POLICY AND PRIORITIES COMMITTEE AGENDA

P&P-09/2019 Immediately Following Council
December 2, 2019
Town of Pelham Municipal Office - Council Chambers
20 Pelham Town Square, Fonthill

Meeting will convene immediately following Council. If you require any accommodations for a disability in order to attend and participate in meetings or events, please contact the Office of the Clerk at 905 892-2607, ext. 315 or 320. Taping and/or recording of meetings shall only be permitted in accordance with the Procedure By-law. Rules of Decorum apply to observers.

Pages

1. Call to Order and Declaration of Quorum

2. Adoption of Agenda

3. Disclosure of Pecuniary Interest and the General Nature Thereof

4. New Business

4.7 Vesting of Property into Municipal Ownership for Subsequent Sale, 2019-0135-Corporate Services

5. Old Business

6. Adjournment

COMMITTEE REPORT
FIRE & BY-LAW ENFORCEMENT DEPARTMENT
Monday, December 02, 2019

Subject: Town of Pelham Emergency Plan 2019

Recommendation:

THAT Committee receive Report #2019-0143 and recommend to Council:

THAT the Town of Pelham Emergency Plan be approved; and

THAT staff be directed to prepare the necessary bylaw for Council consideration on December 16, 2019

Background:

Every municipality is required to develop and implement an emergency plan; the plan shall be reviewed annually and revised as required by the emergency management program committee as per Ontario Regulation 380/04.

Analysis:

The current Town of Pelham's emergency Plan was reviewed by the Fire Chief (CEMC) and a number of sections within the plan required updating. The Plan was also reviewed by an outside subject matter expert who contributed to the revisions. The final draft has been reviewed and accepted by the program committee. Revisions focus on the notification process, which was expanded to assist members of the group to operate during an incident, roles and responsibilities of directors within the EOC and finally contact information.

Financial Considerations:

There are no direct costs associated with this report.

Alternatives Reviewed:

This is a statutory requirement to which there are no alternatives.

Strategic Plan Relationship: Strong Organization

Consultation:

P.M. Jannetta & Associates

Emergency management program committee

Fire Chief (CEMC)

Other Pertinent Reports/Attachments:

None

Prepared and Recommended by:

Bob Lymburner, Fire Chief

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer

TOWN OF PELHAM

EMERGENCY MANAGEMENT PLAN

As adopted by Town Council By-Law Number XXXX

Confidential Version
Amended November 5, 2019
Draft Only

The Town of Pelham
20 Pelham Town Square, P.O. Box 400
Fonthill ON L0S1E0
Main Telephone: (905) 892-2607

Preface

Municipal Emergency Plan

"Every municipality shall formulate an emergency plan governing the provision of necessary services during an emergency and the procedures under and the manner in which employees of the municipality and other persons will respond to the emergency and the council of the municipality shall by by-law adopt the emergency plan". 2002, c.14, s. 5(1)

Emergency Management and Civil Protection At, R.S.O. 1990, Chapter E.9

Conformity with Upper-Tier Plan

Conformity between the emergency plans of the Town of Pelham (lower tier) and the Regional Municipality of Niagara (upper-tier), Section 5 of the Emergency Management and Civil Protection Act outlines the relationship between the municipalities, stating:

"The emergency plan of a lower-tier municipality in an upper-tier municipality, excluding a county, shall conform to the emergency plan of the upper-tier municipality and has no effect to the extent of any inconsistency." [2002, c.17]

Public Accessibility to the Plan

A copy of the Town of Pelham's Emergency Management Plan, By-Law 3334 (2013), is available to the public for review and duplication purposes as proposed in the Emergency Management and Civil Protection Act, R.S.O. 1990, Chapter E.9: "…an emergency plan shall be made available to the public for inspection and copying during ordinary business hours at an office of the municipality" (Section 10)

Limitations to Public Access:

The Emergency Management Plan is a public document, excluding the appendices, which are deemed confidential. Limitations to public access of the EMP are outlined within the MFIPPA, specifically Sections 8,9,10 and 13.

Accessibility for Ontarians with Disabilities Act (AODA) 2005, S.O., 2005, C.11

The AODA identifies standards to be set by Regulation. Ontario Regulation 429/07 sets out requirements for Accessible Standards for Customer Service and providing documents in an accessible format.

The Town of Pelham shall provide copies of the EMP in an accessible format, upon request. Accessible conversion of the EMP will require a minimum of ten working days to complete.

O. Reg. 191/11: Integrated Accessibility Standards

Emergency procedure, plans or public safety information

13. (1) In addition to its obligations under section 12, if an obligated organization prepares emergency procedures, plans or public safety information and makes the information available to the public, the obligated organization shall provide the information in an accessible format or with appropriate communication supports, as soon as practicable, upon request. O. Reg. 191/11, s. 13 (1).

Table of Contents

1.0 Introduction

1.1 Background

The Town of Pelham is located in the centre of Niagara Region, in Ontario Canada. The town's southern boundary is formed by the Welland River, a meandering waterway that flows into the Niagara River. To the west is the township of West Lincoln, to the east the city of Welland, and to the north the city of St. Catharines. North Pelham contains the picturesque Short Hills. Two important creeks have their headwaters within Pelham; Coyle Creek, which flows south into the Welland River, and Twelve Mile creek, a spring-fed stream that flows north into Lake Ontario.

Pelham is accessible by Highway 406 south from the Queen Elizabeth Way. The Town encompasses the communities of Effingham, Fenwick, Fonthill, North Pelham and Ridgeville. It has a successful, well diversified economy with a population of approximately 18,000 residents and over 6,500 private dwellings.

The Niagara Peninsula and the Town of Pelham have a significant senior's population and the trend is expected to continue. Seniors make up 24% of the population and the proportion of seniors is 21% across the region (in 2016).

Pelham is home to 621 businesses; professional, scientific and technical services (169 companies), construction firms (153 companies) and real estate and rental leasing (121 companies) are the driving forces behind Pelham's growing community.

With population rapidly increasing, the Town is expanding with commercialism, rural/agricultural and urban residential. Pelham is one of the fastest growing municipalities in Niagara.

The Town of Pelham Strategic Plan was developed to focus on six key priority actions. These priorities outline the Town's commitment to enhance the quality of life, support a strong organization, ensure financial stability, enhance communication and engagement, build strong communities and cultural assets, develop a risk management framework and grow revenue while promoting cultural assets and protecting environment assets. The Town of Pelham Emergency Management Plan works in parallel with the Strategic Plan to achieve each of the six priorities with a focus on emergency preparedness to safeguard the life, property, environment and economy for the Town.

The foundation of the Town of Pelham's Emergency Management Plan is based on the four phases of emergency management.

Figure 1: The Four Phases of Emergency Management

The Four Phases of Emergency Management	
Mitigation Preventing future emergencies or minimizing their effects	Includes any activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies. Buying flood and fire insurance for your home is a mitigation activity. Mitigation activities take place **before** and **after** emergencies.
Preparedness Preparing to handle an emergency	Includes plans or preparations made to save lives and to help response and rescue operations. Evacuation plans and stocking food and water are both examples of preparedness. Preparedness activities take place **before** an emergency occurs.
Response Responding safely to an emergency	Includes actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action. Seeking shelter from a tornado or turning off gas valves in an earthquake are both response activities. Response activities take place **during** an emergency.
Recovery Recovering from an emergency	Includes actions taken to return to a normal or an even safer situation following an emergency. Recovery includes getting financial assistance to help pay for the repairs. Recovery activities take place **after** an emergency.

The Town has also adopted the standardized approach to emergency management that has been developed by the Province of Ontario; the Incident Management System (IMS). As such, the principles and concepts of the Ontario IMS Doctrine has been incorporated into this plan.

1.2 Document Title

The Town of Pelham Emergency Management Plan hereinafter will be referred to as 'the Plan'. The Plan is a flexible and adaptable tool used to assist those who respond to emergency situations, such as first responders and municipal staff.

1.3 Purpose

The purpose of the Plan is to make provisions for the extraordinary arrangements and measures that may be necessary for preserving and safeguarding life, property, the environment and the economy for the Town of Pelham when faced with a complex and large-scale emergency. For the purpose of the Plan, and in accordance with the Emergency Management and Civil Protection Act R.S.O. 1990, Chapter E.9 (the Act), an emergency is defined as:

> "A situation or impending situation that constitutes a danger of major proportions that could result in serious harm to persons or substantial damage to property and that is caused by the forces of nature, a disease or other health risk, an accident or an act whether intentional or otherwise."

1.4 Plan Maintenance and Review

"Every municipality shall review and, if necessary, revise its emergency plan every year." 2002, c.14, s.5(3)

In accordance with the Act, the Town of Pelham Emergency Management Plan shall be reviewed and if necessary, revised on an annual basis. The By-Law associated with the Plan shall be reviewed and updated as required.

The Town of Pelham Emergency Management Program Committee shall be responsible for the maintenance, review and distribution of the Plan.

Town of Pelham Emergency Plan Distribution List

The completed Town of Pelham Emergency Management Plan with attached appendices has been distributed to the stakeholders listed in the table below.

Distribution Date (m/d/yr)	Department/Division/Section	Position Title

Revision Control

Document Version	Document Name	Revision Date	Revision Summary
May 2019	EMP		Amended date
May 2019	EMP		Table of Contents; page number changes
May 2019	EMP		Page 6; By-Law # change
May 2019	EMP		Pages 7-12; Emergency Notification expanded to be more comprehensive
August 2019	EMP		Page 13; CAO replaced by CEMC
May 2019	EMP		Page 23; EIO information updated
August 2019	EMP		Page 31; Contact list updated

2.0 Authority

The Town of Pelham's Emergency Management Plan has been formulated by the Fire and By-Law Services Department under the authority describe in the section below.

2.1 Legislative Authority

The Act as amended, provides the authority for municipalities to prepare for and respond to emergencies in order to protect public health, safety, welfare and property in Ontario communities. *Ontario Regulation 3804/04* (the Regulation), effective December 31, 2004 sets the standards, including the approval of this Plan, for municipal emergency management programs. The Act requires that:

> "Every municipality shall formulate an emergency plan governing the provision of necessary services during an emergency and the procedures under and the manner in which employees of the municipality and other persons will respond to the emergency and the council of the municipality shall by by-law adopt the emergency plan" [Section 3(1)]

The municipal legislation under which the Town of Pelham, its employees and agents are authorized to respond to an emergency is by By-Law.

2.2 Freedom of Information and Protection of Privacy

Any personal information collected under the authority of the Plan shall be used solely for the purpose of planning, preparing and responding to emergencies as defined within the Plan and will be included as appendices. These appendices are deemed to be confidential and do not form part of the Plan. The release of any information under this Plan shall be made in conformity with the Municipality Freedom of Information and Protection of Privacy Act (MFIPPA), R.S.O. 1990, Chapter M.56 as amended:

"The personal information has been supplied by the individual to whom the information relates in confidence." [Section 14(2) (h)]

2.3 Protection from Action for Implementation of the Plan

Section 11 of the Act states:

> "No action or other proceeding lies or shall be instituted against a member of council, an employee of a municipality, an employee of a local services board, an employee of a district social services administration board, a member of the Crown, a public servant or any other individual acting pursuant to this Act or an order made under this Act for any act done in good faith in the exercise or performance or the intended exercise or performance of any power or duty under this Act or an order under this Act or for neglect or defect in the good faith exercise or performance of such a power of duty" [2006, c. 13, s.1 (6)]

2.4 Policies and Procedures

Details relative to the implementation of the provision of the Plan shall be described in Standard Operating Procedures (SOPs) and other documented plans of the departments and agencies responsible for actions to be taken during an emergency. These SOPs and documented plans shall take into consideration the business continuity aspects of government and the additional resources required for the purpose of carrying out responsibilities identified or foreseen under the Plan.

2.5 Town of Pelham Emergency Management Program Committee

Section 11 of the Regulation describes that "every municipality shall have an emergency management program committee".

Further, the committee shall be composed of,

a. The municipality's emergency management program coordinator;
b. A senior municipal official appointed by council;
c. Such municipal employees who are responsible for emergency management functions as may be appointed by council; and
d. Such other persons as may be appointed by council

The council shall also "appoint one of the members of the committee to be the chair" and the "committee shall advise the council on the development and implementation of the municipality's emergency management program" [O. Reg. 380/04, s.11(4), (5)].

Mandate of the Pelham Emergency Management Program Committee (PEMPC):

To serve and oversee the development of a comprehensive Emergency Management Program for the Town of Pelham, and to engage with and provide advice to Town Council on program implementation. The Town's Emergency Management Program shall address continuity of operations, services and security within the corporation paired with a controlled and coordinated response to any emergency in order to preserve the property, health, safety and welfare of the inhabitants, workers and visitors.

Composition:

The membership of the PEMPC should remain flexible to accommodate any changes that may occur in the Town of Pelham's corporate structure. However, the general composition of the Committee should be considered as follows:

- Chair, required by Regulation: Community Emergency Management Coordinator (CEMC)/Fire Chief
- Alternate Chair: Alternate CEMC
- Senior Municipal Official, required by Regulation: Chief Administrative Officer (CAO) or Designate;
- Member of Council, required by Regulation: Appointed Councilor as liaison
- Fire Chief or Designate; and
- City Clerk or Designate

In addition, municipal employees who are responsible for emergency management functions, namely those from the Senior Management Team (IMS) operational sections that are established during an emergency, have also been included in the composition of the PEMPC:

- Operations: Designates are determined by the SLT
- Planning: Designates are determined by the SLT
- Logistics: Designates are determined by the SLT
- Finance and Administration: Designates are determined by the SLT
- Communications: (as a functional role within the Command Group): Designates are determined by the E.I.O

Following the principles and concepts of IMS, inter-organizational collaboration is promoted by inviting any additional Town of Pelham employees, as well as representatives of organizations outside the municipal government who are involved in emergency management, to attend the EMPC meetings, as required. External agencies that are stakeholders in the Town of Pelham Emergency Management Program, and private sector industry representatives, may provide valuable support and input.

3.0 Plan Implementation

3.1 Levels of Emergency / Emergency Notification Procedures

Pelham Emergency Response Plan

Activation / Notification Levels

The Town of Pelham Emergency Management Program recognizes four levels of Emergency Operations Centre (EOC) activation or notification. While the Town of Pelham's Emergency Management Team is always engaged in routine monitoring for any potential threats to safety, should a situation be identified that may impact or has impacted the Town of Pelham services or systems, the EOC activation levels procedure may be used to ensure readiness. Emergencies are dynamic so this procedure is flexible and the level of activation may be changed as more information becomes available or as the situation warrants. This procedure can be implemented by the Emergency Management Coordinator, alternate CEMC or the CAO. The levels of activation are outlined below:

Activation Levels

Level	Description	Staffing Notification
Emergency is Declared FULL ACTIVATION	Emergency is Declared (Optional) - Catastrophic Event - Hazmat (Large) - Rail, Spill release (Large) - Tornado, Extensive Damage loss of life - Pandemic - M.C.I	E.O.C activation (Emergency Declared) - Control Group - Emergency Management Team - Mayor & Council is notified - E.I.O updates web site & social media - Regional Emergency Coordinator - P.E.O.C - Group Staff
Significant Event PARTIAL ACTIVATION	E.O.C is not fully activated (Partial) - Ice Storm, wide spread - Wind Storm, wide spread - Flooding, wide spread - Infrastructure Failure, large scale - Long periods of utility loss, wide spread	E.O.C is not fully activated (Partial) - Control Group - SLT - E.I.O updates web site & social - Group Staff - Council is notified
Isolated Event ENHANCED ACTIVATION	- Road closure, not planned - Large fire loss - Life Loss (Fire) - Tornado touch down - Damage to Town Facilities - Weather event Town closures	E.O.C is not activated - Control group - E.I.O updates web site & social media - Group Staff - SLT - Council is notified
Pending Event ROUTINE MONITOR	- Snowstorms - Ice storms - Wind storms - Heat wave - Cold spells - Loss of infrastructure	Group SLT - Group staff are notified - Council is notified

<u>Full Activation</u>

The EOC may be at full activation during or in advance of an incident that could have a significant impact on the Town or multiple municipalities in Niagara and/or Regional services. These types of incidents may last for a prolonged period or occur on a large regional scale. In the case of a full activation, the majority of EOC personnel may be asked to staff the EOC. Multiple shifts may be required depending on the incident.

- Present or anticipated large scale incident that could cross municipal boundaries within the Region.
- Present or anticipated need to access Province or Federal resources.
- Present or anticipated severe impact resulting in much higher than normal resource demands to manage a significant community impact.

The procedure is outlined below.

1. Emergency Management will notify selected personnel to report to the EOC. This responsibility may also be undertaken by a designate or other role depending on the circumstances, particularly if the response is already underway.
2. The EOC will use the IMS model and an EOC Director will be established. The Director will be the CAO or designate as appropriate based on the incident and the IMS model.
3. Situational awareness will be ongoing.
4. Business cycle meetings will be coordinated based on the needs of the situation. Status updates will be provided and an action plan will be developed. Minutes of meetings and other records are to be maintained.
5. Plans for staffing and resources will be made in case of a long duration response.

Partial Activation

Partial activation may be used when a situation is identified that may impact or has the potential to impact the Town's services or systems and may require short term planning and actions beyond enhanced monitoring or if a municipality requests Regional support to manage a municipal response. During a partial activation, not all EOC members will need to attend. This is an active system and can be implemented by the CAO or the Community Emergency Management Coordinators (CEMCs). Examples of incidents that may require partial activation include potential threats to water sources or imminent or ongoing flooding or severe weather with a high probability of damages and impacts. In some instances, when a municipality in Niagara is responding to an emergency, this group may be required in order to identify and support impacted regional facilities and services.

- Town has received requests to support a Municipal emergency response, which require some coordination.
- Town facilities/services/resources are likely to be negatively impacted resulting in a potential disruption or Business Continuity issue.
- Town emergency response that does not necessarily require the Region's support but does require a Regional effort to mitigate the impacts on Regional facilities and services.
- It is anticipated that there may be a need for non-routine Town resources/services due to a significantly larger demand than normal.

The procedure is outlined below.

1. Emergency Management will notify selected personnel to report to the EOC. This responsibility may also be undertaken by the Personnel delegated or other role depending on the circumstances.
2. Each response to an incident will operate according to the Incident Management System (IMS) whereby there will be an EOC Director. The Director will be the CAO or designate as appropriate based on the incident and the IMS model.

3. Individuals with technical expertise and/or program/service responsibilities will be identified, notified and asked to gather to assist with the situation. At minimum, the CAO and Council will be notified of the situation.
4. Situational awareness will be ongoing.
5. Business cycle meetings will be coordinated based on the needs of the situation. Status updates will be provided and an action plan will be developed. Minutes of meetings and other records are to be maintained.

Enhanced Monitoring

Enhancing Monitoring may be activated when the Emergency Management Team is notified of a potential hazard that may impact the Town but there is still a relatively strong degree of uncertainty regarding the magnitude of the impacts. It is used for situations which warrant additional monitoring as they could escalate into an emergency and possibly require movement into the Partial Activation or Full Activation Levels.

- Incident that requires heightened situational awareness as it may progress into an emergency.
- Could have a moderate to significant impact on Town services, residents, communities, or infrastructure.
- It is anticipated that there may be a need for non-routine Town resources/services due to a significantly larger demand than normal.
- There is present or anticipated political sensitivity regarding the potential incident or heightened media attention.

The procedure is outlined below.

1. Once a potential hazard has been identified, Emergency Management staff will assess the situation to determine whether Enhanced Monitoring is required.
2. If Enhanced Monitoring is required, Emergency Management Staff will notify the staff with roles related to emergency response depending on the situation.
3. The Emergency Management will reach out to the municipal CEMCs to alert them to the potential event and to encourage them to report any impacts.
4. If the incident occurs on a weekend or after hours, the Emergency Management Team will continue to monitor the situation and provide updates as needed.

Routine Monitoring

The Town of Pelham Emergency Management Team continually monitors for potential or actual emergencies. If a potential threat is detected, then the decision to escalate to Enhanced Monitoring may be made.

3.2 Incident Reporting

Citizens usually report incidents by dialing 911 to access Niagara Regional Police Service, municipal fire and emergency medical service. These organizations will be among the first on scene of a potential emergency.

3.3 Primary Responsibility

Whenever an emergency occurs or threatens, the initial primary responsibility for providing immediate assistance and control rests with the responding public safety agency or municipal service department.

Town of Pelham Fire Chief (or designate), Town of Pelham Director of Public Works (or designate), Niagara Regional Police Service Duty Officer, or Niagara Emergency Medical Service Paramedic shall personally assume control at the site of an incident, establishing Incident Command (or arrange for someone on-site to take charge immediately until an Incident Commander, if required, is appointed).

3.4 Authority for Activating the Emergency Plan

The Incident Commander at the site of an incident, may decide to contact the Town of Pelham Community Emergency Management Coordinator (CEMC), or alternate. The CEMC has delegated authority to activate the Plan and implement the Municipal Emergency Control Group. The CEMC shall make the decision to activate the Plan following consultation with the responding agencies and will advise and update the Mayor, Chief Administrative Officer and key stakeholders as soon as possible.

Fire and By-Law Services is responsible for the coordination of emergency management. The Fire Chief/CEMC (or designate) should be notified of incidents that are considered Levels Two, Three and One. In the case of Level Three incidents, the Fire Chief may be notified and placed on standby in preparation for the potential scale-up of the incident. Standby may involve monitoring the situation, alerting stakeholders of potential risk, collecting and disseminating information, preparing for a full activated response and other actions, as needed.

The Fire Chief/CEMC (or designate) monitors, collect and disseminates information about the incident to the appropriate sources and is responsible for notifying and activating the Municipal Emergency Control Group (MECG).

3.5 Emergency Community Control Group

a) Emergency Operations Centre

The CCG will report to the Emergency Operations Centre located at Pelham Fire Station # 1 located at 177 Hwy #20 West, Fonthill. In the event this operation centre cannot be used, then the alternate location will be Pelham Fire Station # 2 located at 766 Welland Road, Fenwick.

b) Community Control Group (CCG)

The emergency response will be directed and controlled by the Community Control Group (CCG) – a group of officials who are responsible for coordinating the provision of the essential services necessary to minimize the effects of an emergency on the community.

The CCG consists of the following officials:

- Mayor or Alternate (E.I.O)
- C.A.O. or Alternate
- Clerk, or Alternate
- Police Chief or Alternate
- Fire Chief or Alternate
- Director of Operations or Alternate
- Treasurer or Alternate
- Medical Officer of Health
- Regional Social Services Representative/Community Services Department
- Emergency Medical Services (EMS) Representative
- Community Emergency Management Coordinator
- Electrical Utility Representatives – Pen West Utilities/Hydro One
- E.I.O

Additional personnel called or added to the CCG may include:

- Emergency Management Ontario Representative
- Ontario Provincial Police Representative
- Niagara Peninsula Conservation Authority Representative
- Liaison staff from provincial ministries

Any other officials, experts or representatives from the public or private sector as deemed necessary by the CCG.

The CCG may function with only a limited number of persons depending upon the emergency. While the CCG may not require the presence of all the people listed as members of the control group, all members of the CCG must be notified.

c) Operating Cycle

Members of the CCG will gather at regular intervals to inform each other of actions taken and problems encountered. The C.A.O. will establish the frequency of meetings and agenda items. Meetings will be kept as brief as possible, thus allowing members to carry out their individual responsibilities. Support staff from the Town's Administration will maintain status boards and maps, which will be prominently displayed and kept up-to-date.

d) Community Control Group Responsibilities

The members of the Community Control Group (CCG) are likely to be responsible for the following actions or decisions:

- Calling out and mobilizing their emergency service, agency and equipment;
- Coordinating and directing their service and ensuring that any actions necessary for the mitigation of the effects of the emergency are taken, provided they are not contrary to law;
- Determining if the location and composition of the CCG are appropriate;
- Advising the Mayor or alternate as to whether the declaration of an emergency is recommended;
- Advising the Mayor or alternate on the need to designate all or part of the Town as an emergency area;
- Ensuring that an Emergency Site Manager (ESM) is appointed;
- Ensuring support to the ESM by offering equipment, staff and resources, as required;
- Ordering, coordinating and/or overseeing the evacuation of inhabitants considered to be in danger;
- Discontinuing utilities or services provided by public or private concerns, i.e. hydro, water, gas, closing down a shopping plaza/mall;
- Arranging for services and equipment from local agencies not under community control, i.e. private contractors, industry, volunteer agencies, service clubs;
- Notifying, requesting assistance from and/or liaising with various levels of government and any public or private agencies not under community control, as considered necessary;
- Determining if additional volunteers are required and if appeals for volunteers are warranted;
- Determining if additional transport is required for evacuation or transport of persons and/or supplies;
- Ensuring that pertinent information regarding the emergency is promptly forwarded to the Emergency Information Coordinator and Citizen Inquiry Supervisor, for dissemination to the media and public;
- Determining the need to establish advisory groups and/or subcommittees/ working groups for any aspect of the emergency including recovery;

- Authorizing expenditure of money required dealing with the emergency;
- Notifying the service, agency or group under their direction, of the termination of the emergency;
- Maintaining a log outlining decisions made and actions taken, and submitting a summary of the log to the C.A.O. within one week of the termination of the emergency, as required;
- Participating in the debriefing following the emergency.

3.6 Emergency Response System

a) Individual Responsibilities of the Community Control Group

1. Mayor, or Alternate

The Mayor is responsible for:

- Declaring an emergency within the designated area;
- Declaring that the emergency has terminated (Note: Council may also terminate the emergency);
- Town Council;
- CAO;
- Public;
- Neighboring Community Officials;
- Local MPs;
- Local MPPs;
- Notifying Emergency Management Ontario, Ministry of Public Safety and Security, of the declaration of the emergency, and termination of the emergency;
- Ensuring that members of Council are advised of the declaration and termination of an emergency, and are kept informed of the emergency situation.

2. C.A.O. or Alternate

The C.A.O. for the Town of Pelham is responsible for:

- Providing order leadership in response to an emergency;
- Ensuring liaison with the Police Chief regarding security arrangements for the EOC;
- As the Operations Officer, coordinating all operations within the EOC, including the scheduling of regular meetings;
- Advising the Mayor on policies and procedures, as appropriate;
- Approving, in conjunction with the Mayor, major announcements and media releases prepared by the Emergency Information Coordinator, in consultation with the CCG;
- Ensuring that a communication link is established between the CCG and the Emergency Site Manager (ESM);
- Calling out additional Town staff to provide assistance, as required.

3. Clerk, or Alternate

The Clerk is responsible for:

- Assisting the C.A.O., as required;
- Ensuring all important decisions made and actions taken by the CCG are recorded;
- Ensuring that maps and status boards are kept up to date;
- Providing a process for registering CCG members and maintaining a CCG member list;
- Notifying the required support and advisory staff of the emergency, and the location of the Emergency Operations Centre;
- Initiating the opening, operation and staffing of switchboard at the community offices, as the situation dictates, and ensuring operators are informed of CCG members' telephone numbers in the EOC;
- Arranging for printing of material, as required;
- Coordinating the provision of clerical staff to assist in the Emergency Operations Centre, as required;
- Upon direction by the Mayor, ensuring that all Council Members are advised of the declaration and termination of the emergency;
- Upon direction by the Mayor, arranging special meetings of Council, as required, and advising members of council of the time, date, and location of the meetings;
- Procuring staff to assist, as required.

4. Police Chief or Alternate

The Police Chief is responsible for:

- Activating the emergency notification system, and ensuring all members of the CCG are notified;
- Notifying necessary emergency and community services, as required;
- Establishing a site command post with communications to the EOC;
- Depending on the nature of the emergency, assign the Site Manager and inform the CCG;
- Establishing an ongoing communications link with the senior police official at the scene of the emergency;
- Establishing the inner perimeter within the emergency area;
- Establishing the outer perimeter in the vicinity of the emergency to facilitate the movement of emergency vehicles and restrict access to all but essential emergency personnel;
- Providing traffic control staff to facilitate the movement of emergency vehicles;
- Alerting persons endangered by the emergency and coordinating evacuation procedures;
- Opening of evacuee centers in collaboration with the Social Services Representative;
- Ensuring liaison with the Social Services Officer regarding the establishment and operation of evacuation and reception centers;
- Ensuring the protection of life and property and the provision of law and order;
- Providing police service in EOC, evacuee centers, morgues, and other facilities, as required;
- Notifying the coroner of fatalities;
- Ensuring liaison with other community, provincial and federal police agencies, as required;

- Providing an Emergency Site Manager, if required.

5. Fire Chief or Alternate

The Fire Chief is responsible for:

- Providing the CCG with information and advice on firefighting and rescue matters;
- Depending on the nature of the emergency, assigning the Site Manager and informing the CCG;
- Establishing an ongoing communications link with the senior fire official at the scene of the emergency;
- Informing the Mutual Aid Fire Coordinators and/or initiating mutual aid arrangements for the provision of additional firefighters and equipment, if needed;
- Determining if additional or special equipment is needed and recommending possible sources of supply, e.g., breathing apparatus, protective clothing;
- Providing assistance to other community departments and agencies and being prepared to take charge of or contribute to non-firefighting operations if necessary, e.g., rescue, first aid, casualty collection, evacuation;
- Providing an Emergency Site Manager, if required.

6. Director of Operations or Alternate

The Director of Operations is responsible for:

- Providing the CCG with information and advice on engineering and public works matters;
- Depending on the nature of the emergency, assigning the Site Manager and informing the CCG;
- Establishing an ongoing communications link with the senior public works official at the scene of the emergency;
- Ensuring liaison with the public works representative from the neighboring community(ies) to ensure a coordinated response;
- Ensuring provision of engineering assistance;
- Ensuring construction, maintenance and repair of Town's roads;
- Ensuring the maintenance of sanitary sewage and water systems;
- Providing equipment for emergency pumping operations;
- Ensuring liaison with the Fire Chief concerning emergency water supplies for firefighting purposes;
- Providing emergency potable water, supplies and sanitation facilities to the requirements of the Medical Officer of Health;
- Discontinuing any public works service to any resident, as required, and restoring these services when appropriate;
- Ensuring liaison with public utilities to disconnect any service representing a hazard and/or to arrange for the provision of alternate services or functions;
- Providing public works vehicles and equipment as required by any other emergency services;
- Ensuring liaison with the conservation authority regarding flood control, conservation and environmental matters and being prepared to take preventative action.

7. Treasurer or Alternate

The Treasurer is responsible for:

- Providing information and advice on financial matters as they relate to the emergency;
- Ensuring liaison, if necessary, with the Treasurers/Directors of Finance of neighboring communities;
- Ensuring that records of expenses are maintained for future claim purposes;
- Ensuring the prompt payment and settlement of all the legitimate invoices and claims incurred during an emergency.

8. Medical Officer of Health

The Medical Officer of Health is responsible for:

- Acting as a coordinating link for all emergency health services at the CCG;
- Ensuring liaison with the Ontario Ministry of Health and Long Term Care, Public Health Branch;
- Depending on the nature of the emergency, assigning the Site Manager and informing the CCG;
- Establishing an ongoing communications link with the senior health official at the scene of the emergency;
- Ensuring liaison with the ambulance service representatives;
- Providing advice on any matters, which may adversely affect public health;
- Providing authoritative instructions on health and safety matters to the public through the Emergency Information Coordinator;
- Coordinating the response to disease-related emergencies or anticipated emergencies, such as epidemics, according to Ministry of Health and Long Term Care policies;
- Ensuring coordination of care of bed-ridden citizens and invalids at home and in evacuee centers during an emergency;
- Ensuring liaison with voluntary and private agencies, as required, for augmenting and coordinating public health resources;
- Ensuring coordination of all efforts to prevent and control the spread of disease during an emergency;
- Notifying the Director of Operations regarding the need for potable water supplies and sanitation facilities;
- Ensuring liaison with Social Services Representative on areas of mutual concern regarding health services in evacuee centers.

9. Regional Social Services Representative/Community Services Department

The Regional Social Services Representative is responsible for:

- Ensuring the well-being of residents who have been displaced from their homes by arranging emergency lodging, clothing, feeding, registration and inquiries and personal services;
- Supervising the opening and operation of temporary and/or long-term evacuee centers, and ensuring they are adequately staffed;
- Ensuring liaison with the police chief with respect to the pre-designation of evacuee centers which can be opened on short notice;

- Liaison with the Medical Officer of Health on areas of mutual concern regarding operations in evacuee centers;
- Ensuring that a representative of the District School Board of Niagara and/or the Niagara Catholic District School Board is/are notified when facilities are required as evacuee reception centers, and that staff and volunteers utilizing the school facilities take direction from the Board representative(s) with respect to their maintenance, use and operation;
- Ensuring liaison with Residential Senior Facilities as required;
- Making arrangements for meals for the staff and volunteers at the EOC and the Site.

10. Emergency Medical Services (EMS) Representative

The Emergency Medical Services Representative is responsible for:

- Ensuring emergency medical services at the emergency site;
- Depending on the nature of the emergency, assigning the Site Manager and informing the CCG;
- Establishing an ongoing communications link with the senior EMS official at the scene of the emergency;
- Obtaining EMS from other municipalities for support, if required;
- Ensuring triage at the site;
- Advising the CCG if other means of transportation are required for large-scale response;
- Liaising with the Ministry of Health and Long Term Care Central Ambulance Communications Centre to ensure balanced emergency coverage is available at all times throughout the community;
- Ensuring liaison with the receiving hospitals;
- Ensuring liaison with the Medical Officer of Health, as required.

11. Community Emergency Management Coordinator

The Community Emergency Management Coordinator (CEMC) is responsible for:

- Activating and arranging the Emergency Operations Centre;
- Ensuring that security is in place for the EOC and registration of CCG members;
- Ensuring that all members of the CCG have necessary plans, resources, supplies, maps, and equipment;
- Providing advice and clarifications about the implementation details of the Emergency Response Plan;
- Supervising the Telecommunications Coordinator;
- Ensuring liaison with community support agencies (e.g. St. John Ambulance, Canadian Red Cross);
- Ensuring that the operating cycle is met by the CCG and related documentation is maintained and kept for future reference;
- Addressing any action items that may result from the activation of the Emergency Response Plan and keeping CCG informed of implementation needs;
- Maintaining the records and logs for the purpose of debriefings and post-emergency reporting that will be prepared.

12. Electrical Utility Representatives – Niagara Peninsula Energy/Hydro One

The Utility Representative – Niagara Peninsula Energy/Hydro One is responsible for:

- Monitoring the status of power outages and customers without services;
- Providing updates on power outages, as required;
- Ensuring liaison with the Operations representative;
- May provide assistance with accessing generators for essential services, or other temporary power measures.

a) Support and Advisory Staff

The following staff may be required to provide support, logistics and advice to the CCG:

- Legal Services Representative (If required)
- Telecommunications (ARES) Coordinator
- Emergency Information Officer or Alternate
- Other Agencies
- District School Board of Niagara / Niagara Catholic District School Board
- Niagara Health System – Welland Site Administrator

1. Legal Services Representative

The Legal Services Representative is responsible for:

- Providing advice to any member of the Community Control Group on matters of a legal nature as they may apply to the actions of the Town of Pelham in its response to the emergency, as requested.

2. Telecommunications (ARES) Coordinator

The Telecommunications Coordinator reports to the Emergency Management Coordinator and is responsible for:

- Activating the emergency notification system of the local amateur radio operators group;
- Initiating the necessary action to ensure the telephone system at the community offices functions as effectively as possible, as the situation dictates;
- Ensuring that the emergency communications centre is properly equipped and staffed, and working to correct any problems which may arise;
- Maintaining an inventory of community and private sector communications equipment and facilities within the community, which could, in an emergency, be used to augment existing communications systems;
- Making arrangements to acquire additional communications resources during an emergency;

3. Communications & Public Works Specialist

The Town's public relations and marketing specialist will act as the Emergency Information Officer during an emergency. The Emergency Information Officer is responsible for the dissemination of news and information to the media for the public.

4. Other Agencies

In an emergency, many agencies may be required to work with the Community Control Group. Two such agencies are the school boards and the hospital, as detailed below. Others might include Emergency Management Ontario, Ontario Provincial Police, and the Office of the Fire Marshal, industry, volunteer groups, conservation authorities, and provincial ministries.

5. District School Board of Niagara and Niagara Catholic District School Board

The District School Board of Niagara and Niagara Catholic District School Board are responsible for:

- Providing any school (as appropriate and available) for use as an evacuation or reception centre and a representative(s) to co-ordinate the maintenance, use and operation of the facilities being utilized as evacuation or reception centers;
- Ensuring liaison with the municipality as to protective actions to the schools (i.e., implementing school stay in place procedure and implementing the school evacuation procedure)

6. Niagara Health System - Welland Site Administrator

The Niagara Health System - Welland Site Administrator is responsible for:

- Implementing the hospital emergency plan;
- Ensuring liaison with the Medical Officer of Health and local ambulance representatives with respect to hospital and medical matters, as required;
- Evaluating requests for the provision of medical site teams/medical triage teams;
- Ensuring liaison with the Ministry of Health and Long Term Care, as appropriate.

c) Relationship between CCG and Emergency Site Manager (ESM):

Depending on the nature of the emergency, and once the ESM has been assigned, the CCG relationship with the ESM is to offer support with equipment, staff and other resources, as required.

The CCG will also ensure that the rest of the community maintains municipal services.

d) Relationship between ESM, and command and control structures of emergency responders

The senior representative for each emergency responder (police, fire, EMS, public works) at the site will consult with the Emergency Site Manager, so as to offer a coordinated and effective response.

Regular briefings will be held at the site and chaired by the Emergency Site Manager, so as to establish the manner and process by which response to the emergency will be provided.

Emergency Telecommunications Plan

Upon implementation of the Emergency Response Plan, it will be important to ensure that communications are established between the emergency site(s) and the EOC. Also, communications may be required at various locations including evacuation centers, hospitals, and other key responding agencies.

The Emergency Telecommunications Coordinator for the Town of Pelham is a predestinated Amateur Radio Operator. The Emergency Telecommunications Coordinator is part of the initial Emergency Notification Procedure who, in turn, will call upon his contacts for further communications support, as required.

The Emergency Telecommunications Office is located in the office adjacent to the EOC. It is equipped with portable hand radios, battery back-up, two-way radio with the necessary channels to communicate with police, fire, EMS and the Ontario Fire Marshall.

Communications between the EOC and the other responding agencies will be with the support of a runner. All messages are to be written on the Amateur Radio Message Forms and logged.

Should the Town of Pelham lose all telephone communications, pre-arranged communications could be obtained from school bus radios, which will act as relay to the EOC and the emergency site.

Emergency Information Plan

Upon implementation of this Emergency Response Plan, it will be important to co-ordinate the release of accurate information to the media, issue authoritative instructions to the public, and respond to or redirect individual requests for, or reports on, information concerning any aspect of the emergency.

In order to fulfill these functions during an emergency, the following positions will be established:

- Emergency Information Officer;
- Community Spokesperson; and
- Citizen Inquiry Supervisor.

The local Emergency Information Centre (EIC) will be located in the Pelham Fire Station # 2 location on Welland Road. In the event that this centre cannot be used, the secondary location will be Pelham Fire Station #3 on Sixteen Road.

Depending on the nature of the emergency, it may be necessary to establish a media information area adjacent to the emergency site, as decided by the Community Control Group. This area, if established, will be staffed as determined by the community spokesperson.

The Citizen Inquiry Section is located in the Pelham Station # 2 location, under the supervision of the Social Services Representative.

a) Emergency Information Officer

The Emergency Information Officer reports to the C.A.O. and is responsible for:

- Establishing a communication link with the Community Spokesperson, the Citizen Inquiry Supervisor and any other media coordinator(s) (i.e. provincial, federal, private industry, etc.) involved in the incident, ensuring that all information released to the media and public is timely, full and accurate;
- Ensuring that the EIC is set up and staffed and a site EIC, if required;
- Ensuring liaison with the CCG to obtain up-to-date information for media releases, co-ordinate individual interviews and organize press conferences;
- Ensuring that the following are advised of the telephone number of the media centre:
    - Media;
    - Community Control Group;
    - Switchboard (Town and Emergency Services);
    - Community Spokesperson;
    - Police Public Relations Officer;
    - Neighboring Communities;
    - Citizen Inquiry Supervisor;
    - Any other appropriate persons, agencies or businesses.
- Providing direction and regular updates to the Citizen Inquiry Supervisor to ensure that the most accurate and up-to-date information is disseminated to the public;

- Ensuring that the media releases are approved by the C.A.O. (in consultation with the Mayor) prior to dissemination, and distributing hard copies of the media release to the EIC, the CCG, Citizen Inquiry Supervisor and other key persons handling inquiries from the media;
- Monitoring news coverage, and correcting any erroneous information;
- Maintaining copies of media releases and newspaper articles pertaining to the emergency.

b) Community Spokesperson

The community spokesperson will be appointed by the Community Control Group and is responsible for:

- Giving interviews on behalf of the Council;
- Establishing a communication link and regular liaison with the Emergency Information Officer at the EOC;
- Redirecting all inquiries about decisions made by the CCG and about the emergency as a whole, to the Emergency Information Officer;
- Coordinating media photograph sessions at the scene when necessary and appropriate;
- Coordinating on-scene interviews between the emergency services personnel and the media.

c) Emergency Information Officer (E.I.O)

The Emergency Information Officer is responsible for:

- Establishing a Citizen Inquiry Service, including the appointment of personnel and designation of telephone lines;
- Informing the affected emergency services, the CCG and Municipal switchboards of the establishment of the Citizen Inquiry Service and designated telephone numbers;
- Ensuring liaison with the Emergency Information Officer to obtain current information on the emergency;
- Responding to, and re-directing inquiries and reports from the public based upon information from the Emergency Information Officer. (Such information may be related to school closings, access routes or the location of evacuee centers.);
- Responding to and redirecting inquiries pertaining to the investigation of the emergency, deaths, injuries or matters of personnel involved with or affected by the emergency to the appropriate emergency service;
- Responding to and redirecting inquiries pertaining to persons who may be located in evacuation and reception centers to the registration and inquiry telephone number(s);
- Procuring staff to assist, as required.

Fire Dispatch	Telephone Number
St. Catharines	**(905) 684-4311**

3.7 Municipal Emergency Control Group (MECG)

Section 12 of the Ontario Regulation 380/04 of the Emergency Management and Civil Protection Act describes that 'every municipality shall have a municipal emergency control group' and that the composition of the group consist of officials, employees and/or members of council, as may be appointed by council. To be equipped and ready to manage an incident, the members of the group shall complete annual emergency management related training, and conduct an annual practice exercise for a simulated emergency incident, to ensure their readiness to direct the Town of Pelham's response in an emergency, including the implementation of this emergency response plan.

In following what is required of the municipality by the Regulation, the MECG of the Town of Pelham is responsible for providing coordination of necessary support to the incident during a Major Emergency (Level Two and Level One) in order to minimize the effects of the emergency on the Town. The MECG is responsible for emergency site support and for ensuring the continuity of town operations during an emergency event.

During activation, the lead response agency at the Emergency Site may require additional coordinated support. In such situations, town employees and representatives from partner agencies will assemble at the EOC for the purposes of providing emergency response support or making emergency response decisions, depending on the nature and scale of the incident.

3.8 Emergency Operations Centre (EOC)

Section 13 (1) of the Ontario Regulation 380/04 of the EMCPA describes that 'every municipality shall establish an emergency operations centre to be used by the municipal emergency control group in an emergency." In the Town of Pelham, following the scale of the Corporate Levels of Emergency, the EOC would be activated for a Major Emergency (Level One) and likely a General Emergency (Level 2).

The CEMC has selected a suitable location for the Primary EOC, which has been equipped with the appropriate technological and telecommunications systems and space to ensure effective response and communications during an emergency. The EOC is also a restricted and secured facility for emergency management staff only.

Other locations within the Town have been designated and equipped to serve as the Alternate EOC, in the vent that the Primary EOC is unavailable or adversely affected by incident.

EOC	Location	Contact No.	Address	Photo
Primary	Town of Pelham Fire Station #**1**	905-892-2607 x201	177 Hwy. #20 West Fonthill	
Alternate	Town of Pelham Fire Station #**2**	905-892-6658	766 Welland Road Fenwick	

a) Emergency Telecommunications Office

Upon implementation of the Plan, it will be important to ensure that communications are established between the emergency site(s) and the EOC. Communications may also be required at various locations including evacuation centers, hospitals and with other key responding agencies.

The Emergency Telecommunications Office is located in the office adjacent to the Primary EOC. It is equipped with portable hand radios, battery back-up, two-way radio with necessary channels to communicate with Police, Fire, EMS and the Office of the Fire Marshal.

In the event of a major loss of electricity or communications infrastructure, the Telecommunications Coordinator for the Town of Pelham will serve as the designated certified Amateur Radio Operator and support the initial emergency notification procedure by calling upon their contacts for communications support, if required.

A 'runner' will support communications between the EOC and other responding agencies. All messages will be prepared on a Radiogram by Amateur Radio Operators. Should the Town of Pelham lose all telephone (landline) and cellular infrastructure, pre-arranged communications support may be available from local school bus radios, acting as a relay to the EOC and the emergency site.

3.9 Action Prior to the Declaration of Emergency

When an emergency exists, but has not yet been declared to exist, Town employees are authorized to take such action(s) under this Plan as may be required to protect life, property, the environment and the economy within the boundaries of the Town of Pelham.

3.10 Declaration of Emergency

The official Declaration of Emergency is the process defined under the Act whereby:

> "The head of council of a municipality may declare that emergency exists in the municipality or in any part thereof and may take such action and make such orders as he or she considers necessary and are not contrary to law to implement the emergency plan of the municipality and to protect property and the health, safety and welfare of the inhabitants of the emergency area." [Section 4(1)]

A Declaration shall be made by the Head of Council upon recommendation of the MECG. In making its recommendation, the MECG may consider a number of matters including the 'Declaration of Emergency Checklist' developed by the Office of the Fire Marshal and Emergency Management. Refer to Annex H

The formal declaration results in the following:

- The implementation of a process to advise the public, the media and the Province that a major emergency exists and that preparation for extraordinary emergency management measures are underway;
- All volunteers registered with the Town and in responding to the emergency are considered municipal employees, and as such, fall under the protection of the Act; and
- Providing personal protection against liability for municipal employees, elected officials and volunteers in emergencies.

Official notification of emergency: the declaration of emergency shall be set out in a standard operating procedure of the Crisis Communications Plan to ensure that the emergency is immediately communicated to the following:

- Office of the Fire Marshal and Emergency Management, Ministry of the Solicitor General (Provincial Emergency Operations Centre)
- Members of Council for the Town of Pelham

- The Niagara Region CEMC
- Neighboring municipal officials as required
- Local Member of Provincial Parliament for Niagara West
- Local Member of Parliament for Niagara West
- The local media as required
- The public as required

3.11 Mutual Assistance

Subsection 13(3) of the *Emergency Management and Civil Protection Act*, R.S.O. 1990, c. E. 9, as amended (the "Act") provides that the council of a municipality may make an agreement with the council of any other municipality or with any person for the provision of any personnel, service, equipment or material during an emergency; and the parties wish to provide for mutual aid and assistance to each other through provision of personnel, services, equipment or material to one or the other within the meaning of the Act.

Whenever a situation cannot be adequately dealt with solely by the Town of Pelham, or with mutual co-operation from other municipal departments, further actions may be required through mutual assistance with neighboring municipalities or other stakeholders without any loss of control or authority.

Refer to Appendix I: Mutual Assistance Agreement Between the Regional Municipality of Niagara and Local Municipalities (2018)

3.12 Regional Assistance

When an emergency declared in the Town involves a large portion of the municipality or reaches beyond the boundaries of Pelham, it may become necessary for inter-jurisdictional collaboration with assistance from Niagara Region.

Niagara Region may provide assistance without implementing their Emergency Management Plan. In the event that the emergency is related to health, or other issues that are of regional jurisdiction (i.e. water wastewater, transportation, etc.), the Region may declare an emergency, while there is no municipal declaration. The municipality may provide support to the Region in this instance.

3.13 Provincial Assistance

The OFMEM is responsible for monitoring, coordinating and assisting in the formulation and implementation of emergency plans throughout Ontario. OFMEM is responsible for the coordination of response and preparedness programs in Ontario and responsible by Order in Council (OIC) for any emergency that requires the coordination of provincial emergency management in Ontario.
If locally available resources, including those that might be available from bordering municipalities and Niagara Region, are insufficient to meet emergency requirements, then assistance may be requested from the Province. Such requests must be directed through area/region/district offices of the provincial ministry that normally provide services in the local area, or directly through the OFMEM Field Officer (Golden Horseshoe Sector).

3.14 Termination of Emergency

Once the emergency has scaled down to a manageable incident or has ended, the following officials may terminate the emergency state at any time:

- The Head of Council, in consultation with the MECG
- The Premier of Ontario

4.0 Emergency Operations

4.1 Introduction

This section provides a brief list of potential agencies that would be involved in emergency operations and a description of the roles and responsibilities that are typically assigned to key emergency response personnel following the structure of the Incident Management System (IMS). All City departments shall have departmental plans and Standard Operating Procedures (SOPs) that provide the details of the implementation of the roles and responsibilities described in this section.

4.2 Initial Response Agencies Involved in Emergency Operations

Before an incident has been assessed as one that requires a larger coordination of service support, the Initial response agencies potentially include the following:

Internal	External
Town of Pelham Fire and By-Law Services	Niagara Regional Police Service
Town of Pelham Public Works Department	Niagara Emergency Medical Service
Town of Pelham Facilities Management	Niagara Region Public Health
	Niagara Region Public Works
	Niagara Region Community Services
	Utility and Infrastructure Agencies

4.3 Incident Management System

The Province of Ontario adopted the Incident Management System (IMS) as a standardized approach to emergency management, built on international recommended practices and designed to reflect the unique needs of municipalities across Ontario. The IMS standard encompasses all the areas that are needed for managing an emergency, including personnel, facilities, equipment, procedures and communications, operating within a common organizational structure.

IMS is predicated on the understanding that in any and every incident, (Level One to Level Four), there are certain management functions that must be carried out regardless of the number of persons who are available or involved in the emergency response.

The key IMS management functions are:

- **Command (Green)**
- **Communications (Red)**
- **Operations (Orange)**
- **Planning (Blue)**
- **Logistics (Yellow)**
- **Finance and Administration (Gray)**

A standard IMS functional organization structure is illustrated in the figure below:

Figure 1: Provincial IMS Structure

The key benefit for the Town of Pelham, in following the Provincial IMS standard, is that it allows for interoperability in the event that an incident is cross-jurisdictional and the municipality needs to connect with the EOC's of neighboring lower-tier municipalities (for example: City of Welland, City of Thorold, City of St. Catharines), the upper-tier municipality (Niagara Region), other levels of government (for example: Ministry of Transportation, St. Catharines) and/or external agencies. Furthermore, operating under IMS guidelines will result in the adoption of common terminologies between agencies, and allow all responders to communicate more effectively in managing the incident.

4.4 Organization of the Emergency Operations Centre and Section Responsibilities

The MECG represents the entire staffing of the EOC. In the event of a major emergency (Level One), a full activation of the MECG would be required to assemble at the EOC. The functions of the members of this group, in keeping with the Incident Management System, are subdivided into five sections, with pre-determined functional roles and responsibilities.

The general roles and responsibilities of the IMS sections are as follows:

Command

The Command function is responsible for decisions that give strategic direction to the overall response to the event

Communications

The Communications team is a sub-section of Command and fills four main functions of: Liaison, Internal Communications, Public Inquiry and Media Relations

Operations

The Operations section will provide minute-by-minute support to emergency responders in the field. Operations is in contact with staff in the field to ensure they have the information about the emergency, that requests for supplies, equipment or personnel are processed and that there is coordination between the agencies involved

Planning

The Planning section will assemble as part of the MECG with the specific responsibility of gathering, analyzing and evaluating the situational information from the emergency in order to develop recommendations on an appropriate Incident Action Plan (IAP), to be approved by Command. This section also provides periodic forecasts on the potential disruptions and impacts of the emergency

Logistics

The Logistics section is primarily responsible for locating and acquiring all the necessary personnel, equipment, and material items needed by the municipality to manage the emergency

Finance and Administration

The Finance and Administration section is responsible for financial management of the operations, which includes tracking all expenses and preparing claims where possible

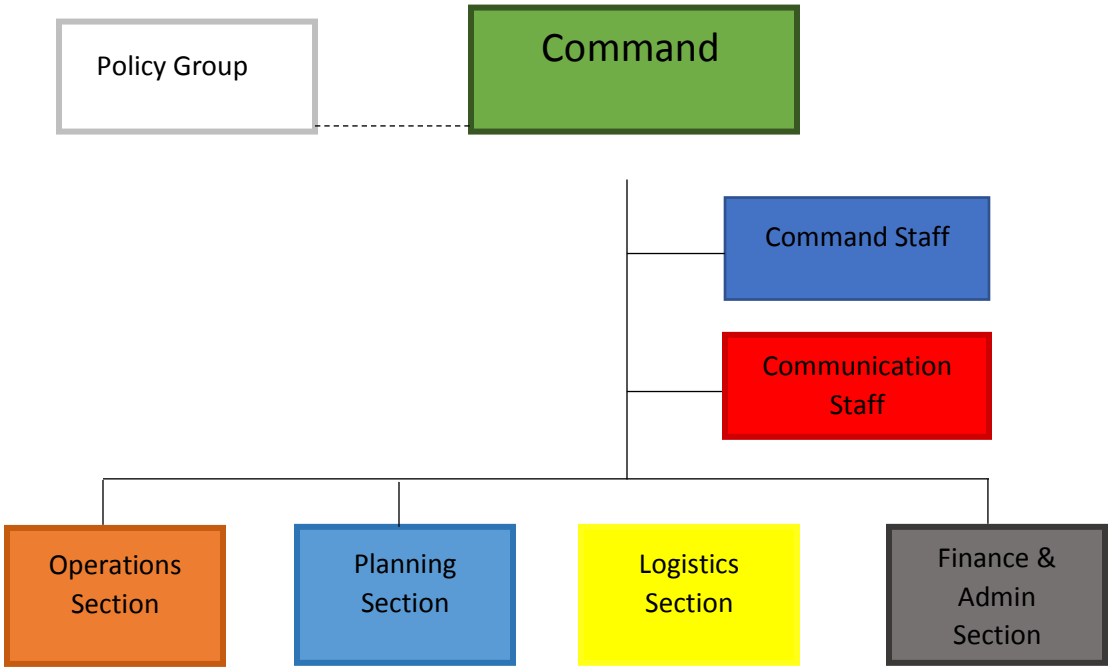


Figure 2: IMS Position Quick Reference Guide

IMS POSITION QUICK REFERENCE GUIDE - TOWN OF PELHAM

COMMAND
Responsible for the overall **management of the incident** and executive **decision making**. This includes:

- Establishing incident objectives/strategies
- Coordination of incident activities
- Determining appropriate level of activation, based on the situation

COMMUNICATIONS
Responsible for developing and distributing all **internal and external communication** about the incident, including to:

- Provide **emergency information and messaging** on the Town's website, social media channels, and any emergency information lines including Niagara 211
- Liaise with Mayor, Council, and Senior Management Team with **regular updates**
- Liaise with Media, including preparing media **releases**, **conferences**, and **interviews**
- **Monitor coverage** through various channels and take corrective actions when required

OPERATIONS – "NOW"
Responsible for coordinating all **operational duties** relating to incident response, including:

- Input into the Incident Action Plan (IAP)
- Implementing the IAP
- Organizing, assigning, and supervising all resources assigned with operational tasks
- Relay situational information to **Command** and **Planning** Communicate resource needs to **Logistics**

PLANNING – "FUTURE"
Responsible for developing the **Incident Action Plan (IAP)** and overseeing the collection, evaluation, processing, dissemination, and use of information regarding the incident. This includes:

- **Prepare and distribute** the IMS 1001: Incident Action Plan
- Populate the IMS 207 **EOC Org Chart**
- Maintain all EOC **documentation**
- Plan for next operational cycle
- Obtain information from **technical experts**, as required
- Develop contingency plans
- Assist other functions with any planning related requests

LOGISTICS – "GETTERS"
Responsible for providing facilities, services, and materials in support of the response. This includes:

- Identify immediate resource needs
- Procure additional resources, as required
- Organize food and sheltering for personnel
- Liaise with **Finance & Administration** for contracts with vendors, as required

FINANCE & ADMINISTRATION – "PAYERS"
Responsible for **financial and administrative** support to an incident, including:

- Ensuring compliance with financial policies/procedures
- Cost analysis
- Service agreements and contracts
- All related business processes

SENIOR MANAGEMENT TEAM
Resource for internal staff to **respond to a business disruption**. The SMT will:

- Ensure **service continuity**
- Ensure availability of critical services, operations, and resources
- Maintain public image and reputation
- Ensure fulfillment of legislative/regulatory requirements
- Identify key contacts

Refer to Annex J: IMS Functional Roles and Responsibilities of the MECG and Annex K: Functional Roles and Responsibilities of Support and Advisory Staff

5. Emergency Recovery

5.1 Recovery

The last phase of an emergency is the recovery phase. This phase focuses on procedures that will enable both the Town of the Pelham and the community to return to daily operations as soon as possible following an emergency. All Town departments will have several tasks to undertake during the recovery, depending on the severity of the emergency.

The MECG may activate the recovery phase once the immediate response to the emergency has been completed. The task of the MECG in this phase is to establish the Post-Emergency Recovery Committee, which may be composed of municipal and regional officials representing legal, health, community services, facility and operations sectors including others depending on the nature of the emergency and the needs for recovery. The Committee will provide direction and coordinate recovery activities.

5.2 Debriefing, Reporting and Implementing Lessons Learned

Debriefing following a significant incident is an important process for the Town to engage in, as it is a valuable forum for capturing views from a wide range of stakeholders involved in the incident.

The Town of Pelham may choose to facilitate one or more debriefing sessions, depending on the nature and scale of the incident, and they can be conducted with internal and/or external stakeholders
Following the debriefing session(s), an After-Action Report (AAR) and Corrective Action Plan (CAP) is developed to capture the feedback. The AAR and CAP are also ways to capture the lessons learned from the event and as a driving force to implement recommendations for improvement. Implementing lessons learned is an opportunity to review and update the Plan and other supporting emergency-related documentation developed by the Town.

The Town should also take the opportunity during this phase to renew partnerships with community stakeholders.

In the Town of Pelham, the emergency management process is cyclical in nature; constant review and revision of plans and procedures is undertaken to ensure an effective and coordinated response and recovery process.

6. Municipal Preparedness

6.1 Training and Exercises

The Act requires that “every municipality shall conduct training programs and exercises to ensure the readiness of employees of the municipality and other persons to act under the emergency plan”. The municipal emergency management program is mandated to include ‘training programs and exercises for employees of the municipality and other persons with respect to the provision of necessary services and the procedures to be followed in emergency response and recovery activities”.

To prepare Town staff, the CEMC is responsible for the development of a comprehensive training and exercise program to be approved by the Pelham Emergency Management Program Committee. The objective of the training and exercises is to ensure that Town staff are able to cope effectively with any emergency situation. Town departments are also encouraged to test their departmental emergency procedures on a regular basis.

Annex A: Glossary of Terms

Pelham Emergency Management Program Committee (PEMPC)	The committee established pursuant to the Regulation to advise the Council on the development and implementation of the Municipality's emergency management program; see Section 1.6.
Business Continuity	A holistic process that identifies, prioritizes, and restores critical functions and processes required to maintain an acceptable level of service in the event of a disruption. Business continuity planning includes risk assessment, business impact analysis, plan development, testing, training, and maintenance.
Business Cycle / Operations Cycle	The cycle whereby the members of the Municipal Emergency Control Group meet on a regular basis to share information, identify actions, and set priorities.
Chief Administrative Officer (CAO)	The Chief Administrative Officer of the Town of Pelham, or in his or her absence, the Acting Town Manager.
Command Post	The mobile communications/central control centre where the Emergency Site Manager and On-Scene Commander(s) manage on-site activities and communicate with the Emergency Operations Centre and other operational communications centres.
Community Emergency Management Coordinator (CEMC)	The person designated in accordance with the Regulation who shall co-ordinate the development, implementation, and maintenance of the municipality's emergency management program. They shall also strive to harmonize the Town's emergency management program as close as possible with the emergency management programs of other municipalities, ministries of the Ontario government and of organizations outside government that are involved in emergency management. The Town of Pelham's CEMC is the Fire Chief.
Critical Infrastructure	Critical infrastructure refers to processes, systems, facilities, technologies, networks, assets and services essential to the health, safety, security or economic well-being of Canadians and the effective functioning of government. Critical infrastructure can be stand-alone or interconnected and interdependent within and across provinces, territories and national borders. Disruptions of critical infrastructure could result in

	catastrophic loss of life, adverse economic effects and significant harm to public confidence.
Municipal declaration of emergency	A signed declaration of emergency made by the Head of Council of a municipality, based on established criteria in accordance with the Emergency Management and Civil Protection Act. This declaration is usually based on a situation or an impending situation that threatens public safety, public health, the environment, critical infrastructure, property, and/or economic stability and exceeds the scope of routine community response
Emergency (as defined in the Act)	A situation or an impending situation that constitutes a danger of major proportions that could result in serious harm to persons or substantial damage to property and that is caused by the forces of nature, a disease or other health risk, an accident or an act whether intentional or otherwise.
Emergency Operations Centre Director	The person assigned to chair the Municipal Emergency Control Group in the event that the Plan is activated, and whose responsibilities include: □ Directing the Municipal Emergency Control Group at the Emergency Operations Centre; □ Ensuring coordination of all actions that support the Emergency Site; □ Ensuring coordination of all actions aimed at resolving the emergency when no specific site is involved; and □ Ensuring Continuity of Government measures are activated when applicable.
Emergency Information Officer (EIO)	The person designated in accordance with the Regulation to act as the primary media and public contact for the municipality in an emergency, and who shall be responsible for all media releases and public announcements during an emergency. The Emergency Information Officer shall be a member of the Communications Team of the Municipal Emergency Control Group.

Emergency Information Centre	The designated location to be determined by the Emergency Information Officer (EIO) where updated media releases and press conferences are held.
Emergency Operations Centre (EOC)	The designated area where the Municipal Emergency Control Group (MECG) assembles to direct and control all operations in support of the Emergency.
Emergency Site	The immediate area where an emergency is occurring.
Incident Commander / Emergency Site Manager	The entity / individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations.
Evacuation Centre / Reception Centre	A facility that provides temporary shelter to persons displaced by the Emergency. An evacuation centre is normally co-located with a reception centre, where evacuees are registered.
Head of Council	The Head of Council of the Town of Pelham is the Mayor, or in his or her absence, the Acting Mayor in accordance with the Town's Procedure By-law.
Incident Action Plan (IAP)	A written or spoken plan to provide all incident supervisory personnel with objective and strategies, tactics, and directions for achieving them. It may also include (among others) resources, structures, as well as safety, medical and telecommunications instructions.
Incident Management System (IMS)	A standardized approach to emergency management, encompassing personnel, facilities, equipment, procedures, and communications operating within a common organizational structure.
Municipal Emergency Control Group (MECG)	The MECG is responsible for providing coordination of the necessary support to the Emergency Site in order to minimize the effects of the Emergency and is responsible for ensuring continuation of necessary municipal operations within the Town during an Emergency. The MECG shall direct the response of the Town to an Emergency including the implementation of the Plan in accordance with the Regulation. To meet the requirements of the Regulation, the Municipal Emergency Control Group is

	composed of senior officials and organized in accordance with the Incident Management System. The MECG includes all teams assembled at the Emergency Operations Centre.
Emergency Information Centre	The location at or near the Emergency Site where the media may gather for updated media releases and press conferences, as determined by the Emergency Information Officer, in consultation with the Emergency Site Manager.
Post-Emergency Recovery Committee	This committee, comprised of municipal officials and key members representing various departments, agencies, and stakeholders, provide direction and coordinate activities addressing the recovery needs of all residents in the Town.
Regional Emergency Control Group	Under the Town of Pelham Emergency Plan, the key department leads and officials at the regional level, including external agencies (example: Canadian Red Cross), who are responsible for coordinating all emergency response operations are required to minimize the effects of an emergency on the Town of Pelham

Annex B: Acronyms

PEMPC	Pelham Emergency Management Planning Committee
CAO	Chief Administrative Officer
CEMC	Community Emergency Management Coordinator
EIO	Emergency Information Officer
EOC	Emergency Operations Centre
IAP	Incident Action Plan
IMS	Incident Management System
MECG	Municipal Emergency Control Group
MFIPPA	Municipal Freedom of Information and Protection of Privacy Act
OFMEM	Office of the Fire Marshal and Emergency Management
PEOC	Provincial Emergency Operations Centre
RECG	Regional Emergency Control Group (Niagara Region)
SOP	Standard Operating Procedure

Annex C: List of EOC Equipment (Primary and Alternate)

Emergency Operations Centre	Equipment and Supplies Inventory	
Primary **Pelham Station #1** **177 Hwy. #20** **Fonthill**	**Equipment** Fax Machine Photocopier Television Telephones White Boards Flip Charts Computer Laptops Stationery Overhead Projector Base Radio Handheld Radios Ham Radio Unit **MECG EOC Kits**	**Details** Fax Number: 905-892-8499 Telephone Number: 905-892-2607 x201 Radio Channel: P25-700MHZ
Alternate **Pelham Station #2** **766 Welland Road** **Fenwick'**	**Equipment** Fax Machine Photocopier Television Telephones White Boards Flip Charts Computer Laptops Stationery Overhead Projector Base Radio Handheld Radios Ham Radio Unit **MECG EOC Kits**	**Details** Telephone Number: 905-892-6658 Radio Channel: P25-700MHZ

Annex D: Emergency Information Centre (EIC)

EIC	Location	Address
Primary	Town of Pelham Fire Station #2 905-892-6658	766 Welland Road, Fenwick
Secondary	Town of Pelham Fire Station #**3** 905-892-5507	2355 Cream Street North Pelham

Public Inquiry Centre (PIC)

PIC	Location/Address	Regional Department Lead
Primary	Meridian Community Centre 100 Meridian Way, Fonthill 905-732-7872	R.C.W

Annex E: IMS Functional Roles and Responsibilities

Command Section

Description: The Command function is responsible for decisions that give strategic direction to the overall response to the event.

Membership:

- CEMC
- All IMS Section Chiefs

The following may be asked to join Command for strategic direction, if required:

- Service Department leads involved in the event (i.e. Director of Public Works)
- Town of Pelham Fire Chief, or designate
- Town of Pelham Legal Counsel
- Chief of Police
- Regional Medical Officer of Health (MOH), or designate
- Regional Community Services Commissioner, or designate

Roles and Responsibilities:

- Advise the Head of Council as to whether an Emergency Declaration is recommended
- Notify, request assistance from, and / or liaise with various levels of government and any public or private agencies not under municipal control as may be required to support the emergency
- Designate any area of the Town as an 'emergency area'
- Coordinate and direct department/agency service providers, ensuring that all actions taken to mitigate the emergency are conducted and not contrary to law
- Mobilige any municipal personnel and equipment which is required in the emergency
- Ensure adequate emergency service provisions are maintained outside and separate from those responding at the Emergency Site
- Arrange for services and equipment from local agencies not under municipal control (i.e. private contractors, volunteer agencies, Amateur Radio Ham Operators, etc.)
- Determine if additional volunteers are required and if appeals for volunteers are necessary
- Determine the need to establish advisory group(s) and/or sub-committees
- Authorize expenditures of funds for implementing the Plan
- Decide to discontinue utilities or services provided to the public or private sector when continuation of such utility or services constitutes a hazard to public safety within an emergency area
- Decide to evacuate the buildings or sections within an emergency area which are themselves considered to be dangerous or in which the occupants are considered to be in danger from other sources
- Arrange for transportation, accommodation and the provision of human needs on a temporary basis, for residents who are in need of assistance due to displacement as a result of the emergency
- Ensure the pertinent information regarding the emergency is promptly forwarded to the Town's Emergency Information Officer (EIO) for dissemination to the media and to the public
- Advise the Head of Council on when to terminate the Declaration of Emergency
- Before emergency response efforts have been completed, determine if a Post Emergency Recovery Committee needs to be established and if so, confirm the Chair and composition of the committee, along with its reporting structure
- Maintain a log outlining actions regarding decisions made, or directives given, and submit a summary of the log to the CEMC for reporting purposes at the end of the emergency

Communications Section

Description: The Communications Team is a sub-section of Command and fills four main functions of: liaison, internal communications, public inquiry and media relations

Membership:

Section 14 of the Ontario Regulation 380/04 of the EMCPA describes that 'Every municipality shall designate an employee of the municipality as its Emergency Information Officer" (EIO) and that the EIO 'shall act as the primary media and public contact for the municipality in an emergency."

- Town of Pelham Communications and Public Relations Specialist
- A representative from Council to coordinate the liaison with the Town and Regional Councilors
- A representative from the Town's Corporate Services Department to ensure proper dissemination of information from the Town's website

Roles and Responsibilities:

- Establish liaison with Town and Regional Councilors and major stakeholders in the municipality
- Establish liaison with other levels of government, likely to be involved or affected by the emergency, including neighboring municipalities, regional government (Niagara Region) and provincial ministries
- Develop and distribute all internal and external communications, as approved by Command
- Support the municipal Call Centre and by preparing approved messaging (utilize 211 Niagara for emergency information management, if appropriate)
- Provide updated emergency information on the Town of Pelham's website and other emergency information networks
- Provide updated emergency information via the Town of Pelham's social media channels (at the end of the emergency)
- Liaise with media, including preparation of press releases, press conferences and interviews
- Develop and implement an emergency information plan for the incident, including the dissemination of information to the general public, the public at risk and the media
- Monitor the coverage of the emergency by social and traditional media, and take appropriate corrective actions when required

Operations

Description: The Operations section will provide minute-by-minute support to emergency responders in the field. Operations is in contact with staff in the field to ensure they have all of the information about the emergency, that requests for supplies, equipment or personnel are processed and that there is coordination between the agencies involved.

Membership:

- Town of Pelham Public Works Department
- Town of Pelham Community Planning and Development Department
- Town of Pelham Fire and By-Law Services
- Niagara Regional Police Services
- Niagara Emergency Medical Service (NEMS)
- Niagara Region Public Health
- Niagara Region Community Services

In addition, the following stakeholders may be asked to join the Operations section for support, as required:

- Representatives from utility suppliers
- Industry stakeholders
- Private sector organizations affect by or involved in the emergency

Roles and Responsibilities:

The Operations section has two major roles, those being: (a) emergency site support and (b) evacuation support. To support these roles, the following responsibilities, fall under the Operations section:

- Ensure efficient transmission of information from the site to the EOC and vice-versa
- Transfer information received to the Planning section in order to prepare Incident Action Plans (IAPs) and to the Communications section in order to prepare public information about the emergency
- Ensure coordinated actions of all agencies involved in the emergency, either at the site or outside the perimeter
- Transmit all instructions related to decisions made by Command to the site and ensure compliance
- Receive requests for supplies, equipment, personnel, and services from the site and take necessary actions, transferring information as required to the Logistics and Finance & Admin sections
- Evaluate impact of evacuation and determined preferred locations for establishment of Reception Centre's and/or Evacuation Centre's
- Liaise with Recreation, Culture and Wellness staff for the opening of facilities selected as Reception Centers and/or Evacuation Centre; collaborate with Niagara Region Community Services as to staffing and management
- Provide support through activities and other care at facilities for evacuees
- Ensure efficient transmission of information from the Reception Centre and/or Evacuation Centre to the MECG and vice-versa
- Address coordinated actions of all agencies involved in the evacuation
- Address implementation of the Incident Action Plan developed by the Planning section, once approved by Command, as it pertains to the evacuation

Planning

Description: The Planning section will assemble as part of the MECG with the specific responsibilities for gathering, analyzing and evaluating the situational information from the emergency in order to develop recommendations on an appropriate Incident Action Plan (IAP) to be approved by Command. This section also provides periodic predictions on the potential disruptions and impacts of the emergency

Membership:

- A senior member from the Public Works Department
- A senior member from the Corporate Services Department
- Representatives from the lead department or agency involved in the emergency
- The Town Clerk to maintain appropriate records, coordinate log-keeping and maintain the status board
- The Town of Pelham Geographic Information Systems (GIS) section or Niagara Region GIS analysts

The following stakeholders may be asked to join the Planning section for support, as required:

- Other representatives from the Town of Pelham departments likely to be impacted by the emergency who will help in planning appropriate actions to reduce such impact
- A representative from the Fire Service to help coordinate the MECG
- A representative from Corporate Services to provide input on how the emergency response aligns with corporate initiatives and corporate effectiveness including economic impact
- A representative from Amateur Radio Emergency Services (ARES) to help in collecting information from the emergency site and from other sources
- Technical advisors from various departments to help gather, analyze and evaluate information
- Technical advisors and/or representatives from stakeholder agencies and organizations including industry representatives, school boards, utility providers and owners/operators of critical infrastructure

Roles and Responsibilities:

- Receive data from all possible sources (internal, partner agencies, stakeholders, media) to evaluate the situation as accurately as possible and make recommendations on courses of action to Command
- Maintain maps and diagrams of the Emergency Site and the surrounding areas to enable the MECG to better understand the situation
- Maintain logs, status boards, and statistical reports of the situation as it develops
- Analyze collected data to provide an assessment of the impact of the situation on the immediate surroundings of the site and on the City as a whole and provide to Command
- Prepare prediction evaluation of the situation and its potential to evolve in the short-term an d over the long-term for review by Command
- Develop an IAP focused on responding to the forecast as efficiently as possible for approval by Command
- Update plans and data based on changes received
- Coordinate initiatives and programs related to the specific impacts on the business community, as required
- Ensure the continuity of Town of Pelham municipal services

Logistics

Description: The Logistics section is primarily responsible for locating and acquiring all the necessary personnel, equipment and material items needed by the municipality to manage the emergency

Membership

- A senior member of the Public Works Department
- A senior member of the Community Planning and Development Department
- A representative from the IT section to coordinate technical support
- A representative from the Corporate Services Department – Human Resources to coordinate staff and volunteer assignment
- A representative from Corporate Services Human Resources/Health and Safety to address health and safety and peer support
- A representative from Fixed Asset Management to locate facilities within the Town as may be required

Roles and Responsibilities:

- Identify and obtain equipment, vehicles, machinery, equipment and supplied, as required and as requested by the Operations section
- Identify and mobilize personnel, volunteers and expert help as required
- Address health and safety concerns of personnel and volunteers assigned to the emergency
- Provide and install information technology and/or telecommunication equipment as requested by the Communications or Operations sections and required at the EOC, Reception Centre, Evacuation Centre
- Locate and obtain access to any Town facility required for the management of the emergency
- Coordinate the contracting of any service required

Finance and Administration

Description: The Finance and Administration section is responsible for the financial management of the operations, which includes tracking all expenses and preparing claims where possible

Membership

- A senior member from the Corporate Services Department (Treasurer) division
- A representative from Corporate Services Purchasing to coordinate acquisitions
- A representative from Risk Management and insurance to process claims
- A representative from the Corporate Service Treasury Unit to track expenses

Roles and Responsibilities:

- Track al expenses incurred by the emergency operations
- Prepare all financial reports on the cost of the emergency and process claims whenever applicable
- Facilitate access to the Ontario Municipal Disaster Recovery Assistance Program, when applicable
- Coordinate with Risk Management and Insurance

Emergency Operations Centre Support Roles

Description:

In parallel to the sections of the IMS structure at the EOC, additional support roles may be needed, especially in the case of a Major Emergency or an incident that requires an activation of the EOC that extends over a significant period of time.

Membership

- The EOC Coordinator will, in most cases, be team members of the Town of Pelham Fire and By-Law Services Department

Roles and Responsibilities:

- Provide support to the EOC Director
- EOC access control including identification of members of the MECG and their support staff as well as restriction of access to unauthorized persons
- Health, safety and security of EOC staff
- Coordination of parking for members of the MECG and their staff at the EOC
- IT and telecommunications support to the MECG
- Provision of supplies and equipment to the EOC
- Catering services and provision of rest areas at the EOC

The EOC Coordinator will also be responsible for constantly evaluating the efficiency of operations within the EOC, in coordinating the emergency response support. In particular, the EOC Coordinator will assess and make recommendations to the EOC Director/CEMC on:

- The need to call in additional personal or volunteers to participate in one or more teams
- The efficient flow of communications from one team to another
- The efficient use of incident status boards, logs, maps, technology and other telecommunications
- The need for nourishment, rest and stress debriefing of the MECG members
- The organization of smooth transition during the changing of shifts at the EOC (i.e. transfer of command and debriefings)
- The lighting and other environmental concerns of the EOC facilities

COMMITTEE REPORT
PUBLIC WORKS DEPARTMENT
Monday, December 02, 2019

Subject: The Assumption of Cherry Ridge Phase 1 and Cherry Ridge Extension

Recommendation:

> **THAT Committee receive Report #2019-0136 and recommend that Council assume the municipal services in Cherry Ridge Phase 1 and Cherry Ridge Extension subdivisions and open the street within the subdivisions as a 'public highway' by by-law in accordance with the subdivision agreements.**

Background:

The Developers of these subdivisions have completed their obligations with respect to the conditions specified in the subdivision agreements with the Town, they have subsequently requested that the Town assume the subdivisions. Drawings of the subdivisions are attached. Cherry Ridge phase 1 subdivision is located in on the east side of Maple Street just north of Canboro Road. By-law 1725(1995) covers this subdivision agreement. Cherry Ridge Extension subdivision is located directly north of Cherry Ridge Phase 1. By-law 2778(2006) covers this subdivision agreement. The developer of Cherry Ridge Extension, Centennial Construction and Contracting, has requested that the Town assume Cherry Ridge Extension, as per the Subdivision Agreement section 17.

Analysis:

Cherry Ridge Phase 1 was constructed by 729 Canboro Road Properties Inc. in 1997, and the developer is no longer active. It has been ready for assumption since 1999, however litigation surrounding the storm outfall has prevented that. The litigation has now been resolved. As it is not possible to assume Cherry Ridge Extension without assuming Cherry Ridge Phase 1, it is recommended that both subdivisions are to be assumed concurrently. The residential development is comprised of one hundred ninety-nine (199) lots for single detached dwelling use, one (1) block for stormwater management, and one (1) block for parkland. There is one vacant lot in this development that is being used for a turnaround bulb awaiting a future extension. The primary and secondary services are complete, and the

maintenance period has elapsed. As-built drawings and a statutory declaration for the development have been received. Holdback Securities will be released upon assumption. The developers have completed their obligations; however, a few minor deficiencies remain in Cherry Ridge Phase 1. These include the portion of the storm sewer on Sandra Drive as well as minor curb and patching work that the Town already does. The Town will rectify outstanding deficiencies upon assumption.

Financial Considerations:

None.

Alternatives Reviewed:

Council could choose to not assume Cherry Ridge Phase 1 due to outstanding deficiencies, and consequently Cherry Ridge Extension would not be able to be assumed.

Strategic Plan Relationship: Build Strong Communities and Cultural Assets

Assumption is the final step in the development process, and will bring all the infrastructure under Town ownership.

Consultation:

Upper Canada Consultants were the engineering consultants for Cherry Ridge Phase 1 and Cherry Ridge Extensions. The consultant has agreed that the works have been completed in a satisfactory manner and recommend assumption of the works.

Other Pertinent Reports/Attachments:

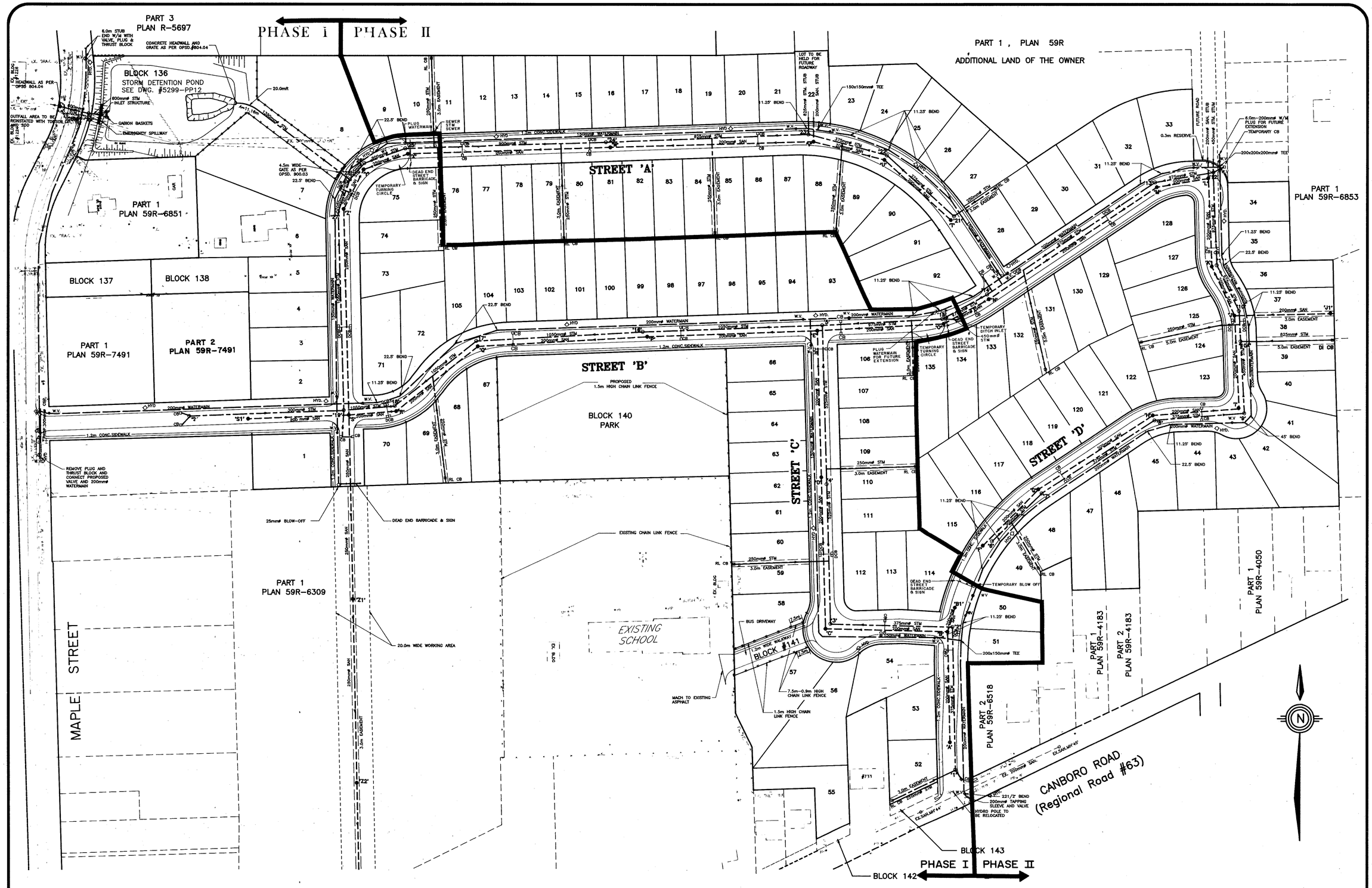
General Servicing Plan for Cherry Ridge Phase 1 and Cherry Ridge Extension

Prepared and Recommended by:

Jason Marr, P. Eng.
Director of Public Works

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer



No	REVISIONS	DATE	BY
2	ISSUED FOR CONSTRUCTION	JUNE 14/95	M.H.
1	REVISED AS PER TOWN COMMENTS	JUNE 4/92	M.H
0	ISSUED FOR APPROVALS		

NOTES:

1.) Storm and sanitary laterals to be PVC DR 28.
2.) Single roadway catchbasin leads to be 200mmø, double roadway catchbasin leads to be 250mmø, PVC DR 35 or Extra Strength Concrete.
3.) The position of pole lines, conduits, watermains, sewers and other underground utilities and structures is not necessarily shown on the construction drawings. Where shown the accuracy of the position of such utilities and structures is not guaranteed.
4.) Before starting work, the contractor shall check with all utilities involved and inform himself of the exact location of all such utilities and structures and shall assume all liability for damage to them.
5.) Hydro and Bell poles are to be anchored to the ground where required so as to ensure the stability of the pole lines.
6.) All manhole frames, catchbasin frames, water valves and gas valves are to be adjusted to finished grade.

APPROVED BY:

TOWN ENGINEER — 1995/05/23 — DATE

REGISTERED PROFESSIONAL ENGINEER — 6/26/92 — L. J. HODGE — PROVINCE OF ONTARIO

UPPER CANADA CONSULTANTS
CONSULTING ENGINEERS/PLANNERS
261 Martindale Rd
Unit 1
St. Catharines, Ontario
L2W 1A1
Phone:(416)688-9400
Fax: (416)688-5274

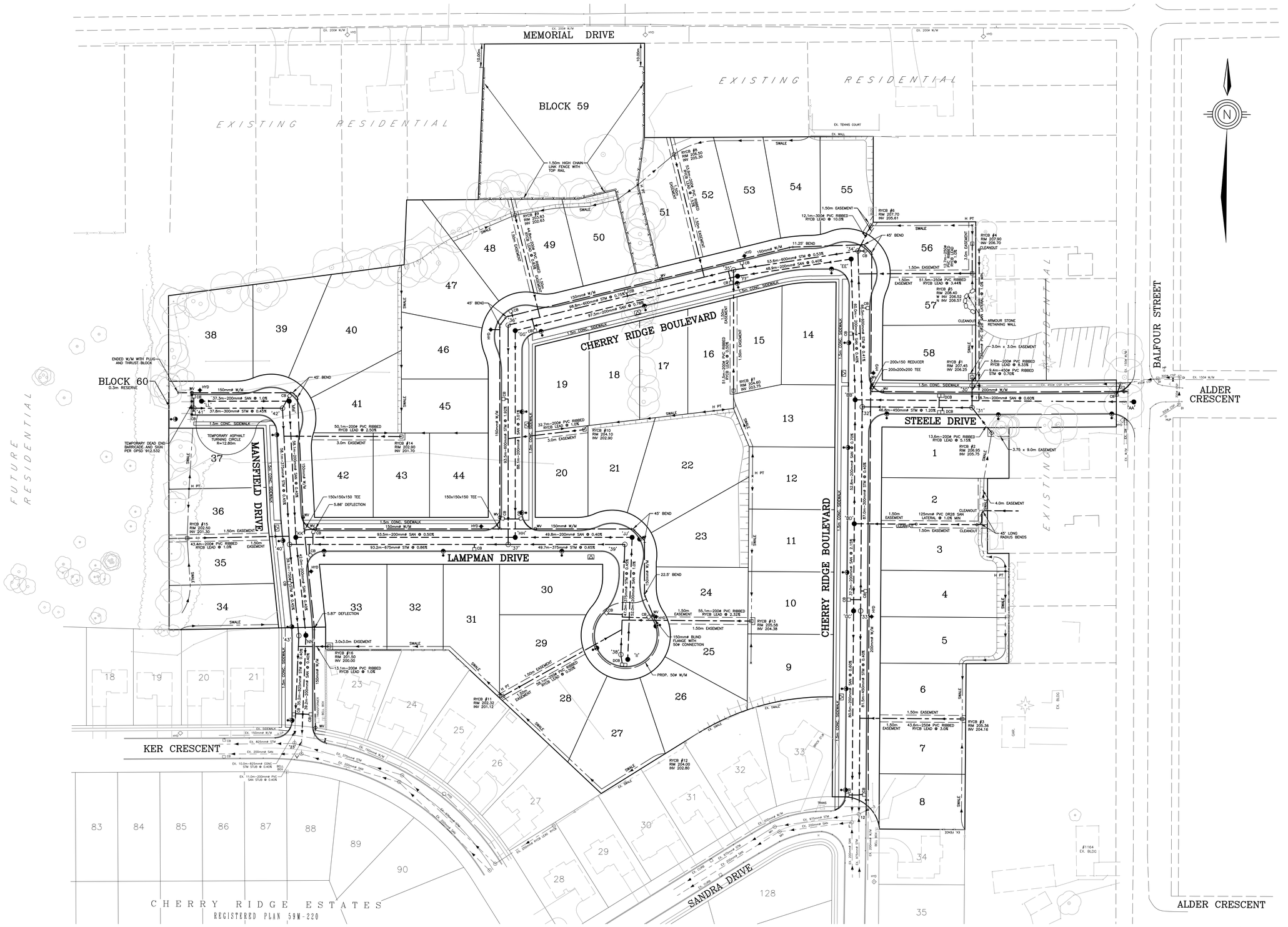
PROJECT NAME: **CHERRY RIDGE**

OWNER: 729 CANBORO ROAD PROPERTIES INC.
C/O ATELLA DEVELOPMENTS
73 ONTARIO ST.
ST. CATHARINES, ONTARIO
L2R 5J5

DRAWING TITLE: **GENERAL SITE PLAN**

DESIGN:	DRAFTING:
MH	JV

DATE: MARCH 20, 1992
SCALE: 1:1000
DRAWING No: 5299-GSP
REV. 2



AS CONSTRUCTED PLAN

DATE: JUNE 2008

No	REVISIONS	DATE	BY
3	AS CONSTRUCTED	JUNE /08	S.J.
2	ISSUED FOR CONSTRUCTION	JAN 17/06	J.S.
1	PER TOWN COMMENTS	JULY 18/05	J.S.
0	ISSUED FOR APPROVAL	JAN 24/05	J.S.

STAMP: LICENSED PROFESSIONAL ENGINEER — J. P. SCHOOLEY — PROVINCE OF ONTARIO

TOWN OF PELHAM

UPPER CANADA CONSULTANTS
ENGINEERS/PLANNERS
261 Martindale Road Unit #1
St. Catharines, Ontario L2W 1A1
Phone:(905)688-9400
Fax: (905)688-5274

PROJECT NAME: CHERRY RIDGE EXTENSION

OWNER: 1473944 ONTARIO LIMITED
c/o CENTENNIAL CONSTRUCTION
353 TOWNLINE ROAD
NIAGARA-ON-THE-LAKE, ONTARIO
L0S 1J0

DRAWING TITLE: GENERAL SERVICES PLAN

DESIGN:	DRAFTING:
M.H.	T.B.G.

DATE: JULY 18, 2005

SCALE: 1 : 750m

DRAWING No: 97005GSP REV. 3

COMMITTEE REPORT
PUBLIC WORKS DEPARTMENT
Monday, December 02, 2019

Subject: Revision of Policy S801-02 for Neighbourhood Traffic Management

Recommendation:

THAT Committee receive Report #2019-0142 and recommend that Council approve the revised Neighbourhood Traffic Management Policy S801-02.

Background:

The Town of Pelham is responsible for ensuring roadways serve the needs of all users such as cars, transit, pedestrians including those with accessibility needs, cyclists, emergency vehicles and snow removal equipment. When the rules of the road are not followed, residents may no longer feel safe walking or riding their bikes on the street, in these cases traffic calming measures may be needed to restore the street to its intended function in the neighbourhood.

Every year the Town receives numerous complaints or concerns from residents regarding speeding, traffic volumes and/or cut through traffic in residential areas.

While some residents perceive they have a solution to traffic issues in their neighbourhood, using the wrong tool or design can potentially create additional safety issues in the area while not addressing the initial concern.

Traffic calming is a contentious subject and should be dealt with in a clear, concise and transparent manner that will meet the needs and expectations of the community. The revised Public Works Neighbourhood Traffic Management Policy (Appendix A) outlines how investigations into traffic calming measures should be initiated and implemented based on the experience gained by the Town of Pelham and other Ontario municipalities over the last decade.

Analysis:

In 2014 the Public Works and Utilities Department as it then was introduced the Neighbourhood Traffic Management Policy (Appendix B) to provide a process for planning neighborhood traffic calming measures in a consistent and objective manner.

Since the policy was approved, staff have responded to a number of citizen concerns regarding speeding on residential roads and have received numerous requests for both the installation and removal of traffic calming measures.

The existing policy states that the Town of Pelham will deal with traffic calming requests in a consistent and objective manner; however, it does not provide guidance for staff or concerned citizens to follow. The lack of procedural frame work within the policy has caused frustration to both staff and citizens attempting to address traffic related issues in identified neighbourhoods. Recent examples include: (1) opposition to the Chicane on Haist Street; (2) the Mini-traffic circle pilot on Look-out Street; and the (3) installation of an un-warranted 4-way Stop on Hurricane Road and Station Street.

The proposed revision of the policy is meant to provide a comprehensive process for responding to complaints regarding speeding and traffic safety concerns. It will also help to educate residents on traffic calming techniques and design, so that they may understand the rationale behind the Town's decision making process.

Financial Considerations:

The process allows for time to attempt passive measures before a permanent design is developed, and acceptance is gained through public input. The implementation of the design may be affected by the availability of capital funding, and will require approval from Council through the budget process.

It is anticipated that the pre-screening process will reduce the amount of time spent responding to concerns from low volumetric roads and will allow staff to focus on areas where traffic calming will have the greatest impact.

Although the frequency of traffic calming requests are considered reasonable at this time, as traffic volume and concerns increase due to growth, implementation of the policy is likely to increase the work load on Engineering and Operations staff beyond their current capabilities.

Alternatives Reviewed:

One alternative that was reviewed included the provision that if physical traffic calming measures are required, such as the installation of speed cushions or realignment of curbs, that they be installed during future capital road reconstruction, or repair projects. This alternative would mean that the implementation of traffic calming would often be delayed for several years leading to greater public frustration over perceived inaction by the Town to address the issues.

Strategic Plan Relationship: Build Strong Communities and Cultural Assets

The proposed revision to the Neighbourhood Traffic Management Policy will work to Build Strong Communities by encouraging public involvement in the traffic calming process, thereby, preserving and enhancing the quality of Pelham communities.

Consultation:

Town of Pelham staff analyzed the traffic calming policies of several Ontario Municipalities including: City of Hamilton, City of London, City of Niagara Falls, and the City of Thorold.

Other Pertinent Reports/Attachments:

Appendix A – Proposed Revision to Policy S801-02 Neighborhood Traffic Management.

Appendix B – Existing Policy S801-02 Neighborhood Traffic Management (2014)

Prepared and Recommended by:

Jason Marr, P. Eng.
Director of Public Works

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer

Policy Name: Neighborhood Traffic Management	**Policy No: S801-02**
Committee approval date:	-
Council approval date:	-
Revision date(s):	11/14/2019
Department/Division:	Engineering

1. Purpose

The overall purpose of this policy is to provide a comprehensive process that addresses local neighbourhood traffic issues experienced in the Town of Pelham.

The specific goals of this traffic calming policy are to develop an integrated set of objectives and procedures that will combine to form a set of overall working guidelines that will:

- Educate residents about traffic calming so they can make more informed decisions and also understand the rationale behind the Town's decision making process.
- Provide a policy that Town officials and the general public are confident is an effective and fair tool in evaluating speeding and/or traffic volume problems.
- Provide a standard format for dealing in a consistent manner with complaints regarding speeding and traffic safety concerns.
- Reduce the workload and duplication of effort for Town staff in responding to resident traffic concerns.
- Educate people on how to create a safe and a pleasant roadway environment for residents, motorists, cyclists and pedestrians.
- Encourage public involvement in the traffic calming activities.
- Educate residents on pedestrian and cyclist safety.

This policy will also provide the guideline, procedure and criteria for the initiation, investigation and implementation of traffic calming measures within existing residential neighbourhoods. The policy will ensure safety concerns related to speeding and excessive volume are handled in a fair, transparent and efficient manner. Guidelines included in this policy will be applied to local and collector roadways within residential neighbourhoods.

The policy does not apply to arterial or rural roadways nor does it apply to anticipated future problems. This policy only applies to identify operational issues within existing residential areas. While similar traffic related issues may exist on arterial and rural roadways, the primary function of these roads is to move traffic efficiently. Therefore, traffic calming measure(s) that may be appropriate for use on urban residential roadways would not be suitable for use on arterial or rural roadways.

2. Policy Statement

It will be the policy of the Town of Pelham to restore Town streets, with an identified problem, to their intended function through applicable traffic calming measures, and hence, preserve and enhance the quality of Pelham communities.

3. Policy Constraints

The policy may be affected by the availability of Town staff, capital funding, design constraints, best practices and comments from other departments and agencies.

4. Definitions

"*85th percentile*" means, the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a monitored point.

"*Local roads*" means, a street that is primarily used to gain access to the property bordering it.

"*Rural roads*" means, a low-to-moderate capacity road located outside the urban boundary which serves to move traffic to local streets and arterial roads as well as provide access to rural property.

"*Collector roads*" means, a low-to-moderate-capacity road which serves to move traffic from local streets to arterial roads as well as provides access to property.

"Arterial roads" means, a high-capacity urban road which serves to deliver traffic from collector roads to highways, and/or between urban centres

"*Traffic Calming*" means, the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users.

5. General Provisions

5.1 What is Traffic Calming?

Traffic calming, as defined by the Institute of Transportation Engineers (ITE) Subcommittee on Traffic Calming, 1997 is:

"The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users."

According to the Canadian Guide to Neighbourhood Traffic Calming, prepared by the Institute of Transportation Engineers (ITE) and the Transportation Association of Canada (TAC), December 1998:

"The purpose of traffic calming is to restore streets to their intended function."

The primary purpose of traffic calming under this policy is to reduce high traffic speeds within residential neighbourhoods and thus improving safety for pedestrians and area residents.

5.2 What is NOT Traffic Calming

Over the past 30 years there has been a significant amount of knowledge gained through the implementation of successful projects to determine what traffic calming measures work and which traffic calming measures are not effective. The all way stop, 40 km/hr reduced speed zone, children at play signs, posted speed signs, rumble strips and speed bumps are all devices commonly mistaken for being traffic calming tools. None of these devices works to calm traffic for the reasons listed below:

Unwarranted All Way Stop

- Creates higher traffic speeds between stop signs. Studies have determined the speed is only reduced for 100 m on either side of the intersection.
- Results in poor compliance with stop signs due to driver frustration.
- Results in more frequent rear-end collisions caused by low percentage of motorists who actually do come to a complete stop.
- Requires frequent police enforcement as motorists do not stop, a drain on manpower resources.
- Potential risk to pedestrians **especially children and seniors** crossing an intersection, since not all motorists approaching an intersection will stop.
- Motorists get in the habit of stopping at unwarranted all-way stop locations, than assume at a 2 way stop cross traffic is going to stop and pull out in front of an opposing vehicle which results in a collision.

In light of the above, all-way stops should not be used as a tool to calm traffic. There are established criteria for all-way stop control based upon the numbers of pedestrians and vehicles sharing an intersection, the collision history and visibility. When these criteria are followed, risks are minimized and new safety concerns are not created. There have been numerous studies completed in North America which have validated all of the above findings.

40 km/h Speed Zone

- People travel at a speed they feel comfortable based on the environment though which they are driving regardless of the posted speed limit.
- Compliance with an artificially reduced speed is only achieved with consistent and visible police enforcement, a resource which is not always available.
- Collisions, when they occur, can be more significant due to the differences in speed between vehicles.
- Pedestrians may perceive the roadway to be safer due to the reduced speed limit. This false sense of security may lead pedestrians that are crossing the roadway to not be as cautious as they would be otherwise.

'Children at Play' Sign

- Many signs in residential areas, which are installed to 'warn' people of normal conditions, fail to improve safety.

- Warning signs can be effective tools if used sparingly and only to warn motorists of uncommon hazards that are not apparent to motorists.
- 'Children at Play' signs can give parents a false sense of security since motorists often disregard these signs.
- Children playing in the streets, while common place, is dangerous and prohibited in the Highway Traffic Act and the Traffic By-law.
- Since children live on nearly every residential block, 'Children at Play' signs would need to be placed on every roadway.
- Residential blocks with no signs might imply that no children live there, so it is acceptable to exceed the posted speed limit.

Speed Limit Sign

- The posted speed limits for roadways are typically established based upon recognized engineering criteria related to the roadway design.
- Posted speed limits, which do not match the characteristics of the roadway frustrate motorists and tend to foster aggressive driving habits. There are several examples where speed concerns exist primarily as a result of assigned speed limits that neither reflects the design speed nor the operating conditions of the roadway. Large discrepancies between posted speed limits and operating speeds can create a false sense of security for all road users, including pedestrians and places an additional enforcement burden on the Police.
- Reducing posted speed limits, without changing the characteristics of the roadway to encourage reduced speeds has been shown to have a minimal impact on vehicle operating speeds.
- Posted speed limits should be implemented in a consistent manner so that the speed limits maintain a level of credibility and compliance when the posted speed limit is applied properly. Reduced speed limits seem to provide the greatest result in situations when they are self-enforcing.
- Additional signage and/or adjusting the posted speed limit of a roadway are not considered to be traffic calming measures.

Rumble Strip

A Rumble Strip is a raised pavement section that can be closely spaced along a roadway at regular intervals. Rumble strips are a road safety feature used to caution inattentive motorists of potential danger. As the motorist travels over the rumble strips, the vehicle experiences both noise and vibration to alert the motorist.

They are typically installed along freeways and higher speed roadways to alert motorists that may begin to veer from the travel lane to the shoulder. Their purpose is to reduce the number of vehicles that depart the roadway; this is a common example of rumble strips used to enhance safety. Rumble strips can also be installed across the travel lane itself when unusual conditions exist ahead.
Rumble Strips can be installed along the travel lanes of a higher speed roadway that contains an isolated all-way stop controlled intersection. A motorist may grow accustomed to traveling at a certain speed and otherwise may not expect to stop; the purpose of the rumble strip is to alert the driver. This is a common example of rumble strips to alert motorists of a condition that is unusual to a specific roadway.

Rumble strips should not be used as traffic calming measures. These measures become less effective over time as the motorists grow accustomed to them. Rumble strips also increase noise levels for nearby residents and commonly require additional maintenance.

Speed Bumps

These measures should not be confused with speed humps. Speed bumps are vertical obstructions often found in privately-owned parking lots (shopping centers, schools, condominium complexes, parks, etc). Speed bumps typically measure between 75 mm and 100 mm in height and 3 m in length, and are often designed for a design speed that is much lower than a typical posted speed limit along a public roadway.

Traffic calming measures should be designed and implemented with the purpose that vehicles will be able to comfortably travel at the posted speed limit. In contrast, speed bumps require vehicles to travel much slower to attain a comfortable travel speed. The necessary braking and slow speeds can create a safety hazard, possibly causing rear- end collisions.

In summary, speed bumps should not be installed on public roads and are not considered to be a traffic calming measure.

5.3 Advantages and Disadvantages of Traffic Calming

Traffic calming if used properly will address identified operational traffic issues. However it will also introduce some disadvantages to a residential neighbourhood that will impact area residents after the project is complete. Listed below are some of the advantages and disadvantages created or caused by traffic calming measures:

Advantages

- Reduced vehicle speeds
- Reduced traffic volumes
- Reduced number of cut through vehicles
- Improved neighbourhood safety especially for pedestrians
- Reduced conflicts between roadway users
- Increased compliance with regulatory signs

Disadvantages

- Potential increase in emergency vehicle response time
- Could make it more difficult to get into and out of neighbourhoods every day
- May result in expensive solutions (time and resources)
- May shift or divert traffic onto neighbouring roadways
- Increase maintenance time and costs
- Add visually unattractive warning signs to a residential area
- May splinter neighbourhoods with strong ‘for and against’ traffic calming operations

5.4 Pedestrians & Traffic Calming

The principal purpose to reducing the speed of traffic in residential areas is to protect all vulnerable road users, such as pedestrians. Copied below is an excerpt from the Ontario Traffic Manual Book 15 - Pedestrian Crossing Facilities:

Pedestrians' Rights and Responsibilities
Notwithstanding the distinction between controlled and uncontrolled crossings, the rights and responsibilities for pedestrians are recognized in the Highway Traffic Act:

1. *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*

The above excerpt is stating whenever a pedestrian crosses a road they have a duty of care to themselves to cross when it is safe. It is important to remember under the Highway Traffic Act motor vehicles are only required to stop or yield to pedestrians at a controlled crossing such as traffic signals or pedestrian signals. At all uncontrolled crossings pedestrians must wait for a safe gap in traffic sufficient for them to cross before entering the road.

When an area is studied for traffic calming pedestrian crossing points are primary focus points, since this potential conflict point is exactly where you want drivers to slow down. The installation of traffic calming tools such as raised crosswalks, raised intersections, curb extensions does not change the rules of the Highway Traffic Act, pedestrians must still cross the road responsibly.

5.5 Types of Traffic Calming

Traffic Calming for the purpose of this policy is broken into two categories:

i. Passive, i.e. line markings and/or signage
ii. Physical, i.e. intrusive treatments that modify the shape and/or form of the travel lanes making it uncomfortable for drivers to attain high speeds.

<u>Passive Traffic Calming</u>

Passive traffic calming treatments are simple modifications in comparison to physical treatments. Passive modifications are intended to visually reduce effective lane width for a motorist and in most circumstances re-allocate some of road space to cyclists and on- street parking. These treatments have proven to be capable of reducing 85th percentile operating speeds by up to 5 km/h in other municipalities.

Passive treatments are implemented on a proactive and reactive basis and are typically applied uniformly over the entire road section, unlike physical treatments which are best described as spot treatments. The modifications associated with passive calming treatments are typically well received by the public. Staff provides the public with advance notification, including a plan of the proposed modifications prior to implementation. This level of public interaction appears to work well for the application of passive traffic calming.

Physical Traffic Calming

Physical traffic calming can be broken down into three categories: (1) vertical deflections, (2) horizontal deflections; and (3) physical obstructions.

Vertical traffic calming measures provide an obstruction that vehicles are able to travel over. The change in pavement height (and sometimes pavement materials) can cause discomfort to the occupants of vehicles that are exceeding the design speed of the traffic calming measure.

Horizontal traffic calming tries to prevent vehicles from traveling in a straight line at excessive speeds by using measures such as raised islands and curb extensions.

Physical obstructions involve a full or partial closure of the road.

Examples of passive and physical traffic calming techniques are listed in **Table 1**. Appendix A provides a more detailed explanation of the traffic calming devices listed below, including the advantages and disadvantages.

Table 1 – Applicability of Traffic Calming Measures in Pelham

	Measure Applicable On:			
Traffic Calming Technique	**Road Classification**			**Other Considerations**
	Local Roads	Collector Road	Arterial Road	Transit Route
Passive and Mitigating Measures				
Education	Yes	Yes	Yes	Yes
Community Entrance Sign	Yes	Yes	Yes	Yes
Textured Crosswalk	Yes	Yes	Yes	Yes
Targeted Enforcement	Yes	Yes	Yes	Yes
Speed Display	Yes	Yes	Yes	Yes
On Street Parking	Yes	Yes	Yes	Yes
Road Diet	Yes	Yes	Yes	Yes
Physical Vertical Deflection				
Speed Cushion	Yes	Yes	No	Yes
Raised Intersection	Yes	Yes	No	Yes
Raised Crosswalk	Yes	Yes	No	Yes
Speed Table	Yes	Yes	No	Yes
Speed Hump	No	No	No	No
Physical Horizontal Deflection				
Curb Extension	Yes	Yes	Yes	Yes
Curb Radius Reduction	Yes	Yes	No	No
Neighbourhood Traffic Circle	Yes	Yes	No	No
Centre Island Median	Yes	Yes	Yes	Yes
One-Lane Chicane	Yes	Yes	No	No
Lateral Shift	Yes	Yes	Yes	Yes

Roundabout	Yes	Yes	Yes	Yes
Physical Obstruction				
Directional Closure	Yes	Yes	No	No
Raised Median Through Intersection	Yes	Yes	Yes	Yes
Right-in/Right-out Island	Yes	Yes	Yes	No
Intersection Channelization	Yes	Yes	Yes	Yes
Diverter	Yes	Yes	No	No
Full Closure	Yes	Yes	No	No

5.6 Streets That Qualify of Traffic Calming

Locals and Secondary Collectors

Traffic calming will only be considered on local and collector roads, and not on arterial roadways in the Town. Through application of this policy and by applying good engineering judgment, traffic calming measures, when deemed prudent, will be installed in a manner that will ensure they provide the most effective solutions while continuing to support the intended function of the roadway. For example, to ensure that transit service remains efficient on collector routes, curb radius reduction would not be recommended at locations where transit vehicles must turn right since curb radius reductions significantly slow the turning speed of larger transit vehicles.

Local Roads

The primary function of local roadways is to provide access to adjacent properties. Local roads are not intended for use as through routes or as important links to move traffic within an area's overall road network. An acceptable volume of traffic for a local road is up to 1,500 vehicles a day. Examples of local streets are Kerr, Crosshill, Stella and Sunset.

Collector Roads

Collector roads carry traffic volume typically below 5,000 vehicles per day, between local roads, and arterial roadways. Collectors help circulate traffic within individual neighbourhoods, and link smaller local roadways to the larger road network but are relatively short as compared to arterial roadways which may extend from one side of the Town to the other. Examples of collector roads are Pancake, Welland, Port Robinson and Canboro. Examples of Arterial Roads are Pelham Street, and Regional Road 20.

5.7 Policy Guidelines

The following guidelines will be considered when investigating, selecting and implementing traffic calming measures. These guidelines will ensure that the appropriate measures are considered and the potential negative impacts are minimized. Following these guidelines will maximize the effectiveness of traffic calming while building community acceptance and support for the final recommendations.

Traffic calming measures will:

- Be considered only after education, enforcement and traffic engineering efforts have failed to produce the desired results.
- Be considered when there is a demonstrated safety, speed or short-cutting traffic concern and acceptable alternative measures have been exhausted.
- Be considered after focus is placed first on improvements to the arterial road network, such as signal timing optimization.
- Include consideration as to whether an area-wide plan versus a street-specific plan is more suitable: an area wide plan should be considered if a street-specific plan would likely result in displacement of traffic onto adjacent streets.
- Be predominantly restricted to two lane roadways (one lane of through traffic in each direction) and a posted speed limit no greater than 50 km/h.
- Not impede non-motorized, alternative modes of transportation and be designed to ensure pedestrian and cycling traffic is unaffected.
- Not impede Emergency and Transit services access unless alternate measures are agreed upon.
- Maintain reasonable automobile access to Town roads.
- Only be installed after Engineering staff has investigated existing traffic conditions and the necessary approvals have been received.
- Be monitored; follow-up studies will be completed to assess effectiveness and the results will be communicated to the community and Council.

6. Traffic Calming Process

The following process will be used when proceeding with a request for traffic calming. An established and formal process for investigating roads provides consistency and equality in the determination of whether traffic calming is warranted in a given location.

6.1 Public Input

In order for traffic calming to achieve the goal of restoring residential streets to their intended purpose, community involvement and support is paramount. Throughout the process, residents are encouraged to participate in the development of a traffic calming plan suitable to the neighbourhood and the concerns within it.

Before an area is considered for traffic calming a signed petition must be received by the Town showing a minimum of 25% support for traffic calming measures. If the petition does not show the required level of interest, the area will not qualify for traffic calming.

Later in the process, after passive measures have failed to address the traffic concerns, area residents will be asked by survey or at a Public Information Centre (PIC) for input on minor adjustments into a proposed physical traffic calming plan for the area.

In order for a traffic calming plan to be approved it must be circulated amongst all impacted area residents and must receive a majority response rate in favour from all residents surveyed before being considered for implementation.

The benefit of community involvement is that it generates support for a traffic calming program and assists in the implementation of a plan without significant opposition upon completion. Community involvement also enhances the credibility of the traffic calming program, particularly when it is eventually presented to Council for approval.

6.2 Process Initiation and Pre-Screening

Residents with traffic related concerns are instructed to submit their written request to investigate traffic calming within their neighbourhood to the Town. Staff will then conduct a brief preliminary assessment to determine if the requested roadway meets the Initial Screening Criteria, shown in **Table 1**

Table 1: Traffic Calming Pre-Screening Assessment

1.	Is the road a Local or Collector?	Pass	Fail
2.	Is the AADT (annual average daily traffic) >1000	Pass	Fail
3.	Is the posted speed 50km/h?	Pass	Fail
4.	Has the road been assumed?	Pass	Fail
5.	Is the road primarily residential?	Pass	Fail
6.	Does the street provide an obvious by-pass to a major intersection or road?	Pass	Fail
7.	Is the section of road longer than 200m?	Pass	Fail
8.	Have any previous efforts been made within the last 12 months?	Pass	Fail

If the roadway fails any of the 8 areas listed in the pre-screening it does not qualify for traffic calming.

6.3 Traffic Calming Ineligibility based on Pre-screening

For locations not meeting the above-noted initial screening criteria, staff will consider front-line mitigating measures to address the neighbourhood traffic concerns. These methods could

include tools such as the use of driver feedback boards, targeted police enforcement, sign installation and pavement marking modifications.

Front-line mitigating measures very rarely require public involvement such as surveys and public meetings. However, they may require monitoring and evaluation to assess their effectiveness. Details regarding front-line mitigating measures are provided in Appendix 'A'.

6.4 Traffic Calming Neighbourhood Petition

After it has been determined that the requested location meets the initial assessment criteria, a petition will be distributed to the residents within the impact area. The Town is responsible for the initiation, distribution and collection of the Traffic Calming petition to ensure consistency of the process by managing the collection of public input and this will be done in a manner that incorporates community involvement. An example of a petition letter is shown in Appendix B. The focus of the petition will centre on whether or not there is neighbourhood support for the Town to initiate an investigation into the need for traffic calming on the requested roadway.

A minimum of twenty-five percent (25%) of property owners within the impact area must indicate their approval by signing the Traffic Calming Petition. The signatures must come from households with direct frontage or flankage onto the section of roadway that has been identified as the location for the potential implementation of traffic calming measures, as defined by Engineering staff.

Each household is represented by one signature, regardless of the number of people in the household. This step in the process is crucial in determining the level of concern from the residents. Failure to meet the 25% support level will result in termination of the investigation; meeting the required 25% support level will trigger the commencement of a traffic calming study.

The Town shall allow twenty-eight (28) days for the petition to be returned. Day zero (0) is the date on which the Town delivers the Traffic Calming Petition to the citizen representative.

a. If petition approval is achieved, the evaluation phase begins.
b. If twenty-eight (28) days elapse and petition approval has not been achieved, the roadway will not be considered for traffic calming for twelve (12) months.

6.5 Data Collection

Once a successful petition is received the collection of data is scheduled based on a priority list. The Town shall collect information and data along roadway(s) in the project as deemed necessary by Engineering staff to qualify and quantify the extent of the local traffic problem. The data collection may include any of the following:

- Vehicle volume count to determine 24-hour traffic
- Speed study to determine existing speed data
- Classification count to determine heavy vehicle traffic
- Collision data for the most recent three (3) years (if available)
- Study to quantify cut-through traffic, if determined necessary by staff
- Existing roadway conditions (e.g. pavement condition, signing, marking)
- Pedestrian activity

- Presence of sidewalks on one or both sides of the road
- Presence of special pedestrian generators such as schools, seniors homes, playgrounds, etc. in the area

A review of the data will be completed using recognized engineering standards. Once collected and summarized, the data will be utilized in the point assessment system to determine a total point value. This assessment will be used to determine the need for traffic calming and assist in setting priority for locations of consideration.

6.6 Point Assessment System

The point assessment system is a screening process focused on the various attributes of a roadway in order to quantify its potential need for traffic calming. By means of assigning weighted points based on the severity of certain road attributes (e.g. 85th percentile speed), this process will bring to the forefront roadways requiring consideration while quantifying the current conditions. A point assessment system is provided in Appendix 'C'.

The point assessment system will also be used to prioritize locations for consideration. Those locations with an extremely high point assessment will be given priority based on the quantitative nature of the point assessment system. Depending on funding availability, locations will be selected based on the point system with those locations with the highest points constructed first. If funding does not permit all locations to be constructed in one year, roadways will be carried forward to the next year when they will then be re-prioritized to include any new locations.
The minimum number of points required to proceed with the investigation of traffic calming measures differs based on the classification of roadway. In keeping with the objective of restoring roadways to their intended function, local and collector roadways are designed and expected to convey varying levels of traffic volume. This, in turn, has a bearing on the minimum point value required to proceed, as traffic volume is a major consideration. Based on this, the following are minimum point values for each road type:

Local road - minimum 35 points
Collector road - minimum 52 points

Should a location fail to meet these requirements, residents will be notified in writing and the investigation for traffic calming measures will discontinue. However, staff will continue to address the concerns of the residents by means of the front-line mitigating measures.

6.7 Traffic Calming Design Considerations

The data collected combined with site visits, historical information, future maintenance and construction plans, as well as resident feedback will be taken into consideration to determine potential traffic calming measures.

Appropriate traffic calming measures will be determined based on the list of traffic calming measures outlined in Appendix 'A' of this policy. The traffic calming design could include one or more different types of traffic calming techniques. The proposed traffic calming measures will be in accordance with the design Guidelines found in the Canadian Guide to Neighbourhood Traffic Calming, engineering judgement and experience of staff.

The preferred design will first be presented to emergency and/or roads operations services. It will then be presented at a public meeting. After any required modifications to the preferred design as a result of public input, a traffic calming survey will be delivered to affected residents.

6.8 Comments from Emergency/Transit and Roads Operations

Staff will provide the preferred design to the relevant review agencies (e.g. emergency and transit services). Comments from the potentially affected services will be solicited and feedback with respect to possible impacts will be encouraged. As required, Town staff will work with agencies to modify the design, as necessary. While it is preferable to modify the traffic calming design, if modifications are not able to remedy agency concerns, the traffic calming process will be discontinued for the roadway under consideration and residents will be notified.

6.9 Public Information Centre & Public Notice

Staff will host a Public Information Centre (PIC) to present the purpose, objectives and implementation process of traffic calming in general. The PIC notice will be circulated to all residents who live within the affected area, which may include adjacent streets, as determined by staff. Staff will then present and explain the rationale behind the specific preferred traffic calming design. The public meeting will provide residents with an opportunity to become involved in the process, learn more about the proposed traffic calming treatment(s) and to provide their feedback. Each plan will include a procedure to communicate with and engage the neighbourhood, in keeping with the Council Policy on Community Engagement and its principles.

Notification of the meeting will be published in a newspaper and through other social media network, including Town website, Facebook and Twitter. The purpose of this notice will be to provide notification to the public regarding the meeting date, time and location. It will also present an opportunity to solicit comments on the alternative traffic calming measures.

6.10 Resident Notification

Residents will be notified that traffic calming has been either approved or not approved by the Town on the subject roadway. The notice will be sent to the same mailing list used to deliver the traffic calming survey and any other persons having requested notification throughout the process.

6.11 Finalize Preferred Traffic Calming Plan

Using technical data, community feedback, and in keeping with the goals, objectives and principles set out in this policy, staff will finalize the preferred traffic calming design to be put forward as the recommended preferred traffic calming plan. In finalizing the preferred traffic calming plan, general consideration will be given to the various aspects of road design such as utility placement, landscaping, sign requirement and drainage.

If, during the detailed design stage, limitations are identified which challenge the feasibility of the plan, alternatives will need to be considered. This may include alterations or a re-development of the preferred plan. If significant or major changes to the plan are required due to design constraints, agencies and residents on the mailing list will be consulted and

notified of any changes. If staff believe that the required modifications to create the detailed design result in a significantly different final design from that which was presented to residents , staff may recommend additional agency consultation, and/or public meeting.

6.12 Implementation of Traffic Calming Measures

Upon approval of Council, resident notification, and sufficient funding, traffic calming measures will be implemented. Residents will be notified of implementation timelines through the contact mailing list. Where feasible, staff may decide it is beneficial to phase in the traffic calming plan through the use of temporary or removable traffic calming measures such as pavement markings or flexible delineators. This will allow time to examine the impact of the measures and their effectiveness before committing funding to permanent treatments.

6.13 Evaluation and Monitoring

Engineering staff will monitor the roadway to determine the effectiveness of the utilized measures and their impact on the surrounding road network. This information will be used in recommending similar measures in the future. In addition to conducting before and after speed studies the Town will conduct studies to assess if the traffic calming plan has resulted in significant amounts of traffic diverting to adjacent, parallel streets in some cases. These after studies will be compared with the Town's 'before' studies to determine the change in traffic volume.

6.14 Removal of Traffic Calming Measures

Traffic calming devices may be removed, at the request of residents after 2 years provided that at least the same level of support exists to remove as was measured for installation. A minimum of twenty-five (25) percent of property owners within the impact area must indicate their approval by signing the Traffic Calming Removal Request. The signatures must come from households with direct frontage or flankage onto the section of roadway that has been identified as the location for the potential implementation of traffic calming measures, as defined by Engineering Staff. Each household is represented by one signature, regardless of the number of people in the household.

When Staff receives a successful petition, a survey will be sent out to all the area residents who were initially surveyed. The survey will be delivered to the same residents as was initially done to gauge support for traffic calming. The survey must indicate majority of respondents surveyed agreeing to the removal to be deemed successful. Traffic calming measures must be installed for at least 2 years before starting the process to remove them. If traffic calming devices are removed, the subject street must wait at least 2 years before requesting a new traffic calming plan; at this point the approval process will start over.

If a request to remove a single traffic calming device, within an overall traffic calming plan, is received, all traffic calming devices will be considered for removal. Depending on circumstances, it could be possible to remove a single device constructed as part of an overall plan, however, in most cases all devices work together to be effective and to ensure that traffic is not diverted where it should not be. The Town reserves the right to remove traffic calming measures if it determines that they are ineffective or unsafe, or if they have created a negative impact that cannot be corrected. The Town will mail out a notification and advertise in local newspapers informing of its decision to remove traffic calming measures.

APPENDIX A – Traffic Calming Techniques

PASSIVE & MITIGATION MEASURES

Passive traffic calming measures do not require construction of physical modifications to the roadway. Passive traffic calming often results in lower cost and prevents constructing a more-permanent change to the roadway. Physical (vertical and horizontal) traffic calming measures will be considered by the Town when either the passive measures have not alleviated the Neighbourhood concerns or the Town determines the need for their installation.

Passive traffic calming measures include education, targeted speed limit enforcement, radar trailer placement, dynamic speed display signs, and speed legends.

Education

Activities that change people's perceptions and help alter driver behaviour are most preferred. Meetings and workshops with neighbours and the Town can help implement and direct traffic calming applications. Most traffic problems are a result of human behaviour. Through outreach programs and Neighbourhood watch programs such as the Active and Safe Routes to School program, residents can play a big part in spreading the information.

Advantages:

- Flexible in the duration of meetings, workshops, etc.
- Inexpensive compared to other alternatives

Disadvantages:

- Difficult to measure the effectiveness
- May take time to be effective
- Potential challenge in generating citizen participation

Community Entrance Signs

The "Drive Slowly… Think of Us" sign is purely informational and as such, is intended to serve as a reminder to motorists that they are entering a residential area where the residents are concerned about the safety and integrity of the neighbourhood.

As the over use of any traffic control device or sign can have a negative effect on motorist activities, the Engineering Services Department limits the placement of community entrance signs using the following principles/guidelines:

Limits its installation to entrances to residential neighbourhoods off collector and arterial roadways where the neighbourhood experiences a degree of non-residential through traffic.

The sign is meant to serve as a reminder for motorists to "turn off" the highway driving mode and to be aware that they are entering a residential area where reduced speeds are required to negotiate vehicles entering and exiting driveways as well as the potential for children to be playing adjacent to the roadway.

Textured Pavement

Textured pavement and stamped asphalt can be used alone as a traffic calming measure or in combination with other physical measures. Drivers typically slow down when crossing textured pavement due to vibration created by the pavement surface. However, this also creates considerable noise that may be a disadvantage for neighbours.

Textured Pavement

Advantages:

- Pleasing visual aesthetics

Disadvantages:

- Noise pollution
- Higher cost
- Not as effective in reducing speeds

Textured Pavement

Targeted Speed Limit Enforcement

The Niagara Region, through the Niagara Regional Police (NRP), can provide targeted speed limit enforcement in response to identified operational issues. Targeted speed limit enforcement purpose is to make drivers more aware of their speed within a residential area. This measure typically only provides a temporary benefit, since speed limit enforcement is not available on a regular, on-going basis.

The Niagara Regional Police Service has set up a hotline to allow citizens to provide feedback on traffic safety issues. The hotline allows the public to provide information on where traffic is dangerous, problems you're encountering on the roads, and other traffic safety complaints. This initiative doesn't replace existing methods of dealing with accidents and other traffic issues, but serves as an additional way of reporting incidents you may have witnessed or become aware of. By the public and police working together, the Niagara Region becomes a safer place for everyone.

Speeding and other traffic issues may be reported to the NRP utilizing the traffic hotline: 905-688-4111, ext. 5555. Or website: https://niagarapolice.formbuilder.ca/Public-Website/Traffic-Complaint

Advantages:

- Does not require time for design
- Does not slow emergency vehicles
- Effective in reducing speeds in a short timeframe

Disadvantages:

- Effectiveness may be temporary
- Expensive to maintain a continued program of enforcement
- Fines lower than enforcement cost
- Time and resources constrained

Speed Display

A dynamic speed display sign performs the same function as a radar trailer, but is meant to be installed as a permanent device. Real-time speeds are relayed to drivers and flash when vehicle speeds exceed the posted speed limit. Dynamic speed display signs are typically placed in on a street for a period of 1 week. The Town has one (1) mobile unit which is rotated through a number of locations during the spring, summer and fall. A higher priority is placed on locations with younger or older pedestrians. Portable speed display signs can also be utilized but only for a short durations.

Advantages:

- Relatively Inexpensive
- Does not require time for design
- Does not slow emergency vehicles
- Effective in reducing speeds in a short timeframe

Disadvantages:

- Requires power source
- Requires staff for set-up and removal
- Only effective for one direction of travel

- Long-term effectiveness is uncertain
- Subject to vandalism

Portable Speed Display Sign

On Street Parking

Most roads within residential areas are built wide enough to allow on street parking on at least one side of the road. Area residents often create the opportunity to speed by introducing No Parking zones. Eliminating parked vehicles from your street significantly increases the width of the road and will increase the speed of local traffic. There have been studies done in North America which have shown the introduction of a No Parking zone increased the speed of traffic by 20%. On Street Parking is not permitted between November 1rst and April 1rst during Winter Operations.

Road Diet

A road diet refers to using pavement markings to make the travel portion of the road narrower, typically introducing bike lanes and or parking lanes. Passive speed control measures such as pavement markings attempt to change the fundamental sensory information available to drivers to influence their speed behaviour. By adding markings to the road, drivers' perceptions can be distorted creating the illusion that they are driving faster than they really are, persuading drivers to slow down. Additionally, the new road markings can serve as a warning sign; because these pavement patterns are mostly unfamiliar to road users, they violate driver expectancy causing motorists to decelerate.

Road Diet
(Including On Street Parking and Bike Lanes)

PHYSICAL VERTICAL DEFLECTION

Vertical traffic calming measures provide an obstruction that vehicles are able to travel over. The change in pavement height (and sometimes pavement materials) can cause discomfort to the occupants of vehicles that are exceeding the design speed of the traffic calming measure. It should be noted that most vertical traffic calming measures are not preferred along roadways that are emergency vehicle routes or transit routes.

To reduce the chances of potential liability issues, vertical traffic calming measures should be signed and marked in accordance with reference material provided by the Institute of Transportation Engineers (ITE) and the Neighbourhood Traffic Calming (TAC). Vertical traffic calming measures typically perform better when they are installed in a series, as opposed to a single isolated measure. The deceleration and acceleration of a vehicle, while negotiating a series of vertical traffic calming measures, is dependent on the number and spacing of the installations.

The implementation of vertical traffic calming measures can result in some traffic diverting onto parallel streets. This essentially moves the cut-through problem instead of solving it. Consideration should be placed on the concept of improving the Neighbourhood (not just improving the street).
Vertical traffic calming measures include speed humps, speed cushions, speed tables, raised crosswalks, raised intersections, and textured pavements.

Speed Cushion

Speed cushions are narrower speed humps that are typically installed in the center of each travel lane. Speed cushions typically are six (6) feet in width. Speed cushions typically range in length between seven (7) and ten (10) feet. Passenger vehicles will traverse the speed cushions in the same manner as a speed hump. However, emergency vehicles are able to straddle the speed cushions due to their wider wheel track. Thus, response times for emergency vehicles are not increased as much (if at all).

Advantages:

- Less expensive than speed humps
- Effective in reducing vehicle speed
- Does not impact emergency vehicle response time as much as speed humps

Disadvantages:

- Increases noise and air pollution in Neighbourhood
- Passenger vehicles with larger axle widths may be able to straddle the speed cushions
- May be damaged by snow plows

Speed Cushions

Raised Crosswalks

Raised crosswalks have a similar shape to a speed table, but the flat top contains a striped pedestrian crosswalk. These measures should be elevated to a height that matches the adjacent sidewalk, such that the raised crosswalk is flush with the curb or top of sidewalk elevation at each end. Raised crosswalks must be installed with the appropriate sidewalk transitions on both sides.

Advantages:

- Provides a more visible pedestrian crossing
- Quicker response time for emergency vehicles than speed humps
- Effective in reducing vehicle speed, but not as well as speed humps
- Addition of brick or textured materials can improve aesthetics

Raised Crosswalks

Disadvantages:

- More expensive than speed humps
- Increases response time for emergency vehicles
- Increases noise and air pollution in Neighbourhood
- May be damaged by snow plows

NOTE: Lack of sidewalk infrastructure may result in a raised crosswalk not being applicable in the Town. Raised crosswalks can be constructed without the presence of

sidewalks, as long as there are AODA- compliant pedestrian landing areas with detectable warning strips on both ends of the raised crosswalk

Speed Tables

Speed tables are flat-topped speed humps. Speed tables typically measure between three (3) and four (4) inches in height and 22 feet in length, with the flat portion being ten (10) feet in length. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat top. Their long flat fields give speed tables higher design speeds than speed humps. The brick or other textured materials are usually used on the flat top to improve the appearance of speed tables, draw attention to them, reduce speed, and may enhance safety. Like speed humps, discomfort increases as the speed of the vehicle traveling over the hump increases. Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles.

Advantages:

- Quicker response time for emergency vehicles than speed humps
- Effective in reducing vehicle speed, but not as well as speed humps
- Addition of brick or textured materials can improve aesthetics

Disadvantages:

- More expensive than speed humps
- Increases response time for emergency vehicles
- Increases noise and air pollution in Neighbourhood

Speed Tables

Speed Humps

Speed humps are raised areas of pavement which are rounded on top and placed cross the entire street. Speed humps typically measure between 75 and 100 millimeters in height and 10m in length. The height and length of the speed hump determines how fast it can be navigated without causing discomfort to the driver. Discomfort increases as the speed of the vehicle traveling over the hump increases.

Advantages:

- Low Cost
- Effective in reducing vehicle speed

Disadvantages:

- Unsupported by Emergency Services
- Increases response times and damage to emergency vehicles
- Negative impact on Transit buses
- Increases noise and air pollution in Neighbourhood
- May be damaged by snow plows

Speed Humps

HORIZONTAL TRAFFIC CALMING MEASURES

Horizontal traffic calming measures incorporate raised islands and curb extensions to prevent vehicles from traveling in a straight line at excessive speeds. Vehicles either slow down while maneuvering around the horizontal obstacle, or slow down due to the physical perception of a narrower roadway. To reduce the chances of potential liability issues, horizontal traffic calming measures should be signed and marked in accordance with reference material provided by the Institute of Transportation Engineers (ITE) and the Transportation Association of Canada (TAC).

The implementation of horizontal traffic calming measures can result in some traffic diverting onto parallel streets. This essentially moves the problem instead of solving the problem. Consideration should be placed on the concept of improving the Neighbourhood (not just improving the street).

Horizontal traffic calming measures include Neighbourhood traffic circles, roundabouts, chicanes, lateral shifts, centre medians and curb extensions.

Curb Extension

Curb Extensions reduce the roadway width at intersections and midblock locations, thereby reducing speeds when drivers experience the physical perception of a narrow roadway. Curb extensions offer the more important benefit of improving pedestrian safety by providing a refuge and shortening the crossing distance. Curb extensions have been found to be very effective in school zones where they offer the third benefit of defining the parking area.

Advantages:

- Encourages a safer pedestrian environment by providing a shorter crossing distance and increased visibility
- Very effective in front of elementary schools in addressing pick-up, drop off parking issues
- Prevents parking too close to intersections keeping sight lines open
- Opportunity for landscaping and improved aesthetics

Disadvantages:

- Effectiveness is limited by the absence of vertical deflection and if traffic volumes are low
- Difficult for right-turning emergency vehicles
- Increased cost for maintenance of landscaping if it exists
- May require bicyclists to briefly merge with vehicular traffic

Curb Extension(s)

Curb Radius Reduction

The Curb Radius Reduction is the reconstruction of an intersection corner to a smaller radius. This measure effectively slows down right-turning vehicle speeds by making the corner 'tighter' with a smaller radius. A corner radius reduction may also improve pedestrian safety to a certain degree by shortening the crossing distance. This type of measure is acceptable primarily on local roads and to a lesser extent on collector roadways; its use is often limited to specific situations where the existing intersection geometry would allow the reconstruction. In addition, curb radius reductions should not be used on transit routes requiring a right turn.

Advantages:

- Shortens pedestrian crossing time
- Forces vehicles on approach to come to a full stop

Disadvantages:

- Large axle vehicles are unable to negotiate the turn without driving over the sidewalk

Neighbourhood Traffic Circle

Neighbourhood traffic circles are raised islands placed in intersections, forcing traffic to circulate around the raised island. The traffic circle is typically circular in shape and can include landscaping within the raised island. The raised island in the center of the intersection typically measures between 16 and 24 feet in diameter. Neighbourhood traffic circles can be controlled by YIELD signs on all approaches, STOP signs on all approaches, or a combination of free-flow conditions along the major street and STOP signs along the minor street. Traffic circles prevent drivers from speeding through intersections by impeding the through movement. Neighbourhood traffic circles are most effective when there is vertical planting material in the center. This adds to its visibility to the driver and provides aesthetics to the Neighbourhood.

Advantages:

- Effective in reducing vehicle speed
- Can reduce severity of motor vehicle collisions
- Opportunity for landscaping and improved aesthetics

Disadvantages:

- Difficult for left-turning emergency vehicles
- Possible need for right-of-way, depending on size of raised island
- Increased cost/labor for maintenance of landscaping

Neighborhood Traffic Circle

Center Island Median

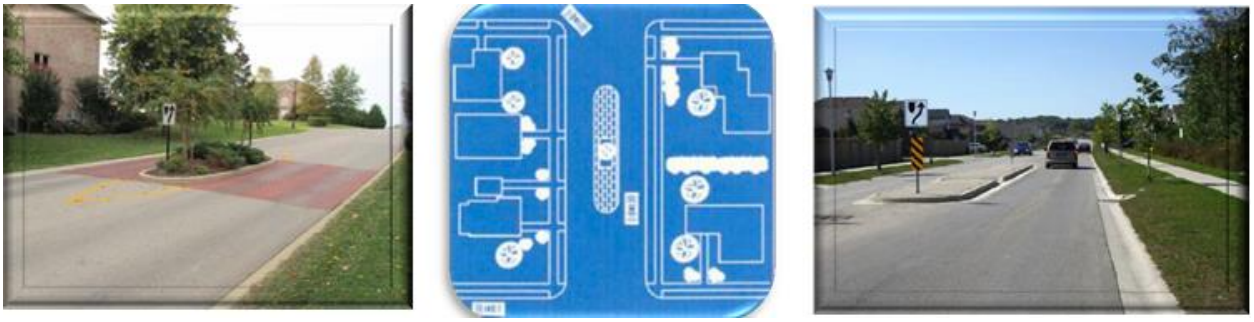
Center island medians are raised islands located along the centerline of a street that narrow the travel lanes at that location. The presence of a median, resulting in a smaller roadway width, reduces speeds when drivers experience the physical perception of a narrow roadway. The medians can be landscaped to provide visual amenity.
The median island can act as a "gateway" when placed at the entrance to a neighbourhood. A median island of adequate width can also be referred to as a "pedestrian refuge" if located at a crosswalk and the median is accommodating for pedestrians.

Advantages:

- If designed well, can have a positive aesthetic value
- Opportunity for landscaping and improved aesthetics

Disadvantages:

- Effectiveness is limited by the absence of vertical deflection
- May interrupt driveway access to adjacent properties
- Increased cost for maintenance of landscaping



Centre Island Median(s)

Chicane

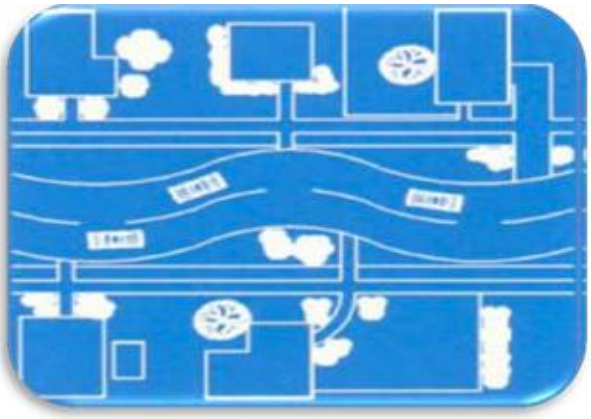
Chicanes are curb extensions that alternate from one side of the street to the other, creating S-shaped travel patterns. Raised landscaped islands or delineators are usually provided at both ends of a chicane in order to enhance the drivers awareness of the need for a lateral shift.
Along a section of roadway that contains a chicane; off-street parallel parking may be restricted along property frontages due to curb and gutter.

Advantages:

- Discourages high speeds by forcing horizontal deflection
- Easily negotiable by emergency vehicles
- Opportunity for landscaping and improved aesthetics

Disadvantages:

- Must be designed carefully to discourage drivers from deviating out of the appropriate lane
- Curb realignment and landscaping can be expensive, especially if there are drainage issues
- Increased cost for maintenance of landscaping



Chicane

Lateral Shift

Lateral shifts can be described as one half of a chicane. Curb extensions or pavement markings are provided on otherwise straight streets that cause travel lanes to bend one way and then bend back the other way to the original direction of travel. With the appropriate degree of deflection, lateral shifts are one of the few measures that have been used on collectors or even arterials. When high traffic volumes and high posted speed limits prevent the use of other traffic calming measures, lateral shifts can be considered.

Advantages:

- Can accommodate higher traffic volumes than many other traffic calming measure
- Discourages high speeds by forcing horizontal deflection
- Easily negotiable by emergency vehicles
- Opportunity for landscaping and improved aesthetics

Disadvantages:

- Must be designed carefully to discourage drivers from deviating out of the appropriate lane
- Curb realignment and landscaping can be expensive (pavement markings are less expensive)
- Increased cost for maintenance of landscaping

Lateral Shift - With Road Paint

Roundabouts

Unlike traffic circles, roundabouts are larger and typically require additional right-of-way. The central island diameter of a single-lane roundabout can measure between 55 and 110 feet. Roundabouts require raised splitter islands to channel approaching traffic to the right. Roundabouts are found primarily on arterial and collector streets, often substituting for intersections that are controlled by traffic signals or all-way stop signs.

Advantages:

- Moderates traffic speed on an arterial, collector, or local road
- Enhanced safety compared to a traffic signal
- Less expensive to operate than a traffic signal Opportunity for landscaping and improved aesthetics

Disadvantages:

- May require major reconstruction of an existing intersection
- Increases pedestrian distance from one crosswalk to the next
- Difficult for visually impaired pedestrian to navigate
- Increased cost for maintenance of landscaping

Roundabout(s)

Curb Face Sidewalk

A curb face sidewalk is a wider than normal sidewalk retrofitted into an older area of the Town where putting a sidewalk in standard location would eliminate or damage a number of mature trees. The sidewalk is primarily built on the existing road bed, narrowing the road.

Advantages:

- Removes the pedestrians from the road improving pedestrian safe
- Narrowing the road will slow some drivers down
- No trees need to be remove

Disadvantages:

- May have to eliminate on street parking
- Expensive
- Reduced snow storage, difficult to clear large windrows

Curb Face Sidewalk

PHYSICAL OBSTRUCTION

Physical obstructions are the most severe traffic calming tool and are only used when it is determined a vertical or a horizontal measures won't address the identified problem. The primary purpose of physical obstructions is to eliminating short-cutting traffic by stopping specific vehicle movements. It is important to note that physical obstructions are intended to deter motor vehicle traffic only and not to obstruct bicycle or pedestrian traffic. These types of measures are typically implemented at intersections, but may also be applied at some mid-block locations.

Obstructions range from those that have a relatively minor impact on vehicular access to those that severely restrict access such as a road closure. It is important to remember once the vehicle restricted movement is in place area residents have to live with it every day.

Directional Closures

Directional closures are created using a curb extension or other barrier that extends into the roadway, approximately as far as the centerline. This device obstructs one side of the roadway and effectively prohibits vehicles travelling in that direction from entering. Directional closures are especially useful for controlling non-compliance of one-way road sections and are compatible with other modes such as bicycles.

At all directional closures, bicycles are permitted to travel in both directions through the unobstructed side of the road; however, some directional closures have a pathway built through the device specifically for bicycles. Since their purpose is to prevent short-cutting traffic, directional closures are applicable for use on local streets and minor collectors, at their intersection with collectors and arterials

Advantages:

- Directional closures typically result in about a 40% reduction in traffic volumes
- There may also be a reduction in travel speeds around the intersection
- Eliminates right angle collisions

Disadvantages:

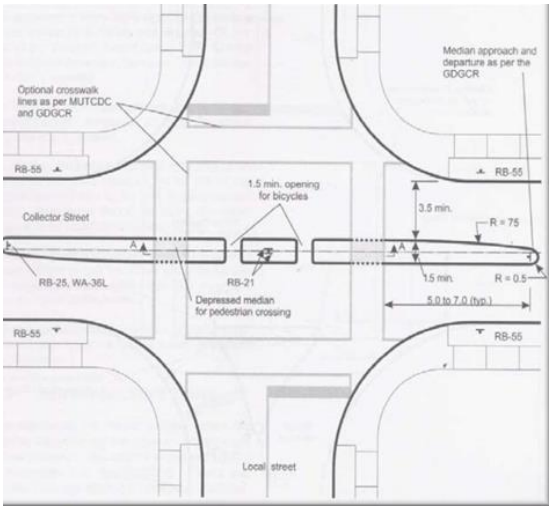
- Restricts resident access to the neighbourhood
- May divert significant volume of traffic to parallel streets without traffic calming measures
- Could not be implemented without a larger traffic impact study

Directional Closure – Restricted Neighbourhood Access

Raised Median Through Intersection

These devices may be used on the centerlines of local and collector roadways to prevent left-turn and through movements to and from intersecting streets. This type of device is especially effective at preventing short-cutting and through traffic while providing some secondary pedestrian safety benefits.

The advantages and disadvantages are the same as the directional closure.



Raised Median Through Intersection

Right-In / Right-Out

Right-in/right-out islands are raised triangular islands located on an intersection approach to limit the side street to right turn in and out movements. Similar to a raised median through an intersection, this device is used primarily to restrict movements to and from an intersection roadway.

Right-in/right out islands may be considered only for use in locations where local residential streets intersect another roadway of any class. The island needs to be designed properly or vehicles will drive left around it.

The advantages and disadvantages are the same as the directional closure.

Right-in / Right-out

Diverter

A diverter is a raised barrier placed diagonally across an intersection that forces traffic to turn and prevents traffic from proceeding straight through the intersection. Diverters can incorporate gaps for pedestrians, wheelchairs and bicycles and can be mountable by emergency vehicles. The purpose of a diverter is to obstruct short-cutting or through traffic.

Advantages:

- Diverters can result in a 20% to 70% reduction in area-wide traffic volumes, depending on extent of diverters used

Disadvantages:

- Restricts resident access to the neighbourhood
- May divert significant volume of traffic to parallel streets without traffic calming measures
- Could not be implemented without a larger traffic impact study

Traffic Diverter

Full Closure

A full closure is a barrier extending the entire width of a roadway, which obstructs all motor vehicle traffic along the roadway. A closure can change a four-way intersection to a three-way intersection, or a three-way intersection into a non-intersection. Gaps can be provided for cyclists and they are typically passable by emergency vehicles. The purpose of a full closure is to eliminate short-cutting or through traffic.

Full Closure

Advantages:

- Eliminates all short-cutting or through traffic

Disadvantages:

- Restricts resident access to the neighbourhood
- May divert significant volume of traffic to parallel streets without traffic calming measure
- Could not be implemented without a larger traffic impact study

APPENDIX B – Traffic Calming Form Letters

20 Pelham Town Square
PO Box 400
Fonthill, On
L0S1E0

Date:

PETITION LETTER
IMPORTANT INFORMATION REGARDING
NEIGHBOURHOOD TRAFFIC CALMING REVIEW PETITION

Please read before signing petition

The Town of Pelham has initiated this petition to evaluate who is interested in initiating a traffic calming review at the following location:

_____

Pelham Staff Note: Insert Street Name and extents (to/from) before sending and attach policy

To initiate a review of whether or not the above-noted street warrants traffic calming, a petition, indicating support, is required. The Town of Pelham has provided the attached copy of the traffic calming petition and the Town's Traffic Calming Policy to the resident initiating the request for a review. The focus of the petition is to determine if there is support from adjacent residents for Town staff to perform an investigation of traffic concerns on the above-noted roadway.

The results of the petition must show support from at least 25% of the households with direct frontage onto the roadway to be investigated. Each household is represented by one signature, regardless of the number of people in the household (an apartment/condo would count as one household). Failure to meet the 25% support level will result in termination of the investigation. Please note that you should indicate on the petition whether or not you support the request for a review. If you are neutral and do not feel strongly either way, please check off the 'neutral' box: neutral answers will be considered as not supporting the initiation of a review.

Initially passive measures will be used by the Town for a 1 year period in an attempt to address the identified operational traffic issues. If the outcome of the Town's 1 year review indicates the problem still exists than physical traffic calming measures are warranted, all affected residents (households), as determined by the Town, will have the opportunity to indicate whether or not they support any future proposed physical traffic calming measures.

After the Town develops a traffic calming plan, the Town will conduct a public meeting to explain the plan, at which point residents will have the opportunity to provide their input. Following the public meeting, the traffic calming plan will be modified, as required.

If you have any additional questions or comments please contact:

Assigned Public Works Staff

(905) 892-2607 ext. XXX
Publicworksstaff@pelham.ca
www.pelham.ca

20 Pelham Town Square
PO Box 400
Fonthill, On
L0S1E0

PETITION LETTER
IMPORTANT INFORMATION REGARDING
NEIGHBOURHOOD TRAFFIC CALMING REMOVAL PETITION

Please read before signing petition

The Town of Pelham has supplied this petition to a concerned resident who is interested in initiating a traffic calming removal petition at the following location:

_____

Pelham Staff Note: Insert Street Name and extents (to/from) before sending and attach policy

To initiate a review of whether or not the above-noted street warrants traffic calming removal, a petition, indicating support, is required. The Town of Pelham has provided the attached copy of the traffic calming removal petition and the Town's Traffic Calming Policy to the resident initiating the request for a review. The focus of the petition is to determine if there is support from adjacent residents for Town staff to perform an investigation to remove the traffic calming devices

The results of the petition must indicate a majority of the total surveys delivered to residents with direct frontage onto the roadway to be investigated. Each household is represented by one signature, regardless of the number of people in the household (an apartment/condo would count as one household). Failure to meet the majority support from residents within the impact area will result in termination of the investigation. Please note that you should only sign the petition if you agree the devices should be removed.

If a request to remove a single traffic calming device, within an overall traffic calming plan, is received, all traffic calming devices will be considered for removal. Depending on circumstances, it could be possible to remove a single device constructed as part of an overall plan, however, in most cases all devices work together to be effective and to ensure that traffic is not diverted where it should not be. The Town reserves the right to remove traffic calming measures if it determines that they are ineffective or unsafe, or if they have created a negative impact that cannot be corrected. The Town will mail out a notification and advertise in local newspapers informing of its decision to remove traffic calming measures

If traffic calming devices are removed, the subject street must wait at least 2 years before requesting a new traffic calming plan; at this point the approval process will start over.

If you have any additional questions or comments please contact:

Assigned Public Works Staff

(905) 892-2607 ext. XXX
Publicworksstaff@pelham.ca
www.pelham.ca

Traffic Calming Removal Request

Citizen Representative Information

Name: _____ Street Address: _

Telephone: _____ Email: _

Signature: _____ Date: _

The Citizen representative is requesting that the Town of Pelham consider the removal of traffic calming measures along the following roads:

_____ between _____ and _____

_____ between _____ and _____

_____ between _____ and _____

Select the concerns that apply and provide a brief description of the concerns

- ☐ Speeding
- ☐ Traffic Volumes
- ☐ Cut-through traffic
- ☐ Crashes
- ☐ Pedestrian Safety
- ☐ Bicycle Safety
- ☐ Large Trucks
- ☐ Other

Brief Description of Concerns:

The undersigned concur with the request for the traffic calming measures made by the citizen representative. Only one signature per property is permitted. In order for this request form to be reviewed, a majority response in favour is required from property owners. Any signatures without valid addresses will be voided. This petition can only be circulated to homes contacted as part of the original traffic calming survey.

Name	Street Address	Signature

Town of Pelham Office:
905-892-2607 Ext. 332
pelhamstaff@pelham.ca
www.pelham.ca

APPENDIX C – Traffic Calming Point Assessment

TRAFFIC CALMING POINT ASSESSMENT

Location:			Date Compiled:	
Roadway Type:		Local	Collector	
Traffic Data				
	Feature	Range	Criteria	Total
1a.	Speed	0 to 35	5 points for every 2 km/h that the 85th percentile speed is greater than 10 km/hr over the speed limit	
1b	High Speed	0 to 5	5 points if minimum of 5% of daily traffic exceeds posted speed by 15-20 km/hr	
2.	Volume	0 to 20	Local Roadways: 5 points for every 1,500 ADT Collector Roadways: 5 points for every 2,000 ADT	
3.	Short-Cutting Traffic	0 or 15	5 points if there is a presence of 25% or more short-cutting traffic, additional 5 points for every 10% increment above 25%.	
4.	Collisions	0 to 10	1 point for every 2 collisions/year over a 3 year period	
Road Characteristics				
	Feature	Range	Criteria	Total
5.	Sidewalks	0 or 10	10 points for no sidewalks with evidence of pedestrian activity, 5 points for sidewalks on only one side	
6.	Pedestrian Generators	0 to 15	5 points for each nearby* pedestrian generator such as a school, playground, community centre, libraries, retail centres, etc.	
Total				
	Does the location meet the minimum requirements			
	• Local roadway = minimum 35 points			
	• Collector roadway = minimum 52 points		YES	NO

Solution Title:	Neighbourhood Traffic Management Policy	
Last Updated:	April 7, 2014	S801-02

HOW MIGHT WE:

How might the Town of Pelham provide a policy that deals with neighbourhood traffic operational issues such as stop signs, pavement markings, speeding, traffic infiltration and aggressive driver behaviour.

KEY FACTS:

PURPOSE:

1. To provide an objective policy to evaluate requests for Town staff resources and capital expenditures related to traffic operational issues on streets under the jurisdiction of the Town.

2. To provide a consistent process for planning neighbourhood traffic management that are defendable, traceable, effective and efficient.

POLICY CONSTRAINTS

1. The policy may be affected by the availability of Town staff, capital funding, design constraints, traffic calming standards and comments from other departments and agencies.

DECISION MAKING PROCESS

1. The policy allows the affected neighbourhood to be involved with staff in the decision making process. The initial screening process evaluates requests at an early stage to ensure that they comply with the policy.

SOLUTION STATEMENT:

It will be the policy of the Town of Pelham to deal with neighbourhood traffic operational issues such as stop signs, pavement markings, speeding, traffic infiltration and aggressive driver behavior in a consistent and objective manner that is defendable, traceable, effective and efficient.

COMMITTEE REPORT
PUBLIC WORKS DEPARTMENT
Monday, December 02, 2019

Subject: Pedestrian Crossing on Pelham Street

Recommendation:

THAT Committee receive Report #2019-0125, with reference to the Signalized Pedestrian Crossings on Pelham Street for information.

Background:

In 2009 The Town of Pelham initiated a town wide traffic study which included the review of intersections and pedestrian crossings. Based on the recommendations of this report Council directed staff to investigate the creation of a signalized pedestrian intersection at Pelham Street and Churchill Street. In addition to the signalized intersection at Pelham Street and Churchill Street, consideration was given to signalized intersections at Pelham and Bacon Lane/Spruceside Crescent and at Pelham Street and Pancake Lane/John Street.

In 2013, Council passed a resolution to install PPS crossings at the above locations. The PPS's were installed between 2013 and 2014.

In addition, in 2013, Council passed a resolution to install a PPS at Pelham Street and Fallingbrook Crescent. This PPS has not been installed yet due to the fact that development in this area is not complete. Staff will make consideration towards a safe pedestrian crossing at this location during the Pelham Street Reconstruction project and will report back to Council with recommendations.

Pedestrian safety is a concern at the three 'Pedestrian Priority Signal' (PPS) locations on Pelham St. The three locations are at the following locations: (1) Pelham Street and Churchill; (2) Pelham Street and Pancake Lane / John Street; and (3) Pelham Street and Bacon Lane/Spruceside Crescent. (See Appendix A for a map indicating the locations of the PPS). Note: There are two additional PPS crossings at Pelham Town Square adjacent to the Fonthill Library entrance and on Haist Street in front of A.K. Wigg Public School. These PPS locations were not included as part of this current safety review.

These PPS's are controlled crossings, which are considered the most complex type of crossings under the Ontario Traffic Manual. In accordance with Council's instruction Staff retained the services of Associated Engineering (AE) to investigate whether the intersection pedestrian signals are warranted and whether there are any operational or safety issues associated with them. The report completed by AE in the winter of 2019 is included in Appendix B.

Previous Council reports in 2017 and 2018 looked at the requirement and justification for the PPS's at the locations along Pelham Street. These reports are attached for reference.

Analysis:

A review of the warranting conditions for the three PPSs indicates that they are not currently warranted based on the November 2018 traffic counts. In addition, the gap analysis that was completed indicates that there is a sufficient amount of available safe gaps for pedestrians to cross the roadway without intersection pedestrian signals. Given the capital investment put into their installation and upgrades to date, it is the consultant's recommendation to leave the PPSs in place; however, undertake measures to improve their safety and conformance to current standards. In addition, it is further recommended that action be taken to educate the public on the correct use of the PPSs.

In general, the recommended safety improvements with the PPS's include:

(1) Investigate the possibility of prohibiting vehicle parking within 30 m of the crossing to improve sightlines for both pedestrians using the crossing and for vehicles approaching the intersection.

(2) Remove the existing crosswalk markings and replace with markings specified in Section 6.2.4.5 Figure 12 of Book 15 (ladder markings for increased awareness).

(3) Install Ra-9a signs to direct pedestrian to the proper crossing location.

(4) Ensure that during snow clearing operations that the areas around the pedestrian push buttons poles are cleared adequately and remain accessible to all users; and

(5) Develop an education program for the public regarding the proper use of the intersection pedestrian signals.

Financial Considerations:

The PPS crossings were installed in 2013 at cost of between $30,000 to $50,000 each.

In addition, there have been several traffic signal design improvements that have occurred since the original installation of the PPSs including AODA regulation compliance upgrades and the standard inclusion of Uninterruptable Power Supplies (UPS) to the signals.

There will be limited financial impacts as the improvements being recommended in the consultant's report will be absorbed as part of the 2020 Public Works operating budget.

Alternatives Reviewed:

The installation of regular traffic signals was investigated as part of previous studies. Traffic signal warrant studies showed that regular traffic signals are not warranted at these locations.

Improved sightlines could be achieved at the Pelham Street and Churchill PPS by removing a limited number of parking stalls adjacent to the intersection (within 10 m of the approach), specifically on the north west approach to the PPS. This would result in the loss of approximately two parking stalls but would increase the sightlines and make it safer for pedestrians. The approximate cost for the removal of the two parking stalls is estimated at $3000.

Further, traffic calming measures such as the installation of raised crosswalks could be installed to slow traffic and clearly identify the safe location for pedestrians to cross. The approximate cost for installation of the raised crosswalk is roughly estimated at $30,000.

In lieu of the current PPS crossing staff could consider the implementation of a PXO (Pedestrian Crossover) crossing. In consultation with the Region's transportation safety staff, converting the signals to the newer 'PXO' (pedestrian crossover) style is possible. The PXO style involves rapid flashing lights mounted on the poles, not the overhead arms, visible from all directions. The crossover also requires specific signs and pavement markings. Legislation about these crossovers changed in January 2016, and resulted in the improved crossing design, seen most recently in

the area in West Lincoln. This would likely improve the capacity of drivers to be able to see the activated lights, at a reasonably low cost, since the lights would be mounted on both the east and west poles, rather than on the overhead arms. New PXO installations are estimated at $12-$15K. This is currently an unbudgeted item.

Finally, left turns from Churchill Road into Pelham Street could be restricted which would mitigate unsafe traffic movements at the intersection and improve pedestrian safety at the crosswalk.

Strategic Plan Relationship: Strong Organization

Providing safe pedestrian crossings for the public and promoting active transportation is critical to fostering a strong organization and safe community.

Consultation:

Although staff recognizes that the recommendations made by the consultant would help improve safety at the intersection, the root cause analysis completed identifies the poor visibility of the traffic signals, especially from Church Hill, as one of the root causes of safety concerns.

Other Pertinent Reports/Attachments:

Appendix A – Location Map of PPS's Included in AE Safety Study
Appendix B – 2019 AE Report – Review of Intersection Pedestrian Signals

2017 Report to Council – Safer Pedestrian Crossing on Pelham Street
2018 Report to Council – Church Hill Pelham Intersection Update

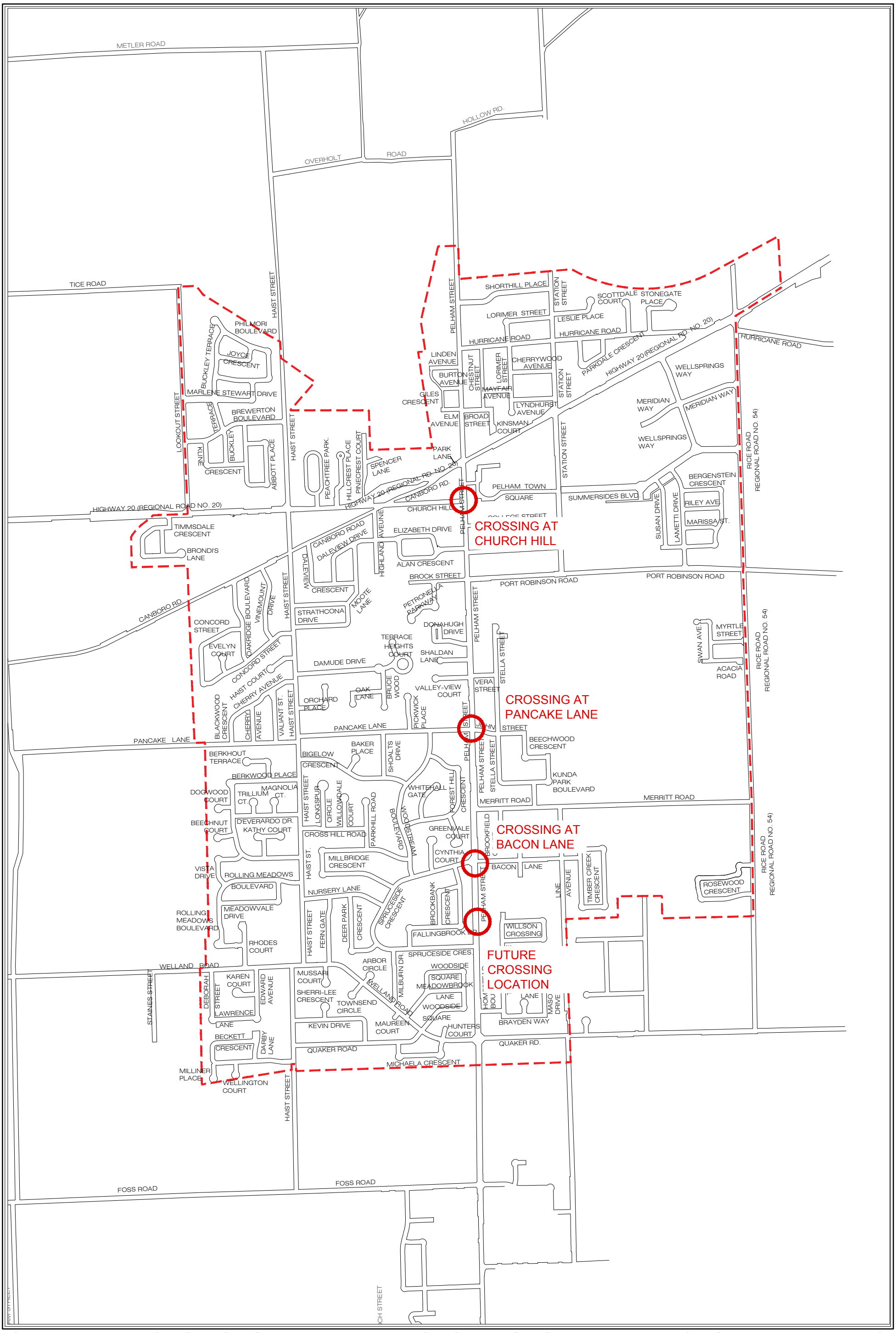
Prepared and Recommended by:

Derek Young, Manager, Engineering

Jason Marr, P. Eng.
Director of Public Works

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer



Pelham NIAGARA
PUBLIC WORKS & UTILITIES DEPARTMENT

NOTE:
1. THE POSITION OF POLE LINES, CONDUITS, SEWERS, WATERMAINS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONSTRUCTION DRAWINGS. WHERE SHOWN THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
2. BEFORE STARTING WORK, THE CONTRACTOR SHALL CHECK WITH ALL UTILITIES INVOLVED AND INFORM HIMSELF/HERSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

Drawn	DY
Design	DY
Checked	JM
Reviewed	JM

Location: TOWN OF PELHAM		Sheet Title: APPENDIX A	Date: NOV. 2019
Project Name: SIGNALIZED CROSS WALK LOCATION PLAN		Scale: NTS	Sheet 1 of 1
			Drawing No: SC-01

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

Date:	February 27, 2019	**File:**	2018-5290
To:	Ryan Cook, Town of Pelham		
From:	Jeff Suggett, M. Sc.		
Project:	Traffic Studies		
Subject:	Review of Intersection Pedestrian Signals		

MEMO

Ryan:

The purpose of this memorandum is to report findings of our review of operations at three (3) intersections on Pelham Street that are currently controlled by Intersection Pedestrian Signals; Pelham Street and Church Hill; Pelham Street and Pancake Lane/John Street; and, Pelham Street and Bacon Lane/Spruceside Crescent. This is in response to the Town's request that Associated Engineering (AE) investigate whether the intersection pedestrian signals are warranted and whether there are any operations or safety issues associated with them.

1 DESCRIPTION / BACKGROUND

The intersections being reviewed all intersect with Pelham Street south of Regional Road 20 within a space of approximately 1.6 kilometres. The intersection of Pelham Street and Church Hill is located closest to Regional Road 20 and in the built-up area of the Community of Fonthill. The intersections of Pelham Street and Pancake Lane/John Street and Pelham Street and Bacon Lane/Spruceside Crescent are located further south in a mainly residential area.

Each intersection has an intersection pedestrian signal. The intersecting road is controlled by a stop sign and the main road (Pelham Street) is controlled by the signals. Painted crosswalks are provided across the main road and pedestrians can cross with the right-of-way when the display shows the "Walk" indication.

Previous Studies

In previous studies recently completed by AE for the Town of Pelham, a traffic operations assessment was conducted at the intersections of Pelham Street and Church Hill/Pelham Street and Pelham Town Square. The intersections of Pelham Street and Pancake Lane/John Street and Pelham Street and Bacon Lane/Spruceside Crescent were evaluated for the need for regular traffic signals (traffic signal warrant).

Pelham Street and Church Hill
The recommendation of the previous study indicated that consideration be made to enhance pedestrian safety within the vicinity of the intersection by prohibiting vehicle parking on Pelham Street within 30 metres of the signal (i.e., 30 metres from the crossing). Observations showed that legally parked vehicles were obscuring sightlines for both pedestrians crossing and vehicles approaching this intersection.

Pelham Street and Pancake Lane/John Street
The recommendation of the previous study indicated that regular traffic signals are not justified based on the typical vehicular volumes entering the intersection, which were too low to meet the two (2) warrant criteria of the *Ontario Traffic Manual Book 12: Traffic Signals* (Book 12) – only 61% and 72% met.

Pelham Street and Bacon Lane/Spruceside Crescent
The recommendation of the previous study indicated that regular traffic signals are not justified based on the typical vehicular volumes entering the intersection, which were too low to meet the warrant criteria of Book 12 – only 40% and 50% met.

Intersection Pedestrian Signals Justification

According to *Ontario Traffic Manual Book 12– Traffic Signals* (Book 12)[1], the need for an Intersection Pedestrian Signal is determined based on the traffic volume on the road, pedestrian volumes and the amount of pedestrian delay (inability for pedestrians to find safe gaps - Justification 6), as presented in Figures 22 and Figure 23 of Book 12. Higher traffic volumes will result in a reduction in gap availability, making it more difficult for a pedestrian to safely cross the roadway. A review of Figure 22 provided in Book 12 indicate the warranting conditions for an Intersection Pedestrian Signal are not met, based on the traffic counts undertaken in November 2018, as there is insufficient pedestrian volume, as shown in **Appendix A**. While not formally evaluated, it was also noted that there are insufficient pedestrian crossing volumes for an intersection pedestrian signal to be justified (based on Figure 23), as pedestrian volumes fall well below the minimum threshold (200 pedestrians crossing in an eight-hour period).

2 DATA REVIEW / FIELD VISITS

In order to gain insights into pedestrian crossing behaviour and overall gap availability, a gap study was undertaken at each location to determine the number of safe gaps a pedestrian would have to cross the roadway. The methodology used was adapted from the *Crossing Guard Guide* produced by the *Ontario Traffic Council*[2].

Gap studies at each of the study intersections were requested from Pyramid Traffic Inc. and were conducted on Wednesday, January 16, 2019 during the AM-, Mid- and PM-peak hours for each location for a total study time of three (3) hours. The study involved collecting information about vehicle gaps on Pelham Street, of the number of pedestrians crossing and whether pedestrians were pushing the button (compliance) or crossing without the benefit of the traffic signal (non-compliance). Gap availability was only collected during periods of time when the signal was green on Pelham Street (allowing traffic to proceed). The gap study field sheets are provided in **Appendix B.**

The summary of the gap study results is shown in **Table 2-1** at each location. A safe gap is defined as the period of time a pedestrian would require to safely cross the road, in consideration of a 1.0 m/s walking speed and the total width of the crosswalk (with a 4 second perception-reaction time). During each 5-minute period assessed at all locations, there was a minimum of 4 safe gaps (when the signal was green). The average number of safe gaps per 5-minute periods (for the periods when the signal was green) ranged between 5.5 – 7.2.

[1] Ontario Traffic Manual Book 12 – Traffic Signals, Ontario Ministry of Transportation, 2012
[2] Crossing Guard Guide, Ontario Traffic Council, 2017

Table 2-1 Gap Study Summary

Location	Safe Gap (seconds)	Average Safe Gaps per 5 Minute Period (With Green Signal)	Total Pedestrians Crossing in 3 Hours	Number of Pedestrians that Pushed Button	Number of Pedestrians that did not Push Button
Pelham Street and Church Hill	12	7.2	27	10	17
Pelham Street and Pancake Lane/John Street	14	5.5	6	3	3
Pelham Street and Bacon Lane/Spruceside Crescent	14	6.6	4	1	3

The results of the gap studies show that pedestrian crossing volumes at all locations are relatively low and that the average number of safe gaps per 5 minutes is adequate. This suggests that under free flow conditions, during the peak hour periods reviewed, there is sufficient gap availability to cross Pelham Street. If the intersection pedestrian signal was absent, pedestrians would still have no difficulty crossing the roadway.

The number of pedestrians crossing the location at Church Hill was noted to be 27 pedestrians over the 3-hour period reviewed, or roughly one every six minutes. It was noted that there were a very small number of pedestrians crossing the other two locations. A total of 6 and 5 pedestrians respectively, crossed Pelham Street at the Pancake Lane/John Street and Bacon Lane/Spruceside Crescent locations. The higher number of pedestrians at the Church Hill location is expected, given the built-up nature of the surrounding area. The other two locations are in a residential area (single family dwellings) with no elementary schools in the immediate area.

The final key observation made with the gap study was the lack of use of the push button. At the three locations combined, less than half of the pedestrians pressed the push button. This further confirms the lack of need for an intersection pedestrian signal. It also emphasized the need for the public to be further educated on the legal, correct and appropriate use of intersection pedestrian signal.

2.1 Other Field Observations

Additional field observations were made on Friday, February 1, 2019 to review sightlines at each location, traffic signs, pavement markings and the condition and operation of the signal and signal hardware. Pictures illustrating the crosswalks at each of the Study intersections is provided in **Figure 2-1**.

Pelham Street and Church Hill

Pelham Street and Pancake Lane/John Street

Pelham Street and Bacon Lane/Spruceside Crescent

Figure 2-1 Views of Crosswalks

Observations during the field visit on February 1st reaffirm that visibility for pedestrians and vehicles at Pelham Street and Church Hill was obscured as documented in our previous study. This is due to the presence of legally parked vehicles (2-hour parking permitted) within the functional area of the intersection on the Pelham Street approaches. Visibility was adequate at the intersections of Pelham Street and Pancake Lane/John Street and Pelham Street and Bacon Lane/Spruceside Crescent on the north and south approaches to the intersection pedestrian signals.

Observations made during the field visit regarding traffic signs, pavement markings and the condition and operation of the signals were compared with the requirements of *Ontario Traffic Manual Book 15: Pedestrian Crossing Treatments* (Book 15) and the components for intersection pedestrian signals specified in *Table 9*. Each location met most of the requirements or desirable components, however a number of common deficiencies to each location were not met. Table 9 of Book 15 is provided in **Figure 2-2**.

Table 9: Components for Intersection and Mid-block Pedestrian Signals

Required Components	Desirable Components	Optional Components

• Traffic Signal Heads as required
• Approach Markings (Stop Line, No-Passing zone, and Turn Lanes markings, as required)
• Crosswalk Markings
• Advanced Stop Bar at Crosswalk with mandatory Stop Here on Red Signal Sign (Rb-78)
• Stop Here On Red sign (Rb-78) on the near side of an IPS with vehicle and pedestrian heads installed on the far side
• Pedestrian Control Indications with AODA compliant Pedestrian Signal Pushbuttons and Pedestrian Pushbutton Symbol Sign (Ra-12)
• Stop sign (Ra-1) on the cross street for IPS
	• Raised refuge island (for road cross-sections with more than two lanes and two-directional traffic) with mandatory:
	  • Pavement markings on approaches to obstructions
	  • Keep Right Sign (Rb-25, Rb-125)
	  • Object Marker Sign (Wa-33L)
	• Stopping prohibition for a minimum of 30 m on each approach to the crossing, and 15 m following the crossing
	• Parking and other sight obstructions prohibition within at least 30 m of crossings
		• School Crossing Guard
		• Pedestrian Count Down Signals
		• Pedestrian Countdown Signal Information Sign
		• Auxiliary Signal Heads
		• Type 12 Signal Head (300 mm red / amber / green lens)
		• Ladder Crosswalk Markings
		• Textured Crosswalk
		• Raised Crosswalk
		• Cross on Walk Signal Only Sign (RA-7)
		• Cross Other Side Sign (Ra-9)
		• Do Not Cross Here Sign (Ra-9a)
		• No Right Turn on Red sign (Rb-79)
		• Pedestrian Must Push Button to Receive Walk Signal (Ra-13)
		• Safety elements including Barricades, Pedestrian Fencing, Gates, Walls, Bollards, and Barriers

Figure 2-2

Book 15 Requirements for Intersection Pedestrian Signals

The existing crosswalk pavement markings are not appropriate and are for those used at rural supervised school crosswalks as shown in Figure 45 of *Ontario Traffic Manual Book 11: Markings and Delineation* (Book 11). The appropriate markings are specified in Section 6.2.4.4 of Book 15 and consist of solid white lines spaced a minimum of 2.5 metres apart. As an option and for enhancement purposes, ladder crosswalk markings can be utilized as specified in section 6.2.4.5, Figure 12 of Book 15. The Ontario Traffic Manual illustrations are provided in **Figures 2-3 and 2-4.**

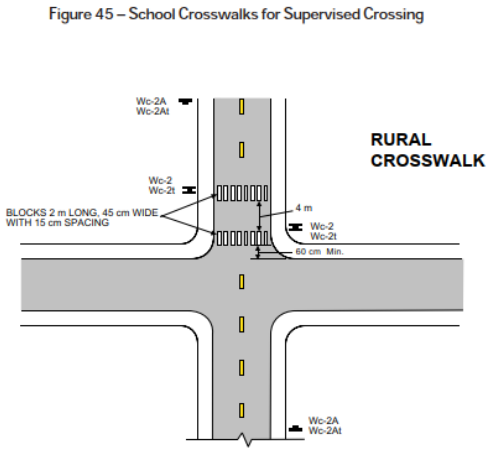


Figure 2-3

Book 11 Markings for Rural Supervised Crossings

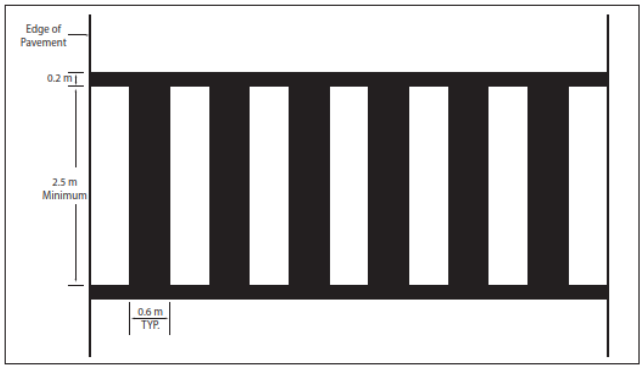


Figure 2-4

Book 15 Ladder Crosswalk Markings

There are no signed parking or stopping prohibitions within 30 metres of the crosswalk approaches and 15 metres beyond the crosswalk. This is to ensure clear sightlines for drivers approaching the intersection (on Pelham Street or turning from the crossing roadway) and for pedestrians crossing Pelham Street.

There are no signs that reinforce to pedestrians the appropriate side to cross (i.e., the Ra-9a), given that the proportion of non-compliance is high (observations from the gap studies). An illustration of the Ra-9a “Cross Other Side” sign is provided in **Figure 2-5.**

Figure 2-5
Ra-9a "Cross Other Side" Sign

Other site-specific issues observed include:

- Short-term parking (2 hours) permitted on both sides of Pelham Street within the 30 metre approaches to the crosswalk at Church Hill as documented earlier in this report and;
- Accessibility issues at Pelham Street and Bacon Lane/Spruceside Crescent with respect to the push-button location. It was noted at the time of the site visit that snow had not been cleared near the steel pole to which the push-button was installed (south-east corner) which made access difficult. A picture is provided in **Figure 2-6**.

Figure 2-6

Push-Button Accessibility south-east corner of Pelham Street and Bacon Lane/Spruceside Crescent

3 CONCLUSIONS/RECOMMENDATIONS

A review of the warranting conditions for the three intersection pedestrian signals indicates that they are not currently warranted based on the November 2018 traffic counts. In addition, the gap analysis indicates that there is a sufficient amount of available safe gaps for pedestrians to cross the roadway without the benefit of the intersection pedestrian signals. However, given the capital investment put into their installation, it is recommended that they remain in place, and measures be undertaken to improve their safety and conformance to Book 15 as well as educating the public on their correct use. To enhance safety and conform to engineering guidelines as well as to maximize their use and encourage compliance, the following site-specific (and general) measures are recommended at each of the following pedestrian signals:

Pelham Street and Church Hill

1. Prohibit vehicle parking on both sides of Pelham Street within 30 metres of the crossing and install the corresponding parking prohibition signs;
2. Remove existing crosswalk markings and replace with markings specified in Section 6.2.4.4 of Book 15 (the existing crosswalk surface is textured so ladder markings are not recommended);

3. Install Ra-9a signs on the south side of the intersection as specified in Table 9 of Book 15 under "Optional Components".

Pelham Street and Pancake Lane/John Street

1. Consider installing parking prohibition signs on both sides of Pelham Street within 30 metres of the crossing;
2. Remove the existing crosswalk markings and replace with markings specified in Section 6.2.4.5, Figure 12 of Book 15 (ladder markings for increased awareness).
3. Install Ra-9a signs on the north side of the intersection as specified in Table 9 of Book 15 under "Optional Components".

Pelham Street and Bacon Lane/Spruceside Crescent

1. Consider installing parking prohibition signs on both sides of Pelham Street within 30 metres of the crossing;
2. Remove the existing crosswalk markings and replace with markings specified in Section 6.2.4.5, Figure 12 of Book 15 (ladder markings for increased awareness);
3. Install Ra-9a signs on the north side of the intersection as specified in Table 9 of Book 15 under "Optional Components".

General Measures

1. Ensure that during snow clearing operations, the area around the pedestrian push-button poles is cleared adequately to remain accessible to all users;
2. Develop an education program or initiative that teaches the proper use of intersection pedestrian signals. This can be achieved through the production and distribution of brochures or other media and/or delivery of presentations to the public.

Respectfully submitted,
Associated Engineering (Ont.) Ltd.

Jeff Suggett, M. Sc.
Acting Manager, Transportation

Domenic Di Flavio, Dipl. T.
Senior Transportation Planner

REGISTERED PROFESSIONAL ENGINEER
G. R. A. BURN
2019/02/27
PROVINCE OF ONTARIO

Geoff Burn, P. Eng.
Division Manager

APPENDIX A – Ontario Traffic Manual Book 12, Figures 22 and 23

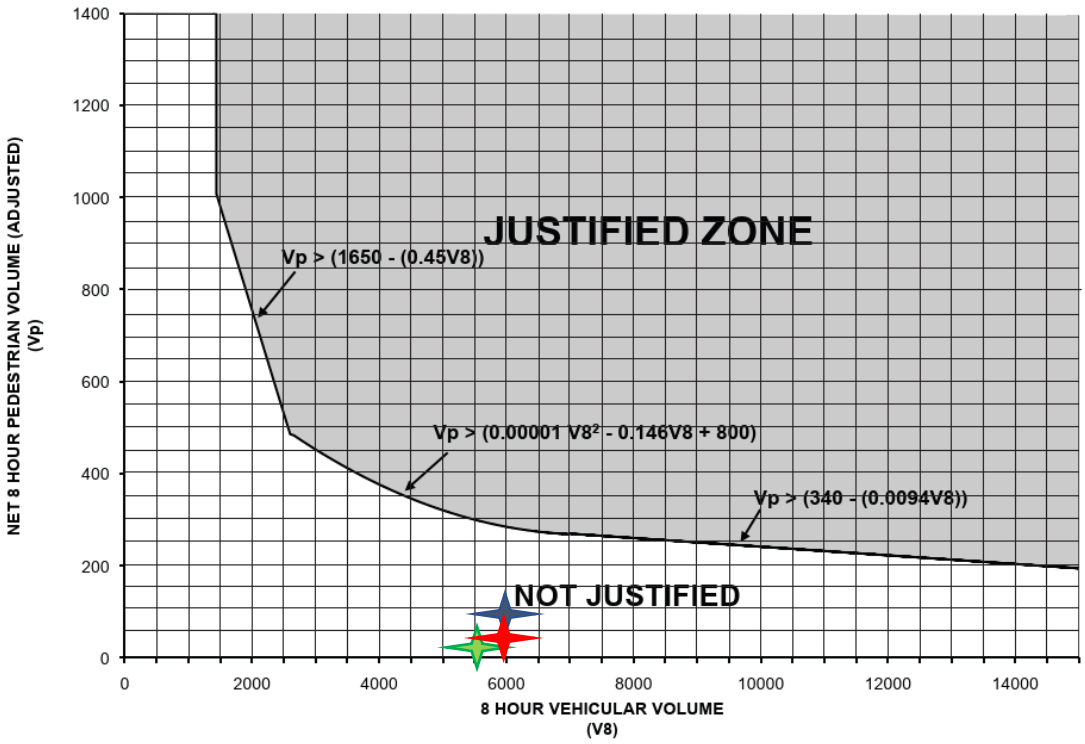


Figure 22 – Justification 6 – Pedestrian Volume

- Pelham Street and Church Hill
- Pelham Street and Pancake Lane/John Street
- Pelham Street and Bacon Lane/Spruceside Crescent

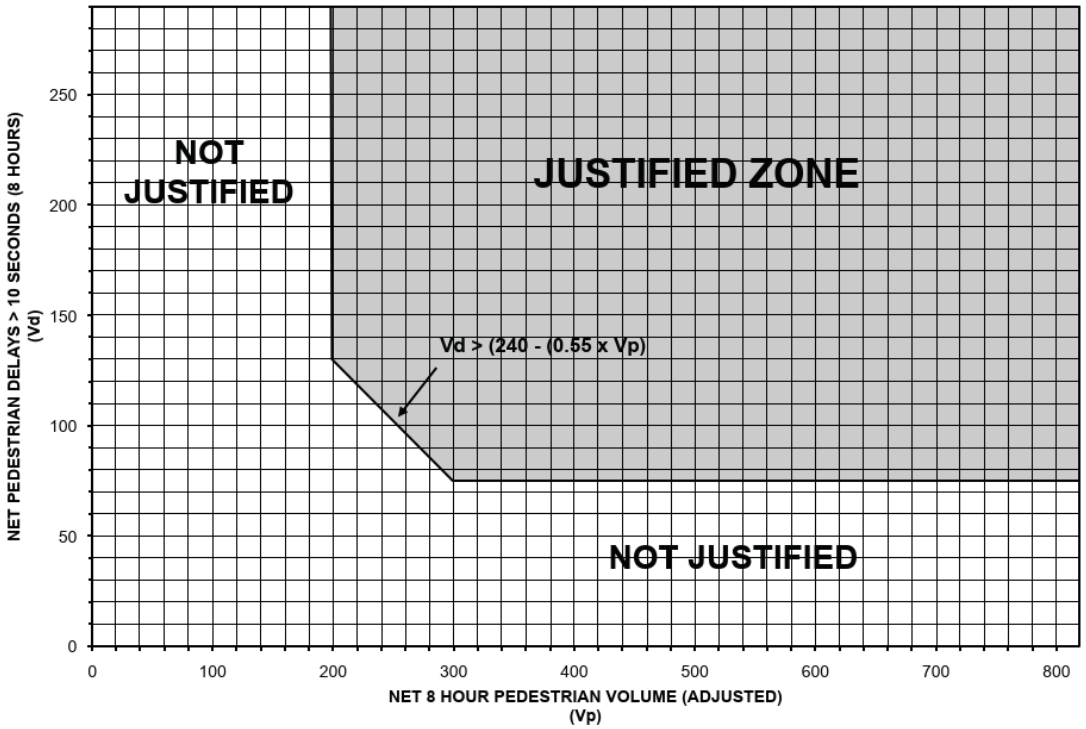


Figure 23 – Justification 6 – Pedestrian Delay

APPENDIX B – Gap Study Summary Field Sheets

GAP SURVEY FORM

Date: Wednesday, January 16, 2019
Intersection: Pelham St @ Church Hill
Crossing Width: 8

Driection of Travel: North-South
Safe Gap: 12
Weather: Overcast

Time	Gaps When Signal is Green	Time When Signal is Red	Pedestrian #'s	
			Pressed Button	Did Not Press Button
8:00 – 8:05	/,/,/,/,/,/,32,/,/,/,/,12,23,/,/,/,/,/,/,/,14,/,14,/,/,/,/,/,/,/,/,/,/,22,34,/,/,/,/,/,/,	25,	1,	1,
8:05 – 8:10	18,21,/,/,/,/,12,/,23,13,/,/,/,/,/,19,/,/,16,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,15,/,/,			
8:10 – 8:15	/,/,/,20,13,17,/,/,/,/,/,/,/,/,/,/,/,25,/,/,/,12,/,/,/,/,/,/,18,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,17,17,/,/,/,/			
8:15 – 8:20	/,/,/,/,17,/,/,/,16,/,/,17,/,/,14,/,17,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,/,15,/,/,/,/,13,			
8:20 – 8:25	/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,16,/,/,/,/,/,/,/,/,/,/,/,/,14,/,			
8:25 – 8:30	/,/,/,/,/,/,/,/,/,31,/,/,/,/,/,/,19,/,29,/,14,/,/,/,/,/,/,/,/,/,/,/,/,24,	25,	2,	
8:30 – 8:35	/,14,/,			1,
8:35 – 8:40	/,14,13,/,/,/,/,/,/,/,/,12,17,18,/,/,/,13,/,/,18,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,18,/,20,/,/,			1,
8:40 – 8:45	/,/,/,12,/,/,/,/,/,/,/,/,/,/,/,/,24,14,/,/,/,/,/,/,/,/,/,36,/,/,16,/,/,/,/,/,/,/,/,/,/,13,/,/,22,	25,	1,	
8:45 – 8:50	/,/,/,13,/,/,/,/,/,/,/,/,/,/,/,20,/,25,			1,
8:50 – 8:55	/,17,/,/,/,/,/,/,/,16,/,13,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,12,/,/,/,			
8:55 – 9:00	/,/,/,/,/,/,/,/,/,/,/,/,/,/,13,/,/,/,/,/,/,12,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,/,/,/,/,/,/,/,/,/,/,/,/,15,/,/,/,			
		Total:	4	4

Time	Gaps When Signal is Green	Time When Signal is Red	Pressed Button	Did Not Press Button
11:45 - 11:50	/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,23,/,15,/,19,/,/,/,/,/,/,/,/,/,25,/,/,/,/,/,/,/,	25,	1,	1,
11:50 - 11:55	/,17,/,16,/,/,/,/,27,			1,
11:55 - 12:00	/,/,/,/,/,21,/,/,/,/,/,/,/,/,/,12,/,/,34,/,13,/,/,/,/,/,/,/,/,/,/,/,/,36,	25,	1,	
12:00 - 12:05	/,/,16,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,16,	25,	1,	
12:05 - 12:10	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,16,/,/,/,/,26,/,/,/,/,/,/,/,/,19,29,/,/,/,/,/,/,/,/,/,/,/,15,			1,
12:10 - 12:15	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,19,/,/,/,24,/,/,/,/,/,/,/,/,14,17,23,/,/,/,13,12,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
12:15 - 12:20	/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,19,12,/,/,15,15,/,/,/,/,/,/,/,15,13,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,15,15,/,/,/,/,/,15,			1,
12:20 - 12:25	14,/,/,/,/,/,/,/,/,/,/,/,/,/,13,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,12,/,/,/,/,/,18,15,			
12:25 - 12:30	/,/,/,/,/,/,/,/,/,/,/,/,12,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,/,/,/,/,/,/,/,/,/,/,/,/,/,25,28,/,/,/,/,/,/,/,/,/,			1,1,
12:30 - 12:35	/,13,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,13,/,			1,
12:35 - 12:40	16,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,22,/,/,/,/,/,15,/,/,14,/,23,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
12:40 - 12:45	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,12,/,/,/,/,/,/,39,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,35,/,/,/,/,/,/,12,/,15,17,/,/,/,/,/,	25,25,	1,1,	
		Total:	5	7

Time	Gaps When Signal is Green	Time When Signal is Red	Pressed Button	Did Not Press Button
16:15 - 16:20	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,13,/,/,/,/,/,/,14,/,16,/,/,/,/,/,/,			1,
16:20 - 16:25	/,14,/,/,/,/,/,15,12,/,/,/,/,/,/,/,/,/,19,/,/,23,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
16:25 - 16:30	/,21,/,12,			
16:30 - 16:35	/,/,/,/,/,/,/,/,18,/,/,/,13,/,21,/,/,27,/,/,/,/,/,/,/,/,/,15,			
16:35 - 16:40	/,/,/,/,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,13,/,/,/,/,/,/,/,/,/,19,14,/,/,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,			1,
16:40 - 16:45	/,17,/,/,/,/,/,/,/,/,/,/,/,			1,
16:45 - 16:50	/,17,/,15,/,/,/,/,/,13,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
16:50 - 16:55	/,13,/,/,/,/,/,/,/,/,/,/,/,/,/,21,/,19,/,/,/,/,/,/,/,/,/,14,23,/,/,/,/,/,/,/,/,/,/,/,/,13,/,/,/,15,			1,
16:55 - 17:00	/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,18,/,/,/,			1,
17:00 - 17:05	/,/,/,/,/,/,/,/,/,/,15,13,/,/,/,/,/,/,23,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,16,/,/,/,/,/,/,/,/,/,/,/,/,/,26,/,/,/,			1,
17:05 - 17:10	/,/,/,/,/,/,/,/,12,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,12,/,23,			
17:10 - 17:15	/,/,/,12,/,/,/,/,/,/,/,/,/,/,/,/,/,/,32,/,17,/,/,/,/,/,	25,	1,	
		Total:	1	6

GAP SURVEY FORM

Date: Wednesday, January 16, 2019
Intersection: Pelham St @ Pancake Ln
Crossing Width: 10

Driection of Travel: North-South
Safe Gap: 14
Weather: Overcast

Time	Gaps When Signal is Green	Time When Signal is Red	Pedestrian #'s	
			Pressed Button	Did Not Press Button
8:00 – 8:05	/,/,23,18,/,/,/,/,/,/,/,/,/,/,/,/,28,/,/,/,37,20,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
8:05 – 8:10	/,23,/,14,37,/,/,/,/,/,/,/,/,/,/,/,			
8:10 – 8:15	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,15,14,/,/,/,/,/,/,/,/,/,/,22,/,/,/,23,/,22,/,/,/,/,/,/,19,/,/,/,/,/,/,			
8:15 – 8:20	/,/,/,/,/,/,31,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,18,/,/,/,/,/,/,/,/,18,/,/,/,/,/,/,/,/,/,/,/,/,17,			
8:20 – 8:25	/,14,/,/,/,/,/,/,/,/,/,/,21,/,/,/,			
8:25 – 8:30	/,/,/,/,/,/,/,/,/,/,29,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,24,21,			
8:30 – 8:35	/,15,/,/,/,/,/,/,/,23,/,			
8:35 – 8:40	/,/,/,/,/,/,/,/,/,/,/,21,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,28,/,/,/,/,/,/,/,/,14,/,21,17,/,/,17,			
8:40 – 8:45	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,21,/,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,31,/,/,/,/,/,/,/,/,/,/,/,21,/,/,/,/,16,			
8:45 – 8:50	15,/,/,14,/,			
8:50 – 8:55	/,15,/,/,/,/,/,/,/,/,/,35,/,28,/,/,	25,	1,	2,1,
8:55 – 9:00	/,/,/,/,/,/,/,/,/,17,/,/,/,21,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,21,/,			
		Total:	1	3

Time	Gaps When Signal is Green	Time When Signal is Red	Pressed Button	Did Not Press Button
11:15 - 11:20	/,/,19,/,14,/,20,/,/,/,/,/,/,/,/,/,/,/,/,31,/,/,/,/,/,/,24,/,16,25,14,/,17,			
11:20 - 11:25	/,/,/,/,/,/,55,/,/,/,/,/,/,/,/,/,22,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,27,19,16,/,/,/,/,/,			
11:25 - 11:30	/,/,/,/,/,/,/,/,/,/,/,/,/,/,23,/,/,/,/,/,/,/,/,21,25,/,/,/,31,/,16,/,/,/,			
11:30 - 11:35	/,/,/,/,/,/,27,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,15,/,/,/,27,/,/,/,/,/,/,/,/,/,/,23,/,/,/,/,/,/,14,			
11:35 - 11:40	27,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,35,			1,
11:40 - 11:45	/,15,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,15,/,/,/,/,/,/,19,/,/,/,/,/,24,			
11:45 - 11:50	/,/,/,/,22,/,/,/,/,/,16,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,16,/,/,/,/,/,18,23,/,/,/,/,/,/,/,/,/,/,/,/,24,			
11:50 - 11:55	/,36,37,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,14,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,18,	25,	1,	
11:55 - 12:00	/,/,14,/,/,/,/,/,/,/,/,16,19,/,/,/,/,/,/,26,/,/,/,/,/,/,/,16,/,22,/,/,			
12:00 - 12:05	/,14,/,/,/,/,/,/,/,/,28,/,19,/,/,			
12:05 - 12:10	/,15,/,16,/,			
12:10 - 12:15	/,24,/,/,/,/,/,/,/,/,/,/,/,25,/,/,/,/,/,/,/,/,20,17,/,			
		Total:	2	0

Time	Gaps When Signal is Green	Time When Signal is Red	Pressed Button	Did Not Press Button
16:30 - 16:35	/,20,/,17,/,/,/,/,/,/,			
16:35 - 16:40	/,/,/,/,/,/,/,/,/,/,/,/,16,/,16,/,/,/,/,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
16:40 - 16:45	/,15,/,23,/,/,/,			
16:45 - 16:50	/,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,14,/,/,/,/,/,18,/,/,/,/,/,/,/,/,/,			
16:50 - 16:55	/,16,/,/,/,/,19,/,/,/,/,/,/,/,/,/,/,/,/,21,/,/,/,/,20,			
16:55 - 17:00	/,/,/,/,/,/,/,/,/,/,/,/,19,/,24,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,			
17:00 - 17:05	/,/,/,/,/,/,/,/,/,/,/,23,/,/,/,/,16,/,			
17:05 - 17:10	/,/,/,/,/,/,/,/,/,/,/,/,/,15,19,/,/,/,/,/,/,/,/,/,18,/,			
17:10 - 17:15	/,/,16,/,15,/,			
17:15 - 17:20	16,/,174,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
17:20 - 17:25	/,14,/,/,15,/,			
17:25 - 17:30	/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,28,/,/,/,/,/,/,/,/,/,/,/,/,18,/,/,/,			
		Total:	0	0

GAP SURVEY FORM

Date: Wednesday, January 16, 2019
Intersection: Pelham St @ Bacon Ln
Crossing Width: 10

Driection of Travel: North-South
Safe Gap: 14
Weather: Overcast

Time	Gaps When Signal is Green	Time When Signal is Red	Pedestrian #'s	
			Pressed Button	Did Not Press Button
8:00 – 8:05	/,/,/,/,/,30,/,/,/,25,22,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,18,/,18,/,/,/,			
8:05 – 8:10	25,/,/,/,20,/,/,/,8,/,22,/,/,/,/,/,/,/,/,/,16,/,			
8:10 – 8:15	/,24,/,/,20,14,/,/,/,/,/,/,17,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
8:15 – 8:20	/,/,9,/,/,/,/,/,/,/,/,/,/,/,/,34,/,/,/,19,/,/,/,18,/,/,/,/,/,/,/,/,/,/,/,25,/,/,/,/,/,/,20,/,16,			
8:20 – 8:25	/,15,/,/,/,/,21,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,25,/,/,/,/,/,/,/,/,/,/,/,/,/,18,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,			
8:25 – 8:30	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,52,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,			
8:30 – 8:35	/,15,/,27,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,15,/,			
8:35 – 8:40	/,14,/,32,			
8:40 – 8:45	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,27,/,16,/,/,			
8:45 – 8:50	/,/,/,14,/,/,/,/,/,/,/,16,14,17,/,/,/,/,/,/,/,/,/,/,7,/,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,31,			
8:50 – 8:55	/,/,/,/,/,/,/,21,19,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,			
8:55 – 9:00	/,/,/,29,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,20,14,/,/,/,/,/,/,/,/,/,/,/,/,16,/,			
		Total:	0	0

Time	Gaps When Signal is Green	Time When Signal is Red	Pressed Button	Did Not Press Button
13:00 - 13:05	/,/,/,/,/,22,/,15,/,/,16,/,/,/,/,/,20,/,14,/,/,/,/,/,/,/,/,/,/,18,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,17,/,			1,
13:05 - 13:10	/,/,/,17,/,/,/,/,28,/,29,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,17,/,/,23,17,/,25,			
13:10 - 13:15	/,/,/,/,/,18,/,/,18,/,/,/,23,29,/,14,/,/,17,/,/,/,/,/,/,/,/,28,/,/,22,			
13:15 - 13:20	20,/,/,/,/,17,/,/,/,/,/,/,/,15,/,/,/,/,18,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,40,/,/,/,16,			
13:20 - 13:25	/,/,14,/,/,/,/,/,/,/,/,21,/,/,/,/,/,/,/,/,20,/,/,/,40,/,/,/,/,/,/,24,/,/,/,/,/,/,25,/,			1,1,
13:25 - 13:30	/,41,/,/,/,28,/,/,/,/,22,/,/,/,27,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,			
13:30 - 13:35	/,/,/,/,/,/,/,/,/,23,/,/,17,/,/,18,/,21,/,26,/,/,22,/,/,/,/,/,17,/,16,/,/,/,/,/,/,/,/,			
13:35 - 13:40	/,/,16,/,/,/,/,/,/,14,/,/,/,/,21,/,/,/,/,/,/,/,/,/,/,/,32,/,/,36,/,/,/,/,/,/,/,/,16,			
13:40 - 13:45	/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,30,18,/,/,/,/,17,/,/,/,31,/,18,22,/,/,/,/,			
13:45 - 13:50	/,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,26,/,15,/,/,/,/,/,29,/,/,/,/,/,			
13:50 - 13:55	/,/,/,16,17,/,14,14,19,18,19,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
13:55 - 14:00	/,/,/,/,/,/,/,/,17,/,/,/,/,/,22,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,19,/,/,/,/,/,15,/,/,			
		Total:	0	3

Time	Gaps When Signal is Green	Time When Signal is Red	Pressed Button	Did Not Press Button
16:30 - 16:35	/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,			
16:35 - 16:40	/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,17,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,19,/,			
16:40 - 16:45	/,17,/,15,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,19,/,/,/,/,/,/,/,/,			
16:45 - 16:50	/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,32,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,		1,	
16:50 - 16:55	/,/,/,/,/,/,24,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,/,/,17,/,21,/,/,/,/,14,16,/,14,/,29,			
16:55 - 17:00	/,26,/,8,/,			
17:00 - 17:05	/,/,/,/,/,/,/,/,/,/,/,/,3/,/,/,/,/,/,/,18,/,/,/,/,16,//,/,/,			
17:05 - 17:10	/,/,/,/,/,/,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,18,/,/,/,/,/,/,/,/,/,/,/,/,/,20,/,/,/,/,/,/,17,/,/,/,/,/,			
17:10 - 17:15	/,/,/,/,/,/,/,17,/,/,/,/,19,/,/,/,/,/,/,/,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,16,/,/,/,/,/,/,/,/,/,/,20,/,/,/,/,			
17:15 - 17:20	/,25,/,/,/,/,/,/,/,/,/,15,/,/,/,/,/,/,/,/,34,/,/,/,/,/,/,/,/,			
17:20 - 17:25	/,/,24,/,/,/,/,/,/,/,/,14,/,/,/,16,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,//,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,/,27,/,/,/,/,/,/,/,/,/,/,/,			
17:25 - 17:30	/,/,/,/,/,/,/,18,/,/,/,/,/,/,/,/,14,/,/,/,/,/,/,/,/,/,/,/,/,/,/,28,/,/,/,/,/,/,/,/,/,/,15,/,			
		Total:	1	0

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

The following discussion lists the conclusions drawn from background data, field inventories and subsequent analyses of traffic data and collision history within the Fonthill Traffic Study primary and secondary study areas.

1. Based on field inventories conducted on March 24, and 25, 2009, a review of the available departure sight distance at the STOP controlled (two-way and all-way) intersections concluded that the majority of the two-way STOP controlled intersections currently have differing degrees of restricted sight lines, due in most part, to a variety of obstructions within the sight triangles (i.e. trees, bushes, signs, hydro poles, the presence of parked vehicles and building structures). Notable intersections where restricted sight lines are more problematic include Pelham Street at Pelham Town Square (westbound direction) and Station Street at Hurricane Road (northbound direction). In most cases, the recommended sight lines can be improved by removing obstacles within the sight triangles.

2. Roadways carrying the heaviest two-way 24 hour traffic volumes included Regional Road 20 (17,700 vpd), Pelham Street (10,251 vpd), Rice Road (4,940 vpd), Pelham Town Square (3,967 vpd), Port Robinson Road (3,188 vpd), Church Hill (2,847 vpd), Pancake Lane (2,794 vpd), and Station Street (2,077 vpd).

3. Historical and recent spot speed surveys (conducted on April 2, 2009) indicated that drivers traveling on Town and Region roads generally disregard posted speed limits. The average percentage compliance for all roadways combined, was found to be 38 percent with a median value of 42 percent compliance.

4. The operational performance of the existing intersections (signalized and unsignalized) within the study area indicated that the majority of intersections are operating at acceptable levels of service with reasonable delays with the exception of a number of critical movements at several intersections. Notable delays are experienced within the Regional Road 20 corridor in the eastbound (morning peak hour) and westbound (afternoon peak hour) directions due to the higher volumes of traffic exiting and entering Fonthill during peak times with only one through lane in each direction to accommodate the traffic volumes. Due to the lack of available gaps in through traffic, left turn manoeuvres are problematic for Pelham Town Square westbound (PM peak hour), Port Robinson Road westbound (PM peak hour), Pancake Lane eastbound (AM and PM peak hour), and Hurricane Road south-eastbound (all peak hours). Several driveways accesses also experience poor levels of service and longer delays for left turning traffic; however, traffic queues are accommodated within the private sites in each case.

5. The operational performance of the existing intersections (signalized and unsignalized) within the study area including remedial measures and programmed roadway improvements indicated that through movements within the Regional Road 20 corridor will be improved; however, the eastbound (AM peak hour) and westbound (PM peak hour) through movements at the intersection of Pelham Street and Regional Road 20 will experience lower levels of service and longer delays due to the sheer volume of traffic utilizing only one lane in each direction. The length of the eastbound traffic queues may cause blockages from time to time of the Canboro Road/Regional Road 20 intersection during the morning peak hour. Left turn manoeuvres at the unsignalized intersections will be improved; however, the

unsignalized intersection at Hurricane Road and Regional Road 20 will still experience longer delays during the afternoon peak hour.

6. The potential installation of traffic signal control at the Church Hill/Pelham Street intersection can be accommodated. Although signal spacing between Regional Road 20 and Church Hill does not meet minimum standards, from a traffic operations perspective (based on existing 2009 traffic volumes), a traffic signal at this location will operate effectively. Suggested improvements in conjunction with a new traffic signal at this location include a three lane cross section from Regional Road 20 to south of Church Hill and signal coordination with the existing traffic signals at Regional Road 20.

7. A review of traffic control warrants for Port Robinson Road-Brock Street/Pelham Street (potential for the installation of traffic signals), Pancake Lane-John Street/Pelham Street (potential for the installation of traffic signals), Hurricane Road/Station Street (potential for the installation of an All-way STOP control), and Station Street/Port Robinson Road (review of current All-way STOP control) indicated that, based on the collected traffic data, none of the aforementioned intersections currently meet warrants. In the case of a new traffic signal installation at the Port Robinson Road-Brock Street/Pelham Street intersection, additional factors should be considered as part of the justification process beyond the traffic signal warrant including safety issues, traffic operations, physical, and strategic considerations. From a safety perspective, the installation of traffic signals may help slow traffic (based on a review of the spot speed survey on Pelham Street), reduce the probability and severity of collisions involving right-of-way conflicts, and provide a safe crossing for pedestrians and school children. From a traffic operations perspective, new traffic signals would improve traffic operations without exhibiting any detrimental affects to either the intersection or transportation network as a whole.

8. There are a number of Context Sensitive Solutions and traffic calming principles and practices that could be applied to the revitalization of the downtown core encompassing elements associated with roadside design, the traveled way, and intersections. Traffic calming, focused on measures that could be considered to slow traffic speeds, reduce traffic volumes, and reduce pedestrian/traffic conflicts within the downtown core could also be applied where warranted.

9. Based on a review of reported collision data, 135 collisions occurred in the study area of which about 21% occurred at the intersections and about 18% were intersection related. The remaining collisions were either non-intersection related or occurred at a private driveway, parking lot, or other location. There were no fatal collisions reported. Four percent were non-reportable, 14% were non-fatal injuries, and 82% were property damage only collisions. From a statistical significance point of view, only the section of Regional Road 20 from Pelham Street to Station Street was determined to be of concern. The majority of collisions that occurred within the Regional Road 20 corridor were single motor vehicle and rear end collisions (52%) with the remainder being made up of sideswipe, turning movement, or overtaking type collisions. In most cases, the collision experience at each of the intersections and roadway segments was similar to or less than that of the Ontario average collision experience. The two main safety issues are likely to be managing speed along Regional Road 20 and Pelham Street, as motorists transition from rural to urban conditions, and managing access and parking in the commercial part of the study area. On Pelham Street, south of Regional Road 20, the collisions recorded in the commercial area are directly related to accesses, side streets, and parking movements.

10. From a traffic operations perspective, the diversion of traffic away from Regional Road 20 and onto Town roads can be accommodated to a certain degree. However, the impacts of increasing traffic diversion will cause the degradation of service levels at two key intersections—Port Robinson Road at Station Street and at Rice Road—assuming that the pattern of diversion remains away from Regional Road 20 and onto Port Robinson Road and Station Street through the centre of Fonthill. The ability of the existing All-way STOP control at both locations to handle the increased traffic volumes will lessen as the diversion rates increase. The performance of the existing traffic signal controlled intersection at Regional Road 20 and Station Street will improve as traffic is diverted away from Regional Road 20 and on to Town roads.

11. The potential diversion of traffic to Pelham Street, Port Robinson Road, and Station Street should not adversely affect the pavement structure as it is anticipated that larger trucks would not be permitted on the roadways (i.e. used as a truck route). In addition, in light of the anticipated road improvement program, the addition of asphalt overlays and/or eventual reconstruction of these roadways will improve the road surface structural integrity thereby improving the lifespan of the roadways.

12. The majority of on-street parking facilities are provided within the downtown core area on Pelham Street and Regional Road 20 with 45 and 15 parking spaces each respectively, for a total of 60 spaces. Any future modifications to the existing on-street parking should consider the need for proper sight lines at the intersections of Pelham Street, Pelham Town Square and Church Hill with Regional Road 20.

13. Since the initiation of the Pelham Link, a review of the ridership indicated that a total of 3,230 riders have used the transit service from September 2008 to May 2009 inclusive. The total number of users in 2008 was 1,413 and 1,817 in 2009 showing an overall increase in ridership of about 29 percent indicating that the number of users per year is growing at a healthy rate. The majority of riders held Niagara College (N.C.) U-Passes (1,902) while 444 paid cash, 518 held Monthly Passes with the remaining being composed of N.C. Other and Transfers (Trans). Currently, due to the lack of ridership volumes, the existing transit services provided by the City of Welland will cease transit operations in August 2009. The Town continues to look for other feasible ways to provide public transit services which could be explored in the future. There are two schools within the study area that currently have school bus services during school times including Glynn A. Green Public School and St. Alexander Catholic Elementary School.

14. Available pedestrian facilities within the Town consist mainly of hard sidewalks and the trail network. The cycling network within the study area is primarily composed of Regional bikeway routes and the sharing of the Steve Bauer Trail as a Region/Town route. There are a number of cycling routes, both on-road and off-road passing through the study area. The trail system within the Fonthill area is classified into a number of Trail Loops composed of multi-use off road pathways and on road sidewalk or asphalt road facilities. There are seven circle loops and a section of trail link within Fonthill ranging from approximately 2.1 to 7.5 kilometres in length.

8.2 Recommendations

The following discussion lists the recommendations drawn from the various analyses undertaken as part of the Fonthill Traffic Study.

1. Deficient sight lines at the unsignalized intersections, noted for departure sight distance, should be investigated to determine if the removal of obstacles is practical, and if so, the removal of the obstacles should be undertaken to improve existing sight distances. Missing or deficient STOP bars should be reinstated at the unsignalized intersections.

2. Speeding on Town roads and within the Regional Road 20 corridor may be further reviewed to determine if additional speed control measures are necessary including police enforcement, driver awareness programs/signs, and/or traffic calming measures. In the case of motorists speeding on Port Robinson Road between Pelham Street and Station Street, it is recommended that the current regulatory 40 km/h speed limit be increased to 50 km/hr and SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs be installed within a distance of 150 metres along the road in either direction beyond the limits of the school property. A 40 km/h maximum speed for the school zone should be designated in conjunction with the flashing signs. The Town of Pelham municipal by-law should indicate the times that the sign is in effect and the variable element (i.e. flashing beacons) are activated. The times should be relevant to the operating hours of Glynn A. Green Public School within the Town's jurisdiction, within the limits of 8 a.m. to 5 p.m. In addition, it is recommended that the appropriate pedestrian warning signs remain and/or be installed in conjunction with the School Zone Maximum Speed When Flashing signs (i.e. School Area and School Crossing Signs, where appropriate).

3. The following remedial measures may be implemented to help improve traffic operations within the Fonthill Traffic Study area:
    a. Extend northbound left turn storage bay from 25 metres to 40 metres on Pelham Street at Regional Road 20;
    b. Extend southbound left turn storage bay to 30 metres (if signal timing adjustments are not undertaken), otherwise bay storage length should remain as existing;
    c. Modify existing traffic signal at Pelham Street/Regional Road 20 from "fixed time" to "fully actuated uncoordinated";
    d. Modify signal cycle lengths and maximum signal phase splits for existing traffic signals on Regional Road 20 at Pelham Street, Station Street, Sobeys Signalized Entrance and Rice Road; and
    e. Review the need to adjust the pedestrian crossing times at all existing traffic signal locations.

4. The Town of Pelham should ensure that they are aware and informed of the Region's future reconstruction schedule of Regional Road 20 as well as the Region's traffic management plan during the reconstruction phase(s) in order to better monitor diversionary traffic on Town roads. Based on the current traffic management plan for Regional Road 20, it is not recommended that any localized improvements be carried out on Town roads to accommodate potential diversionary traffic due the reconstruction of Regional Road 20.

5. Recommended improvements to existing pedestrian, cycling and trail facilities in the short-term may include the following:

a. Provision of a new north-south pedestrian sidewalk along the west side of Pelham Street from Elizabeth Drive to Brock Street, as a minimum, to tie into the future signalized intersection configuration at the intersection of Pelham Street and Brock Street/Port Robinson Road;

b. Provision of a new east-west sidewalk facility with the reconstruction of Brock Street and Elizabeth Drive to ensure pedestrians have safer access to local residential neighbourhoods;

c. Upgrading of existing sidewalk facilities (east side of road) and provide additional sidewalk on the west side of Station Street with the future upgrading of the roadway. A future sidewalk on the west side of Station Street could be tied into future upgrades to the Steve Bauer Trail in this location;

d. Cycling on Town roads and on existing trail facilities is currently permitted and should be further encouraged through the provision of wider pavements and/or on- and off-street cycling facilities where practical; and

e. Formalize and provide connectivity for the Steve Bauer Trail from Regional Road 20 to Port Robinson Road.

6. The installation of a new traffic signal at the Port Robinson Road-Brock Street/Pelham Street intersection would need to be justified based on other factors, beyond a strictly technical justification (i.e. traffic signal warrant), including safety issues, traffic operations, physical, and strategic considerations.

7. The future installation of a new traffic signal at the Church Hill/Pelham Street intersection could be accommodated from a traffic operations perspective and would provide a safe crossing location for pedestrians within the downtown area. It is recommended that, as part of a future traffic signal installation at this location, the roadway cross section elements on Pelham Street between Regional Road 20 and Church Hill be reviewed along with the need to coordinate the existing traffic signal timings at Regional Road 20 with the future traffic signal timings at Church Hill.

Concept: How Might We Improve Pedestrian Safety When Crossing Pelham Street at Church Hill?

Background:

The pedestrian crossing signal at Church Hill and Pelham Street continues to be a safety concern, as no solution has yet been approved for implementation.

Latest Committee report: June 5 2017: Council did not support a fully signalized intersection to replace the Pedestrian Priority Signal (PPS), and rather asked that staff investigate prohibiting left turns at this intersection or installing a 3-way stop.

News of potentially prohibiting left turns quickly prompted feedback to staff from the community, about potential effects on businesses, resulting increased traffic on College and Emmett, bypassing, speeding, and U-turns. Prohibition of left turns is considered a Schedule A+ project under the Municipal Class EA legislation, requiring Public Notice. Also, effectiveness of this measure depends largely on enforcement, since driver compliance to 'no left turns' signs is often poor. This option was not investigated further.

Implementation of the 3-way stop was not tested in a pilot program, as it was uncertain whether compliance and vehicle queuing would pose significant risks for collision, especially related to the highway 20 intersection to the north. Like the 'no left turn' signs, effectiveness of this measure depends largely on enforcement, since driver compliance to unwarranted stop signs is often poor, and drivers instead do rolling stops, increasing collision risk (Staff are observing this with an unwarranted stop sign at another location, and plan to investigate options with this issue further).

In addition, Book 5 Regulatory Signs – Section 2 states the following:

> *"All-way stop controls should not be used under the following conditions… Where the protection of pedestrians, school children in particular, is a prime concern. This concern can usually be addressed by other* means."

To ensure Town staff are investigating options and not introducing additional risk, further data was collected by an independent consulting firm (Trans-Plan). The firm was engaged to study the intersection, its pedestrian and vehicle traffic, sightlines, past reports, and to make recommendations on improving safety, especially related to Council suggestions of a 3-way stop. In the interim, staff continued to explore root causes of the safety concerns.

2018 Consultant's Traffic Review at Church Hill and Pelham Street:

The Trans-Plan review is complete. Key items to note from the 2018 review:

1. The Trans-Plan review noted previous important recommendations from a former Fonthill Traffic Study (R&R, 2009):

   Historical and recent spot speed surveys suggested that drivers on these roads generally disregard speed limits, endangering pedestrians. The study noted that installing traffic signals would help to slow traffic and likely reduce the probability and severity of collisions involving right of way conflicts, as well as improving safety conditions for pedestrians. Future modifications for the existing 45 on-street parking spaces on Pelham Street should be reviewed and analyzed in order improve sightlines at the cross streets of Pelham Town Square, Church Hill, and Regional Road 20.

2. The Trans-Plan review also noted observations from a 2017 intersection review (Rusit & Associates, 2017):

   A signalized intersection at Church Hill would be below the minimum separation distance to the northerly existing signalized intersection at Highway 20. The intersection spacing is 179m, which is below the minimum of spacing requirement of 215m between signalized intersections (in urban settings). The findings also indicate that installing new traffic signals at the intersection would improve left turn movements from Pelham Town Square to Pelham Road. It was also noted from field observations that southbound vehicle queues on Pelham Road extend approximately 150m from the Church Hill intersection, as far as the Highway 20 intersection.

3. 91 pedestrians crossed Pelham Street in an 8-hour test duration. Due to the comparatively higher number of retail and commercial uses located to the north of the intersection, compared to the south of the intersection, the pedestrian crossing volumes at or near the north leg are generally higher. For the full 8-hour period, excluding midblock crossings, 27 pedestrians complied with the PPS and 13 pedestrians did not, resulting in a compliance of 67.5 percent.

4. During the study, two near-misses were observed by the consultant: A woman crossing the street with infant at the PPS (during walk phase) was almost struck by a vehicle exiting from an on-street parking space located within the intersection, and a Senior crossing street at the PPS

(during walk phase) was almost struck by a southbound vehicle making U-turn within the intersection.

5. The on-street parking bay conflicts with vehicle and pedestrian movements within the intersection. There is adequate visibility from the approach at Church Hill to see vehicles travelling in the northbound and southbound directions along Pelham Street; however, when vehicles are parked along the west side of Pelham Street, the visibility becomes limited.

6. Regarding vehicle queuing, all vehicles tend to clear the intersection after each cycle (of the PPS). No vehicles were observed to experience lengthy delays at Church Hill when making eastbound left and right turns at the intersection. During afternoon hours, southbound vehicles stacked up to 63m while the PPS was activated. This stacking is anticipated to be 35m should a 3-way stop be implemented under future conditions, and 33m for a signalized intersection.

7. There has only been one collision reported within the past three years at the Pelham Street and Church Hill intersection. Therefore, no further vehicle collision analyses were conducted.

8. Both methods of intersection control (3-way stop or traffic signals) would operate acceptably (under current or future conditions); however, from our warrant analysis (using OTM guidelines), neither control type is warranted due to low pedestrian crossing volumes and due to comparatively low volumes of traffic entering the intersection from Church Hill. Despite the traffic signal warrant analysis not being met according to the provisions of OTM, there are very rare cases where the engineer's study finds no satisfaction of numerical warrants, but finds other special conditions that result in a conclusion that a signal is the best solution compared to other possible alternatives. According to the conditions of the intersection, the OTM indicates "should not" rather than a "shall not" for the very reasons discussed above. It is important to note that a politically dictated unwarranted signal installation (or all-way stop installation) may not be the best recommended solution.

9. Based on the investigation, and the unwarranted traffic signal or 3-way stop conditions and guidance from Book 5 of the Ontario Traffic Manual, the consultant has recommended the following:

    - *Remove on-street public parking within a minimum of 10m from the intersection (and within the intersection), and*

- *Introduce a raised crosswalk to enhance the PPS crossing location and improve pedestrian safety.*

Staff Notes

Although staff recognizes that both recommendations made by the consultant would help improve safety at the intersection, the root cause analysis completed by staff identifies the poor visibility of the traffic signals, especially from Church Hill, as one of the root causes of safety concerns. As noted during the consultant's study, two near misses were witnessed when the PPS was activated, one with a driver leaving an on-street parking stall, and one with a driver making a U-turn on Pelham St.

In consultation with the Region's transportation safety staff, converting the signals to the newer 'PXO' (pedestrian crossover) style is possible. The PXO style involves rapid flashing lights mounted on the poles, not the overhead arms, visible from all directions. The crossover also requires specific signs and pavement markings. Legislation about these crossovers changed in January 2016, and resulted in the improved crossing design, seen most recently in the area in West Lincoln. This would likely improve drivers being able to see the activated lights, at a reasonably low cost, since the lights would be mounted on both the east and west poles, rather than on the overhead arms. New PXO installations are estimated at $12-$15K, but since hydro, poles, arms and other hardware are already present at this intersection, some of this cost could be reduced. The Region has secured a small amount of funding for driver education regarding the new PXOs, that could also be beneficial in education both drivers and pedestrians in Pelham. In the latest PXO installation in West Lincoln, the Niagara Regional Police were also requested to educate and monitor compliance for the first few days of use, which also proved successful.

The approximate costs for installation of the raised crosswalk is roughly estimated at $30,000, and for removal of the on-street parking stalls at $3,000. The raised crosswalk would be considered in the 2019 budget request, while the parking stall removal and PXO conversion can begin in 2018, provided budget can be reallocated accordingly. In consultation with the CAO and the Treasurer, this approach is feasible, especially in reviewing the red and blue circled projects for 2018. As this is an ongoing safety concern, Public Works would also recommend re-allocating funds from another approved roads project if needed, if red or blue circled funds could not be reallocated to this project.

A summary of recommended improvement measures is shown in the table below:

Item	Estimated Cost	When
Raised crosswalk – elevate crossing to increase visibility, while still being accessible and maintainable	$30,000 - $40,000	2019
Removal of on-street parking stalls within 10m of intersection	$3,000 - $5,000	2018
Conversion to PXO	$5,000 - $12,000	2018

Parking stall removal and PXO conversion can begin in 2018, provided budget can be reallocated accordingly. In consultation with the CAO and the Treasurer, this approach is feasible, especially in reviewing the red and blue circled projects for 2018. As this is an ongoing safety concern, Public Works would also recommend re-allocating 2018 funds from another approved roads project if needed, if red or blue circled funds could not be reallocated to this project.

The raised crosswalk could be considered in the 2019 budget request, as a second phase of safety measures.

An illustration of the target PXO design is shown below, provided by the Region of Niagara, based on Ministry of Transportation updated legislation.

,

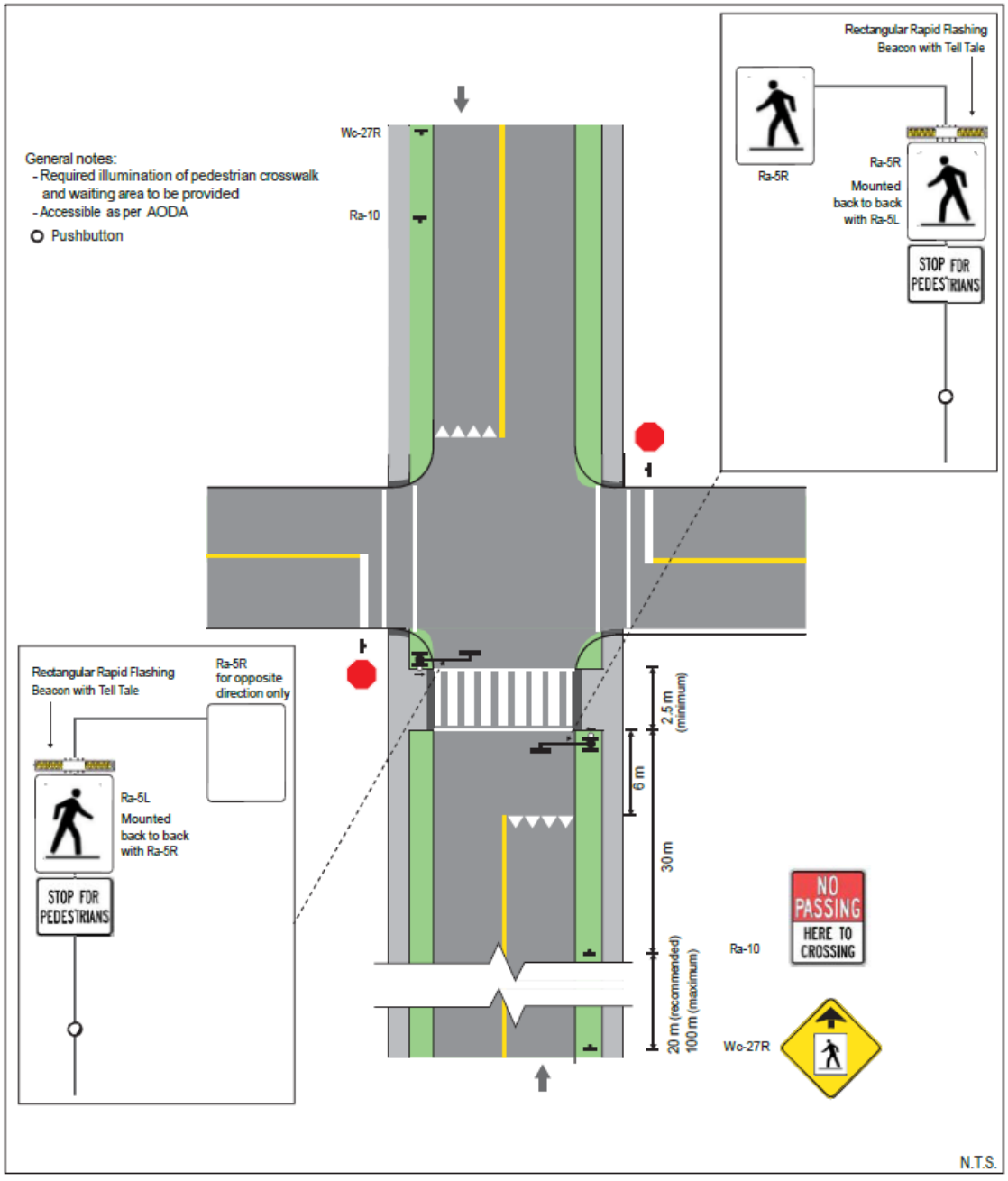


Figure 27: Pedestrian Crossover Level 2 Type B – Intersection (2-way)

The Challenge:

How might we improve pedestrian safety while crossing Pelham Street at Church Hill?

Our Recommended Solution:

That Committee of the Whole receive the Public Works report "Safer Pedestrian Crossing on Pelham Street" for information, and

That Committee of the Whole recommends Council approve the removal of select on-street parking stalls and PXO conversion from the existing PPS, in 2018.

Rationale:

Implementation of the recommended measures for safety align with the 2017 Strategic Plan Values, and with Goals 4 and 5.

Measure of Success:

Success of these improvements could be measured through PATC endorsement, reports of near-misses.

Milestones:

Approval of measures by Council, Approval in 2018 or 2019 Capital budget, Completion of Construction project.

COMMITTEE REPORT
COMMUNITY PLANNING & DEVELOPMENT DEPARTMENT
Monday, December 02, 2019

Subject: Ridgeville Hamlet Boundary

Recommendation:

THAT Committee receive Report 2019-0137 and recommend to Council:

THAT Council support the proposed Ridgeville Hamlet Boundary as presented in this Report;

THAT the Director inform the Manager of Long Range Planning at the Region of Niagara of Council's decision.

Background:

In May 2017 the Province released the new Greenbelt Plan which identified Ridgeville as hamlet with a dot at the crossroads of Effingham Street and Canboro Road. The previous 2005 Greenbelt Plan did not identify Ridgeville as a hamlet and it was the only hamlet in the Niagara Greenbelt area that was not included in the Greenbelt Plan at that time.

The Greenbelt Plan 2017 states that hamlets are subject to the policies of the Growth Plan and are governed by official plans. Limited growth is permitted through infill and intensification subject to appropriate water and sewage services.

In Niagara, the Region is responsible for establishing the boundaries of hamlets and urban areas in its Official Plan. The Region is currently in the process of undertaking a new Official Plan and as part of that process is looking to establish a boundary for the hamlet of Ridgeville as something more than a dot at the intersection of Effingham Street and Canboro Road. Ridgeville is the last hamlet in Niagara to have a boundary established in the Regional Official Plan.

Analysis:

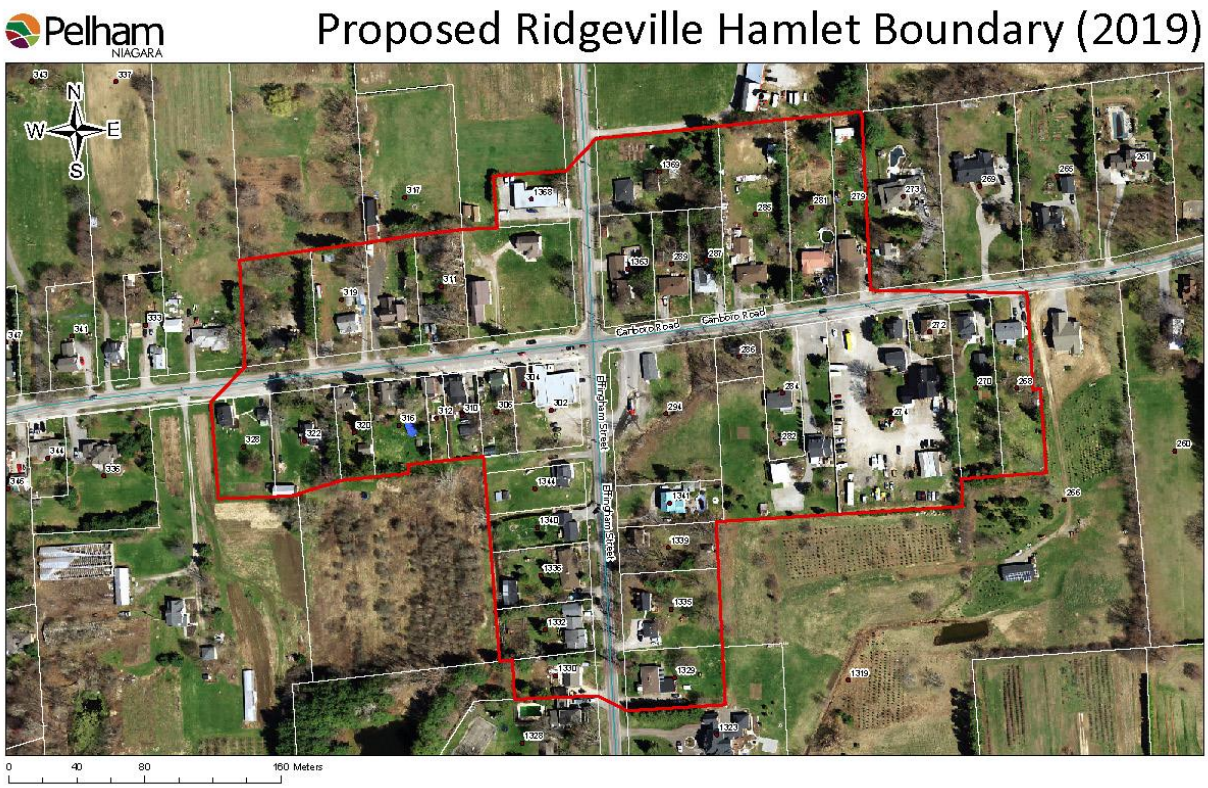
The Region of Niagara is in the process of preparing a new Official Plan. It is anticipated to be complete in approximately two years. As part of that process, Regional staff had discussions with Town staff regarding establishing an appropriate boundary for the hamlet of Ridgeville. The Region is responsible for establishing the boundary through its Official Plan and the Town is responsible for the detail land use policies within the hamlet in its Official Plan. In accordance with the Growth Plan and the Greenbelt Plan, hamlets provide for limited development and redevelopment opportunities through infill and intensification.

In terms of process the Region must establish the hamlet boundary first through its Official Plan, and once the hamlet boundary has been established, the Town can then prepare an Official Plan amendment with policies that address the type of land uses and how development and redevelopment may take place within the hamlet boundary. The Region is seeking municipal support at this time of a proposed hamlet boundary in terms of moving forward with a proposed boundary as part of its Regional Official Plan preparation process. Municipal support at this time, does not preclude further input into the process.

The following factors were taken into consideration with regards to the establishment of an appropriate boundary:

- character of development to fit the context of the area
- servicing considerations
- opportunities for infill and redevelopment
- land use impacts
- protection of agricultural lands

Based on the above considerations, the following hamlet boundary outlined in red on the aerial photo below was developed for Council’s consideration.



The proposed boundary takes into consideration the character of development in the area which generally involves an older, traditional building stock, smaller rural lots and development that is generally closer to the road consistent with a traditional hamlet settlement pattern. Beyond the proposed boundary, the development is less consistent with a hamlet settlement pattern and is more estate like consisting of larger lots, more modern building stock with larger setbacks and also includes agricultural parcels. Many of the lots within the boundary have a greater potential to redevelop as compared to other lots beyond the boundary that are larger and more estate-like and therefore less likely to redevelop. Opportunities for redevelopment potential should be focused on the hamlet versus on prime agricultural lands or on lots that would have the potential to have a greater impact the surrounding agricultural area.

With respect to servicing considerations the lands along Canboro Road have municipal water services available, while the lands in the Effingham Street area are privately serviced with respect to water services and all the lands are privately serviced with regards to sanitary sewage systems. Therefore, given the limited municipal services available to the area, any infill and redevelopment will be on private sanitary sewage services and may be serviced with municipal water is if it is on Canboro Road. Hamlets generally have limited municipal services and as a result development opportunities are restricted by servicing capabilities.

There are some opportunities for infill and redevelopment within the proposed boundary, however, it is unlikely that large scale development or redevelopment will take place given the servicing capacity available, the policy restrictions regarding extension of municipal services beyond urban area boundaries and the policy intent of providing limited growth opportunities in hamlets. Within the proposed hamlet boundary are commercial uses, utility buildings, an auto and small equipment repair use, and residential uses consisting primarily of single detached dwellings and some apartments above storefronts. It is noted that any development or redevelopment opportunity within the proposed hamlet boundary area would only occur and be initiated by a property owner, not by the municipality, and the likelihood for adverse land use impacts would be minimal given the limited scale of development that would likely be considered.

Keeping the proposed hamlet boundary reasonably tight also provides the greatest protection to the surrounding prime agricultural lands which is consistent with the policy objectives of the Provincial Policy Statement, Greenbelt Plan, Growth Plan and Region of Niagara Official Plan.

The establishment of a hamlet boundary for Ridgeville is needed first in order to provide the opportunity for limited development and redevelopment and reinvestment into this traditional settlement area. The proposed boundary is considered reasonable given the existing context and development pattern of the area and represents good land use planning given the existing policy framework for hamlets.

Financial Considerations:

There are no financial considerations with regards to the establishment of the hamlet boundary for the Ridgeville in the Region of Niagara Official Plan.

Alternatives Reviewed:

During discussions with the Regional staff on establishing an appropriate hamlet boundary for Ridgeville various options were reviewed, however they did not fit the criteria as well as the one that is being recommended. For example, other options had greater impact on the surrounding agricultural lands, did not provide for as consistent character of development and would have greater impacts from a servicing perspective.

Strategic Plan Relationship: Build Strong Communities and Cultural Assets

The establishment of a hamlet boundary for Ridgeville recognizes the historical development area known as Ridgeville which contributes positively to building a strong community. Once the hamlet boundary is established, it would be

appropriate for the Town to amend its Official Plan to provide the policy framework for development and redevelopment within the boundary that will be aimed at building a strong community and recognition of the community's history.

Consultation:

The delineation of the proposed Ridgeville hamlet boundary has been a collaborative process that involved consultation with Regional and Town staff. The public and agency consultation process will be through the Regional Official Plan process and when the Town amends its Official Plan to provide policy guidance with regards to the Ridgeville hamlet there will be further public and agency consultation at that time as well. This is the first step in the process towards the Region establishing a boundary for the hamlet of Ridgeville.

Other Pertinent Reports/Attachments:

Appendix A – Proposed Hamlet Boundary for Ridgeville

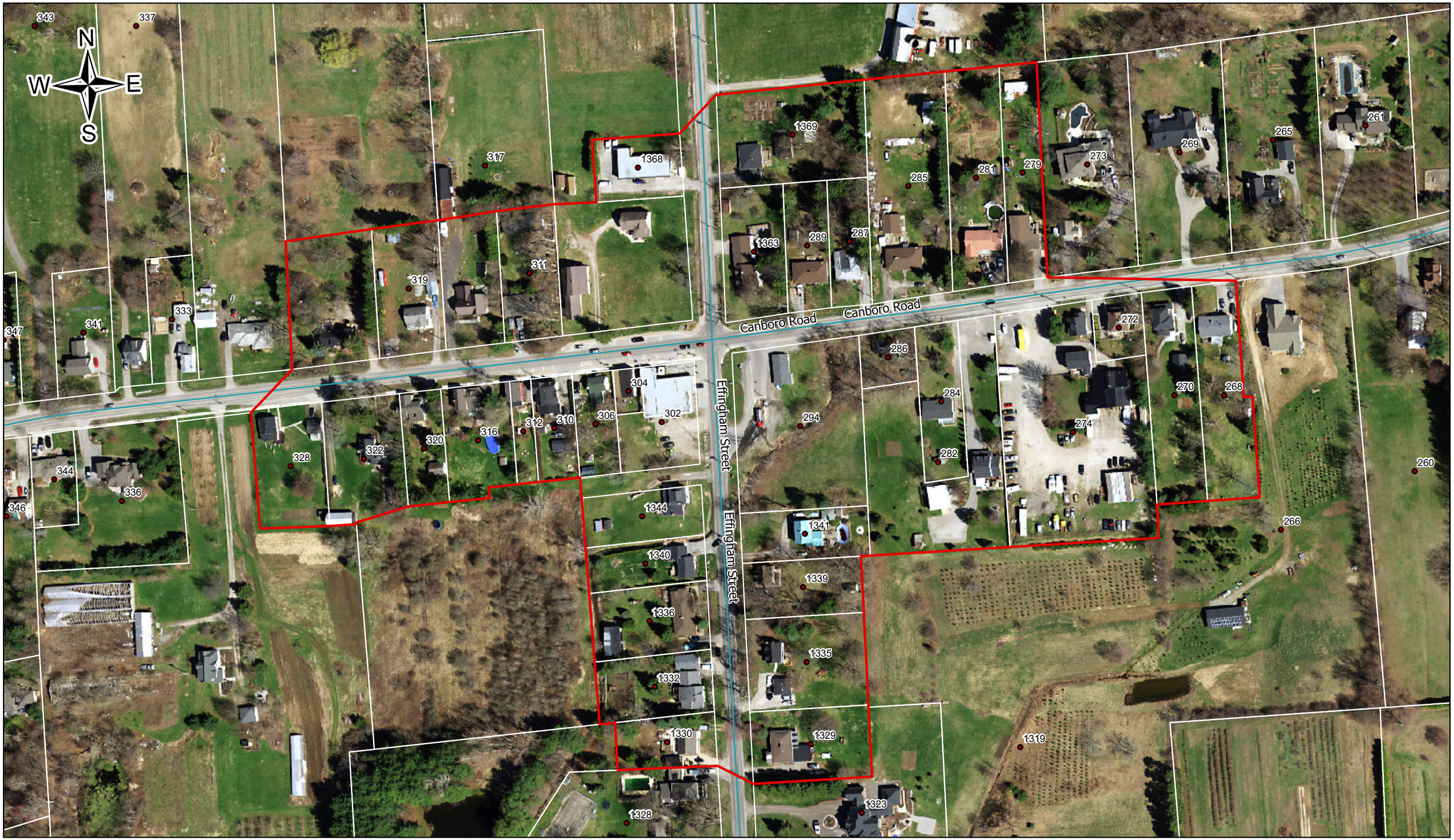
Prepared and Recommended by:

Barbara Wiens, MCIP, RPP
Director of Community Planning and Development

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer

Proposed Ridgeville Hamlet Boundary (2019)



0 40 80 160 Meters

COMMITTEE REPORT
COMMUNITY PLANNING & DEVELOPMENT DEPARTMENT
Monday, December 02, 2019

Subject: Cannabis Control Committee Recommended Nuisance and Odour By-law

Recommendation:

THAT Committee receive Report 2019-0134 and recommend to Council:

THAT the proposed Nuisance and Odour By-laws by the Cannabis Control Committee be referred to staff for review and comment as part of the overall review and study related to the Interim Control By-law.

Background:

On September 23rd Council meeting, the Chair of the Cannabis Control Committee presented a work plan to Council that anticipated having a Cannabis Nuisance and Odour By-laws to Council for its consideration by the end of November. The Cannabis Control Committee has been diligently working on such by-laws which are attached as Appendix A to this report.

Analysis:

The Cannabis Control Committee has invested many hours into researching, reviewing and developing a proposed Cannabis Nuisance By-law, now Nuisance By-law, and a proposed general Odour By-law in an effort to address concerns of residents as it relates to nuisances associated with the cannabis operations in Town. Town staff have reviewed and provided input to the draft By-laws at Cannabis Control Committee meetings, some of which has been reflected in the proposed By-laws.

Staff recognize that By-laws to better manage and address the impacts of Cannabis on the community are important and it is critical that the By-laws be carefully reviewed, not only by Planning staff, but also By-law Enforcement staff and legal counsel as it relates to administration and enforcement of the by-law, and the impact such by-laws have on the community and legal proceedings that the Town is currently involved in and potential legal proceedings.

Financial Considerations:

Enforcement of the proposed Nuisance By-law and Odour By-laws as recommended by the Cannabis Control Committee will require additional resources including odour measuring equipment, staff training and staff time. It is also anticipated that professional resources from various fields of expertise to complete odour analyses may also be required. The total costs are unclear at this time and require further review and investigation. Further, there needs to be a consideration of the financial implications of current and potential legal implications related to administration, enforcement and legal challenges.

Alternatives Reviewed:

Council could approve the Nuisance By-law and Odour By-law as recommended by the Cannabis Control Committee.

Council could approve the Nuisance By-law and Odour By-law recommended by the Cannabis Control Committee with modifications.

Alternatively, the Town Administration has recognized a need to update and modernize the existing Nuisance By-law to address a number of matters and the proposed By-laws recommended by the Cannabis Control Committee could be modified to integrate within a whole new Nuisance By-law. Council could instruct staff to return with a modified Nuisance By-law which would incorporate the work of the Cannabis Control Committee where appropriate.

Strategic Plan Relationship: Build Strong Communities and Cultural Assets

The Strategic Plan includes addressing Cannabis requirements and regulations as an action for 2019. The Cannabis Control Committee and staff have been working hard on this initiative. Council extended the Interim Control By-law with regards to cannabis and cannabis related uses to July 2020.

Consultation:

Town Planning staff reviewed and provided comments on earlier versions of the proposed Nuisance By-law and Odour By-law. However, additional review and comments are required from By-law Enforcement staff as well as the Town's external solicitor. It is also important to consider the timing of passing these by-laws given existing legal proceedings and impact they may have on those proceedings and the status of other studies and by-laws required as result of the interim control by-law.

Other Pertinent Reports/Attachments:

2019-0061 Information Report on Proposed Cannabis Regulations

2019-0074 Recommendation Report for Proposed Cannabis Regulations and Extension of Interim Control By-law 4046 (2018)

Appendix A Proposed Nuisance By-law and Odour By-laws as Recommended by Cannabis Control Committee

Prepared and Recommended by:

Shannon Larocque, MCIP, RPP
Senior Planner

Barbara Wiens, MCIP, RPP
Director of Community Planning and Development

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer

THE CORPORATION OF THE

T O W N OF P E L H A M

BY-LAW NO. (2019)

Being a by-law to regulate certain matters and nuisances related to odourous industrial facilities.

WHEREAS, Section 128 of the *Municipal Act,* R.S.O. 2001, .c 25 provides that a local municipality may prohibit and regulate with respect to public nuisances including matters that in the opinion of Council are, or could become, or cause public nuisances;

AND WHEREAS Section 129(a) of the Municipal Act 2001, R.S.O. 2001, .c25 provides that a local municipality may prohibit and regulate with respect to noise, vibration, odour, dust and outdoor illumination, including indoor lighting that can be seen outdoors; and prohibit these matters unless a permit is obtained from the municipality and may impose conditions for obtaining, continuing to hold and renewing the permit, including requiring the submission of plans;

AND WHEREAS Section 429 of the *Municipal Act 2001,* R.S.O. 2001, c.25 provides a municipality with the authority to impose fines for offences of a by-law of the municipality passed under the *Municipal Act 2001,* R.S.O 2001, c.25;

AND WHEREAS Cannabis production facilities are a new industry for municipalities, and federal and provincial regulations, policies and legislation serve as a guide to municipalities on how they should regulate certain matters related to cannabis production facilities;

AND WHEREAS Cannabis Regulations SOR/2018-144, Section 85 requires the building where cannabis is produced to be equipped with a system that filters air to prevent the escape of odours;

AND WHEREAS The Environmental Protection Act R.S.O. 1990, Chapter E.19, Section 14 requires that no person shall discharge or cause or permit the discharge of a contaminant, including an odour, into the natural environment, if the discharge causes or may cause an adverse effect;

AND WHEREAS The Ministry of the Environment, Conservation and Parks D-6 Guidelines, O. Reg. 419/05 Odour Regulation, and NPC-300 Noise Regulation provide a framework, standards and methods for assessing whether adverse effects are likely, whether proposed mitigations are likely to be adequate, and how to measure compliance;

AND WHEREAS Ontario Provincial Policy Statement 2014, 1.2.6.1 requires that major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, and minimize risk to public health and safety;

AND WHEREAS The Planning Act R.S.O. 1990, CHAPTER P.13 requires that a municipality's Official Plan and Zoning By-laws are consistent with Provincial policy statements;

AND WHEREAS The Town of Pelham's Pelham Zoning Bylaw 1136 (1987) Section 6.19 requires that no land shall be used and no building or structure erected, altered or used for any purpose which is obnoxious, for any purpose that creates or is likely to become a nuisance or offensive, or both by reason of the emission of objectionable odour;

AND WHEREAS, without proper regulation, the activities regulated by this By-law, especially in the absence of sufficient regulation and enforcement by another level of government, could become or cause public nuisances;

AND WHEREAS The residents of the Town of Pelham have clearly indicated their strong dislike of Cannabis odour and treatment including odour masking agents that they have been subjected to and the adverse effects it and other nuisances are having on them, which has highlighted the need to update by-laws to address the negative impacts of odourous industrial facilities;

AND WHEREAS the Council of the Town of Pelham has deemed it to be in the public interest that such a By-law be enacted;

NOW THEREFORE, THE COUNCIL OF THE CORPORATION OF THE TOWN OF PELHAM ENACTS AS FOLLOWS:

<u>Interpretation</u>

1. In this By-law:

    a) "Adverse Effect" means an effect that has greater than a trivial impact, including effects such as (i) loss of the ordinary enjoyment or use of one's property including for Sensitive Uses; (ii) loss in property value; (iii) a negative health impact on a resident; (iv) a negative impact on the environment including soil, ground water and septic system contamination, loss of precious agricultural lands; (v) a negative ecological impact including habitat loss, hazards to sensitive nearby crops; and (vi) increase in garbage, noise or traffic or the creation of unusual traffic patterns.

    b) "Authorized Cannabis Production and Processing" means Cannabis Production and Processing authorized by an issued license or registration by the federal Minister of Health, pursuant to the Cannabis Regulations SOR/2018-144 or the Access to Cannabis for Medical Purposes Regulations, SOR/2016-230, and in compliance with the Cannabis Act S.C. 2018, C.16 and the Controlled Drugs and Substances Act, SC 1996, c 19, as amended from time to time, or any successors thereto, and operating in accordance with relevant provincial regulations and all municipal bylaws and regulations including this bylaw."

c) "Cannabis" shall have the same meaning as cannabis as defined in the *Cannabis Act* (Canada) S.C.2018, c.16 as amended from time to time, or any successors thereto.

d) “Cannabis Production and Processing” means lands, buildings or structures used for or in support of growing, producing, processing, testing, storing, destroying, packaging or otherwise making ready for sale, permitting consumption, selling, and / or shipping of Cannabis.”

e) “Heavy Odour Operation” means a landfill operation, slaughter house operation, or rendering operation.

f) “Odourous Industrial Processing” means lands, buildings or structures used for or in support of processing, producing, storing, destroying, packaging, or shipping of a Heavy Odour Operation.

g) "Odourous Industrial Facility" means the property, including all its lands and improvements on the lands, associated with:

i.) a Cannabis Production and Processing operation, including an Authorized Cannabis Production and Processing operation, but shall not mean any property on which cannabis is grown exclusively for legal use solely by the registered owner of the property; or

ii) a Heavy Odour Operation, as the case may be.

h) "Cannabis Products" means any product for which Cannabis is one of the principal ingredients, including Cannabis derivatives.

i) “Council" means the Council of the Municipality.

j) “Enforcement Officer” means the By-law Enforcement Officer appointed by the Council of the Corporation of the Town of Pelham for the purpose of the enforcement of Town by-laws; or any Police Officer as defined by the Police Service Act, R.S.O. 1990 c.p. 15 as amended.

k) “Glare” means light emitting from a luminaire with intensity great enough to reduce a viewer’s ability to see, or to produce a sensation of discomfort.

l) “LEP” means a licensed engineering practitioner who is a person who holds a licence, limited licence or temporary licence under the Professional Engineers Act Ontario.

m) “Light Trespass” means the shining of light by a luminaire beyond the boundaries of a property on which it is located.

n) “Luminaire” means a complete lighting system including a lamp or lamps enclosed in a housing complete with reflectors or refractors.

o) “MECP” means the Ministry of the Environment, Conservation and Parks, Ontario.

p) "Municipality" means The Corporation of the Town of Pelham.

q) "Obnoxious Odour" means an odour of Cannabis or an odour from an Odourous Industrial Facility, that;
   a. emanates from a premise and disperses or is likely to disperse to one or more properties in the vicinity of the premise; and
   b. is of such strength that it causes or is likely to cause an Adverse Effect.

r) “Odour Unit” or “Odour Threshold Value” is a measure of the number of dilutions required to render a sample to the detection threshold, commonly expressed as an odour concentration (OU/m^3). One odour unit is defined as the point where 50% of a normal population could just detect that an odour is present. Measurement of the strength of an odour in odour units is facilitated using a laboratory or field olfactometer.

s) “Person” means a natural person, a corporation, partnership or association and their heirs, executors, administrators or other legal representatives of a person to whom the context can apply according to law.

t) “Public Nuisance” means a nuisance as defined in Section 128 and 129 of the Municipal Act 2001, R.S.O. 2001, .c25.

u) "Sensitive Use" or “Sensitive Receptor” means a school, day care, playground, sporting venue, park, recreational area, residence use, place of worship, community centre or any other place where people regularly gather or sleep.

v) "Zone" means an area delineated on a zoning map schedule and established and designated by the Comprehensive Zoning By-law 1136(1987), or any amendment or subsequent comprehensive Zoning By-law duly enacted, for a specific use or group of uses.

Prohibitions

2. No person shall:

a) operate an Odourous Industrial Facility except in accordance with the provisions of this By-Law;

b) operate an Odourous Industrial Facility where the Cannabis Production and Processing or Odourous Industrial Processing, as the case may be, includes the release of substances or contaminants that may be harmful or noxious to the public or the environment;

c) operate an Odourous Industrial Facility that causes one or more Adverse Effects; or

d) operate an Odourous Industrial Facility, in the case of a Cannabis Production and Processing operation, except as one maintained as an Authorized Cannabis Production and Processing operation.

Licences

3. The owner, occupier and/ or operator of an Odourous Industrial Facility shall produce for inspection any licence, registration or other form of authorization which permits the Authorized Cannabis Production and Processing or the Odourous Industrial Processing, as the case may be, on the premises.

Odourous Industrial Facility Regulations

4. An Odourous Industrial Facility shall:

a) promptly inform the Municipality of any lapses, non-compliances, changes or proposed changes to its licences and operating authorities from Canadian governments and agencies including Health Canada and Canada Revenue Agency, the Province of Ontario including the Ministry of the Environment, Conservation and Parks, the Municipality and any other competent authority;

b) operate indoors;

c) prepare at no cost to the Municipality a contingency odour mitigation plan signed/sealed by an LEP, for use in the event of substantiated complaints so that the plans can be immediately implemented as necessary. The odour mitigation plan shall be in the form of an MECP Emission Summary and Dispersion Modelling report detailing the odour inventory and mitigation that will be employed, off-property odour impact predictions, implementation timelines, and a signed/sealed statement by the LEP that (i) the off-property odour impact will not cause an adverse effect at any sensitive use in the vicinity, and (ii) the odour strength will not exceed two odour units at any sensitive use in the vicinity (where the standard of compliance is that two odour units will only be exceeded at any given sensitive use up to 0.5% of the time on an annual basis as per MECP Technical Bulletin “Methodology for Modelling Assessment of Contaminants with 10-Minute Average Standards and Guidelines”, September 2016);

d) prepare at no cost to the Municipality a contingency light mitigation plan with implementation timelines signed/sealed by an LEP, for use in the event of substantiated complaints so that the plan can be immediately implemented as necessary;

e) prior to the issuance of any building permit for new construction or alteration, or prior to commencing operation associated with any changes in land use, obtain site plan

approval and enter into a Site Plan Agreement with the Municipality pursuant to Section 41 of the *Planning Act, R.S.O. 1990, c.P.13*. Site plan approval will require, at no cost to the Municipality with independent peer review on behalf of the Municipality, site plans that include studies, on-site monitoring plans and contingency mitigation plans signed/sealed by an LEP which demonstrate that the noise, odour and light requirements of this by-law will be met;

f) operate only in a Zone designated for such use;

g) employ systems, including air filtration systems, throughout the Odourous Industrial Facility where cannabis or other odour is present to prevent the escape of obnoxious odours and to ensure that at all sensitive uses in the vicinity, the odour strength measured from the Odourous Industrial Facility never exceeds two odour units;

h) ensure that all security and parking lot lighting are shielded, directed downward and shall not spill onto adjacent properties or create light trespass or glare so as to cause a nuisance to adjacent properties;

i) ensure that structures that require interior supplemental lighting for the growing of Cannabis or for another purpose employ a light control plan and light blocking systems to prevent skyglow at night so as to not cause a nuisance to neighbours and the general public;

j) ensure that noise generated by the Odourous Industrial Facility, including noise from the use of power generators as a primary power source, does not result in sound levels that exceed the limits set out in MECP's NPC-300 guidelines;

k) operate in a manner to avoid becoming a public nuisance including implementing pro-active measures to mitigate potential Adverse Effects, and acting quickly and in good faith by implementing contingency measures and additional mitigation measures as needed if complaints arise;

l) document, and report to the Municipality all complaints received from neighbours and residents and detail the corrective action that will be implemented including a timeline to prevent further adverse impacts;

m) report to the Municipality any corrective action taken within five days of commencement of such action and again within five days following completion of such action;

n) pay for an ongoing neighbourhood, ambient odour monitoring program conducted by independently trained and competent odour practitioner(s) selected by the Municipality with results simultaneously delivered to the Municipality and the Odourous Industrial Facility operator and posted online for public access; and

o) be, in the case of Cannabis Production and Processing, limited to the growing, production, processing and packaging of Cannabis solely for the holder of the licence for the premises on which the Odourous Industrial Facility is located.

Penalty

5. The following penalties would apply to any contravention of this By-law:

a) any contravention of a provision of this By-law can be designated as a continuing offence, pursuant to Section 429 (2)(a) of the *Municipal Act 2001*, R.S.O. 2001, c.25;

b) any Person who contravenes any provision of this By-law is guilty of an offence and upon conviction, is liable to a fine, including the fines set out in this By-law and such other penalties as provided for in the *Provincial Offences Act,* R.S.O, 1990 c.P.33, and the *Municipal Act 2001,* R.S.O. 2001. c.25;

c) every Person who contravenes any provision of this By-law is guilty of an offence and on conviction, is liable to a fine not exceeding $5,000 per day that the offence continues;

d) notwithstanding paragraph (a) and (c) above, every Person who is a corporation that contravenes any provision of this By-law is guilty of an offence and upon conviction, liable to a fine not exceeding $10,000 per day that the offence continues.

Continuing Offence

6. Each calendar day a violation of Section 2 continues is deemed to be a separate offence.

Enforcement

7. In addition to any other penalty or remedy available to the Municipality, the Council may apply to the Superior Court of Justice for an order requiring all or part of an Odourous Industrial Facility to be closed for a period not exceeding two (2) years if it be proved on a balance of probabilities that

a) activities or circumstances on or in the premises of an Odourous Industrial Facility constitute a public nuisance or cause or contribute to activities or circumstances constituting a public nuisance in the vicinity of the premises;

b) the public nuisance has a detrimental impact on the use and enjoyment of property in the vicinity of the Odourous Industrial Facility;

c) the owner, operator or occupants of the Odourous Industrial Facility or part of the facility knew or ought to have known that the activities or circumstances constituting the public nuisance were taking place or existed and did not take adequate steps to eliminate the public nuisance; or

d) a conviction for a contravention of this By-law by a court of competent jurisdiction of a public nuisance in respect to the Odourous Industrial Facility has been entered, and the conviction is not currently under appeal.

Powers of Entry

8. Pursuant to Section 436 of the *Municipal Act, 2001,* R.S.O. 2001, c. 25 and in addition to any other powers of entry granted to the Municipality, the Municipality, by its employees or agents, may enter on the premises of an Odourous Industrial Facility at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:

    a) this By-law or any other by-law passed by the municipality;

    b) any direction or order of the Municipality made under the *Municipal Act, 2001,* R.S.O. 2001, c.25, or this By-law;

    c) a condition of a license issued by the Municipality; or

    d) an order to discontinue or remedy a contravention of this By-law for which a conviction has been entered by a court of competent jurisdiction.

Powers of Inspection

9. The Municipality may do any of the following for the purpose of an inspection under Section 8:

    a) require the production for inspection of documents or things relevant to the enforcement of this By-law

    b) inspect and remove documents or things relevant to the enforcement of this By-law for the purpose of making copies or extracts;

    c) require information from any person concerning the matter relevant to the enforcement of this By-law; and

    d) alone or in conjunction with a person possessing special or expert knowledge, make examinations or take tests, sample or photographs necessary for the purposes of the inspection; and

    e) conduct a lawful inspection under this By-law by an Enforcement Officer without interference, obstruction or hinderance by any person.

Severability

10. If a Court of competent jurisdiction should declare any section or part of a section of this By-law to be invalid, such section shall not be construed as having persuaded or influenced Council to pass the remainder of the By-law and it is hereby declared that the remainder of the By-law shall be remain in force.

Effect

11. This By-law shall take effect and be in force upon enactment.

ENACTED, SIGNED AND SEALED THIS

_____ DAY OF _____, 2019

_____

MAYOR MARVIN JUNKIN

_____

CLERK NANCY J. BOZZATO

THE CORPORATION OF THE

T O W N OF P E L H A M

BY-LAW NO. (2019)

Being a by-law to regulate odour.

WHEREAS, Section 129(a) of the *Municipal Act 2001,* R.S.O. 2001, .c25 provides that a local municipality may prohibit and regulate with respect to odour; and prohibit these matters unless a permit is obtained from the municipality and may impose conditions for obtaining, continuing to hold and renewing the permit, including requiring the submission of plans;

AND WHEREAS Section 429 of the *Municipal Act 2001,* R.S.O. 2001, c.25 provides a municipality with the authority to impose fines for offences of a by-law of the municipality passed under the *Municipal Act 2001,* R.S.O 2001, c.25;

AND WHEREAS Cannabis production facilities are a new industry for municipalities, and federal and provincial regulations, policies and legislation serve as a guide to municipalities on how they should regulate certain matters related to cannabis production facilities;

AND WHEREAS the *Environmental Protection Act* R.S.O. 1990, Chapter E.19, Section 14 requires that no person shall discharge or cause or permit the discharge of a contaminant, including an odour, into the natural environment, if the discharge causes or may cause an adverse effect;

AND WHEREAS Ontario Provincial Policy Statement 2014, 1.2.6.1 requires that major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, and minimize risk to public health and safety;

AND WHEREAS *The Planning Act* R.S.O. 1990, Chapter P.13 requires that a municipality's Official Plan and Zoning By-laws are consistent with Provincial policy statements;

AND WHEREAS The Town of Pelham's Pelham Zoning Bylaw 1136 (1987) Section 6.19 requires that no land shall be used and no building or structure erected, altered or used for any purpose which is obnoxious, for any purpose that creates or is likely to become a nuisance or offensive, or both by reason of the emission of objectionable odour;

AND WHEREAS The residents of the Town of Pelham have clearly indicated their strong dislike of odour, such as Cannabis odour and treatments including odour masking agents, that they have been subjected to and the adverse effects it is having on them;

AND WHEREAS the Council of the Town of Pelham has deemed it to be in the public interest that a by-law to regulate odour be enacted;

NOW THEREFORE, THE COUNCIL OF THE CORPORATION OF PELHAM ENACTS AS FOLLOWS:

Interpretation

1. In this By-law:

a) “Adverse Effect” means an effect that has greater than a trivial impact, including effects such as (i) loss of the ordinary enjoyment of one’s property including for Sensitive Uses; (ii) loss in property value; and (iii) a negative health impact on a resident.

b) "Council" means the Municipal Council of the Municipality.

c) “Enforcement Officer” means the By-law Enforcement Officer appointed by the Council of the Corporation of the Town of Pelham for the purpose of the enforcement of Town by-laws; or any Police Officer as defined by the *Police Service Act*, R.S.O. 1990 c.p. 15 as amended.

d) “Industrial Area” means those areas of the municipality designated as industrial in Pelham Zoning By-law No. 1136(1987).

e) "Municipality" means The Corporation of the Town of Pelham.

f) "Obnoxious Odour" means an odour that:
   i. emanates from a premise and disperses or is likely to disperse to one or more properties in the vicinity of the premise; and
   ii. is of such strength that it causes or is likely to cause an adverse effect.

g) “Person” means a natural person, a corporation, partnership or association and their heirs, executors, administrators or other legal representatives of a person to whom the context can apply according to law.

h) “Public Nuisance” means a nuisance as defined in Section 128(1) of the *Municipal Act 2001*, R.S.O. 2001, .c25.

Prohibitions

2. No person shall conduct or permit any activity that causes an Obnoxious Odour.

Non Application of By-law

3. Section 2 of this by-law does not apply to an odour created by any one of the following activities:

   a) A normal farm practice as determined pursuant to the *Farming and Food Production Protection Act,* 1998, S.O. Chap. 1, except in cases where said Act does not have jurisdiction such as those indicated in Section 2(3) of said Act.

   b) An activity carried on in compliance with an order of the Normal Farm Practices Protection Board.

   c) An activity carried on by the municipality or any other level of government.

d) An activity carried on in compliance with an approved nutrient management plan pursuant to *the Nutrient Management Act, 2002,* S.O. 2002 c.4*.*

Grant of Exemption by Council

4. a) Application to Council:

Notwithstanding anything contained in this By-law, any person may make application to Council to be granted an exemption from any of the provisions of this By-law with respect to any source of odour for which the person might be prosecuted and Council, by resolution, may grant or refuse to grant the exemption applied for and any exemption granted shall specify the time period, during which the exemption is effective and may contain such terms and conditions as Council deems appropriate.

b) Adjournment:

Council may adjourn consideration of the matter for any reason Council deems appropriate, provided that the reason for adjournment is stated and recorded in the minutes.

c) Decision:

In deciding whether to grant the exemption, Council shall give the applicant and any person opposed to the application, an opportunity to be heard and may consider such other matters as Council deems appropriate.

d) Breach:

A breach of any of the terms or conditions of any exemption granted by Council shall render the exemption null and void.

Penalty

5. The following penalties would apply to any contravention of this By-law:

a) any contravention of a provision of this By-law can be designated as a continuing offence, pursuant to Section 429 (2)(a) of the *Municipal Act 2001,* R.S.O. 2001, c.25;

b) any Person who contravenes any provision of this By-law is guilty of an offence and upon conviction, is liable to a fine, including the fines set out in this By-law and such other penalties as provided for in the *Provincial Offences Act*, R.S.O, 1990 c.P.33, and the *Municipal Act 2001,* R.S.O. 2001. c.25;

c) every Person who contravenes any provision of this By-law is guilty of an offence and on conviction, is liable to a fine not exceeding $5,000 per day that the offence continues;

d) notwithstanding paragraph (c) above, every Person who is a corporation who contravenes any provision of this By-law is guilty of an offence and on conviction, liable to a fine not exceeding $10,000 per day that the offence continues.

Continuing Offence

6. Each calendar day a violation of Section 2 continues is deemed to be a separate offence.

Enforcement

7. In addition to any other penalty or remedy available to the Municipality, the Council may apply to the Superior Court of Justice for an order requiring all or part of a property or facility to be closed for a period not exceeding two (2) years if it be proved on a balance of probabilities that:

a) activities or circumstances on or in the premises of a property or facility constitute a Public Nuisance or cause or contribute to activities or circumstances constituting a Public Nuisance in the vicinity of the premises;

b) the Public Nuisance has a detrimental impact on the use and enjoyment of a property in the vicinity of the premises; and

c) the owner or occupants of the premises or part of the premises knew or ought to have known that the activities or circumstances constituting the Public Nuisance were taking place or existed and did not take adequate steps to eliminate the Public Nuisance; or

d) a conviction for a contravention of this By-law by a court of competent jurisdiction of a Public Nuisance in respect to the premises or property has been entered, and the conviction is not currently under appeal.

Powers of Entry

8. Pursuant to Section 436 of the *Municipal Act 2001*, R.S.O. 2001, c.25 and in addition to any other powers of entry granted to the Municipality, the Municipality, by its employees or agents, may enter on the premises of a property or facility at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:

a) this By-law or any other by-law passed by the municipality;

b) any direction or order of the Municipality made under the *Municipal Act 2001*, R.S.O. 2001, c.25, or this By-law;

c) a condition of a license issued by the Municipality; or

d) an order to discontinue or remedy a contravention of this By-law for which a conviction has been entered by a court of competent jurisdiction.

Powers of Inspection

9. The Municipality may do any of the following for the purpose of an inspection under Section 8:

a) require the production for inspection of documents or things relevant to the enforcement of this By-law;
b) inspect and remove documents or things relevant to the enforcement of this By-law for the purpose of making copies or extracts;

c) require information from any person concerning the matter relevant to the enforcement of this By-law;

d) alone or in conjunction with a person possessing special or expert knowledge, make examinations or take tests, samples or photographs necessary for the purposes of the inspection, and where warranted, require the operator to hire and pay for an independent third party (odour practitioner) who would report simultaneously to the Town and the operator; and

e) conduct a lawful inspection under this By-law by an Enforcement Officer without interference, obstruction or hinderance by any person.

Severability

10. If a Court of competent jurisdiction should declare any section or part of a section of this By-law to be invalid, such section shall not be construed as having persuaded or influenced Council to pass the remainder of the By-law and it is hereby declared that the remainder of the By-law shall be remain in force.

Effect

11. This By-law shall take effect and be in force upon enactment.

ENACTED, SIGNED AND SEALED THIS

_____ DAY OF _____, 2019 A.D.

_____

MAYOR MARVIN JUNKIN

_____

CLERK NANCY J. BOZZATO

COMMITTEE REPORT
CORPORATE SERVICES DEPARTMENT
Monday, December 02, 2019

Subject: Vesting of Property into Municipal Ownership for Subsequent Sale

Recommendation:

THAT Committee receive Report #2019-0135 and recommend:

THAT Council: vest Roll # 2732 010 016 12510; PIN 64029-0272(LT); Part Lot 20 N/S Ontario St. Plan 703 Pelham as in RO112837 except RO107119 & Part 1 59R8830 into the name of the municipality, write-off the outstanding taxes, penalties, interest and tax sale fees, then subsequently sell the parcel of land on the market at an amount more attractive to potential purchasers.

Background:

On May 15th, 2019 the Town of Pelham (Town) conducted a Municipal Tax Sale (sale of land by public tender) under the authority of the *Municipal Act, 2001* (the Act). A total of three properties were advertised for sale. Two of the properties received bids and were sold successfully. One property received no bids and remains outstanding. Within two years of the tax sale date, the Town must decide whether to re-list the property for tax sale at the full cancellation price, re-list the property for tax sale at a reduced cancellation price or vest the property into the name of the municipality and subsequently sell the property on the market.

The property being considered is described as:

Roll Number: 2732 010 016 12510
Legal Description: PIN 64029-0272(LT); Part Lot 20 N/S Ontario St. Plan 703 Pelham as in RO112837 except RO107119 & Part 1 59R8830
Outstanding taxes, penalties, interest & tax sale fees owing as of November 1st, 2019: $25,581.15

This parcel measures 1.63 acres. It is landlocked and its proximity to an active railway corridor limits the residential building envelope. Abutting property owners may wish to acquire this land for use.

Analysis:

Vesting the property into municipal ownership will allow the Town to subsequently sell the property at an amount more attractive to potential buyers. Although the Town may have to sell the property for less than the amount of the arrears, this alternative provides the greatest potential recovery and will serve to re-instate the property as a taxable property on the assessment roll so that future municipal taxes can be realized.

Financial Considerations:

Pursuant to Sections 354(2) and (3) of the Act, following an unsuccessful tax sale, Council, on the recommendation of the Treasurer, can write-off all or a portion of the tax arrears and charge back the proportionate share of the unpaid taxes to the Region and school boards. The financial impact of each alternative is considered below:

Option 1- Re-list the property for tax sale at the full cancellation price:
The cost of relisting the property for tax sale is approximately $1,125 payable to Realtax. This amount is added to the tax account and can be recovered if the property sells successfully. The cancellation price (minimum tender) would be set to recover the full $25,581.15 outstanding plus $1,125 of additional tax sale fees, and any accumulated amounts up to the date of sale.

Option 2-Re-list the property for tax sale at a reduced cancellation price:
The cost of relisting the property for tax sale is approximately $1,125 payable to Realtax. This amount is added to the tax account and can be recovered if the property sells successfully. The cancellation price (minimum tender) can be reduced by writing-off all or a portion of the arrears. However, any of the arrears written-off under this alternative will no longer be recoverable. If the Town chooses to write-off all interest, penalty and taxes outstanding, the Town's share of the write-off is approximately $13,658 which consists of $4,762 of taxes and $8,896 of interest and penalty. The new cancellation price would be set at approximately $4,800, which would recover the cost of all outstanding tax sale fees. Any amount received that exceeds the cancellation price is forfeited to the Courts and cannot be collected by the Town.

Option 3-Register a Notice of Vesting and sell the property on the market:
By vesting the property, all outstanding taxes, penalties, interest and tax sale fees owing will be written-off. The uncollected taxes written-off will be charged back to the Region and school boards proportionately. The Town's share of the write-off is $17,225 which consists of $3,567 of tax sale fees, $8,896 of interest and penalties and $4,762 of taxes plus any accumulated taxes, penalties and interest after November 1st, 2019. This alternative provides the greatest opportunity for recovery, as the Town is able to list the property for an amount more attractive to potential buyers and can recover more than the cancellation price listed in Option 2. Additional fees will be incurred to sell the property on the real estate market and the Town must pay a proportionate share of the proceeds from the sale to the Region and school boards, up to the amount of taxes previously written-off.

Alternatives Reviewed:

Option 1-Re-list the property for tax sale at the full cancellation price:
The Town may re-advertise the property for tax sale, pursuant to Section 380.1 of the Act, for the full cancellation price of $25,581.15 plus any accumulated taxes, interest, penalties and tax sale fees to date. By relisting the property for tax sale, the Town is bound by the strict tax sale guidelines set out in the Municipal Tax Sale Rules. Under this alternative the Town does not take ownership of the property and therefore, is not responsible for the risks of ownership. However, considering the prior failed tax sale attempt, combined with the subsequent increase in cancellation price, the chance of receiving future tender bids under this alternative is considered to be low.

Option 2- Re-list the property for tax sale at a reduced cancellation price:
The Town may re-advertise the property for tax sale, pursuant to Section 380.1 of the Act, for a reduced cancellation price. All outstanding interest, penalty and taxes can be written-off, the Town's share of this write-off is $13,658. By relisting the property for tax sale, the Town, is bound by the strict tax sale guidelines set out in the Municipal Tax Sale Rules and can only recover the amount of the cancellation price. Therefore, if the highest tender amount exceeds the new cancellation price of $4,800, these surplus funds will be forfeited to the Courts and the Town will not be eligible to redeem them. Under this alternative the Town does not take ownership of the property and therefore, is not responsible for the risks of ownership but limits the recovery available.

Option 3-Register a Notice of Vesting and sell the property on the market:
Pursuant to Section 379 (5b) (7.1) of the Act, the Town may register on title a Notice of Vesting in the name of the municipality, transferring the ownership and

associated risks to the Town. Under this alternative any outstanding taxes are written off pursuant to Section 354(2) and (3) of the Act and charged back proportionately to the Region and school boards. The Town's share of this write-off is $17,225. Following vesting, the Town may subsequently sell the municipal land on the market for an amount more attractive to potential purchasers. Under this alternative the Town is not bound by the strict tax sale guidelines set out in the Municipal Tax Sale Rules. This alternative provides the greatest opportunity for recovery, as the Town can recover more than the cancellation price. Additional fees will be incurred to sell the property on the real estate market and the Town must pay a proportionate share of the proceeds from the sale, to the Region and school boards, up to the amount previously written-off.

If the municipality has not registered a Notice of Vesting or re-advertised the property for tax sale within two years of the tax sale date the whole process is deemed to have been cancelled.

Strategic Plan Relationship: Financial Sustainability

Although the Town may have to sell the property for less than the amount of the arrears, this process will serve to recover a portion of the outstanding balance and re-instate this property as a taxable property on the assessment roll, so that future municipal taxes can be realized.

Consultation:

Realtax was consulted and provided the Town with the options available following the unsuccessful tax sale.

Other Pertinent Reports/Attachments:

Appendix A Property Map and Description

Prepared and Recommended by:

Teresa Quinlin, MBA, CPA, CA
Director of Corporate Services/Treasurer

Prepared and Submitted by:

David Cribbs, BA, MA, JD, MPA
Chief Administrative Officer

Property Information

Municipality	Town of Pelham
File Number	17-02
Roll Number	27 32 010 016 12510 0000
Minimum Tender Amount	
Municipal Location	Not Assigned
Property Identification Number	64029-0272 (LT)
Brief legal description	Part Lot 20 N/S Ontario St Plan 703 Pelham as in RO112837 except RO107119 & Part 1 59R8830
Annual Taxes	$1,390.98
Assessed value	$109,000
Approximate property size per Assessment Roll	1.63 Acres
Is the property on a lake or a bay or a river?	No
Is the property accessible by a public or private road or a right-of-way?	No
Is there a house on the property?	No
Is there some other structure on the property?	No
Zoning	RV1 (Residential Village 1) – Section 9 https://www.pelham.ca/en/how-might-I/Zoning-By-law.aspx
With the existing zoning, is it possible to obtain a building permit?	No - property must have frontage on a public street. This can be corrected through a boundary adjustment (consent application)
Is it possible to have the property re-zoned?	Depends
For further information regarding Zoning, contact:	Curtis Thompson – Planner (905) 892-2607 ex. 324
Additional information	Landlocked Proximity to active railway corridor limits residential building envelope (23m setback in effect)

Maps and pictures are provided as a courtesy only and the municipality makes no warranties as to the accuracy of this information. Boundaries on aerial photos may be skewed.

Subject Parcel: 2732 010 016 12510