            | FLEET TRACKING - APR 2021      | 01-130-099-60460 | \$1,149.89  |
| 76401  | 4/20/2021 | Southpoint Publishing Inc            | AD - MARCH 2021                | 01-130-099-60306 | \$290.02    |
| 76403  | 4/20/2021 | Strongco Limited Partnership         | SERVICE & REPAIR - LOADER      | 01-130-099-60316 | \$5,521.48  |
| 76412  | 4/20/2021 | Verhaegen Land Surveyors             | PROF SERVICES - 319 RD 2 E     | 01-130-360-71925 | \$326.03    |
| 76413  | 4/20/2021 | Waddick Fuels                        | PW - DIESEL                    | 01-130-099-60340 | \$799.69    |
| 76413  | 4/20/2021 | Waddick Fuels                        | PW - GASOLINE                  | 01-130-099-60340 | \$1,870.16  |
| 76413  | 4/20/2021 | Waddick Fuels                        | PW - GASOLINE                  | 01-130-099-60340 | \$1,525.99  |
| 76413  | 4/20/2021 | Waddick Fuels                        | PW - DIESEL                    | 01-130-099-60340 | \$1,149.27  |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | 390 Main St E Traffic Lights   | 01-130-110-60402 | \$84.46     |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | Wigle Traffic Lights           | 01-130-110-60402 | \$68.88     |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | Street Lights - Kingsville     | 01-130-114-60412 | \$6,877.15  |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | Division Traffic Lights        | 01-130-110-60402 | \$160.19    |
| 76426  | 4/21/2021 |                                      | Spruce Traffic Lights          | 01-130-110-60402 | \$206.70    |
| 76426  | 4/21/2021 |                                      | Santos & Main Traffic Lights   | 01-130-110-60402 | \$27.89     |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | Jasperson Crosswalk            | 01-130-110-60402 | \$1,111.65  |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | Street Lights - Cottam         | 01-130-114-60412 | \$1,391.55  |
| 76426  | 4/21/2021 | E.L.K. Energy Inc                    | Jasperson Traffic Lights       | 01-130-110-60402 | \$206.70    |
| 76427  | 4/21/2021 | Enbridge Gas Inc.                    | 2021 Div RdN - PW Garage       | 01-130-099-60314 | \$246.24    |
| 76427  | 4/21/2021 | Enbridge Gas Inc.                    | 2021 Division - Garage         | 01-130-099-60314 | \$189.50    |
| 76429  | 4/21/2021 | HYDRO ONE                            | Streetlights - Kratz           | 01-130-114-60412 | \$3.06      |
| 76429  | 4/21/2021 | HYDRO ONE                            | Combination All Street Lights  | 01-130-114-60412 | \$2,762.45  |
| 76429  | 4/21/2021 | HYDRO ONE                            | PW Garage                      | 01-130-099-60314 | \$1,824.43  |
| 10423  | 7/21/2021 | Telus Mobility                       | CELL PHONE - MAR 28-APR 27/21  | 01-130-099-60327 | \$45.79     |

| 76434 | 4/21/2021 | Telus Mobility             | CELL PHONE - MAR 28-APR 27/21 | 01-130-099-60327     | \$559.68     |
|-------|-----------|----------------------------|-------------------------------|----------------------|--------------|
| 76435 | 4/21/2021 | Town of Kingsville (water) | PW Garage                     | 01-130-099-60314     | \$289.55     |
|       |           |                            |                               | Total For Department | \$278,308.32 |

| Cheque | * | Date      | Vendor Name               | Description                   | G/L Account          | Amount       |
|--------|---|-----------|---------------------------|-------------------------------|----------------------|--------------|
| 76325  |   | 4/20/2021 | Essex-Windsor Solid Waste | FIXED COSTS - MARCH 2021      | 01-131-400-60370     | \$40,211.00  |
| 76325  |   | 4/20/2021 | Essex-Windsor Solid Waste | WASTE DISPOSAL - MARCH 2021   | 01-131-400-60370     | \$19,584.63  |
| 76330  |   | 4/20/2021 | GFL Environmental Inc     | FRONT END-COTTAM/LP CONDO     | 01-131-400-60380     | \$499.78     |
| 76330  |   | 4/20/2021 | GFL Environmental Inc     | WASTE COLLECTION - APR 2021   | 01-131-400-60380     | \$52,860.52  |
| 76330  |   | 4/20/2021 | GFL Environmental Inc     | FRONT END - LP CONDO          | 01-131-400-60380     | \$11.80      |
| 76330  |   | 4/20/2021 | GFL Environmental Inc     | FRONT END-ARENA/LIONS/690 HER | 01-131-400-60380     | \$117.72     |
|        |   |           |                           |                               | Total For Department | \$113,285.45 |

| Cheque | * | Date      | Vendor Name              | Description           | G/L Account          | Amount     |
|--------|---|-----------|--------------------------|-----------------------|----------------------|------------|
| 76339  |   | 4/20/2021 | Hutchins Monuments       | RUTHVEN - OPENING     | 01-151-072-60121     | \$570.00   |
| 76339  |   | 4/20/2021 | Hutchins Monuments       | RUTHVEN - OPENING     | 01-151-072-60121     | \$570.00   |
| 76348  |   | 4/20/2021 | Kingsville Home Hardware | CEMETERY - EGDER      | 01-151-099-60337     | \$38.99    |
| 76348  |   | 4/20/2021 | Kingsville Home Hardware | CEMETERY - CHAIN LINK | 01-151-099-60337     | \$9.98     |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | Greenhill Cemetery    | 01-151-099-60314     | \$124.76   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | Mill St Cemetery      | 01-151-099-60314     | \$87.65    |
|        |   |           |                          |                       | Total For Department | \$1 401 38 |

| Cheque | * | Date      | Vendor Name                | Description                    | G/L Account          | Amount      |
|--------|---|-----------|----------------------------|--------------------------------|----------------------|-------------|
| 76286  |   | 4/20/2021 | Black & McDonald Limited   | ARENA - COMPRESSOR MAINT       | 01-170-099-60316     | \$5,253.65  |
| 76299  |   | 4/20/2021 | Cintas Canada Limited      | ARENA - MATS                   | 01-170-099-60315     | \$100.04    |
| 76313  | * | 4/20/2021 |                            | RFND-PAVILION APR 23-25, 2021  | 01-170-006-12063     | \$1,100.00  |
| 76331  | * | 4/20/2021 |                            | RFND - PAVILION JUL 16-18 2021 | 01-170-006-12063     | \$700.00    |
| 76351  |   | 4/20/2021 | LBC Capital                | P&R COPIER - APR 17-MAY 16/21  | 01-170-099-60301     | \$86.10     |
| 76358  |   | 4/20/2021 | Merchant Paper Company     | P&R - SHOP SUPPLIES            | 01-170-099-60315     | \$241.29    |
| 76363  |   | 4/20/2021 | Monarch Office Supply      | OFFICE SUPPLIES - MAR 2021     | 01-170-099-60301     | \$98.96     |
| 76365  | * | 4/20/2021 |                            | RFND-GROVEDALE APR 23-25, 2021 | 01-170-006-12063     | \$1,000.00  |
| 76386  | * | 4/20/2021 |                            | RFND-GROVEDALE APR 9-11, 2021  | 01-170-006-12063     | \$1,000.00  |
| 76389  |   | 4/20/2021 | Royal Benefits Inc         | BENEFITS CLAIM - MAR 2021      | 01-170-072-60222     | \$481.50    |
| 76392  | * | 4/20/2021 | Sarah Parks Horsemanship   | P2P FORM 006 & 007             | 01-170-000-15000     | \$1,098.36  |
| 76411  | * | 4/20/2021 |                            | RFND-GROVEDALE SEPT 24-26,2021 | 01-170-006-12063     | \$1,500.00  |
| 76423  |   | 4/21/2021 | Allstream Business Inc     | Arena - Fax/Debit              | 01-170-099-60327     | \$90.00     |
| 76423  |   | 4/21/2021 | Allstream Business Inc     | Carnegie/Arena Elevator        | 01-170-099-60327     | \$45.00     |
| 76425  |   | 4/21/2021 | Cogeco                     | 1741 JASPERSON                 | 01-170-099-60327     | \$110.43    |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.          | 1741 Jasperson Lane            | 01-170-099-60314     | \$1,545.19  |
| 76429  |   | 4/21/2021 | HYDRO ONE                  | Arena Complex                  | 01-170-099-60314     | \$3,970.69  |
| 76434  |   | 4/21/2021 | Telus Mobility             | CELL PHONE - MAR 28-APR 27/21  | 01-170-099-60327     | \$450.00    |
| 76435  |   | 4/21/2021 | Town of Kingsville (water) | 1741 Jasperson Lane            | 01-170-099-60314     | \$21.55     |
|        |   |           |                            |                                | Total For Department | \$18,892.76 |

| Cheque | * Date    | Vendor Name                | Description                    | G/L Account          | Amount     |
|--------|-----------|----------------------------|--------------------------------|----------------------|------------|
| 76323  | 4/20/2021 | E.R.(Bill) Vollans Ltd.    | P&R - OIL CHANGES              | 01-171-099-60316     | \$2,745.13 |
| 76326  | 4/20/2021 | FastSigns                  | P&R - BYLAW SIGNS              | 01-171-099-60315     | \$779.28   |
| 76362  | 4/20/2021 | Modular Service Group Inc  | STORAGE RENTAL - SOCCER        | 01-171-099-60318     | \$76.32    |
| 76378  | 4/20/2021 | Practica                   | DOGGY BAGS                     | 01-171-099-60335     | \$285.34   |
| 76382  | 4/20/2021 | Queens Auto Supply         | P&R - MULTI-BALL MOUNT         | 01-171-099-60316     | \$42.73    |
| 76382  | 4/20/2021 | Queens Auto Supply         | P&R - BELTS                    | 01-171-099-60316     | \$28.47    |
| 76382  | 4/20/2021 | Queens Auto Supply         | P&R - BELT                     | 01-171-099-60316     | \$20.65    |
| 76410  | 4/20/2021 | Truax Lumber               | APPLEWOOD PARK - FENCING       | 01-171-099-60315     | \$33.52    |
| 76410  | 4/20/2021 | Truax Lumber               | METTAWAS - BENCHES             | 01-171-099-60315     | \$40.69    |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | Queen St - NE Corner           | 01-171-099-60314     | \$14.79    |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | Queen St - NW Corner           | 01-171-099-60314     | \$14.79    |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | 315 Queen St - Meter Cab       | 01-171-099-60314     | \$25.97    |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | 169 Cty Rd 34W (Cottam Rotary) | 01-171-099-60314     | \$33.21    |
| 76429  | 4/21/2021 | HYDRO ONE                  | ERCA - Ticket Booth            | 01-171-099-60314     | \$27.75    |
| 76435  | 4/21/2021 | Town of Kingsville (water) | ERCA - Park Washrooms          | 01-171-099-60314     | \$108.55   |
|        |           |                            |                                | Total For Department | \$4.277.19 |

| Cheque | * | Date      | Vendor Name        | Description       | G/L Account          | Amount   |
|--------|---|-----------|--------------------|-------------------|----------------------|----------|
| 76382  |   | 4/20/2021 | Queens Auto Supply | FOL - RAPID STRIP | 01-172-099-60315     | \$114.28 |
|        |   |           |                    |                   | Total For Department | \$114.28 |

| Cheque | * | Date      | Vendor Name            | Description                    | G/L Account          | Amount   |
|--------|---|-----------|------------------------|--------------------------------|----------------------|----------|
| 76423  |   | 4/21/2021 | Allstream Business Inc | Boat Ramp - 599 Cedar Dr       | 01-173-099-60327     | \$48.62  |
| 76429  |   | 4/21/2021 | HYDRO ONE              | Cedar Beach Marina-W Dock      | 01-173-099-60314     | \$75.73  |
| 76429  |   | 4/21/2021 | HYDRO ONE              | Cedar Island Boat Slips        | 01-173-099-60314     | \$37.43  |
| 76429  |   | 4/21/2021 | HYDRO ONE              | Cedar Island Washrooms         | 01-173-099-60314     | \$27.27  |
| 76429  |   | 4/21/2021 | HYDRO ONE              | Boat Ramp Booth - 599 Cedar Dr | 01-173-099-60314     | \$43.42  |
|        |   |           |                        |                                | Total For Department | \$232.47 |

| Cheque | * | Date      | Vendor Name | Description                    | G/L Account          | Amount   |
|--------|---|-----------|-------------|--------------------------------|----------------------|----------|
| 76282  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76308  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76316  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76328  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76347  |   | 4/20/2021 |             | MILEAGE - FEB 26 - MAR 26 2021 | 01-175-099-60400     | \$58.66  |
| 76354  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76366  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76372  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76376  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76377  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76381  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76393  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76397  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76400  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
| 76414  | * | 4/20/2021 |             | RFND - 3 FITNESS CLASSES       | 01-175-066-40625     | \$17.70  |
|        |   |           |             |                                | Total For Department | \$306.46 |

| Cheque | * | Date      | Vendor Name              | Description              | G/L Account          | Amount     |
|--------|---|-----------|--------------------------|--------------------------|----------------------|------------|
| 76302  |   | 4/20/2021 | Colour Wheel Home Center | CARNEGIE PAINT           | 01-178-171-60315     | \$102.55   |
| 76302  |   | 4/20/2021 | Colour Wheel Home Center | CARNEGIE - PAINT         | 01-178-171-60315     | \$102.55   |
| 76410  |   | 4/20/2021 | Truax Lumber             | PAVILION - PLYWOOD       | 01-178-155-60315     | \$15.87    |
| 76410  |   | 4/20/2021 | Truax Lumber             | PAVILION - WOOD          | 01-178-155-60315     | \$283.42   |
| 76410  |   | 4/20/2021 | Truax Lumber             | PAVILION - MATERIALS     | 01-178-155-60315     | \$12.99    |
| 76410  |   | 4/20/2021 | Truax Lumber             | PAVILION - WOOD          | 01-178-155-60315     | \$123.58   |
| 76410  |   | 4/20/2021 | Truax Lumber             | PAVILION - MATERIALS     | 01-178-155-60315     | \$62.35    |
| 76410  |   | 4/20/2021 | Truax Lumber             | PAVILION - VICE GRIP     | 01-178-155-60315     | \$29.99    |
| 76410  |   | 4/20/2021 | Truax Lumber             | GROVEDALE - GRINDER      | 01-178-155-60315     | \$99.99    |
| 76423  |   | 4/21/2021 | Allstream Business Inc   | Park Pavilion            | 01-178-155-60327     | \$48.62    |
| 76423  |   | 4/21/2021 | Allstream Business Inc   | Lions Hall               | 01-178-159-60327     | \$45.00    |
| 76423  |   | 4/21/2021 | Allstream Business Inc   | Carnegie/Arena Elevator  | 01-178-171-60327     | \$52.66    |
| 76424  |   | 4/21/2021 | Bell Canada              | BIA Phone                | 01-178-135-60314     | (\$45.44)  |
| 76424  |   | 4/21/2021 | Bell Canada              | Grovedale Elevator       | 01-178-135-60314     | \$89.56    |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 21 Mill St - Lions Hall  | 01-178-159-60314     | \$14.53    |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 28 Division St S         | 01-178-171-60314     | \$202.00   |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 315 Queen St - Pavilion  | 01-178-155-60314     | \$182.33   |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 21 Mill St - Lions Hall  | 01-178-159-60314     | \$321.57   |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 37 Beech St (42 Main)    | 01-178-172-60314     | \$155.51   |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 103 Park St              | 01-178-135-60314     | \$15.94    |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 103 Park St              | 01-178-135-60314     | \$1,153.99 |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 124 Fox - Ridgeview Park | 01-178-176-60314     | \$20.90    |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc        | 122 Fox St               | 01-178-173-60314     | \$235.46   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | 124 Fox St               | 01-178-176-60314     | \$293.64   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | 122 Fox St               | 01-178-173-60314     | \$485.68   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | 37 Beech St              | 01-178-172-60314     | \$180.34   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | 21 Mill St - Lions Hall  | 01-178-159-60314     | \$578.54   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | 28 Division St S         | 01-178-171-60314     | \$104.50   |
| 76427  |   | 4/21/2021 | Enbridge Gas Inc.        | 103 Park St              | 01-178-135-60314     | \$336.34   |
| 76431  |   | 4/21/2021 | Reliance Home Comfort    | 24 Mill St - Lions Hall  | 01-178-159-60314     | \$24.00    |
| 76431  |   | 4/21/2021 | Reliance Home Comfort    | 315 Queen                | 01-178-155-60314     | \$91.77    |
|        |   |           |                          |                          | Total For Department | \$5,420.73 |

| Cheque | * | Date      | Vendor Name           | Description                   | G/L Account          | Amount   |
|--------|---|-----------|-----------------------|-------------------------------|----------------------|----------|
| 76363  |   | 4/20/2021 | Monarch Office Supply | OFFICE SUPPLIES - MAR 2021    | 01-180-099-60301     | \$58.30  |
| 76434  |   | 4/21/2021 | Telus Mobility        | CELL PHONE - MAR 28-APR 27/21 | 01-180-099-60327     | \$45.79  |
|        |   |           |                       |                               | Total For Department | \$104.09 |

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| Cheque | * | Date      | Vendor Name                | Description                   | G/L Account          | Amount   |
|--------|---|-----------|----------------------------|-------------------------------|----------------------|----------|
| 76284  |   | 4/20/2021 |                            | BIA - VOLUNTEER GIFT          | 01-181-099-60317     | \$24.80  |
| 76284  |   | 4/20/2021 |                            | BIA - CONTEST PRIZE           | 01-181-099-60306     | \$50.00  |
| 76418  |   | 4/20/2021 | Windsor Parade Corporation | EASTER PROMO - PHOTO DONATION | 01-181-099-60306     | \$150.00 |
| 76424  |   | 4/21/2021 | Bell Canada                | BIA Internet                  | 01-181-099-60327     | \$36.63  |
| 76424  |   | 4/21/2021 | Bell Canada                | BIA Phone                     | 01-181-099-60327     | \$123.37 |
|        |   |           |                            |                               | Total For Department | \$384.80 |

| Cheque | * | Date      | Vendor Name                        | Description              | G/L Account          | Amount   |
|--------|---|-----------|------------------------------------|--------------------------|----------------------|----------|
| 76407  |   | 4/20/2021 | Tourism Windsor Essex Pelee Island | AD-TWEPI'S VISITOR GUIDE | 01-185-099-63104     | \$864.96 |
| 76424  |   | 4/21/2021 | Bell Canada                        | BIA Toll Free            | 01-185-099-60327     | \$12.16  |
|        |   |           |                                    |                          | Total For Department | \$877.12 |

| Cheque | * | Date      | Vendor Name | Description                  | G/L Account          | Amount   |
|--------|---|-----------|-------------|------------------------------|----------------------|----------|
| 76290  |   | 4/20/2021 |             | RESEARCH ASSISTANT-MAR & EXP | 01-186-099-63200     | \$420.00 |
| 76290  |   | 4/20/2021 |             | RESEARCH ASSISTANT-MAR & EXP | 01-186-099-60320     | \$15.43  |
|        |   |           |             |                              | Total For Department | \$435.43 |

| Cheque | * | Date      | Vendor Name                        | Description                   | G/L Account          | Amount      |
|--------|---|-----------|------------------------------------|-------------------------------|----------------------|-------------|
| 76278  |   | 4/20/2021 | Allsop Plumbing                    | WTR-METER REPAIR 236 CTY RD27 | 02-201-099-63017     | \$194.62    |
| 76278  |   | 4/20/2021 | Allsop Plumbing                    | WTR-TEST&CERT HYDRANTBACKFLOW | 02-201-099-63045     | \$144.50    |
| 76294  |   | 4/20/2021 | Canada Post Corporation            | WATER - G/S & KING ARREARS    | 02-201-099-60303     | \$3,638.97  |
| 76296  | * | 4/20/2021 |                                    | RFND WTR - EBP MULTIPLE ACCTS | 02-201-006-12067     | \$515.20    |
| 76303  |   | 4/20/2021 | comPeters inc.                     | LOCATE SOFTWARE - APR 2021    | 02-201-099-63020     | \$381.60    |
| 76319  |   | 4/20/2021 | Economy Rental Centre              | ES - 2" TRASH PUMP            | 02-201-099-60357     | \$609.44    |
| 76332  |   | 4/20/2021 | Great Lakes Safety Products        | ES - HARD HATS                | 02-201-099-60347     | \$229.66    |
| 76342  |   | 4/20/2021 | ICONIX Waterworks LP               | 5/8" METERS                   | 02-201-099-63015     | \$7,845.69  |
| 76344  |   | 4/20/2021 | Jireh Tools                        | ES - GRINDING WHEEL           | 02-201-099-60357     | \$487.43    |
| 76344  |   | 4/20/2021 | Jireh Tools                        | ES - GRINDING WHEEL UPGRADE   | 02-201-099-60357     | \$71.23     |
| 76344  |   | 4/20/2021 | Jireh Tools                        | ES - GRINDING WHEEL           | 02-201-099-60357     | \$9.13      |
| 76375  |   | 4/20/2021 | Ontario One Call                   | NOTIFICATIONS - MAR 2021      | 02-201-099-63020     | \$402.61    |
| 76379  |   | 4/20/2021 | Preview Inspections and Consulting | BACKFLOW PREVENTION-MAR 2021  | 02-201-180-60405     | \$1,933.44  |
| 76382  |   | 4/20/2021 | Queens Auto Supply                 | ES - BULBS                    | 02-201-099-60335     | \$80.43     |
| 76389  |   | 4/20/2021 | Royal Benefits Inc                 | BENEFITS CLAIM - MAR 2021     | 02-201-072-60222     | \$132.41    |
| 76389  |   | 4/20/2021 | Royal Benefits Inc                 | BENEFITS CLAIM - MAR 2021     | 02-201-072-60223     | \$2,303.76  |
| 76417  |   | 4/20/2021 | Windsor Factory Supply             | ES - CURB STOP REPAIRS        | 02-201-180-60403     | \$211.85    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - ANGLE METER VALVES       | 02-201-099-63017     | \$587.87    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - WATER SERVICE COUPLINGS  | 02-201-099-63025     | \$386.69    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - METER PIT RISERS         | 02-201-099-63025     | \$61.92     |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - METER PIT COVER          | 02-201-099-63017     | \$43.15     |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - HYDRANT LUBE             | 02-201-099-63045     | \$314.44    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - BLUE PAINT               | 02-201-099-63020     | \$732.67    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - ANGLE METER VALVES       | 02-201-099-63015     | \$4,149.77  |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - METER PIT COVERS         | 02-201-099-63017     | \$659.40    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - LOCATE FLAGS & VALVE BOX | 02-201-099-63020     | \$109.99    |
| 76419  |   | 4/20/2021 | Wolseley Canada Inc                | ES - LOCATE FLAGS & VALVE BOX | 02-201-099-63040     | \$1,437.17  |
| 76421  |   | 4/20/2021 | Work Authority                     | BOOTS -                       | 02-201-098-60254     | \$223.86    |
| 76430  |   | 4/21/2021 | Ontario Municipal Water Assoc.     | 2021 MEMBERSHIP               | 02-201-099-60320     | \$1,231.29  |
| 76434  |   | 4/21/2021 | Telus Mobility                     | CELL PHONE - MAR 28-APR 27/21 | 02-201-099-60327     | \$366.34    |
| 76435  |   | 4/21/2021 | Town of Kingsville (water)         | Coin Meter                    | 02-201-099-60314     | \$21.55     |
|        |   |           |                                    |                               | Total For Department | \$29,518.08 |

| Cheque | * Date    | Vendor Name                | Description                              | G/L Account          | Amount       |
|--------|-----------|----------------------------|--|----------------------|--------------|
| 76314  | 4/20/2021 | Dillon Consulting          | LAKESIDE PARK - TRUNK SAN S              | 02-242-360-71864     | \$1,749.07   |
| 76373  | 4/20/2021 | Ontario Clean Water Agency | ENBRIDGE - FEB 12-MAR 17, 2021           | 02-242-099-60314     | \$2,952.71   |
| 76373  | 4/20/2021 | Ontario Clean Water Agency | <b>OPERATIONS &amp; MAINT - APR 2021</b> | 02-242-320-64360     | \$67,162.59  |
| 76373  | 4/20/2021 | Ontario Clean Water Agency | <b>OPERATIONS &amp; MAINT - APR 2021</b> | 02-242-320-64360     | \$17,073.63  |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | 98 McCallum Dr                           | 02-242-099-60314     | \$89.66      |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | Bernath Pump Station                     | 02-242-099-60314     | \$37.01      |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | 67 Heritage Sewage 2                     | 02-242-099-60314     | \$3,405.97   |
| 76426  | 4/21/2021 | E.L.K. Energy Inc          | 250 Queen St                             | 02-242-099-60314     | \$931.55     |
| 76429  | 4/21/2021 | HYDRO ONE                  | Normandy Pump Station                    | 02-242-099-60314     | \$89.14      |
| 76429  | 4/21/2021 | HYDRO ONE                  | 18 Hwy Lane Sewage Lagoon                | 02-242-099-60314     | \$70.13      |
| 76429  | 4/21/2021 | HYDRO ONE                  | 1562 Heritage Rd Pump 4                  | 02-242-099-60314     | \$68.99      |
| 76429  | 4/21/2021 | HYDRO ONE                  | Pump Station Cedar Island                | 02-242-099-60314     | \$465.14     |
| 76429  | 4/21/2021 | HYDRO ONE                  | 1053 Cedar Dr                            | 02-242-099-60314     | \$114.68     |
| 76429  | 4/21/2021 | HYDRO ONE                  | 690 Heritage Rd                          | 02-242-099-60314     | \$19,491.39  |
| 76429  | 4/21/2021 | HYDRO ONE                  | 1902 Heritage Rd Pump 5                  | 02-242-099-60314     | \$65.58      |
| 76429  | 4/21/2021 | HYDRO ONE                  | Forcemain over Bridge                    | 02-242-099-60314     | \$31.09      |
|        |           |                            |  | Total For Department | \$113,798,33 |

| Cheque | * | Date      | Vendor Name                   | Description                              | G/L Account          | Amount     |
|--------|---|-----------|-------------------------------|--|----------------------|------------|
| 76338  |   | 4/20/2021 | Hurricane SMS Inc             | FLUSHER - COTTAM BLOCK SEWER             | 02-243-320-64365     | \$610.56   |
| 76373  |   | 4/20/2021 | Ontario Clean Water Agency    | <b>OPERATIONS &amp; MAINT - APR 2021</b> | 02-243-320-64360     | \$4,952.19 |
| 76373  |   | 4/20/2021 | Ontario Clean Water Agency    | <b>OPERATIONS &amp; MAINT - APR 2021</b> | 02-243-320-64360     | \$1,204.71 |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc             | 168 Cty Rd 27 N                          | 02-243-099-60314     | \$458.75   |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc             | Rear 17 Lyle                             | 02-243-099-60314     | \$43.86    |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc             | 16 whitewood (Behind)                    | 02-243-328-64365     | \$154.91   |
| 76426  |   | 4/21/2021 | E.L.K. Energy Inc             | 168 Cty Rd 27 N - Lagoon                 | 02-243-099-60314     | \$706.62   |
| 76428  |   | 4/21/2021 | Gosfield North Communications | PUMP HOUSE ALARM                         | 02-243-099-60327     | \$48.15    |
|        |   |           |                               |  | Total For Department | \$8,179.75 |

\* Note GST Rebate details are omitted, but are included in the totals

\$750,696.23



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

Date: May 4, 2021

To: Mayor and Council

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

RE: Main St. East Interim Control By-law

Report No.: PS 2021-025

# **RECOMMENDED ACTION**

That Council:

Establish a secondary plan study area for the lands outlined in the attached interim control bylaw, Schedule "A", and direct administration to begin preparation of a secondary plan, hereafter referred to as the Main St. E. Secondary Plan Area; and

Approve and adopt the attached interim control by-law, including Schedule "A" affecting only those lands outlined in Schedule "A", and for the time period outlined in the by-law.

# BACKGROUND

In February of 2020, a draft of an interim control by-law was prepared for presentation to Council. This by-law would pause the consideration of development applications for a minimum of one year along the Main Street corridor from Heritage Road to Kratz Road. As part of the same report presented to Council in February a recommendation was made to establish an ad hoc committee to review current development policy and concerns related to the impacts of ongoing development pressure in the corridor. The final version of the by-law was prepared and returned to Council in April of 2020 and adopt the following motion:

Motion 279-2020

That Council directs Administration to prepare a final interim control by law for consideration at a future Regular Meeting, and directs that consideration of such by-law be not later than thirty (30) days after the coronavirus (COVID-19) emergency declaration has been terminated.

Since that time, the work of the Main Street Development Review Committee has undertaken a significant amount of work and review. The committee has reviewed a number of key areas in the Main St. study area and formulated recommendations. A public open house was held April 6, 2021 to present the proposed recommendations to the public and get additional feedback. The committee is now ready to come forward to Council with those recommendations.

# DISCUSSION

Once Council has considered the recommendations from the Main St. Committee it is anticipated that those recommendations will be referred to administration for review and comment. Part of the review will consider what planning policy changes may be necessary to implement different aspects of the recommendations. One such tool available to planning is a secondary plan. The Official Plan does not current have policies on secondary planning however the 5 year Official Plan review has added a section on this topic. What is a secondary planning?

"Secondary Planning is a specific tool, which: Helps understand opportunities and address issues related to land use in certain defined geographic areas. It provides specific policies for those areas of the Town where more detailed direction is needed for matters beyond the general framework provided by the Official Plan."

Review of this area will require some significant time and focus from staff and will greatly benefit from external consultation and expertise in the area of secondary plan preparation. Although not yet approved by Council many of the issues raised as part of the Main St. Committee will be considered in detail for the proposed secondary plan area.

During the initial discussion with the committee, the use of an interim control by-law was another planning tool noted however, staff advised that consideration of the by-law had been paused due to the Covid-19 emergency. With the potential for ongoing development along Main St. the use of an interim control by-law has remained a topic of interest and was discussed again prior to the April meeting.

Due to the significant impact an interim control by-law can have and to make sure that the by-law is focusing control effectively, the Chief Administrative Officer met with the Manager of Planning Services and the Director of Legislative Service to review the intent of the interim control by-law and the extent of its coverage. What resulted was a more focused area which would center on lands that remain primarily vacant on the north and south side of Main St. E. and include the following:

190 & 224 Main St. E. – the approved but not constructed six-storey apartment buildings to the rear of 200 Main St. E.

140 Main St. E – only the rear potion of the property would be included as a building permit has been issued for the initial phase of development at the front

170 Main St. E – the Kingsville high school property

45 Spruce St. – this is a large underutilized residential property with potential for additional development and abuts 140 Main St. E. to the east.

195 Main St. E – the vacant farmed lands on the south side of the street

Pausing development in this area will provide time for administration to undertake the necessary in-depth study, a requirement of implementing an interim control by-law, to provide a more comprehensive plan of how the Town would like to see the area used. The specific approach for the study would be to undertake a secondary plan for the subject lands.

The CAO expressed concern about the originally drafted interim control by-law including the entire Main Street corridor from Heritage Road to Kratz Road. The CAO's concern is that this large corridor area would be impacted by an interim control by-law which would potentially have negative economic impact to the community. The study area proposed in the interim control by-law is more focused and concentrates a review on an area that is underutilized and has been under ongoing development pressure in recent years.

It is important to note that a Secondary Plan can be undertaken at any time for any given area within the Town without the need to pass an interim control by-law.

If Council adopts the interim control by-law, administration will need to undertake a communication strategy to explain the rationale for the interim control by-law and purpose of the secondary plan study to the effected landowners, with emphasis placed upon continuing to support and encourage appropriate development in Kingsville.

# LINK TO STRATEGIC PLAN

Manage growth through sustainable planning.

# Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- □ Customer Service: Training, Technology, Staff, Review Standards/Level of service

□ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)

- Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- □ Economic Development: strengthen tourism/hospitality
- □ COVID economic recovery
- □ Communications: Strategy Policy (social media), Website refresh and other tools, Public engagement
- □ Housing: Migrant Worker Housing Inspections (Building/Fire), regulate, reduce, or increase
- $\hfill\square$  Committees / Boards: Review and Report
- □ Policy Update: Procedural Bylaw
- $\hfill\square$  Economic Development: diversify the economy, create local jobs, industrial,

Cottam

- □ Infrastructure (non-Municipal): Union Water expansion & governance
- □ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit
- $\hfill\square$  No direct link to Council priorities

# FINANCIAL CONSIDERATIONS

There are financial implications related to the implementation of an interim control bylaw including the delay or potential loss of development in the affected area and the cost of completing the necessary study work. Council will recall during the 2021 budget that Planning staff had requested funding for the completion of a local comprehensive review. This work was intended to take place over two years with an anticipated budget of \$175,000. After consultation with the County Planner there will be works that the County will be undertaking as part of their own 5 year Official Plan review that will benefit the Town. This in turn will lead to cost savings in the local comprehensive review. Those cost savings should be able to be redirected toward the secondary plan study.

# CONSULTATIONS

CAO, Clerk, Director of Finance

# Robert Brown

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

# THE CORPORATION OF THE TOWN OF KINGSVILLE

# BY-LAW 42-2021

#### Being a by-law to establish Interim Control on certain land uses within The Corporation of the Town of Kingsville

**WHEREAS** Section 38(1) of the Planning Act, R.S.O. 1990, c.P.13, as amended, authorizes the council of a municipality to pass an interim control by-law where the council has directed that a review or study be undertaken in respect of land use planning policies in the municipality, or in any defined area or areas thereof;

**AND WHEREAS** Council has directed, by resolution, that a secondary plan study be undertaken to review the land use planning policies in respect of the lands in the secondary plan area, as illustrated in Schedule 'A" of this by-law;

**AND WHEREAS** it is deemed desirable and expedient to enact this interim control by-law to provide the Town with the necessary time to complete the study and allow Council to consider the results of such study;

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

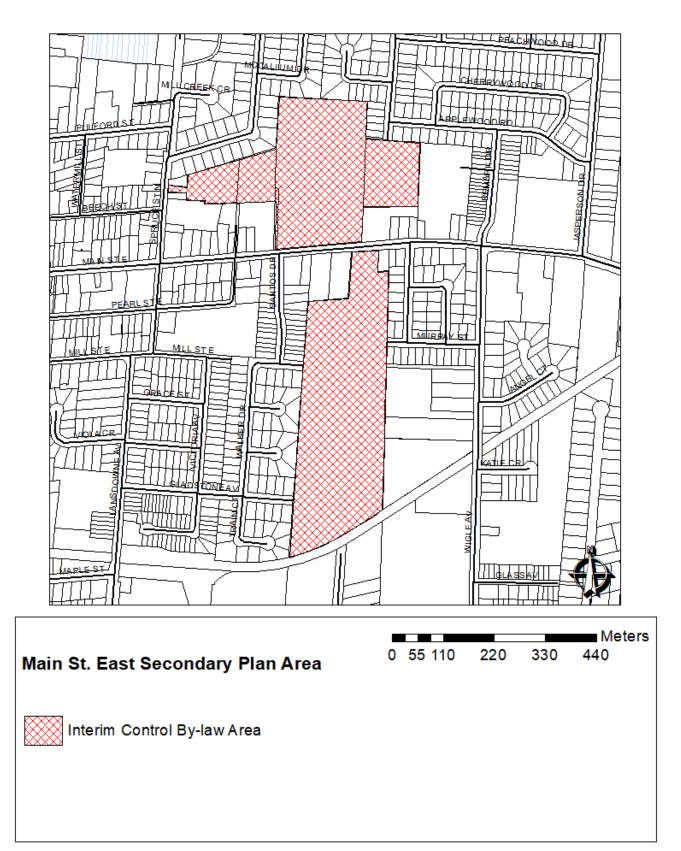
- 1. The provisions of this by-law shall only apply to the lands outlined in Schedule "A", attached to this by-law.
- 2. Notwithstanding any other by-law to the contrary, no person shall, on the lands identified in Schedule "A", use any land, building or structure for any purpose whatsoever except for a use that lawfully existed on the date of the passage of this by-law as long as it continues to be used for such purpose.
- 3. Where any conflict exists between the provisions of this by-law and any other by-law of The Corporation of the Town of Kingsville this by-law shall prevail.
- 4. If any provision or requirement of this by-law, or the application thereof to any person, shall to any extent be held to be invalid or unenforceable, the remainder of this by-law or the application of such provision or requirement to all persons other than those to which it is held to be invalid or unenforceable, shall not be affected thereby, and each provision and requirement of this by-law shall be separately valid an enforceable to the fullest extent permitted by law.
- 5. Schedule 'A' attached hereto forms part of this By-law.
- 6. This by-law shall come into force and take effect on the day it is finally passed and shall remain in effect for one (1) year from the passage of this By-law unless otherwise extended in accordance with Section 38 of the *Planning* Act, or repealed by Council at an earlier date.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 10th DAY OF May, 2021.

MAYOR, Nelson Santos

CLERK, Jennifer Astrologo

# Schedule A





| Date:       | May 4, 2021   |
|-------------|---|
| То:         | Mayor and Council                                   |
| Author:     | Tim Del Greco, Manager of Engineering               |
| RE:         | Road 2 East Reconstruction – Phase 1 Tender Results |
| Report No.: | IED 2021 – 22                                       |

# **RECOMMENDED ACTION**

That Council award the Road 2 East Reconstruction Tender (Phase 1) to J&J Lepera Infrastructures in the amount of \$5,825,000 (excluding HST) and authorize the Mayor and Clerk to execute the requisite agreement.

# BACKGROUND

Road 2 East is a high volume rural roadway with a poor pavement condition and due for rehabilitation. During the January 13, 2021, Budget Meeting, Council approved reconstruction of Road 2 East from County Road 45 (Union Ave) to Graham Sideroad.

The reconstruction of Road 2 East presents an opportunity to incorporate several long term Kingsville initiatives. This includes:

- Extension of large diameter watermain to eventually service the west side of the Kingsville core per the Official Plan.
- Road reconstruction to urban standards in order to accommodate heavy truck traffic per the Transportation Master Plan.
- Construction of active transportation facilities per the Active Transportation Master Plan.

In 2020, RC Spencer Associates was procured to provide engineering and design services to facilitate reconstruction. Their initial work included a study of the existing corridor to determine a preferred future cross section. A copy of the corridor study is included in Appendix A. To summarize, the corridor study recommends a cross section (identified as Alternative #1) comprised of the following:

• New asphalt roadway with curb and gutter.

- Road lane widths to be slightly narrow (3.3 metres, not including curb and gutter).
- Additional streetlights.
- An asphalt multi-use pathway within the south boulevard.

Below is a brief summary of notable design considerations.

#### Barrier Curb and Gutter

Current safety standards for this type of roadway recommend that active transportation facilities be separated from the road and within the boulevard. Ideally, this facility (multiuse pathway) should be on the south side of the road to eliminate unnecessary crossings of Road 2 East by pedestrians and cyclists (the majority of destinations are south of Road 2 East).

Safety standards specify the amount of recommended separation between the pathway and roadway. The use of barrier curb allows the pathway to be closer to the edge of road. The south boulevard is not wide enough to accommodate a pathway in the absence of curb while still meeting current safety standards. Further, the installation of barrier curb and gutter was determined to be the least expensive option when compared to the other alternatives.

#### **Speed Limit Considerations**

The proposed design maintains a posted speed of 60 km/h on Road 2 East. A wider road would be ideal for any consideration of an increase in speed. In this case, road width is limited by the municipal drain, and further, by the installation of a proposed active transportation facility.

It is worth noting a pedestrian crossing would no longer be recommended at the Chrysler Canada Greenway for a posted speed in excess of 60 km/h. In that situation, a midblock traffic signal should be utilized.

### Farm Equipment

Local farmers of Road 2 East were approached to collect feedback on the proposed road width in comparison to their equipment. The general response was that an urban cross section is somewhat inconvenient and mounting the curb with their equipment may be necessary in order to avoid encroaching oncoming traffic. That said, local farmers acknowledged the need for safe and practical active transportation along Road 2 East. It was also indicated that the use of large equipment is typically limited to a few days during both the planting and harvesting season.

It is anticipated that agricultural land along Road 2 East will continue to experience redevelopment to residential and / or greenhouse applications. As this redevelopment progresses, it should lessen the amount of large farm equipment utilizing Road 2 East.

# DISCUSSION

A tender for Road 2 East reconstruction (including extension of large diameter watermain) was advertised on April 15, 2021 and closed on April 30, 2021. Seven bids were received. The results (excluding HST) of the top five are as follows:

| Contractor / Vendor Name      | Bid Amount  |
|-------------------------------|-------------|
| J&J Lepera Infrastructures    | \$5,825,000 |
| D'Amore Construction Limited  | \$5,924,279 |
| Nevan Construction            | \$6,196,250 |
| Major Construction            | \$6,272,927 |
| Sterling Ridge Infrastructure | \$6,523,314 |

J&J Lepera is able to satisfy requirements relating to experience with similar projects, bonding, and insurance while providing the lowest cost proposal. Therefore, the recommendation is to proceed with this vendor. RC Spencer has also endorsed this recommendation (see Appendix B for their tender review letter).

Construction plans were circulated to residents / businesses within the affected area as well as online via social media and the Town website. The plans are attached in Appendix C and the comments received from the public are attached in Appendix D.

Should Council award reconstruction, the work is anticipated to commence in late spring and extend into late fall. Road 2 East from County Road 45 (Union Ave) to Graham Sideroad will be closed to local traffic only (no through traffic) throughout the duration of the project.

# LINK TO STRATEGIC PLAN

To become a leader in sustainable infrastructure renewal and development.

# Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- □ Customer Service: Training, Technology, Staff, Review Standards/Level of service

□ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)

- Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- □ A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- Economic Development: strengthen tourism/hospitality
- □ COVID economic recovery

□ Communications: Strategy – Policy (social media), Website refresh and other tools, Public engagement

□ Housing: Migrant Worker Housing – Inspections (Building/Fire), regulate, reduce, or increase

- □ Committees / Boards: Review and Report
- □ Policy Update: Procedural Bylaw
- □ Economic Development: diversify the economy, create local jobs, industrial, Cottam
- □ Infrastructure (non-Municipal): Union Water expansion & governance

□ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit

☑ No direct link to Council priorities

# FINANCIAL CONSIDERATIONS

The award of \$5,825,000 is within the amount budgeted for this project in the 2021 Capital Budget.

Hydro One has provided the Town with an estimate of \$650,000 (+/- 50%) to relocate 22 hydro poles in conflict with Phase 2 reconstruction (Graham Sideroad to Kratz Sideroad). Administration will provide Hydro One approval to proceed should Council award Road 2 East Phase 1 reconstruction as tendered.

# CONSULTATIONS

Kingsville Administration RC Spencer Associates Kingsville Residents via Notification of Public Consultation

Tím Del Greco

Tim Del Greco, P.Eng Manager of Engineering

<u>G. A. Plancke</u> G.A. Plancke, Civil Eng. Tech (Env.) Director of Infrastructure and Engineering

# ROAD 2 EAST CORRIDOR STUDY COUNTY ROAD 29 TO COUNTY ROAD 45 KINGSVILLE, ONTARIO

**Prepared for:** 



**Prepared by:** 

RC SPENCER ASSOCIATES INC. Consulting Engineers Windsor: 800 University Avenue W. – Windsor ON N9A 5R9 Leamington: 18 Talbot Street W. – Leamington ON N8H 1M4 Chatham-Kent: 49 Raleigh Street – Chatham ON N7M 2M6

London: 660 Inverness Avenue – London ON N6H 5R4

File No.: 20-1000

November 2020

# ROAD 2 EAST CORRIDOR STUDY (NOVEMBER 2020) COUNTY ROAD 29 TO COUNTY ROAD 45, KINGSVILLE, ONTARIO

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#### Appendix A: Historical Traffic Data

• Jasperson Drive at Road 2 East

#### Appendix B: Current Traffic Data

- Jasperson Drive at Road 2 East
- Kratz Sideroad at Road 2 East
- Graham Sideroad at Road 2 East
- County Road 45 (Union Avenue) at Road 2 East

#### **Appendix C: Traffic Projection Figures**

- Jasperson Drive at Road 2 East
- Kratz Sideroad at Road 2 East
- Graham Sideroad at Road 2 East
- County Road 45 (Union Avenue) at Road 2 East

#### Appendix D: Detailed Synchro Results

- Jasperson Drive at Road 2 East
- Kratz Sideroad at Road 2 East
- Graham Sideroad at Road 2 East
- County Road 45 (Union Avenue) at Road 2 East

#### Appendix E: Left Turn Lane Warrant Analyses

- Jasperson Drive at Road 2 East
- Kratz Sideroad at Road 2 East
- Graham Sideroad at Road 2 East

#### Appendix F: Signal Warrant Analyses

- Jasperson Drive at Road 2 East
- Kratz Sideroad at Road 2 East
- Graham Sideroad at Road 2 East
- County Road 45 (Union Avenue) at Road 2 East

#### Appendix G: OTM Book 15: References

#### Appendix H: OTM Book 18: References

#### Appendix I: TAC Geometric Design Guide for Canadian Roads: References

# INTRODUCTION AND BACKGROUND

As illustrated on Figure 1 – Area Plan, Road 2 East is an east / west minor arterial road in the Town of Kingsville. The Town has a population of approximately 21,000 and is the result of an amalgamation of the former Townships of Gosfield North, Gosfield South and the Town of Kingsville, as well as a number of smaller communities, such as Cottam and Ruthven. The Town of Kingsville consists of primarily agricultural land, including numerous greenhouse operations. The Town is currently planning to reconstruct Road 2 East from County Road 29 (Division Road) to County Road 45 (Union Avenue), as defined on Figure 2 – Study Area.

The Town of Kingsville intends to reconstruct the granular road base to accommodate heavy truck traffic, surface the roadway with an appropriate asphalt pavement design, and improve the existing road profile to accommodate both vehicular traffic and active transportation users. It is noted that the Chrysler Greenway, a major regional recreational trail, crosses Road 2 East just east of Graham Sideroad; it also crosses the Graham Sideroad just south of Road 2 East. Furthermore, the Kingsville Recreation Complex is located on the south side of Road 2 East between Kratz Sideroad and Jasperson Drive, which further emphasizes the need for active transportation connectivity. Accordingly, active transportation facilities along Road 2 East may be integrated to facilitate alternative modes of transportation and leisure within the region.

The reconstruction of Road 2 East is scheduled for reconstruction in three phases. Phase 1 of the project is comprised of the 1.8km stretch from County Road 45 (Union Avenue) at the east to Graham Sideroad at the west; it is scheduled for reconstruction in 2021. Phase 2 of the project is comprised of the 1.9km stretch from Graham Sideroad at the east to Kratz Sideroad at the west; it is scheduled for reconstruction in 2022. Phase 3 of the project is comprised of the 1.78km stretch from Kratz Sideroad at the east to County Road 29 (Division Road) at the west; it is scheduled for reconstruction in 2023.

County Road 45 (Union Avenue) and County Road 29 (Division Road) at the project limits are major arterial roads, while Kratz Sideroad, Graham Sideroad, and Peterson Road are best characterized as rural local / collector roads. All intersecting roads west of Kratz Sideroad are best classified as urban collector roads, while Queen Boulevard just west of County Road 45 is also best classified as an urban collector road.

The purpose of this study is to evaluate the Road 2 East corridor between County Road 29 and County Road 45 with respect to its right-of-way cross-section elements, road safety, and active transportation needs. Specifically, an urban cross-section with off-road multi-use pathway, rural cross-section with multi-use pathway, hybrid cross-section with off-road multi-use pathway, and rural cross-section with paved shoulders will be compared for Council's decision.



# **EXISTING CONDITIONS**

As provided in Appendix A, turning movement counts were completed by Pyramid Traffic Inc. on 1 November 2018 for the northbound stop-controlled tee intersection of Jasperson Drive at Road 2 East, which is approximately 400m west of Kratz Sideroad. During the eight hours of data collection, 1,044 vehicles (including 4% heavy vehicles) proceeded east on Road 2 East from the intersection and 1,235 vehicles (including 3.5% heavy vehicles) proceeded west. Using industry factors to convert 8-hour traffic volumes to average annual daily traffic (AADT), the estimated AADT on this 5.48km stretch of roadway is a maximum of 6000 vehicles per day. Recent AADT counts for this corridor, as provided by the Town of Kingsville, are consistent with this assumption. Table 1 reports the AADT counts and the dates they were collected:

| Street Name  | From                       | То           | Functional Class | AADT | Date           |
|--------------|----------------------------|--------------|------------------|------|----------------|
| Road 2 E.    | Kratz Sdrd.                | Graham Sdrd. | Minor Arterial   | 5303 | 25 June 2019   |
| Road 2 E.    | Graham Sdrd.               | Peterson Ln. | Minor Arterial   | 5409 | 26 June 2019   |
| Road 2 E.    | Peterson Ln.               | Queen Blvd.  | Collector        | 3408 | 28 August 2019 |
| Road 2 E.    | Queen Blvd.                | Union Ave.   | Collector        | 3472 | 19 August 2019 |
| Kratz Sdrd.  | Road 2 E.                  | Seacliff Dr. | Local            | 1389 | 18 July 2019   |
| Graham Sdrd. | 3 <sup>rd</sup> Concession | Road 2 E.    | Local            | 2986 | 18 June 2019   |
| Graham Sdrd. | Road 2 E.                  | Seacliff Dr. | Local            | 1514 | 20 June 2019   |

Table 1: Average Annual Daily Traffic (AADT) Data by Street Segment and Date

# POTENTIAL CORRIDOR DEVELOPMENT CONSIDERATIONS

Land use in the study area is primarily agricultural, with several large greenhouse operations fronting along Road 2 East, which generate some heavy truck traffic. Kratz Sideroad and Jasperson Drive, near the middle of the study area, are adjacent to the Kingsville Recreational Complex, a facility which may generate recreational and active transportation travel demand along Road 2 East. At the east end of the study area, Road 2 East passes through a small residential subdivision adjacent to Queen Boulevard prior to reaching County Road 45.

Proposed developments on Road 2 East include a new commercial development at the southeast corner of Division Road at Road 2 East, as well as a residential development on farmlands located at 319 Road 2 East. Additionally, future greenhouse development is anticipated to continue all along the Road 2 East corridor. The expectation is that Road 2 East will continue to experience growth in traffic volumes as a result of ongoing build-out of development projects. Road 2 East is also used as a bypass for the Town's commercial core.



# **EXISTING TURNING MOVEMENT IMPLICATIONS**

Since it is anticipated that the Road 2 East corridor will exhibit increased traffic volumes as a result of area development, an analysis was completed to quantify the potential impact of existing and future turning movements.

Traffic counts were obtained by RC Spencer Associates Inc. for the following intersections:

- Jasperson Drive at Road 2 East (18 August 2020);
- Kratz Sideroad at Road 2 East (19 August 2020);
- Graham Sideroad at Road 2 East (20 August 2020); and
- County Road 45 (Union Avenue) at Road 2 East (25 August 2020).

All turning movement counts are provided in Appendix B. These counts were compared to the previous turning movement counts at the Jasperson Drive at Road 2 East intersection and to the available AADT counts in the area to account for historical (pre-pandemic) traffic patterns which were somewhat higher. Accordingly, the observed counts were increased by a factor of 1.3 to provide factored traffic counts as a basis for analysis. It is the engineers' opinion that the factored volumes represent a somewhat conservative (on the high side) estimate of potential traffic volumes in year 2020, had traffic volumes not been affected by a global pandemic.

The factored counts for the intersections of Road 2 East at Kratz Sideroad, Graham Sideroad and County Road 45 and the existing traffic counts dated 1 November 2018 for Road 2 East at Jasperson Drive were analyzed using the Synchro 10 program, which calculates various parameters of intersection performance, such as level of service (LOS), intersection capacity utilization (ICU), and control delay.

# CAPACITY AND LEVEL OF SERVICE ANALYSIS

Detailed analysis using the Synchro 10 analysis program was carried out for all intersections for AM and PM peak time periods with respect to the following scenarios:

- Existing / Factored Traffic;
- Total Traffic 2025; and
- Total Traffic 2030.

To be conservative, background traffic was increased by 2% per year for the 2025 and 2030 horizon forecasts; this anticipated background growth is consistent with previous studies and the pace of area development.



Figures 3 to 5 (AM / PM Peak Hour) summarize total traffic estimates for the factored, 2025, and 2030 horizon year forecasts for background traffic in the study area. The effect of factored and horizon traffic volumes at each specific intersection can be found in Appendix C – Traffic Projection Figures.

The resulting Synchro 10 simulation reports are provided in Appendix D – Detailed Synchro Results. In order to quantify the effect of traffic growth on individual intersections within the study area and to assess the need for geometric or traffic infrastructure improvements, the Synchro results were summarized as follows:

#### Jasperson Drive at Road 2 East

The unsignalized, tee intersection of Jasperson Drive at Road 2 East is currently controlled by a northbound stop condition. This intersection is currently operating at a good level of service, and it is anticipated that the intersection will continue to operate at a good level of service in all horizon years.

|                    |              | Jasperson Drive at Road 2 East |     |     |              |     |     |     |  |
|--------------------|--------------|--------------------------------|-----|-----|--------------|-----|-----|-----|--|
| Scenario           | AM Peak Hour |                                |     |     | PM Peak Hour |     |     |     |  |
|                    | E/B          | W/B                            | N/B | S/B | E/B          | W/B | N/B | S/B |  |
| Existing Traffic   | Α            | Α                              | В   | N/A | А            | Α   | В   | N/A |  |
| Total Traffic 2025 | Α            | Α                              | В   | N/A | А            | Α   | В   | N/A |  |
| Total Traffic 2030 | Α            | Α                              | В   | N/A | А            | Α   | В   | N/A |  |

#### Table 2: Level of Service by Approach – Jasperson Drive at Road 2 East

### Kratz Sideroad at Road 2 East

The unsignalized, tee intersection of Kratz Sideroad at Road 2 East is currently controlled by a northbound stop condition. This intersection is currently operating at a good level of service, and it is anticipated that the intersection will continue to operate at a good level of service in all horizon years.

#### Table 3: Level of Service by Approach – Kratz Sideroad at Road 2 East

|                    | Kratz Sideroad at Road 2 East |     |     |              |     |     |     |     |  |
|--------------------|-------------------------------|-----|-----|--------------|-----|-----|-----|-----|--|
| Scenario           | AM Peak Hour                  |     |     | PM Peak Hour |     |     |     |     |  |
|                    | E/B                           | W/B | N/B | S/B          | E/B | W/B | N/B | S/B |  |
| Factored Traffic   | Α                             | Α   | В   | N/A          | А   | Α   | В   | N/A |  |
| Total Traffic 2025 | Α                             | Α   | В   | N/A          | А   | Α   | В   | N/A |  |
| Total Traffic 2030 | Α                             | Α   | В   | N/A          | А   | А   | В   | N/A |  |



#### Graham Sideroad at Road 2 East

The unsignalized intersection of Graham Sideroad at Road 2 East is currently controlled by a northbound / southbound stop condition. This intersection is currently operating at a satisfactory level of service, and it is anticipated that the intersection will continue to operate at a satisfactory level of service in all horizon years.

|                    | Graham Sideroad at Road 2 East |     |     |     |              |     |     |     |  |
|--------------------|--------------------------------|-----|-----|-----|--------------|-----|-----|-----|--|
| Scenario           | AM Peak Hour                   |     |     |     | PM Peak Hour |     |     |     |  |
|                    | E/B                            | W/B | N/B | S/B | E/B          | W/B | N/B | S/B |  |
| Factored Traffic   | Α                              | Α   | В   | В   | Α            | Α   | В   | С   |  |
| Total Traffic 2025 | Α                              | Α   | В   | В   | Α            | Α   | С   | С   |  |
| Total Traffic 2030 | Α                              | А   | В   | В   | А            | Α   | С   | С   |  |

#### Table 4: Level of Service by Approach – Graham Sideroad at Road 2 East

#### County Road 45 (Union Avenue) at Road 2 East

The unsignalized intersection of County Road 45 at Road 2 East is currently controlled by an eastbound / westbound stop condition. This intersection is currently operating at a satisfactory level of service, and it is anticipated that the intersection will continue to operate at a satisfactory level of service in all horizon years, with the exception of the eastbound approach.

| Table 5: Level of Service by Approach – County Road 45 at Road 2 East |  |
|---|--|
|   |  |

|                    | County Road 45 at Road 2 East |     |     |     |              |     |     |     |  |
|--------------------|-------------------------------|-----|-----|-----|--------------|-----|-----|-----|--|
| Scenario           | AM Peak Hour                  |     |     |     | PM Peak Hour |     |     |     |  |
|                    | E/B                           | W/B | N/B | S/B | E/B          | W/B | N/B | S/B |  |
| Factored Traffic   | С                             | В   | Α   | Α   | С            | В   | Α   | Α   |  |
| Total Traffic 2025 | С                             | В   | Α   | А   | D            | В   | А   | Α   |  |
| Total Traffic 2030 | С                             | В   | А   | А   | Е            | В   | А   | Α   |  |

# POTENTIAL GEOMETRIC IMPROVEMENTS

Based on the potential of the Road 2 East corridor and the level of service results provided in the above tables, it is the engineers' opinion that Road 2 East may benefit from geometric improvements at the time of its reconstruction. The eastbound single-lane approach to the County Road 45 at Road 2 East intersection is anticipated to exhibit ever-worsening levels of service in the critical PM peak hour. As a result, it is the engineers' recommendation that the eastbound approach be widened to accommodate dedicated through / left and right turn lanes. Based on a Synchro 10 evaluation, this improvement could potentially decrease average control delay by about 10 seconds.



Additionally, for the critical Total Traffic 2030 scenario, left turn lane warrants were evaluated in accordance with provincial warrants for the entire length of Road 2 East between County Road 29 and County Road 45; the results are provided in Appendix E. Only the westbound approach to the Jasperson Drive at Road 2 East intersection would benefit from a dedicated left turn lane. It is anticipated that the future mega-school on Jasperson Drive, as well as the Kingsville Recreation Complex, will generate peak periods of activity, so it would be prudent to implement a dedicated left turn lane and a dedicated bypass lane on the westbound approach.

# POTENTIAL TRAFFIC CONTROL IMPROVEMENTS

Signal warrants were completed for each of the four main intersections in the study area. The detailed results of the signal warrant analyses are presented in Appendix F. None of the intersections meet minimum warrants for signalization in the future scenarios.

# **EXISTING CROSS-SECTION ELEMENTS**

As illustrated on Figure 6, the existing typical Road 2 East right-of-way cross-section between County Road 29 and County Road 45 is approximately 20m wide. However, much of the right-of-way is occupied by a large municipal drain (approximately 7.0m wide) on the north side of the roadway. The remaining cross-section elements are typical of a rural cross-section.

The roadway has been resurfaced between County Road 29 (Division Road) and Kratz Sideroad, but the Town has elected to reconstruct it because design / construction of a large diameter watermain has been incorporated into the road reconstruction project. Historically, this stretch of roadway has also experienced pavement support issues, so Town administration has asked that its reconstruction be considered as an added element to improving the Road 2 East corridor.

# **IDEAL FUTURE CROSS-SECTION ELEMENTS**

The Town of Kingsville administration have requested that a multi-use pathway be implemented into the reconstruction of Road 2 East. Ontario Traffic Manual (OTM) Book 18 (Cycling Facilities) is currently under revision, and it is anticipated that the revisions will be formally adopted by the province within a year. As a result, Town administration is speculating that paved shoulders may no longer be suitable for Road 2 East and that a dedicated in-boulevard facility may be required. Furthermore, OTM Book 15 (Pedestrian Crossing Treatments) introduced new treatments to facilitate and standardize safe pedestrian crossings across the entire province. The legal framework for the new pedestrian crossing treatments was adopted by the province per Ontario Regulation 402/152, which came into effect January 01, 2016.



Per OTM Book 15, page 8, "The regulation introduces two levels of pedestrian crossovers. Level 1 Pedestrian Crossovers are distinctly defined by the use of a specific set of regulatory signs, internally illuminated overhead warning signs, pavement markings, and flashing amber beacons. Level 2 pedestrian crossovers are distinctly defined by the prescribed use of a different set of regulatory signs, warning signs, pavement markings, and rapid rectangular flashing beacons." The OTM Book 15 reference is provided in Appendix G.

Per the most recent OTM Book 18 (Cycling Facilities) publication, pages 115-116, in-boulevard cycling facilities are "separated from motor vehicle traffic by a boulevard or a verge within the roadway right-of-way. These are typically implemented adjacent to roadways with higher motor vehicle speeds and volumes along key cycling corridors. An in-boulevard facility can be constructed with the bicycle path distinct from the sidewalk or with a single facility shared by cyclists and pedestrians." These OTM Book 18 references are provided in Appendix H.

It is the engineers' recommendation that, given the anticipated volume of active transportation users, dedicated pedestrian and cycling facilities are not required; a single in-boulevard facility shared by pedestrians and cyclists will suffice.

To accommodate safe passage across Road 2 East for both pedestrians and cyclists, it is the engineers' recommendation that appropriate pedestrian crossing treatments should be integrated with existing and future cycling facilities to ensure a robust and reliable active transportation network. Furthermore, the proposed Road 2 East active transportation network should be compatible for existing active transportation master plans (i.e. CWATS).

As noted on page 115 of OTM Book 18, it is recommended that several geometric elements should be considered prior to implementing an in-boulevard facility: width, design speed, grade, stopping sight distance, horizontal curvature, crest, vertical curves and lateral clear zones.

It is the engineers' opinion that the most critical design element to accommodate an in-boulevard facility is the available lateral clear zone. Clear zone industry best practices, as defined by the TAC Geometric Design Guide for Canadian Roads (2017), Chapter 7, page 12, suggest that lateral clear zone distance for a Road 2 East rural cross-section (assuming 60 km/h – 70 km/h design speed, 1,500 – 6,000 AADT) should be at least 4.5m. The reference is provided in Appendix I.

Ensuring an adequate clear zone results in a more forgiving boulevard to "run off the road" incidents; serious collisions are reduced if a reasonable recovery zone, free of obstacles, is provided. It also provides a safer "buffer" between on-road vehicles and in-boulevard active transportation facility users.



However, as acknowledged by the TAC reference, it is recognized that, in an urban environment and sometimes suburban environment, the concept of clear zone is not necessarily applicable due to urban street environment, especially when barrier curbs are present.

In consideration of the defined lateral clear zone design criteria for rural and urban environments, four alternative cross-sections were proposed for the stretch of Road 2 East between County Road 29 and County Road 45. The alternatives are illustrated on Figures 7 to 10.

# ALTERNATIVE 1: URBAN CROSS-SECTION WITH OFF-ROAD A/T FACILITY

Alternative 1 (Figure 7) considers the implications of implementing a curb-and-gutter system to both control stormwater runoff and provide separation between respective users of the proposed roadway and the active transportation pathway.

The advantages to the proposed urban cross-section design, with off-road active transportation facility, are as follows:

- i) Minimum clear zone distance of 0.6m is acceptable when raised curbs are present;
- ii) Boulevard allows for safe buffer between roadway users and can be purposed to accommodate streetlight and above-ground utility infrastructure, thus allowing for more efficient roadway / pathway lighting and utilities distribution;
- iii) Adjacent existing municipal drain does not require enclosure, resulting in anticipated cost savings to the reconstruction project.

The disadvantages to the proposed urban cross-section design, with off-road active transportation facility, are as follows:

- i) No paved or gravel shoulder available for emergency stops;
- ii) Amendment to existing public works' protocols and maintenance procedures;
- iii) Minor inconvenience to farmers traversing the roadway with oversized machinery.

# ALTERNATIVE 2: RURAL CROSS-SECTION WITH OFF-ROAD A/T FACILITY

Alternative 2 (Figure 8) considers the implications of retaining "status quo" rural roadway operations; however, in order to ensure adequate clear zone lateral separation and existing roadway alignment, the municipal drain must be enclosed, and a minimum 4.5m separation must be provided between respective users of the proposed roadway and the active transportation pathway.



The advantages to the proposed rural cross-section design are as follows:

- i) Gravel shoulder available for emergency stops and larger farm equipment;
- ii) Municipal drain enclosure simplifies access to adjacent properties and allows for a more functional use of the existing right-of-way width;
- iii) Minor amendment to existing public works' protocols and maintenance procedures.

The disadvantages to the proposed rural cross-section design are as follows:

- i) Minimum clear zone distance of 4.5m affects functionality of existing right-of-way;
- ii) Grassed boulevard cannot accommodate streetlight and utility infrastructure, as nonbreakaway infrastructure within the clear zone is not recommended;
- iii) Adjacent existing municipal drain requires enclosure, resulting in a significant additional cost to the reconstruction project.

There is also a variation of this alternative whereby the roadway is shifted to the north (after the ditch is infilled) and the pathway is implemented in the southerly boulevard. However, it is the engineers' opinion that this variation would prove challenging, especially if the project is staged; the existing road alignment connectivity would result in severe geometric constraints. Additionally, to completely relocate the roadway towards the north, it is anticipated that the added traffic control costs in addition to the roadway relocation costs would significantly affect the cost efficiency of the construction project.

# ALTERNATIVE 3: HYBRID CROSS-SECTION WITH OFF-ROAD A/T FACILITY

Alternative 3 (Figure 9) considers the implications of implementing a hybrid solution, whereby a curb-and-gutter system is implemented on the south side of Road 2 East to protect the proposed active transportation facility and a gravel shoulder is implemented on the north side to accommodate oversized farm equipment, and emergency stops in the westbound direction.

This alternative has been provided for discussion purposes only, as the proposed cross-section is very uncommon. Farmers would experience less inconvenience when travelling westbound with oversized farm equipment; however, when travelling eastbound, farmers would experience the same kinds of limitations and inconveniences associated with Alternative 1. As a result, it is the engineers' opinion that this alternative is best categorized as a "half-solution".

Regardless, the anticipated advantages to the proposed hybrid cross-section design, with offroad active transportation facility, are as follows:



- i) Minimum clear zone distance of 0.6m is acceptable when raised curbs are present;
- South boulevard allows for safe buffer between roadway users and can be purposed to accommodate streetlight and above-ground utility infrastructure, thus allowing for more efficient roadway / pathway lighting and utilities distribution;
- iii) Adjacent existing municipal drain does not require enclosure, resulting in anticipated cost savings to the reconstruction project.

The disadvantages to the proposed hybrid cross-section design, with off-road active transportation facility, are as follows:

- i) To accommodate the 1.5m gravel shoulder, existing ditch will require significant modifications / realignment to maintain stable side slopes;
- ii) Non-symmetrical cross-section may be confusing to road users;
- iii) Public perception of the "half solution" may be negative;
- iv) Solution does not fully solve inconveniences to farmers hauling larger farm equipment.

# ALTERNATIVE 4: RURAL CROSS-SECTION WITH PAVED SHOULDERS

Alternative 4 (Figure 10) considers the implications of retaining "status quo" rural roadway operations at the loss of a protected active transportation facility; in this alternative, users of active transportation are expected to use the paved shoulder.

This alternative is simply an extension of the existing cross-section between County Road 29 (Division Road) and Jasperson Drive. Currently, active transportation along this stretch of roadway is expected to travel directly alongside motorists. This alternative cross-section is convenient for oversized farm equipment; however, active transportation safety is compromised. Typically, only seasoned cyclists are comfortable riding alongside motorists in a rural cross-section, while pedestrians and joggers typically travel in the opposite direction to monitor oncoming traffic.

It is the engineers' opinion that this alternative does little to address active transportation safety, and as a result, it is anticipated that the paved shoulders would see very little use. The cross-section design better accommodates farmers with oversized equipment; however, this alternative is largely deficient in ensuring safe active transportation options for "all ages and abilities" in the Road 2 East corridor. Therefore, it is the engineers' recommendation that this



alternative be considered a "minimalist" solution for the Road 2 East corridor. Advantages and disadvantages of this alternative are largely subject to active transportation priority. In the engineers' opinion, this alternative's disadvantages largely outweigh the advantages, particularly since active transportation safety is compromised.

# **IMPACT ON FARM EQUIPMENT**

In arriving at the preferred alternative for the reconstruction of Road 2 East, RC Spencer staff notified Road 2 East farmers that their input was invaluable to the public process. Of the farmers willing to discuss and / or showcase their farm equipment, the following was concluded:

- The largest tractor owned by local farmers is 3.7m wide;
- When in their largest tractor and travelling down a roadway with curbs, local farmers typically mount the curb and ride on top of it to stay in their lane; all local farmers indicated that mounting the curb can be uncomfortable for the driver;
- The largest farm equipment is approximately 4.2m wide; however, all surveyed farmers indicated that their equipment can be lifted a foot off the ground, so transportation above any 150mm (6 in.) barrier curb is never a problem;
- Local farmers typically look for depressions in the curb (ie. driveway accesses) to smoothly mount onto the curb; should curbs be implemented in the road reconstruction design, all driveway approaches should utilize a 1.5m (5 ft.) taper for a smooth transition;
- Use of the largest farm equipment is typically two times a week during the busiest season.

Local farmers that were willing to meet with RC Spencer staff were informed that the purpose of the project was to address existing pavement issues and to address active transportation connectivity between Ruthven and Kingsville. All local farmers agreed that implementation of a protected off-road facility on the south side of the roadway would most benefit the corridor. All local farmers that were surveyed observed that most activity is currently generated by the recreational complex and migrant worker employment, and they fully anticipate that the future mega-school on Jasperson Drive will draw even more active transportation users (cyclists, roller bladers, pedestrians, etc.) between Kingsville and Ruthven.

Some local farmers expressed concern regarding the inconvenience of an urban cross-section; however, when surveyed, all the local farmers indicated that they understand the need for safe and practical active transportation connectivity. In addition, they acknowledged that speeding on Road 2 East was problematic and was likely the result of the "wide open" rural cross-section.



# **COST COMPARISON**

A functional cost comparison was completed in order to evaluate the fiscal implications of reconstructing Road 2 East in accordance with the four alternatives. The cost comparison was based on linear metre cost estimates for the respective alternative's cross-section elements. After considering the linear metre costs to reconstruct 5.48km of Road 2 East per the urban cross-section and rural cross-section alternatives, it was determined that Alternative 2 (Rural Cross-Section and Municipal Drain Enclosure) will cost approximately \$2.5 million more than Alternative 1 (Urban Cross-Section). No land acquisition is anticipated for either option.

Therefore, it is the engineers' opinion that the urban cross-section alternative is the more fiscally responsible choice for reconstructing Road 2 East between County Road 29 and County Road 45. Furthermore, with respect to the identified advantages versus disadvantages of implementing the urban cross-section, it is the engineers' recommendation that Alternative 1: Urban Cross-Section with Off-Road Active Transportation Facility be implemented as the preferred design.

# SUMMARY AND CONCLUSIONS

The reconstruction of Road 2 East is scheduled for reconstruction in three phases. Phase 1 of the project is comprised of the 1.8km stretch from County Road 45 (Union Avenue) at the east to Graham Sideroad at the west; it is scheduled for reconstruction in 2021. Phase 2 of the project is comprised of the 1.9km stretch from Graham Sideroad at the east to Kratz Sideroad at the west; it is scheduled for reconstruction in 2022. Phase 3 of the project is comprised of the 1.78km stretch from Kratz Sideroad at the east to County Road 29 (Division Road) at the west; it is scheduled for reconstruction in 2023.

Using recently obtained turning movement counts and applying the best available trip generation and distribution data and methodologies, an analysis was completed to quantify existing and horizon year traffic operations. To be conservative, background traffic was increased by 2% per year for the 2025 and 2030 horizon forecasts; this anticipated background growth is consistent with previous studies and the pace of area development.

Upon completion of the analysis, it was concluded that:

 The unsignalized, northbound stop-controlled, tee intersection of Jasperson Drive at Road 2 East is currently operating at a good level of service, and it is anticipated that the intersection will continue to operate at a good level of service in all horizon years; however, according to provincial warrants, the westbound approach would benefit from implementation of a dedicated left turn lane at the time of Road 2 East's reconstruction;



- The unsignalized, northbound stop-controlled, tee intersection of Kratz Sideroad at Road
   2 East is currently operating at a good level of service, and it is anticipated that the intersection will continue to operate at a good level of service in all horizon years; no geometric improvements are required at the time of Road 2 East's reconstruction;
- The unsignalized, northbound / southbound stop-controlled intersection of Graham Sideroad at Road 2 East is currently operating at a satisfactory level of service, and it is anticipated that the intersection will continue to operate at a satisfactory level of service in all horizon years; no geometric improvements are required at the time of Road 2 East's reconstruction;
- The unsignalized, eastbound / westbound stop-controlled intersection of County Road 45 at Road 2 East is currently operating at a satisfactory level of service, and it is anticipated that the intersection will continue to operate at a satisfactory level of service in all horizon years, with the exception of the eastbound approach; as a result, it is recommended that the eastbound approach be widened to accommodate dedicated through / left and right turn lanes;
- Traffic signals are not warranted at any intersection within the study area;

Land use in the study area is primarily agricultural, with several large greenhouse operations fronting along Road 2 East. Kratz Sideroad and Jasperson Drive, near the middle of the study area, are adjacent to the Kingsville Recreational Complex, a facility which may generate recreational and active transportation travel demand along Road 2 East.

Proposed developments on Road 2 East include a new commercial development at the southeast corner of Division Road at Road 2 East, as well as a residential development on farmlands located at 319 Road 2 East. Additionally, future greenhouse development is anticipated to continue all along the Road 2 East corridor. The expectation is that Road 2 East will continue to experience growth in traffic volumes as a result of ongoing build-out of development projects. Road 2 East is also used as a bypass for the Town's commercial core.

The existing typical Road 2 East right-of-way cross-section between County Road 29 and County Road 45 is approximately 20m wide. However, much of the right-of-way is occupied by a large municipal drain (approximately 7.0m wide) on the north side of the roadway. The remaining cross-section elements are typical of a rural cross-section.

The Town of Kingsville administration have requested that a multi-use pathway be implemented into the reconstruction of Road 2 East. Town administration is speculating that paved shoulders may no longer be suitable for Road 2 East; a dedicated in-boulevard facility may be required.



It is the engineers' recommendation that, given the anticipated volume of active transportation users, dedicated pedestrian and cycling facilities are not required; a single in-boulevard facility shared by pedestrians and cyclists will suffice. Appropriate pedestrian crossing treatments should be integrated with existing and future cycling facilities to ensure a robust and reliable active transportation network. Furthermore, the proposed Road 2 East active transportation network should be compatible for existing active transportation master plans (i.e. CWATS).

It is the engineers' opinion that the most critical design element to accommodate an in-boulevard facility is the available lateral clear zone. Clear zone industry best practices suggest that lateral clear zone distance for a Road 2 East rural cross-section should be at least 4.5m. In an urban environment and sometimes suburban environment, the concept of clear zone is not necessarily applicable, especially when barrier curbs are present.

Four alternative cross-sections were proposed for the stretch of Road 2 East between County Road 29 and County Road 45. Alternative 1: Urban Cross-Section with Off-Road Active Transportation Facility considers the implications of lowering the road and implementing a curband-gutter system to both control stormwater runoff and provide separation between respective users of the proposed roadway and the active transportation pathway. Alternative 2: Rural Cross-Section with Off-Road Active Transportation Facility considers the implications of retaining "status quo" rural traffic operations the road; however, in order to ensure adequate clear zone lateral separation, the municipal drain must be enclosed, and a minimum 4.5m separation must be provided between respective users. Also, the active transportation facility would have to be implemented on the north side of Road 2 East; this alternative would require additional crossing locations across Road 2 East to ensure connectivity with active transportation attractions on the south side of the roadway.

A functional cost comparison was completed in order to evaluate the fiscal implications of reconstructing Road 2 East in accordance with the four alternatives. After disregarding Alternatives 3 and 4 based on significant geometric and fiscal complications to reconstruct 5.48km of roadway, it was determined that Alternative 2 (Rural Cross-Section and Municipal Drain Enclosure) will cost approximately \$2.5 million more than Alternative 1 (Urban Cross-Section). No land acquisition is anticipated for either option.

After reviewing the advantages, disadvantages, and costs associated with each alternative, it is the engineers' opinion that Alternative 1: Urban Cross-Section is the more fiscally responsible choice and provides a safe solution for reconstructing Road 2 East between County Road 29 and County Road 45. Furthermore, with respect to the identified advantages versus disadvantages of implementing the urban cross-section, it is the engineers' recommendation that Alternative 1: Urban Cross-Section be implemented as the preferred functional cross-section design.



All of which is respectfully submitted,

#### **RC Spencer Associates Inc.**



John D. Tofflemire, M.A.Sc., P.Eng. Manager, Learnington Office

**Reviewed by:** 

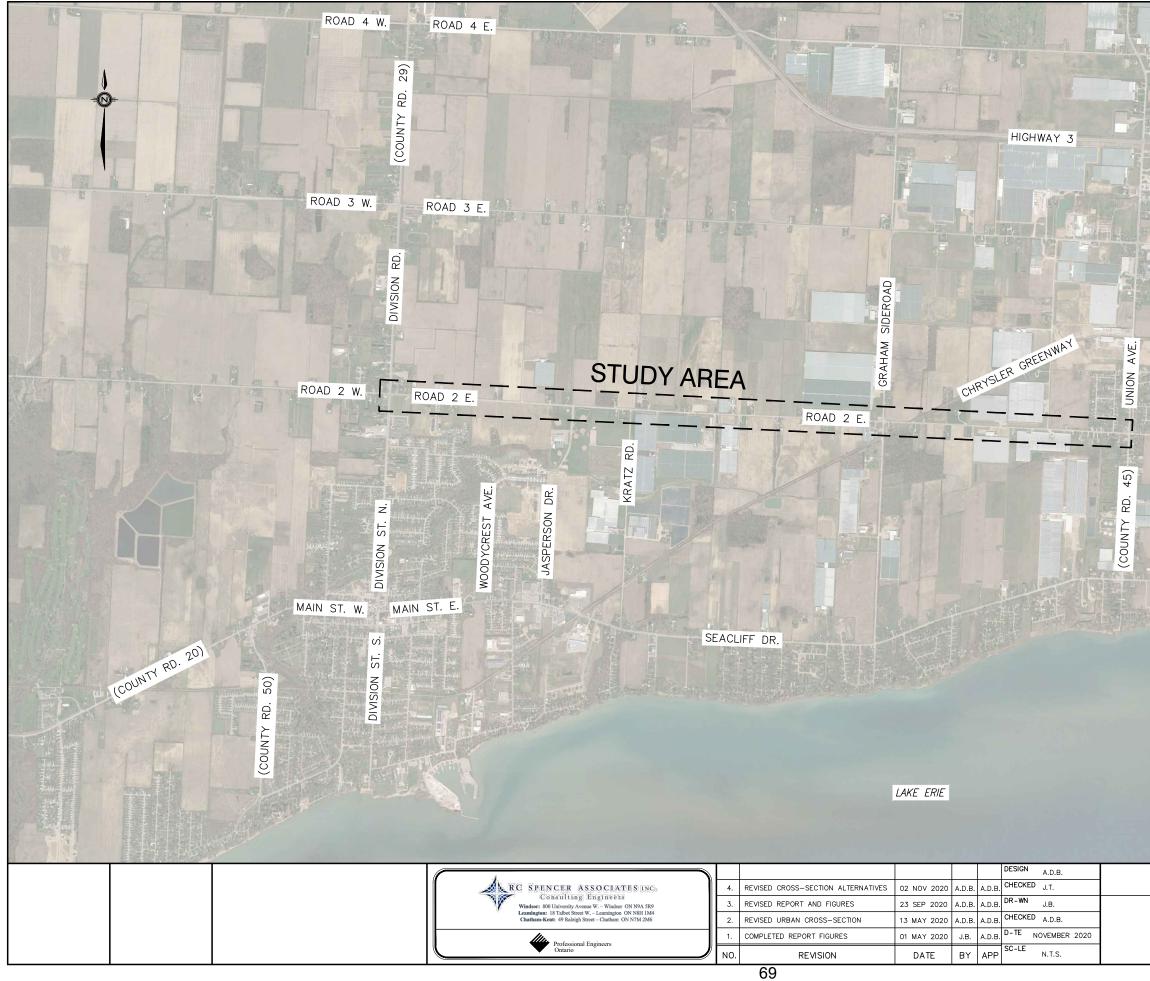


Aaron D. Blata, M.Eng., P.Eng., PTOE Traffic Operations Project Engineer

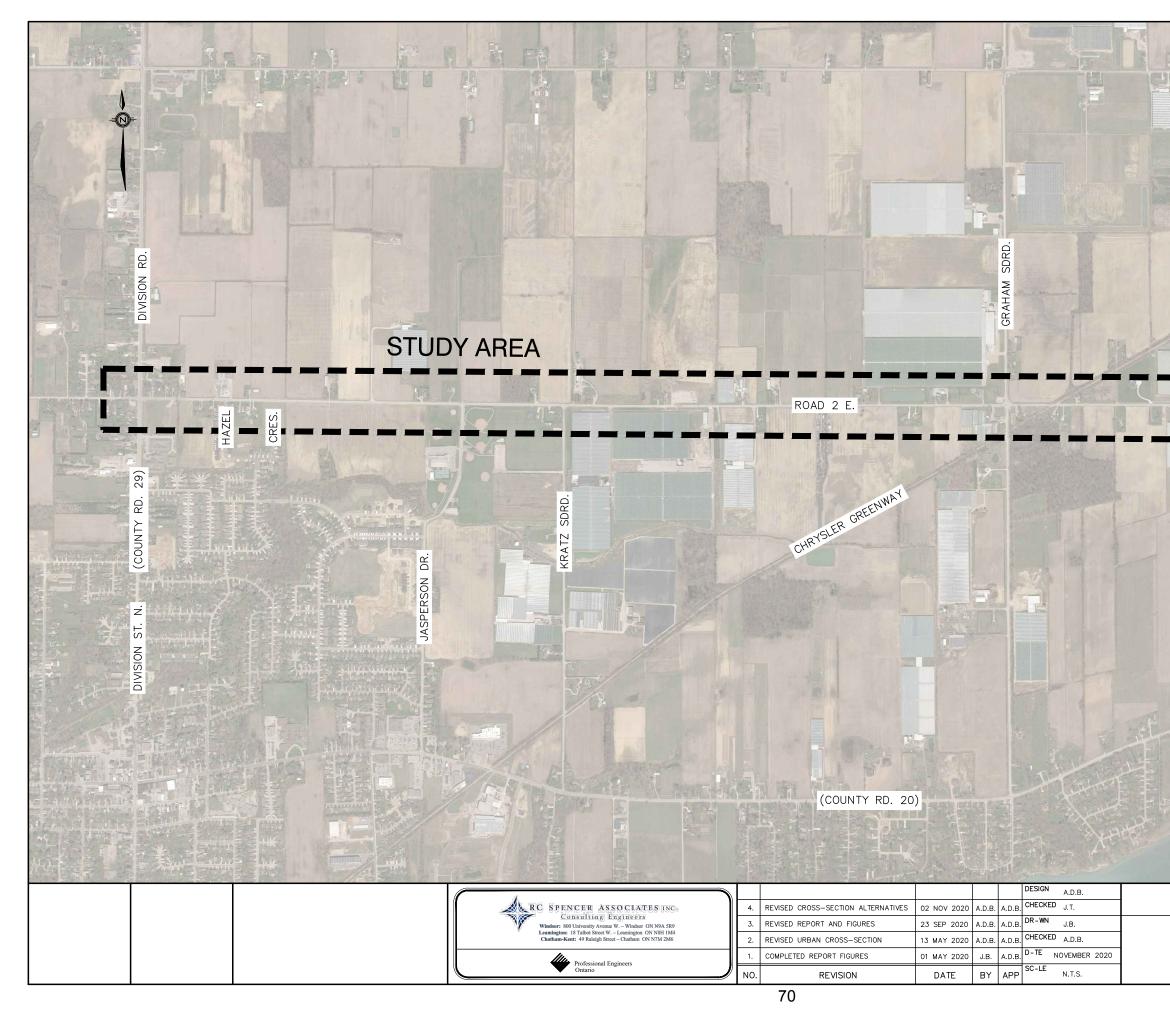


Richard C. Spencer, M.A.Sc., P.Eng. President

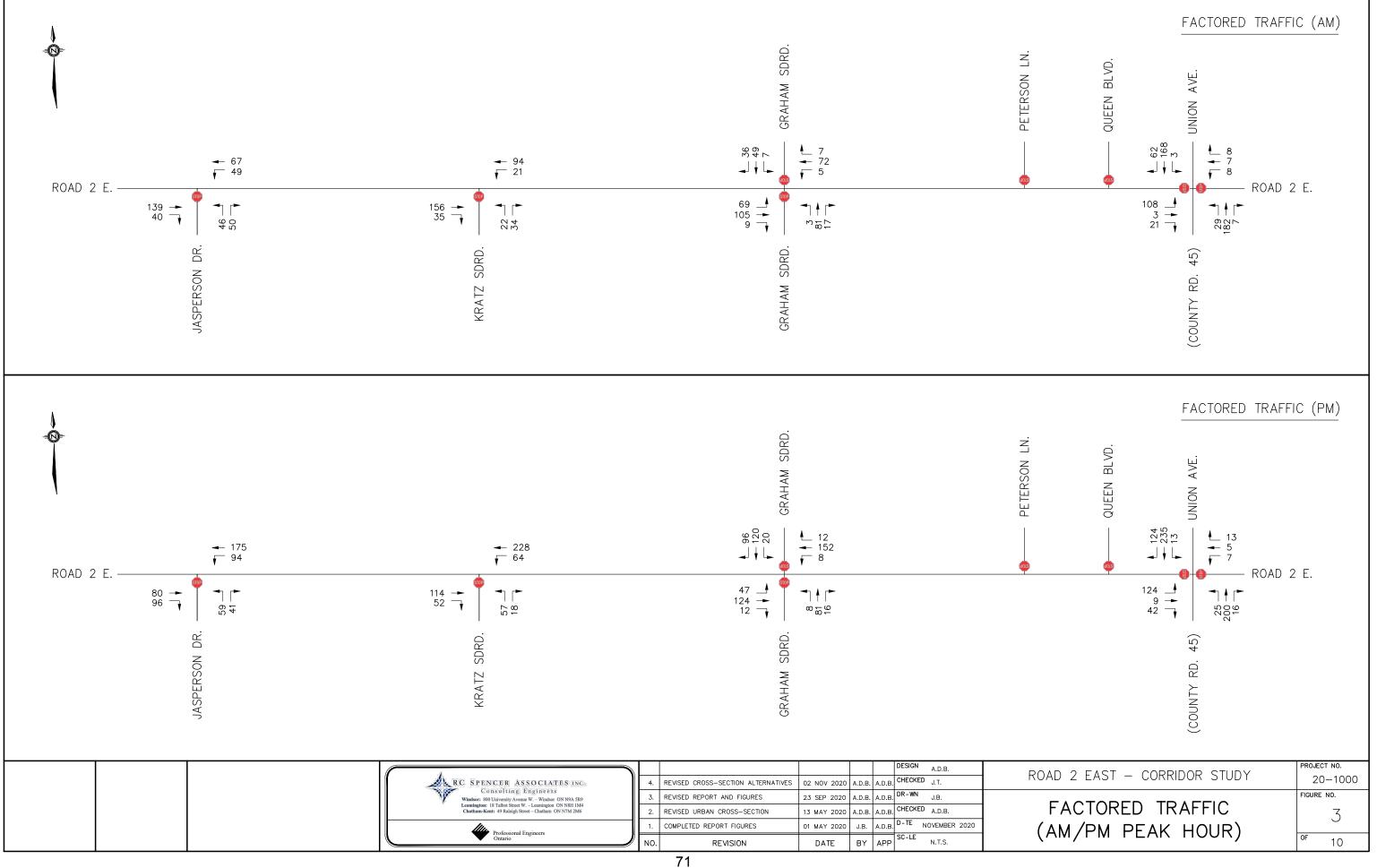


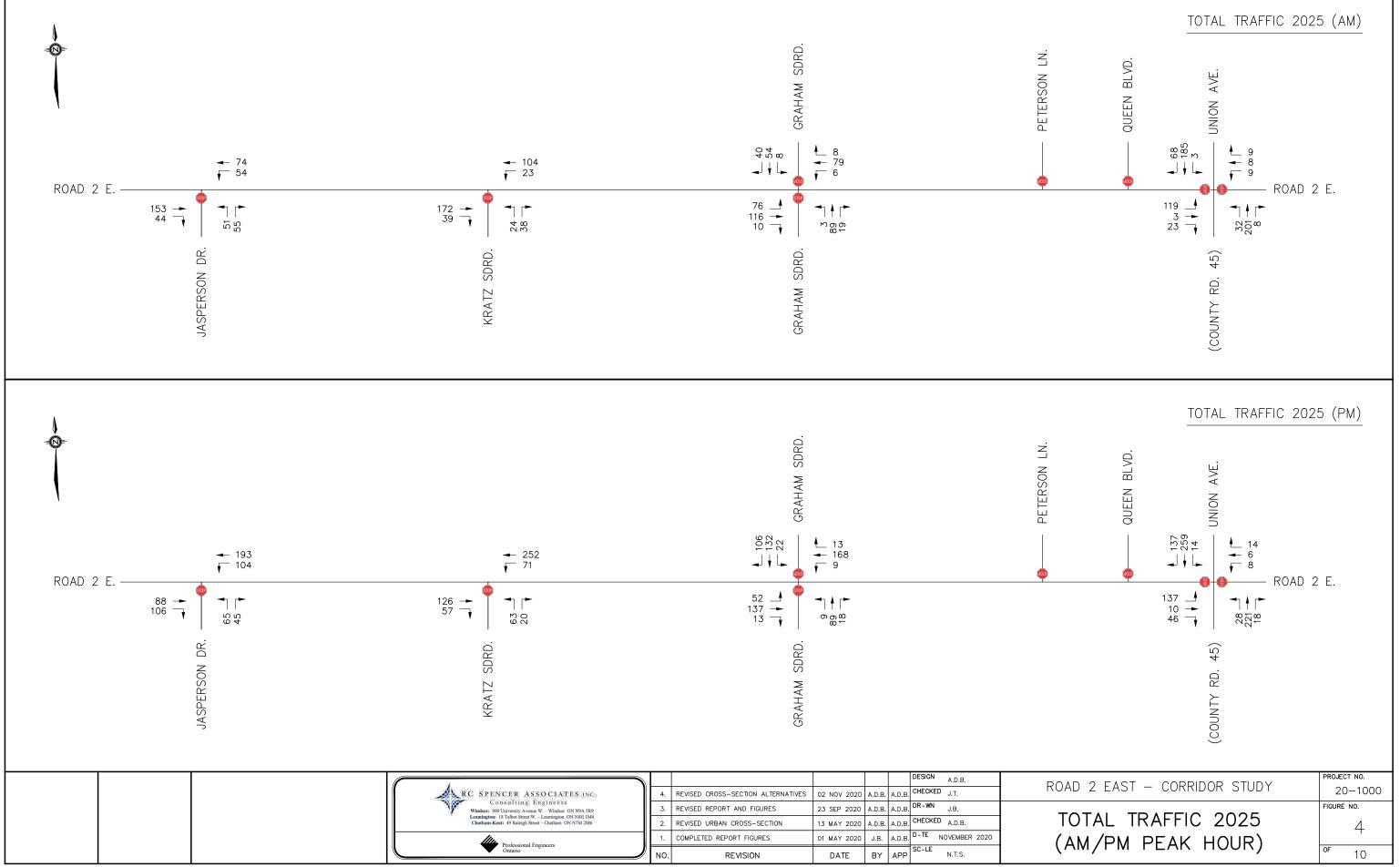


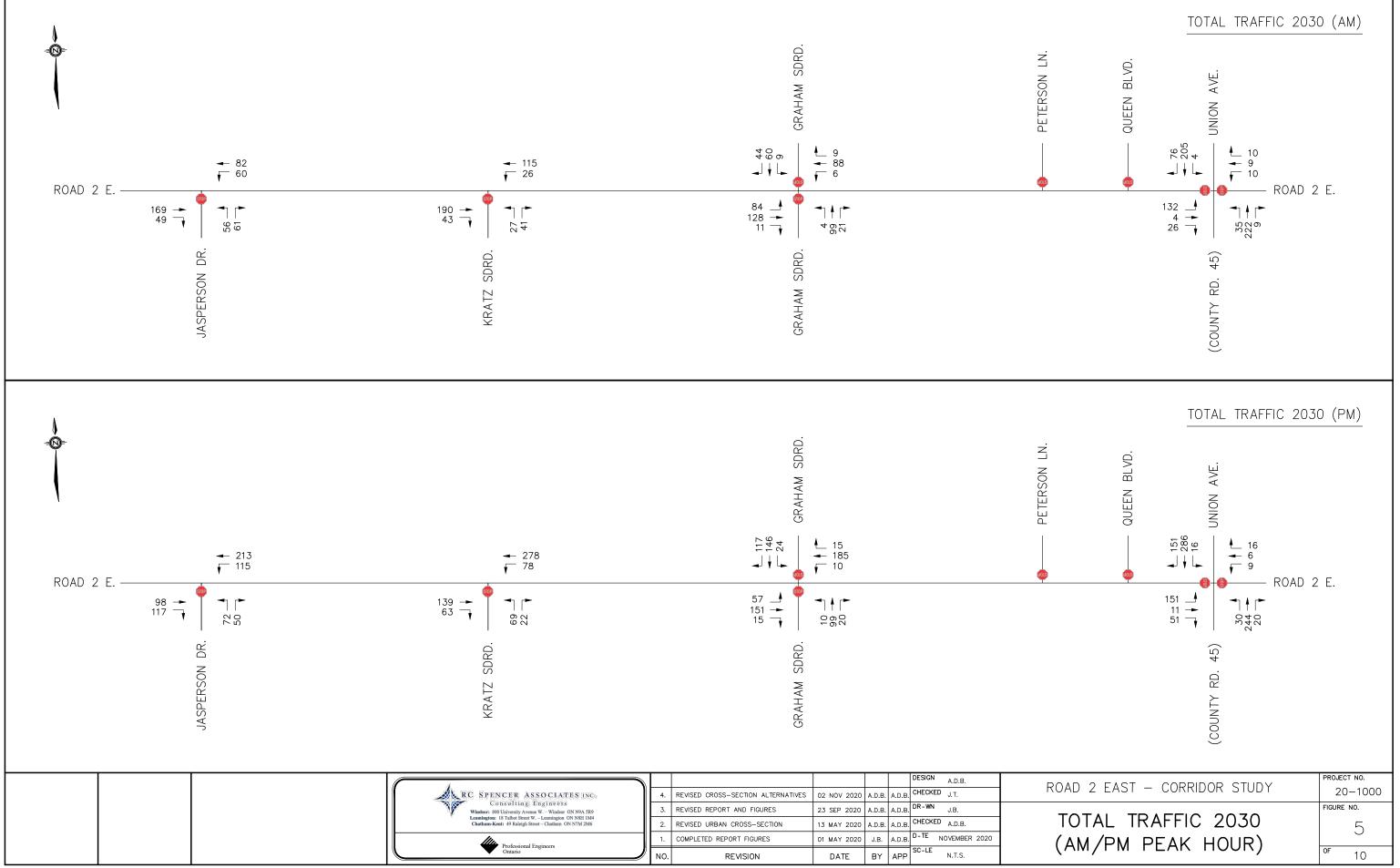
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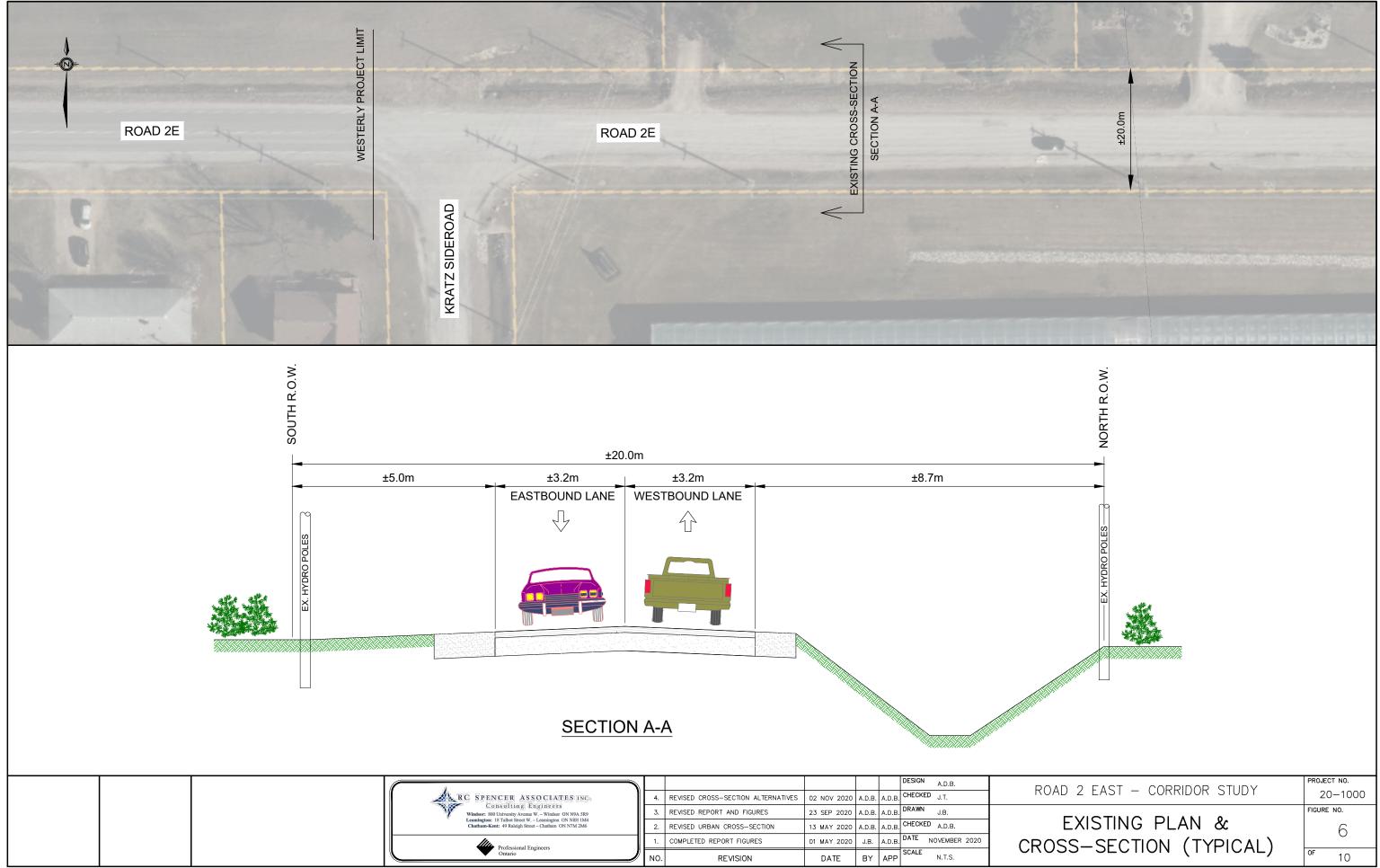


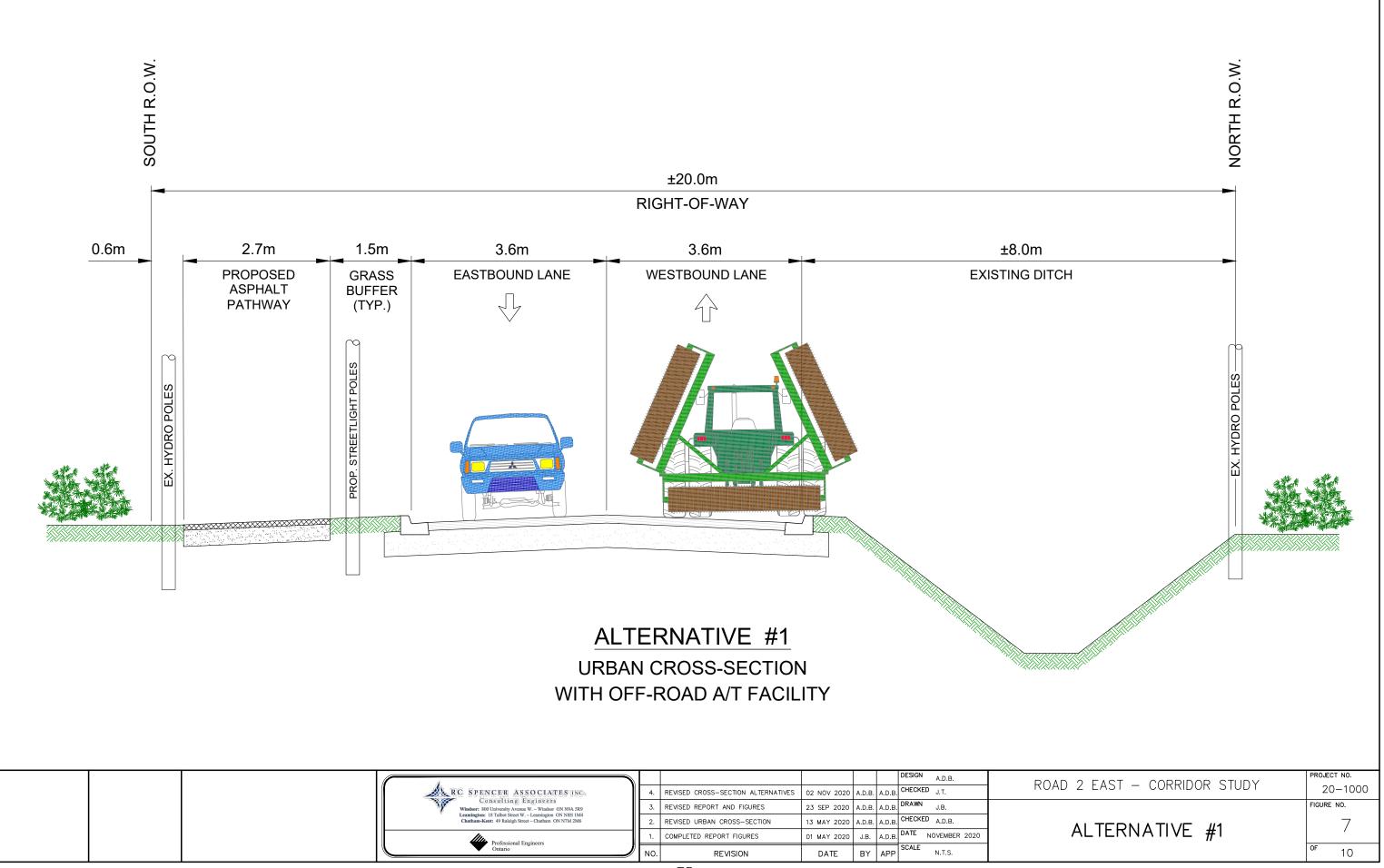


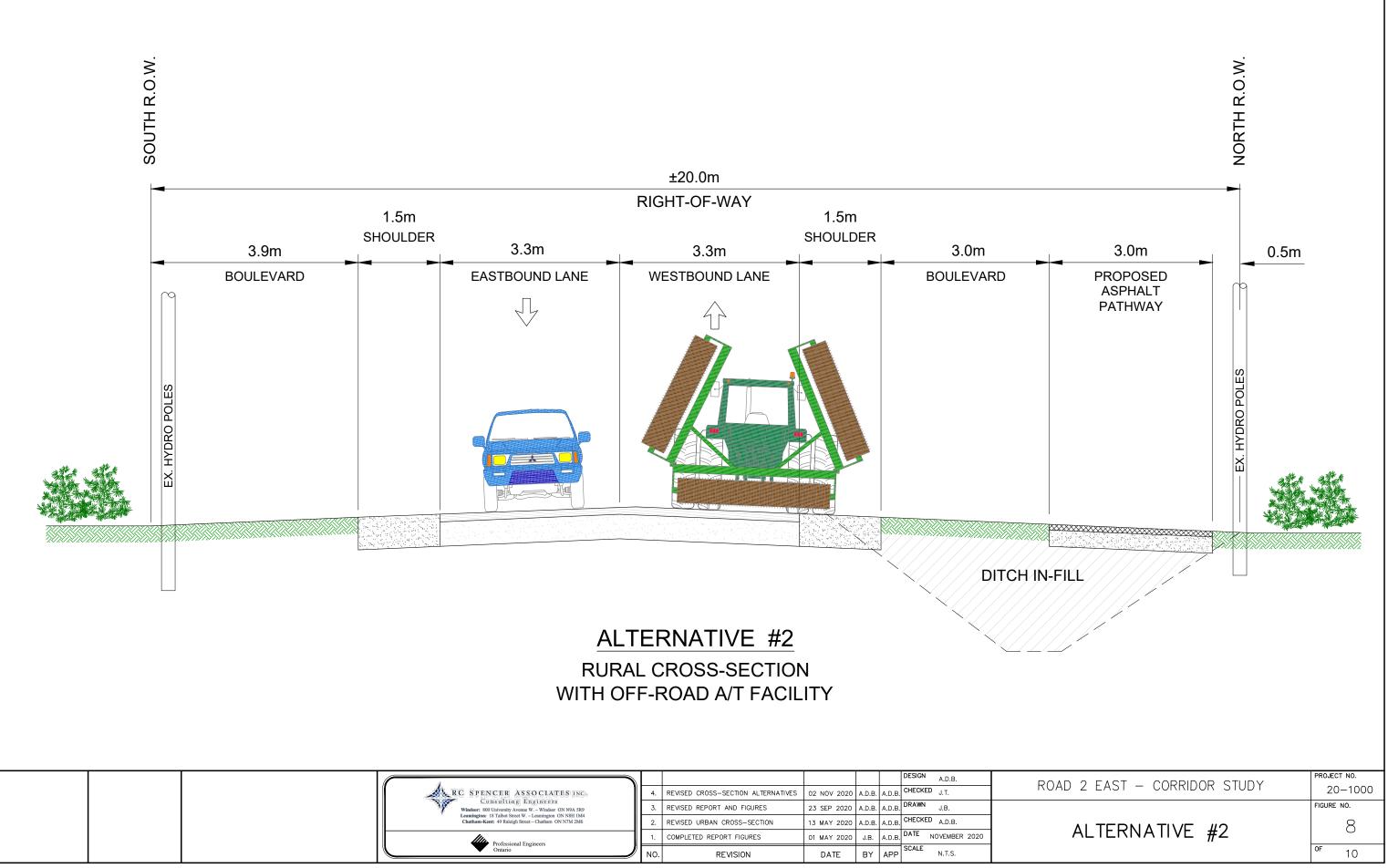


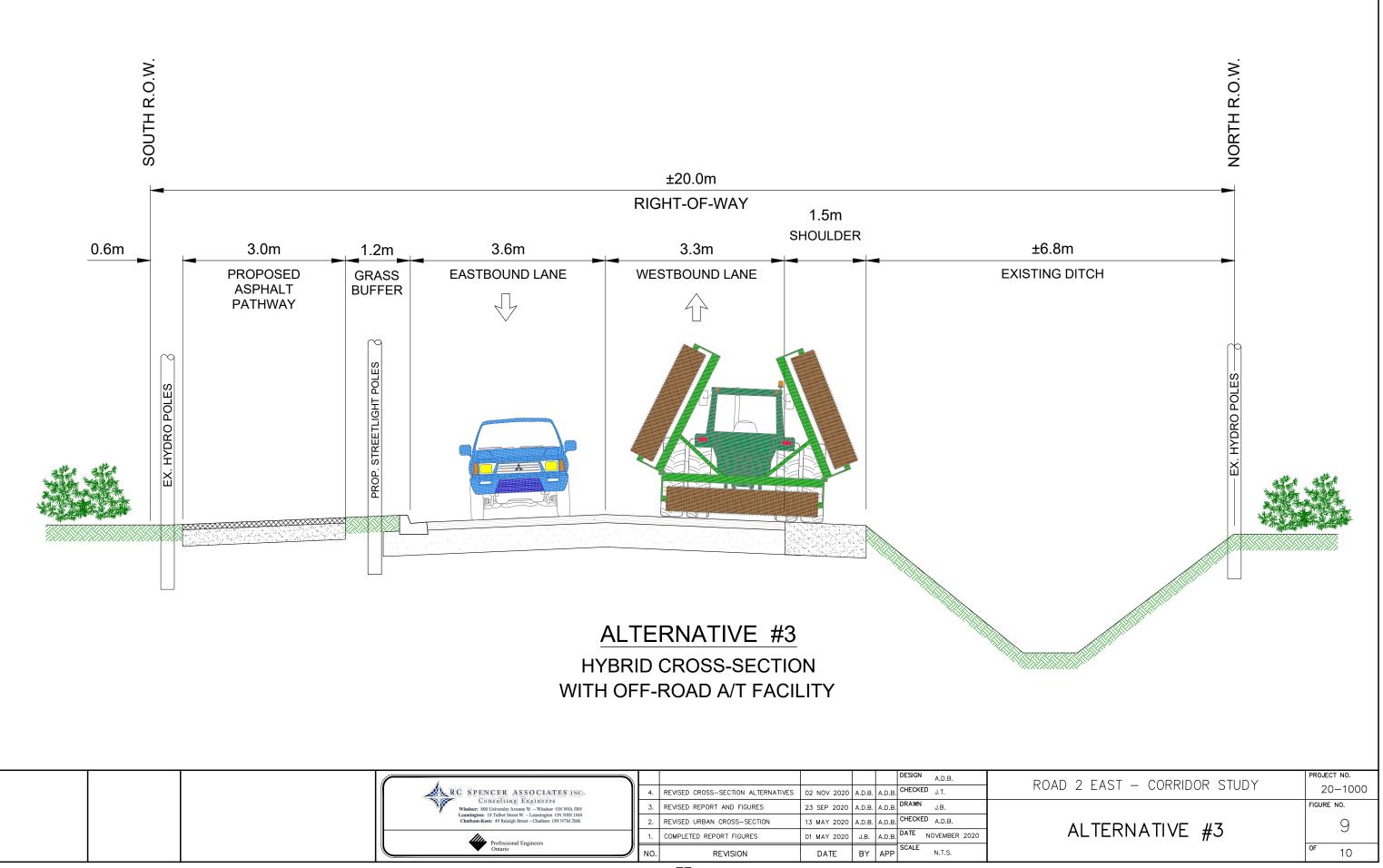


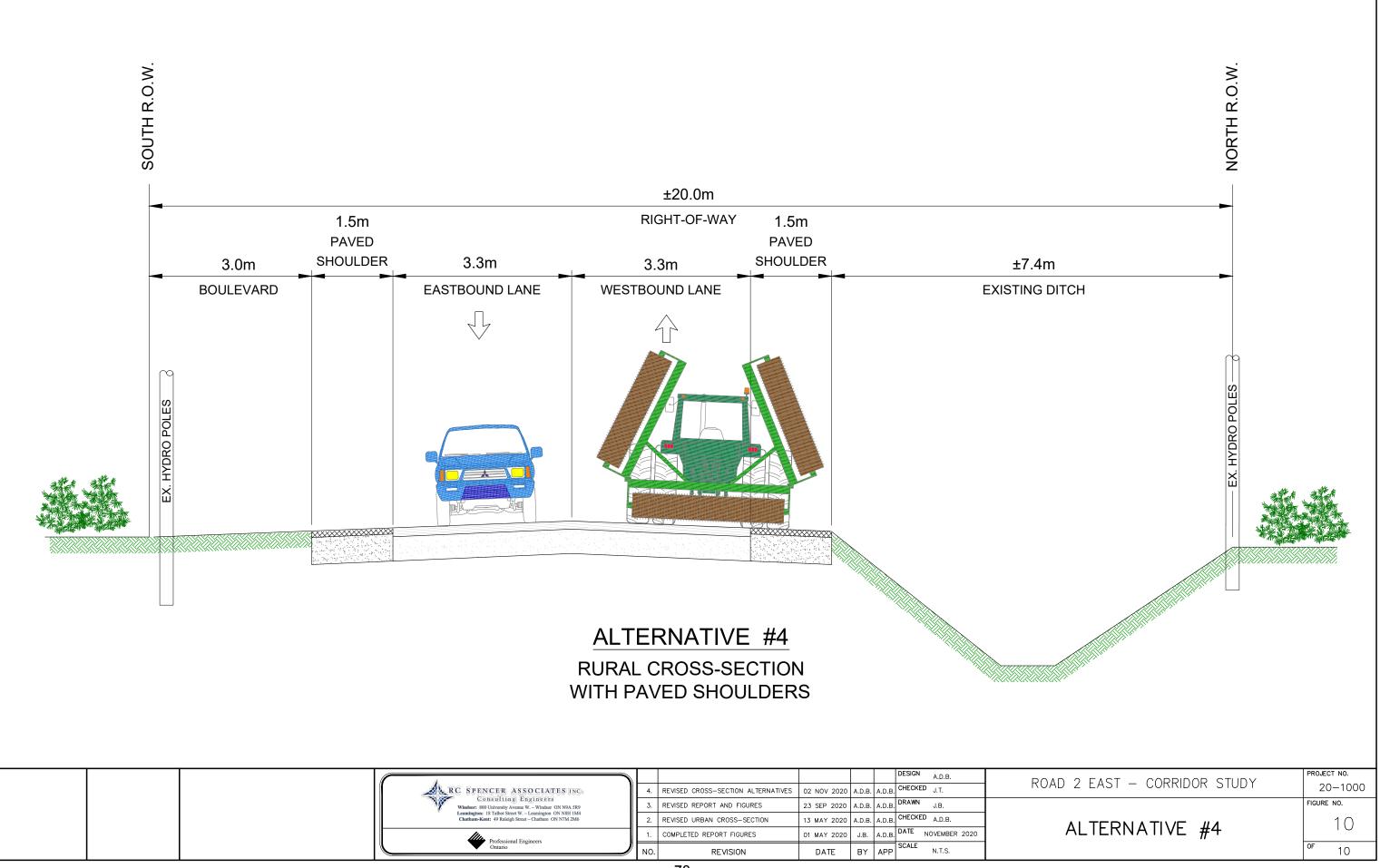








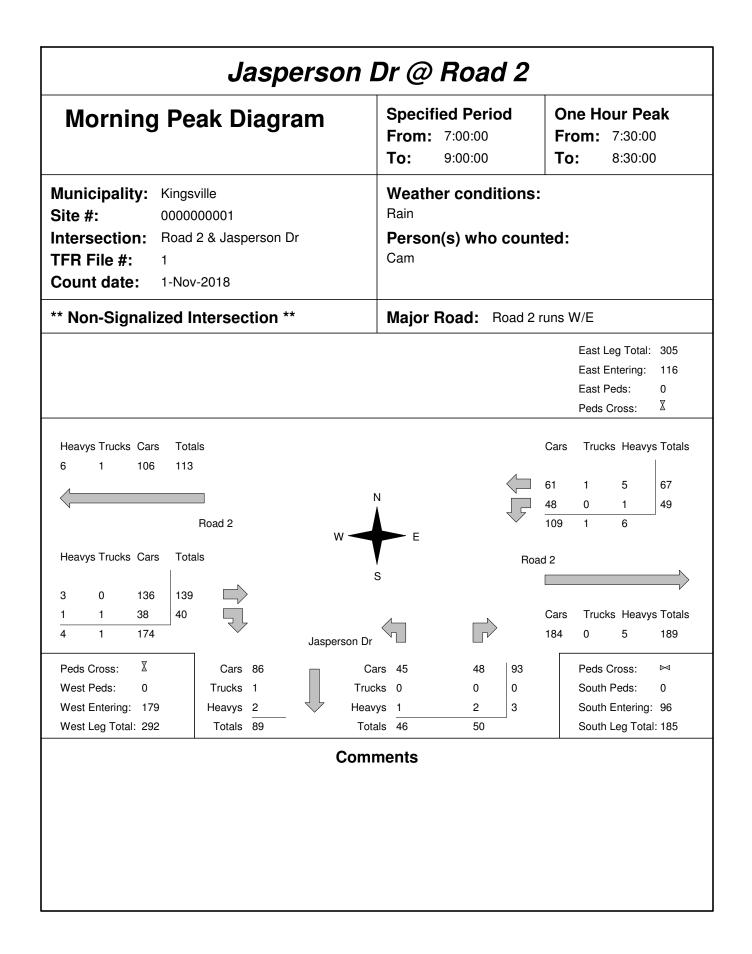




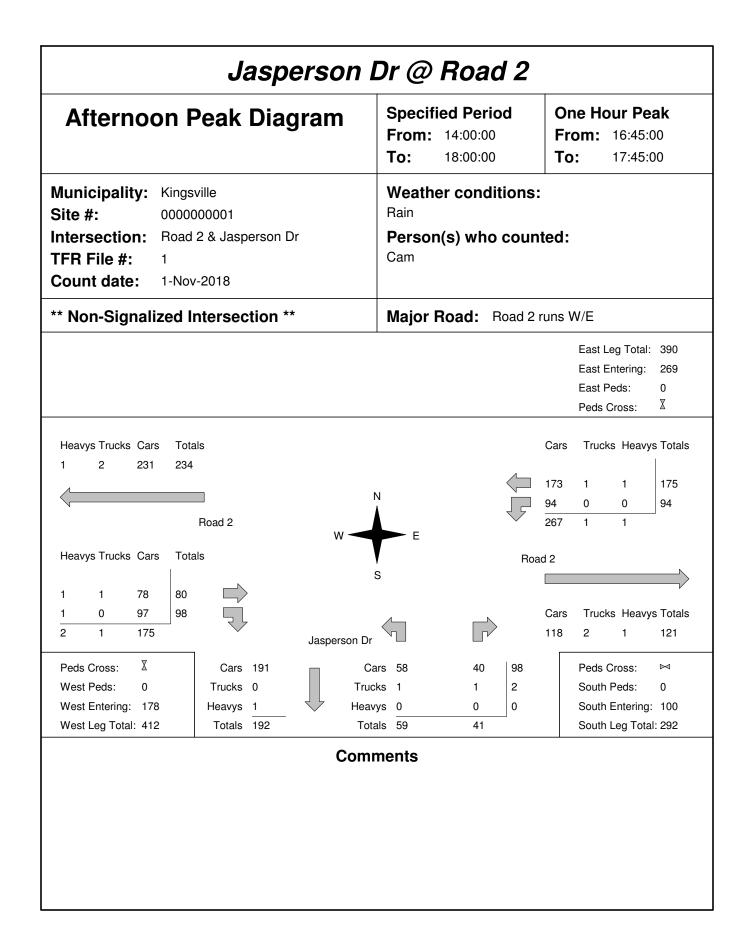
**Appendix A** 

# **HISTORICAL TRAFFIC DATA**

Jasperson Drive at Road 2 East



| Mid-day Pea   | k Diagram                                      |  | ed Period<br>11:00:00<br>13:00:00 | One F<br>From:<br>To: | lour Pe<br>11:45:0<br>12:45:0                       | 00                   |
|---|--|--|-----------------------------------|-----------------------|---|----------------------|
| Municipality:KingsviSite #:000000Intersection:Road 2TFR File #:1Count date:1-Nov-2  | 0001<br>& Jasperson Dr                         | Rain   | r conditions:<br>(s) who coun     |                       |   |                      |
| ** Non-Signalized Int   | tersection **                                  | Major F                                      | load: Road 2                      | runs W/E              |   |                      |
|   |  |  |                                   | Eas<br>Eas            | t Leg Total:<br>t Entering:<br>t Peds:<br>s Cross:  | 267<br>150<br>0<br>∑ |
| Heavys Trucks Cars Totals<br>4 4 129 137  | i -  |  |                                   | Cars Tru<br>84 3      | icks Heavy<br>3                                     | s Totals             |
| F   | Road 2   | W E  | Ţ.                                |                       | 0   | 60                   |
| Heavys Trucks Cars Totals   |  |  | Roa                               | ad 2                  |   |                      |
| 3 4 75 82   |  | S  |                                   |                       |   |                      |
| 0 1 48 49<br>3 5 123  | Jasp   | erson Dr                                     |                                   |                       | icks Heavy<br>4                                     |                      |
| Peds Cross:Image: Image: | Cars 107<br>Trucks 2<br>Heavys 0<br>Totals 109 | Cars 45<br>Trucks 1<br>Heavys 1<br>Totals 47 | 32 77<br>2 3<br>1 2<br>35         | Sou<br>Sou            | s Cross:<br>th Peds:<br>th Entering:<br>th Leg Tota |                      |
|   |  | Comments                                     |                                   |                       |   |                      |



| Jasperson L  | Dr @ Road 2  |
|--|--|
| Total Count Diagram  |  |
| Municipality:KingsvilleSite #:000000001Intersection:Road 2 & Jasperson DrTFR File #:1Count date:1-Nov-2018 | Weather conditions:<br>Rain<br>Person(s) who counted:<br>Cam   |
| ** Non-Signalized Intersection **  | Major Road: Road 2 runs W/E  |
|  | East Leg Total: 2279<br>East Entering: 1235<br>East Peds: 0<br>Peds Cross: <sup>X</sup>  |
| Heavys Trucks Cars Totals<br>32 19 1115 1166   | Cars Trucks Heavys Totals<br>764 13 26 803<br>428 2 2 432<br>1192 15 28  |
| Heavys Trucks Cars Totals  | E Road 2   |
| 19     10     711     740       7     8     405     420       26     18     1116     Jasperson Dr          | Cars Trucks Heavys Totals<br>1005 15 24 1044   |
| West Peds:   0   Trucks   10   Truck     West Entering:   1160   Heavys   9   Heavys                       | rs     351     294     645     Peds Cross:     ⋈       ks     6     5     11     South Peds:     0       ys     6     5     11     South Entering:     667       ils     363     304     South Leg Total:     1519 |
| Comr   | nents  |
|  |  |

**Appendix B** 

### **CURRENT TRAFFIC DATA**

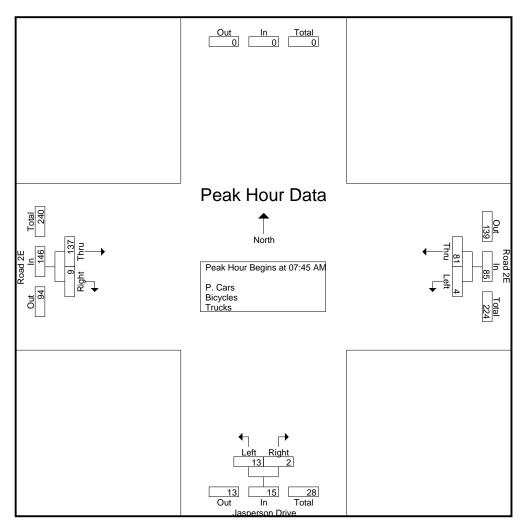
Jasperson Drive at Road 2 East Kratz Sideroad at Road 2 East Graham Sideroad at Road 2 East County Road 45 (Union Avenue) at Road 2 East

### Date: 18 August 2020 Counted by: Austin Greenhow Weather Conditions: Clear Jasperson Drive at Road 2E

|               |      |      |      |            | Grou  | ps Printe | ed- P. C | ars - Bicyc | les - Truc |      |       |            |              |              |            |
|---------------|------|------|------|------------|-------|-----------|----------|-------------|------------|------|-------|------------|--------------|--------------|------------|
|               |      |      | d 2E |            |       | Jaspers   |          | )           |            |      | ld 2E |            |              |              |            |
|               |      |      | //B  |            |       |           | /B       |             |            |      | /B    |            |              | I            |            |
| Start Time    | Thru | Left | Peds | App. Total | Right | Left      | Peds     | App. Total  | Right      | Thru | Peds  | App. Total | Exclu. Total | Inclu. Total | Int. Total |
| 07:15 AM      | 16   | 2    | (0)  | 18         | 0     | 2         | (0)      | 2           | 0          | 22   | (0)   | 22         | 0            | 42           | 42         |
| 07:30 AM      | 20   | 0    | (0)  | 20         | 1     | 2         | (0)      | 3           | 1          | 39   | (0)   | 40         | 0            | 63           | 63         |
| 07:45 AM      | 19   | 1    | (0)  | 20         | 0     | 1         | (0)      | 1           | 1          | 41   | (0)   | 42         | 0            | 63           | 63         |
| Total         | 55   | 3    | (0)  | 58         | 1     | 5         | (0)      | 6           | 2          | 102  | (0)   | 104        | 0            | 168          | 168        |
| 08:00 AM      | 18   | 1    | (0)  | 19         | 0     | 1         | (0)      | 1           | 3          | 33   | (0)   | 36         | 0            | 56           | 56         |
| 08:15 AM      | 17   | 1    | (O)  | 18         | 0     | 8         | (O)      | 8           | 4          | 32   | (O)   | 36         | 0            | 62           | 62         |
| 08:30 AM      | 27   | 1    | (1)  | 28         | 2     | 3         | (0)      | 5           | 1          | 31   | (0)   | 32         | 1            | 65           | 66         |
| *** BREAK *** |      |      |      |            |       |           |          |             |            |      |       |            |              |              |            |
| Total         | 62   | 3    | (1)  | 65         | 2     | 12        | (0)      | 14          | 8          | 96   | (0)   | 104        | 1            | 183          | 184        |
| *** BREAK *** |      |      |      |            |       |           |          |             |            |      |       |            |              |              |            |
| 11:30 AM      | 32   | 2    | (0)  | 34         | 3     | 6         | (0)      | 9           | 10         | 23   | (0)   | 33         | 0            | 76           | 76         |
| 11:45 AM      | 34   | 1    | (1)  | 35         | 0     | 3         | (0)      | 3           | 1          | 23   | (0)   | 24         | 1            | 62           | 63         |
| Total         | 66   | 3    | (1)  | 69         | 3     | 9         | (0)      | 12          | 11         | 46   | (0)   | 57         | 1            | 138          | 139        |
| 12:00 PM      | 32   | 1    | (0)  | 33         | 1     | 5         | (0)      | 6           | 7          | 23   | (0)   | 30         | 0            | 69           | 69         |
| 12:15 PM      | 33   | 2    | (0)  | 35         | 2     | 9         | (O)      | 11          | 3          | 18   | (0)   | 21         | 0            | 67           | 67         |
| 12:30 PM      | 28   | 1    | (0)  | 29         | 2     | 1         | (0)      | 3           | 5          | 45   | (0)   | 50         | 0            | 82           | 82         |
| 12:45 PM      | 17   | 3    | (0)  | 20         | 2     | 4         | (0)      | 6           | 5          | 42   | (0)   | 47         | 0            | 73           | 73         |
| Total         | 110  | 7    | (0)  | 117        | 7     | 19        | (0)      | 26          | 20         | 128  | (0)   | 148        | 0            | 291          | 291        |
| *** BREAK *** |      |      |      |            |       |           |          |             |            |      |       |            |              |              |            |
| 04:45 PM      | 40   | 1    | (0)  | 41         | 2     | 2         | (0)      | 4           | 3          | 29   | (0)   | 32         | 0            | 77           | 77         |
| Total         | 40   | 1    | (0)  | 41         | 2     | 2         | (0)      | 4           | 3          | 29   | (0)   | 32         | 0            | 77           | 77         |
| 05:00 PM      | 54   | 2    | (0)  | 56         | 4     | 5         | (0)      | 9           | 2          | 20   | (0)   | 22         | 0            | 87           | 87         |
| 05:15 PM      | 53   | 1    | (0)  | 54         | 2     | 1         | (0)      | 3           | 4          | 26   | (0)   | 30         | 0            | 87           | 87         |
| 05:30 PM      | 39   | 0    | (0)  | 39         | 2     | 1         | (0)      | 3           | 6          | 20   | (0)   | 26         | 0            | 68           | 68         |
| 05:45 PM      | 35   | 3    | (0)  | 38         | 4     | 1         | (0)      | 5           | 5          | 20   | (0)   | 25         | 0            | 68           | 68         |
| Total         | 181  | 6    | (0)  | 187        | 12    | 8         | (0)      | 20          | 17         | 86   | (0)   | 103        | 0            | 310          | 310        |
| 06:00 PM      | 30   | 0    | (0)  | 30         | 2     | 1         | (0)      | 3           | 6          | 15   | (0)   | 21         | 0            | 54           | 54         |
| Grand Total   | 544  | 23   | (2)  | 567        | 29    | 56        | (0)      | 85          | 67         | 502  | (0)   | 569        | 2            | 1221         | 1223       |
| Apprch %      | 95.9 | 4.1  | (-)  |            | 34.1  | 65.9      | (-)      |             | 11.8       | 88.2 | (-)   |            | _            |              |            |
| Total %       | 44.6 | 1.9  |      | 46.4       | 2.4   | 4.6       |          | 7           | 5.5        | 41.1 |       | 46.6       | 0.2          | 99.8         |            |
| P. Cars       | 532  | 22   |      | 556        | 28    | 39        |          | 67          | 49         | 492  |       | 541        | 0            | 0            | 1164       |
| % P. Cars     | 97.8 | 95.7 | 100  | 97.7       | 96.6  | 69.6      | 0        | 78.8        | 73.1       | 98   | 0     | 95.1       | 0            | 0            | 95.2       |
| Bicycles      | 5    | 0    |      | 5          | 0     | 5         |          | 5           | 4          | 2    | -     | 6          | 0            | 0            | 16         |
| % Bicycles    | 0.9  | 0    | 0    | 0.9        | 0     | 8.9       | 0        | 5.9         | 6          | 0.4  | 0     | 1.1        | 0            | 0            | 1.3        |
| Trucks        | 7    | 1    |      | 8          | 1     | 12        |          | 13          | 14         | 8    |       | 22         | 0            | 0            | 43         |
| % Trucks      | 1.3  | 4.3  | 0    | 1.4        | 3.4   | 21.4      | 0        | 15.3        | 20.9       | 1.6  | 0     | 3.9        | 0            | 0            | 3.5        |



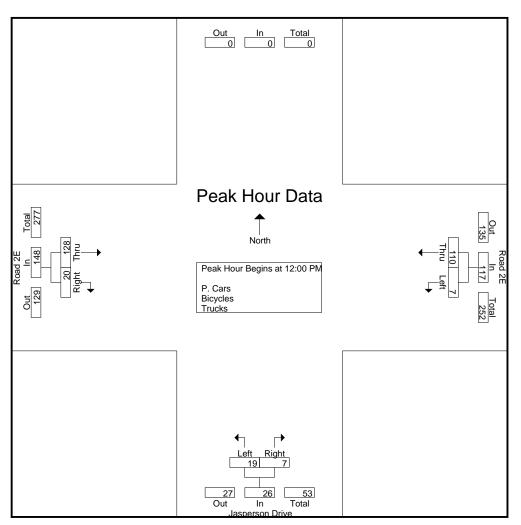
|                           |                | Road 2E<br>W/B |             | Jas   | sperson Dri<br>N/B | ve         |       |      |            |            |
|---------------------------|----------------|----------------|-------------|-------|--------------------|------------|-------|------|------------|------------|
| Start Time                | Thru           | Left           | App. Total  | Right | Left               | App. Total | Right | Thru | App. Total | Int. Total |
| Peak Hour Analysis From   | m 07:15 AM to  | 09:45 AM -     | Peak 1 of 1 | -     |                    |            | -     |      |            |            |
| Peak Hour for Entire Inte | ersection Begi | ns at 07:45 /  | AM          |       |                    |            |       |      |            |            |
| 07:45 AM                  | 19             | 1              | 20          | 0     | 1                  | 1          | 1     | 41   | 42         | 63         |
| 08:00 AM                  | 18             | 1              | 19          | 0     | 1                  | 1          | 3     | 33   | 36         | 56         |
| 08:15 AM                  | 17             | 1              | 18          | 0     | 8                  | 8          | 4     | 32   | 36         | 62         |
| 08:30 AM                  | 27             | 1              | 28          | 2     | 3                  | 5          | 1     | 31   | 32         | 65         |
| Total Volume              | 81             | 4              | 85          | 2     | 13                 | 15         | 9     | 137  | 146        | 246        |
| % App. Total              | 95.3           | 4.7            |             | 13.3  | 86.7               |            | 6.2   | 93.8 |            |            |
| PHF                       | .750           | 1.00           | .759        | .250  | .406               | .469       | .563  | .835 | .869       | .946       |







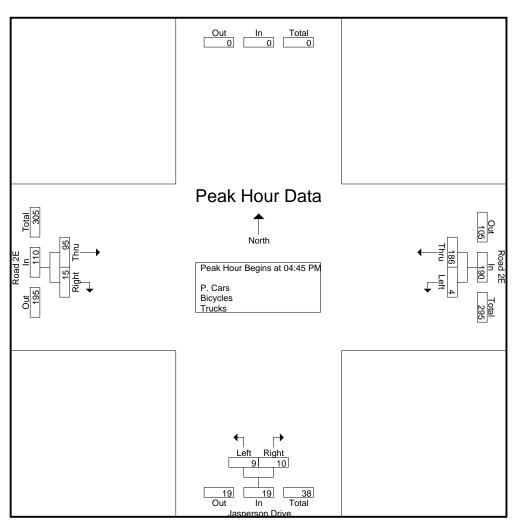
|                           |               | Road 2E<br>W/B |               | Ja    | sperson Dri<br>N/B | ve         |       |      |            |            |
|---------------------------|---------------|----------------|---------------|-------|--------------------|------------|-------|------|------------|------------|
| Start Time                | Thru          | Left           | App. Total    | Right | Left               | App. Total | Right | Thru | App. Total | Int. Total |
| Peak Hour Analysis From   | m 10:00 AM t  | to 01:45 PM    | - Peak 1 of 1 | -     |                    |            | -     |      |            |            |
| Peak Hour for Entire Inte | ersection Beg | gins at 12:00  | PM            |       |                    |            |       |      |            |            |
| 12:00 PM                  | 32            | 1              | 33            | 1     | 5                  | 6          | 7     | 23   | 30         | 69         |
| 12:15 PM                  | 33            | 2              | 35            | 2     | 9                  | 11         | 3     | 18   | 21         | 67         |
| 12:30 PM                  | 28            | 1              | 29            | 2     | 1                  | 3          | 5     | 45   | 50         | 82         |
| 12:45 PM                  | 17            | 3              | 20            | 2     | 4                  | 6          | 5     | 42   | 47         | 73         |
| Total Volume              | 110           | 7              | 117           | 7     | 19                 | 26         | 20    | 128  | 148        | 291        |
| % App. Total              | 94            | 6              |               | 26.9  | 73.1               |            | 13.5  | 86.5 |            |            |
| PHF                       | .833          | .583           | .836          | .875  | .528               | .591       | .714  | .711 | .740       | .887       |







|                           |                | Road 2E<br>W/B |             | Jas   | person Dri<br>N/B | ve         |       |      |            |            |
|---------------------------|----------------|----------------|-------------|-------|-------------------|------------|-------|------|------------|------------|
| Start Time                | Thru           | Left           | App. Total  | Right | Left              | App. Total | Right | Thru | App. Total | Int. Total |
| Peak Hour Analysis From   | m 02:00 PM to  | 06:00 PM -     | Peak 1 of 1 | -     |                   |            | -     |      |            |            |
| Peak Hour for Entire Inte | ersection Begi | ns at 04:45 F  | PM          |       |                   |            |       |      |            |            |
| 04:45 PM                  | 40             | 1              | 41          | 2     | 2                 | 4          | 3     | 29   | 32         | 77         |
| 05:00 PM                  | 54             | 2              | 56          | 4     | 5                 | 9          | 2     | 20   | 22         | 87         |
| 05:15 PM                  | 53             | 1              | 54          | 2     | 1                 | 3          | 4     | 26   | 30         | 87         |
| 05:30 PM                  | 39             | 0              | 39          | 2     | 1                 | 3          | 6     | 20   | 26         | 68         |
| Total Volume              | 186            | 4              | 190         | 10    | 9                 | 19         | 15    | 95   | 110        | 319        |
| % App. Total              | 97.9           | 2.1            |             | 52.6  | 47.4              |            | 13.6  | 86.4 |            |            |
| PHF                       | .861           | .500           | .848        | .625  | .450              | .528       | .625  | .819 | .859       | .917       |



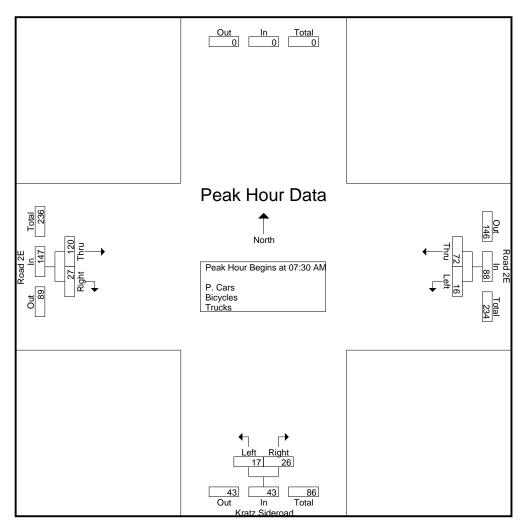


### Date: 19 August 2020 Counted by: Austin Greenhow Weather Conditions: Clear Kratz Sideroad at Road 2E

|                      |          |        |                     |            | Grou   |        |                          | <u>ars - Bicyc</u> | les - Truc |          |                          |            |              |              |            |
|----------------------|----------|--------|---------------------|------------|--------|--------|--------------------------|--------------------|------------|----------|--------------------------|------------|--------------|--------------|------------|
|                      |          |        | d 2E                |            |        |        | Sideroad                 |                    |            |          | ld 2E                    |            |              |              |            |
|                      |          |        | //B                 |            |        |        | I/B                      |                    |            |          | /B                       |            |              |              |            |
| Start Time           | Thru     | Left   | Peds                | App. Total | Right  | Left   | Peds                     | App. Total         | Right      | Thru     | Peds                     | App. Total | Exclu. Total | Inclu. Total | Int. Total |
| 07:15 AM             | 14       | 5      | (0)                 | 19         | 5      | 4      | (0)                      | 9                  | 6          | 23       | (0)                      | 29         | 0            | 57           | 57         |
| 07:30 AM             | 14       | 4      | (0)                 | 18         | 8      | 3      | (0)                      | 11                 | 2          | 30       | (0)                      | 32         | 0            | 61           | 61         |
| 07:45 AM             | 27       | 4      | (0)                 | 31         | 7      | 5      | (0)                      | 12                 | 12         | 38       | (0)                      | 50         | 0            | 93           | 93         |
| Total                | 55       | 13     | (0)                 | 68         | 20     | 12     | (0)                      | 32                 | 20         | 91       | (0)                      | 111        | 0            | 211          | 211        |
| 00.00 414            | 40       | -      | $\langle 0 \rangle$ | 17         | 0      | 0      | $\langle \alpha \rangle$ | 40                 | 7          | 20       | $\langle \alpha \rangle$ | 22         | 0            | <u></u>      | <u></u>    |
| 08:00 AM<br>08:15 AM | 12<br>19 | 5<br>3 | (0)<br>(0)          | 22         | 6<br>5 | 6<br>3 | (0)<br>(0)               | 12<br>8            | 7<br>6     | 26<br>26 | (0)<br>(0)               | 33<br>32   | 0<br>0       | 62<br>62     | 62<br>62   |
| 08:30 AM             | 19       | 5      | (0)                 | 16         | 3      | 6      | (0)                      | 9                  | 4          | 20       | (0)                      | 33         | 0            | 58           | 58         |
| *** BREAK ***        |          | 5      | (0)                 | 10         | 5      | 0      | (0)                      | 5                  | 4          | 23       | (0)                      | 55         | 0            | 50           | 50         |
| Total                | 42       | 13     | (0)                 | 55         | 14     | 15     | (0)                      | 29                 | 17         | 81       | (0)                      | 98         | 0            | 182          | 182        |
|                      |          |        |                     |            |        |        |                          |                    |            |          |                          |            |              |              |            |
| *** BREAK ***        |          |        |                     |            |        |        |                          |                    |            |          |                          |            |              |              |            |
| 11:30 AM             | 28       | 11     | (0)                 | 39         | 5      | 5      | (0)                      | 10                 | 9          | 24       | (0)                      | 33         | 0            | 82           | 82         |
| 11:45 AM             | 34       | 6      | (O)                 | 40         | 9      | 4      | (O)                      | 13                 | 6          | 23       | (Ó)                      | 29         | 0            | 82           | 82         |
| Total                | 62       | 17     | (0)                 | 79         | 14     | 9      | (0)                      | 23                 | 15         | 47       | (0)                      | 62         | 0            | 164          | 164        |
| 12:00 PM             | 35       | 23     | (0)                 | 58         | 8      | 11     | (0)                      | 19                 | 7          | 22       | (0)                      | 29         | 0            | 106          | 106        |
| 12:15 PM             | 25       | 14     | (0)                 | 39         | 4      | 9      | (0)                      | 13                 | 8          | 18       | (0)                      | 26         | 0            | 78           | 78         |
| 12:30 PM             | 20       | 4      | (0)                 | 24         | 10     | 9      | (0)                      | 19                 | 8          | 23       | (0)                      | 31         | 0            | 74           | 74         |
| 12:45 PM             | 27       | 4      | (0)                 | 31         | 12     | 6      | (0)                      | 18                 | 14         | 25       | (0)                      | 39         | 0<br>0       | 88           | 88         |
| Total                | 107      | 45     | (0)                 | 152        | 34     | 35     | (0)                      | 69                 | 37         | 88       | (0)                      | 125        | 0            | 346          | 346        |
| *** BREAK ***        |          |        |                     |            |        |        |                          |                    |            |          |                          |            |              |              |            |
| DILAN                |          |        |                     |            |        |        |                          |                    |            |          |                          |            |              |              |            |
| 04:30 PM             | 34       | 11     | (0)                 | 45         | 3      | 16     | (0)                      | 19                 | 10         | 25       | (0)                      | 35         | 0            | 99           | 99         |
| 04:45 PM             | 36       | 14     | (0)                 | 50         | 4      | 7      | (0)                      | 11                 | 10         | 16       | (0)                      | 26         | 0            | 87           | 87         |
| Total                | 70       | 25     | (0)                 | 95         | 7      | 23     | (0)                      | 30                 | 20         | 41       | (0)                      | 61         | 0            | 186          | 186        |
| 05:00 PM             | 50       | 16     | (0)                 | 66         | 3      | 12     | (0)                      | 15                 | 14         | 28       | (0)                      | 42         | 0            | 123          | 123        |
| 05:15 PM             | 55       | 8      | (0)                 | 63         | 4      | 9      | (0)                      | 13                 | 6          | 19       | (0)                      | 25         | 0            | 101          | 101        |
| 05:30 PM             | 30       | 11     | (0)                 | 41         | 2      | 5      | (0)                      | 7                  | 8          | 24       | (0)                      | 32         | Ő            | 80           | 80         |
| 05:45 PM             | 23       | 9      | (0)                 | 32         | 6      | 4      | (0)                      | 10                 | 7          | 16       | (0)                      | 23         | 0            | 65           | 65         |
| Total                | 158      | 44     | (0)                 | 202        | 15     | 30     | (0)                      | 45                 | 35         | 87       | (0)                      | 122        | 0            | 369          | 369        |
| Grand Total          | 494      | 157    | (0)                 | 651        | 104    | 124    | (0)                      | 228                | 144        | 435      | (0)                      | 579        | 0            | 1458         | 1458       |
| Apprch %             | 75.9     | 24.1   | (0)                 | 0.01       | 45.6   | 54.4   | (0)                      | 220                | 24.9       | 75.1     | (0)                      | 515        | 0            | 1450         | 1450       |
| Total %              | 33.9     | 10.8   |                     | 44.7       | 7.1    | 8.5    |                          | 15.6               | 9.9        | 29.8     |                          | 39.7       | 0            | 100          |            |
| P. Cars              | 479      | 154    |                     | 633        | 102    | 121    |                          | 223                | 142        | 423      |                          | 565        | 0            | 0            | 1421       |
| % P. Cars            | 97       | 98.1   | 0                   | 97.2       | 98.1   | 97.6   | 0                        | 97.8               | 98.6       | 97.2     | 0                        | 97.6       | 0            | Õ            | 97.5       |
| Bicycles             | 0        | 0      |                     | 0          | 0      | 0      |                          | 0                  | 1          | 0        |                          | 1          | 0            | 0            | 1          |
| % Bicycles           | 0        | 0      | 0                   | 0          | 0      | 0      | 0                        | 0                  | 0.7        | 0        | 0                        | 0.2        | 0            | 0            | 0.1        |
| Trucks               | 15       | 3      |                     | 18         | 2      | 3      |                          | 5                  | 1          | 12       |                          | 13         | 0            | 0            | 36         |
| % Trucks             | 3        | 1.9    | 0                   | 2.8        | 1.9    | 2.4    | 0                        | 2.2                | 0.7        | 2.8      | 0                        | 2.2        | 0            | 0            | 2.5        |

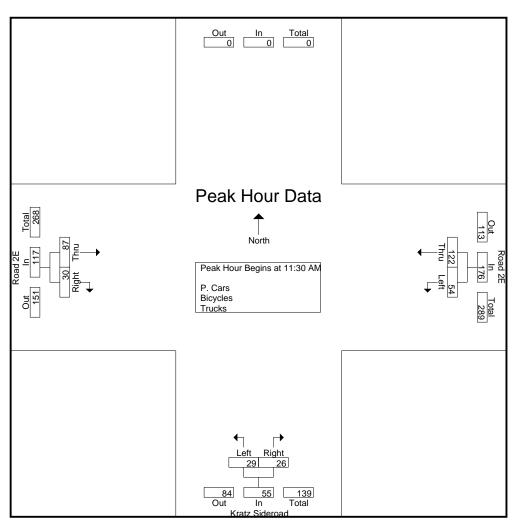


|                           |               | Road 2E<br>W/B |             | Kra   | atz Sideroa<br>N/B | d          |       |                    |            |            |
|---------------------------|---------------|----------------|-------------|-------|--------------------|------------|-------|--------------------|------------|------------|
| Start Time                | Thru          | Left           | App. Total  | Right | Left               | App. Total | Right | <u>E/B</u><br>Thru | App. Total | Int. Total |
| Peak Hour Analysis From   | m 07:15 AM to | o 09:45 AM -   | Peak 1 of 1 |       |                    |            |       | ·                  |            |            |
| Peak Hour for Entire Inte | ersection Beg | ins at 07:30 A | AM          |       |                    |            |       |                    |            |            |
| 07:30 AM                  | 14            | 4              | 18          | 8     | 3                  | 11         | 2     | 30                 | 32         | 61         |
| 07:45 AM                  | 27            | 4              | 31          | 7     | 5                  | 12         | 12    | 38                 | 50         | 93         |
| 08:00 AM                  | 12            | 5              | 17          | 6     | 6                  | 12         | 7     | 26                 | 33         | 62         |
| 08:15 AM                  | 19            | 3              | 22          | 5     | 3                  | 8          | 6     | 26                 | 32         | 62         |
| Total Volume              | 72            | 16             | 88          | 26    | 17                 | 43         | 27    | 120                | 147        | 278        |
| % App. Total              | 81.8          | 18.2           |             | 60.5  | 39.5               |            | 18.4  | 81.6               |            |            |
| PHF                       | .667          | .800           | .710        | .813  | .708               | .896       | .563  | .789               | .735       | .747       |





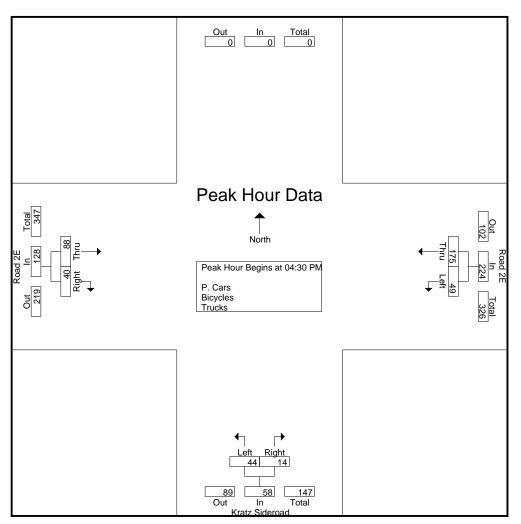
|                           |               | Road 2E<br>W/B |             | K     | ratz Sideroa<br>N/B | ad         |       |             |            |            |
|---------------------------|---------------|----------------|-------------|-------|---------------------|------------|-------|-------------|------------|------------|
| Start Time                | Thru          | Left           | App. Total  | Right | Left                | App. Total | Right | E/B<br>Thru | App. Total | Int. Total |
| Peak Hour Analysis From   | m 10:00 AM to | o 01:45 PM -   | Peak 1 of 1 | -     |                     |            | -     |             |            |            |
| Peak Hour for Entire Inte | ersection Beg | ins at 11:30   | AM          |       |                     |            |       |             |            |            |
| 11:30 AM                  | 28            | 11             | 39          | 5     | 5                   | 10         | 9     | 24          | 33         | 82         |
| 11:45 AM                  | 34            | 6              | 40          | 9     | 4                   | 13         | 6     | 23          | 29         | 82         |
| 12:00 PM                  | 35            | 23             | 58          | 8     | 11                  | 19         | 7     | 22          | 29         | 106        |
| 12:15 PM                  | 25            | 14             | 39          | 4     | 9                   | 13         | 8     | 18          | 26         | 78         |
| Total Volume              | 122           | 54             | 176         | 26    | 29                  | 55         | 30    | 87          | 117        | 348        |
| % App. Total              | 69.3          | 30.7           |             | 47.3  | 52.7                |            | 25.6  | 74.4        |            |            |
| PHF                       | .871          | .587           | .759        | .722  | .659                | .724       | .833  | .906        | .886       | .821       |







|                           |      | Road 2E<br>W/B |            | Kı     | ratz Sideroa<br>N/B | ad          |        |          |             |            |
|---------------------------|------|----------------|------------|--------|---------------------|-------------|--------|----------|-------------|------------|
| Start Time                | Thru | Left           | App. Total | Right  | Left                | App. Total  | Right  | <u> </u> | App. Total  | Int. Total |
| Peak Hour Analysis From   | -    |                |            | rtight | Lon                 | ripp. rotar | rtight |          | ripp: rotar | int. Fotar |
| Peak Hour for Entire Inte |      |                |            |        |                     |             |        |          |             |            |
| 04:30 PM                  | 34 ັ | 11             | 45         | 3      | 16                  | 19          | 10     | 25       | 35          | 99         |
| 04:45 PM                  | 36   | 14             | 50         | 4      | 7                   | 11          | 10     | 16       | 26          | 87         |
| 05:00 PM                  | 50   | 16             | 66         | 3      | 12                  | 15          | 14     | 28       | 42          | 123        |
| 05:15 PM                  | 55   | 8              | 63         | 4      | 9                   | 13          | 6      | 19       | 25          | 101        |
| Total Volume              | 175  | 49             | 224        | 14     | 44                  | 58          | 40     | 88       | 128         | 410        |
| % App. Total              | 78.1 | 21.9           |            | 24.1   | 75.9                |             | 31.2   | 68.8     |             |            |
| PHF                       | .795 | .766           | .848       | .875   | .688                | .763        | .714   | .786     | .762        | .833       |





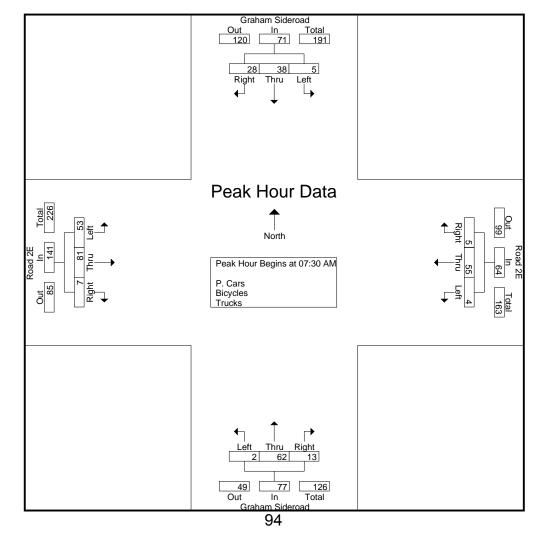


#### Date: 20 August 2020 Counted by: Austin Greenhow Weather Conditions: Clear Graham Sideroad at Road 2E

|                        |           |                   |                  |        |                   |           |          |                | Grou | ups Printe | d- P. Ca   | rs - Bicy        | cles - T         | rucks |            |                  |                  |                  |      |                  | _            |              |            |
|------------------------|-----------|-------------------|------------------|--------|-------------------|-----------|----------|----------------|------|------------|------------|------------------|------------------|-------|------------|------------------|------------------|------------------|------|------------------|--------------|--------------|------------|
|                        |           | Grah              | nam Sic          | leroad |                   |           | F        | Road 2         | E    |            |            | Grah             | am Side          | eroad |            |                  |                  | Road 2           | E    |                  |              |              |            |
|                        |           |                   | S/B              |        | 1                 |           |          | W/B            |      |            |            |                  | N/B              | r     |            |                  |                  | E/B              |      |                  |              |              |            |
| Start Time             | Right     | Thru              | Left             | Peds   | App. Total        | Right     | Thru     | Left           | Peds | App. Total | Right      | Thru             | Left             | Peds  | App. Total | Right            | Thru             | Left             | Peds | App. Total       | Exclu. Total | Inclu. Total | Int. Total |
| 07:15 AM               | 5         | 7                 | 0                | (0)    | 12                | 0         | 12       | 0              | (0)  | 12         | 1          | 14               | 2                | (0)   | 17         | 0                | 16               | 7                | (0)  | 23               | 0            | 64           | 64         |
| 07:30 AM               | 9         | 7                 | 0                | (0)    | 16                | 2         | 12       | 0              | (0)  | 14         | 2          | 22               | 0                | (0)   | 24         | 1                | 21               | 20               | (0)  | 42               | 0            | 96           | 96         |
| 07:45 AM               | 9         | 6                 | 2                | (0)    | 17                | 1         | 13       | 3              | (0)  | 17         | 3          | 10               | 0                | (0)   | 13         | 5                | 28               | 20               | (0)  | 53               | 0            | 100          | 100        |
| Total                  | 23        | 20                | 2                | (0)    | 45                | 3         | 37       | 3              | (0)  | 43         | 6          | 46               | 2                | (0)   | 54         | 6                | 65               | 47               | (0)  | 118              | 0            | 260          | 260        |
| 08:00 AM               | 3         | 10                | 0                | (0)    | 13                | 1         | 13       | 0              | (0)  | 14         | 4          | 15               | 1                | (0)   | 20         | 0                | 20               | 9                | (0)  | 29               | 0            | 76           | 76         |
| 08:15 AM               | 7         | 15                | 3                | (0)    | 25                | 1         | 17       | 1              | (0)  | 19         | 4          | 15               | 1                | (0)   | 20         | 1                | 12               | 4                | (0)  | 17               | 0            | 81           | 81         |
| 08:30 AM               | 8         | 11                | 1                | (0)    | 20                | 0         | 13       | 1              | (0)  | 14         | 2          | 11               | 0                | (0)   | 13         | 2                | 24               | 5                | (0)  | 31               | 0            | 78           | 78         |
| *** BREAK ***<br>Total | 18        | 36                | 4                | (0)    | 58                | 2         | 43       | 2              | (0)  | 47         | 10         | 41               | 2                | (0)   | 53         | 3                | 56               | 18               | (0)  | 77               | 0            | 235          | 235        |
| *** BREAK ***          | 1 10      | 00                | -                | (0)    | 00                |           | 40       | 2              | (0)  | 11         | 10         |                  | 2                | (0)   | 001        | 0                | 00               | 10               | (0)  |                  | 0            | 200          | 200        |
| BREAK                  |           |                   |                  |        |                   |           |          |                |      |            |            |                  |                  |       |            |                  |                  |                  |      |                  |              |              |            |
| 11:30 AM               | 9         | 13                | 2                | (0)    | 24                | 2         | 17       | 0              | (0)  | 19         | 3          | 7                | 3                | (0)   | 13         | 4                | 19               | 10               | (0)  | 33               | 0            | 89           | 89         |
| 11:45 AM               | 7         | 16                | 0                | (0)    | 23                | 1         | 21       | 3              | (0)  | 25         | 2          | 11               | 0                | (0)   | 13         | 1                | 26               | 8                | (0)  | 35               | 0            | 96           | 96         |
| Total                  | 16        | 29                | 2                | (0)    | 47                | 3         | 38       | 3              | (0)  | 44         | 5          | 18               | 3                | (0)   | 26         | 5                | 45               | 18               | (0)  | 68               | 0            | 185          | 185        |
| 12:00 PM               | 18        | 14                | 4                | (0)    | 36                | 2         | 34       | 3              | (0)  | 39         | 4          | 15               | 1                | (0)   | 20         | 3                | 26               | 0                | (0)  | 29               | 0            | 124          | 124        |
| 12:15 PM               | 7         | 15                | 1                | (0)    | 23                | 2         | 17       | 3              | (0)  | 22         | 1          | 9                | 2                | (0)   | 12         | 0                | 21               | 5                | (0)  | 26               | 0            | 83           | 83         |
| 12:30 PM               | 17        | 12                | 3                | (0)    | 32                | 0         | 30       | 0              | (0)  | 30         | 5          | 14               | 0                | (0)   | 19         | 2                | 18               | 11               | (0)  | 31               | 0            | 112          | 112        |
| 12:45 PM               | 7         | 11                | 1                | (0)    | 19                | 2         | 24       | 2              | (0)  | 28         | 6          | 15               | 3                | (0)   | 24         | 3                | 26               | 10               | (0)  | 39               | 0            | 110          | 110        |
| Total                  | 49        | 52                | 9                | (0)    | 110               | 6         | 105      | 8              | (0)  | 119        | 16         | 53               | 6                | (0)   | 75         | 8                | 91               | 26               | (0)  | 125              | 0            | 429          | 429        |
| *** BREAK ***          |           |                   |                  |        |                   |           |          |                |      |            |            |                  |                  |       |            |                  |                  |                  |      |                  |              |              |            |
| 04:30 PM               | 15        | 20                | 4                | (0)    | 39                | 3         | 21       | 2              | (0)  | 26         | 3          | 17               | 3                | (0)   | 23         | 1                | 33               | 8                | (0)  | 42               | 0            | 130          | 130        |
| 04:45 PM               | 14        | 20                | 2                | (0)    | 36                | 2         | 33       | 0              | (0)  | 35         | 1          | 19               | 0                | (0)   | 20         | 2                | 22               | 14               | (0)  | 38               | 0            | 129          | 129        |
| Total                  | 29        | 40                | 6                | (0)    | 75                | 5         | 54       | 2              | (0)  | 61         | 4          | 36               | 3                | (0)   | 43         | 3                | 55               | 22               | (0)  | 80               | 0            | 259          | 259        |
| 05:00 PM               | 22        | 27                | 4                | (0)    | 53                | 1         | 33       | 2              | (1)  | 36         | 5          | 14               | 2                | (0)   | 21         | 5                | 21               | 9                | (0)  | 35               | 1            | 145          | 146        |
| 05:15 PM               | 23        | 25                | 5                | (0)    | 53                | 3         | 30       | 2              | (1)  | 35         | 3          | 12               | 1                | (0)   | 16         | 1                | 19               | 5                | (0)  | 25               | 1            | 129          | 130        |
| 05:30 PM               | 19        | 23                | 3                | (0)    | 45                | 4         | 22       | 2              | (0)  | 28         | 2          | 14               | 1                | (0)   | 17         | 2                | 14               | 4                | (0)  | 20               | 0            | 110          | 110        |
| 05:45 PM               | 13        | 19                | 2                | (0)    | 34                | 0         | 23       | 1              | (0)  | 24         | 0          | 8                |                  | (0)   | 9          | 0                | 15               | 4                | (0)  | 19               | 0            | 86           | 86         |
| Total                  | 77        | 94                | 14               | (0)    | 185               | 8         | 108      | 7              | (2)  | 123        | 10         | 48               | 5                | (0)   | 63         | 8                | 69               | 22               | (0)  | 99               | 2            | 470          | 472        |
| Grand Total            | 212       | 271               | 37               | (0)    | 520               | 27        | 385      | 25             | (2)  | 437        | 51         | 242              | 21               | (0)   | 314        | 33               | 381              | 153              | (0)  | 567              | 2            | 1838         | 1840       |
| Apprch %               | 40.8      | 52.1              | 7.1              |        |                   | 6.2       | 88.1     | 5.7            |      |            | 16.2       | 77.1             | 6.7              |       |            | 5.8              | 67.2             | 27               |      |                  |              |              |            |
| Total %                | 11.5      | 14.7              | 2                |        | 28.3              | 1.5       | 20.9     | 1.4            |      | 23.8       | 2.8        | 13.2             | 1.1              |       | 17.1       | 1.8              | 20.7             | 8.3              |      | 30.8             | 0.1          | 99.9         |            |
| P. Cars                | 202       | 258               | 35               | ~      | 495               | 26        | 381      | 22             | 400  | 431        | 51         | 238              | 20               | 0     | 309        | 31               | 373              | 145              | ~    | 549              | 0            | 0            | 1784       |
| <u> </u>               | 95.3<br>0 | <u>95.2</u><br>10 | <u>94.6</u><br>0 | 0      | <u>95.2</u><br>10 | 96.3<br>0 | <u> </u> | <u>88</u><br>0 | 100  | 98.2       | <u>100</u> | <u>98.3</u><br>1 | <u>95.2</u><br>0 | 0     | 98.4       | <u>93.9</u><br>1 | <u>97.9</u><br>1 | <u>94.8</u><br>0 | 0    | <u>96.8</u><br>2 | 0            | 0            | <u> </u>   |
| % Bicycles             | 0         | 3.7               | 0                | 0      | 10                | 0         | 0        | 0              | 0    | 0          | 0          | 0.4              | 0                | 0     | 0.3        | 3                | 0.3              | 0                | 0    | 2<br>0.4         | 0            | 0            | 0.7        |
| Trucks                 | 10        | <u> </u>          | 2                | 0      | 1.9               | 1         | 4        | 3              | 0    | 8          | 0          | 3                | 1                | 0     | 4          | 1                | 0.3              | 8                | 0    | 16               | 0            | 0            | 43         |
| % Trucks               | 4.7       | 1.1               | 5.4              | 0      | 2.9               | 3.7       | 1        | 12             | 0    | 1.8        | 0          | 1.2              | 4.8              | 0     | 1.3        | 3                | ,<br>1.8         | 5.2              | 0    | 2.8              | 0            | 0            | 2.3        |
|                        |           |                   | 2.1              | 5      | 0                 |           | •        | •              | 5    |            | Ũ          |                  |                  | Ũ     |            | v                |                  |                  | 5    |                  |              | Ŭ            |            |

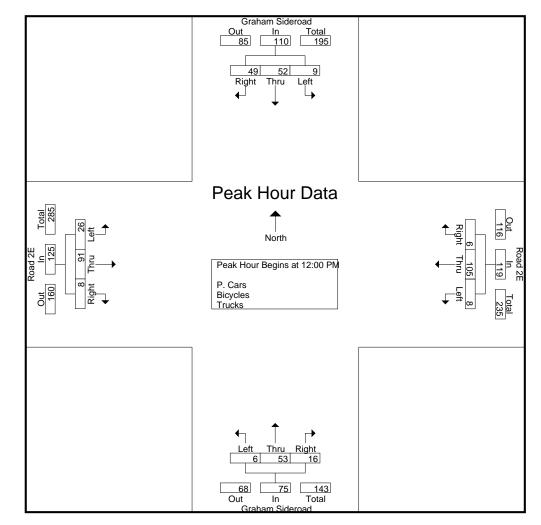


|                      |              | Graham S   | Sideroad   |            |       | Road | 12E  |            |       | Graham S | Sideroad |           |       |      |      |            |            |
|----------------------|--------------|------------|------------|------------|-------|------|------|------------|-------|----------|----------|-----------|-------|------|------|------------|------------|
|                      |              | S/E        | 3          |            | W/B   |      |      |            |       | N/       | В        |           |       |      |      |            |            |
| Start Time           | Right        | Thru       | Left       | App. Total | Right | Thru | Left | App. Total | Right | Thru     | Left Ap  | op. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis F | rom 07:15    | AM to 09:4 | 45 AM - Po | eak 1 of 1 | -     |      |      |            |       |          |          |           | -     |      |      |            |            |
| Peak Hour for Entire | Intersection | Begins at  | 07:30 AN   | 1          |       |      |      |            |       |          |          |           |       |      |      |            |            |
| 07:30 AM             | 9            | 7          | 0          | 16         | 2     | 12   | 0    | 14         | 2     | 22       | 0        | 24        | 1     | 21   | 20   | 42         | 96         |
| 07:45 AM             | 9            | 6          | 2          | 17         | 1     | 13   | 3    | 17         | 3     | 10       | 0        | 13        | 5     | 28   | 20   | 53         | 100        |
| 08:00 AM             | 3            | 10         | 0          | 13         | 1     | 13   | 0    | 14         | 4     | 15       | 1        | 20        | 0     | 20   | 9    | 29         | 76         |
| 08:15 AM             | 7            | 15         | 3          | 25         | 1     | 17   | 1    | 19         | 4     | 15       | 1        | 20        | 1     | 12   | 4    | 17         | 81         |
| Total Volume         | 28           | 38         | 5          | 71         | 5     | 55   | 4    | 64         | 13    | 62       | 2        | 77        | 7     | 81   | 53   | 141        | 353        |
| % App. Total         | 39.4         | 53.5       | 7          |            | 7.8   | 85.9 | 6.2  |            | 16.9  | 80.5     | 2.6      |           | 5     | 57.4 | 37.6 |            |            |
| PHF                  | .778         | .633       | .417       | .710       | .625  | .809 | .333 | .842       | .813  | .705     | .500     | .802      | .350  | .723 | .663 | .665       | .883       |



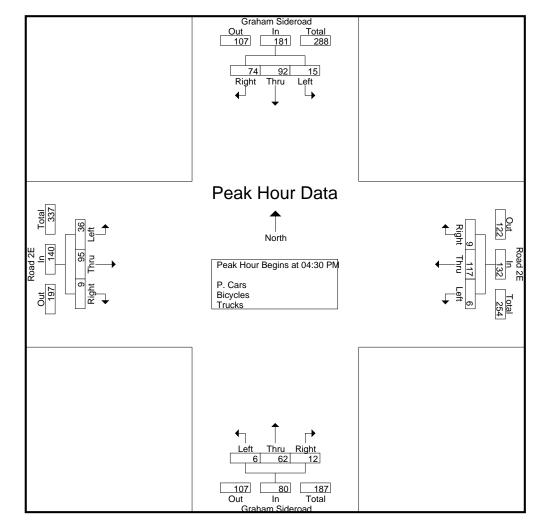


|                      |              | Graham S   | Sideroad  |             |       | Road | 12E  |            |       | Graham | Sideroad |           |       |      |      |            |            |
|----------------------|--------------|------------|-----------|-------------|-------|------|------|------------|-------|--------|----------|-----------|-------|------|------|------------|------------|
|                      |              | S/         | В         |             |       | W/   | В    |            |       | N/     | В        |           |       | E/   | В    |            |            |
| Start Time           | Right        | Thru       | Left      | App. Total  | Right | Thru | Left | App. Total | Right | Thru   | Left A   | pp. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis I | From 10:00   | AM to 01:  | 45 PM - I | Peak 1 of 1 |       |      |      |            |       |        |          |           |       |      |      |            |            |
| Peak Hour for Entire | Intersection | n Begins a | t 12:00 P | M.          |       |      |      |            |       |        |          |           |       |      |      |            |            |
| 12:00 PM             | 18           | 14         | 4         | 36          | 2     | 34   | 3    | 39         | 4     | 15     | 1        | 20        | 3     | 26   | 0    | 29         | 124        |
| 12:15 PM             | 7            | 15         | 1         | 23          | 2     | 17   | 3    | 22         | 1     | 9      | 2        | 12        | 0     | 21   | 5    | 26         | 83         |
| 12:30 PM             | 17           | 12         | 3         | 32          | 0     | 30   | 0    | 30         | 5     | 14     | 0        | 19        | 2     | 18   | 11   | 31         | 112        |
| 12:45 PM             | 7            | 11         | 1         | 19          | 2     | 24   | 2    | 28         | 6     | 15     | 3        | 24        | 3     | 26   | 10   | 39         | 110        |
| Total Volume         | 49           | 52         | 9         | 110         | 6     | 105  | 8    | 119        | 16    | 53     | 6        | 75        | 8     | 91   | 26   | 125        | 429        |
| % App. Total         | 44.5         | 47.3       | 8.2       |             | 5     | 88.2 | 6.7  |            | 21.3  | 70.7   | 8        |           | 6.4   | 72.8 | 20.8 |            |            |
| PHF                  | .681         | .867       | .563      | .764        | .750  | .772 | .667 | .763       | .667  | .883   | .500     | .781      | .667  | .875 | .591 | .801       | .865       |





|                      |              | Graham     |           |             |       | Road |      |            |       | Graham |        |           |       |      |      |            |            |
|----------------------|--------------|------------|-----------|-------------|-------|------|------|------------|-------|--------|--------|-----------|-------|------|------|------------|------------|
|                      |              | S/         | В         |             |       | W    | /B   |            |       | N/     | В      |           |       |      |      |            |            |
| Start Time           | Right        | Thru       | Left      | App. Total  | Right | Thru | Left | App. Total | Right | Thru   | Left A | pp. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis I | From 02:00   | PM to 05:  | 45 PM - F | Peak 1 of 1 |       |      |      |            |       |        |        |           |       |      |      |            |            |
| Peak Hour for Entire | Intersection | n Begins a | t 04:30 P | M           |       |      |      |            |       |        |        |           |       |      |      |            |            |
| 04:30 PM             | 15           | 20         | 4         | 39          | 3     | 21   | 2    | 26         | 3     | 17     | 3      | 23        | 1     | 33   | 8    | 42         | 130        |
| 04:45 PM             | 14           | 20         | 2         | 36          | 2     | 33   | 0    | 35         | 1     | 19     | 0      | 20        | 2     | 22   | 14   | 38         | 129        |
| 05:00 PM             | 22           | 27         | 4         | 53          | 1     | 33   | 2    | 36         | 5     | 14     | 2      | 21        | 5     | 21   | 9    | 35         | 145        |
| 05:15 PM             | 23           | 25         | 5         | 53          | 3     | 30   | 2    | 35         | 3     | 12     | 1      | 16        | 1     | 19   | 5    | 25         | 129        |
| Total Volume         | 74           | 92         | 15        | 181         | 9     | 117  | 6    | 132        | 12    | 62     | 6      | 80        | 9     | 95   | 36   | 140        | 533        |
| % App. Total         | 40.9         | 50.8       | 8.3       |             | 6.8   | 88.6 | 4.5  |            | 15    | 77.5   | 7.5    |           | 6.4   | 67.9 | 25.7 |            |            |
| PHF                  | .804         | .852       | .750      | .854        | .750  | .886 | .750 | .917       | .600  | .816   | .500   | .870      | .450  | .720 | .643 | .833       | .919       |



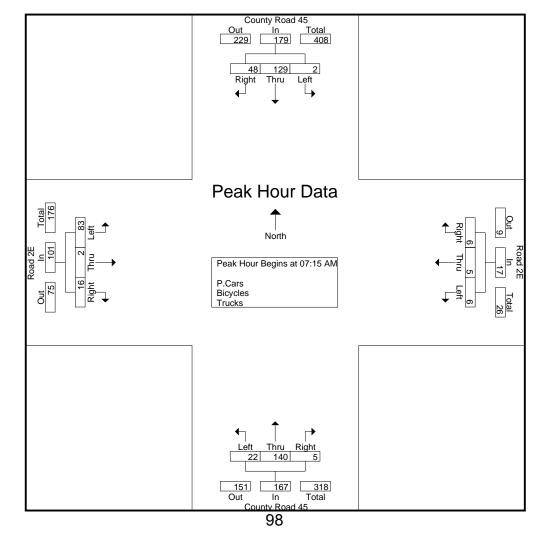


### Date: 25 August 2020 Counted by: Austin Greenhow Weather Conditions: Clear County Road 45 at Road 2E

|               |       |                  |                  |       |                  |       |                  |            | Gro  | ups Printe | d- P.Ca          | rs - Bicv        | cles - Ti        | rucks |            |                  |                  |                  |      |            |              |              |            |
|---------------|-------|------------------|------------------|-------|------------------|-------|------------------|------------|------|------------|------------------|------------------|------------------|-------|------------|------------------|------------------|------------------|------|------------|--------------|--------------|------------|
|               |       | Cou              | inty Ro          | ad 45 |                  |       | F                | Road 2     | E    |            |                  | Cou              | nty Roa          | d 45  |            |                  | I                | Road 2           | E    |            |              |              |            |
|               |       |                  | S/B              |       |                  |       |                  | W/B        |      |            |                  |                  | N/B              |       |            |                  |                  | E/B              |      |            |              |              |            |
| Start Time    | Right | Thru             | Left             | Peds  | App. Total       | Right | Thru             | Left       | Peds | App. Total | Right            | Thru             | Left             | Peds  | App. Total | Right            | Thru             | Left             | Peds | App. Total | Exclu. Total | Inclu. Total | Int. Total |
| 07:15 AM      | 14    | 19               | 0                | (0)   | 33               | 1     | 2                | 2          | (0)  | 5          | 1                | 33               | 3                | (0)   | 37         | 4                | 0                | 9                | (0)  | 13         | 0            | 88           | 88         |
| 07:30 AM      | 12    | 34               | 0                | (0)   | 46               | 3     | 2                | 3          | (0)  | 8          | 0                | 24               | 3                | (0)   | 27         | 4                | 1                | 24               | (0)  | 29         | 0            | 110          | 110        |
| 07:45 AM      | 11    | 42               | 0                | (0)   | 53               | 0     | 0                | 1          | (0)  | 1          | 2                | 42               | 10               | (0)   | 54         | 7                | 0                | 28               | (0)  | 35         | 0            | 143          | 143        |
| Total         | 37    | 95               | 0                | (0)   | 132              | 4     | 4                | 6          | (0)  | 14         | 3                | 99               | 16               | (0)   | 118        | 15               | 1                | 61               | (0)  | 77         | 0            | 341          | 341        |
| 08:00 AM      | 11    | 34               | 2                | (0)   | 47               | 2     | 1                | 0          | (0)  | 3          | 2                | 41               | 6                | (0)   | 49         | 1                | 1                | 22               | (0)  | 24         | 0            | 123          | 123        |
| 08:15 AM      | 15    | 25               | 2                | (0)   | 42               | 2     | 0                | 2          | (1)  | 4          | 0                | 27               | 1                | (0)   | 28         | 1                | 0                | 11               | (0)  | 12         | 1            | 86           | 87         |
| 08:30 AM      | 14    | 19               | 1                | (0)   | 34               | 1     | 1                | 2          | (0)  | 4          | 2                | 23               | 6                | (0)   | 31         | 5                | 0                | 23               | (0)  | 28         | 0            | 97           | 97         |
| *** BREAK *** |       |                  |                  |       |                  |       |                  |            |      |            |                  |                  |                  |       |            |                  |                  |                  |      |            |              |              |            |
| Total         | 40    | 78               | 5                | (0)   | 123              | 5     | 2                | 4          | (1)  | 11         | 4                | 91               | 13               | (0)   | 108        | 7                | 1                | 56               | (0)  | 64         | 1            | 306          | 307        |
| *** BREAK *** |       |                  |                  |       |                  |       |                  |            |      |            |                  |                  |                  |       |            |                  |                  |                  |      |            |              |              |            |
| 11:30 AM      | 14    | 42               | 1                | (1)   | 57               | 2     | 0                | 2          | (0)  | 4          | 2                | 28               | 3                | (0)   | 33         | 9                | 2                | 15               | (0)  | 26         | 1            | 120          | 121        |
| 11:45 AM      | 15    | 27               | 1                | (0)   | 43               | 0     | 2                | 0          | (0)  | 2          | 1                | 41               | 7                | (0)   | 49         | 8                | 2                | 26               | (0)  | 36         | 0            | 130          | 130        |
| Total         | 29    | 69               | 2                | (1)   | 100              | 2     | 2                | 2          | (0)  | 6          | 3                | 69               | 10               | (0)   | 82         | 17               | 4                | 41               | (0)  | 62         | 1            | 250          | 251        |
| 12:00 PM      | 22    | 44               | 3                | (0)   | 69               | 2     | 0                | 2          | (0)  | 4          | 3                | 38               | 6                | (0)   | 47         | 9                | 0                | 16               | (0)  | 25         | 0            | 145          | 145        |
| 12:15 PM      | 25    | 32               | 3                | (0)   | 60               | 2     | 0                | 0          | (0)  | 2          | 3                | 27               | 4                | (0)   | 34         | 9                | 2                | 12               | (0)  | 23         | 0            | 119          | 119        |
| 12:30 PM      | 18    | 41               | 1                | (0)   | 60               | 1     | 2                | 1          | (0)  | 4          | 6                | 47               | 3                | (0)   | 56         | 6                | 1                | 18               | (0)  | 25         | 0            | 145          | 145        |
| 12:45 PM      | 29    | 39               | 0                | (0)   | 68               | 2     | 1                | 3          | (0)  | 6          | 1                | 36               | 6                | (0)   | 43         | 6                | 0                | 18               | (0)  | 24         | 0            | 141          | 141        |
| Total         | 94    | 156              | 7                | (0)   | 257              | 7     | 3                | 6          | (0)  | 16         | 13               | 148              | 19               | (0)   | 180        | 30               | 3                | 64               | (0)  | 97         | 0            | 550          | 550        |
| *** BREAK *** |       |                  |                  |       |                  |       |                  |            |      |            |                  |                  |                  |       |            |                  |                  |                  |      |            |              |              |            |
| 04:30 PM      | 26    | 43               | 2                | (1)   | 71               | 3     | 2                | 0          | (0)  | 5          | 6                | 47               | 2                | (0)   | 55         | 11               | 3                | 31               | (0)  | 45         | 1            | 176          | 177        |
| 04:45 PM      | 21    | 41               | 2                | (0)   | 64               | 0     | 0                | 1          | (0)  | 1          | 2                | 28               | 6                | (0)   | 36         | 4                | 0                | 25               | (0)  | 29         | 0            | 130          | 130        |
| Total         | 47    | 84               | 4                | (1)   | 135              | 3     | 2                | 1          | (0)  | 6          | 8                | 75               | 8                | (0)   | 91         | 15               | 3                | 56               | (0)  | 74         | 1            | 306          | 307        |
| 05:00 PM      | 29    | 51               | 3                | (0)   | 83               | 1     | 0                | 1          | (0)  | 2          | 3                | 43               | 4                | (0)   | 50         | 7                | 0                | 29               | (0)  | 36         | 0            | 171          | 171        |
| 05:15 PM      | 19    | 46               | 3                | (0)   | 68               | 6     | 2                | 3          | (0)  | 11         | 1                | 36               | 7                | (0)   | 44         | 10               | 4                | 10               | (0)  | 24         | 0            | 147          | 147        |
| 05:30 PM      | 24    | 30               | 2                | (0)   | 56               | 2     | 1                | 2          | (0)  | 5          | 3                | 32               | 5                | (0)   | 40         | 12               | 2                | 21               | (0)  | 35         | 0            | 136          | 136        |
| 05:45 PM      | 13    | 28               | 1                | (0)   | 42               | 1     | 1                | 1          | (0)  | 3          | 4                | 29               | 7                | (0)   | 40         | 4                | 1                | 15               | (0)  | 20         | 0            | 105          | 105        |
| Total         | 85    | 155              | 9                | (0)   | 249              | 10    | 4                | 7          | (0)  | 21         | 11               | 140              | 23               | (0)   | 174        | 33               | 7                | 75               | (0)  | 115        | 0            | 559          | 559        |
| Grand Total   | 332   | 637              | 27               | (2)   | 996              | 31    | 17               | 26         | (1)  | 74         | 42               | 622              | 89               | (0)   | 753        | 117              | 19               | 353              | (0)  | 489        | 3            | 2312         | 2315       |
| Apprch %      | 33.3  | 64               | 2.7              |       |                  | 41.9  | 23               | 35.1       |      |            | 5.6              | 82.6             | 11.8             |       |            | 23.9             | 3.9              | 72.2             |      |            |              |              |            |
| Total %       | 14.4  | 27.6             | 1.2              |       | 43.1             | 1.3   | 0.7              | 1.1        |      | 3.2        | 1.8              | 26.9             | 3.8              |       | 32.6       | 5.1              | 0.8              | 15.3             |      | 21.2       | 0.1          | 99.9         |            |
| P.Cars        | 328   | 556              | 25               | 4.00  | 911              | 28    | 15               | 26         | 4.00 | 70         | 40               | 521              | 83               | 6     | 644        | 112              | 16               | 343              | 6    | 471        | 0            | 0            | 2096       |
| <u> </u>      | 98.8  | <u>87.3</u><br>0 | <u>92.6</u><br>0 | 100   | <u>91.3</u><br>0 | 90.3  | <u>88.2</u><br>1 | <u>100</u> | 100  | 93.3       | <u>95.2</u><br>1 | <u>83.8</u><br>1 | <u>93.3</u><br>0 | 0     | 85.5       | <u>95.7</u><br>0 | <u>84.2</u><br>2 | <u>97.2</u><br>2 | 0    | 96.3       | 0            | 0            | 90.5       |
| % Bicycles    | 0     | 0                | 0                | 0     | 0                | 0     | 5.9              | 0          | 0    | 1.3        | 2.4              | 0.2              | 0                | 0     | 2<br>0.3   | 0                | ∠<br>10.5        | 2<br>0.6         | 0    | 4<br>0.8   |              | 0            | 0.3        |
| Trucks        | 4     | 81               | 2                | 0     | 87               | 3     | <u> </u>         | 0          | 0    | 4          |                  | 100              | 6                | 0     | 107        | 5                | 10.5             | <u> </u>         | 0    | <u> </u>   | 0            | 0            | 212        |
| % Trucks      | 1.2   | 12.7             | 7.4              | 0     | 8.7              | 9.7   | 5.9              | 0          | 0    | 5.3        | 2.4              | 16.1             | 6.7              | 0     | 14.2       | 4.3              | 5.3              | 2.3              | 0    | 2.9        | 0            | 0            | 9.2        |
| /0 110010     |       |                  |                  | Ŭ     | 0.1              | 0.1   | 0.0              | 0          | 0    | 0.0        | <b>_</b> .,      | 10.1             | 0.1              | 5     |            |                  | 0.0              | 2.5              | 0    | 2.0        | . 0          | Ŭ            | 0.2        |

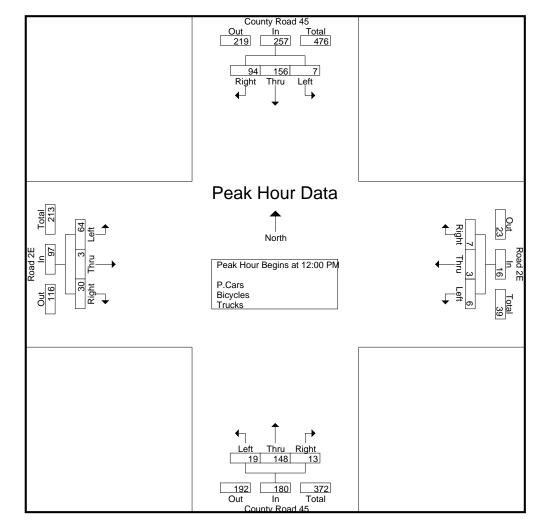


|                      |              | County F    | Road 45    |            |       | Road | d 2E |            |       | County I | Road 45 |           |       |      |      |            |            |
|----------------------|--------------|-------------|------------|------------|-------|------|------|------------|-------|----------|---------|-----------|-------|------|------|------------|------------|
|                      |              | S/          | В          |            |       | W/   | /B   |            |       | N/       | Έ       |           |       | E/   | В    |            |            |
| Start Time           | Right        | Thru        | Left A     | App. Total | Right | Thru | Left | App. Total | Right | Thru     | Left A  | pp. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis I | From 07:15   | AM to 09:4  | 45 AM - Pe | ak 1 of 1  | -     |      |      |            | -     |          |         |           | -     |      |      |            |            |
| Peak Hour for Entire | Intersection | n Begins at | t 07:15 AM |            |       |      |      |            |       |          |         |           |       |      |      |            |            |
| 07:15 AM             | 14           | 19          | 0          | 33         | 1     | 2    | 2    | 5          | 1     | 33       | 3       | 37        | 4     | 0    | 9    | 13         | 88         |
| 07:30 AM             | 12           | 34          | 0          | 46         | 3     | 2    | 3    | 8          | 0     | 24       | 3       | 27        | 4     | 1    | 24   | 29         | 110        |
| 07:45 AM             | 11           | 42          | 0          | 53         | 0     | 0    | 1    | 1          | 2     | 42       | 10      | 54        | 7     | 0    | 28   | 35         | 143        |
| 08:00 AM             | 11           | 34          | 2          | 47         | 2     | 1    | 0    | 3          | 2     | 41       | 6       | 49        | 1     | 1    | 22   | 24         | 123        |
| Total Volume         | 48           | 129         | 2          | 179        | 6     | 5    | 6    | 17         | 5     | 140      | 22      | 167       | 16    | 2    | 83   | 101        | 464        |
| % App. Total         | 26.8         | 72.1        | 1.1        |            | 35.3  | 29.4 | 35.3 |            | 3     | 83.8     | 13.2    |           | 15.8  | 2    | 82.2 |            |            |
| PHF                  | .857         | .768        | .250       | .844       | .500  | .625 | .500 | .531       | .625  | .833     | .550    | .773      | .571  | .500 | .741 | .721       | .811       |



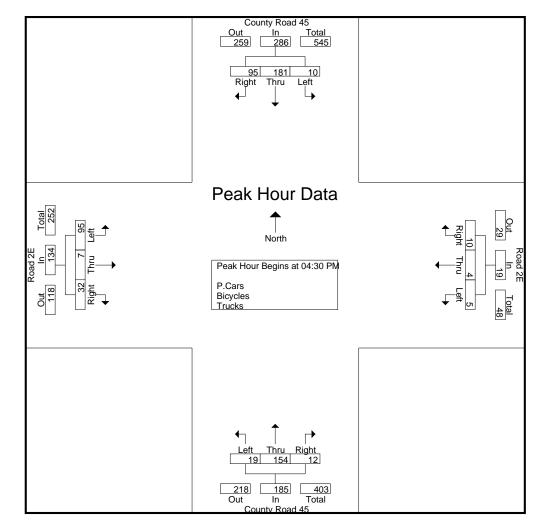


|                      |              | County F    | Road 45   |             |       | Road |      |            |       |      | Road 45 |           |       |      |      |            |            |
|----------------------|--------------|-------------|-----------|-------------|-------|------|------|------------|-------|------|---------|-----------|-------|------|------|------------|------------|
|                      |              | S/I         | В         |             |       | W/   | В    |            |       | N/   | ΈB      |           |       | E/   | В    |            |            |
| Start Time           | Right        | Thru        | Left      | App. Total  | Right | Thru | Left | App. Total | Right | Thru | Left A  | op. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis   | From 10:00   | AM to 01:4  | 45 PM - F | Peak 1 of 1 |       |      |      |            |       |      |         |           |       |      |      |            |            |
| Peak Hour for Entire | Intersection | n Begins at | 12:00 PI  | M .         |       |      |      |            |       |      |         |           |       |      |      |            |            |
| 12:00 PM             | 22           | 44          | 3         | 69          | 2     | 0    | 2    | 4          | 3     | 38   | 6       | 47        | 9     | 0    | 16   | 25         | 145        |
| 12:15 PM             | 25           | 32          | 3         | 60          | 2     | 0    | 0    | 2          | 3     | 27   | 4       | 34        | 9     | 2    | 12   | 23         | 119        |
| 12:30 PM             | 18           | 41          | 1         | 60          | 1     | 2    | 1    | 4          | 6     | 47   | 3       | 56        | 6     | 1    | 18   | 25         | 145        |
| 12:45 PM             | 29           | 39          | 0         | 68          | 2     | 1    | 3    | 6          | 1     | 36   | 6       | 43        | 6     | 0    | 18   | 24         | 141        |
| Total Volume         | 94           | 156         | 7         | 257         | 7     | 3    | 6    | 16         | 13    | 148  | 19      | 180       | 30    | 3    | 64   | 97         | 550        |
| % App. Total         | 36.6         | 60.7        | 2.7       |             | 43.8  | 18.8 | 37.5 |            | 7.2   | 82.2 | 10.6    |           | 30.9  | 3.1  | 66   |            |            |
| PHF                  | .810         | .886        | .583      | .931        | .875  | .375 | .500 | .667       | .542  | .787 | .792    | .804      | .833  | .375 | .889 | .970       | .948       |





|                      |              | County F   |            |             |       | Road<br>W/ |      |            |       | County F |        |            |       |      |      |            |            |
|----------------------|--------------|------------|------------|-------------|-------|------------|------|------------|-------|----------|--------|------------|-------|------|------|------------|------------|
|                      |              | 3/         | D .        |             |       | <u></u>    | D    |            |       |          | D      |            |       | E/   | D    |            |            |
| Start Time           | Right        | Thru       | Left       | App. Total  | Right | Thru       | Left | App. Total | Right | Thru     | Left A | App. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis I | From 02:00   | PM to 05:  | 45 PM - F  | Peak 1 of 1 |       |            |      |            |       |          |        |            |       |      |      |            |            |
| Peak Hour for Entire | Intersection | n Begins a | t 04:30 PI | M           |       |            |      |            |       |          |        |            |       |      |      |            |            |
| 04:30 PM             | 26           | 43         | 2          | 71          | 3     | 2          | 0    | 5          | 6     | 47       | 2      | 55         | 11    | 3    | 31   | 45         | 176        |
| 04:45 PM             | 21           | 41         | 2          | 64          | 0     | 0          | 1    | 1          | 2     | 28       | 6      | 36         | 4     | 0    | 25   | 29         | 130        |
| 05:00 PM             | 29           | 51         | 3          | 83          | 1     | 0          | 1    | 2          | 3     | 43       | 4      | 50         | 7     | 0    | 29   | 36         | 171        |
| 05:15 PM             | 19           | 46         | 3          | 68          | 6     | 2          | 3    | 11         | 1     | 36       | 7      | 44         | 10    | 4    | 10   | 24         | 147        |
| Total Volume         | 95           | 181        | 10         | 286         | 10    | 4          | 5    | 19         | 12    | 154      | 19     | 185        | 32    | 7    | 95   | 134        | 624        |
| % App. Total         | 33.2         | 63.3       | 3.5        |             | 52.6  | 21.1       | 26.3 |            | 6.5   | 83.2     | 10.3   |            | 23.9  | 5.2  | 70.9 |            |            |
| PHF                  | .819         | .887       | .833       | .861        | .417  | .500       | .417 | .432       | .500  | .819     | .679   | .841       | .727  | .438 | .766 | .744       | .886       |



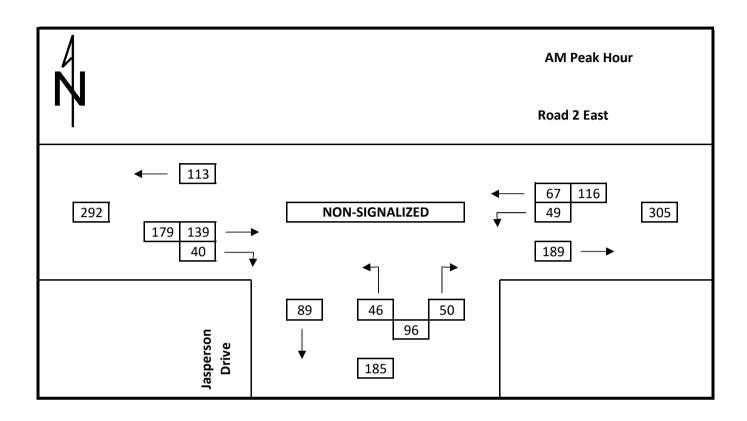
**Appendix C** 

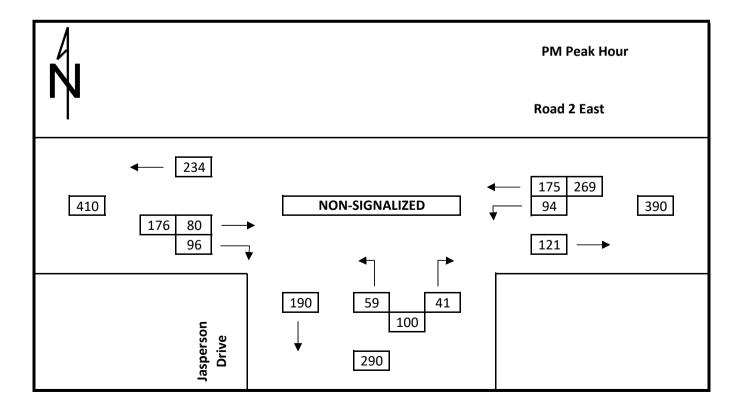
## **TRAFFIC PROJECTION FIGURES**

Jasperson Drive at Road 2 East Kratz Sideroad at Road 2 East Graham Sideroad at Road 2 East County Road 45 (Union Avenue) at Road 2 East

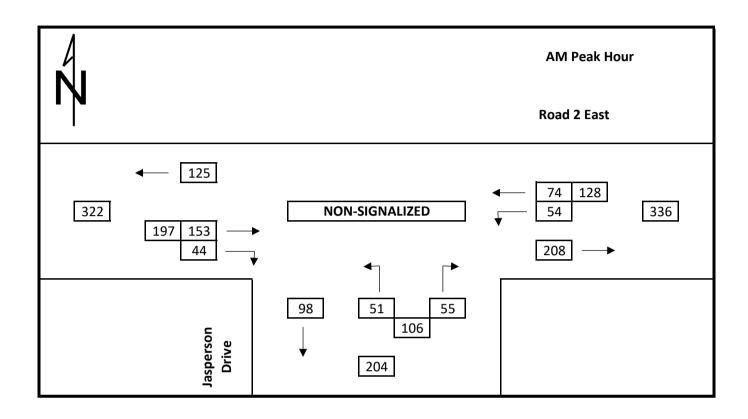
### Existing Traffic Counts

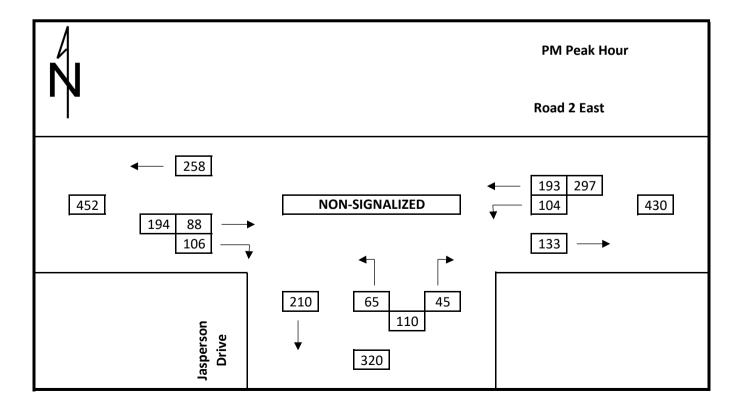
Jasperson Drive at Road 2 East



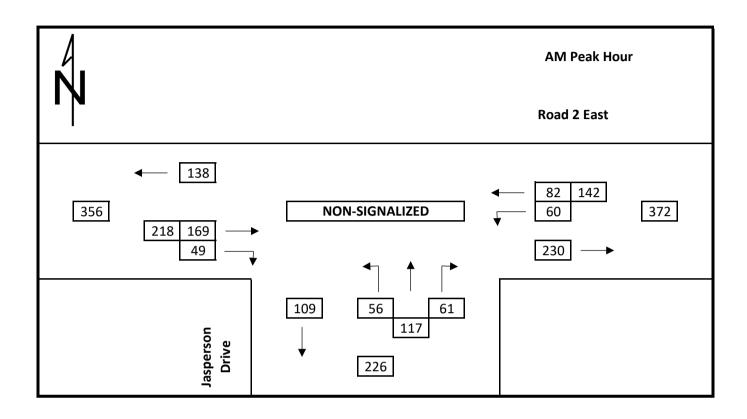


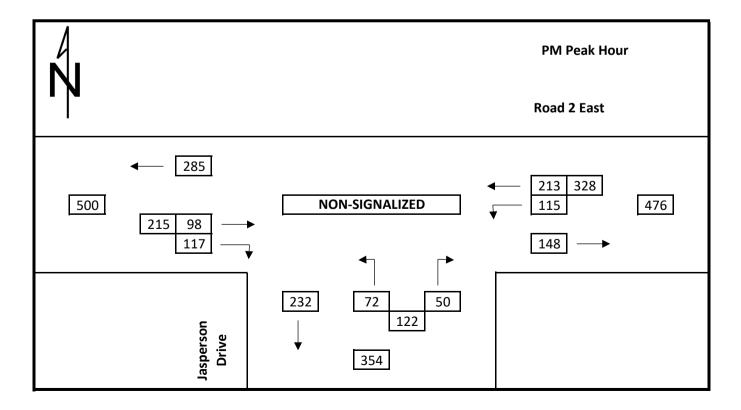
## **Total Traffic 2025** Jasperson Drive at Road 2 East





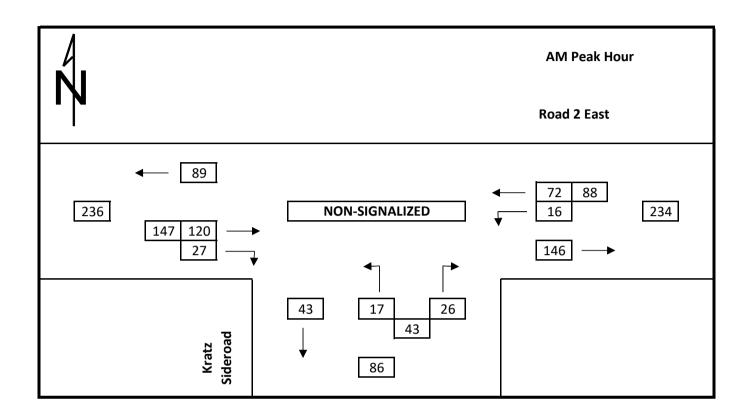
## **Total Traffic 2030** Jasperson Drive at Road 2 East

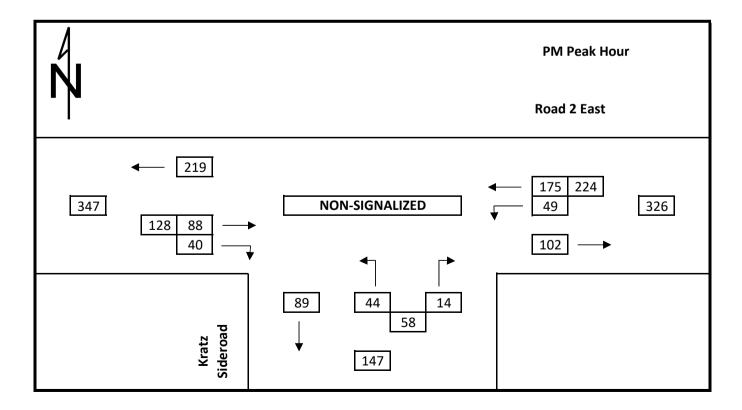




### **Observed Traffic Counts**

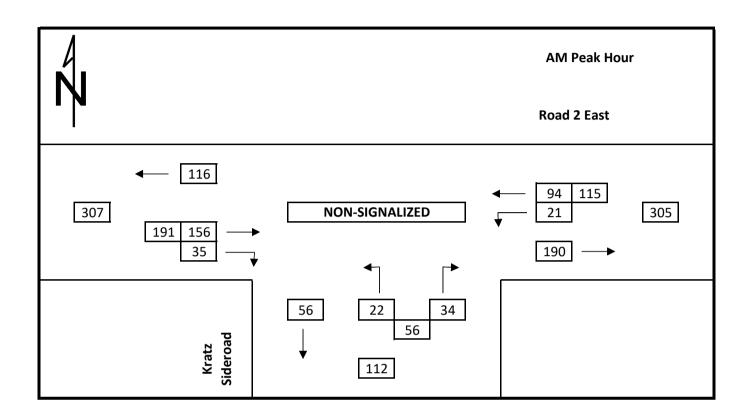
Kratz Sideroad at Road 2 East

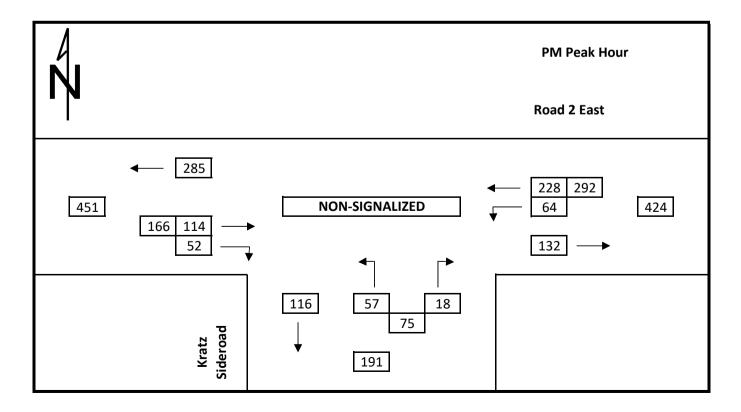




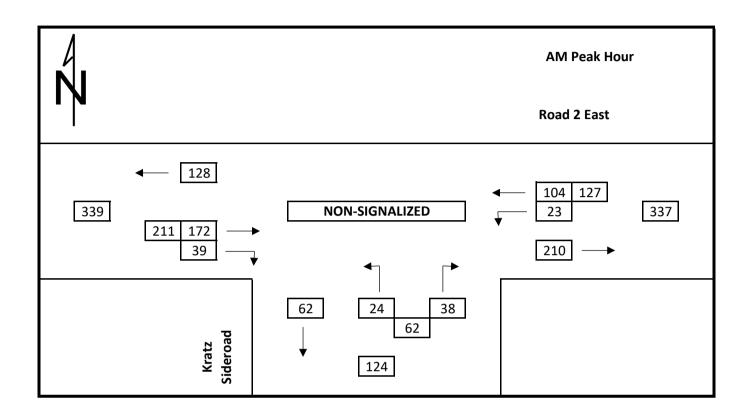
#### Factored Traffic Counts

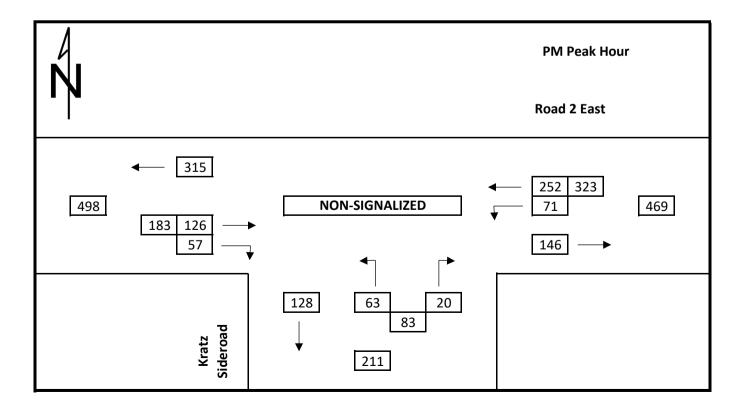
Kratz Sideroad at Road 2 East



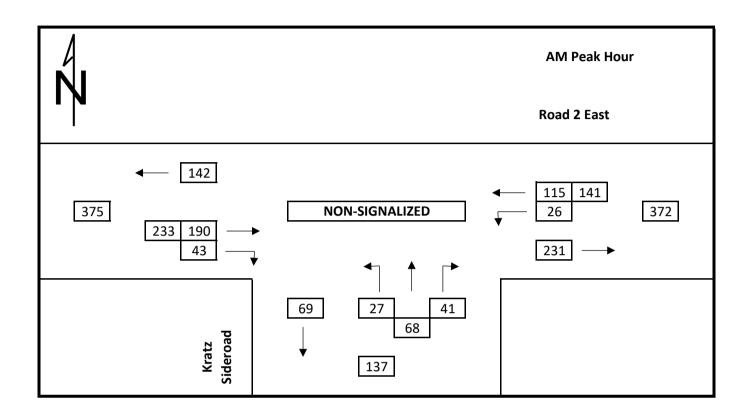


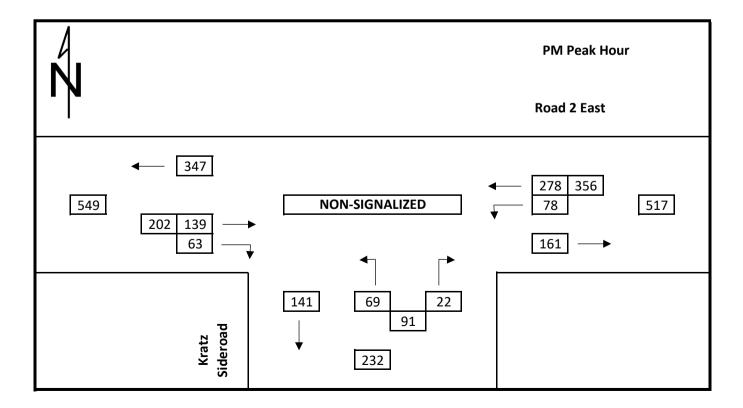
## **Total Traffic 2025** Kratz Sideroad at Road 2 East





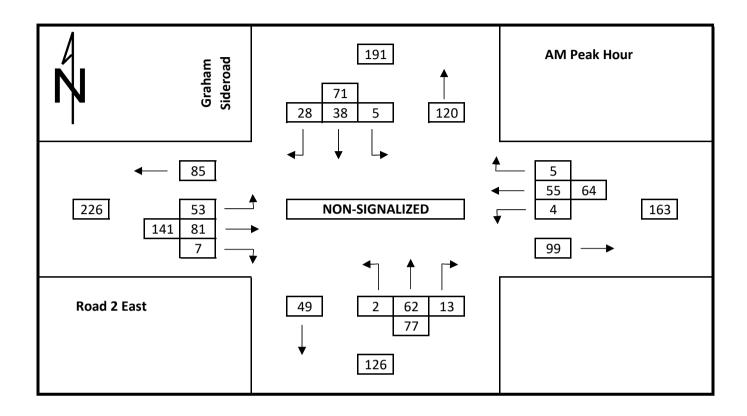
## **Total Traffic 2030** Kratz Sideroad at Road 2 East

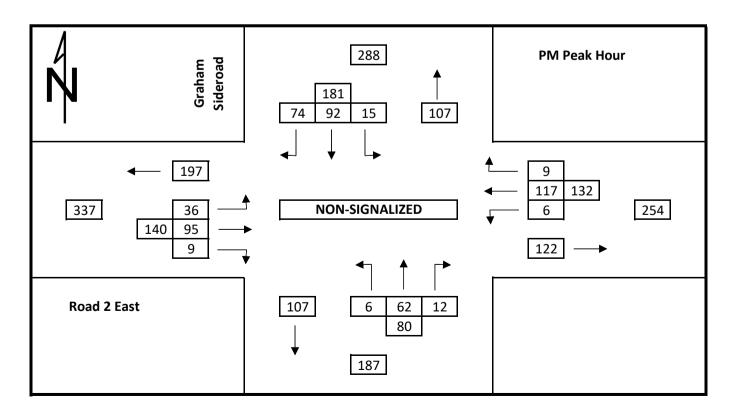




#### **Observed Traffic Counts**

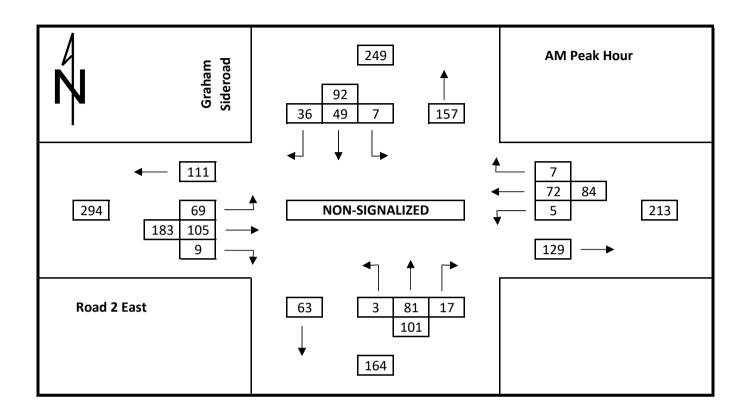
Graham Sideroad at Road 2 East

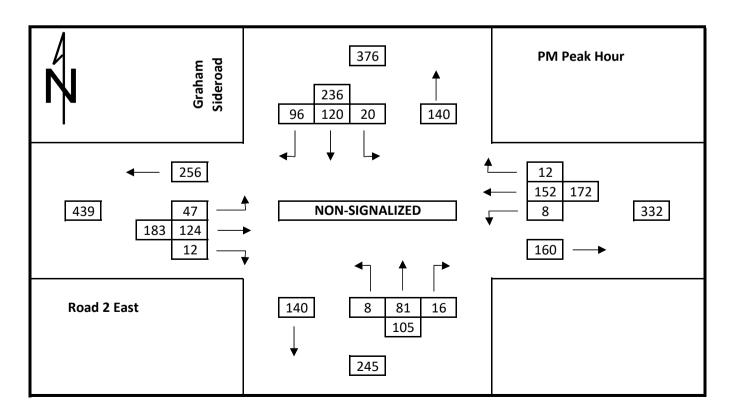




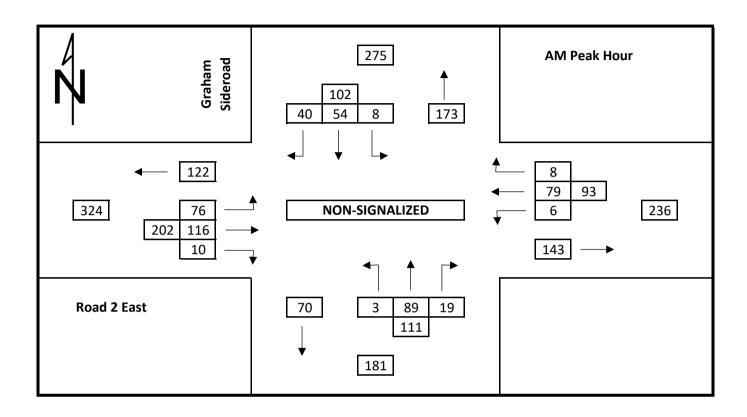
#### Factored Traffic Counts

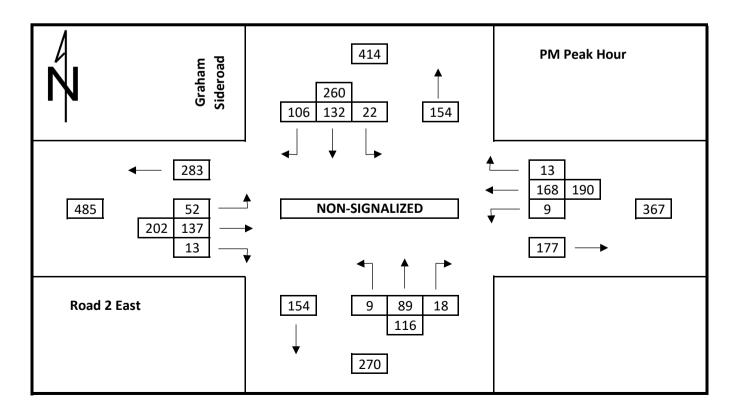
Graham Sideroad at Road 2 East



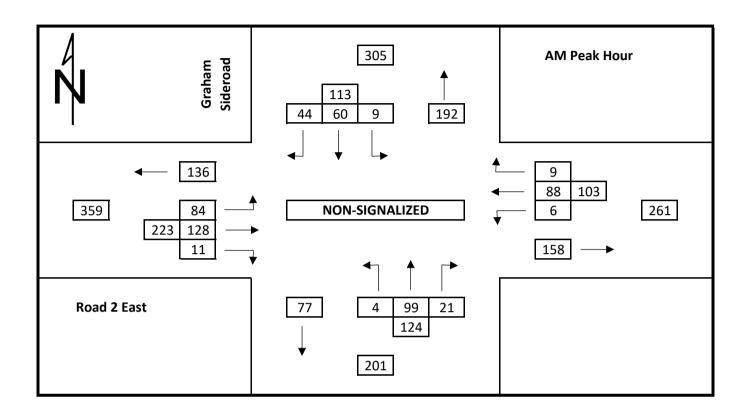


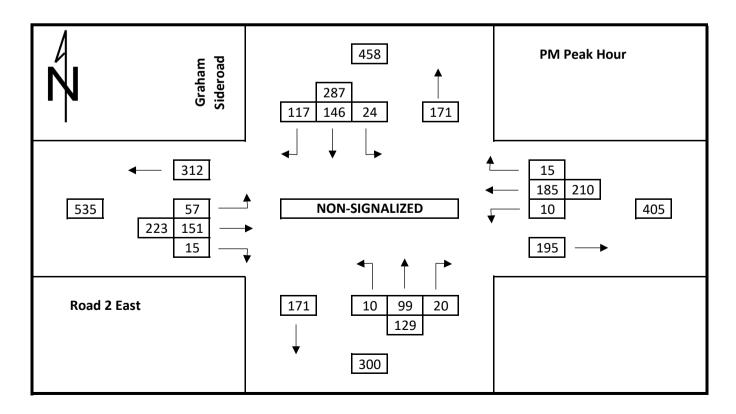
**Total Traffic 2025** Graham Sideroad at Road 2 East





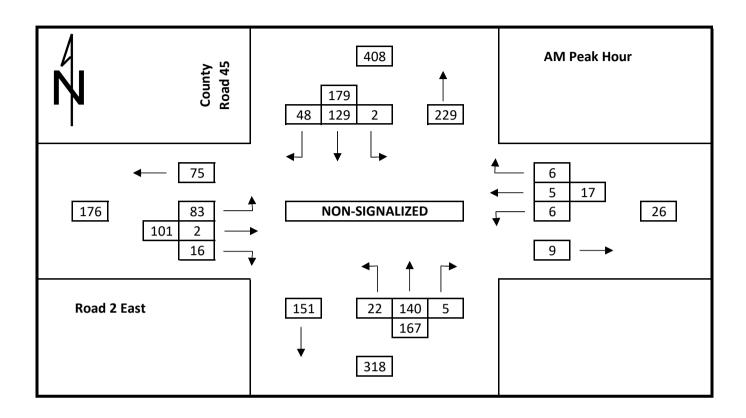
**Total Traffic 2030** Graham Sideroad at Road 2 East

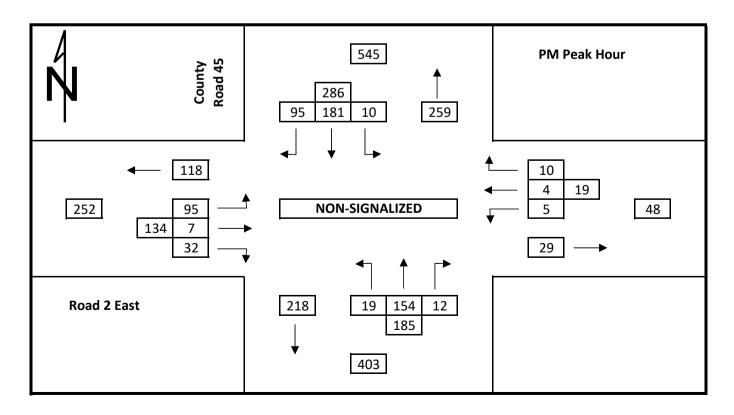




#### **Observed Traffic Counts**

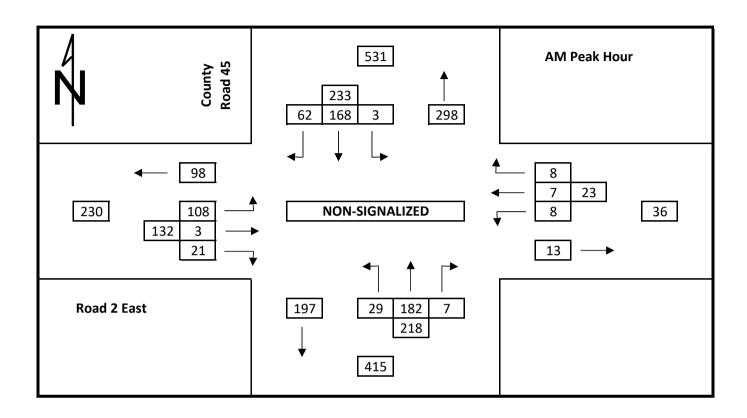
County Road 45 at Road 2 East

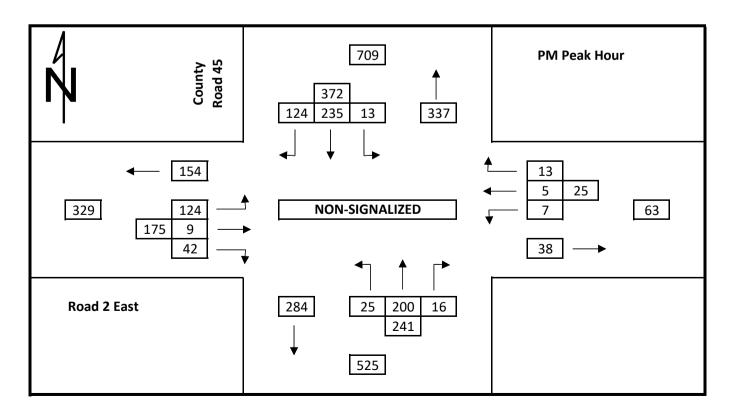




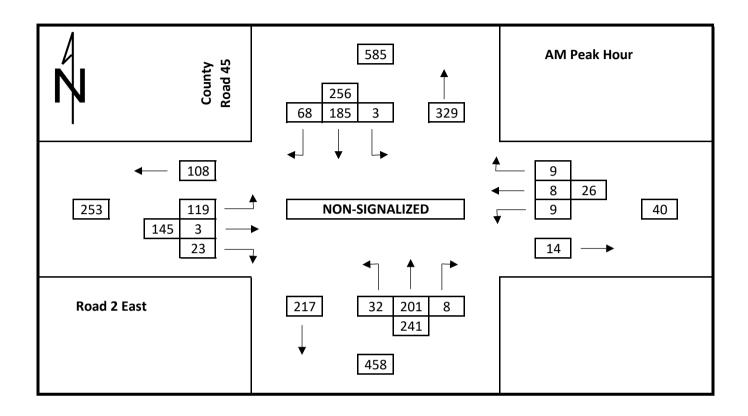
#### Factored Traffic Counts

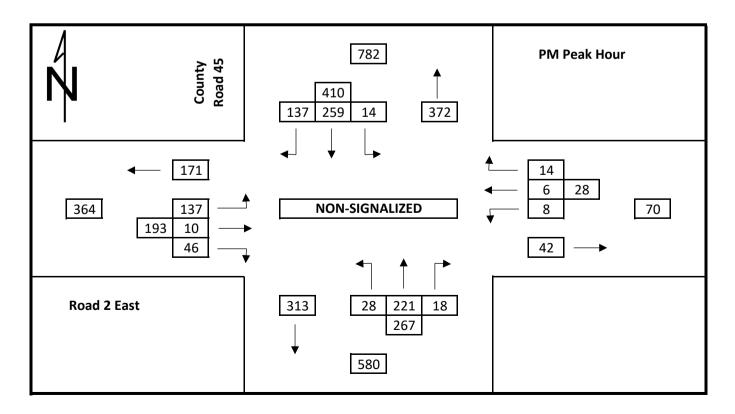
County Road 45 at Road 2 East



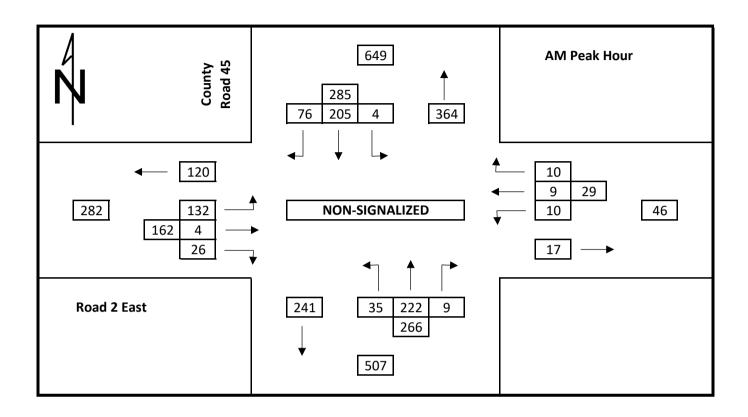


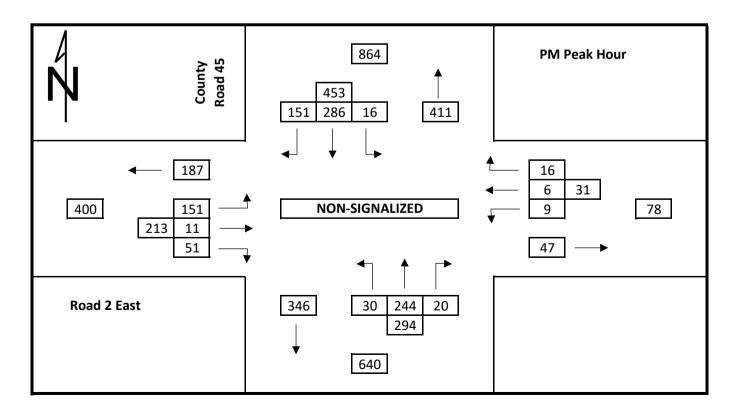
Total Traffic 2025 County Road 45 at Road 2 East





Total Traffic 2030 County Road 45 at Road 2 East





**Appendix D** 

# **DETAILED SYNCHRO RESULTS**

Jasperson Drive at Road 2 East Kratz Sideroad at Road 2 East Graham Sideroad at Road 2 East County Road 45 (Union Avenue) at Road 2 East

| Intersection           |        |      |      |      |      |      |   |
|------------------------|--------|------|------|------|------|------|---|
| Int Delay, s/veh       | 3.6    |      |      |      |      |      |   |
| Movement               | EBT    | EBR  | WBL  | WBT  | NBL  | NBR  | 2 |
| Lane Configurations    | ef 👘   |      |      | र्च  | - Y  |      |   |
| Traffic Vol, veh/h     | 139    | 40   | 49   | 67   | 46   | 50   | ) |
| Future Vol, veh/h      | 139    | 40   | 49   | 67   | 46   | 50   | ) |
| Conflicting Peds, #/hr | 0      | 0    | 0    | 0    | 0    | 0    | ) |
| Sign Control           | Free   | Free | Free | Free | Stop | Stop | ) |
| RT Channelized         | -      | None | -    | None | -    | None | Ś |
| 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      | 5    | 2    | 9    | 2    | 4    | ł |
| Mvmt Flow              | 151    | 43   | 53   | 73   | 50   | 54   |   |

| Major/Minor          | Major1 | Major2  | Mi  | inor1 |       |
|----------------------|--------|---------|-----|-------|-------|
| Conflicting Flow All | 0      | 0 194   | 0   | 352   | 173   |
| Stage 1              | -      |         | -   | 173   | -     |
| Stage 2              | -      |         | -   | 179   | -     |
| Critical Hdwy        | -      | - 4.12  |     | 6.42  | 6.24  |
| Critical Hdwy Stg 1  | -      |         |     | 5.42  | -     |
| Critical Hdwy Stg 2  | -      |         |     | 5.42  | -     |
| Follow-up Hdwy       | -      | - 2.218 | - 3 |       | 3.336 |
| Pot Cap-1 Maneuver   | -      | - 1379  | -   | 646   | 865   |
| Stage 1              | -      |         | -   | 857   | -     |
| Stage 2              | -      |         | -   | 852   | -     |
| Platoon blocked, %   | -      | -       | -   |       |       |
| Mov Cap-1 Maneuve    |        | - 1379  | -   | 620   | 865   |
| Mov Cap-2 Maneuver   | r -    |         | -   | 620   | -     |
| Stage 1              | -      |         | -   | 857   | -     |
| Stage 2              | -      |         | -   | 818   | -     |
|                      |        |         |     |       |       |
| Approach             | EB     | WB      |     | NB    |       |
| HCM Control Delay, s |        | 3.3     |     | 10.8  |       |
| HCM LOS              | , v    | 0.0     |     | B     |       |
|                      |        |         |     |       |       |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 727   | -   | -   | 1379  | -   |
| HCM Lane V/C Ratio    | 0.144 | -   | -   | 0.039 | -   |
| HCM Control Delay (s) | 10.8  | -   | -   | 7.7   | 0   |
| HCM Lane LOS          | В     | -   | -   | А     | А   |
| HCM 95th %tile Q(veh) | 0.5   | -   | -   | 0.1   | -   |

| Intersection           |      |      |      |                  |      |      |   |
|------------------------|------|------|------|------------------|------|------|---|
| Int Delay, s/veh       | 3.6  |      |      |                  |      |      |   |
| Movement               | EBT  | EBR  | WBL  | WBT              | NBL  | NBR  | ł |
| Lane Configurations    | 4    |      |      | <del>्</del> र्स | - ¥  |      |   |
| Traffic Vol, veh/h     | 80   | 96   | 94   | 175              | 59   | 41   |   |
| Future Vol, veh/h      | 80   | 96   | 94   | 175              | 59   | 41   | J |
| Conflicting Peds, #/hr | 0    | 0    | 0    | 0                | 0    | 0    | ) |
| Sign Control           | Free | Free | Free | Free             | Stop | Stop | ) |
| RT Channelized         | -    | None | -    | None             | -    | None | į |
| Storage Length         | -    | -    | -    | -                | 0    | -    |   |
| Veh in Median Storage  | ,# 0 | -    | -    | 0                | 0    | -    |   |
| Grade, %               | 0    | -    | -    | 0                | 0    | -    | - |
| Peak Hour Factor       | 92   | 92   | 92   | 92               | 92   | 92   | 2 |
| Heavy Vehicles, %      | 3    | 1    | 0    | 1                | 3    | 2    | 2 |
| Mvmt Flow              | 87   | 104  | 102  | 190              | 64   | 45   | 5 |

| Major/Minor N                   | Major1 | Ν     | /lajor2 | 1   | Minor1 |       |
|---------------------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All            | 0      | 0     | 191     | 0   | 533    | 139   |
| Stage 1                         | -      | -     | -       | -   | 139    | -     |
| Stage 2                         | -      | -     | -       | -   | 394    | -     |
| Critical Hdwy                   | -      | -     | 4.1     | -   | 6.43   | 6.22  |
| Critical Hdwy Stg 1             | -      | -     | -       | -   | 5.43   | -     |
| Critical Hdwy Stg 2             | -      | -     | -       | -   | 5.43   | -     |
| Follow-up Hdwy                  | -      | -     | 2.2     | -   | 3.527  | 3.318 |
| Pot Cap-1 Maneuver              | -      | -     | 1395    | -   | 506    | 909   |
| Stage 1                         | -      | -     | -       | -   | 885    | -     |
| Stage 2                         | -      | -     | -       | -   | 679    | -     |
| Platoon blocked, %              | -      | -     |         | -   |        |       |
| Mov Cap-1 Maneuver              | -      | -     | 1395    | -   | 465    | 909   |
| Mov Cap-2 Maneuver              | -      | -     | -       | -   | 465    | -     |
| Stage 1                         | -      | -     | -       | -   | 885    | -     |
| Stage 2                         | -      | -     | -       | -   | 623    | -     |
|                                 |        |       |         |     |        |       |
| Approach                        | EB     |       | WB      |     | NB     |       |
|                                 | 0      |       | 2.7     |     | 12.6   |       |
| HCM Control Delay, s<br>HCM LOS | U      |       | Ζ.Ι     |     |        |       |
| HUNI LUS                        |        |       |         |     | В      |       |
|                                 |        |       |         |     |        |       |
| Minor Lane/Major Mvm            | it NE  | 3Ln1  | EBT     | EBR | WBL    | WBT   |
| Capacity (veh/h)                |        | 581   | -       | -   | 1395   | -     |
| HCM Lane V/C Ratio              | 0      | ).187 | -       | -   | 0.073  | -     |
| LICM Control Dolou (a)          |        |       |         |     |        |       |
| HCM Control Delay (s)           |        | 12.6  | -       | -   | 7.8    | 0     |

0.7

HCM 95th %tile Q(veh)

0.2

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| Intersection           |      |      |      |      |      |      |
|------------------------|------|------|------|------|------|------|
| Int Delay, s/veh       | 3.7  |      |      |      |      |      |
| Movement               | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations    | 4    |      |      | ्र   | ۰¥   |      |
| Traffic Vol, veh/h     | 153  | 44   | 54   | 74   | 51   | 55   |
| Future Vol, veh/h      | 153  | 44   | 54   | 74   | 51   | 55   |
| 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    | 5    | 2    | 9    | 2    | 4    |
| Mvmt Flow              | 166  | 48   | 59   | 80   | 55   | 60   |

| Major/Minor           | Major1 | Λ     | Anior? |     | Minor1 |       |          |
|-----------------------|--------|-------|--------|-----|--------|-------|----------|
|                       |        |       | Major2 |     |        | 100   | <u>,</u> |
| Conflicting Flow All  | 0      | 0     | 214    | 0   | 388    | 190   |          |
| Stage 1               | -      | -     | -      | -   | 190    | -     | -        |
| Stage 2               | -      | -     | -      | -   | 198    | -     |          |
| Critical Hdwy         | -      | -     | 4.12   | -   | 6.42   | 6.24  | 1        |
| Critical Hdwy Stg 1   | -      | -     | -      | -   | 5.42   | -     | -        |
| Critical Hdwy Stg 2   | -      | -     | -      | -   | 5.42   | -     | -        |
| Follow-up Hdwy        | -      | -     | 2.218  | -   | 3.518  | 3.336 | Ś        |
| Pot Cap-1 Maneuver    | -      | -     | 1356   | -   | 616    | 847   | 7        |
| Stage 1               | -      | -     | -      | -   | 842    | -     |          |
| Stage 2               | -      | -     | -      | -   | 835    | -     | -        |
| Platoon blocked, %    | -      | -     |        | -   |        |       |          |
| Mov Cap-1 Maneuver    | -      | -     | 1356   | -   | 588    | 847   | 7        |
| Mov Cap-2 Maneuver    |        | -     | -      | -   | 588    | -     |          |
| Stage 1               | -      | -     | -      | -   |        | -     |          |
| Stage 2               |        |       |        | -   | 797    | -     |          |
| Stage 2               |        |       |        |     | 171    |       |          |
|                       |        |       |        |     |        |       |          |
| Approach              | EB     |       | WB     |     | NB     |       |          |
| HCM Control Delay, s  | 0      |       | 3.3    |     | 11.2   |       |          |
| HCM LOS               |        |       |        |     | В      |       |          |
|                       |        |       |        |     |        |       |          |
|                       |        |       |        |     |        |       |          |
| Minor Lane/Major Mvm  | nt N   | IBLn1 | EBT    | EBR | WBL    | WBT   |          |
| Capacity (veh/h)      |        | 699   | -      | -   | 1356   | -     | -        |
| HCM Lane V/C Ratio    |        | 0.165 | -      | -   | 0.043  | -     | -        |
| HCM Control Delay (s) | )      | 11.2  | -      | -   | 7.8    | 0     | )        |
| HCM Lane LOS          |        | В     | -      | -   | А      | А     | ١        |
| · · · · · · ·         |        |       |        |     |        |       |          |

0.6

0.1

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| Intersection           |      |      |      |              |      |      |   |
|------------------------|------|------|------|--------------|------|------|---|
| Int Delay, s/veh       | 3.9  |      |      |              |      |      |   |
| Movement               | EBT  | EBR  | WBL  | WBT          | NBL  | NBR  | ľ |
| Lane Configurations    | et 👘 |      |      | <del>ا</del> | Y    |      |   |
| Traffic Vol, veh/h     | 88   | 106  | 104  | 193          | 65   | 45   | , |
| Future Vol, veh/h      | 88   | 106  | 104  | 193          | 65   | 45   | ) |
| Conflicting Peds, #/hr | 0    | 0    | 0    | 0            | 0    | 0    | J |
| 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   | ļ |
| Heavy Vehicles, %      | 3    | 1    | 0    | 1            | 3    | 2    | , |
| Mvmt Flow              | 96   | 115  | 113  | 210          | 71   | 49   | ) |

| Major/Minor           | Major1 | Ν     | /lajor2 | 1   | Minor1 |      |
|-----------------------|--------|-------|---------|-----|--------|------|
| Conflicting Flow All  | 0      | 0     | 211     | 0   | 590    | 154  |
| Stage 1               | -      | -     | -       | -   | 154    | -    |
| Stage 2               | -      | -     | -       | -   | 436    | -    |
| Critical Hdwy         | -      | -     | 4.1     | -   | 6.43   | 6.22 |
| Critical Hdwy Stg 1   | -      | -     | -       | -   | 5.43   | -    |
| Critical Hdwy Stg 2   | -      | -     | -       | -   | 5.43   | -    |
| Follow-up Hdwy        | -      | -     | 2.2     | -   | 3.527  |      |
| Pot Cap-1 Maneuver    | -      | -     | 1372    | -   | 469    | 892  |
| Stage 1               | -      | -     | -       | -   | 872    | -    |
| Stage 2               | -      | -     | -       | -   | 650    | -    |
| Platoon blocked, %    | -      | -     |         | -   |        |      |
| Mov Cap-1 Maneuver    |        | -     | 1372    | -   | 425    | 892  |
| Mov Cap-2 Maneuver    | -      | -     | -       | -   | 425    | -    |
| Stage 1               | -      | -     | -       | -   | 872    | -    |
| Stage 2               | -      | -     | -       | -   | 590    | -    |
|                       |        |       |         |     |        |      |
| Approach              | EB     |       | WB      |     | NB     |      |
| HCM Control Delay, s  | 0      |       | 2.8     |     | 13.5   |      |
| HCM LOS               |        |       |         |     | В      |      |
|                       |        |       |         |     |        |      |
| Minor Lane/Major Mvn  | nt I   | NBLn1 | EBT     | EBR | WBL    | WBT  |
| Capacity (veh/h)      |        | 541   | -       | -   | 1372   | -    |
| HCM Lane V/C Ratio    |        | 0.221 | -       | -   | 0.082  | -    |
| HCM Control Delay (s) | )      | 13.5  | -       | -   | 7.9    | 0    |

| Η | CM Lane V/C Ratio    | 0.221 | - | - ( | 0.082 | - |  |
|---|----------------------|-------|---|-----|-------|---|--|
| Η | CM Control Delay (s) | 13.5  | - | -   | 7.9   | 0 |  |
| Η | CM Lane LOS          | В     | - | -   | А     | А |  |
| Η | CM 95th %tile Q(veh) | 0.8   | - | -   | 0.3   | - |  |
|   |                      |       |   |     |       |   |  |

| Intersection           |      |      |      |                  |      |      |
|------------------------|------|------|------|------------------|------|------|
| Int Delay, s/veh       | 3.9  |      |      |                  |      |      |
| Movement               | EBT  | EBR  | WBL  | WBT              | NBL  | NBR  |
| Lane Configurations    | 4    |      |      | <del>्</del> र्स | - ¥  |      |
| Traffic Vol, veh/h     | 169  | 49   | 60   | 82               | 56   | 61   |
| Future Vol, veh/h      | 169  | 49   | 60   | 82               | 56   | 61   |
| 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    | 5    | 2    | 9                | 2    | 4    |
| Mvmt Flow              | 184  | 53   | 65   | 89               | 61   | 66   |

|                       | alor1 | Ν     | Inior?  | r   | Vinor1 |       |
|-----------------------|-------|-------|---------|-----|--------|-------|
|                       | ajor1 |       | /lajor2 |     |        | 011   |
| Conflicting Flow All  | 0     | 0     | 237     | 0   | 430    | 211   |
| Stage 1               | -     | -     | -       | -   | 211    | -     |
| Stage 2               | -     | -     | -       | -   | 219    | -     |
| Critical Hdwy         | -     | -     | 4.12    | -   | 6.42   | 6.24  |
| Critical Hdwy Stg 1   | -     | -     | -       | -   | 5.42   | -     |
| Critical Hdwy Stg 2   | -     | -     | -       | -   | 5.42   | -     |
| Follow-up Hdwy        | -     | -     | 2.218   | -   | 3.518  | 3.336 |
| Pot Cap-1 Maneuver    | -     | -     | 1330    | -   | 582    | 824   |
| Stage 1               | -     | -     | -       | -   | 824    | -     |
| Stage 2               | -     | -     | -       | -   | 817    | -     |
| Platoon blocked, %    | -     | -     |         | -   |        |       |
| Mov Cap-1 Maneuver    | -     | -     | 1330    | -   | 552    | 824   |
| Mov Cap-2 Maneuver    | -     | -     | -       | -   | 552    | -     |
| Stage 1               | -     | _     | -       | -   | 004    | -     |
| Stage 2               | -     |       |         | -   | 775    | -     |
| olugo 2               |       |       |         |     | 110    |       |
|                       |       |       |         |     |        |       |
| Approach              | EB    |       | WB      |     | NB     |       |
| HCM Control Delay, s  | 0     |       | 3.3     |     | 11.7   |       |
| HCM LOS               |       |       |         |     | В      |       |
|                       |       |       |         |     |        |       |
|                       |       |       | EDT     |     |        | WDT   |
| Minor Lane/Major Mvmt | N     | BLn1  | EBT     | EBR | WBL    | WBT   |
| Capacity (veh/h)      |       | 667   | -       |     | 1330   | -     |
| HCM Lane V/C Ratio    | (     | 0.191 | -       | -   | 0.049  | -     |
| HCM Control Delay (s) |       | 11.7  | -       | -   | 7.8    | 0     |
| HCM Lane LOS          |       | В     | -       | -   | Α      | А     |

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| Intersection           |        |      |      |      |      |      |   |
|------------------------|--------|------|------|------|------|------|---|
| Int Delay, s/veh       | 4.1    |      |      |      |      |      |   |
| Movement               | EBT    | EBR  | WBL  | WBT  | NBL  | NBR  |   |
| Lane Configurations    | 4î -   |      |      | ्स   | ۰¥   |      |   |
| Traffic Vol, veh/h     | 98     | 117  | 115  | 213  | 72   | 50   | 1 |
| Future Vol, veh/h      | 98     | 117  | 115  | 213  | 72   | 50   | I |
| 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, %      | 3      | 1    | 0    | 1    | 3    | 2    |   |
| Mvmt Flow              | 107    | 127  | 125  | 232  | 78   | 54   |   |

| Major/Minor M         | 1ajor1 | N     | /lajor2 |     | Vinor1     |       |
|-----------------------|--------|-------|---------|-----|------------|-------|
| Conflicting Flow All  | 0      | 0     | 234     | 0   | 653        | 171   |
| Stage 1               | -      | -     | 254     | -   | 171        | -     |
| Stage 2               | _      | _     | -       | _   | 482        | _     |
| Critical Hdwy         | -      | -     | 4.1     | -   | 6.43       | 6.22  |
| Critical Hdwy Stg 1   | -      |       | 4.1     |     | 5.43       | 0.22  |
| Critical Hdwy Stg 2   | -      | -     | -       | -   | 5.43       | -     |
| Follow-up Hdwy        | -      | -     | 2.2     |     | 3.527      |       |
| Pot Cap-1 Maneuver    | -      | -     | 1345    | -   | 430        | 873   |
| Stage 1               | -      | -     | 1345    |     | 857        | - 075 |
| Stage 2               | -      | -     | -       | -   | 619        | -     |
| Platoon blocked, %    | -      | -     | -       |     | 019        | -     |
| Mov Cap-1 Maneuver    | -      | -     | 1345    | -   | 384        | 873   |
|                       | -      | -     | 1540    | -   | 384<br>384 |       |
| Mov Cap-2 Maneuver    | -      | -     | -       | -   |            | -     |
| Stage 1               | -      | -     | -       | -   |            | -     |
| Stage 2               | -      | -     | -       | -   | 553        | -     |
|                       |        |       |         |     |            |       |
| Approach              | EB     |       | WB      |     | NB         |       |
| HCM Control Delay, s  | 0      |       | 2.8     |     | 14.8       |       |
| HCM LOS               |        |       |         |     | В          |       |
|                       |        |       |         |     |            |       |
|                       |        |       |         |     |            |       |
| Minor Lane/Major Mvmt | N      | BLn1  | EBT     | EBR | WBL        | WBT   |
| Capacity (veh/h)      |        | 498   | -       |     | 1345       | -     |
| HCM Lane V/C Ratio    |        | 0.266 | -       | -   | 0.093      | -     |
| HCM Control Delay (s) |        | 14.8  | -       | -   | 8          | 0     |
| HCM Lane LOS          |        | В     | -       | -   | А          | А     |

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0.3

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#### Intersection

| Int Delay, s/veh       | 2    |      |      |      |      |      |
|------------------------|------|------|------|------|------|------|
| Movement               | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations    | el 🗧 |      |      | ÷    | Y    |      |
| Traffic Vol, veh/h     | 156  | 35   | 21   | 94   | 22   | 34   |
| Future Vol, veh/h      | 156  | 35   | 21   | 94   | 22   | 34   |
| 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, %      | 3    | 1    | 2    | 3    | 2    | 2    |
| Mvmt Flow              | 170  | 38   | 23   | 102  | 24   | 37   |

| Major/Minor M         | ajor1 | Ν     | /lajor2 |     | Minor1    |       |
|-----------------------|-------|-------|---------|-----|-----------|-------|
| Conflicting Flow All  | 0     | 0     | 208     | 0   | 337       | 189   |
| Stage 1               | -     | -     | -       | -   | 189       | -     |
| Stage 2               | -     | -     | -       | -   | 148       | -     |
| 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    | -     | -     | 1363    | -   | 658       | 853   |
| Stage 1               | -     | -     | -       | -   | 843       | -     |
| Stage 2               | -     | -     | -       | -   | 880       | -     |
| Platoon blocked, %    | -     | -     |         | -   |           |       |
| Mov Cap-1 Maneuver    | -     | -     | 1363    | -   | 646       | 853   |
| Mov Cap-2 Maneuver    | -     | -     | -       | -   | 646       | -     |
| Stage 1               | -     | -     | -       | -   | 843       | -     |
| Stage 2               | -     | -     | -       | -   | 864       | -     |
|                       |       |       |         |     |           |       |
| Approach              | EB    |       | WB      |     | NB        |       |
| HCM Control Delay, s  | 0     |       | 1.4     |     | 10.2      |       |
| HCM LOS               | 0     |       | 1.4     |     | 10.2<br>B |       |
|                       |       |       |         |     | D         |       |
|                       |       |       |         |     |           |       |
| Minor Lane/Major Mvmt | Ν     | IBLn1 | EBT     | EBR | WBL       | WBT   |
| Capacity (veh/h)      |       | 758   | -       | -   | 1363      | -     |
| HCM Lane V/C Ratio    |       | 0.08  | -       | -   | 0.017     | -     |
| HCM Control Delay (s) |       | 10.2  | -       | -   | 7.7       | 0     |
| HCM Lane LOS          |       | В     | -       | -   | А         | А     |

HCM 95th %tile Q(veh)

0.3

0.1

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| Intersection     |    |  |
|------------------|----|--|
| Int Delay, s/veh | 27 |  |

| Int Delay, s/veh       | 2.7    |      |      |                |      |      |
|------------------------|--------|------|------|----------------|------|------|
| Movement               | EBT    | EBR  | WBL  | WBT            | NBL  | NBR  |
| Lane Configurations    | el 👘   |      |      | <del>ب</del> ا | ٦    | 1    |
| Traffic Vol, veh/h     | 114    | 52   | 64   | 228            | 57   | 18   |
| Future Vol, veh/h      | 114    | 52   | 64   | 228            | 57   | 18   |
| 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    | 0    |
| Veh in Median Storage  | e, # 0 | -    | -    | 0              | 0    | -    |
| Grade, %               | 0      | -    | -    | 0              | 0    | -    |
| Peak Hour Factor       | 92     | 92   | 92   | 92             | 92   | 92   |
| Heavy Vehicles, %      | 3      | 1    | 2    | 3              | 2    | 2    |
| Mvmt Flow              | 124    | 57   | 70   | 248            | 62   | 20   |

|                       |         | -        |        | -   |        |       |  |
|-----------------------|---------|----------|--------|-----|--------|-------|--|
|                       | /lajor1 |          | Major2 |     | Vinor1 |       |  |
| Conflicting Flow All  | 0       | 0        | 181    | 0   | 541    | 153   |  |
| Stage 1               | -       | -        | -      | -   | 153    | -     |  |
| Stage 2               | -       | -        | -      | -   | 388    | -     |  |
| 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    | -       | -        | 1394   | -   | 502    | 893   |  |
| Stage 1               | -       | -        | -      | -   | 875    | -     |  |
| Stage 2               | -       | -        | -      | -   | 686    | -     |  |
| Platoon blocked, %    | -       | -        |        | -   |        |       |  |
| Mov Cap-1 Maneuver    | -       | -        | 1394   | -   | 473    | 893   |  |
| Mov Cap-2 Maneuver    | -       | -        | -      | -   | 473    | -     |  |
| Stage 1               | -       | -        | -      | -   | 875    | -     |  |
| Stage 2               | -       | -        | -      | -   | 646    |       |  |
| oluge 2               |         |          |        |     | 010    |       |  |
|                       |         |          |        |     |        |       |  |
| Approach              | EB      |          | WB     |     | NB     |       |  |
| HCM Control Delay, s  | 0       |          | 1.7    |     | 12.7   |       |  |
| HCM LOS               |         |          |        |     | В      |       |  |
|                       |         |          |        |     |        |       |  |
| Minorlono/Major Mund  | L N     | IDI m1 I |        | ГОТ |        |       |  |
| Minor Lane/Major Mvmt | L N     | IBLn1 I  |        | EBT | EBR    | WBL   |  |
| Capacity (veh/h)      |         | 473      | 893    | -   | -      | 1394  |  |
| HCM Lane V/C Ratio    |         |          | 0.022  | -   | -      | 0.05  |  |
| HCM Control Delay (s) |         | 13.8     | 9.1    | -   | -      | 7.7   |  |
| HCM Lane LOS          |         | В        | A      | -   | -      | A     |  |

0.1

0.4

0.2

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-

| Intersection           |       |      |      |              |      |      |
|------------------------|-------|------|------|--------------|------|------|
| Int Delay, s/veh       | 2.1   |      |      |              |      |      |
| Movement               | EBT   | EBR  | WBL  | WBT          | NBL  | NBR  |
| Lane Configurations    | ef 👘  |      |      | <del>ب</del> | Y    |      |
| Traffic Vol, veh/h     | 172   | 39   | 23   | 104          | 24   | 38   |
| Future Vol, veh/h      | 172   | 39   | 23   | 104          | 24   | 38   |
| 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, %      | 3     | 1    | 2    | 3            | 2    | 2    |
| Mvmt Flow              | 187   | 42   | 25   | 113          | 26   | 41   |

| Major/Minor          | Major1 |       | Major2 |     | Vinor1 |       |
|----------------------|--------|-------|--------|-----|--------|-------|
| Conflicting Flow All | 0      | 0     | 229    | 0   | 371    | 208   |
| Stage 1              | -      | -     | -      | -   | 208    | -     |
| Stage 2              | -      | -     | -      | -   | 163    | -     |
| 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   | -      | -     | 1339   | -   | 630    | 832   |
| Stage 1              | -      | -     | -      | -   | 827    | -     |
| Stage 2              | -      | -     | -      | -   | 866    | -     |
| Platoon blocked, %   | -      | -     |        | -   |        |       |
| Mov Cap-1 Maneuver   | -      | -     | 1339   | -   | 617    | 832   |
| Mov Cap-2 Maneuver   | · _    | -     | -      | -   | 617    | -     |
| Stage 1              | -      | -     | -      | -   | 827    | -     |
| Stage 2              | -      | -     | -      | -   | 849    | -     |
|                      |        |       |        |     |        |       |
| Approach             | EB     |       |        |     | NB     |       |
| Approach             |        |       | WB     |     |        |       |
| HCM Control Delay, s | 0      |       | 1.4    |     | 10.4   |       |
| HCM LOS              |        |       |        |     | В      |       |
|                      |        |       |        |     |        |       |
| Minor Lane/Major Mvr | nt N   | IBLn1 | EBT    | EBR | WBL    | WBT   |
| Capacity (veh/h)     |        | 733   | -      | -   | 1339   | -     |
| HCM Lane V/C Ratio   |        | 0.092 | -      | -   | 0.019  | -     |
| HCM Control Delay (s |        | 10.4  | _      | _   | 77     | 0     |

| Ca | pacity (ven/n)       | 133   | - | - | 1339  | - |  |  |  |
|----|----------------------|-------|---|---|-------|---|--|--|--|
| HC | CM Lane V/C Ratio    | 0.092 | - | - | 0.019 | - |  |  |  |
| HC | CM Control Delay (s) | 10.4  | - | - | 7.7   | 0 |  |  |  |
| HC | CM Lane LOS          | В     | - | - | А     | А |  |  |  |
| HC | CM 95th %tile Q(veh) | 0.3   | - | - | 0.1   | - |  |  |  |
|    |                      |       |   |   |       |   |  |  |  |

| Intersection           |            |      |      |      |      |      |    |
|------------------------|------------|------|------|------|------|------|----|
| Int Delay, s/veh       | 2.8        |      |      |      |      |      |    |
| Movement               | EBT        | EBR  | WBL  | WBT  | NBL  | NBR  | 2  |
| Lane Configurations    | - <b>Þ</b> |      |      | ्र   | - ሽ  | 1    | E. |
| Traffic Vol, veh/h     | 126        | 57   | 71   | 252  | 63   | 20   | )  |
| Future Vol, veh/h      | 126        | 57   | 71   | 252  | 63   | 20   | )  |
| Conflicting Peds, #/hr | 0          | 0    | 0    | 0    | 0    | 0    | )  |
| Sign Control           | Free       | Free | Free | Free | Stop | Stop | )  |
| RT Channelized         | -          | None | -    | None | -    | None | Ś  |
| Storage Length         | -          | -    | -    | -    | 0    | 0    | )  |
| Veh in Median Storage, | # 0        | -    | -    | 0    | 0    | -    |    |
| Grade, %               | 0          | -    | -    | 0    | 0    | -    | -  |
| Peak Hour Factor       | 92         | 92   | 92   | 92   | 92   | 92   | )  |
| Heavy Vehicles, %      | 3          | 1    | 2    | 3    | 2    | 2    | )  |
| Mvmt Flow              | 137        | 62   | 77   | 274  | 68   | 22   | )  |

| Major/Minor N         | 1ajor1 | Ν      | /lajor2 | ſ   | Minor1    |       |
|-----------------------|--------|--------|---------|-----|-----------|-------|
| Conflicting Flow All  | 0      | 0      | 199     | 0   | 596       | 168   |
| Stage 1               | -      | -      | -       | -   | 168       | -     |
| Stage 2               | -      | -      | -       | -   | 428       | -     |
| 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    | -      | -      | 1373    | -   | 466       | 876   |
| Stage 1               | -      | -      | -       | -   | 862       | -     |
| Stage 2               | -      | -      | -       | -   | 657       | -     |
| Platoon blocked, %    | -      | -      |         | -   |           |       |
| Mov Cap-1 Maneuver    | -      | -      | 1373    | -   | 435       | 876   |
| Mov Cap-2 Maneuver    | -      | -      | -       | -   | 435       | -     |
| Stage 1               | -      | -      | -       | -   | 862       | -     |
| Stage 2               | -      | -      | -       | -   | 614       | -     |
|                       |        |        |         |     |           |       |
| Approach              | EB     |        | WB      |     | NB        |       |
| HCM Control Delay, s  | 0      |        | 1.7     |     | 13.5      |       |
| HCM LOS               | 0      |        | 1.7     |     | 13.5<br>B |       |
|                       |        |        |         |     | ם         |       |
|                       |        |        |         |     |           |       |
| Minor Lane/Major Mvmt | : 1    | VBLn1N | IBLn2   | EBT | EBR       | WBL   |
| Capacity (veh/h)      |        | 435    | 876     | -   | -         | 1373  |

| Capacity (ven/n)      | 435 870    | ) - | - 13/3  | - |  |
|-----------------------|------------|-----|---------|---|--|
| HCM Lane V/C Ratio    | 0.157 0.02 | 5 - | - 0.056 | - |  |
| HCM Control Delay (s) | 14.8 9.2   | 2 - | - 7.8   | 0 |  |
| HCM Lane LOS          | B A        | ۰ A | - A     | А |  |
| HCM 95th %tile Q(veh) | 0.6 0.2    | - 1 | - 0.2   | - |  |

| Int Delay, s/veh2.1MovementEBTEBRWBLWBTNBLNBRLane ConfigurationsImage: Configuration set of the |
|---|
|   |
| Lano Configurations 1   |
| Lane Configurations 🥵 🙀 🌱   |
| Traffic Vol, veh/h 190 43 26 115 27 41  |
| Future Vol, veh/h 190 43 26 115 27 41   |
| Conflicting Peds, #/hr 0 0 0 0 0 0  |
| Sign Control 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, % 3 1 2 3 2 2   |
| Mvmt Flow 207 47 28 125 29 45   |

| Major/Minor N          | /lajor1 | Ν        | Najor2 | 1   | Vinor1 |       |
|------------------------|---------|----------|--------|-----|--------|-------|
| Conflicting Flow All   | 0       | 0        | 254    | 0   | 412    | 231   |
| Stage 1                | -       | -        | -      | -   | 231    | -     |
| Stage 2                | -       | -        | -      | -   | 181    | -     |
| 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     | -       | -        | 1311   | -   | 070    | 808   |
| Stage 1                | -       | -        | -      | -   | 807    | -     |
| Stage 2                | -       | -        | -      | -   | 850    | -     |
| Platoon blocked, %     | -       | -        |        | -   |        |       |
| Mov Cap-1 Maneuver     | -       | -        | 1311   | -   | 582    | 808   |
| Mov Cap-2 Maneuver     | -       | -        | -      | -   | 582    | -     |
| Stage 1                | -       | -        | -      | -   | 807    | -     |
| Stage 2                | -       | -        | -      | -   | 830    | -     |
|                        |         |          |        |     |        |       |
| Approach               | EB      |          | WB     |     | NB     |       |
| HCM Control Delay, s   | 0       |          | 1.4    |     | 10.7   |       |
| HCM LOS                |         |          |        |     | В      |       |
|                        |         |          |        |     |        |       |
| Minor Long / Agior Mum | + N     |          | ГРТ    |     | MDI    |       |
| Minor Lane/Major Mvm   | l ľ     | VBLn1    | EBT    | EBR | WBL    | WBT   |
| Capacity (veh/h)       |         | 700      | -      | -   | 1011   | -     |
| HCM Lane V/C Ratio     |         | 0.106    | -      |     | 0.022  | -     |
| HCM Control Delay (s)  |         | 10.7     | -      | -   | 7.0    | 0     |
| HCM Lane LOS           |         | B<br>0.4 | -      | -   | A      | А     |
| HCM 95th %tile Q(veh)  |         | 0.4      | -      | -   | 0.1    | -     |

| ntersection |
|-------------|
|-------------|

| Int Delay, s/veh       | 3    |      |      |                |      |      |
|------------------------|------|------|------|----------------|------|------|
| Movement               | EBT  | EBR  | WBL  | WBT            | NBL  | NBR  |
| Lane Configurations    | el 🗧 |      |      | <del>ب</del> ا | ٦    | 1    |
| Traffic Vol, veh/h     | 139  | 63   | 78   | 278            | 69   | 22   |
| Future Vol, veh/h      | 139  | 63   | 78   | 278            | 69   | 22   |
| 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    | 0    |
| Veh in Median Storage  | # 0  | -    | -    | 0              | 0    | -    |
| Grade, %               | 0    | -    | -    | 0              | 0    | -    |
| Peak Hour Factor       | 92   | 92   | 92   | 92             | 92   | 92   |
| Heavy Vehicles, %      | 3    | 1    | 2    | 3              | 2    | 2    |
| Mvmt Flow              | 151  | 68   | 85   | 302            | 75   | 24   |

| Major/Minor          | Major1 | Major2  | Mir  | nor1 |       |
|----------------------|--------|---------|------|------|-------|
| Conflicting Flow All | 0      | 0 219   | 0    | 657  | 185   |
| Stage 1              | -      |         | -    | 185  | -     |
| Stage 2              | -      |         | -    | 472  | -     |
| Critical Hdwy        | -      | - 4.12  | - 6  | 6.42 | 6.22  |
| Critical Hdwy Stg 1  | -      |         | - 5  | 5.42 | -     |
| Critical Hdwy Stg 2  | -      |         | - 5  | 5.42 | -     |
| Follow-up Hdwy       | -      | - 2.218 | - 3. | .518 | 3.318 |
| Pot Cap-1 Maneuver   | · -    | - 1350  | -    | 430  | 857   |
| Stage 1              | -      |         | -    | 847  | -     |
| Stage 2              | -      |         | -    | 628  | -     |
| Platoon blocked, %   | -      | -       | -    |      |       |
| Mov Cap-1 Maneuve    |        | - 1350  | -    | 397  | 857   |
| Mov Cap-2 Maneuve    | er -   |         | -    | 397  | -     |
| Stage 1              | -      |         | -    | 847  | -     |
| Stage 2              | -      |         | -    | 580  | -     |
|                      |        |         |      |      |       |
| Approach             | EB     | WB      |      | NB   |       |
| HCM Control Delay,   | s 0    | 1.7     |      | 14.5 |       |
| HCM LOS              |        |         |      | В    |       |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL   | WBT |  |
|-----------------------|-------|-------|-----|-----|-------|-----|--|
| Capacity (veh/h)      | 397   | 857   | -   | -   | 1350  | -   |  |
| HCM Lane V/C Ratio    | 0.189 | 0.028 | -   | -   | 0.063 | -   |  |
| HCM Control Delay (s) | 16.2  | 9.3   | -   | -   | 7.8   | 0   |  |
| HCM Lane LOS          | С     | А     | -   | -   | А     | А   |  |
| HCM 95th %tile Q(veh) | 0.7   | 0.1   | -   | -   | 0.2   | -   |  |

| Intercetion                      |        |       |      |        |  |       |        |  |       |        |       |       |  |
|----------------------------------|--------|-------|------|--------|--|-------|--------|--|-------|--------|-------|-------|--|
| Intersection<br>Int Delay, s/veh | 6.4    |       |      |        |  |       |        |  |       |        |       |       |  |
| in the second                    |        |       |      |        |  |       | -      |  |       |        | ł     |       |  |
| Movement                         | EBL    | EBT   | EBR  | WBL    | WBT  | WBR   | NBL    | NBT  | NBR   | SBL    | SBT   | SBR   |  |
| Lane Configurations              |        | ŧ     |      |        | ŧ  |       |        | ŧ  |       |        | ¢     |       |  |
| Traffic Vol, veh/h               | 69     | 105   | 6    | ഹ      | 72   | L     | S      | 81   | 17    | L      | 49    | 36    |  |
| Future Vol, veh/h                | 69     | 105   | 6    | 5      | 72   | L     | S      | 81   | 17    | L      | 49    | 36    |  |
| Conflicting Peds, #/hr           | 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 | 1      | 1  | None  |        |  | None  | 1      | '     | None  |  |
| Storage Length                   | '      | '     | ı    |        |  |       |        |  |       |        | '     |       |  |
| Veh in Median Storage, #         | -<br># | 0     | •    |        | 0  | ı     | ı      | 0  |       |        | 0     |       |  |
| Grade, %                         | •      | 0     | •    | •      | 0  | •     | ı      | 0  |       | ı      | 0     |       |  |
| Peak Hour Factor                 | 92     | 92    | 92   | 92     | 92   | 92    | 92     | 92   | 92    | 92     | 92    | 92    |  |
| Heavy Vehicles, %                | 5      | 2     | S    | 12     | <del>.                                    </del> | 4     | 5      | <del>.                                    </del> | 0     | 2      | -     | 5     |  |
| Mvmt Flow                        | 75     | 114   | 10   | 2      | 78   | ∞     | ŝ      | 88   | 18    | ∞      | 53    | 39    |  |
|                                  |        |       |      |        |  |       |        |  |       |        |       |       |  |
| Major/Minor Ma                   | Major1 |       | N    | Major2 |  | N     | Minor1 |  | N     | Minor2 |       |       |  |
| Stanticzing Flow All             | 86     | 0     | 0    | 124    | 0  | 0     | 407    | 365  | 119   | 414    | 366   | 82    |  |
|                                  | 1      | T     | ı    | T      | I  | T     | 269    | 269  | ı     | 92     | 92    | ı     |  |
|                                  | '      | '     | ı    | '      | •  | '     | 138    | 96   | •     | 322    | 274   |       |  |
| Critical Hdwy                    | 4.15   |       | 1    | 4.22   | 1  | ı     | 7.15   | 6.51   | 6.2   | 7.15   | 6.51  | 6.25  |  |
| Critical Hdwy Stg 1              | •      | •     |      | •      | •  | •     | 6.15   | 5.51   | •     | 6.15   | 5.51  |       |  |
| Critical Hdwy Stg 2              | '      | T     | ı    | T      | ı  | 1     | 6.15   | 5.51   | ı     | 6.15   | 5.51  |       |  |
|                                  | 2.245  | '     | 1    | 2.308  | •  | 1     |        | 4.009  | 3.3   |        | 4.009 | 3.345 |  |
| Bratoeap-1 Maneuver 1            | 1492   | '     | I    | 1403   | 1  | ı     | 549    | 565  | 938   | 543    | 564   | 696   |  |
|                                  | '      | ı     | ı    | ·      | ı  | ·     | 730    | 688  | ı     | 908    | 821   | ı     |  |
|                                  | 1      | '     | 1    | 1      |  | 1     | 858    | 817  | •     | 684    | 685   |       |  |
|                                  |        | '     | ı    |        |  |       |        |  |       |        |       |       |  |
|                                  | 1492   | T     | 1    | 1403   | 1  | 1     | 465    | 532  | 938   | 445    | 531   | 696   |  |
| Bhang€ap-2 Maneuver              | '      | 1     | •    | 1      |  | '     | 465    | 532  |       | 445    | 531   |       |  |
|                                  | •      | T     | I    | T      | I  | I     | 691    | 651  | ı     | 859    | 818   |       |  |
|                                  | •      | '     | •    | •      | •  | •     | 767    | 814  | •     | 549    | 648   |       |  |
|                                  |        |       |      |        |  |       |        |  |       |        |       |       |  |
| Approach                         | EB     |       |      | WB     |  |       | NB     |  |       | SB     |       |       |  |
| HCM Control Delay, s             | 2.8    |       |      | 0.5    |  |       | 12.8   |  |       | 11.7   |       |       |  |
| HCM LOS                          |        |       |      |        |  |       | ഫ      |  |       | മ      |       |       |  |
|                                  |        |       |      |        |  |       |        |  |       |        |       |       |  |
| Minor Lane/Major Mvmt            | Z      | NBLn1 | EBL  | EBT    | EBR  | WBL   | WBT    | WBR SBLn1  | BLn1  |        |       |       |  |
| Capacity (veh/h)                 |        | 571   | 1492 | 1      | 1  | 1403  | '      | 1  | 634   |        |       |       |  |
| HCM Lane V/C Ratio               |        | 0.192 | 0.05 | •      | '  | 0.004 | •      | '  | 0.158 |        |       |       |  |
| HCM Control Delay (s)            |        | 12.8  | 7.5  | 0      | 1  | 7.6   | 0      | 1  | 11.7  |        |       |       |  |
| HCM Lane LOS                     |        | ш     | A    | A      | •  | A     | A      | •  | e s   |        |       |       |  |
| HCM 95th %tile Q(veh)            |        | 0.7   | 0.2  | •      | •  | 0     | •      | •  | 0.6   |        |       |       |  |

| Intersection             |            |            |        |            |      |       |        |           |            |       |      |          |
|--------------------------|------------|------------|--------|------------|------|-------|--------|-----------|------------|-------|------|----------|
| Int Delay, s/veh         | 8.2        |            |        |            |      |       |        |           |            |       |      |          |
| Movement                 | EBL        | EBT        | EBR    | WBL        | WBT  | WBR   | NBL    | NBT       | NBR        | SBL   | SBT  | SBR      |
| Lane Configurations      |            | ŧ          |        |            | \$   |       |        | ŧ         |            |       | \$   |          |
| Traffic Vol, veh/h       | 47         | 124        | 12     | ω          | 152  | 12    | ∞      | 81        | 16         | 20    | 120  | 96       |
| Future Vol, veh/h        | 47         | 124        | 12     | 8          | 152  | 12    | 8      | 81        | 16         | 20    | 120  | 96       |
| 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           | 1          | ı.         | None   | 1          | T    | None  | 1      | ı.        | None       | 1     | 1    | None     |
| Storage Length           | ı          | ı          |        | '          | I    | ı     | ı      | ı         | ı          | 1     | I    |          |
| Veh in Median Storage, # | - #'       | 0          |        | '          | 0    |       |        | 0         | •          |       | 0    | 1        |
| Grade, %                 | ·          | 0          |        | '          | 0    |       |        | 0         | ·          | '     | 0    | 1        |
| Peak Hour Factor         | 92         | 92         | 92     | 92         | 92   | 92    | 92     | 92        | 92         | 92    | 92   | 92       |
| Heavy Vehicles, %        | 5<br>5     | 135<br>135 | с<br>С | 0          | 165  | 4 5   | ഗ      | - gg      | 0          | 3 5   | 130  | 5<br>10/ |
|                          | 5          | 2          | 2      | •          | 3    | 2     | •      | S         | 2          | 44    | 2    | 6        |
|                          | Maior 1    |            | 4      | Maior      |      |       | Minor1 |           | Ä          | Minor |      |          |
| Cranticoling Flow All    | 178<br>178 | C          |        | 148<br>148 | C    |       | 551    | 440       | 142        | 486   | 440  | 172      |
|                          | 2 '        | י כ        | י כ    | 2 '        | ' (  | י כ   | 244    | 244       | <u>1</u> ' | 190   | 190  | -        |
|                          | '          | '          | 1      | '          | '    | 1     | 307    | 196       | •          | 296   | 250  |          |
| Critical Hdwy            | 4.15       | 1          | 1      | 4.22       | '    |       | 7.15   | 6.51      | 6.2        | 7.15  | 6.51 | 6.25     |
| Critical Hdwy Stg 1      | 1          | '          |        | •          | •    | '     | 6.15   | 5.51      | •          | 6.15  | 5.51 | 1        |
| Critical Hdwy Stg 2      | •          |            |        | '          | '    | •     |        | 5.51      | •          | 6.15  | 5.51 |          |
| Etalgevaup Hdwy          | 2.245      | 1          |        | 2.308      | '    | '     |        | 4.009     |            |       |      | 3.345    |
| Brageap-1 Maneuver       | 1380       | 1          | •      | 1375       | 1    | '     | 440    | 513       | 911        | 487   | 513  | 864      |
|                          | '          | '          | •      | '          | '    | •     | 753    | 706       | •          | 805   | 745  |          |
|                          | ı.         | T          | •      | •          | T    | ı.    | 696    | 740       | T          | 706   | 702  |          |
| Platoon blocked, %       |            | '          | '      |            | '    | •     |        |           |            |       |      |          |
| Blay6ap-1 Maneuver       | 1380       | 1          | •      | 1375       | 1    | •     | 297    | 489       | 911        | 397   | 489  | 864      |
| Blay62p-2 Maneuver       |            | •          | '      | '          | '    | •     | 297    | 489       | •          | 397   | 489  |          |
|                          | 1          | ,          | •      | •          | '    | •     | 723    | 678       | i.         | 773   | 740  |          |
|                          | '          | '          | •      | '          | '    | '     | 501    | 735       | •          | 578   | 674  |          |
|                          |            |            |        |            |      |       |        |           |            |       |      |          |
| Approach                 | EB         |            |        | WB         |      |       | NB     |           |            | SB    |      |          |
| HCM Control Delay, s     | 2          |            |        | 0.4        |      |       | 14.3   |           |            | 16    |      |          |
| HCM LOS                  |            |            |        |            |      |       | В      |           |            | ပ     |      |          |
|                          |            |            |        |            |      |       |        |           |            |       |      |          |
| Minor Lane/Major Mvmt    |            | NBLn1      | EBL    | EBT        | EBR  | WBL   | WBT    | WBR SBLn1 | BLn1       |       |      |          |
| Capacity (veh/h)         |            | 500        | 1380   | '          | '    | 1375  | •      | •         | 580        |       |      |          |
| HCM Lane V/C Ratio       |            |            | 0.037  | '          | '    | 0.006 | •      | '         | 0.442      |       |      |          |
| HCM Control Delay (s)    |            | 14.3       | 7.7    | 0          | •    | 7.6   | 0      | •         | 16         |       |      |          |
| HCM Lane LOS             |            | മ          | A      | A          | •    | A     | A      | '         | ပ          |       |      |          |
| HCM 95th %tile Q(veh)    |            | 0.9        | 0.1    | •          | •    | 0     | •      | •         | 2.3        |       |      |          |

| الملحات مقامي            |        |       |       |        |      |       |        |  |       |        |                |       |  |
|--------------------------|--------|-------|-------|--------|------|-------|--------|--|-------|--------|----------------|-------|--|
| Intersection             | L 4    |       |       |        |      |       |        |  |       |        |                |       |  |
| IIII DOIDY, SIVOII       |        |       |       |        |      |       |        |  |       |        |                |       |  |
| Movement                 | EBL    | EBT   | EBR   | WBL    | WBT  | WBR   | NBL    | NBT  | NBR   | SBL    | SBT            | SBR   |  |
| Lane Configurations      |        | ¢     |       |        | ¢    |       |        | ¢  |       |        | ¢              |       |  |
| Traffic Vol, veh/h       | 76     | 116   | 10    | 9      | 79   | œ     | ŝ      | 89   | 19    | ω      | 54             | 40    |  |
| Future Vol, veh/h        | 76     | 116   | 10    | 9      | 79   | ω     | S      | 89   | 19    | ω      | 54             | 40    |  |
| eds, #/hr                | 0      | 0     | 0     | 0      | 0    | 0     | 0      |  | 0     | 0      | 0              | 0     |  |
|                          | Free   | Free  | Free  | Free   | Free | Free  | Stop   | Stop   | Stop  | Stop   | Stop           | Stop  |  |
| RT Channelized           |        |       | None  | ı.     | '    | None  |        | ,  | None  | T      | •              | None  |  |
| Storage Length           | •      | •     | 1     | •      | 1    | •     | •      | •  | •     | •      | •              |       |  |
| Veh in Median Storage, a | - #    | 0     | ī     | ı      | 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, %        | വ      | 2     | Ś     | 12     | -    | 4     | വ      | <del>.                                    </del> | 0     | വ      | <del>, -</del> | 5     |  |
| Mvmt Flow                | 83     | 126   | 7     | ٢      | 86   | 6     | ŝ      | 67   | 21    | 6      | 59             | 43    |  |
|                          |        |       |       |        |      |       |        |  |       |        |                |       |  |
| Major/Minor Ma           | Major1 |       | N     | Major2 |      | M     | Minor1 |  | M     | Minor2 |                |       |  |
| Stanticzing Flow All     | 95     | 0     | 0     | 137    | 0    | 0     | 454    | 407  | 132   | 462    | 408            | 91    |  |
| 5                        | •      | '     | •     | •      | •    | •     | 298    | 298  | •     | 105    | 105            |       |  |
|                          | •      | •     | •     | •      | •    | •     | 156    | 109  |       | 357    | 303            |       |  |
| Critical Hdwy            | 4.15   | 1     | •     | 4.22   | 1    | •     | 7.15   | 6.51   | 6.2   | 7.15   | 6.51           | 6.25  |  |
| Critical Hdwy Stg 1      | •      | •     | •     | •      | •    | •     | 6.15   | 5.51   |       | 6.15   | 5.51           |       |  |
| Critical Hdwy Stg 2      | •      | '     | ı.    | •      | ı    | •     |        | 5.51   |       |        | 5.51           | ,     |  |
| Etallogev-tup Hdwy 2     | 2.245  | '     | '     | 2.308  |      | 1     |        | 4.009  |       |        |                | 3.345 |  |
| Bratoeap-1 Maneuver      | 1480   | '     |       | 1388   |      | •     | 511    | 535  | 923   | 505    | 534            | 958   |  |
|                          | •      | •     | •     | •      | •    | •     | 704    | 699  | •     | 893    | 810            |       |  |
|                          | •      | •     | •     | •      | ,    | •     | 839    | 807  | •     | 655    | 665            |       |  |
|                          |        | •     | •     |        | •    | •     |        |  |       |        |                |       |  |
|                          | 1480   | •     | ı.    | 1388   | ı.   | •     | 422    | 500  | 923   | 400    | 499            | 958   |  |
| Blowg@ap-2 Maneuver      | •      | •     | 1     | •      | ı    | •     | 422    | 200  | •     | 400    | 499            |       |  |
|                          | •      | •     | ı.    | •      | ı.   | •     | 661    | 628  | •     | 839    | 806            |       |  |
|                          | •      | •     | •     | •      | •    | •     | 739    | 803  | •     | 509    | 624            |       |  |
|                          |        |       |       |        |      |       |        |  |       |        |                |       |  |
| Approach                 | EB     |       |       | WB     |      |       | NB     |  |       | SB     |                |       |  |
| HCM Control Delay, s     | 2.9    |       |       | 0.5    |      |       | 13.6   |  |       | 12.4   |                |       |  |
| HCM LOS                  |        |       |       |        |      |       | മ      |  |       | ш      |                |       |  |
|                          |        |       |       |        |      |       |        |  |       |        |                |       |  |
| Minor Lane/Major Mvmt    | Z      | NBLn1 | EBL   | EBT    | EBR  | WBL   | WBT    | WBR SBLn1  | BLn1  |        |                |       |  |
| Capacity (veh/h)         |        | 540   | 1480  | T      | ı    | 1388  |        | ı.   | 009   |        |                |       |  |
| HCM Lane V/C Ratio       |        |       | 0.056 | •      | '    | 0.005 | •      | '  | 0.185 |        |                |       |  |
| HCM Control Delay (s)    |        | 13.6  | 7.6   | 0      | •    | 7.6   | 0      | 1  | 12.4  |        |                |       |  |
| HCM Lane LOS             |        | en g  | A C   | A      | •    | < <   | A      | •  | m r   |        |                |       |  |
| HCM 95th %tile Q(veh)    |        | 0.8   | 0.2   | •      | 1    | 0     | 1      | 1  | 0.7   |        |                |       |  |

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|                                  | SBR      |                     | 106                | 106               | 0                      | Stop         | None           |                |                        |          | 92               | 2  | 115       |               | 190                  |     |     | 6.25          |                     |                     | 3.345 | 844                | '   | '   |                    | 844                | '                  | '   | '   |          |                      |         |                       |                  |                    |                       |  |
|----------------------------------|----------|---------------------|--------------------|-------------------|------------------------|--------------|----------------|----------------|------------------------|----------|------------------|--|-----------|---------------|----------------------|-----|-----|---------------|---------------------|---------------------|-------|--------------------|-----|-----|--------------------|--------------------|--------------------|-----|-----|----------|----------------------|---------|-----------------------|------------------|--------------------|-----------------------|--|
|                                  | SBT      | ¢                   | 132                | 132               | 0                      | Stop         | . '            | 1              | 0                      | 0        | 92               | -  | 143       |               | 487                  | 210 | 277 | 6.51          | 5.51                | 5.51                | 4.009 | 482                | 730 | 683 |                    | 456                | 456                | 724 | 652 |          |                      |         |                       |                  |                    |                       |  |
|                                  | SBL      |                     | 22                 | 22                | 0                      | Stop         | . '            | •              | -                      | '        | 92               | വ  | 24        | Minor2        | 539                  | 210 | 329 | 7.15          | 6.15                | 6.15                | 3.545 | 449                | 785 | 678 |                    | 353                | 353                | 749 | 539 | SB       | 18.5                 | ပ       |                       |                  |                    |                       |  |
|                                  | NBR      |                     | 18                 | 18                | 0                      | Stop         | None           |                | •                      | •        | 92               | 0  | 20        | 2             | 156                  | 1   | ı   | 6.2           | ı                   | 1                   | 3.3   | 895                | •   | I   |                    | 895                | •                  | ı   | •   |          |                      |         | BLn1                  | 545              | 0.519              | 18.5                  |  |
|                                  | NBT      | ¢                   | 89                 | 89                | 0                      | Stop         |                | '              | 0                      | 0        | 92               | <del>.                                    </del> | 79        |               | 487                  | 270 | 217 | 6.51          | 5.51                | 5.51                | 4.009 | 482                | 688 | 725 |                    | 456                | 456                | 656 | 719 |          |                      |         | WBR SBLn1             | •                | '                  | ı                     |  |
|                                  | NBL      |                     | 6                  | 6                 | 0                      | Stop         |                | '              | •                      | •        | 92               | ഹ  | 10        | Minor1        | 609                  | 270 | 339 | 7.15          | 6.15                | 6.15                |       | 403                | 729 | 699 |                    | 253                | 253                | 695 | 459 | NB       | 15.7                 | ပ       | WBT                   | •                |                    | 0                     |  |
|                                  | WBR      |                     | 13                 | 13                | 0                      | Free         | None           |                |                        | •        | 92               | 4  | 14        | 2             | 0                    | •   | •   | •             | •                   | •                   | 1     | •                  | •   | •   | •                  | •                  | •                  | •   | •   |          |                      |         | WBL                   | 1357             | 0.007              | 7.7                   |  |
|                                  | WBT      | ¢                   | 168                | 168               | 0                      | Free         | T              | '              | 0                      | 0        | 92               | <del>.                                    </del> | 183       |               | 0                    | ·   |     | •             |                     | ·                   |       | ·                  | •   | •   |                    | •                  | •                  |     | •   |          |                      |         | EBR                   | •                | '                  | •                     |  |
|                                  | WBL      |                     | 6                  | 6                 | 0                      | Free         | T              | '              |                        | •        | 92               | 12   | 10        | Major2        | 163                  | ·   |     | 4.22          |                     | ·                   | 2.308 | 1357               | •   | •   |                    | 1357               | •                  |     | •   | WB       | 0.4                  |         | EBT                   | •                |                    | 0                     |  |
|                                  | EBR      |                     | 13                 | 13                | 0                      | Free         | None           | '              | 1                      | •        | 92               | ŝ  | 14        | 2             | 0                    | T   | ı   | I             | ı                   | T                   | '     | T                  | •   | ı   |                    |                    | •                  | I.  | •   |          |                      |         | EBL                   | 1358             | 0.042              | 7.8                   |  |
|                                  | EBT      | ¢                   | 137                | 137               | 0                      | Free         | T              | '              | 0                      | 0        | 92               | 2  | 149       |               | 0                    | I   | ı   | ı             | ı                   | I                   | ı     | ı                  | •   | ı   |                    | 1                  | '                  | 1   | •   |          |                      |         | NBLn1                 | 462              | 0.273              | 15.7                  |  |
| 9.3                              | EBL      |                     | 52                 | 52                | 0                      | Free         | 1              | 1              | -<br>#                 | '        | 92               | 2  | 57        | Major1        | 197                  | 1   | '   | 4.15          | '                   | 1                   | 2.245 | 1358               | •   | '   |                    | 1358               | •                  | '   | •   | EB       | 2                    |         |                       |                  |                    |                       |  |
| Intersection<br>Int Delay, s/veh | Movement | Lane Configurations | Traffic Vol, veh/h | Future Vol, veh/h | Conflicting Peds, #/hr | Sign Control | RT Channelized | Storage Length | Veh in Median Storage, | Grade, % | Peak Hour Factor | Heavy Vehicles, %                                | Mvmt Flow | Major/Minor N | Stanticzing Flow All | 5   |     | Critical Hdwy | Critical Hdwy Stg 1 | Critical Hdwy Stg 2 |       | Brageap-1 Maneuver |     |     | Platoon blocked, % | Slay@ap-1 Maneuver | Bloy6ap-2 Maneuver |     |     | Approach | HCM Control Delay, s | HCM LOS | Minor Lane/Major Mvmt | Capacity (veh/h) | HCM Lane V/C Ratio | HCM Control Delay (s) |  |

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| Internation            |        |            |       |        |      |       |        |           |       |       |       |       |  |
|------------------------|--------|------------|-------|--------|------|-------|--------|-----------|-------|-------|-------|-------|--|
| Intersection           | 7      |            |       |        |      |       |        |           |       |       |       |       |  |
| ini Delay, s/ven       | /./    |            |       |        |      |       |        |           |       |       |       |       |  |
| Movement               | EBL    | EBT        | EBR   | WBL    | WBT  | WBR   | NBL    | NBT       | NBR   | SBL   | SBT   | SBR   |  |
| Lane Configurations    |        | ¢          |       |        | ¢    |       |        | ¢         |       |       | ¢     |       |  |
| Traffic Vol, veh/h     | 84     | 128        | =     | 9      | 88   | 6     | 4      | 66        | 21    | 6     | 09    | 44    |  |
| Future Vol, veh/h      | 84     | 128        | ;:-   | 9      | 88   | 6     | 4      | 66        | 21    | 6     | 09    | 44    |  |
| Conflicting Peds, #/hr | 0      | 0          | 0     | 0      | 0    | 0     | 0      | 0         | 0     | 0     | 0     | 0     |  |
|                        | Free   | Free       | Free  | Free   | Free | Free  | Stop   | Stop      | Stop  | Stop  | Stop  | Stop  |  |
| RT Channelized         | 1      | ,          | None  | ,      | 1    | None  | ı      | •         | None  | •     | 1     | None  |  |
| Storage Length         | •      | •          | •     | •      | •    | •     | •      | •         |       | •     | '     |       |  |
| Veh in Median Storage, | '<br># | 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, %      | ഹ      | 2          | ŝ     | 12     | -    | 4     | വ      | -         | 0     | വ     | -     | 5     |  |
| Mvmt Flow              | 91     | 139        | 12    | L      | 96   | 10    | 4      | 108       | 23    | 10    | 65    | 48    |  |
| Maior/Minor M          | Maior1 |            | 2     | Maior2 |      | 2     | Minor1 |           | M     | Minor |       |       |  |
| Tow All                | 106    | C          | C     | 151    | C    |       | 499    | 447       | 145   | 508   | 448   | 101   |  |
|                        | ) '    | , ,        | , ,   |        | , ,  | , ,   | 327    | 327       |       | 115   | 115   |       |  |
|                        | '      |            | '     |        | •    | •     | 172    | 120       |       | 393   | 333   |       |  |
| Critical Hdwy          | 4.15   | •          | •     | 4.22   | •    | •     | 7.15   | 6.51      | 6.2   | 7.15  | 6.51  | 6.25  |  |
| Critical Hdwy Stg 1    | 1      | •          | 1     | •      | •    | •     | 6.15   | 5.51      |       | 6.15  | 5.51  |       |  |
| Critical Hdwy Stg 2    | 1      | ·          | 1     | ·      | ·    |       | 6.15   | 5.51      |       | 6.15  | 5.51  |       |  |
|                        | 2.245  | •          | 1     | 2.308  | •    | 1     | 3.545  | 4.009     | 3.3   | 3.545 | 4.009 | 3.345 |  |
| Brageap-1 Maneuver     | 1467   |            | T     | 1371   | •    | •     | 477    | 508       | 908   | 471   | 507   | 946   |  |
| ,                      | •      | •          | •     | •      | •    | •     | 679    | 650       | •     | 883   | 802   |       |  |
|                        |        | 1          | '     | 1      | 1    | •     | 823    | 798       | •     | 626   | 646   |       |  |
|                        |        | •          | •     |        | •    | •     |        |           |       |       |       |       |  |
|                        | 1467   | •          | •     | 1371   | •    | •     | 383    | 471       | 908   | 358   | 470   | 946   |  |
| Blower Maneuver        | '      | •          | •     | •      | •    | •     | 383    | 471       | •     | 358   | 470   |       |  |
|                        | 1      | •          | •     | •      | •    | •     | 633    | 606       | •     | 823   | 798   |       |  |
|                        |        | •          |       | •      | •    | •     | 714    | 794       | •     | 468   | 602   |       |  |
|                        |        |            |       |        |      |       |        |           |       |       |       |       |  |
| Approach               | B      |            |       | WB     |      |       | NB     |           |       | SB    |       |       |  |
| HCM Control Delay, s   | 2.9    |            |       | 0.4    |      |       | 14.6   |           |       | 13.1  |       |       |  |
| HCM LOS                |        |            |       |        |      |       | В      |           |       | В     |       |       |  |
|                        |        |            |       |        |      |       |        |           |       |       |       |       |  |
| Minor Lane/Major Mvmt  | Z      | NBLn1      | EBL   | EBT    | EBR  | WBL   | WBT    | WBR SBLn' | BLn1  |       |       |       |  |
| Capacity (veh/h)       |        | 509        | 1467  |        |      | 1371  |        |           | 567   |       |       |       |  |
| HCM Lane V/C Ratio     | -      | 0.265      | 0.062 |        | '    | 0.005 | •      | '         | 0.217 |       |       |       |  |
| HCM Control Delay (s)  |        | 14.6       | 7.6   | 0      | 1    | 7.6   | 0      | •         | 13.1  |       |       |       |  |
| HCM Lane LOS           |        | n -        | A     | A      | •    | A     | A      | •         | m     |       |       |       |  |
| HCM 95th %tile Q(veh)  |        | <u>.</u> . | 0.2   | •      | •    | 0     | •      | •         | 0.8   |       |       |       |  |

| Intersection             | 001    |             |       |        |      |       |        |           |       |        |       |       |  |
|--------------------------|--------|-------------|-------|--------|------|-------|--------|-----------|-------|--------|-------|-------|--|
| IIII Delay, svell        | 10.4   |             |       |        |      |       |        |           |       |        |       |       |  |
| Movement                 | EBL    | EBT         | EBR   | WBL    | WBT  | WBR   | NBL    | NBT       | NBR   | SBL    | SBT   | SBR   |  |
| Lane Configurations      |        | ¢           |       |        | ¢    |       |        | ¢         |       |        | ŧ     |       |  |
| Traffic Vol, veh/h       | 57     | 151         | 15    | 10     | 185  | 15    | 10     | 66        | 20    | 24     | 146   | 117   |  |
| Future Vol, veh/h        | 57     | 151         | 15    | 10     | 185  | 15    | 10     | 66        | 20    | 24     | 146   | 117   |  |
| 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  |  |
| <b>RT</b> Channelized    | •      | •           | None  | •      | •    | None  | •      | •         | None  | •      | 1     | None  |  |
| Storage Length           | ı      |             | 1     | 1      | 1    |       |        | •         | ·     | ı      |       | ı     |  |
| Veh in Median Storage, # | -<br># | 0           |       |        | 0    | •     |        | 0         | •     |        | 0     | ı     |  |
| Grade, %                 |        | 0           | '     |        | 0    | ·     |        | 0         | '     |        | 0     | ·     |  |
| Peak Hour Factor         | 92     | 92          | 92    | 92     | 92   | 92    | 92     | 92        | 92    | 92     | 92    | 92    |  |
| Heavy Vehicles, %        | ഹ      | 2           | Ś     | 12     | ~    | 4     | വ      | -         | 0     | വ      | ~     | 5     |  |
| Mvmt Flow                | 62     | 164         | 16    | 7      | 201  | 16    | 7      | 108       | 22    | 26     | 159   | 127   |  |
|                          |        |             |       |        |      |       |        |           |       |        |       |       |  |
| Major/Minor M.           | Major1 |             | 2     | Major2 |      | 2     | Minor1 |           | 2     | Minor2 |       |       |  |
| Spanticzing Flow All     | 217    | 0           | 0     | 180    | 0    | 0     | 670    | 535       | 172   | 592    | 535   | 209   |  |
|                          | •      | '           | •     | •      | •    | 1     | 296    | 296       | •     | 231    | 231   | ı     |  |
|                          | •      | 1           | •     | •      | •    | •     | 374    | 239       | •     | 361    | 304   |       |  |
| Critical Hdwy            | 4.15   | 1           | 1     | 4.22   |      | •     | 7.15   | 6.51      | 6.2   | 7.15   | 6.51  | 6.25  |  |
| Critical Hdwy Stg 1      |        | •           | •     |        |      | •     | 6.15   | 5.51      | •     | 6.15   | 5.51  |       |  |
| Critical Hdwy Stg 2      | •      | '           | '     | '      | •    | •     | 6.15   | 5.51      | •     | 6.15   | 5.51  | ,     |  |
|                          | 2.245  | '           | '     | 2.308  | '    | 1     |        | 4.009     | 3.3   | 3.545  | 4.009 | 3.345 |  |
| Bradeap-1 Maneuver       | 1335   | '           | •     | 1337   | •    | •     | 367    | 453       | 877   | 414    | 453   | 824   |  |
| •                        |        | '           | '     | •      | •    | •     | 706    | 670       | •     | 765    | 715   | I     |  |
|                          | ı      | 1           | •     | •      | •    | T     | 641    | 709       | •     | 651    | 665   | I     |  |
| Platoon blocked, %       |        | '           | 1     |        |      |       |        |           |       |        |       |       |  |
| Blay6ap-1 Maneuver       | 1335   | '           | '     | 1337   | '    | ı.    | 211    | 425       | 877   | 311    | 425   | 824   |  |
| bollange.ap-2 Maneuver   | •      | •           | •     | •      | •    |       | 211    | 425       | •     | 311    | 425   | I     |  |
|                          | •      | 1           | •     | •      | •    | •     | 699    | 635       | •     | 725    | 709   |       |  |
|                          | •      |             | '     | •      | •    | •     | 417    | 703       | •     | 500    | 630   |       |  |
|                          |        |             |       |        |      |       |        |           |       |        |       |       |  |
| Approach                 | EB     |             |       | WB     |      |       | NB     |           |       | SB     |       |       |  |
| HCM Control Delay, s     | 2      |             |       | 0.4    |      |       | 17.5   |           |       | 22.5   |       |       |  |
| HCM LOS                  |        |             |       |        |      |       | ပ      |           |       | ပ      |       |       |  |
|                          |        |             |       |        |      |       |        |           |       |        |       |       |  |
| Minor Lane/Major Mvmt    | Z      | NBLn1       | EBL   | EBT    | EBR  | WBL   | WBT    | WBR SBLn1 | BLn1  |        |       |       |  |
| Capacity (veh/h)         |        | 426         | 1335  |        |      | 1337  |        | •         | 510   |        |       |       |  |
| HCM Lane V/C Ratio       |        | 0.329 0.046 | 0.046 | •      | •    | 0.008 | •      | '         | 0.612 |        |       |       |  |
| HCM Control Delay (s)    |        | 17.5        | 7.8   | 0      | •    | 7.7   | 0      | •         | 22.5  |        |       |       |  |
| HCM Lane LOS             |        | ပ           | A     | A      | •    | A     | A      | 1         | ပ     |        |       |       |  |
| HCM 95th %tile Q(veh)    |        | 1.4         | 0.1   | 1      |      | 0     | 1      | •         | 4.1   |        |       |       |  |

|                  | SBR      |                     | 62                 | 62                | 0                      | Free         | None           |                |                        |          | 92               | -                 | 67        |        | 0                    |     |     |               | I                   |      |       |                      |     | ·   |                    |                    |                      |             |       |          |  |         |                       |                  |                    |                       |              |                       |
|------------------|----------|---------------------|--------------------|-------------------|------------------------|--------------|----------------|----------------|------------------------|----------|------------------|-------------------|-----------|--------|----------------------|-----|-----|---------------|---------------------|------|-------|----------------------|-----|-----|--------------------|--------------------|----------------------|-------------|-------|----------|--|---------|-----------------------|------------------|--------------------|-----------------------|--------------|-----------------------|
|                  | SBT      | ¢                   | 168                | 168               | 0                      | Free         | '              | '              | 0                      | 0        | 92               | 13                | 183       |        | 0                    | 1   | '   | '             | '                   | 1    | '     | 1                    | '   | '   | •                  | 1                  | '                    | '           | '     |          |  |         |                       |                  |                    |                       |              |                       |
|                  | SBL      |                     | ŝ                  | Ś                 | 0                      | Free         | '              | •              | 1                      | '        | 92               | ٢                 | S         | Major2 | 206                  | •   | '   | 4.17          | •                   | •    | 2.263 | 1336                 | •   | '   |                    | 1336               | •                    |             | •     | SB       | 0.1  |         |                       |                  |                    |                       |              |                       |
|                  | NBR      |                     | L                  | L                 | 0                      | Free         | None           | •              | 1                      | '        | 92               | 2                 | 8         | 2      | 0                    |     | '   | '             | •                   |      |       | 1                    | •   | •   | •                  | •                  | •                    | •           |       |          |  |         | SBR                   |                  | '                  | •                     | ı            | •                     |
|                  | NBT      | ¢                   | 182                | 182               | 0                      | Free         | '              | •              | 0                      | 0        | 92               | 16                | 198       |        | 0                    | •   | '   | '             | •                   | •    | •     | •                    | •   | •   | •                  | •                  | •                    |             | •     |          |  |         | SBT                   | •                | '                  | 0                     | A            | •                     |
|                  | NBL      |                     | 29                 | 29                | 0                      | Free         | •              | •              | ī                      |          | 92               | ٢                 | 32        | Major1 | 250                  | ·   |     | 4.17          |                     | ·    | 2.263 | 1287                 | •   | •   |                    | 128/               | •                    |             |       | NB       | <del>.                                    </del> |         | SBL                   | 1336             | 0.002              | Τ.Τ                   | A            | 0                     |
|                  | WBR      |                     | ω                  | ∞                 | 0                      | Stop         | None           | •              | ī                      |          | 92               | 10                | 6         | Σ      | 202                  | ·   |     | 6.3           |                     | ·    |       | 819                  | •   | •   |                    | 819                | •                    |             |       |          |  |         | BLn1                  | 532              | -                  | 12.1                  | В            | 0.1                   |
|                  | WBT      | ¢                   | -                  | Ľ                 | 0                      | Stop         | '              | •              | 0                      | 0        | 92               | 9                 | ω         |        | 522                  | 266 | 256 | 6.56          | 5.56                | 5.56 | 4.054 | 454                  | 681 | 688 |                    | 440                | 440                  | 700         |       |          |  |         | NBR EBLn1WBLn1        | 494              |                    | 15.2                  | ပ            | 1.2                   |
|                  | WBL      |                     | ω                  | ω                 | 0                      | Stop         | •              | •              | ·                      |          | 92               | 0                 | 6         | Minor1 | 502                  | 266 | 236 | 7.1           | 6.1                 |      |       | 483                  | 744 | 772 | ļ                  | 456                | 456                  | 125<br>745  | C+7   | WB       | 12.1   | В       | NBR E                 | •                | 1                  | •                     | ·            | •                     |
|                  | EBR      |                     | 21                 | 21                | 0                      | Stop         | None           | •              | ·                      |          | 92               | 4                 | 23        | Σ      | 217                  | ·   |     | 6.24          |                     | ·    | 3.336 | 818                  | •   | ŀ   |                    | 818                | •                    |             |       |          |  |         | NBT                   | •                | •                  | 0                     | A            | •                     |
|                  | EBT      | ¢                   | ŝ                  | Ś                 | 0                      | Stop         | •              | ı              | 0                      | 0        | 92               | 2                 | S         |        | 493                  | 223 | 270 | 6.55          | 5.55                |      |       | 473                  | 713 | 680 |                    | 458                | 458                  | 111         | 3     |          |  |         | NBL                   | 1287             | 0.024              | 7.9                   | A            | 0.1                   |
| 4.2              | EBL      |                     | 108                | 108               | 0                      | Stop         | •              | •              | - #                    |          | 92               | 2                 | 117       | Minor2 | 498                  | 223 | 275 | 7.12          | 6.12                |      |       | 483                  | 780 | 731 |                    | 460                | 460                  | / 70<br>405 | C 4 D | EB       | 15.2   | ပ       |                       |                  | Ŭ                  |                       |              |                       |
| Int Delay, s/veh | Movement | Lane Configurations | Traffic Vol, veh/h | Future Vol, veh/h | Conflicting Peds, #/hr | Sign Control | RT Channelized | Storage Length | Veh in Median Storage, | Grade, % | Peak Hour Factor | Heavy Vehicles, % | Mvmt Flow |        | Stanticzing Flow All |     |     | Critical Hdwy | Critical Hdwy Stg 1 | J 2  |       | Btatoleap-1 Maneuver |     |     | Platoon blocked, % | Blay64p-1 Maneuver | Blange 2p-2 Maneuver |             |       | Approach | HCM Control Delay, s                             | HCM LOS | Minor Lane/Major Mvmt | Capacity (veh/h) | HCM Lane V/C Ratio | HCM Control Delay (s) | HCM Lane LOS | HCM 95th %tile Q(veh) |

| Intersection             |            |       |       |        |                |      |        |      |      |        |      |      |  |
|--------------------------|------------|-------|-------|--------|----------------|------|--------|------|------|--------|------|------|--|
| Int Delay, s/veh         | 5.3        |       |       |        |                |      |        |      |      |        |      |      |  |
| Movement                 | EBL        | EBT   | EBR   | WBL    | WBT            | WBR  | NBL    | NBT  | NBR  | SBL    | SBT  | SBR  |  |
| Lane Configurations      |            | ¢     |       |        | ¢              |      |        | ¢    |      |        | ¢    |      |  |
| Traffic Vol, veh/h       | 124        | 6     | 42    | 7      | വ              | 13   | 25     | 200  | 16   | 13     | 235  | 124  |  |
| Future Vol, veh/h        | 124        | 6     | 42    | ~      | വ              | 13   | 25     | 200  | 16   | 13     | 235  | 124  |  |
| Conflicting Peds, #/hr   | 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           | ı          | '     | None  | 1      | •              | None | '      | '    | None | '      | 1    | None |  |
| Storage Length           | '          | ·     | '     | '      | '              |      | '      | '    |      |        | '    |      |  |
| Veh in Median Storage, # | - #'       | 0     | ı     |        | 0              | •    | 1      | 0    | 1    | •      | 0    |      |  |
| Grade, %                 | 1          | 0     | ı     | •      | 0              | •    | '      | 0    | •    | •      | 0    |      |  |
| Peak Hour Factor         | 92         | 92    | 92    | 92     | 92             | 92   | 92     | 92   | 92   | 92     | 92   | 92   |  |
| Heavy Vehicles, %        | 2          | പ     | 4     | 0      | 9              | 10   | 2      | 16   | 2    | ٢      | 13   |      |  |
| Mvmt Flow                | 135        | 10    | 46    | œ      | 2              | 14   | 27     | 217  | 17   | 14     | 255  | 135  |  |
|                          |            |       |       |        |                |      |        |      |      |        |      |      |  |
|                          | Minor2     |       | 2     | Minor1 |                | Σ    | Major1 |      | 2    | Major2 |      |      |  |
| Stanticzing Flow All     | 640        | 639   | 323   | 629    | 698            | 226  | 390    | 0    | 0    | 234    | 0    | 0    |  |
| 5                        | 351        | 351   | •     | 280    | 280            | •    | •      | •    | •    | •      | •    |      |  |
|                          | 289        | 288   | ,     | 379    | 418            |      | '      | ·    |      | '      | '    | ,    |  |
| Critical Hdwy            | 7.12       | 6.55  | 6.24  | 7.1    | 6.56           | 6.3  | 4.17   | ı.   | •    | 4.17   | '    |      |  |
| Critical Hdwy Stg 1      | 6.12       | 5.55  | •     | 6.1    | 5.56           | •    | •      | •    | •    | •      | '    |      |  |
| Critical Hdwy Stg 2      |            |       | •     | 6.1    | 5.56           |      | '      | •    |      | 1      | 1    | ,    |  |
| Etalgevaup Hdwy          |            |       | 3.336 |        | 4.054          |      | 2.263  | '    | ı    | 2.263  | '    |      |  |
| Btatoeap-1 Maneuver      | 388        | 390   | 713   | 380    | 359            | 794  | 1142   | •    | 1    | 1305   | '    | ,    |  |
| ,                        | 666        | 627   |       | 731    | 672            |      | ı      | '    | ı    | '      | '    |      |  |
|                          | 719        | 668   | ı     | 647    | 584            | •    | •      | •    | T    | •      | 1    |      |  |
| Platoon blocked, %       |            |       |       |        |                |      |        | '    | ı    |        | '    | ,    |  |
| Bloy6ap-1 Maneuver       | 365        | 374   | 713   | 338    | 344            | 794  | 1142   | '    | •    | 1305   | '    |      |  |
| Blage 2 Maneuver         | 365        | 374   | •     | 338    | 344            | •    | •      | •    | •    | •      | •    |      |  |
|                          | 648        | 618   | ı.    | 711    | 654            | •    | •      | •    | •    | •      | 1    |      |  |
|                          | 681        | 650   | •     | 588    | 576            |      | •      | •    | '    | •      | •    |      |  |
|                          |            |       |       |        |                |      |        |      |      | 1      |      | l    |  |
| Approach                 | EΒ         |       |       | WB     |                |      | NB     |      |      | SB     |      |      |  |
| HCM Control Delay, s     | 20.9       |       |       | 12.9   |                |      | 0.9    |      |      | 0.3    |      |      |  |
| HCM LOS                  | ပ          |       |       | മ      |                |      |        |      |      |        |      |      |  |
|                          |            |       |       |        |                |      |        |      |      |        |      |      |  |
| Minor Lane/Major Mvmi    | - <b>-</b> | NBL   | NBT   | NBR E  | NBR EBLn1WBLn1 |      | SBL    | SBT  | SBR  |        |      |      |  |
| Capacity (veh/h)         |            | 1142  | 1     | T      | 414            |      | 1305   | •    | T    |        |      |      |  |
| HCM Lane V/C Ratio       |            | 0.024 | •     | '      | 0.459 0.056    |      | 0.011  | •    | •    |        |      |      |  |
| HCM Control Delay (s)    |            | 8.2   | 0     | •      | 20.9           | 12.9 | 7.8    | 0    | •    |        |      |      |  |
| HCM Lane LOS             |            | A 2   | A     | •      | ပ <del>,</del> | e e  | A      | A    | •    |        |      |      |  |
| HCM 95th %tile Q(veh)    |            | 0.1   | •     | •      | 2.4            | 0.2  | 0      |      | 1    |        |      |      |  |

|                          | 4.6    |       |       |        |                |             |        |      |      |        |      |      |
|--------------------------|--------|-------|-------|--------|----------------|-------------|--------|------|------|--------|------|------|
| EBI                      |        | EBT   | EBR   | WBL    | WBT            | WBR         | NBL    | NBT  | NBR  | SBL    | SBT  | SBR  |
| -ane Configurations      |        | 4     |       |        | <del>4</del>   |             |        | ¢    |      |        | 4    |      |
| -                        | 119    | ŝ     | 23    | 6      | ω              | 6           | 32     | 201  | ω    | ŝ      | 185  | 68   |
|                          | 119    | ŝ     | 23    | 6      | ∞              | 6           | 32     | 201  | œ    | ŝ      | 185  | 68   |
| Conflicting Peds, #/hr   | 0      |       | 0     | 0      | 0              | 0           | 0      | 0    | 0    | 0      | 0    | 0    |
|                          | Stop S | Stop  | Stop  | Stop   | Stop           | Stop        | Free   | Free | Free | Free   | Free | Free |
|                          |        |       | None  | 1      | 1              | None        | 1      | 1    | None | 1      | 1    | None |
|                          |        |       | •     | '      | •              | •           | T      | •    | •    | '      | •    |      |
| Veh in Median Storage, # |        | 0     |       | -      | 0              |             | 1      | 0    | •    |        | 0    |      |
|                          |        | 0     | •     | 1      | 0              | '           | '      | 0    | '    | '      | 0    |      |
|                          | 92     | 92    | 92    | 92     | 92             | 92          | 92     | 92   | 92   | 92     | 92   | 92   |
| Heavy Vehicles, %        | 2      | വ     | 4     | 0      | 9              | 10          | ٢      | 16   | 2    | 2      | 13   | -    |
| <del>, -</del>           | 29     | ŝ     | 25    | 10     | 6              | 10          | 35     | 218  | 6    | S      | 201  | 74   |
|                          |        |       |       |        |                |             |        |      |      |        |      |      |
| Minor2                   | r2     |       | Σ     | Minor1 |                | 2           | Major1 |      | 2    | Major2 |      |      |
| Stantisching Flow All 5- |        | 541   | 238   | 551    | 574            | 223         | 275    | 0    | 0    | 227    | 0    | 0    |
|                          | 244    | 244   | •     | 293    | 293            | 1           | 1      | '    | '    | 1      | •    |      |
| õ                        |        | 297   | 1     | 258    | 281            | 1           | ı      | '    | '    | '      | 1    | ,    |
| 7.                       | 7.12 6 | 6.55  | 6.24  | 7.1    | 6.56           | 6.3         | 4.17   | 1    | '    | 4.17   | 1    | •    |
|                          |        | 5.55  |       | 6.1    | 5.56           | •           | •      | •    | •    | •      | •    | •    |
| Critical Hdwy Stg 2 6.   |        | 5.55  | •     | 6.1    | 5.56           | •           | 1      | •    | •    | •      | •    |      |
| 3.518                    |        | 4.045 | 3.336 | 3.5    | 4.054          | 3.39        | 2.263  | •    | •    | 2.263  | •    |      |
| Bradgeap-1 Maneuver 4.   |        | 444   | 796   | 448    | 424            | <i>1</i> 97 | 1260   | •    | 1    | 1312   |      |      |
| 7.                       |        | 669   | •     | 719    | 663            | •           | •      | •    | •    | •      | •    |      |
|                          | 707 (  | 662   | ·     | 751    | 671            |             |        |      | •    |        |      | ·    |
|                          |        |       |       |        |                |             |        | '    | '    |        |      |      |
|                          |        | 428   | 796   | 420    | 409            | 797         | 1260   |      | •    | 1312   |      | ·    |
| Stander 4.               |        | 428   | ı     | 420    | 409            | 1           | ı      | '    | '    | '      | 1    | ,    |
|                          |        | 697   | ·     | 696    | 642            |             |        |      | •    | '      |      | ·    |
| Ŷ                        | 667 (  | 641   | •     | 722    | 699            | •           | •      | •    | •    | •      | •    |      |
|                          |        |       |       |        |                |             |        |      |      |        |      |      |
|                          | EB     |       |       | WB     |                |             | NB     |      |      | SB     |      |      |
| HCM Control Delay, s 16  | 16.9   |       |       | 12.7   |                |             | 1.1    |      |      | 0.1    |      |      |
|                          | ပ      |       |       | В      |                |             |        |      |      |        |      |      |
| Vlinor Lane/Major Mvmt   | 2      | NBL   | NBT   | NBR F  | NBR EBLn1WBLn1 | /BLn1       | SBL    | SBT  | SBR  |        |      |      |
|                          | 1      | 1260  | •     | '      | 458            | 497         | 1312   | '    | '    |        |      |      |
| HCM Lane V/C Ratio       | 0.0    | 0.028 | •     | '      | 0.344          | 0.057       | 0.002  | •    | •    |        |      |      |
| HCM Control Delay (s)    |        | 7.9   | 0     | '      |                |             | 7.8    | 0    | •    |        |      |      |
|                          |        | A     | A     | 1      | ပ              | ш           | A      | A    | •    |        |      |      |
|                          |        |       |       |        |                |             |        |      |      |        |      |      |

| acitor created           |        |       |       |        |                |       |        |      |      |        |      |      |  |
|--------------------------|--------|-------|-------|--------|----------------|-------|--------|------|------|--------|------|------|--|
| Int Delay, s/veh         | 6.5    |       |       |        |                |       |        |      |      |        |      |      |  |
| Movement                 | EBL    | EBT   | EBR   | WBL    | WBT            | WBR   | NBL    | NBT  | NBR  | SBL    | SBT  | SBR  |  |
| Lane Configurations      |        | ¢     |       |        | ¢              |       |        | ¢    |      |        | ¢    |      |  |
| Traffic Vol, veh/h       | 137    | 10    | 46    | ω      | 9              | 14    | 28     | 221  | 18   | 14     | 259  | 137  |  |
| Future Vol, veh/h        | 137    | 10    | 46    | ω      | 9              | 14    | 28     | 221  | 18   | 14     | 259  | 137  |  |
| 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           | I      | T     | None  | '      | T              | None  | ı      | ı    | None | '      | T    | None |  |
| Storage Length           |        | ,     | •     | '      | ·              | ı     | •      | ·    |      | '      | ı    | 1    |  |
| Veh in Median Storage, # | - #    | 0     | •     | 1      | 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     | 4     | 0      | 9              | 10    | ٢      | 16   | 2    | 7      | 13   | 1    |  |
| Mvmt Flow                | 149    | 7     | 50    | 6      | 7              | 15    | 30     | 240  | 20   | 15     | 282  | 149  |  |
|                          |        |       |       |        |                |       |        |      |      |        |      |      |  |
|                          | Minor2 |       | 2     | Minor1 |                | 2     | Major1 |      | 2    | Major2 |      |      |  |
| Stanticzing Flow All     | 708    | 707   | 357   | 727    | 171            | 250   | 431    | 0    | 0    | 260    | 0    | 0    |  |
| 5                        | 387    | 387   | 1     | 310    | 310            | T     | ,      | Т    | 1    | 1      | 1    |      |  |
|                          | 321    | 320   | •     | 417    | 461            | •     |        | •    | •    | '      | '    |      |  |
| Critical Hdwy            | 7.12   | 6.55  | 6.24  | 7.1    | 6.56           | 6.3   | 4.17   | •    | •    | 4.17   | '    |      |  |
| Critical Hdwy Stg 1      | 6.12   | 5.55  | •     | 6.1    | 5.56           | •     | •      | •    | •    | •      | •    |      |  |
| Critical Hdwy Stg 2      | 6.12   | 5.55  | 1     | 6.1    | 5.56           | 1     | ł      | •    | •    | '      | ı.   | ı    |  |
| Ecolow-tup Hdwy          | 3.518  | 4.045 | 3.336 | 3.5    | 4.054          | 3.39  | 2.263  | •    | •    | 2.263  | '    |      |  |
| Brageap-1 Maneuver       | 350    | 356   | 683   | 342    | 326            | 770   | 1102   | •    | •    | 1276   | •    |      |  |
|                          | 637    | 604   | •     | 705    | 652            | •     | '      | •    | •    | '      | '    |      |  |
|                          | 691    | 647   | T     | 617    | 559            | ı.    | ı.     | ı.   | ı.   | ı.     | ı.   |      |  |
| Platoon blocked, %       |        |       |       |        |                |       |        | •    | •    |        | '    |      |  |
| bollangeap-1 Maneuver    | 326    | 339   | 683   | 298    | 311            | 770   | 1102   | •    | •    | 1276   | •    |      |  |
| Stange ap-2 Maneuver     | 326    | 339   | •     | 298    | 311            | •     | •      | •    | •    | •      | •    |      |  |
|                          | 617    | 594   | •     | 682    | 631            | •     | •      | •    | •    | 1      | •    |      |  |
|                          | 649    | 626   | •     | 552    | 550            | •     | •      | •    | •    | '      | '    |      |  |
|                          |        |       |       |        |                |       |        |      |      |        |      |      |  |
| Approach                 | EB     |       |       | WB     |                |       | NB     |      |      | SB     |      |      |  |
| HCM Control Delay, s     | 26.4   |       |       | 13.9   |                |       | 0.9    |      |      | 0.3    |      |      |  |
| HCM LOS                  | Ω      |       |       | В      |                |       |        |      |      |        |      |      |  |
|                          |        |       |       |        |                |       |        |      |      |        |      |      |  |
| Minor Lane/Major Mvmt    | +      | NBL   | NBT   | NBR F  | NBR EBLn1WBLn1 | /BLn1 | SBL    | SBT  | SBR  |        |      |      |  |
| Capacity (veh/h)         |        | 1102  | •     |        | 373            |       | 1276   | •    | •    |        |      |      |  |
| HCM Lane V/C Ratio       |        | 0.028 | '     | '      | 0.562          |       | 0.012  | ı    | '    |        |      |      |  |
| HCM Control Delay (s)    |        | 8.4   | 0     | 1      | 26.4           | 13.9  | 7.9    | 0    | •    |        |      |      |  |
| HCM Lane LOS             |        | A     | A     | '      |                | В     | A      | A    | •    |        |      |      |  |
| HCM 95th %tile Q(veh)    |        | 0.1   | I     | 1      | 3.3            | 0.2   | 0      | T    |      |        |      |      |  |
|                          |        |       |       |        |                |       |        |      |      |        |      |      |  |

| Intersection           |            |            |       |            |                |      |        |      |      |        |      |      |  |
|------------------------|------------|------------|-------|------------|----------------|------|--------|------|------|--------|------|------|--|
| Int Delay, s/veh       | 5.3        |            |       |            |                |      |        |      |      |        |      |      |  |
| Movement               | EBL        | EBT        | EBR   | WBL        | WBT            | WBR  | NBL    | NBT  | NBR  | SBL    | SBT  | SBR  |  |
| Lane Configurations    |            | ¢          |       |            | ¢              |      |        | ŧ    |      |        | ŧ    |      |  |
| Traffic Vol, veh/h     | 132        | 4          | 26    | 10         | 6              | 10   | 35     | 222  | 6    | 4      | 205  | 76   |  |
| Future Vol, veh/h      | 132        | 4          | 26    | 10         | 6              | 10   | 35     | 222  | 6    | 4      | 205  | 76   |  |
| 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         | T          | ľ          | None  | T          | I              | None | ľ      | ı    | None | ı      | T    | None |  |
| Storage Length         | ı          | •          |       | •          |                | •    | •      |      | •    | •      | ı    |      |  |
| Veh in Median Storage, | '<br>#     | 0          | ۲     | 1          | 0              | ·    |        | 0    | 1    | T      | 0    |      |  |
| Grade, %               |            | 0          | •     |            | 0              |      |        | 0    |      |        | 0    |      |  |
| Peak Hour Factor       | 92         | 92         | 92    | 92         | 92             | 92   | 92     | 92   | 92   | 92     | 92   | 92   |  |
| Heavy Vehicles, %      | 2          | വ          | 4     | 0          | 9              | 10   | L      | 16   | 2    | Ľ      | 13   | -    |  |
| Mvmt Flow              | 143        | 4          | 28    | 7          | 10             | 7    | 38     | 241  | 10   | 4      | 223  | 83   |  |
|                        |            |            |       |            |                |      |        |      |      |        |      |      |  |
| Major/Minor N          | Minor2     |            | 2     | Minor1     |                | 2    | Major1 |      | 2    | Major2 |      |      |  |
| Standiczing Flow All   | 909        | 009        | 265   | 611        | 636            | 246  | 306    | 0    | 0    | 251    | 0    | 0    |  |
| ,                      | 273        | 273        | ı     | 322        | 322            | 1    | 1      | 1    | 1    | T      | 1    |      |  |
|                        | 333        | 327        |       | 289        | 314            |      |        |      |      | •      |      | ı    |  |
| Critical Hdwy          | 7.12       | 6.55       | 6.24  | 7.1        | 6.56           | 6.3  | 4.17   | I    | I    | 4.17   | ı    | I    |  |
| Critical Hdwy Stg 1    | 6.12       | 5.55       | '     | 6.1        | 5.56           | '    | •      | •    | '    |        | •    |      |  |
| J 2                    |            |            | I     | 6.1        | 5.56           |      | •      | 1    | 1    | 1      | 1    |      |  |
|                        |            |            | 3.336 |            | 4.054          |      | 2.263  | •    | •    | 2.263  | •    |      |  |
| Batgeap-1 Maneuver     | 409        | 411        | 769   | 409        | 390            | 774  | 1227   |      | 1    | 1286   | 1    |      |  |
|                        | 733        | 678        | •     | 694        | 644            | •    | •      | •    | •    | •      | •    |      |  |
|                        | 681        | 642        | 1     | 723        | 649            | •    | 1      | •    | •    | 1      | 1    |      |  |
| Platoon blocked, %     |            |            |       |            | ŗ              | ŀ    |        | •    | •    | 1001   | '    |      |  |
| Blage ap-1 Naneuver    | 383        | 395        | /0/   | 915<br>070 | 3/4            | 114  | 1771   | •    | •    | 1280   | •    |      |  |
| unage zp-2 iviarieuver | 585<br>707 | 545<br>675 | •     | 519<br>440 | 514<br>401     | •    | '      | '    | •    | '      | '    |      |  |
|                        | 637        | 619        |       | 689        | 021<br>646     |      |        |      |      |        |      |      |  |
|                        |            |            |       |            |                |      |        |      |      |        |      |      |  |
| Approach               | EB         |            |       | WB         |                |      | NB     |      |      | SB     |      |      |  |
| HCM Control Delay, s   | 19.8       |            |       | 13.4       |                |      | 1.1    |      |      | 0.1    |      |      |  |
| HCM LOS                | ပ          |            |       | Ю          |                |      |        |      |      |        |      |      |  |
|                        |            |            |       |            |                |      |        |      |      |        |      |      |  |
| Minor Lane/Major Mvmt  |            | NBL        | NBT   | NBR E      | NBR EBLn1WBLn1 | BLn1 | SBL    | SBT  | SBR  |        |      |      |  |
| Capacity (veh/h)       |            | 1227       |       | 1          |                |      | 1286   | 1    |      |        |      |      |  |
| HCM Lane V/C Ratio     |            | 0.031      | •     | '          |                |      | 0.003  | •    | •    |        |      |      |  |
| HCM Control Delay (s)  |            | ω,         | 0     | 1          | 19.8<br>0      | 13.4 | 7.8    | 0    | 1    |        |      |      |  |
| HCM Lane LOS           |            | A          | A     | •          | U              | ш    | A      | A    | •    |        |      |      |  |
| HCM 95th %tile Q(veh)  |            | 0.1        | 1     | •          | 2.1            | 0.2  | 0      | •    | •    |        |      |      |  |

File No.: 20-1000 File Name: Road 2 East Corridor Study

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| Intersection           |        |       |       |               |                |       |        |      |      |        |      |      |  |
|------------------------|--------|-------|-------|---------------|----------------|-------|--------|------|------|--------|------|------|--|
| Int Delay, s/veh       | 8.9    |       |       |               |                |       |        |      |      |        |      |      |  |
| Movement               | EBL    | EBT   | EBR   | WBL           | WBT            | WBR   | NBL    | NBT  | NBR  | SBL    | SBT  | SBR  |  |
| Lane Configurations    |        | ¢     |       |               | ¢              |       |        | ¢    |      |        | ¢    |      |  |
| Traffic Vol, veh/h     | 151    | =     | 51    | 6             | 9              | 16    | 30     | 244  | 20   | 16     | 286  | 151  |  |
| Future Vol, veh/h      | 151    | =     | 51    | 6             | 9              | 16    | 30     | 244  | 20   | 16     | 286  | 151  |  |
| 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         | 1      |       | None  |               |                | None  | T      | 1    | None | 1      |      | None |  |
| Storage Length         | T      | ı     | ı     | ı             | I              | Т     | ı      | T    | T    | ı      | T    | ı    |  |
| Veh in Median Storage, | - #';  | 0     | 1     |               | 0              | '     | •      | 0    | '    | •      | 0    | ı    |  |
| Grade, %               | '      | 0     | •     | •             | 0              | '     | '      | 0    | 1    | '      | 0    |      |  |
| Peak Hour Factor       | 92     | 92    | 92    | 92            | 92             | 92    | 92     | 92   | 92   | 92     | 92   | 92   |  |
| Heavy Vehicles, %      | 2      | 2     | 4     | 0             | 9              | 10    | ٢      | 16   | 2    | ٢      | 13   | -    |  |
| Mvmt Flow              | 164    | 12    | 55    | 10            | 7              | 17    | 33     | 265  | 22   | 17     | 311  | 164  |  |
|                        |        |       |       |               |                |       |        |      |      |        |      |      |  |
| Major/Minor N          | Minor2 |       | 2     | <b>Minor1</b> |                | 2     | Major1 |      | 2    | Major2 |      |      |  |
| Stanticcting Flow All  | 781    | 780   | 393   | 803           | 851            | 276   | 475    | 0    | 0    | 287    | 0    | 0    |  |
| 5                      | 427    | 427   | 1     | 342           | 342            | 1     | T      | 1    | 1    | 1      | 1    |      |  |
|                        | 354    | 353   | '     | 461           | 509            | '     |        | '    | '    | '      | '    |      |  |
| Critical Hdwy          | 7.12   | 6.55  | 6.24  | 7.1           | 6.56           | 6.3   | 4.17   |      | •    | 4.17   |      |      |  |
| Critical Hdwy Stg 1    | 6.12   | 5.55  | •     | 6.1           | 5.56           | •     |        | •    | •    | •      | •    |      |  |
| Critical Hdwy Stg 2    | 6.12   | 5.55  |       | 6.1           | 5.56           | '     |        |      | •    | •      | •    |      |  |
| Etallow-tup Hdwy       | 3.518  | 4.045 | 3.336 | 3.5           | 4.054          | 3.39  | 2.263  | •    | •    | 2.263  | •    |      |  |
| Bradeapp-1 Maneuver    | 312    | 323   | 652   | 304           | 293            | 744   | 1061   | 1    | '    | 1247   | 1    | ı    |  |
| 9                      | 606    | 580   | ı     | 677           | 631            | I     | ı      | ı    | ı    | ı      | ı    | ı    |  |
|                        | 663    | 626   | I     | 584           | 532            | T     | I      | I    | T    | I      | I    | ı    |  |
| Platoon blocked, %     |        |       |       |               |                |       |        | 1    | '    |        | '    | ı    |  |
| Slageap-1 Maneuver     | 287    | 305   | 652   | 258           | 277            | 744   | 1061   | 1    | '    | 1247   | '    |      |  |
| Blayseap-2 Maneuver    | 287    | 305   | •     | 258           | 277            | •     | •      | •    | •    | •      | •    |      |  |
|                        | 584    | 569   | 1     | 652           | 608            | ı.    | 1      | 1    | T    | 1      | 1    |      |  |
|                        | 617    | 603   | '     | 513           | 522            | '     | •      | '    | '    | '      | '    |      |  |
|                        |        |       |       |               |                |       |        |      |      |        |      |      |  |
| Approach               | EB     |       |       | WB            |                |       | NB     |      |      | SB     |      |      |  |
| HCM Control Delay, s   | 37.2   |       |       | 14.9          |                |       | 0.9    |      |      | 0.3    |      |      |  |
| HCM LOS                | ш      |       |       | മ             |                |       |        |      |      |        |      |      |  |
|                        |        |       |       |               |                |       |        |      |      |        |      |      |  |
| Minor Lane/Major Mvmt  | It     | NBL   | NBT   | NBR E         | NBR EBLn1WBLn1 | /BLn1 | SBL    | SBT  | SBR  |        |      |      |  |
| Capacity (veh/h)       |        | 1061  | 1     | T             | 333            | 397   | 1247   | 1    | '    |        |      |      |  |
| HCM Lane V/C Ratio     |        | 0.031 | •     | •             |                |       | 0.014  | '    | •    |        |      |      |  |
| HCM Control Delay (s)  |        | 8.5   | 0     | T             | 37.2           | 14.9  | 7.9    | 0    | •    |        |      |      |  |
| HCM Lane LOS           |        | A     | A     | •             | ш              | ഫ     | A      | A    | •    |        |      |      |  |
| HCM 95th %tile Q(veh)  |        | 0.1   | 1     | 1             | 4.9            | 0.3   | 0      | 1    | •    |        |      |      |  |

6.7

### Intersection

Int Delay, s/veh

| Movement               | EBL  | EBT      | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |  |
|------------------------|------|----------|------|------|------|------|------|------|------|------|------|------|--|
| Lane Configurations    | ľ    | el<br>el |      |      | \$   |      |      | ÷    |      |      | \$   |      |  |
| Traffic Vol, veh/h     | 151  | 11       | 51   | 9    | 6    | 16   | 30   | 244  | 20   | 16   | 286  | 151  |  |
| Future Vol, veh/h      | 151  | 11       | 51   | 9    | 6    | 16   | 30   | 244  | 20   | 16   | 286  | 151  |  |
| 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         | 200  | -        | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |  |
| 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    | 5        | 4    | 0    | 6    | 10   | 7    | 16   | 2    | 7    | 13   | 1    |  |
| Mvmt Flow              | 164  | 12       | 55   | 10   | 7    | 17   | 33   | 265  | 22   | 17   | 311  | 164  |  |

| Major/Minor          | Minor2 |       | Ν     | /linor1 |       |      | Vajor1 |   | N | /lajor2 |   |   |  |
|----------------------|--------|-------|-------|---------|-------|------|--------|---|---|---------|---|---|--|
| Conflicting Flow All | 781    | 780   | 393   | 803     | 851   | 276  | 475    | 0 | 0 | 287     | 0 | 0 |  |
| Stage 1              | 427    | 427   | -     | 342     | 342   | -    | -      | - | - | -       | - | - |  |
| Stage 2              | 354    | 353   | -     | 461     | 509   | -    | -      | - | - | -       | - | - |  |
| Critical Hdwy        | 7.12   | 6.55  | 6.24  | 7.1     | 6.56  | 6.3  | 4.17   | - | - | 4.17    | - | - |  |
| Critical Hdwy Stg 1  | 6.12   | 5.55  | -     | 6.1     | 5.56  | -    | -      | - | - | -       | - | - |  |
| Critical Hdwy Stg 2  | 6.12   | 5.55  | -     | 6.1     | 5.56  | -    | -      | - | - | -       | - | - |  |
| Follow-up Hdwy       | 3.518  | 4.045 | 3.336 | 3.5     | 4.054 | 3.39 | 2.263  | - | - | 2.263   | - | - |  |
| Pot Cap-1 Maneuver   | 312    | 323   | 652   | 304     | 293   | 744  | 1061   | - | - | 1247    | - | - |  |
| Stage 1              | 606    | 580   | -     | 677     | 631   | -    | -      | - | - | -       | - | - |  |
| Stage 2              | 663    | 626   | -     | 584     | 532   | -    | -      | - | - | -       | - | - |  |
| Platoon blocked, %   |        |       |       |         |       |      |        | - | - |         | - | - |  |
| Mov Cap-1 Maneuver   | 287    | 305   | 652   | 258     | 277   | 744  | 1061   | - | - | 1247    | - | - |  |
| Mov Cap-2 Maneuver   | 287    | 305   | -     | 258     | 277   | -    | -      | - | - | -       | - | - |  |
| Stage 1              | 584    | 569   | -     | 652     | 608   | -    | -      | - | - | -       | - | - |  |
| Stage 2              | 617    | 603   | -     | 513     | 522   | -    | -      | - | - | -       | - | - |  |
|                      |        |       |       |         |       |      |        |   |   |         |   |   |  |

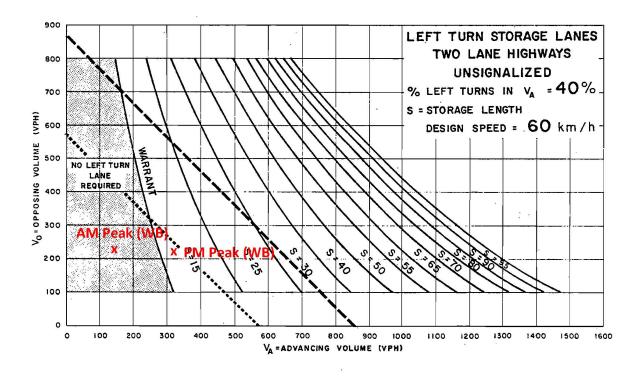
| Approach             | EB   | WB   | NB  | SB  |  |
|----------------------|------|------|-----|-----|--|
| HCM Control Delay, s | 27.1 | 14.9 | 0.9 | 0.3 |  |
| HCM LOS              | D    | В    |     |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1061  | -   | -   | 287   | 542   | 397   | 1247  | -   | -   |
| HCM Lane V/C Ratio    | 0.031 | -   | -   | 0.572 | 0.124 | 0.085 | 0.014 | -   | -   |
| HCM Control Delay (s) | 8.5   | 0   | -   | 33.1  | 12.6  | 14.9  | 7.9   | 0   | -   |
| HCM Lane LOS          | А     | А   | -   | D     | В     | В     | А     | А   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 3.3   | 0.4   | 0.3   | 0     | -   | -   |

**Appendix E** 

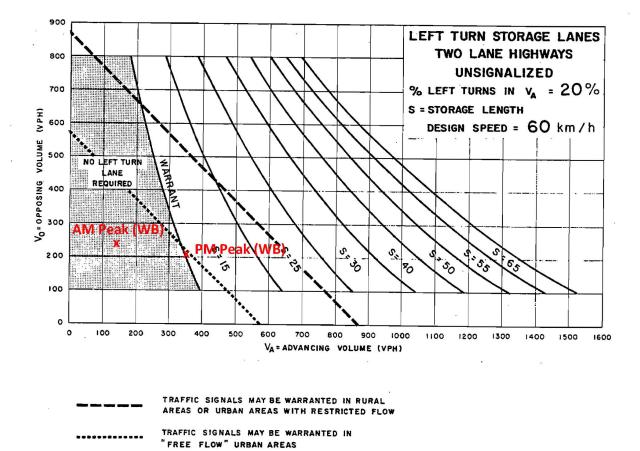
# LEFT TURN LANE WARRANT ANALYSES

Jasperson Drive at Road 2 East Kratz Sideroad at Road 2 East Graham Sideroad at Road 2 East

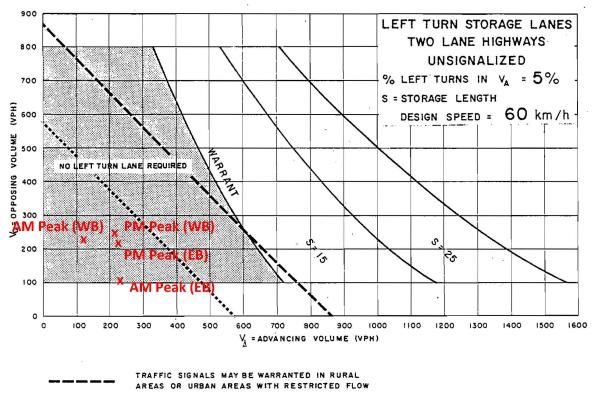


# Jasperson Drive at Road 2E – Left Turn Lane Warrant Total Traffic 2030

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS



## Kratz Sideroad at Road 2E – Left Turn Lane Warrant Total Traffic 2030



# Graham Sideroad at Road 2E – Left Turn Lane Warrant Total Traffic 2030

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

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**Appendix F** 

# **SIGNAL WARRANT ANALYSES**

Jasperson Drive at Road 2 East Kratz Sideroad at Road 2 East Graham Sideroad at Road 2 East County Road 45 (Union Avenue) at Road 2 East

#### Projected Background Traffic (Horizon Year 2025)

|                                     |  |  | QUIREMENTS<br>NE ROADWAYS            | COMPL             | IANCE         |
|-------------------------------------|--|--|--------------------------------------|-------------------|---------------|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                   |               |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>%    | ENTIRE<br>%** |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 36 (1)            | 21            |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 21 (2)            | 21            |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 28 <sup>(3)</sup> | 28            |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the Major Street for Each of the Same 8 Hours.   | 50   | 75                                   | 39 (4)            | 20            |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                   | 21            |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                   | N/A           |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A               | N/A           |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES  | NO 🗌                                 |                   | N/A           |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌                                 |                   |               |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌                                 |                   | N/A           |

#### Jasperson Drive at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

\*\* The Lowest Sectional Percentage Governs the Entire Warrant.

\*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

#### Justification 7 - Future Traffic Volumes

- (1) = (431 + 601) / 4 / 720 = 36%
- (2) = (106 + 110) / 4 / (170 x 1.5) = 21%

(3) = (325 + 491) / 4 / 720 = 28%

(4) = (51 + 65) / 4 / 75 = 39%

#### Projected Background Traffic (Horizon Year 2030)

|                                     |  |  | QUIREMENTS<br>NE ROADWAYS            | COMPL          | IANCE         |
|-------------------------------------|--|--|--------------------------------------|----------------|---------------|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                |               |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>% | ENTIRE<br>%** |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 40 (1)         | 23            |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 23 (2)         | 25            |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 31 (3)         | 31            |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the Major Street for Each of the Same 8 Hours.   | 50   | 75                                   | 43 (4)         | 01            |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                | 23            |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                | N/A           |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A            | N/A           |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES 🗌  | NO 🗌                                 |                | N/A           |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌                                 |                |               |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES 🗌  | NO 🗌                                 |                | N/A           |

#### Jasperson Drive at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

\*\* The Lowest Sectional Percentage Governs the Entire Warrant.

\*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

- (1) = (477 + 665) / 4 / 720 = 40%
- (2) = (117 + 122) / 4 / (170 x 1.5) = 23%
- (3) = (360 + 543) / 4 / 720 = 31%
- (4) = (56 + 72) / 4 / 75 = 43%

#### Projected Background Traffic (Horizon Year 2025)

|                                     |  |  | QUIREMENTS<br>NE ROADWAYS            | COMPL             | IANCE         |
|-------------------------------------|--|--|--------------------------------------|-------------------|---------------|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                   |               |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>%    | ENTIRE<br>%** |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 34 (1)            | 14            |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 14 (2)            | 14            |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 29 <sup>(3)</sup> | 29            |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the<br>Major Street for Each of the Same 8 Hours.  | 50   | 75                                   | 29 (4)            |               |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                   | 14            |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                   | N/A           |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A               | N/A           |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES  | NO 🗌                                 |                   | N/A           |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌                                 |                   |               |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌                                 |                   | N/A           |

#### Kratz Sideroad at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

\*\* The Lowest Sectional Percentage Governs the Entire Warrant.

\*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

#### Justification 7 - Future Traffic Volumes

- (1) = (400 + 589) / 4 / 720 = 34%
- (2) = (62 + 83) / 4 / (170 x 1.5) = 14%

(3) = (338 + 506) / 4 / 720 = 29%

(4) = (24 + 63) / 4 / 75 = 29%

#### Projected Background Traffic (Horizon Year 2030)

|                                     |  |  | QUIREMENTS<br>NE ROADWAYS            | COMPL             | IANCE         |
|-------------------------------------|--|--|--------------------------------------|-------------------|---------------|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                   |               |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>%    | ENTIRE<br>%** |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 38 (1)            | 16            |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 16 <sup>(2)</sup> | 10            |
| 2. DELAY TO<br>CROSS TRAFFIC        | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 32 <sup>(3)</sup> | 32            |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the<br>Major Street for Each of the Same 8 Hours.  | 50   | 75                                   | 32 (4)            |               |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                   | 16            |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                   | N/A           |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A               | N/A           |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES 🗌  | NO 🗌                                 |                   | N/A           |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌                                 |                   |               |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌                                 |                   | N/A           |

#### Kratz Sideroad at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

\*\* The Lowest Sectional Percentage Governs the Entire Warrant.

\*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

#### Justification 7 - Future Traffic Volumes

(1) = (442 + 649) / 4 / 720 = 38%

(2) = (68 + 91) / 4 / (170 x 1.5) = 16%

(3) = (374 + 558) / 4 / 720 = 32%

(4) = (27 + 69) / 4 / 75 = 32%

#### Projected Total Traffic (Horizon Year 2025)

|                                     |  | MINIMUM RE<br>FOR TWO-LAN                              | COMPLIANCE                           |                   |               |  |
|-------------------------------------|--|--|--------------------------------------|-------------------|---------------|--|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                   |               |  |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>%    | ENTIRE<br>%** |  |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 44 (1)            | 4.4           |  |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 87 (2)            | 44            |  |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 24 <sup>(3)</sup> | 24            |  |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the<br>Major Street for Each of the Same 8 Hours.  | 50   | 75                                   | 88 (4)            | 24            |  |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                   | 24            |  |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                   | N/A           |  |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A               | N/A           |  |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES  | NO 🗌                                 |                   | N/A           |  |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌                                 |                   |               |  |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌                                 |                   | N/A           |  |

Graham Sideroad at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

- \*\* The Lowest Sectional Percentage Governs the Entire Warrant.
- \*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

- (1) = (508 + 768) / 4 / 720 = 44%
- (2) = (213 + 376) / 4 / 170 = 87%
- (3) = (295 + 392) / 4 / 720 = 24%
- (4) = (100 + 163) / 4 / 75 = 88%

#### Projected Total Traffic (Horizon Year 2030)

|                                     |  | MINIMUM RE<br>FOR TWO-LAN                              | COMPLIANCE      |                   |                  |  |
|-------------------------------------|--|--|-----------------|-------------------|------------------|--|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW |                   |                  |  |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h |                 | SECTIONAL<br>%    | ENTIRE<br>%**    |  |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720             | 49 <sup>(1)</sup> | 49               |  |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170             | 96 <sup>(2)</sup> | 49               |  |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720             | 26 <sup>(3)</sup> | <sup>3)</sup> 26 |  |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the<br>Major Street for Each of the Same 8 Hours.  | 50   | 75              | 97 <sup>(4)</sup> | 20               |  |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸            |                   | 26               |  |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌            |                   | N/A              |  |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5               | N/A               | N/A              |  |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES 🗌  | NO 🗌            |                   | NYA              |  |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌            |                   |                  |  |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌            |                   | N/A              |  |

#### Graham Sideroad at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

- \*\* The Lowest Sectional Percentage Governs the Entire Warrant.
- \*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

- (1) = (563 + 849) / 4 / 720 = 49%
- (2) = (237 + 416) / 4 / 170 = 96%
- (3) = (326 + 433) / 4 / 720 = 26%
- (4) = (112 + 180) / 4 / 75 = 97%

#### Projected Total Traffic (Horizon Year 2025)

|                                     |  | MINIMUM RE<br>FOR TWO-LAN                              | COMPLIANCE                           |                   |               |  |
|-------------------------------------|--|--|--------------------------------------|-------------------|---------------|--|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                   |               |  |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>%    | ENTIRE<br>%** |  |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 54 <sup>(1)</sup> | 54            |  |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 58 <sup>(2)</sup> | 54            |  |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 41 <sup>(3)</sup> | 41            |  |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the<br>Major Street for Each of the Same 8 Hours.  | 50   | 75                                   | 97 (4)            | 41            |  |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                   | 41            |  |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                   | N/A           |  |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A               | N/A           |  |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES  | NO 🗌                                 |                   | N/A           |  |
| 6. PEDESTRIAN                       | <ul> <li>A. Plotted Point Representing 8 Hour Pedestrian Volume vs.</li> <li>8 Hour Vehicular Volume Fall in Justified Zone, and</li> </ul>                      | YES  | NO 🗌                                 |                   |               |  |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌                                 |                   | N/A           |  |

County Road 45 at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

\*\* The Lowest Sectional Percentage Governs the Entire Warrant.

\*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

- (1) = (668 + 898) / 4 / 720 = 54%
- (2) = (171 + 221) / 4 / 170 = 58%
- (3) = (497 + 677) / 4 / 720 = 41%
- (4) = (136 + 155) / 4 / 75 = 97%

#### Projected Total Traffic (Horizon Year 2030)

|                                     |  | MINIMUM RE<br>FOR TWO-LAN                              | COMPLIANCE                           |                    |               |  |
|-------------------------------------|--|--|--------------------------------------|--------------------|---------------|--|
| JUSTIFICATION                       | DESCRIPTION  | FREE FLOW  | RESTRICTED FLOW                      |                    |               |  |
|                                     |  | OPERATING SPEED<br>GREATER THAN OR<br>EQUAL TO 70 km/h | OPERATING SPEED<br>LESS THAN 70 km/h | SECTIONAL<br>%     | ENTIRE<br>%** |  |
| 1. MINIMUM<br>VEHICULAR             | A*. Vehicle Volume, All Approaches for Each of the Heaviest<br>8 Hours of an Average Day, and  | 480  | 720                                  | 60 <sup>(1)</sup>  | 60            |  |
| VOLUME                              | B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours   | 120  | 170                                  | 64 <sup>(2)</sup>  | UU            |  |
| 2. DELAY TO                         | A*. Vehicle Volume, Major Street for Each of the Heaviest 8<br>Hours of an Average Day, and  | 480  | 720                                  | 45 <sup>(3)</sup>  | 45            |  |
| CROSS TRAFFIC                       | B*. Combined Vehicle and Pedestrian Volume Crossing the Major Street for Each of the Same 8 Hours.   | 50   | 75                                   | 107 <sup>(4)</sup> | f             |  |
| 3. VOLUME/DELAY<br>COMBINATIONS     | The Above Justifications (1 and 2) Both Satisfied to the<br>Extent of 80% or more  | YES  | NO 🗸                                 |                    | 45            |  |
| 4. MIN. FOUR HOUR<br>VEHICLE VOLUME | At Plotted Point Representing Hourly Volume for Minor<br>Approach vs. Major Approach for Four Highest Hours of an<br>Average Day Fall above the Applicable Curve | YES  | NO 🗌                                 |                    | N/A           |  |
| 5. COLLISION                        | A. Total Reported Accidents of Types Susceptible to<br>Correction by a Traffic Signal, per 12 Month Period<br>Averaged over a 36 Month Period, and               |  | 5                                    | N/A                | N/A           |  |
| EXPERIENCE                          | B. Adequate Trial of Less Restrictive Remedies. Where<br>Satisfactory Observance and Enforcement Have Failed to<br>Reduce the Number of Collisions               | YES  | NO 🗌                                 |                    | N/A           |  |
| 6. PEDESTRIAN                       | A. Plotted Point Representing 8 Hour Pedestrian Volume vs.<br>8 Hour Vehicular Volume Fall in Justified Zone, and  | YES 🗌  | NO 🗌                                 |                    |               |  |
| VOLUME<br>AND DELAY                 | B. Plotted Point Representing 8 Hour Volume of Pedestrian<br>Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian<br>Volume Fall in Justified Zone          | YES  | NO 🗌                                 |                    | N/A           |  |

County Road 45 at Road 2 East

#### <u>Notes</u>

\* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

\*\* The Lowest Sectional Percentage Governs the Entire Warrant.

\*\*\* For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

- (1) = (742 + 991) / 4 / 720 = 60%
- (2) = (191 + 244) / 4 / 170 = 64%
- (3) = (551 + 747) / 4 / 720 = 45%
- (4) = (151 + 171) / 4 / 75 = 107%

**Appendix G** 

# OTM BOOK 15: REFERENCES

| Controlled Crossings  | Pedestrian-Right-of-Way   |
|-----------------------|---|
| School Crossing Guard | School crossing guards may also provide a designated right-of-way for school children as vehicles must yield to a crossing guard. According to the HTA Section 176 – School crossings:  |
|                       | 1) School crossing guard means a person sixteen years of age or older who is directing the movement of persons across a highway and who is, (a) employed by a municipality, or (b) employed by a corporation under contract with a municipality to provide the services of a school crossing guard. R.S.O. 1990, c. H.8, s. 176 (1); 2005, c. 14. 1 (1).  |
|                       | 2) A school crossing guard about to direct persons across a highway with a speed<br>limit not in excess of 60 kilometres per hour shall, prior to entering the roadway,<br>display a school crossing stop sign in an upright position so that it is visible to<br>vehicles approaching from each direction and shall continue to so display the<br>school crossing stop sign until all persons, including the school crossing guard,<br>have cleared the roadway. 2005, c. 26, Sched. A, s. 29 (1). |
|                       | Vehicles approaching guard displaying sign  |
|                       | (3) Where a school crossing guard displays a school crossing stop sign as provided in subsection (2), the driver of any vehicle or street car approaching the school crossing guard shall stop before reaching the crossing and shall remain stopped until all persons, including the school crossing guard, have cleared the roadway and it is safe to proceed. 2005, c. 26, Sched. A, s. 29 (1); 2015, c. 14, s. 51.  |

# 2.1.2 Pedestrian's Rights and Responsibilities

Notwithstanding the distinction between controlled and uncontrolled crossings, the rights and responsibilities for pedestrians are recognized in the <u>HTA</u><sup>1</sup>:

- In the absence of statutory provisions or bylaw, a pedestrian is not confined to a street crossing or intersection and is entitled to cross at any point, although greater care may then be required of him or her in crossing. However, pedestrians crossing the highway must look to ensure the crossing can be made safely or possibly be held responsible for any ensuing collision.
- 2. Pedestrians must exercise due care even when they are lawfully within a crossing and have right-of-way. It is not an absolute right and they must still exercise care to avoid a collision with a vehicle.

3. If there is a crosswalk at a signalized intersection, pedestrians have to walk within the crosswalk (see Section 6.2.1.1 for the definition of crosswalk):

Section 144 (22) – Duty at Traffic Control Signals — Pedestrian Crossing – where portions of a roadway are marked for pedestrian use, no pedestrian shall cross the roadway except within a portion so marked.

# 2.1.3 Ontario Regulations

Ontario Regulation 402/15<sup>2</sup> came into effect January 01, 2016. The regulation introduces two levels of pedestrian crossovers. Level 1 Pedestrian Crossovers are distinctly defined by the use of a specific set of regulatory signs, internally illuminated overhead warning signs, pavement markings, and flashing amber beacons. Level 2 pedestrian crossovers are distinctly defined by the prescribed use of a different set of regulatory signs, warning signs, pavement markings, and rapid rectangular flashing beacons. **Appendix H** 

# OTM BOOK 18: REFERENCES

#### 4.4 In-Boulevard Facilities

## 4.4.1 In-Boulevard Bicycle Facilities and In-Boulevard Active Transportation Facilities

**In-Boulevard Bicycle Facilities** are separated from motor vehicle traffic by a boulevard or a verge within the roadway right-of-way. These are typically implemented adjacent to roadways with higher motor vehicle speeds and volumes along key cycling corridors. An in-boulevard facility can be constructed with the bicycle path distinct from the sidewalk or with a single facility shared by cyclists and pedestrians. In the former case, the in-boulevard facility may transition to a raised cycle track that is immediately adjacent to the curb, as described in **Section 4.3.1**. Examples of inboulevard facilities are depicted in **Figure 4.88**.

Prior to initiating design work on a given link, practitioners should refer to the Bicycle Facility Type Selection process in **Section 3.2.2**. This will confirm whether the in-boulevard bicycle facility is the most suitable and identify key design considerations.

#### 4.4.1.1 Geometry

In-boulevard facilities are located outside the travelled portion of the roadway and do not necessarily follow its geometric design. Practitioners should consider several geometric elements including the width, design speed, grade, stopping sight distance, horizontal curvature, crest vertical curves and lateral clear zones.

One- and two-way in-boulevard bicycle facilities should be 2.0 metres or 4.0 metres wide respectively. **Table 4.7** presents the desired and minimum widths for in-boulevard bicycle facilities, and **Figure 4.89** illustrates typical cross sections. It is recommended that practitioners always design to the desired width. However, through the use of sound engineering judgement, a practitioner may consider reducing the width to a value greater than or equal to the suggested minimum, but only for context specific situations on segments or corridors with constrained right-of-way widths.

In addition, a 'splash strip' should be provided between the in-boulevard facility and the curb. Splash strips provide a buffer to keep cyclists and other users away from the hazardous vertical dropoff at the curb face. They are also used to store plowed snow so that it does not obstruct the adjacent in-boulevard facility. A typical splash strip is 1.0 metres wide and is, therefore, too narrow to function as a sidewalk or other active transportation facility.

#### Table 4.7 – Desired and Suggested Minimum Widths for In-Boulevard Bicycle Facilities<sup>a</sup>

| Facility   | Desired Width | Suggested Minimum  |  |  |  |  |
|--|---------------|--------------------|--|--|--|--|
| One-Way In-Boulevard Bicycle Facility  | 2.0 m         | 1.8 m              |  |  |  |  |
| Two-Way In-Boulevard Bicycle Facility  | 4.0 m         | 3.0 m <sup>b</sup> |  |  |  |  |
| Two-Way In-Boulevard Shared Facility 4.0 m 3.0 m <sup>b</sup>  |               |                    |  |  |  |  |
| <sup>a</sup> Excludes splash strip (typical width 1.0 metre) where the in-boulevard facility abuts the curb.   |               |                    |  |  |  |  |
| <sup>b</sup> This may be reduced to 2.4 metres over very short distances in order to avoid utility poles or other infrastructure that may be costly to relocate. |               |                    |  |  |  |  |

Source: Based on AASHTO Guide for Planning, Design and Operation of Bicycle Facilities, 2012; NACTO Urban Bikeway Design Guide, 2011

#### Figure 4.88 – Examples of In-Boulevard Facilities

(As an option, directional arrows may be applied within the in-boulevard facility)

#### One-Way In-Boulevard Bicycle Facility (Brampton)



Credit: MMM, 2013

### Two-way In-Boulevard Bicycle Facility (Toronto)



Credit: City of Toronto

#### Two-way In-Boulevard Shared-Use Facility(Mississauga)

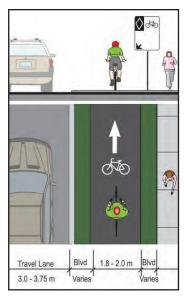


Credit: MMM, 2013

#### Figure 4.89 - Cross-Sections of In-Boulevard Facilities

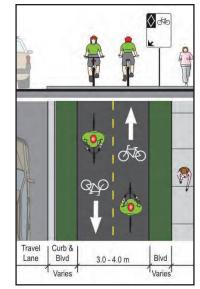
(See Table 4.7 for more details. As an option, directional arrows may be applied within the in-boulevard facility.)

#### One-Way In-Boulevard Bicycle Facility

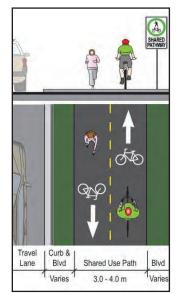


Source: MMM, 2013

### Two-way In-Boulevard Bicycle Facility



#### Two-way In-Boulevard Shared-Use Facility



**Appendix I** 

# TAC GEOMETRIC DESIGN GUIDE FOR CANADIAN ROADS: REFERENCES

**Clear Zone Distances** 

| Design          | Design ADT                 | Fill Slopes    |             |            | Cut slopes |            |                   |
|-----------------|----------------------------|----------------|-------------|------------|------------|------------|-------------------|
| Speed<br>(km/h) |                            | 6:1 or flatter | 5:1 to 4:1  | 3:1        | 3:1        | 5:1 to 4:1 | 6:1 or<br>flatter |
|                 | Under 750                  | 2.0 - 3.0      | 2.0 - 3.0   | See note 1 | 2.0 - 3.0  | 2.0 - 3.0  | 2.0 - 3.0         |
|                 | 750 – 1,500                | 3.0 - 3.5      | 3.5 – 4.5   |            | 3.0 - 3.5  | 3.0 - 3.5  | 3.0 - 3.5         |
| ≤ 60            | 1,500 - 6,000              | 3.5 – 4.5      | 4.5 – 5.0   | "          | 3.5 - 4.5  | 3.5 - 4.5  | 3.5 - 4.5         |
|                 | > 6,000                    | 4.5 - 5.0      | 5.0 - 5.5   | U          | 4.5 - 5.0  | 4.5 - 5.0  | 4.5 - 5.0         |
|                 | Under 750                  | 3.0 - 3.5      | 3.5 - 4.5   | н          | 2.5 - 3.0  | 2.5 - 3.0  | 3.0 - 3.5         |
|                 | <b>7</b> 50 – <b>1,500</b> | 4.5 - 5.0      | 5.0 - 6.0   | u.         | 3.0 - 3.5  | 3.5 – 4.5  | 4.5 - 5.0         |
| 70 – 80         | 1,500 - 6,000              | 5.0 - 5.5      | 6.0 - 8.0   | п          | 3.5 - 4.5  | 4.5 - 5.0  | 5.0 - 5.5         |
|                 | > 6,000                    | 6.0 - 6.5      | 7.5 - 8.5   | μ          | 4.5 - 5.0  | 5.5 – 6.0  | 6.0 - 6.5         |
| 90              | Under 750                  | 3.5 - 4.5      | 4.5 - 5.5   | "          | 2.5 - 3.0  | 3.0 - 3.5  | 3.0 - 3.5         |
|                 | 750 – 1,500                | 5.0 - 5.5      | 6.0 - 7.5   | 'n         | 3.0 - 3.5  | 4.5 - 5.0  | 4.5 - 5.0         |
|                 | 1,500 - 6,000              | 6.0 - 6.5      | 7.5 – 9.0   | u          | 4.5 - 5.0  | 5.5 - 6.5  | 5.0 - 5.5         |
|                 | > 6,000                    | 6.5 - 7.5      | 8.0 - 10.0  |            | 5.0 - 5.5  | 6.0 - 6.5  | 6.0 - 6.5         |
|                 | Under 750                  | 5.0 - 5.5      | 6.0 - 7.5   | н          | 3.0 - 3.5  | 3.5 – 4.5  | 3.0 - 3.5         |
| 100             | 750 – 1,500                | 6.0 - 7.5      | 8.0 - 10.0  | п          | 3.5 - 4.5  | 5.0 - 5.5  | 5.0 - 5.5         |
| 100             | 1,500 - 6,000              | 8.0 - 9.0      | 10.0 - 12.0 | п          | 4.5 - 5.5  | 5.5 - 6.5  | 6.0 - 6.5         |
|                 | > 6,000                    | 9.0 - 10.0     | 11.0 - 13.5 | u,         | 6.0 - 6.5  | 7.5 – 8.0  | 8.0 - 8.5         |
| ≥ 110           | Under 750                  | 5.5 - 6.0      | 6.0 - 8.0   | u          | 3.0 - 3.5  | 4.5 - 5.0  | 4.5 - 5.0         |
|                 | 750 - 1,500                | 7.5 - 8.0      | 8.5 - 11.0  |            | 3.5 - 5.0  | 5.5 - 6.0  | 6.0 - 6.5         |
|                 | 1,500 - 6,000              | 8.5 - 10.0     | 10.5 - 13.0 | n          | 5.0 - 6.0  | 6.5 - 7.0  | 8.0 - 8.5         |
|                 | > 6,000                    | 9.0 - 10.5     | 11.5 - 14.5 | п          | 6.5 - 7.5  | 8.0 - 9.0  | 8.5 – 9.0         |

# Table 7.3.1: Clear Zone Distances (m)

Notes:

 Since recovery is less likely on the unshielded, traversable 3:1 slopes, fixed objects should not be present near the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of slope (see Section 7.3.4.2 for more information).

2. For low volume roads, it may not be practical to apply even the minimum values found in this table. Refer to Section 7.8.

**3.** For higher design speeds than those shown above, or where investigation reveals a high probability of continuing crashes, it may be necessary to use higher clear zone values.

# **Appendix B**



RC SPENCER ASSOCIATES INC. Consulting Engineers

> 3 May 2021 File No. 20-1000

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

Attention: Mr. Tim Del Greco, P.Eng. Manager of Engineering

## Re: Road 2 East Reconstruction – Phase 1 Tender Results

Dear Tim:

Tenders for the Road 2 East Reconstruction (Phase 1) were received on 30 April 2021. The results are listed below in ascending order:

| Cont | ractor                             | <u>Bid</u> (including H.S.T.) |
|------|------------------------------------|-------------------------------|
| 1.   | J&J Lepera Infrastructures         | \$ 6,582,250.00               |
| 2.   | D'Amore Construction (2000) Ltd.   | \$ 6,694,435.27               |
| 3.   | Nevan Construction Inc.            | \$ 7,001,762.50               |
| 4.   | Major Construction (2010) Ltd.     | \$ 7,088,407.18               |
| 5.   | Sterling Ridge Infrastructure Inc. | \$ 7,371,344.82               |
| 6.   | SheaRock Construction Group Inc.   | \$ 7,845,765.15               |
| 7.   | Amico Infrastructures Inc.         | \$ 8,846,623.10               |
|      |                                    |                               |

We have checked the Tender submissions and determined that there were no mathematical errors made.

It is our recommendation that we obtain written confirmation from J&J Lepera Infrastructures Inc. that they will dedicate all of the key staff outlined in "Statement B" of their Tender submission and complete the work in accordance with the construction timelines set out in the Tender documents, as time is of the essence on this project.

Windsor: 800 University Ave. W. – Windsor, ON N9A 5R9 Leamington: 18 Talbot St. W. – Leamington, ON N8H 1M4 Chatham-Kent: 49 Raleigh St. – Chatham, ON N7M 2M6



We therefore recommend that the Town accept the low tender submitted by J&J Lepera Infrastructures Inc., in the amount of **\$5,825,000.00** plus \$757,250.00 (13% HST), for a total of \$6,582,250.00.

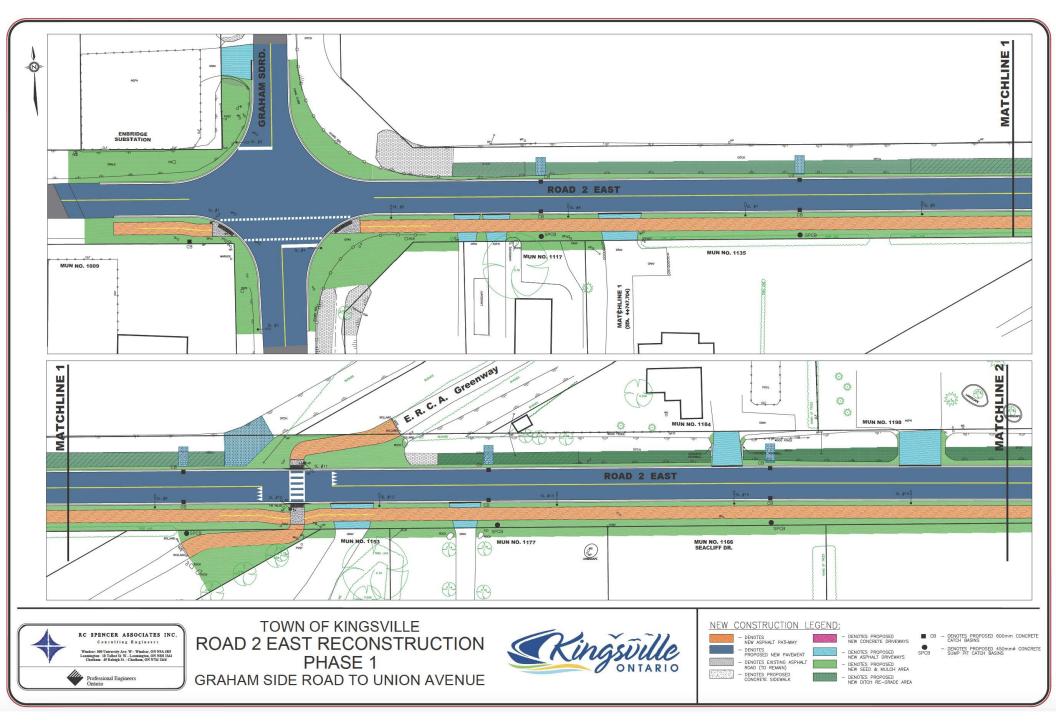
Please note that this total contract amount falls within our estimated construction budget of \$ 5,910,000.00 plus HST previously submitted in September 2020.

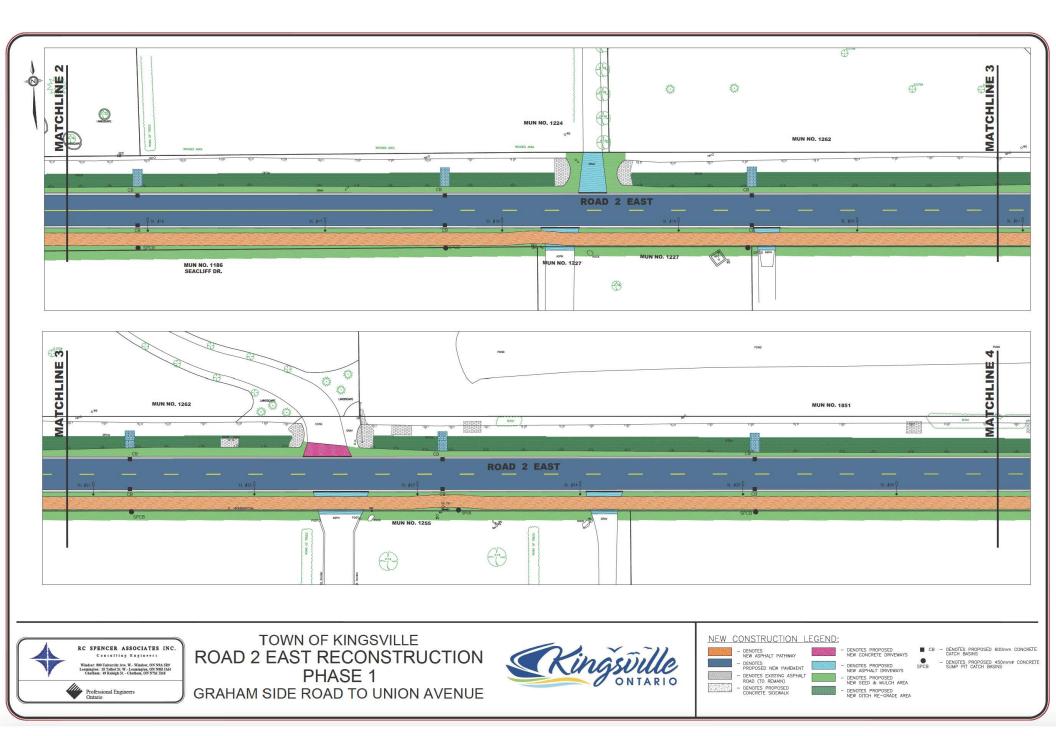
Yours Truly C Spencer/Associates Inc. Richard C. Spencer, M.A.Sc., P.Eng. President

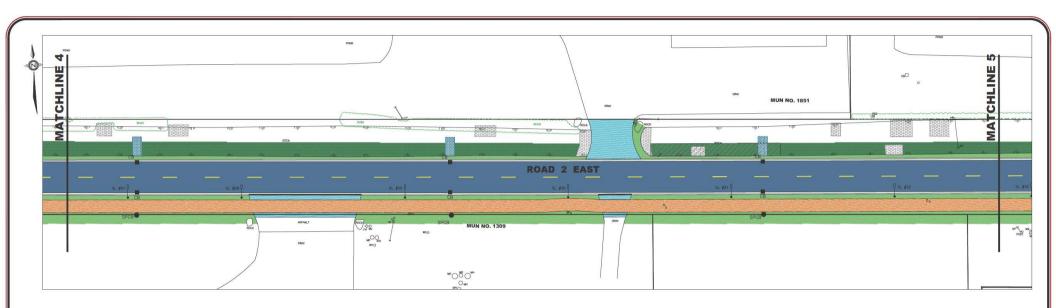
cc: Andrew Plancke

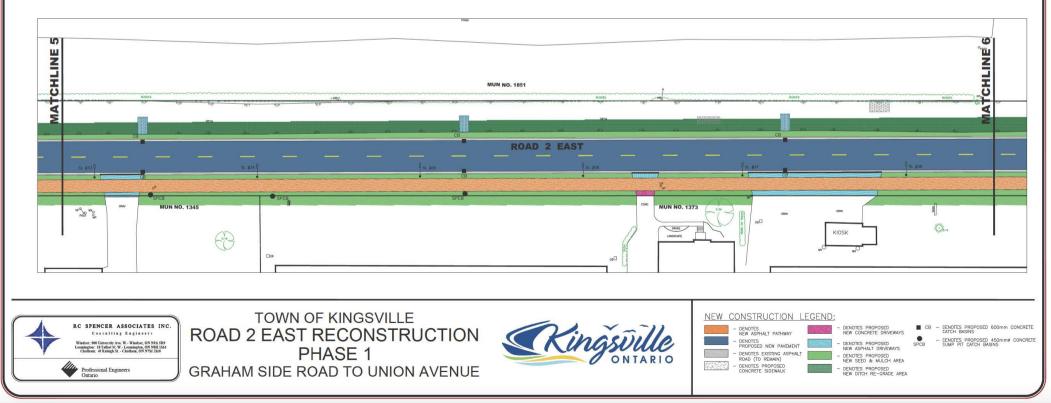
# TOWN OF KINGSVILLE ROAD 2 EAST RECONSTRUCTION PHASE 1

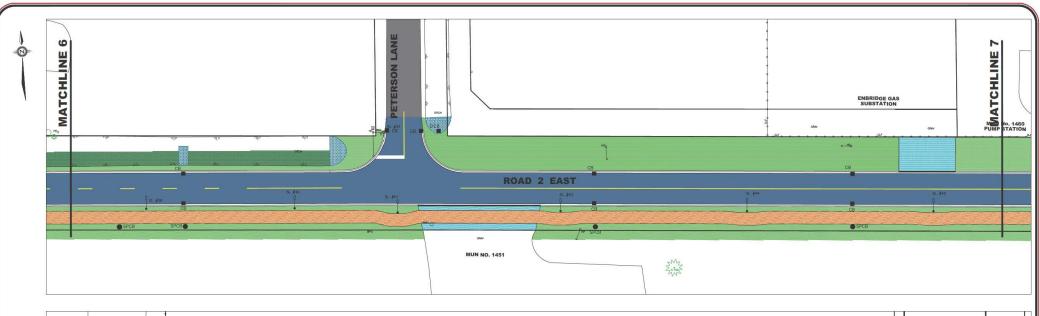




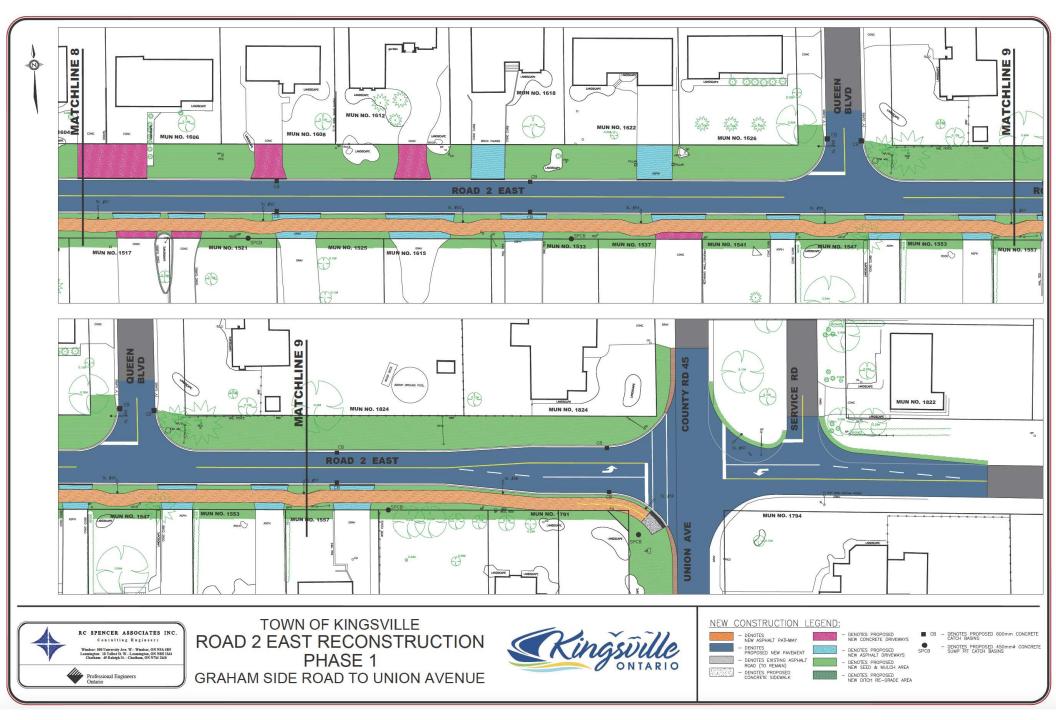












# Appendix D

# Tim Del Greco

From: Sent: To: Subject: Chris Hamm April 25, 2021 8:52 PM Tim Del Greco RE: 1345 Road 2 East

Hi Tim

Thanks for the email.

I think I have more questions now.

So what is the dollar amount and distance in KM for this project? What is Kingsville Debt at? Are we running a surplus?

I think that bike lanes for road 2 is a bad idea. Move the bike lanes to Seacliff or road 20 or 18 what ever you call it now or 3rd con.or the best is use the Green Way. What really should happen is that both lanes needs to have paved shoulders on Road 2. You know how many times you see a car with it's 4 ways pulled over and talking on the phone. Basically blocking half the road since there is essentially no shoulder. This is really a safety hazard. If there was a shoulder bikes could use it also. No need for the multi-use pathways.

Use the Green Way instead of the multi-use pathway, that you want to build. That is why it was put there.

I think Additional street lights for this street is not a wise use of tax payers money. I don't want the light pollution or pay for the lighting. That is why I am in the country. Maybe put them on the Green Way.

I have to disagree with the active transportation facilities plans.Change the current safety design standards for the curb. Bad idea. Go back to the drawing board I know there was other options.

As for the culvert if you are removing it I think it would be fair for the town to reimburse the money I spent on it.

I am against the project as it is right now. I Also don't like 1.2 meter grass buffer. So who is going to mow it?

I am sure you guys will force it though. If you do I want my drive driveway to be a min. of 45 to 50' wide with no curb..Please

This project is very disappointing to me living on this Road. Do we need road 2 repaved and wider with paved shoulders yes. But that is all it needs. Like old hwy 3 to Learnington.

I seems that governments love to spend tax payers money and go into debt for it.

Chris H

On 04/23/21, Tim Del Greco <tdelgreco@kingsville.ca> wrote:

Good morning Chris,

Thank you for your email. I can provide you with some brief answers.

- The majority of cost for reconstruction of Road 2 East is to be funded by collected development charges. Approximately 75% of the project will be funded by development charges with the remaining 25% funded by taxation. I can't tell you if this will result in an increase in your taxes as tax rates fluctuate every year based on many variables.
- 2. There are 2 street lights proposed in front of your property, one west of your driveway and the other near the east property line. There are a number of new street lights proposed down Road 2 East. The installation of an urbanized road with an active transportation pathway results in increased lighting in accordance with current roadway lighting safety design standards. That said, we will use light fixtures that minimize the amount of light directed onto private property.
- 3. Yes, it will be removed. It will not be needed as there will be a significant improvement to drainage.

Hopefully I have answered your questions.

Thanks

Tim

From: Chris Hamm Sent: April 22, 2021 10:14 PM To: Tim Del Greco <tdelgreco@kingsville.ca> Subject: 1345 Road 2 East

Hi Tim

Couple of questions I would like you to answer.

Am I going to be paying more in Taxes because of this? If so how much? Stop raising the taxes every year and please be responsible!

Where are the lights going to be? I did not see them on the plan or did I miss them? I Don't want any by my place please.

What is happening with the culvert drain over the driveway that I was force to install when I built the house? Are you removing it?

Chris Hamm



| Date:       | May 10, 2021   |
|-------------|--|
| То:         | Mayor and Council  |
| Author:     | Dan Wolicki, Manager of Municipal Facilities and Properties  |
| RE:         | New Playground Equipment – Cottam Rotary Park & Ruthven Park |
| Report No.: | CDS 2021-4   |

# **RECOMMENDED ACTION**

- That Council approve the proposal submitted by New World Park Solutions in the amount of, \$54,665.92 (excluding HST) for the supply and installation of playground equipment at Cottam Rotary Park;
- And that, Council approve the proposal submitted by New World Park Solutions in the amount of \$75,820.24 (excluding HST) for the supply and installation of playground equipment at Ruthven Park.

### BACKGROUND

Cottam Rotary Park is an existing active parkland located on County Road 34 West in Cottam between Lot 183 and Lot 165. The equipment at this location is aged and no longer compliant with the current standards regarding children's playspaces and equipment safety. In 2021, \$65,000 was allocated in the capital budget (PARKS-2021-8) for the supply and installation of new playground equipment at this location.

Ruthven Park is a new park development located at 1833 Queen's Valley Drive in Ruthven. Lot 131 of the residential development within the Queen's Valley subdivision had been identified as dedicated parkland space. In addition, the adjacent parcel Lot 23, had also been secured by the Town to expand the footprint of the dedicated parkland space to allow for further recreational amenities given that this will become the first active parkland within the community of Ruthven.

The Parks, Recreation, Arts and Culture Masterplan recognizes a provision target for additional children's play facilities within urban areas where crossings of major barriers such as railways, waterways, or county highways, that obstruct access to parks. As a result, a playground is recommended in Ruthven to address service gaps reflective of infrastructure barriers within the community.

In 2021, \$125,000 was allocated in the capital budget (PARKS-2021-5) towards the Phase 1 development of Ruthven Park and \$80,000 of this budget will be utilized towards the supply and installation of new playground equipment.

# DISCUSSION

In February of 2021, a request for playground proposals were advertised respectively for Cottam Rotary Park (PR-2021-01) and Ruthven Park (PR-2021-03). As a result, several contractors submitted pricing for various designs. The following criteria was used to evaluate each design:

- Equipment safety features
- Number of accessibility features
- Number of play features
- Overall cost
- Types of material used
- Future maintenance requirements and concerns
- Overall appeal (cosmetics)

In addition, the design proposals were distributed to local residents surrounding each of the parkland areas requesting for their feedback and preferred selection among the various designs.

Upon reviewing the above criteria and survey results, it was decided to proceed with the proposals most favored by the local residents in each respective area. The proposal can be viewed in Appendix A (Cottam Rotary Park) and Appendix B (Ruthven Park). An additional bay for a swing-along swing has been incorporated into the overall design of the play structure at Ruthven Park

The proposal was also circulated to the Parks, Recreation, Arts and Culture Committee as well as the Kingsville Accessibility Advisory Committee for review and feedback. Positive remarks were provided from both committees and generally support the proposed designs.

The proposal complies with CSA Standard Z614-14 (Children's playspaces and equipment safety standard) which also includes Annex H of this standard (Children's playspaces and equipment that are accessible to persons with disabilities). It is also in compliance with the Ontario Integrated Accessibility Standards Regulation (AODA).

# LINK TO STRATEGIC PLAN

Improve recreational and cultural facilities and opportunities within the Town of Kingsville.

# Link to Council 2021-2022 Priorities

☑ Programming Increase: Youth and Seniors

### FINANCIAL CONSIDERATIONS

Pending approval of this report, \$54,665.92 (excluding HST) will be awarded to New World Park Solutions for the installation of playground equipment at Cottam Rotary Park. The budget for this location is \$65,000.

In addition, \$75,820.24 (excluding HST) will also be awarded to New World Park Solutions for the installation of equipment at Ruthven Park. \$125,000 had been approved in the 2021 Captial Budget for the new park development in Ruthven. The remainder of this budget will be utilized towards the procurement of additional amenities as part of the phase 1 development of the park including park furniture, a paved pathway and fencing.

# CONSULTATIONS

Kingsville Senior Management Team Kingsville Accessibility Committee PRAC Committee Residents of Kingsville

Dan Wolíckí

Dan Wolicki Manager of Municipal Facilities and Properties

# Appendix A



# **COTTAM ROTARY PARK**



# **COTTAM ROTARY PARK**

# Appendix B



# **RUTHVEN PARK**



# **RUTHVEN PARK**



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

| Date:       | April 29, 2021                                    |
|-------------|---|
| То:         | Mayor and Council                                 |
| Author:     | Ken Vegh, CRS                                     |
| RE:         | Fleming Wigle Drain Improvements (Section 78 (1)) |
| Report No.: | IED 2021-24                                       |
|             |   |

# **RECOMMENDED ACTION**

That Council appoint N.J Peralta Engineering to design a drain enclosure for the Mucci Farms development adjacent to the Fleming Wigle Drain

# BACKGROUND

A request for drain improvements through Section 78 (1) of the Ontario Drainage Act has been submitted by Mr. Bert Mucci from Mucci Farms. A greenhouse operation is currently under construction, and to satisfy construction concerns, the current landowner has requested to enclose a section of the Fleming Wigle Drain.

### DISCUSSION

The proposed drain enclosure will need to go through the standard approval process by the necessary agencies. This includes consideration by the Town of Kingsville Planning Department as well as the Department of Infrastructure and Engineering Services.

Mucci Farms has requested N.J. Peralta to design the requested drain enclosure. The entire costs of the design and installation of the enclosure will be borne by Mucci Farms.

The process of the Drainage Act will be followed and the required public meetings will be held at the appropriate time.

### LINK TO STRATEGIC PLAN

To become a leader in sustainable infrastructure renewal and development.

### Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- □ Customer Service: Training, Technology, Staff, Review Standards/Level of service
- □ Housing: Affordability (lot sizes, developer incentives, second dwellings, density,
- etc.)
- □ Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- □ A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- □ Economic Development: strengthen tourism/hospitality
- □ COVID economic recovery

□ Communications: Strategy – Policy (social media), Website refresh and other tools, Public engagement

□ Housing: Migrant Worker Housing – Inspections (Building/Fire), regulate, reduce, or increase

- $\hfill\square$  Committees / Boards: Review and Report
- Policy Update: Procedural Bylaw
- $\boxtimes\,$  Economic Development: diversify the economy, create local jobs, industrial, Cottam
- □ Infrastructure (non-Municipal): Union Water expansion & governance
- ☑ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit
- $\hfill\square$  No direct link to Council priorities

# FINANCIAL CONSIDERATIONS

The cost for the design and installation of the requested drain enclosure will be borne by the current landowners and future maintenance will be determined by the engineer.

# CONSULTATIONS

Infrastructure and Engineering Services Department – Internal Review Planning Department – Internal Review N.J. Peralta Engineering

<u>Ken Vegh</u> Ken Vegh, CRS Drainage Superintendent

Shaun Martínho

Shaun Martinho, H.B. Sc., MBA Manager of Public Works and Environmental Services

<u>G.A. Plancke</u>

G.A. Plancke, Civil Eng. Tech (Env) Director of Infrastructure and Engineering



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

| Date:       | May 5, 2021  |
|-------------|--|
| То:         | Mayor and Council  |
| Author:     | Shaun Martinho, Manager of Public Works and Environmental Services |
| RE:         | Public Works Support for Enhancements in the BIA District          |
| Report No.: | IED 2021- 25   |

# **RECOMMENDED ACTION**

That Council approves allotting up to a maximum of 350 person-hours per annum in the Public Works Department to support enhanced beautification and streetscape works in the BIA district.

### BACKGROUND

As stated by the Ministry of Municipal Affairs and Housing, one of the primary functions of a Business Improvement Area ("BIA") 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. Their primary purpose is to provide enhancements in a business area to create a more pleasant atmosphere for local businesses and neighbouring residential areas.

The Town works to foster a strong partnership with the BIA to help achieve the common goal of creating a vibrant and robust business community. For this reason, the Town provides both financial and technical resource assistance in support of BIA beautification initiatives. This includes enhanced weed spraying and removal, maintaining street furniture and fixtures, winter decorating, and various other works.

It is recognized that some, but not all, of the beautification works and purchases made by the BIA would have to be made by the Town if the BIA ceased to exist. This provides a benefit to the Town and all the residents of Kingsville. The Town is grateful for the BIA's efforts.

Over the last several years administration has noticed a rise in the number of requests from the BIA for in-kind labour from public works. For example, assistance was requested to support an additional autumn mum flower planting, installing new hanging

basket supports, and replacing the decorative banners on downtown light standards. Most recently, the Town received a request for additional labour in support of improved holiday décor, including:

- Unlit Garland and bow installations at the four main intersections along Main St.
- Set-up and takedown of large ornaments and decorative statues at the clock garden at 1 Main St.
- Letters that spell JOY at the intersections of Main St & Division St and Heritage Rd & Main St W.

# DISCUSSION

There are several things administration and Council need to consider when receiving these requests.

# Staffing Levels

Staffing levels in the Public Works Department have not changed since amalgamation in 1999. Since staffing resources are limited, committing staff to one initiative will detract from another. Therefore, when adding or improving services, it is essential to consider existing operations. Committing staff resources to specific user groups and organizations dilutes the level of service received by the average ratepayer. The core function of the Public Works Department is the maintenance of publicly owned infrastructure. Administration recognizes the benefit of having a beautified downtown, but it is important to ensure that Kingsville residents have a sustainable well-maintained road network.

# Asset Management

Committing staff for beautification works means they are not maintaining municipal infrastructure. Kingsville has an extensive road network, and redeploying staff may not immediately impact infrastructure conditions. However, insufficient maintenance typically leads to underperforming assets that cause increased risks, potential service disruptions, and premature failure of the asset. Proactive maintenance helps assets, such as roads, reach their full-service life potential. Regular maintenance will extend the life of an asset, reducing the average annual capital investment costs required to replace it in the future.

# Legislative Requirements

*O. Reg. 366/18: Minimum Maintenance Standards for Municipal Highways* (MMS) provides municipalities with a defense against liability from actions concerning the level of care provided on roads and bridges. It outlines prescribed activities and response times for routine patrolling, snow removal, sidewalk maintenance, road maintenance, and sign inspections. To use this defense in court, the Town must show that it met the standards defined by the regulation through documentation. As such, other services must not impede the department's ability to meet these requirements. Given the finite

amount of human resources in Pubic Works, careful consideration must be given before expanding services in other areas.

# **Other Commitments**

Public Works also supports several other user groups, community programs, and local events. This includes, but is not limited to, the Veteran Banner program, Open Streets, the Highland Games, Folk Fest, and numerous other SERT-approved special events. A significant amount of staff time is devoted to setting up barricades and installing signage for these events. Expanding a service in one specific area may hinder the department's ability to support future SERT applications.

Given current resource constraints and the competing demands placed on the Public Works Department, administration set out to define a base level of service the Town can provide in support of BIA programs and projects. Developing a clear and concise plan will help determine the roles of each of the parties, improve lines of communication, and help set expectations. As such, it is recommended that a set limit of person-hours be made available each year to the BIA to support enhanced beautification works within the business district.

# LINK TO STRATEGIC PLAN

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

Support growth of the business community.

Effectively manage corporate resources and maximize performance in day-to-day operations.

# Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- ☑ Customer Service: Training, Technology, Staff, Review Standards/Level of service

□ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)

- □ Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- □ A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- Economic Development: strengthen tourism/hospitality
- □ COVID economic recovery

□ Communications: Strategy – Policy (social media), Website refresh and other tools, Public engagement

□ Housing: Migrant Worker Housing – Inspections (Building/Fire), regulate, reduce, or increase

□ Committees / Boards: Review and Report

□ Policy Update: Procedural Bylaw

□ Economic Development: diversify the economy, create local jobs, industrial, Cottam

□ Infrastructure (non-Municipal): Union Water expansion & governance

□ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit

□ No direct link to Council priorities

# FINANCIAL CONSIDERATIONS

Starting in 2019, Infrastructure and Engineering began tracking the number of hours staff devoted to beautification and streetscape initiatives in the BIA district. The following is a breakdown of the time and associated costs:

| Activity                  | 2019          | 2020         |
|---------------------------|---------------|--------------|
| Flower Program            | 141           | 132.5        |
| Garland                   | 32            | 16           |
| Snowflakes                | 105           | 78.5         |
| Painting Street Furniture | 10.5          | 30           |
| Miscellaneous Requests    | 65            | 23           |
| Total Hours               | 353.5         | 280          |
| Staffing Costs            | \$ 14, 638.44 | \$ 11,796.40 |

The totals costs mentioned above do not include contracted services, equipment costs, or administrative expenses. For example, in 2021, the downtown winter cleanup cost an additional \$9384.81 in contracted services. Furthermore, according to the Ministry of Transportation, the recommended billable rate for the Towns truck-mounted aerial device is \$144.70 per hour. Using this rate, equipment costs to install the snowflakes in 2020 would have been \$9003.95. Considering all ancillary costs, based on the services provided in the table, in 2020, the BIA received over \$35,000.00 in in-kind services from the Town. Given that the BIA's total expenses in 2020 were \$150,731.00, these programs would require almost 25% of their budget if these services were contracted out.

So far in 2021, staff have spent an estimated 77 hours on BIA-related work, including removing the winter greens from the ground planters and installing brackets for the new self-watering hanging flower baskets.

Based on historical practices and current resources, administration proposes a limit of an additional 350 person-hours above the Towns base level of service for beautification works in the BIA district. This would include the time spent administering the flower program, installing garland, decorative snowflakes, painting outdoor furniture, weed removal, banner installations, and other streetscape activities.

In total, this amounts to in-kind labour services of \$14,493.50 in staffing resources. It is suggested that should the BIA require additional servicing above 350 hours, they would

explore other options such a contracted services or volunteers. Alternatively, the BIA could request that Council increase the hours above 350 at which time Administration will be seeking direction from Council on how to provide the additional labour and whether other public works services will be reduced.

# CONSULTATIONS

Kingsville BIA Coordinator Ontario Good Roads Association Legislative Services Department

Respectfully Submitted,

# Shaun Martinho

Shaun Martinho, H.B.Sc., MBA Manager of Public Works and Environmental Services

G.A. Plancke

G.A. Plancke, Civil Eng. Tech (Env.) Director of Infrastructure & Engineering



| Date:       | April 20, 2021                                   |
|-------------|--|
| То:         | Mayor and Council                                |
| Author:     | Ryan McLeod, Director of Financial & IT Services |
| RE:         | BIA Rent Relief                                  |
| Report No.: | FS-2021-10                                       |

# **RECOMMENDED ACTION**

That Council waive the Kingsville BIA's rent from March 1, 2021 through December 31, 2021.

# BACKGROUND

On April 12<sup>th</sup>, Council received the attached letter from the Kingsville BIA requesting rent relief for the balance of 2021. The BIA is requesting this relief so that it can allocate more of its budget toward promotional and marketing efforts for its membership through the pandemic.

### DISCUSSION

The Kingsville BIA currently rents the lower level of the Carnegie Arts & Vistors' Centre, for \$300.82 per month or \$3,609.84 annually. This rent is inclusive of any utilities, janitorial services, and maintenance. The annual cost of these services for the <u>entire building</u> has averaged \$13,000 over the past 3 years. As the BIA currently occupies approximately 40% of the usable space in this building, it is reasonable for their rent, at a minimum, to cover their proportionate share of these operating costs.

That being said, the small businesses in Kingsville's downtown core have been extremely hard hit by pandemic restrictions. Given the BIA's request to redirect these funds towards marketing and promoting their membership, Administration fully supports their request for rent relief for the balance of 2021.

# LINK TO STRATEGIC PLAN

Support growth of the business community.

# Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- □ Customer Service: Training, Technology, Staff, Review Standards/Level of service

□ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)

- □ Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- □ A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- □ Economic Development: strengthen tourism/hospitality
- ⊠ COVID economic recovery

□ Communications: Strategy – Policy (social media), Website refresh and other tools, Public engagement

□ Housing: Migrant Worker Housing – Inspections (Building/Fire), regulate, reduce, or increase

- □ Committees / Boards: Review and Report
- □ Policy Update: Procedural Bylaw
- □ Economic Development: diversify the economy, create local jobs, industrial, Cottam
- □ Infrastructure (non-Municipal): Union Water expansion & governance
- □ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit
- □ No direct link to Council priorities

# FINANCIAL CONSIDERATIONS

The lost rental revenue for the period from March  $1^{st}$  – December 31, 2021 equates to \$3,008.20. At this point in time, Administration is confident the lost revenue can be absorbed through savings on other line items in the 2021 operating budget.

# CONSULTATIONS

Senior Management Team

Ryan McLeod Ryan McLeod, CPA, CA Director of Financial & IT Services



Carnegie Arts & Visitor Centre 28 Division Street South Kingsville, ON N9Y 1P3

 Phone:
 519-733-6250

 Fax:
 519-733-9963

 Toll free:
 844-554-5464

kingsvillebia@bellnet.ca www.kingsvillebia.com

March 10, 2021

Dear Members of Council

I am writing today on behalf of the Kingsville BIA Board of Managers and our membership to respectfully request if there may be an opportunity for the Kingsville BIA to receive rent relief for the office space at the Carnegie building for the remainder of 2021.

We are extremely grateful for the partnership and lease agreement in place where we value the very fair rent amount applied. However, we are finding ourselves in greater need to invest in more promotion and marketing efforts to aid our membership through the pandemic situation. Our members that have traditionally been in a circumstance where they can donate towards promotional and marketing efforts are not able to do so this year. Moving forward we have planned to do more contest features and promotions to support the local small businesses and the rent relief dollars will support us in doing so.

We genuinely thank you in advance for your consideration and look forward to our continued working relationship as partners.

Respectfully,

Christina Bedal

Christina Bedal BIA Coordinator

CC: KINGSVILLE TOWN COUNCIL CC: MAYOR NELSON SANTOS CC: JOHN NORTON CC: BIA BOARD MEMBERS



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

| Date:       | April 29, 2021   |
|-------------|--|
| То:         | Kingsville Town Council  |
| Author:     | Nelson Santos, Mayor & Chair of Kingsville PSB   |
| RE:         | Community Safety & Policing Act, 2019 (CPSA):<br>OPP Detachment Board Framework and Proposal |
| Report No.: | PS-2021-01   |

# **RECOMMENDED ACTION**

That Council receives this report for information, and

FURTHER THAT Council confirms that the Municipality of Kingsville wishes to maintain representation on the new detachment board and supports the composition of a single detachment board for Essex County to include representation of OPP policed municipalities of Kingsville, Essex, Lakeshore, Tecumseh, Pelee Island and the Caldwell Nation; and

FURTHER that Council endorses in principle the proposed composition for the new Essex County Detachment Board as provided in this report; and

THAT this resolution and report be circulated to each municipality and current police service board for their information.

### BACKGROUND

As previously provided to Council in initial reports last year, the pending transition from the current Police Services Act (1990) to the Community Safety and Policing Act, 2019 provides for legislative reform on the current Section 10 Police Boards for OPP Serviced Communities.

On March 26, 2019, Ontario passed the Comprehensive Ontario Police Services Act, 2019 (Bill 68) and established the Community Safety and Policing Act, 2019 (CSPA). Once in-force, the CSPA, 2019 will replace the Police Services Act (1990). The Ministry is working to bring the CSPA into force in early 2022.

In the interim, to bring the new Act into force, the Ministry is required to and is developing several regulation matters including specific regulations related to the OPP which include OPP Detachment Boards, an OPP Governance Advisory Council and OPP Billing. The chart below identifies more examples of the new legislative requirements.

# **New Legislative Requirements**

- Section 67 of the CSPA requires there be an OPP detachment board, or more than one OPP detachment board, for each detachment of the OPP that provides policing in a municipality of in a First Nation community.
- Each municipality and First Nation community receiving OPP services will have an opportunity to participate on an OPP detachment board.
- An OPP detachment board will be required to, among other things:
  - Advise the detachment commander with respect to policing provided by the detachment and on the development of the local action plan;
  - Consult with the Commissioner on the selection and monitor the performance of the detachment commander; and
  - Provide an annual report to municipalities and band councils.
- In addition to the training required for all board members under the Act, detachment board members are required to successfully complete training on the role of boards and responsibilities as members prior to exercising their powers.
- Members must abide by a Code of Conduct that will be in regulation.

# DISCUSSION

In keeping with the Ministry's process and intended timelines, they launched the OPP Detachment Board Proposal Process on March 17, 2021.

As outlined in the SolGen framework, it requires municipalities and First Nations within a Detachment to work together to develop and submit one proposal indicating the composition of their board(s) by June 7, 2021, and if requested, their rationale for multiple boards within the same region/detachment area. This proposal must meet the minimum composition requirements as established by the Ministry. (See Page 5)

In consultations with the SolGen, including most recently on April 20, 2021, Ministry representatives confirmed the minimum composition for a new board is 5 members. While they also qualified that there is no maximum size outlined in the new Act, their discussion acknowledged that proposed amalgamated boards that exceed 15 members could prove to be too large. The Ministry representatives confided that this would be a reasonable consideration for requesting or proposing more than one new police board for any area.

# **OPP Detachment Board Composition**

Overview

- Municipalities and First Nations within a detachment will be required to submit a proposal that meets the composition requirements (below), indicating the proposed composition of your board.
- All municipalities and First Nations within the detachment area must agree on the proposal.
- One municipality/First Nation must be designated to submit the proposal.
- The proposal must include a rationale for more than one detachment board (if needed/desired).

| Composition              | Minimum Requirements                   |
|--------------------------|--|
| Minimum size             | Minimum of 5 members                   |
| Maximum size             | No maximum                             |
| Community Representative | 20% community representation (minimum) |
| Provincial Appointments  | 20% provincial appointees              |

As previously provided under a separate report to Council, the Joint Police Services Boards of Essex County engaged Foresight Management Consulting who provided a final report outlining the considerations for the newly proposed Essex County Detachment. The January 2020 report outlined the considerations for the OPP policed communities of Essex, Kingsville, Lakeshore, Leamington, and Tecumseh. It also noted considerations under the CSPA which bring the Township of Pelee and potentially the Caldwell Nation should they opt to participate as a member of this detachment.

Since the initial report, the Municipality of Learnington has served notice that they are pursuing a new policing model and will no longer be policed by the OPP by the time the new act comes into effect. In light of this change, the proposal as outlined under the Foresight report provided the following considerations for the composition of the new detachment board:

- A) There was agreement that every municipality needs a voice and should be represented on the detachment board. This approach could also assist in meeting the CSPA diversity requirements.
- B) Representatives by municipal population: up to 10,000 has one member appointed to the detachment board, and two members to be appointed for municipalities with a population of over 10,000; and 2 provincial representatives (in keeping with the 20 percent provincial requirement).
- C) There was consensus that equal representation by municipality is not the ideal situation. It was proposed that the above form of representation by population be instituted. The group agreed and offers the composition formula as a recommendation to each municipality.

Based on the context above, the recommended composition of the new Essex County Detachment Board (Tecumseh, Lakeshore, Essex, Kingsville, Pelee Island and potentially the Caldwell Nation) include at least one elected and/or community member from each municipality, township or First Nation with a second representative based on population.

| Municipality     | Community<br>Members - | Community Members -<br>Community | Provincial<br>Appointees | Total |
|------------------|------------------------|----------------------------------|--------------------------|-------|
|                  | Elected                | Representative                   |                          |       |
| Caldwell Nation  | 1                      |                                  |                          |       |
| Essex            | 1                      | 1                                |                          |       |
| Kingsville       | 1                      | 1                                | 3                        |       |
| Lakeshore        | 1                      | 1                                | 3                        |       |
| Pelee            | 1                      |                                  |                          |       |
| Tecumseh         | 1                      | 1                                |                          |       |
| Composition with | 6                      | 4                                | 3                        | 13    |
| Caldwell Nation  | 46%                    | 31%                              | 23%                      | 100%  |

| Municipality        | Community<br>Members -<br>Elected | Community Members -<br>Community<br>Representative | Provincial<br>Appointees | Total |
|---------------------|-----------------------------------|--|--------------------------|-------|
| Essex               | 1                                 | 1  |                          |       |
| Kingsville          | 1                                 | 1  |                          |       |
| Lakeshore           | 1                                 | 1  | 2                        |       |
| Pelee               | 1                                 |  |                          |       |
| Tecumseh            | 1                                 | 1  |                          |       |
| Composition without | 5                                 | 4  | 2                        | 11    |
| Caldwell Nation     | 45%                               | 36%  | 19%                      | 100%  |

These scenarios are conditional on each municipality's independent approval and confirmation and as such is subject to change. There was previous discussion and consideration of potentially pursuing a second Detachment Board for Essex County (i.e. North/ South concept). However, given the provincial updates and recent discussions around the new policy, the composition numbers above are under 15 members which the Ministry identifies as a reasonable expectation. Consideration for a second board, in this writer's opinion, would need to identify unique and other challenging circumstances that would provide sufficient warrants for the Province to support.

Finally, it is important to note the proposed composition(s), as presented, are in keeping with the Ministry requirements. These options must be agreed to by all municipalities before submitting the proposal to the Ministry. A regional meeting including each municipal CAO, local OPP PSB Chairs/Board Reps and Mayors, Pelee Township and the Caldwell Nation is planned in the next few weeks to explore these options. The expectation is that each will ultimately provide direction in supporting a final recommendation on the board composition.

# KINGSVILLE ADMINISTRATION COMMENTS

Administration does not think this change in Board governance is a positive step forward and would prefer that Kingsville be able to retain its own police board. If the Ontario Government has already decided to proceed with this change in governance model and is making this change regardless of Kingsville's input, then the proposal for composition of the new amalgamated board is acceptable recognizing that we are losing representation.

It is not controversial to say that Canadian police chiefs and police departments have become less accountable to local politicians over time and that these changes in board governance will hasten that evolution. We do not understand why this is considered a step forward.

In addition, we are concerned about the upcoming renewal of our contract with the OPP and uncertain about what these governance changes mean for the future. Will these changes in governance have a positive or negative effect on costs for Kingsville?

# LINK TO STRATEGIC PLAN

To promote a safe community

# LINK TO COUNCIL 2021-2022 PRIORITIES

☑ COVID-19 and the health and safety of the community

# FINANCIAL CONSIDERATIONS

There are no financial impacts at this time.

Updates on the renewal process around the current policing contract will be provided in late Summer 2021 by the OPP Contract Division. It is anticipated under the new CSPA that individual municipal contracts will be terminated while billing under the new model will continue to individual municipalities based on their local experience and statistics and will operate as a separate function from the proposed Detachment Board.

### CONSULTATIONS

Kingsville Chief Administrative Officer Kingsville Director of Financial & IT Services Kingsville Senior Management Team Kingsville Police Service Board Ministry of Solicitor General OPP Contract Division

# Nelson Santos

Nelson Santos Mayor

# John Norton

John Norton CAO

Finance and Business Services 111 Erie Street North Leamington, ON N8H 2Z9 519-326-5761



April 27, 2021

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

Attn: Jennifer Astrologo, Director of Corporate Services/Clerk

# Re: Dedicated Gas Tax Funds for Public Transportation Program

The Ministry of Transportation advised the Municipality of Learnington that it is eligible to receive funding for the 2020-2021 program year pursuant to the Dedicated Gas Tax Funds for Public Transportation Program.

As you are aware, the Municipality of Learnington currently provides a public transit service that includes service to, and financial contributions from, the Town of Kingsville. The Municipality of Learnington acts as the "host" for the provision of this joint service, as and such, a resolution of the Council for the Town of Kingsville endorsing Learnington's role is required pursuant to the funding agreement.

It is requested that you please arrange for Council of the Town of Kingsville to enact a resolution endorsing the Municipality of Learnington to act in that capacity on their behalf and that a certified copy of that resolution be provided to the Municipality of Learnington to be returned with the Letter of Agreement to the Ministry of Transportation.

Please do not hesitate to contact me should you have any questions or require anything further.

Yours truly,

Laura Rauch, CPA, CMA Director of Finance and Business Services Treasurer

/lr



# Report

To: Mayor and Members of Council
From: Laura Rauch, Director of Finance and Business Services
Date: March 25, 2021
Re: 2021 Ontario Gas Tax Program

# **Recommendation:**

It is recommended that:

- 1. The Municipality of Learnington accepts any designation of host municipality by collecting the Dedicated Gas Tax Funds for Public Transportation Program funds on behalf of the Municipality of Learnington and the Town of Kingsville.
- The Mayor and Treasurer for the Municipality of Learnington be authorized to execute the Letter of Agreement between Her Majesty the Queen in right of the Province of Ontario, represented by the Minister of Transportation for the Province of Ontario under the Dedicated Gas Tax Funds for Public Transportation Program and the Municipality be bound to the terms of the said agreement. (Report FIN-08-21)

# **Background:**

Funding up to \$231,587 for 2020/21 (\$205,632 for 2019/20) has been approved through the Province of Ontario, under the Dedicated Gas Tax Funds for a Public Transportation Program. This funding is to be used to ensure that local public transportation services continue and to increase overall ridership through the expansion of public transportation capital infrastructure and levels of service. The Ministry of Transportation provides two cents per litre of provincial gas tax as transit funding, which is allocated based on 70% transit ridership (conventional and specialized) and 30% municipal population.

Council has acknowledged the 'Gas Tax Funding' allocation methodology includes statistics from both Learnington's conventional transit system and the specialized transit system delivered by the South Essex Community Council, which is funded by the Municipality of Learnington and the Town of Kingsville. Council has confirmed its commitment to utilizing dedicated gas tax funds for the benefit of both the conventional

transit system and the Erie Shore Community Transit service, which includes service to the Town of Kingsville.

# Comments:

The Province requires that every year the Municipality of Learnington authorize the Letter of Agreement for the Dedicated Gas Tax Funds for Public Transportation Program which sets out the terms and conditions for the use of the dedicated gas tax funds by municipalities for public transportation. The Province requires a by-law and signed agreement from the Municipality prior to sending the funds for the 2020-2021 year.

Dedicated gas tax funds and any related interest must be spent on one or more of the following:

- Public transportation capital expenditures that promote increased transit ridership;
- Public transportation operating expenditures;
- o Capital expenditures for the replacement of any public transportation vehicles;
- Capital expenditures that provide improvements to public transportation security and passenger safety; or
- Expenditures for major refurbishment on any fully accessible, or to be made fully accessible, public transportation vehicle, with the exception of specialized vehicles used for the transportation of persons with disabilities.
- For municipalities that provide only specialized transit for persons with disabilities, dedicated gas tax funds can be spent on public transit initiatives that may not initially result in ridership growth but will provide increased accessibility.

Following a careful consideration of municipal and transit stakeholder feedback, the Ministry implemented two changes last year that were identified as areas for improvement:

- The baseline spending requirement has been removed. This will allow municipalities with declining ridership/expenditures and declining fare revenues to use their Gas Tax funding where they were previously unable to do so.
- Municipalities are now permitted to submit a scanned copy of the municipal by-law instead of a certified copy. This will expedite the flow of funding and will reduce the administrative burden to municipalities.

# Financial Impact:

Up to \$231,587 in Ontario Dedicated Gas Tax funding will be available to support conventional transit in Learnington and specialized transit in Learnington and Kingsville. These funds are dedicated and set aside in a reserve fund (40-3-0240-0334-000240), along with any related interest earned on the fund, and are used for eligible transit related costs allowed under the funding agreement.

In the 2021 budget, \$466,000 in Ontario dedicated gas tax funding has been earmarked for capital projects such as bus stop improvements, signage and a portion of the funding for the two new bus purchases. Approximately \$192,000 is budgeted to support expenditures for transit operations. It is anticipated that approximately \$640,000 will remain in the reserve fund at the end of 2021.

Respectfully submitted,

Laura Rauch, CPA, CMA Director of Finance and Business Services

Attachments: none

T:\Finance\90 - Reports\2021\FIN-08-21 Ontario Gas Tax Program.docx

# Stephanie Olewski

Subject:

RE: 49 Division

From: Sarah Sacheli Sent: Friday, April 9, 2021 9:37 AM To: Sandy Kitchen <<u>SKitchen@kingsville.ca</u>> Subject: Re: 49 Division

April 9, 2021

To Mr. Robert Brown and Members of Council,

At its March 17 meeting, the Kingsville Municipal Heritage Advisory Committee discussed as requested the rezoning application and development proposal respecting the lots located at 45 and 49 Division Street North. 49 Division Street North is not a property designated under the Ontario Heritage Act, but is on the Kingsville's Register of Property of Cultural Heritage Value or Interest. 45 Division Street North is not on the Register.

The committee reviewed the chain of ownership for 49 Division Street North and historical references to the building and its owners. Those documents were circulated to committee members in the agenda for the March 17 meeting.

After discussion, the committee recommends Council instruct the Clerk of the municipality to remove 49 Division Street North from the Register of Property of Cultural Heritage Value or Interest.

Respectfully,

Sarah Sacheli

Chair, Kingsville Municipal Heritage Advisory Committee



#### **SPECIAL MEETING OF COUNCIL**

# MINUTES

# Monday, April 19, 2021 6:00 PM Council Chambers 2021 Division Road N Kingsville, Ontario N9Y 2Y9

| Members of Council | Mayor Nelson Santos        |
|--------------------|----------------------------|
|                    | Deputy Mayor Gord Queen    |
|                    | Councillor Tony Gaffan     |
|                    | Councillor Thomas Neufeld  |
|                    | Councillor Larry Patterson |
|                    | Councillor Kimberly DeYong |
|                    | Councillor Laura Lucier    |
|                    | Councillor Kimberly DeYong |

Members of J. Astrologo, Director of Legislative Services/Solicitor/Clerk Administration S. Kitchen, Deputy Clerk-Council Services

- R. McLeod, Director of Financial & IT Services
- A. Plancke, Director of Infrastructure & Engineering
- R. Baines, Deputy Clerk Administrative Services
- J. Norton, CAO
- J. Quennell, Fire Chief

# A. CALL TO ORDER

Mayor Santos, in attendance in the Council Chambers, called the Special Meeting to order at 6:00 p.m. All other members of Council participated in the meeting through video conferencing technology from remote locations.

### B. 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.

# C. STAFF REPORTS

# 1. Procedure By-law Review

J. Astrologo, Director of Legislative Services

Ms. Astrologo presented the PowerPoint presentation entitled 'Procedure By-law Proposed Amendments' dated April 19, 2021, noting that the procedure by-law was last reviewed in 2016. The proposed changes were reviewed in detail, commencing with proposed changes to the procedure by-law to allow for voting through the eSCRIBE agenda software voting module.

# 271-2021

Moved by Councillor Kimberly DeYong Seconded by Councillor Laura Lucier

That Council approves the necessary changes in the Procedural By-law to allow for voting through the eSCRIBE voting system.

# CARRIED

# 272-2021

Moved by Deputy Mayor Gord Queen Seconded by Councillor Thomas Neufeld

That Council directs that the proposed revision to "allow the Clerk to refuse the delegation request in limited circumstances with written reasons for the denial supplied to the requester" be deleted.

LOST

# 273-2021

Moved by Deputy Mayor Gord Queen Seconded by Councillor Kimberly DeYong

That Council directs that any reference to a three (3) minute speaking time limit be deleted.

# CARRIED

### 274-2021

Moved by Councillor Kimberly DeYong Seconded by Deputy Mayor Gord Queen

That Council approves the balance of the proposed changes to the delegations and presentations format.

# CARRIED

### 275-2021

Moved by Councillor Larry Patterson Seconded by Councillor Tony Gaffan

That Council approves the inclusion of a 'Consent Approvals' section in the Procedure By-law.

# CARRIED

#### 276-2021

Moved by Councillor Kimberly DeYong Seconded by Councillor Tony Gaffan

That Council receives the information regarding the Notice of Motion procedure.

### CARRIED

### 277-2021

Moved by Councillor Kimberly DeYong Seconded by Deputy Mayor Gord Queen

That Council directs that a proposed provisions allowing Proxy Voting be brought back for Council review to be included in the procedure by-law.

#### LOST

#### 278-2021

Moved by Councillor Larry Patterson Seconded by Councillor Thomas Neufeld

That council approves the revisions to Electronic Participation in meetings.

CARRIED

# 279-2021

Moved by Deputy Mayor Gord Queen Seconded by Councillor Kimberly DeYong

That Council deletes recommended change to extend curfew on 2/3 vote of Council.

LOST

### 280-2021

Moved by Councillor Tony Gaffan Seconded by Councillor Laura Lucier

That Council approves the change to the voting to extend curfew on 2/3 vote of Council, with provisions to be brought forward for Council review with respect to details pertaining to such time extension.

# CARRIED

### 281-2021

Moved by Councillor Kimberly DeYong Seconded by Councillor Larry Patterson

That Council approves introducing a Land Acknowledgement Statement at the beginning of its Council meetings; And Further That Council appoint one or two Members of Council to work with the Clerk's Department to craft a statement for Council's consideration.

# CARRIED

### 282-2021

Moved by Deputy Mayor Gord Queen Seconded by Councillor Laura Lucier

That Council directs Administration to wait until the conclusion of the Committee Review analysis before changing any procedural rules with respect to committee governance.

CARRIED

# D. CONFIRMATORY BY-LAW

#### 1. By-law 36-2021

#### 283-2021

Moved by Deputy Mayor Gord Queen Seconded by Councillor Larry Patterson

That Council reads By-law 36-2021, being a By-law to confirm the proceedings of the Council of The Corporation of the Town of Kingsville at its April 19, 2021 Special Meeting, a first, second and third and final time.

CARRIED

# E. ADJOURNMENT

### 284-2021

Moved by Councillor Tony Gaffan Seconded by Councillor Thomas Neufeld

That Council adjourns this Special Meeting at 8:11 p.m.

CARRIED

MAYOR, Nelson Santos

CLERK, Jennifer Astrologo



#### **REGULAR MEETING OF COUNCIL**

### MINUTES

# Monday, April 26, 2021 6:00 PM Council Chambers 2021 Division Road N Kingsville, Ontario N9Y 2Y9

| Members of Council | Mayor Nelson Santos        |
|--------------------|----------------------------|
|                    | Deputy Mayor Gord Queen    |
|                    | Councillor Tony Gaffan     |
|                    | Councillor Thomas Neufeld  |
|                    | Councillor Larry Patterson |
|                    | Councillor Kimberly DeYong |
|                    | Councillor Laura Lucier    |
|                    |                            |

Members of Administration J. Astrologo, Director of Legislative Services/Solicitor/Clerk

- R. Brown, Manager of Planning Services
- K. Brcic, Planner
- T. Del Greco, Manager of Engineering
- S. Kitchen, Deputy Clerk-Council Services
- S. Martinho, Manager of Public Works and Environmental
- R. McLeod, Director of Financial & IT Services
- A. Plancke, Director of Infrastructure & Engineering
- R. Baines, Deputy Clerk Administrative Services
- D. Wolicki, Manager of Municipal Facilities and Property
- J. Norton, CAO
- J. Quennell, Fire Chief

### A. CALL TO ORDER

Mayor Santos, in attendance at the Council Chambers, called the Regular Meeting to order at 6:00 p.m. All other members of Council participated in the meeting through video conferencing technology from remote locations.

# B. 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.

# C. 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.

# D. PLAYING OF NATIONAL ANTHEM

# E. PRESENTATIONS/DELEGATIONS

# 1. Erie Shores Health Care and the Erie Shores Health Foundation--Kristin Kennedy, CEO, Erie Shores HealthCare and Christine Colautti, Executive Director, Erie Shores Health Foundation

Ms. Kennedy and Ms. Colautti presented the PowerPoint presentation entitled *Physician Recruitment, Erie Shores HealthCare and Erie Shores Health Foundation, Town Council Meeting,* providing a Hospital Overview and Physician Recruitment Needs, and asked that the Town of Kingsville consider a long-term investment partnership of \$20,000/year over the next fifteen years to support Physician Recruitment and help provide key health care security for the region. Ms. Colautti offered to update Council in the future in regard to further developments and details.

### 285-2021

**Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Laura Lucier

That Council receives the presentation from Erie Shores HealthCare Chief Executive Officer K. Kennedy and Erie Shores Health Foundation Executive Director C. Colautti; And Further That Council requests an update report from the Senior Management Team with recommendations moving forward.

CARRIED

# F. MATTERS SUBJECT TO NOTICE

1. Combined Application for Official Plan Amendment OPA/01/2021 & Zoning By-law Amendment ZBA/01/2021 by 2610349 Ontario Ltd. 45 and 49 Division St. N., Part of Lots 3, 4 & 5 W Watermill St., Plan

R. Brown, Manager of Planning Services

i) (Revised) Notice of Complete Application and Public Meeting: Official Plan Amendment and Zoning By-law Amendment, dated March 26, 2021;

ii) Report of R. Brown, dated April 14, 2021;

iii) Proposed By-law 37-2021, being a By-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville;

iv) Proposed By-law 38-2021, being a By-law to amend the Official Plan of the Town of Kingsville.

Mr. Brown presented his Report dated April 14, 2021 and Appendices thereto, providing Council with details on a requested Official Plan amendment and Zoning By-law Amendment to permit the development of a new professional office building on lands located at 45 and 49 Division Street North, in the Town of Kingsville.

Comments from the Applicant's Agent:

Ms. Jackie Lassaline of Lassaline Planning Consultants Inc. representing the Applicant, stated that she agrees with Mr. Brown's findings as contained in his Report. She referenced and summarized her Planning Rationale Report (PRR, dated February 24, 2021), being Appendix C to Mr. Brown's report.

Comments:

Mr. Larry Harrison, indicated that he had no further comments to add.

A recorded vote was requested.

286-2021 Moved By Councillor Laura Lucier Seconded By Councillor Tony Gaffan

That Council:

Adopts Official Plan Amendment No. 12 (OPA 12) to re-designate lands located at 49 Division St. N., from 'Residential' to 'Central Commercial' in the Town of Kingsville and direct administration to forward the amendment to the County of Essex for final approval; and Approves Zoning By-law amendment application ZBA/10/2021, to implement OPA 12, rezone properties located at 45 and 49 Division St. N., from Residential Zone 1 Urban (R1.1)' and ' General Commercial Zone 4 Exception 4 (C4-4)' to General Commercial Zone 4 Exception 7 (C4-7)' and adopt the implementing bylaw subject to final approval of OPA 12 by the County of Essex.

|                            | For | Against |
|----------------------------|-----|---------|
| Mayor Nelson Santos        | Х   |         |
| Deputy Mayor Gord Queen    |     | Х       |
| Councillor Tony Gaffan     | Х   |         |
| Councillor Thomas Neufeld  | Х   |         |
| Councillor Larry Patterson | Х   |         |
| Councillor Kimberly DeYong | Х   |         |
| Councillor Laura Lucier    | Х   |         |
| Results                    | 6   | 1       |

CARRIED (6 to 1)

## G. AMENDMENTS TO THE AGENDA

Mayor Santos added one announcement.

## H. ADOPTION OF ACCOUNTS

1. Town of Kingsville Accounts for the monthly period ended March 31, 2021 being TD cheque numbers 0075952 to 0076275 for a grand total of \$1,311,099.62.

287-2021 Moved By Deputy Mayor Gord Queen Seconded By Councillor Thomas Neufeld

That Council receives Town of Kingsville Accounts for the monthly period ended March 31, 2021 being TD cheque numbers 0075952 to 0076275 for a grand total of \$1,311,099.62.

CARRIED

#### I. STAFF REPORTS

1.

#### 2020/2021 Fire Safety Grant

J. Quennell, Fire Chief

288-2021 Moved By Deputy Mayor Gord Queen Seconded By Councillor Larry Patterson

That Council approves the Fire Safety Grant Application as written and authorizes submission of the Application to the Office of the Fire Marshal for final approval.

## CARRIED

## 2. Jasperson Drive Reconstruction – Phase 3 - Peachwood Drive to Main Street East

T. Del Greco, Manager of Engineering

## 289-2021 Moved By Councillor Thomas Neufeld

Seconded By Councillor Kimberly DeYong

That Council awards the Jasperson Drive Phase 3 reconstruction tender to J&J Lepera Infrastructures in the amount of \$1,312,000 (excluding HST) with an amendment that the sidewalk be constructed back of curb and 1.8 metres wide, and authorizes the Mayor and Clerk to execute the requisite agreement.

CARRIED

## Application for Site Plan Approval SPA/09/2021 by Auto Supply 2013 Division Rd N, Plan 1198, Part 1, RP 12R 1009

Queens Part Lot 8,

R. Brown, Manager of Planning Services

## **290-2021 Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Larry Patterson

That Council:

Approves site plan application SPA/09/2021 for the development of a new 18.29 m (60 ft.)  $\times$  30.48 m (100 ft.) 557.48 sq. m (6,000 sq. ft.) two-storey preengineered building, subject to the conditions and requirements outlined in the site plan agreement and authorize the Mayor and Clerk to sign the agreement and register said agreement on title.

CARRIED

## 4. Application for Site Plan Approval by Greater Essex County District School Board 1620 Jasperson Dr., Part of Lot 3, Concession 1 ED, Parts 1 & 2, RP 12R 27276

R. Brown, Manager of Planning Services

291-2021 Moved By Councillor Larry Patterson Seconded By Deputy Mayor Gord Queen

That Council:

Approves site plan application SPA/20/2020 for the construction of a 12,818 sq, m (138,000 sq. ft.) elementary/secondary school and associated support facilities, parking, drop-off/pick-up areas and bus lanes on lands located at 1620 Jasperson Drive in the Town of Kingsville, subject to the conditions and requirements outlined in the site plan and associated site plan agreement and authorize the Mayor and Clerk to sign the agreement and register said agreement on title.

## CARRIED

Mayor Santos called for a recess at 7:47 p.m., and the meeting reconvened at 7:55 p.m.

5. Application for Site Plan Approval by 2418772 Ontario Inc. 76 Main St E Lot 13 & Pt. Lot 14, Plan 184 & 185 Roll No. 3711 150 000 03500 K. Brcic, Town Planner

**292-2021 Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Laura Lucier

That Council approves Site Plan Application SPA/07/21 for the construction of a new covered patio addition to the front of the existing building at 76 Main St. E., subject to the conditions and requirements outlined in the Site Plan Agreement and authorizes the Mayor and Clerk to sign the Agreement and register said Agreement on title; And Further That Council directs that the Senior Administration Team arrive at a dollar figure amount for the 'cash in lieu' pertaining to the 4 parking spaces referenced in Report of Planner Brcic.

## CARRIED

#### 6. Kingsvilleworks Service Request Summary 1st Quarter 2021

G. A. Plancke, Director of Infrastructure and Engineering

**293-2021 Moved By** Councillor Thomas Neufeld **Seconded By** Councillor Tony Gaffan

That Council receives the Report of G. A. Plancke, Director of Infrastructure and Engineering RE: KingsvilleWorks Service Requests.

## CARRIED

On a go-forward the KingsvilleWorks Service Request report will be provided quarterly, with additional information about the status of the service requests (i.e. which requests remain open / outstanding; which are closed, etc.)

#### 7. Conveyance of Property on Cedar Creek

R. McLeod, Director of Financial and IT Services

**294-2021 Moved By** Councillor Kimberly DeYong **Seconded By** Councillor Thomas Neufeld

That Council authorize the conveyance of the shoreline portion of a Cedar Creek water lot (PIN 75181-0230) to the abutting property owners for the construction

or rehabilitation of breakwalls; and that the cost to administer the tax sale and any additional 'out of pocket' expenses incurred by the Town in the acquisition or conveyance of the land shall be recovered from the benefiting landowners.

CARRIED

#### J. BUSINESS CORRESPONDENCE-ACTION

## 1. County of Essex--Correspondence dated April 14, 2021 RE: Request from Fire Chief Bruce Krauter RE: Paramedic Recognition Banners

295-2021 Moved By Councillor Laura Lucier Seconded By Councillor Kimberly DeYong

That Council approves request from Essex-Windsor EMS to celebrate Paramedic Services Week (May 23-29, 2021) by hanging temporary banners over the road in Kingsville for 3 weeks (May 16-June 6, 2021) and waive the banner fees.

CARRIED

# 2. Striking Committee Update RE: Appointments for Communities in Bloom Committee

296-2021 Moved By Councillor Larry Patterson Seconded By Councillor Thomas Neufeld

That Council endorses the following appointments and updates the municipal committee appointment by-law for the Communities in Bloom Committee membership as presented to include: Heather Crewe, Tracy Oswald, Karin Sonnenberg, Astrid Tobin.

CARRIED

8

## K. MINUTES OF THE PREVIOUS MEETINGS

1. Regular Meeting of Council--April 12, 2021

## 2. Regular Closed Session Meeting of Council--April 12, 2021

297-2021 Moved By Deputy Mayor Gord Queen Seconded By Councillor Laura Lucier

That Council adopts Regular Meeting of Council Minutes dated April 12, 2021 and Regular Closed Session Meeting of Council Minutes dated April 12, 2021.

#### CARRIED

#### L. MINUTES OF COMMITTEES AND RECOMMENDATIONS

#### 1. Main Street Development Review Committee--February 2 and March 2, 2021

**298-2021 Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Tony Gaffan

That Council receives Main Street Development Review Committee Meeting Minutes dated February 2, 2021 and March 2, 2021.

#### CARRIED

## 2. Committee of Adjustment--February 16, 2021

299-2021 Moved By Councillor Kimberly DeYong Seconded By Councillor Thomas Neufeld

That Council receives Committee of Adjustment Meeting Minutes dated February 16, 2021.

#### CARRIED

#### 3. Tourism and Economic Development--February 11 and March 11, 2021

**300-2021 Moved By** Councillor Laura Lucier **Seconded By** Councillor Tony Gaffan That Council receives Tourism and Economic Development Committee Meeting Minutes dated February 11, 2021 and March 11, 2021.

## CARRIED

#### 4. Kingsville B.I.A.--March 9, 2021

**301-2021 Moved By** Councillor Larry Patterson **Seconded By** Councillor Tony Gaffan

That Council receives Kingsville B.I.A. Meeting Minutes dated March 9, 2021.

## CARRIED

## 5. Kingsville Municipal Heritage Advisory Committee--March 17, 2021

**302-2021 Moved By** Councillor Tony Gaffan **Seconded By** Councillor Laura Lucier

That Council receives Kingsville Municipal Heritage Advisory Committee Meeting Minutes dated March 17, 2021

## CARRIED

#### 6. Parks Recreation Arts and Culture Committee--March 18, 2021

**303-2021 Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Thomas Neufeld

That Council receives Parks, Recreation, Arts and Culture Committee Meeting Minutes dated March 18, 2021 together with the following sub-committee minutes: Communities in Bloom - February 2, 2021 and Fantasy of Lights -January 26, 2021.

- M. BUSINESS CORRESPONDENCE INFORMATIONAL
- 1. Town of Caledon--Correspondence dated March 31, 2021 RE: 3-digit Suicide and Crisis Prevention Hotline.
- Letters of Support RE: Kingsville Council Resolution 205-2021 RE: Bill C-21, An Act to Amend Certain Acts, and to Make Certain Consequential Amendments (Firearms)
  - a. County of Essex--Correspondence dated April 7, 2021 from M. Birch, Director of Council and Community Services/Clerk, sent on behalf of Gary McNamara, Warden, County of Essex
  - b. Township of Faraday--Correspondence dated April 7, 2021
  - c. Township of Addington Highlands--Correspondence dated April 9, 2021
  - d. Towship of Essa--Correspondence dated April 9, 2021
  - e. Municipality of West Elgin--Correspondence dated April 9, 2021
  - f. Township of Casey--Correspondence dated April 15, 2021
  - g. Township of La Valee--Correspondence dated April 15, 2021
  - h. County of Perth--Correspondence from Office of the Warden dated April 19, 2021
  - i. Municipality of Temagami--Correspondence dated April 20, 2021
- 3. Township of the Archipelago--Correspondence dated April 9, 2021 RE: Road Management Action on Invasive Phragmites
- 4. Town of Tecumseh--Correspondence dated April 13, 2021 RE: National 3-Digit Suicide Prevention Hotline
- 5. Town of Essex--Correspondence dated April 14, 2021 RE: COVID-19 Shutdown
- 6. Township of Springwater--Correspondence dated April 16, 2021 RE: Clean Fuel Standard
- 7. Town of Mono--Correspondence dated April 16, 2021 RE: Cannabis Licencing and Enforcement

## **304-2021 Moved By** Councillor Kimberly DeYong **Seconded By** Councillor Tony Gaffan

That Council receives Business Correspondence-Informational items 1 through 7.

## CARRIED

## **305-2021 Moved By** Councillor Kimberly DeYong **Seconded By** Councillor Larry Patterson

That Council supports the Town of Mono's Resolution #1 1-6-2021 passed March 23, 2021 RE: Cannabis Licensing and Enforcement.

## CARRIED

## N. NOTICES OF MOTION

## O. UNFINISHED BUSINESS, ANNOUNCEMENTS AND UPDATES

Mayor Santos announced that CAO John Norton has recently been recognized by the Association of Municipal Managers, Clerks and Treasurers of Ontario (AMCTO) with a Membership Service Award in recognition of 10 years of service and personal contribution to the municipal profession.

## P. BYLAWS

#### 1. By-law 37-2021

**306-2021 Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Larry Patterson

That Council reads By-law 37-2021, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville (45 and 49 Division St. North, Part of Lots 3-5 W Watermill St. Plan 184 and 185, Pt. Lots 6-8 ED, Pt 2 RP 12R 27243; ZBA/01/2021) a first, second and third and final time.

## 2. By-law 38-2021

**307-2021 Moved By** Deputy Mayor Gord Queen **Seconded By** Councillor Kimberly DeYong

That Council reads By-law 38-2021, being a By-law to amend the Official Plan of the Town of Kingsville (OPA 12) a first, second and third and final time.

## CARRIED

## Q. CLOSED SESSION

#### 308-2021

Moved By Deputy Mayor Gord Queen Seconded By Councillor Laura Lucier

That Council, pursuant to Subsection 239(2) of the *Municipal Act, 2001* at 8:19 p.m. enter into Closed Session to address the following item:

i) Subsection 239(2)(f) advice that is subject to solicitor-client privilege RE: Interim Control By-law discussion.

## CARRIED

## R. REPORT OUT OF CLOSED SESSION

Upon rising from Closed Session at 8:57 p.m. Mayor Santos reported that members of Council received legal advice that is subject to solicitor-client privilege pertaining to interim control by-law discussion.

## S. CONFIRMATORY BY-LAW

## 1. By-law 39-2021

309-2021 Moved By Deputy Mayor Gord Queen Seconded By Councillor Kimberly DeYong That Council reads By-law 39-2021, being a by-law to confirm the proceedings of the Council of The Corporation of the Town of Kingsville at its April 26, 2021 Regular Meeting a first, second and third and final time.

CARRIED

## T. ADJOURNMENT

**310-2021 Moved By** Councillor Tony Gaffan **Seconded By** Councillor Thomas Neufeld

That Council adjourns at 8:58 p.m.

CARRIED



## JOINT BOARD OF MANAGEMENT

Wednesday, March 17, 2021 9:00 AM Virtually in Zoom

## MINUTES

- Members Present: Mayor MacDonald (Vice-chair); Deputy Mayor Verbeke, Councillors Dunn, Hammond, Jones, Tiessen - Leamington Mayor Nelson Santos (Chair); Deputy Mayor Queen, Councillors DeYong, Neufeld, Patterson - Kingsville Councillor Walstedt - Lakeshore
- Members Absent: Councillor Vander Doelen
- Also in Attendance: Rodney Bouchard, Union Water Supply System Manager Khristine Johnson, Recording Secretary

Municipal

- Staff Present: Laura Rauch, Shannon Belleau, Nelson Carvalho Leamington John Norton, Andrew Plancke, Shaun Martinho, Ryan McLeod-Kingsville Andy Graf, Kevin Girard - Essex Nelson Cavacas, Albert Dionne - Lakeshore
- OCWA Staff Susan Budden Present: Dale Dillen, Ken Penney
- Call to Order: 9:04 am

## Disclosures of Pecuniary Interest: none

## Adoption of Board Minutes:

No. UW-20-21

- Moved by: Deputy Mayor Queen
- Seconded by: Councillor Jones

That Minutes of the UWSS Joint Board of Management meeting of Wednesday, February 17, 2021 is received.

Carried

## **Business Arising Out of the Minutes:**

There was none.

# Report UW/15/21dated March 12, 2021 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to March 12, 2021

The Manager reviews his report with members of the Board. He confirms that Clarifier #3 was taken offline on March 8<sup>th</sup> to allow for the installation of a new flow meter. This new flow meter will allow for more accuracy. He further confirms that Clarifier #3 is back online as of the date of this meeting.

He updates members on the rehabilitation of Filters #2 and #4. He explains that the filter media and underdrains have been removed by Continental Carbon Group. The crew from JDCMI is in the process of rehabilitating the filters and their work is expected to be completed sometime during the week of March 22<sup>nd</sup>. He states that this project is moving along nicely.

The Kingsville Water Tower (KWT) rehabilitation project is also moving along nicely with the scaffolding portion of the project still underway. The Manager anticipates that the KWT will be fully enclosed during the first work of April. He explains that the antennas at the top of the tower will have to be removed during the rehabilitation.

Initial testing of KWT isolation commenced on March 11<sup>th</sup>. UWSS has heard of no water pressure complaints and confirms that pressure data loggers have been installed throughout Kingsville to monitor pressure during the rehabilitation project.

The Manager then explains to members of the Board that the decommissioning of the chloramination system is still ongoing. The former chloramination building will be retrofitted to be used for the maintenance staff. The ammonia storage tanks have been removed.

The new lab construction project has started back up again with construction of the walls almost complete. A new heating/cooling unit will be installed so this new lab area will have its own environmental controls.

JDCMI is currently painting the metal ceiling above Filters #6 and #8, to address some corrosion issues. Since JDCMI was already present at the WTP working on Filters #2 and #4 this allowed for significant cost savings.

A new soft start was installed on High Lift Pump #9. The pump is back in service as this work was completed around March 8-9<sup>th</sup>.

The Manager notes that Associated Engineering (AE) is currently preparing a prequalification document to pre-qualify contractors for the DAF tendering process. AE is also preparing a draft document to identify options for new reservoir.

The Manager explains that the flows are again significantly higher than in the past years. He notes it is very manageable at this time, his main concern is the summer time peaks.

Councillor Patterson asks the Manager is de-commissioning the chloramination system is wise, as he speculates whether it will ever be necessary to implement again. The Manager notes that the current system under Free Chlorine is working well and the best option for the UWSS and at this point this is a permanent decision as he doesn't anticipate going back to chloramination.

No. UW-21-21

Moved by: Councillor Dunn

Seconded by: Councillor Neufeld

That report UW/15/21 dated March 12, 2021 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to March 12, 2021 is received.

#### Carried (UW/15/21)

## Report UW/16/21 dated March 11, 2021 re: Moratorium on Applications for UWSS Treated Water Allocations

The Manager reminds members of the UWSS Board of his report presented in January as well as last October. He notes that the UWSS currently has approximately 2 million gallons of water capacity remaining and it was decided in December 2020 that UWSS would allocate the remaining capacity on an interim basis to owner municipalities based on ownership shares. He further reminds members that at the January 2021 UWSS Board meeting the Board directed the Manager to create a working group to determine how best to move forward with allocation in the future.

The Manager notes that the working group met on February 24, 2021 to review the capacity issue facing UWSS. It was agreed that a moratorium be placed on any large application and also have a look at all of the older applications to determine if there is some allocations that are not currently being used. The moratorium time frame will allow the UWSS to continue to work on making the WTP more efficient and potentially re-rated to allow for more capacity. He notes that large applications are those deemed to be over 50,000 I/day and does not include residential developments. His goal is to have a report back to the board by October 31, 2021.

Councillor Tiessen asked the Manager who comprised the working group. The Manager explains that the four (4) local municipalities' senior staff, as well as planners and in total 11 members comprise the group.

Mayor MacDonald thinks the decision is a sound one, which will allow time to ensure that the growth within the area is appropriate. Councillor Walstedt concurs with the mayor.

Councillor DeYong believes this is a good way to allow the working group to come up with some solutions. She asks the Manager how many acres is 50,000 l/day. The Manager indicates it is approximately 1-2 acres.

Councillor Neufeld asks if the 12 month timeline is enough to try and figure things out for the working group. The Manager feels that this is a good starting point to work with. Councillor Neufeld follows up with a question regarding allocation and if there are any

out there that are prepaid. The Manager explains that there are no allocations which are paid for. Councillor Neufeld's final question asks whether there is any ability to just push raw water. The Manager indicates that there is not as that would require an entirely new set of watermains.

The Manager then explains that the moratorium allows for an opportunity to work with the greenhouse industry and municipalities as well. This also allows for a better allocation process to be developed. The summer daily peaks are the concern because last summer some daily peaks that were hit are cause to start considering expansion. This moratorium will allow for some breathing room.

Councillor Hammond notes that he feels the industry is going to keep growing and this issue needs to be addressed in order to see any continued growth in a way that is proper for all within the UWSS boundaries.

Councillor Patterson thanks the Manager for the recommendation as he believes this is something that the residents have been asking for.

Deputy Mayor Verbeke would like to see the amount of water per plant per acre per day for each of the species grown within the greenhouses, as some crops certainly may take more water than others. Cannabis being one that might take more water.

The Manager then suggests that the new AMI system in Learnington will hopefully provide some clearer data on how much water greenhouses are using for various crops.

Deputy Mayor Queen

#### No. UW-22-21

Moved by: Deputy Mayor Queen

Seconded by: Councillor Walstedt

That the Union Water Supply Joint Board of Management (UWSS Board) implements a moratorium to take effect immediately on new requests for treated water allocations from new or existing entities that use more than 50,000 litres per day;

And further, that the moratorium would not apply to any type of residential development;

And further, that the moratorium will be in effect for up to 12 months;

And further, that the UWSS Board directs the UWSS General Manager, with support from the UWSS-Municipal Treatment Capacity Allocation Working Group (Working Group), to undertake an evaluation of all approved treated water allocations to identify any discrepancies between approved allocations versus actual water usage;

And further, that the UWSS Board directs the UWSS General Manager to deliver a report to the UWSS Board by October 31<sup>st</sup>, 2021 that provides the Working Group's conclusions and recommendations in regards to the evaluation of approved treated water allocations.

Carried (UW/16/21)

## Report UW/17/21 dated March 12, 2021 re: Payments from February to March 11, 2021

No. UW-23-21

Moved by: Councillor Patterson

Seconded by: Mayor MacDonald

That report UW/17/21 dated March 12, 2021 re: Payments from February 11<sup>th</sup> to March 11<sup>th</sup>, 2021 is received.

Carried (UW/17/21)

## **New Business**

There was none.

## Adjournment:

No. UW-19-21

- Moved by: Councillor Hammond
- Seconded by: Councillor Dunn

That the meeting adjourn at 9:42

Carried

Date of Next Meeting: Wednesday, April 21, 2021, virtually in Zoom.

/kmj





## POLICE SERVICES BOARD MEETING WEDNESDAY, MARCH 24, 2021 @ 4:00 P.M. VIA WEBEX

## A. CALL TO ORDER

Chairperson, Nelson Santos called the Meeting to order at 4:00 p.m. with the following persons in attendance:

| Nelson Santos    | - | Chairperson      |
|------------------|---|------------------|
| William Chisholm | - | Vice Chairperson |
| Kimberly DeYong  | - | Board member     |
| Bill Baird       | - | Board member     |
| Barry Wilson     | - | Board member     |
| Glenn Miller     | - | O.P.P. Inspector |
| Silvano Bertoni  | - | O.P.P. Constable |

Member of Administration: Roberta Baines, Deputy Clerk-Administrative Services

## **B. DISCLOSURE OF PECUNIARY INTEREST**

Where a member of the board has any pecuniary interest, direct or indirect, in any matter which is the subject of consideration at the Regular Meeting of the Board, the member shall disclose the pecuniary interest and its general nature, prior to any consideration of the matter. There were none.

## C. DELEGATIONS/PRESENTATIONS

There were none.

#### D. ADOPTION OF MINUTES OF PREVIOUS MEETING

- 1. Adoption of Police Services Board Minutes held on February 24, 2021.
- **PSB 11-2021** Moved by Bill Baird, seconded by Will Chisholm adopt the Police Services Board meeting minutes held on February 24, 2021.

CARRIED





## E. REPORTS

#### 1. Monthly Status Reports

i) Town of Kingsville PSB report and Crime Stoppers report for February 2021

Constable Bertoni provided an overview of the monthly reports, as well as updates relating to tickets issued, traffic and enforcement, increased calls for service, thefts and shoplifting. He also provided an update on the various audits recently conducted, OPP cruiser replacement and the upcoming speed trailer schedule.

Inspector Miller provided additional information relating to the recent catalytic converter thefts in the area. These items contain precious metals and make them highly valuable to thieves. OPP are encouraging residents to take precautions and put security measures in place to deter theft.

Inspector Miller also discussed cyber related fraud and strongly encourages residents to report these crimes.

**PSB 12-2021** Moved by Barry Wilson, seconded by Kim DeYong to receive Kingsville PSB Report and Crime Stoppers report for February 2021 as information.

CARRIED

## F. ADOPTION OF ACCOUNTS

- 1. Adoption of Police Services Accounts RE: Budget actuals ending February 28, 2021.
- **PSB 13-2021**Moved by Will Chisholm, seconded by Bill Baird adopt the Police<br/>Services Budget actuals ending February 28, 2021.

CARRIED

#### G. BUSINESS/CORRESPONDENCE

1. BIA letter dated March 16, 2021 re: Request for OPP to Sponsor BIA Summer Giveaway



# **MINUTES**

Chair Santos indicated that the Police Services Board has not sponsored this BIA event. He inquired whether the OPP had and if this request could be forwarded to the Community Policing Committee for sponsorship.

2. OAPSB dated March 1, 2021 re: Spring Conference Sponsorship

It was noted that OAPSB Zone 6 will be sponsoring this event at the bronze level.

**PSB 14-2021**Moved by Will Chisholm, seconded by Barry Wilson to receive<br/>correspondence items G 1 and 2 as information.

CARRIED

3. Solicitor General dated March 17, 2021 re: OPP Detachment Board Framework

Board members discussed the upcoming framework and composition changes to the detachment board. If mandated to one board, Kingsville will have two representatives. The deadline for proposal submission is June 7, 2021. Board members expressed their preference on board composition. Chair Santos indicated that a special meeting has been called for with area municipalities to discuss the matter further.

Board members expressed the following concerns: contract enhancements, levels of service, protecting the community and safety. The detachment board composition is a significant change and a critical decision to make.

Inspector Miller assured board members that the lines of communication will remain open and will be able to have direct contact with OPP staff.

**PSB 15-2021** Moved by Bill Baird, seconded by Kim DeYong to receive Solicitor General correspondence dated March 17, 2021 as information.

#### CARRIED

## H. NEW AND UNFINISHED BUSINESS

1. OPP Contract

Chair Santos stated that the OPP contract is set to expire on December 31, 2021. A review of the contract and enhancements could not be conducted due to the pandemic and assistance from OPP is requested on this matter.



# **MINUTES**

Inspector Miller indicated that he would reach out to see if an OPP contract personnel could attend a future meeting for contract review.

## I. ADJOURNMENT

**PSB 16-2021** Moved by Kim DeYong, seconded by Will Chisholm that Police Services Board adjourns the meeting at the hour of 4:52 p.m. and to meet again on April 28, 2021 or at the call of the Chair.

CARRIED

## CHAIRPERSON, Nelson Santos

DEPUTY CLERK-ADMINISTRATIVE SERVICES, Roberta Baines

#### CORPORATION OF THE TOWNSHIP OF HARLEY

903303 Hanbury Rd. New Liskeard, ON POJ 1P0 tel: 705-647-5439 fax: 705-647-6373

April 14, 2021

The Town of Kingsville Ontario Sandra Kitchen Deputy Clerk-Council Services 2021 Division Road North, Kingsville, ON N9Y 2Y9

E-mail: skitchen@kingsville.ca

Ms. Kitchen:

Your correspondence dated March 25<sup>th</sup>, 2021 was received by Harley Township Council at their meeting of April 13<sup>th</sup>, 2021 and the following resolution was passed:

#### Resolution No. 2021-064

That we, the Council of the Township of Harley do hereby support the Town of Kingsville motion 205-2021 opposing Bill C-21, an Act to amend certain Acts and to make certain consequential amendments to firearms, specifically Amendment 26 which would make municipalities responsible for gun control laws in Canada; and

Direct municipal staff to issue a letter of support to the Town of Kingsville. "CARRIED"

Yours truly,

Jordan Kemp Clerk-Treasurer Township of Harley

JMK/lp

Municipalité de Municipality of





Sac postal / P.O. Bag 129, Mattice, Ont. POL 1T0 (705) 364-6511 - Fax: (705) 364-6431

#### **RESOLUTION NO. 21-92**

Moved by: Joyce Malenfant Seconded by: Steve Brousseau

WHEREAS municipalities have never been responsible for gun control laws in Canada, and;

WHEREAS law abiding Mattice – Val Côté residents who own legal handguns have already been thoroughly vetted through CFSC, PAL and ATT applications, and;

WHEREAS illegal gun owners and smugglers do not respect postal codes, and;

WHEREAS if one municipality enacts a ban and not a neighbouring municipality, this will create a patchwork of by-laws, and;

WHEREAS a municipal ban would be difficult to enforce and easy to get around;

NOW THEREFORE BE IT RESOLVED THAT Council for the Municipality of Mattice – Val Côté hereby supports Motion no. 205-2021 made by the Town of Kingsville opposing the adoption of any by-laws restricting the possession, storage or transportation of legally obtained handguns, and;

BE IT FURTHER RESOLVED THAT a copy of this resolution be forwarded to the Town of Kingsville and to our federal and provincial government representatives, Carol Hughes and Guy Bourgouin.

- CARRIED -

I, Guylaine Coulombe, CAO/Clerk of the Municipality of Mattice – Val Côté, do hereby certify this to be a true and complete copy of Resolution 21-92, passed by the Council of the Municipality of Mattice – Val Côté at its meeting held the 26th day of April 2021.

DATED at Mattice, Ontario This 30th day of April 2021

uylaine coulombe

232



## DISTRICT OF PARRY SOUND

56 ONTARIO STREET PO BOX 533 BURK'S FALLS, ON POA 1CO (705) 382-2954 (705) 382-2068 Fax: (705) 382-3332 Email: info@armourtownship.ca Website: www.armourtownship.ca

April 20, 2021

Town of Kingsville 2021 Division Road North

Kingsville, ON N9Y 2Y9

#### Re: Support Resolution

At its meeting held on April 13, 2021, the Township of Armour passed Resolution #13 approving the request from the Town of Kingsville.

A copy of Council's Resolution #13 dated April 13, 2021 is attached for your consideration.

Sincerely,

Danika Hammond Administrative Assistant (Enclosed)



## **CORPORATION OF THE TOWNSHIP OF ARMOUR**

## **RESOLUTION**

Date:

April 13, 2021

Motion # *13* 

Whereas municipalities have never been responsible for gun control laws in Canada, the Council of the Township of Armour supports the Town of Kingsville in opposing the adoption of any by-laws restricting the possession, storage and transportation of legally obtained handguns.

| Moved by:          | Blakelock,<br>Rod     | Q/ | Seconded by: | Blakelock, Rod   |    |
|--------------------|-----------------------|----|--------------|--|----|
|                    | Brandt, Jerry         |    |              | Brandt, Jerry  | I. |
|                    | MacPhail, Bob         |    |              | MacPhail, Bob  |    |
|                    | Ward, Rod             |    |              | Ward, Rod  |    |
|                    | Whitwell,<br>Mondu    |    |              | Whitwell, Wendy  |    |
|                    | Wendy                 |    |              | And the second sec |    |
|                    | Carried D<br>Defeated |    | A.Mar        | hall   |    |
| Declaration of Pec | uniary Interest b     | y: |              |  |    |
| Recorded vote req  | uested by:            |    |              |  |    |
| Recorded Vote:     |                       |    | For          | Opposed  |    |
| Blakelock, Rod     |                       |    |              |  |    |
| Brandt, Jerry      |                       |    |              |  |    |
| MacPhail, Bob      |                       |    |              |  |    |
| Ward, Rod          |                       |    |              |  |    |
| Whitwell, Wendy    |                       |    |              |  |    |



Main Office: 32 Commissioner Street Killarney, Ontario POM 2A0

Tel: 705-287-2424 Fax: 705-287-2660

E-mail: inquiries@municipalityofkillarney.ca

#### Public Works Department:

1096 Hwy 637 Killarney, Ontario P0M 2A0

Tel: 705-287-1040 Fax: 705-287-1141

website: www.municipalityofkillarney.ca

Municipality of Killarney

April 21, 2021

Mail & Email: pm@pm.gc.ca

The Right Honourable Justin Trudeau Prime Minister of Canada Langevin Block Ottawa, Ontario K1A 0A2

Dear Prime Minister:

Attached hereto is Resolution No. 21-113 that was passed by the Municipality of Killarney at the Regular Meeting of Council held April 14<sup>th</sup>, 2021 in which Council endorses Resolution 205-2021 passed by the Town of Kingsville regarding Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms).

The Council of the Municipality of Killarney is opposed to the adoption of any by-laws restricting the possession, storage and transportation of illegally obtained handguns.

We look forward to your support regarding this important matter.

Sincerely, THE MUNICIPALITY OF KILLARNEY

(Mrs.) Angie Nuziale, Administrative Assistant

Attachments

cc: Town of Kingsville Hon. Doug Ford, Premier Hon. Andrea Horwath, Leader of the Opposition Hon. Erin O'Toole, Leader of the Opposition Hon. Bill Blair, Minister of Public Safety & Emergency Preparedness Local MPPs

Word: Letters-Kingsville-Amend Act (firearms)-21-04-2021



The Corporation of the Municipality of Killarney 32 Commissioner Street Killarney, Ontario POM 2A0

MOVED BY:

John Dimitrijevic

SECONDED BY: Jim Rook

## RESOLUTION NO. 21-113

**BE IT RESOLVED THAT** the Municipality of Killarney hereby endorses Resolution 205-2021 passed by the Town of Kingsville regarding Bill C-21, an Act to amend certain Acts and to make certain consequential amendments (firearms);

**FURTHER** it is hereby agreed that Council is opposed to the adoption of any by-laws restricting the possession, storage and transportation of legally obtained handguns;

FURTHER this resolution be forwarded to all those indicated by Kingsville.

| Re | solution Result             | Recorded Vote       |     |    |
|----|-----------------------------|---------------------|-----|----|
|    |                             | Council Members     | YES | NO |
|    | CARRIED                     | Robert Campbell     |     | Х  |
|    | DEFEATED                    | John Dimitrijevic   | X   |    |
|    | TABLED                      | Barbara Anne Haitse | X   |    |
|    | RECORDED VOTE (SEE RIGHT)   | Michael Reider      | X   |    |
|    | PECUNIARY INTEREST DECLARED | Jim Rook            | X   |    |
|    | WITHDRAWN                   | Nancy Wirtz         | X   |    |

I, Candy K. Beauvais, Clerk-Treasurer of the Municipality of Killarney do certify the foregoing to be a true copy of Resolution #21-113 passed in a Regular Council Meeting of The Corporation of the Municipality of Killarney on the 14<sup>th</sup> day of April 2021.

Candy K. Beauvais Clerk Treasurer



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

#### SENT VIA EMAIL

March 25, 2021

The Right Honourable Justin Trudeau, MP Prime Minister of Canada Langevin Block Ottawa, Ontario K1A 0A2

Prime Minister:

## RE: Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms)

At its Regular Meeting held on March 8, 2021 Council of the Town of Kingsville passed the following Resolution:

#### \*205-2021

Moved By Councillor Thomas Neufeld, Seconded By Councillor Larry Patterson

A Resolution concerning Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms), specifically Amendment 26, Section (58.01 (1-8), Conditions-bylaw.

WHEREAS municipalities have never been responsible for gun control laws in Canada;

AND WHEREAS law abiding Kingsville residents who own legal handguns have already been thoroughly vetted through the CFSC, PAL and ATT applications;

AND WHEREAS illegal gun owners and smugglers do not respect postal codes;

AND WHEREAS if one municipality enacts a ban and not a neighbouring municipality, this will create a patchwork of by-laws;

AND WHEREAS a municipal ban would be difficult to enforce and easy to get around.

NOW THEREFORE BE IT RESOLVED that The Corporation of the Town of Kingsville is OPPOSED to the adoption of any by-laws restricting the possession, storage and transportation of legally obtained handguns;

AND BE IT FURTHER RESOLVED that this resolution be forwarded to the following public officials: MP Chris Lewis-Essex, MPP Taras Natyshak-Essex, Premier of Ontario The Honourable Doug Ford, Leader of the Official Opposition Andrea Horwath, Prime Minister of Canada The Honourable Justin Trudeau, and Leader of Official Opposition The Honourable Erin O'Toole."

..2/

If you require any further information, please contact the undersigned.

Yours very truly,

Sandra Lischen

Sandra Kitchen **Deputy Clerk-Council Services** Legislative Services Department skitchen@kingsville.ca

- cc: Hon. Doug Ford, Premier cc: Hon. Andrea Horwath, Official Leader of the Opposition

cc: Hon. Erin O'Toole, Official Leader of the Opposition

cc: MP Chris Lewis- Essex

cc: MPP Taras Natyshak-Essex

cc: Hon, Bill Blair, Minister of Public Safety and Emergency Preparedness

cc: MP Shannon Stubbs

- cc: Mayor Aldo DiCarlo, Town of Amherstburg cc: Mayor Larry Snively, Town of Essex
- cc: Mayor Tom Bain, Town of Lakeshore

- cc: Mayor Marc Bondy, Town of LaSaile cc: Mayor Hilda MacDonald, Municipality of Learnington
- cc: Mayor Gary McNamara, Town of Tecumseh

cc: all Municipalities in Ontario

premier@ontario.ca horwatha-gp@ndp.on.ca erin.oloole@parl.gc.ca



The Corporation of the Town of Marathon 4 Hemlo Drive, P.O. Bag TM Marathon, Ontario POT 2E0 clerk@marathon.ca Phone: (807) 229-1340 Ext. 2223 Fax: (807) 229-1999 www.marathon.ca

#### OFFICE OF THE DEPUTY CLERK File 4-6

#### SENT VIA EMAIL

April 23, 2021

Sandra Kitchen, Deputy Clerk-Council Services Town of Kingsville 2021 Division Road North Kingsville, ON N9Y 2Y9

Dear Sandra Kitchen:

At the Regular Meeting of Council held on Monday, April 19, 2021, Council passed Motion No. 079/21 which supports your resolution pertaining to Bill C-21, An Act to make certain consequential amendments (firearms).

Accordingly, I have enclosed a copy of the motion as well as your original request.

I trust you will find this satisfactory, but should you have any questions please do not hesitate to contact my office at your convenience.

Sincerely,

TOWN OF MARATHON

Louise Lees Deputy Clerk

LL:jg

Enclosure(s)

Cc: Honourable Justin Trudeau, Prime Minister of Canada Honourable Doug Ford, Premier of Ontario Andrea Horwath, Official Leader of the Opposition Erin O'Toole, Official Leader of the Opposition Chris Lewis, MP – Essex Taras Natyshak, MPP - Essex

M:\4-6 (Administration)\2021 Correspondence\let\_0423.Town of Kingsville.doc

#### THE CORPORATION OF THE TOWN OF MARATHON MARATHON, Ontario

Motion No .:

Date: April 19, 2021

Moved by:

Seconded by:

TSUBOUCHI

THAT Council hereby supports the resolution received from the Town of Kingsville pertaining to Bill C-21, An Act to amend certain Acts and to make certain consequentialamendments (firearms);

AND FURTHER THAT a copy of this motion be forwarded to the individuals listed on the original resolution request.

| RECORDED VOTE:     | FOR | AGAINST | CONFLICT<br>OF<br>INTEREST |
|--------------------|-----|---------|----------------------------|
| Mayor Dumas        |     |         |                            |
| Councillor Gingras |     |         |                            |
| Lake               |     |         |                            |
| Tsubouchi          |     |         |                            |
| Vallance           |     |         |                            |

CARRIED ~

DEFEATED

No. at Meeting: m

Mayor



#### SENT VIA EMAIL

March 25, 2021

The Right Honourable Justin Trudeau, MP Prime Minister of Canada Langevin Block Ottawa, Ontario K1A 0A2

Prime Minister:

# RE: Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms)

At its Regular Meeting held on March 8, 2021 Council of the Town of Kingsville passed the following Resolution:

#### "205-2021

Moved By Councillor Thomas Neufeld, Seconded By Councillor Larry Patterson

A Resolution concerning Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms), specifically Amendment 26, Section (58.01 (1-8), Conditions-bylaw.

WHEREAS municipalities have never been responsible for gun control laws in Canada;

AND WHEREAS law abiding Kingsville residents who own legal handguns have already been thoroughly vetted through the CFSC, PAL and ATT applications;

AND WHEREAS illegal gun owners and smugglers do not respect postal codes;

AND WHEREAS if one municipality enacts a ban and not a neighbouring municipality, this will create a patchwork of by-laws;

AND WHEREAS a municipal ban would be difficult to enforce and easy to get around.

NOW THEREFORE BE IT RESOLVED that The Corporation of the Town of Kingsville is OPPOSED to the adoption of any by-laws restricting the possession, storage and transportation of legally obtained handguns;

AND BE IT FURTHER RESOLVED that this resolution be forwarded to the following public officials: MP Chris Lewis-Essex, MPP Taras Natyshak-Essex, Premier of Ontario The Honourable Doug Ford, Leader of the Official Opposition Andrea Horwath, Prime Minister of Canada The Honourable Justin Trudeau, and Leader of Official Opposition The Honourable Erin O'Toole."

If you require any further information, please contact the undersigned.

Yours very truly,

Sandra Litchen

Sandra Kitchen Deputy Clerk-Council Services Legislative Services Department skitchen@kingsville.ca

- cc: Hon. Doug Ford, Premier
- cc: Hon. Andrea Horwath, Official Leader of the Opposition
- cc: Hon. Erin O'Toole, Official Leader of the Opposition
- cc: MP Chris Lewis- Essex
- cc: MPP Taras Natyshak-Essex
- cc: Hon. Bill Blair, Minister of Public Safety and Emergency Preparedness
- cc: MP Shannon Stubbs
- cc: Mayor Aldo DiCarlo, Town of Amherstburg cc: Mayor Larry Snively, Town of Essex
- cc: Mayor Tom Bain, Town of Lakeshore
- cc: Mayor Marc Bondy, Town of LaSalle cc: Mayor Hilda MacDonald, Municipality of Leamington
- cc: Mayor Gary McNamara, Town of Tecumseh
- cc: all Municipalities in Ontario

premier@ontario.ca horwatha-qp@ndp.on.ca erin.otoole@parl.gc.ca



April 27, 2021

#### Via Email: justin.trudeau@parl.gc.ca

The Right Honourable Prime Minister of Canada Office of the Prime Minister 80 Wellington Street Ottawa, ON K1A 0A2

Dear Prime Minister Trudeau:

# Re: Bill C-21, An Act to Amend Certain Acts and to Make Certain Consequential Amendments

Council for the City of Temiskaming Shores adopted the resolution below at its regular meeting on April 20, 2021, to support the Town of Kingsville's request regarding Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms).

<u>Resolution No. 2021-180</u> Moved by: Councillor Jelly Seconded by: Councillor Hewitt

Whereas municipalities have never been responsible for gun control laws in Canada; and

Whereas law-abiding Temiskaming Shores residents who own legal handguns have already been thoroughly vetted through the CFSC, PAL and ATT applications; and

Whereas illegal gun owners and smugglers do not respect postal codes; and

Whereas if one municipality enacts a ban and not a neighbouring municipality, this will create a patchwork of by-laws; and

Whereas a municipal ban would be difficult to enforce and easy to get around.

Now therefore be it resolved that The Corporation of the City of Temiskaming Shores hereby supports the Town of Kingsville's opposition to the adoption of any by-laws restricting the possession, storage and transportation of legally obtained handguns; and

Be it further resolved that this resolution be forwarded to the following public officials: The Right Honourable Justin Trudeau, Prime Minister of Canada; The Honourable Doug Ford, Premier of Ontario; Andrea Horwath, Leader of the Official Opposition; The Honourable Erin O'Toole, Leader of Official Opposition; The Honourable Anthony Rota, MP Nipissing-Timiskaming; and John Vanthof, MPP Timiskaming—Cochrane.

#### Carried

Please accept this correspondence for your information and consideration.

Sincerely,

Blag

Logan Belanger Municipal Clerk Ibelanger@temiskamingshores.ca

Enclosure

C.c.

The Honourable Doug Ford, Premier of Ontario The Honourable Erin O'Toole, Leader of Official Opposition Andrea Horwath, Leader of the Official Opposition The Honourable Anthony Rota, MP Nipissing-Timiskaming John Vanthof, MPP Timiskaming—Cochrane Town of Kingsville



2297 Highway 12, PO Box 130 Brechin, Ontario L0K 1B0 p.705-484-5374 f. 705-484-0441

April 28<sup>th</sup>, 2021

Town of Kingsville 2021 Division Road North Kingsville, ON, N9Y 2Y9 SKitchen@Kingsville.ca

Ms. Kitchen,

# Re: Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms)

This is to advise you that the Council of the Township of Ramara passed the following resolution at their meeting held on April 12<sup>th</sup>, 2021:

THAT we receive the correspondence from the Town of Kingsville dated March 25, 2021 regarding Bill C-21, An Act to amend certain Acts and to make certain consequential amendments (firearms); AND THAT we support the motion.

I trust the above is self-explanatory; however, if you require further information or clarification, please contact me.

Sincerely, TOWNHIP OF RAMARA

*Jennífer Connor* Jennifer Connor, CMO, AOMC Director of Legislative & Community Services/Clerk

www.ramara.ca



Municipality of Chatham-Kent Corporate Services Municipal Governance 315 King Street West, P.O. Box 640 Chatham ON N7M 5K8 Tel: 519.360.1998 Fax: 519.436.3237 Toll Free: 1.800.714.7497

April 13, 2021

Association of Municipalities of Ontario (AMO) 200 University Ave., Suite 801 Toronto, ON M5H 3C6

#### Re: Healthy, Professional News Media

Please be advised the Council of the Municipality of Chatham-Kent at its regular meeting held on April 12, 2021 passed the following resolution:

Whereas a healthy, professional news media is essential for the proper functioning of civil society and democracy at the local, regional, federal and international levels; and

Whereas residents of 190 Canadian communities — lost 250 established news outlets because of closings or mergers between 2008 and 2018; and

Whereas the federal government allocated nearly \$600 million in aid for Canadian media over five years in its 2019 budget, including a 25-percent tax credit for newsroom salaries; a 15-percent tax credit for digital media subscribers; and charitable tax status for non-profit news outlets; and

Whereas Canadians have lost the essential services provided by nearly 500 journalists due to layoffs in the Canadian media since the COVID-19 pandemic began to mid-April of 2020 — a time it became clearer to the public how important it is for Canadians to receive factual information — and advertising revenues have plunged, prompting an emergency \$30-million advertising-buy by the federal government; and

Whereas the news media in Chatham-Kent have been instrumental during the COVID-19 pandemic, ensuring local citizens have timely and factual local information; and

Whereas periodic misinformation on social media sites hampers the ability to communicate factually with local citizens; and

Whereas a stronger local media would demonstrate the value of accurate information and provide a more balanced perspective for discussion of public issues, Be it Therefore Resolved that Chatham-Kent Council encourage other Municipal Councils within the province and across Canada

- to acknowledge that a robust news media is essential to the proper functioning of democracy in their jurisdictions,
- to endorse legislation and regulations to support and rejuvenate news outlets across Canada and
- to urge the Federal Government to move quickly to pass legislation to ensure an ecosystem for a healthy news media to serve all Canadians

And Further that this resolution be forwarded to area municipalities, local M.P.s and M.P.P.s, the Federation of Canadian Municipalities and Association of Municipalities of Ontario

And Further that Chatham-Kent Council encourage all residents to support local journalism.

If you have any questions or comments, please contact Judy Smith at <a href="https://ckeitage.ckeitage

Sincerely,

Judy-Smith/CMO Director Municipal Governance Clerk /Freedom of Information Coordinator

C.

Lianne Rood, MP Dave Epp MP Rick Nicholls, MPP Monte McNaughton, MPP Federation of Canadian Municipalities Local Ontario Municipalities



Box 310, 315 George Street, Wiarton, Ontario N0H 2T0 Tel: (519) 534-1400 Fax: (519) 534-4862 1-877-534-1400

April 23, 2021

Doug Downey Attorney General McMurtry-Scott Building 720 Bay Street, 11<sup>th</sup> Floor Toronto ON M7A 2S9

Dear Honorable Mr. Downey:

#### **Re: Lottery Licensing to Assist Small Organizations**

Small organizations are the foundation of rural Ontario. Thousands of hours of selfless volunteerism are logged each year by organizations who may not necessarily be considered not-for profit or charitable. That doesn't mean that they don't contribute to our communities; small organizations cook for the homeless, clean up parks and flowerbeds, read to young people, teach life skills to young adults, organize parades, put on concerts...the list goes on.

Many of these small organizations are not eligible to receive a lottery license. Thismakes it impossible for them to continue to be successful as their fundraising capabilities are extremely limited.

Through this correspondence, we request that you give serious consideration to instituting an additional level of lottery licensing which would enable small organizations obtain a lottery license. Those who are not able to sustain a non-profit or charitable status could still receive a lottery license if their proceeds benefit the community.

Thresholds could be placed on the prize values and perhaps even the number of eventswhich could be held in a calendar year.

We hear over and over again about the hardships in our community and we know that here are organizations who have the ability to help and are not permitted to. Understanding this, Council adopted a resolution seeking your consideration.

#### R-226-2021

It was *Moved* by J. Kirkland, *Seconded* by K. Durst and *Carried* 

That staff are directed to contact the Ministry responsible for Alcohol and Gaming of Ontario to seek theirassistance in implementing an additional level of licensing which would permit small organizations to holdfundraisers as a method of sustaining our community and organizations;

And further that all municipalities in Ontario are sent this resolution to seek their assistance in lobbying the Ministry.

We look forward to your consideration of our request.

Yours very truly, Un 10,0 ree

Angie Cathrae Director of Legislative Services/Clerk 519-534-1400 ext 122 Toi Free 1-877-534-1400 angie.cathrae@southbrucepeninsula.com

cc: MPP Bill Walker, All Ontario Municipalities

Ministry of Municipal Affairs and Housing

Office of the Minister 777 Bay Street, 17<sup>th</sup> Floor Toronto ON M7A 2J3 Tel.: 416 585-7000 Ministère des Affaires municipales et du Logement



Bureau du ministre 777, rue Bay, 17<sup>e</sup> étage Toronto ON M7A 2J3 Tél. : 416 585-7000

April 27, 2021

Dear Head of Council,

As you may be aware, the Ontario government is consulting on how to strengthen accountability for municipal council members. We want to ensure that councillors and heads of council maintain a safe and respectful workplace and carry out their duties as elected officials ethically and responsibly. More information on the scope of consultations can be found at <u>Ontario.ca</u>.

As part of this work, my colleague Jill Dunlop, Associate Minister for Children and Women's Issues will be seeking input from members of council representing each of Ontario's municipalities through one of two hour-long telephone townhall sessions with municipal representatives from Western Ontario's municipalities on June 8, 2021 at 9:30 AM EDT.

This session will provide participants with the opportunity to share their valuable feedback on:

- what changes or mechanisms are needed to better hold council members accountable for municipal code of conduct violations;
- how to effectively enforce these codes
- whether a broader range of penalties for violations of the codes of conduct are needed; and
- the circumstances in which these potential penalties could be applied.

Please identify one member of your council to participate in the session. Once chosen, the one identified member of your council should register via <u>Eventbrite</u> by Thursday, May 6, 2021. The registered member will receive instructions about how to participate in the session prior to the meeting.

We have also launched an online survey to seek input on ways to strengthen accountability mechanisms for municipal council members. I encourage members of council and municipal staff to provide their input on this important topic through the online survey: <u>Consultation: Strengthening accountability for municipal council members</u> <u>Ontario.ca</u>. This online survey will be available until July 15, 2021. Please share this link with your municipal staff.

I hope you will accept this invitation to participate in this session, as we look forward to hearing your feedback on how to strengthen accountability for municipal council members.

Sincerely,

Steve Clark

Steve Clark Minister of Municipal Affairs and Housing

c: Clerk and Chief Administrative Officers Jill Dunlop, Associate Minister of Children and Women's Issues Kate Manson-Smith Deputy Minister, Ministry of Municipal Affairs and Housing Marie-Lison Fougère, Deputy Minister Responsible for Women's Issues



April 27, 2021

Hon. Doug Ford Premier of Ontario Premier's Office, Room 281 Legislative Building, Queen's Park Toronto, ON M7A 1A1

Dear Premier Ford:

On behalf of my Council, I am urging your government to *immediately* implement and fund the necessary policies to provide adequate paid sick day benefits for Ontario's workers.

It is a widely accepted fact that workplaces are a significant source of COVID-19 transmission throughout our province. Sadly however, too many Ontarians are still going to work when they are sick for fear that they will lose pay should they stay at home. This is entirely counterproductive to our collective efforts to contain this deadly virus and is contributing to the high case counts that we continue to see throughout Ontario.

The federal Canada Recovery Sickness Benefit is not nearly sufficient to rely upon as our only line of defense on this front. While it offers some help, this program is temporary, not fully accessible to all workers, and the delays involved in applying fail to adequately cover the crucial first few days of an illness. We can do better Mr. Premier.

I am confident that a "Team Ontario" approach to this issue will find the kind of tailored solution needed to meet the needs of workers within our province. A universal Ontario paid sick day policy must ensure accessible and timely supports to allow workers to stay home when they are sick, get tested, self-isolate and follow all necessary COVID-19 control measures without fear of income-loss and financial hardship. We owe this to our workers who have given so much over this past year.

It's time for action Mr. Premier.

Respectfully yours,

Wade Mills Mayor, Town of Shelburne



### **Community Services**

Legislative Services

April 27, 2021 File #120203 Sent via email: premier@ontario.ca

.../2

The Honourable Doug Ford, Premier of Ontario Legislative Building Queen's Park Toronto, ON M7A 1A1

Honourable and Dear Sir:

#### Province Investigating and Updating Source Water Protection Legislation Re:

Please be advised the Municipal Council of the Town of Fort Erie at its meeting of April 26, 2021 passed the following resolution:

Whereas the Municipal Council of the Town of Fort Erie passed a resolution on October 21st, 2019 identifying that 1,100 private water wells were in operation in the Town of Fort Erie, of which 75% were used for domestic purposes including human and livestock consumption, and

Whereas the Municipal Council of the Town of Fort Erie further identified in that resolution that Council requires the protection of water in the aquifer supplying water to those wells from contamination as the result of any remediation of Pit One owned by the Port Colborne Quarries in the City of Port Colborne, and further

Whereas Report No. PDS-23-2021, approved by Council on March 22, 2021, identified that while the Niagara Peninsula Conservation Authority, The Regional Municipality of Niagara and Local Area Municipalities work together to protect source water, these plans do not generally apply to private servicing, and

Whereas Report No. PDS-23-2021 further identified efforts undertaken by the Town of Fort Erie through available provincial planning policy, regulation and legislation to protect source water within the Town of Fort Erie without any explicit ability to designate source water protection for private services, and

Whereas on July 28, 2010, through Resolution 64/292, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights, and

**Whereas** it would be desirable to ensure that those in our community who rely on wells and other private servicing for clean drinking water are afforded the same source water protection as municipal drinking water systems;

#### Now therefore it be resolved,

**That:** The Municipal Council of the Town of Fort Erie recognizes and acknowledges that clean drinking water and sanitation are basic human rights and essential to the realization of all human rights, and further

**That:** The Municipal Council of the Town of Fort Erie requests that the Ministry of Environment, Conservation and Parks consider legislative changes that would permit the expansion of source water protection to aquifers and private services, and further

**That:** This resolution be circulated to The Honourable Doug Ford, Premier of Ontario, the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks, Wayne Gates, MPP Niagara Falls, Jeff Burch, MPP Niagara Centre, Jennifer Stevens, MPP St. Catharines and Sam Oosterhoff, MPP Niagara West, and further

**That:** This resolution be circulated to all Conservation Authorities and Municipalities in Ontario for their endorsement and support.

Thank you for your attention to this matter.

Yours very truly,

Cu/Schoquel

Carol Schofield, Dipl.M.A. Manager, Legislative Services/Clerk cschofield@forterie.ca CS:dlk

CS:0

The Honourable Jeff Yurek, Minister of Environment, Conservation and Parks jeff.yurekco@pc.ola.org

Jeff Burch, MPP, Niagara Centre jburch-qp@ndp.on.ca

Sam Oosterhoff, MPP, Niagara West sam.oosterhoff@pc.ola.org

Jennifer Stevens, MPP, St. Catharines JStevens-co@ndp.on.ca Wayne Gates, MPP, Niagara Falls wgates-co@ndp.on.ca

Ontario Conservation and all Ontario Conservation Authorities: kgavine@conservationontario.ca; bhorner@abca.ca; kfurlanetto@crca.ca; generalmanager@catfishcreek.ca; @cloca.com; mvytvytskyy@hrca.on.ca; deb.martindowns@cvc.ca; tim.pidduck@crowevalley.com; tbyrne@erca.org; llaliberte@grca.on.ca; karmstrong@grandriver.ca; t.lanthier@greysauble.on.ca; Lisa.Burnside@conservationhamilton.ca; mmajchrowski@kawarthaconservation.com; elizabeth@kettlecreekconservation.on.ca;.cullen@lsrca.on.ca; tammy@lakeheadca.com; jmaxwell@lprca.on.ca; mark.peacock@ltvca.ca; kelly.vandettte@ltc.on.ca; beard@mvca.on.ca; David.Vallier@mattagamiregion.ca; smcintyre@mvc.on.ca; csharma@npca.ca; carl.jorgensen@conservationsudbury.ca; brian.tayler@nbmca.ca; dhevenor@nvca.on.ca; dlandry@otonabeeconservation.com; bmcnevin@quinteconservation.ca; richard.pilon@rrca.on.ca; sommer.casgrain-robertson@rvca.ca; j.stephens@svca.on.ca; cbarrett@ssmrca.ca; acoleman@nation.on.ca; bmcdougall@scrca.on.ca; John.MacKenzie@trca.ca; annettt@thamesriver.on.ca

Ontario Municipalities

#### CORPORATION OF THE MUNICIPALITY OF CALVIN <u>Resolution</u>

| DATE: April 27, 2021                | NO. <u>2021-110</u> |
|-------------------------------------|---------------------|
| MOVED BY <u>Dan Maxwell</u>         |                     |
| SECONDED BY <u>Heather Olmstead</u> |                     |

"WHEREAS the role of Ontario's 441 fire departments and their approximate 30,000 full, part-time, and volunteer firefighters is to protect Ontarians and their property; and

WHEREAS according to the Ontario Fire Marshal and Emergency Management's latest data, in Ontario there was over 11,000 number of loss fires, 9,500 no loss fires, 784 injuries, 91 fatalities, and over \$820 million dollars of estimated loss in 2018; and

**WHEREAS** fire emergencies only make up a portion of the total calls for help received by fire and emergency service departments as they respond to nearly every public emergency, disaster, or 9-1-1 call; and

**WHEREAS** Ontario's fire department infrastructure deficit continues to grow annually and is almost entirely borne by the municipality and local taxpayers with the majority having populations under 25,000; and

**WHEREAS** due to antiquated structures and equipment that do not meet current industry standards the safety of the Ontario public and Ontario firefighters is being jeopardized;

**NOW THEREFORE** the Council of the Corporation of the Municipality of Calvin resolves as follows:

- 1. **THAT** the Federal and Provincial Government includes apparatuses, training, equipment and structures for fire departments as eligible categories to any further infrastructure programs which will not only provide immediate stimulus to the local, provincial and federal economies given current economic uncertainty but also ensure the safety of Canadians and dedicated firefighters; and
- THAT this resolution be forwarded to the Honourable Doug Ford Premier of Ontario, the Honourable Steve Clark, Minister of Municipal Affairs and Housing, the Honourable Laurie Scott, Minister of Infrastructure, local MPP, local MP, the Ontario Fire Marshal, Jon Pegg, the Ontario Association of Fire Chiefs, and all Ontario Municipalities."

dan farall CARRIED

#### DIVISION VOTE

| NAME OF MEMBER OF COUNCIL                   | YEA   | NAY |
|---|---|-----|
| Coun Cross<br>Coun Maxwell<br>Coun Olmstead | $\begin{array}{c} X \\ X \\ X \\ X \end{array}$ |     |
| Mayor Pennell                               | <br>X<br>2                                      | 55  |

#### CORPORATION OF THE MUNICIPALITY OF CALVIN Resolution

DATE: April 27, 2021 NO. 2021-109

MOVED BY Heather Olmstead

SECONDED BY Sandy Cross

"Whereas the Federal government has passed a motion to adopt 988, a National three-digit suicide and crisis hotline;

Whereas the ongoing COVID-19 pandemic has increased the demand for suicide prevention services by 200%;

Whereas existing suicide prevention hotlines require the user to remember a 10-digit number and go through directories or be placed on hold;

Whereas in 2022 the United States will have in place a national 988 crisis hotline;

Whereas the Town of Caledon recognized that it is a significant and important initiative to ensure critical barriers are removed to those in a crisis and seeking help;

Now therefore be it resolved that the Corporation of the Municipality of Calvin endorses this 988 crisis line initiative; and

That this resolution be sent to the Honourable Vic Fedeli, MPP, Federal Minister of Health, the Canadian Radio-television and Telecommunications (CRTC) and all municipalities in Ontario."

dan famel

CARRIED

#### **DIVISION VOTE**

| NAME OF MEMBER OF COUNCIL                   | YEA         | NAY |
|---|-------------|-----|
| Coun Cross<br>Coun Maxwell<br>Coun Olmstead | X<br>X<br>X |     |
| Mayor Pennell                               | X           |     |



April 30, 2021

Hon. Doug Ford, Premier Room 281 Legislative Building, Queen's Park Toronto, ON M7A 1A1

Sent via email: premier@ontario.ca

Dear Premier Ford,

Please be advised that at the Brantford City Council Meeting held April 27, 2021, the following resolution was adopted:

### Request - Province of Ontario withdraws its prohibition on golfing and any other outdoor recreational activities

WHEREAS COVID-19 restrictions have had significant impacts; and

WHEREAS many forms of socializing, recreation and sport have been curtailed; and

WHEREAS the game of golf can be enjoyed while maintaining proper social distancing;

THEREFORE BE IT RESOLVED THAT The Corporation of The City of Brantford recommends:

- A. THAT The Province of Ontario withdraws its prohibition on golfing and any other outdoor recreational activities which can be enjoyed while maintaining proper social distancing; and
- B. THAT the City Clerk BE DIRECTED to forward a copy of this resolution to the Premier of Ontario; Will Bouma, MPP, Brantford-Brant, the Association of Municipalities of Ontario, Ontario Big City Mayors; and the list of other Municipalities in Ontario.

Yours truly,

Tanya Daniels City Clerk tdaniels @brantford.ca

cc MPP Will Bouma, Brantford-Brant Association of Municipalities of Ontario (AMO) Ontario Big City Mayors All Ontario Municipalities

CITY CLERK'S OFFICE City Hall, 100 Wellington Square, Brantford, ON N3T 2M2 P.O Box 818, Brantford, ON N3T 5R7 Phone: (519) 759-4150 Fax: (519) 759-7840 www.brantford.ca

### THE CORPORATION OF THE TOWN OF KINGSVILLE

#### BY-LAW 32-2021

#### Being a by-law to amend By-law 2-2019, as amended, being a By-law to appoint certain members of Council and individuals to boards and committees.

**WHEREAS** the Council of The Corporation of the Town of Kingsville deems it expedient to amend By-law 2-2019, as amended, being a by-law to appoint certain Members and Individuals to board and committees.

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

1. **THAT** Paragraph 1.p) titled **Communities in Bloom Committee** be amended to add the appointment of the following appointees:

Heather Crewe Tracy Oswald Karin Sonnenberg Astrid Tobin

2. **THAT** all other terms set out in said By-law 2-2019 and amendments thereto shall remain in full force and effect.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 10<sup>th</sup> DAY OF MAY, 2021.

MAYOR, Nelson Santos

#### BY-LAW 41-2021

#### 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** the application conforms to the Official Plan of the Town of Kingsville;

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

1. That Subsection 7.1 e) AGRICULTURAL EXCEPTION REGULATIONS is amended by deleting Subsection 7.1.52 and replacing with the following:

#### 7.1.52 'AGRICULTURE EXCEPTION 52 (A1-52)'

For lands shown as A1-52 on Map 9 Schedule "A" of this By-law.

- a) Permitted Uses
  - i) Those uses *permitted* under Section 7.1 Agriculture (A1).
- b) Permitted Buildings and Structures
  - i) Those buildings and structures permitted in Section 7.1.
- c) Zone Provisions

Notwithstanding Subsection 7.1 *Zone* Provisions, the following *shall* apply to lands within the A1-52 *zone*:

- i) Minimum Lot area 7,000 m<sub>2</sub>;
- ii) Minimum Lot frontage 100 meters;
- iii) Minimum Front yard Setback 20 meters;
- iv) Minimum Interior Side yard 1.5 meters;
- v) Minimum Exterior Side yard 15 meters;
- vi) Maximum Height of All Buildings/structures 10 meters.
- 2. 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 10<sup>th</sup> DAY OF May, 2021.

MAYOR, Nelson Santos

#### THE CORPORATION OF THE TOWN OF KINGSVILLE

#### BY-LAW 42 - 2021

#### Being a By-law to establish Interim Control on certain land uses within The Corporation of the Town of Kingsville

**WHEREAS** Section 38(1) of the Planning Act, R.S.O. 1990, c.P.13, as amended, authorizes the council of a municipality to pass an interim control by-law where the council has directed that a review or study be undertaken in respect of land use planning policies in the municipality, or in any defined area or areas thereof;

**AND WHEREAS** Council has directed, by resolution, that a secondary plan study be undertaken to review the land use planning policies in respect of the lands in the secondary plan area, as illustrated in Schedule 'A" of this by-law;

**AND WHEREAS** it is deemed desirable and expedient to enact this interim control by-law to provide the Town with the necessary time to complete the study and allow Council to consider the results of such study;

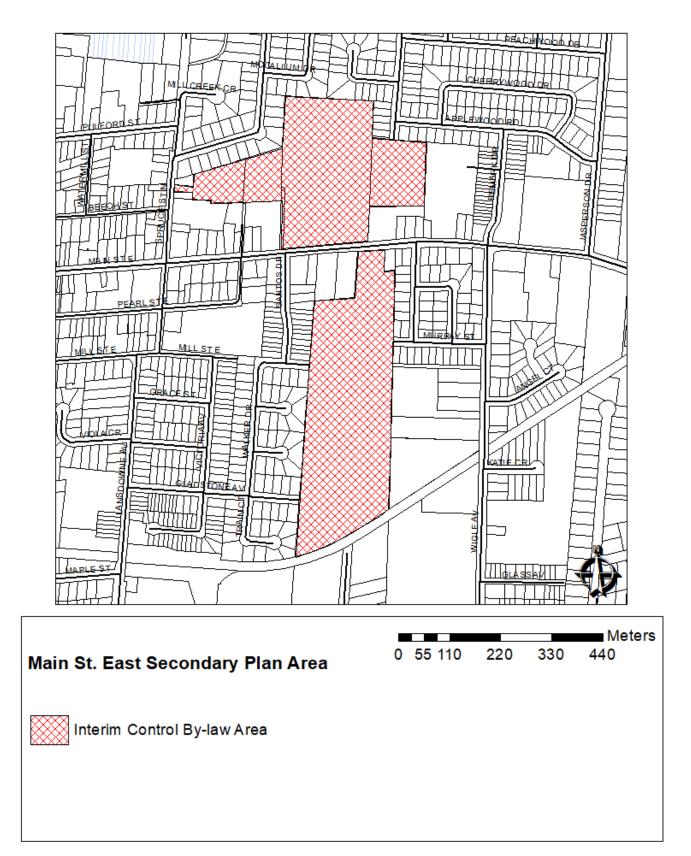
### NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:

- 1. The provisions of this by-law shall only apply to the lands outlined in Schedule "A", attached to this by-law.
- 2. Notwithstanding any other by-law to the contrary, no person shall, on the lands identified in Schedule "A", use any land, building or structure for any purpose whatsoever except for a use that lawfully existed on the date of the passage of this by-law as long as it continues to be used for such purpose.
- 3. Where any conflict exists between the provisions of this by-law and any other by-law of The Corporation of the Town of Kingsville this by-law shall prevail.
- 4. If any provision or requirement of this by-law, or the application thereof to any person, shall to any extent be held to be invalid or unenforceable, the remainder of this by-law or the application of such provision or requirement to all persons other than those to which it is held to be invalid or unenforceable, shall not be affected thereby, and each provision and requirement of this by-law shall be separately valid an enforceable to the fullest extent permitted by law.
- 5. Schedule 'A' attached hereto forms part of this By-law.
- 6. This by-law shall come into force and take effect on the day it is finally passed and shall remain in effect for one (1) year from the passage of this By-law unless otherwise extended in accordance with Section 38 of the Planning Act, or repealed by Council at an earlier date.

### READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED this 10<sup>th</sup> day of May, 2021.

MAYOR, Nelson Santos

### Schedule A



#### THE CORPORATION OF THE TOWN OF KINGSVILLE

#### BY-LAW 43 - 2021

#### Being a By-law to confirm the proceedings of the Council of The Corporation of the Town of Kingsville at its May 10, 2021 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 May 10, 2021 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 10<sup>th</sup> day of May, 2021.

**MAYOR, Nelson Santos**