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Town of Markham Drive-Through Facilities Design Guidelines

Background Report

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1.0 Introduction and Rationale

This background report has been prepared for the Town of Markham to provide the rationale behind the preparation of urban design guidelines for drive-through facilities. As drive-through facilities have become more prevalent within the urban landscape of Ontario, the GTA, and Markham, increasing concern has arisen relating to some of the adverse impacts associated with an auto-oriented use of this nature. Impacts generally attributed to drive-throughs include, but are not limited to: pedestrian safety; traffic & circulation; noise; air pollution; and built form. These impacts are particularly relevant in light of recent Provincial Policy direction which promotes healthy, livable and safe communities. Consequently, there is a need to establish a design framework for new development drive-through development applications and redevelopment projects.

As a means of mitigating impacts, and maintaining the intent of its Official Plan, Markham requires a set of drive-through design guidelines, specifically tailored to the Town's needs and circumstances, which can be utilized during pre-consultation and development review processes. These guidelines will be applied to all development applications in Markham for drive-through facilities and associated parking and stacking lanes. Furthermore, these guidelines will inform a set of zoning provisions to be prepared by Town staff. It is anticipated that these guidelines will assist in successfully mitigating any adverse impacts that may result from the potential development of drive-through facilities as well as maintaining the intent of the Markham Official Plan as it relates to promoting compact, mixed use, pedestrian friendly and complete communities.

The research and analysis compiled in this background report serves as the rationale for the creation of a set of design guidelines applicable to drive-through facilities in Markham. In determining the rationale, this report outlines a number of tasks, which have been undertaken, including:

- an analysis of the existing Markham planning policy framework applicable to this study
- a review of drive-through facilities' characteristics and impacts
- a survey of Ontario municipalities' experiences with drive-through facilities, their current policies, by-law provisions, design guidelines and practices
- a review of existing drive-through facilities within Markham
- an examination of areas within Markham where prohibiting/discouraging drive-through facilities would be advantageous from a land use planning and urban design standpoint

2.0 Applicable Policy Framework

2.1 Provincial Policy Statement (PPS)

The Provincial Policy Statement provides a set of objectives and policies which present a high level framework. As related to regulating an auto-oriented commercial land use, policies within the Building Strong Communities section encourage efficient land use patterns which promote liveability, healthy communities and the protection of public health and safety. Specific references from the PPS are quoted below:

1.1.1 c) avoiding development and land use patterns which may cause environmental or public health and safety concerns.

1.5.1 a) planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, and facilitate pedestrian and non-motorized movement, including but not limited to, walking and cycling.

2.2 Town of Markham Official Plan (Office Consolidation July 2005)

The Markham Official Plan contains a comprehensive set of goals and policies relevant to this assignment. The Plan provides a policy framework, which promotes the establishment of design guidelines to specifically regulate commercial areas. Moreover, throughout the Official Plan, goals and policies are in place, which speak to traffic, urban form, the commercial/residential interface, air quality, noise, odour and pedestrian safety. Upon adoption, the design guidelines for drive-through facilities will reflect this policy framework and reinforce the goals and general intent of the Official Plan. The following is a summary analysis of existing policy.

Section 2 of the Official Plan provides the following:

2.1.1 d) The Town shall endeavour to maintain and improve the physical character and appearance of existing communities.

2.1.1 e) It will be an objective of Council to foster the development of an environment that will enhance the state of well being and the quality of life for residents of the Town and to pursue human services policies that will meet people's changing needs and promote and maintain a healthy community in keeping with the economic resources of the Town.

2.2 i) Every effort will be made to enhance urban amenity through appropriate location of various land uses, performance standards, and site plan control approval.

2.2 ii) The effects of noise, odour, dust, fumes, vibration, inappropriate lighting or signs, refuse matter or waste, invasion of privacy, unnecessary overshadowing, interference with radio or television reception, unsightly appearance, unsightly outside storage or display or other obnoxious features of land use will be controlled to ensure public health and safety, and to minimize incompatibility between land uses.

2.3 a) To ensure the best possible appearance for all existing and future development in the communities and in the Town at large within the context of the natural landscape.

2.3 b) i) To encourage good building and landscape design in sympathy with the distinct character of the communities and with the natural features of the landscape.

2.3 b) ii) To restrict and prohibit development which is inappropriate to the surrounding area.

2.3 b) iv) To set an example of good design by requiring and providing well designed Town and public facilities, services, works and appurtenances.

2.3.1 e) Landscaped buffers may be required by the Town for purposes of screening or separating adjacent land uses.

Section 3 of the Official Plan provides the following:

3.4.2 a) To identify locations, and to establish policies, to guide commercial development resulting from growth within the Town and the surrounding region, and from emerging trends in the commercial sector.

3.4.2 c) To develop and implement urban design guidelines to guide commercial development.

3.4.2 e) To facilitate the safe and efficient movement of pedestrians and vehicles within commercial areas, and on adjacent roads.

3.4.2 f) To promote and maintain high aesthetic, urban design and functional standards for commercial development.

3.4.4.1 a) Commercial development shall be compatible with uses on adjoining lands and in the vicinity. In determining compatibility, regard shall be had to possible detrimental impacts on neighbouring uses by virtue of noise, odour, dust, fumes, vibration, lighting, signs, refuse or waste, hazards, shadowing, unsightly appearance, unsightly storage or display or any similar features contributing to a detrimental impact.

3.4.4.4 a) The Town regards good urban design as essential to ensuring attractive, compatible, functional and successful commercial development. Urban design considerations including the quality of the public realm, the siting, scale and massing of built form elements, the creation of safe and attractive pedestrian environments, the use of complementary landscaping and the appropriate integration of parking and servicing facilities are key factors in determining the acceptability of commercial development and its approval.

3.4.4.4 b) Recognizing the importance of urban design, the Town shall adopt and implement urban design guidelines to establish specific design criteria, which commercial development and redevelopment shall be required to be consistent with.

3.4.4.4 c) The urban design guidelines shall establish criteria for matters such as:

- built form, massing and appearance,*
- building placement, setbacks and encroachments,*
- vehicular circulation, parking access and servicing,*

- *pedestrian access, circulation and amenity areas,*
- *connectivity or integration of adjacent developments*
- *handicapped accessibility,*
- *landscaping requirements, tree preservation,*
- *streetscape treatments with site edge conditions,*
- *signage, and,*
- *lighting.*

2.3 Zoning By-law

The Town of Markham Zoning By-law 177-96 generally permits drive-through facilities as an accessory use provided it is operated in conjunction with the main use of the principal building on the property. As no specific zoning provisions or standards exist for drive-through facilities, current applications are subject to applicable zoning and Site Plan Control. Running concurrently to the design guidelines process, the Town of Markham will be preparing a set of implementing zoning provisions. These zoning regulations will have the effect of implementing the design guidelines. This report will look at available zoning provisions in greater detail in Section 6.

2.4 Staff Report SD-03-016698

Staff Report SD-09-016698 explored the potential regulation of drive through facilities. Based on a legal opinion prepared by Ritchie Ketcheson Hart & Biggart LLP, the staff report noted that Ontario Municipal Board (OMB) decisions show that efforts to establish a total ban on drive-through facilities would prompt strenuous resistance from the drive-through industry through OMB appeals. It was concluded that efforts to limit the location and proliferation of this type of land use through zoning control have been more widely accepted when used in conjunction with design controls. Based on this conclusion, the design guidelines will not only regulate the building placement, stacking options, buffering features, landscaping and street frontage treatments, but also identify appropriate locations where this land use can be best integrated into the existing urban fabric.

Summary Comments

The policy framework provided by the PPS establishes the importance of pedestrian movement and avoiding land use patterns that may be adverse to public safety. The drive-through urban design guidelines will maintain consistency with this framework, which promotes developments that:

- *facilitate convenient pedestrian and bicycle access into the site, while reducing pedestrian and vehicular conflicts*
- *create pleasant and pedestrian supportive streetscapes*

Section 2 of the Town of Markham Official Plan stresses the importance of maintaining and improving the physical character and appearance of existing communities. Additionally, it requires efforts to be made to control the adverse effects of noise,

odour, and light and mitigate any compatibility issues between land uses as generated by the urban environment. The OP promotes restricting or prohibiting development which is inappropriate to surrounding land uses.

This policy direction supports the intent of the drive-through urban design guidelines exercise. As a means of maintaining the intent of the official plan, the guidelines will promote building placement and buffering features, which mitigate potential land use conflicts, and where appropriate, prohibit/restrict the establishment of drive-through facilities in certain areas within Markham.

With regard to commercial areas discussed under Section 3, the Official Plan promotes a high aesthetic standard as well as direction to adopt guidelines to ensure that standard. Additionally, the policy promotes the strategic placement of commercial areas, as well as maintaining regard for the influence this land use has on existing residential neighbourhoods.

The framework provided above promotes the intent of this urban design exercise as it relates to appropriately guiding the development of commercial areas. The urban design guidelines for drive-through facilities will reinforce this framework by:

- *establishing design and functional standards*
- *identifying suitable commercial areas*
- *determining separation distances to residential areas*

3.0 Types of Drive-Through Facilities and their Characteristics

Modern drive-through facilities have evolved from the 1950's and 1960's drive-in restaurants. Many of these early drive-through operations were located on interstate freeway interchanges. However, over the past 30 years, drive-through facilities have emerged as a common land use within commercial/employment areas in Ontario, elsewhere in the GTA, and in Markham. Drive-throughs have been the fastest growing area in fast food sales in the past several years. The retail and development industries have been constructing more drive-throughs, and retrofitting existing facilities to add drive throughs as a means of better meeting the needs of their clientele. It is estimated that between 1994 and 2001, drive-through traffic in Canada has increased by 250%. Generally, drive-through restaurants have been well received by the travelling public as they provide convenience and improved safety at night, particularly with financial institutions. Additionally, drive-through facilities assist the physically disabled in accessing restaurants and financial institutions. In our analysis, the two most prevalent forms of drive-through facilities in Markham, and the GTA are as follows:

3.1 Restaurants

The fast food restaurant style of drive-through facility is the most common in the GTA and in Markham. The following is a summary of findings based on the "Joint Municipal Study of Fast Food Restaurant Drive-through and Parking", which was

prepared by SRM Associates Inc. for Durham Region, and background research done in the cities of Toronto and London in preparing their own town-wide drive-through guidelines:

- Take out restaurants: the food is carried and consumed outside the building;
- Combination eat-in and take-out restaurant: food is consumed within the building as well as outside the premises;
- Two restaurants combined: separate drive-through windows are allocated to each restaurant. The restaurants share access and parking;
- Drive-through restaurants located on service station sites: the restaurant structure may be combined with the service station kiosk or may be free standing;
- Donut shop drive-throughs are generally in the 250m² to 300m² building size group;
- Convenience restaurants with drive-throughs are between 300m² to 500m² in floor area;
- Restaurants which offer coffee/breakfast foods are busiest between 7:45am – 8:25am, with a peak between 8:15am – 8:30am;
- Less parking is required for drive-through restaurants compared to eat-in restaurants because the majority of customers stay within their vehicles.
- If the queue for drive-through restaurants reaches 8-10 vehicles, customers have a tendency to park and walk in; and
- Restaurants with both sit-in and drive-through components increase the chances of vehicle / pedestrian conflicts.

3.2 Financial Institutions

Financial institutions have adopted the drive-through model in a similar manner to restaurants. Due to the nature of use associated with financial institutions, they have been effective at allowing the travelling public to access their services without having to get out of the vehicle. Drive-through financial institutions have more flexibility over their restaurant counterparts when it comes to building design due to their buildings' internal layout not having to necessarily be oriented towards the drive-through lane, the non-existent requirement of an order/voice box, and less traffic.

As a function of their use, drive-through financial institutions have often less impact on their surroundings. Characteristics of drive-through financial institutions include:

- The addition of a drive-through results in a 17-27% reduction in traffic flows because visitors instead visit in non-open hours;
- Average service time is 105 seconds;
- 75% of the time there is no more than 3 vehicles in queue;
- There is no order or voice box, minimizing noise impacts, stacking lengths and eliminates the processing time between order and pickup associated with a restaurant format drive-throughs;
- Financial institutions are not conducive to community gathering as customers have a very specific purpose and do not linger after the fact; and

- In some instances, there may be a stand-alone bank machine without an associated building.

Sources:

"Joint Municipal Study of Fast Food Restaurant Drive-through and Parking" SRM Associates Inc, February 2000.

"City of London Official Plan / Zoning Refinement Review – regulation of Drive-through Facilities" May, 2008

3.3 Emerging Sectors

As drive throughs have become more prevalent for retailers, additional sectors have been emerging; including pharmacies, dry cleaners, convenience stores and other retail stores. In this regard, it is noted that Markham currently includes one drive-through pharmacy.

3.4 Drive-through Formats in Markham

An analysis of existing drive-through facilities throughout Markham has revealed that this type of facility can be broken down into a function of their use, as well as a function of their format or site configuration. In many instances, there is a considerable amount of cross-over in terms of different uses maintaining the same on-site layout, and visa-versa. Within Markham, the following drive-through configurations have been identified:

- stand alone buildings
- stand along buildings on pads within a commercial plaza
- part of an institutional complex
- part of a gas-bar
- part of a commercial building
- attached restaurants with double drive-throughs

Summary Comments

Drive-through facilities are expected to continue to be an important element of automobile-oriented commercial uses. They have become more popular over time and are well used by the travelling public. As this type of development evolves, it is anticipated that there will be new varieties in terms of use and form. Dependant upon the use and form, the issues associated with the facility will vary. In this respect, in order to effectively regulate drive-through facilities through design, the guidelines must be flexible and maintain regard for the different uses and configurations of drive-through facilities.

4.0 Issues Associated with Drive-Through Facilities

The retail sector has been using drive-throughs consistently as a result of increased demand in Ontario and the GTA. However, some concerns have been expressed regarding these facilities, which focus on some of their adverse impacts. These impacts are broken down into four general categories: on adjacent uses; on the streetscape, site planning and traffic/stacking; and environmental concerns.

4.1 Impacts on adjacent land uses - specifically residential uses

Drive-through facilities affect adjacent properties in a variety of ways:

- noise from idling cars, the placing of orders at the order box, and car stereos
- light emissions from on-site lighting, vehicle headlights in stacking lanes, and pick-up windows
- odour from food-serving establishments
- exhaust fumes from cars



This Tim Hortons / Wendy's combination drive-through at Apple Creek Boulevard & Woodbine shows the intensity of automobile use



This Tim Hortons / Gas Bar drive-through at Markham Road & 16th Avenue shows an example of a corner site adjacent residential properties.

4.2 Impacts on the streetscape and urban design concerns

Drive-through facilities could potentially create negative impacts on the streetscape by potentially presenting a development form not supportive of pedestrian friendly street environment. The following issues are identified:

- the site may become dominated by vehicles and asphalt due to the car-intensive use
- if designed with a stacking or circulation lane which separates the building from the street, drive-throughs detract from a pedestrian and transit supportive streetscape
- signage may not be consistent with the visual character of the neighbourhood
- increased traffic volumes generally adds to potential vehicular/pedestrian conflicts
- wrap around stacking lanes may create on-site safety concerns, with pedestrians potentially being forced to navigate the site by cutting across these lanes



This McDonalds at highway 7 & McCowan shows the amount of space which often needs to be allocated towards vehicles and asphalt.



This McDonalds at Markham Road and 16th Avenue shows how a stacking lane can separate customers from the entrance to the restaurant thereby creating a pedestrian conflict.



This Tim Hortons at Highway 7 & McCowan provides an example of a stacking lane which separates the building from the street



This Royal Bank at Markham Road & 14th Avenue provides a good example of appropriately addressing a street corner with stacking lanes situated in the rear part of the site, away from the intersection



This Wendy's at Warden & Steeles provides good street presence, landscaping and pedestrian connectivity to the sidewalk and transit along Steeles Avenue



This Royal Bank at Woodbine & 16th Avenue properly addresses the street corner while maintaining the community architectural theme

4.3 Site planning, vehicular circulation and traffic concerns

Remedies are required for the potential adverse effects that may be created on a drive-through site related to traffic, access and internal circulation. The following should be considered:

- if stacking lanes are not long enough, traffic can back up onto the public road or block sidewalks
- related to the above, turning movements from a public road onto the site can be obstructed by full stacking lanes which can result in disruptions to vehicular movement on the public road
- traffic in stacking lanes should not restrict access to parking stalls
- with several turning areas and realignments, stacking lanes may become difficult to navigate and result in traffic problems within the site
- narrow stacking lanes restrict vehicle access particularly in the winter
- double or multiple drive-throughs may affect the amount of landscaping areas available on the site
- service areas should be screened from view from public areas



This Burger King at Kennedy & Corvette provides an example of a garbage enclosure that is placed within the front yard and in a highly visible manner.



This McDonald's double drive-through Markham Road & Denison shows the amount of area required for a double lane as well as a wrap-around stacking lane that separates the building from the street corner.



Part of a larger commercial block, this Royal Bank at Highway 407 & 9th Line provides good landscaping and pedestrian connectivity on a corner lot.



This TD Bank at McCowan and Bur Oak provides good street presence as well as pedestrian linkage to the street.

4.4 Environmental concerns

Drive-through facilities influence the environment through a variety of means, including:

- vehicle emissions may contribute to poor air quality by idling vehicles – this matter is of particular interest when drive throughs are located in close proximity to residential properties
- additional amounts of litter from queuing vehicles and/or on-site parked cars
- the large asphalted areas required for parking contribute to larger areas of site surfaces with low permeability

In this regard, it is important to note that in 2008, Tim Hortons retained RWDI Consulting Engineers and Scientists to conduct an “Air Quality Assessment” of their drive-through facilities in Ontario. This study concluded that eliminating drive-throughs would have no air quality benefit to the public, primarily due to the following:

- Extra emissions from vehicles travelling the distance to and from a parking space
- Additional emissions from starting up the vehicle

Summary Comments

If not planned and designed appropriately, drive-through facilities may present a variety of adverse effects including impacts on: surrounding uses; the streetscape, site functionality; and potentially on the environment. In order to successfully mitigate these impacts, the design guidelines must maintain regard for all aspects of site design, including location and length of stacking lanes, site access (vehicular/pedestrian), relationship to adjacent uses – particularly residential, building location, signage and lighting, location of service areas, and landscaping and buffering. As well, the public streetscape should be considered in the overall design intent of a drive-through facility.

By collectively addressing all these aspects of drive-through facilities, the guidelines will help address above noted issues, which will be in keeping with Markham’s Official Plan policies. As well, the guidelines will promote pedestrian friendly streetscapes and thus assist in achieving more complete communities.

5.0 Other Ontario Municipalities

As a means of establishing an appropriate comparative framework, an analysis of other Ontario municipalities has been completed to identify other policies, by-laws and design guidelines that have been prepared, and are being used, with a view to identifying best practices, and assessing suitable applicability to the Town of Markham.

This analysis will feed into the creation of a set of urban design guidelines that are based on the most current information available as well as assist the Town of Markham in devising an appropriate Zoning By-law framework.

5.1 City of Toronto

The City of Toronto has prepared a set of preliminary drive-through design guidelines and an implementing zoning by-law amendment. As noted by Marsha Kelmans in the Urban Design Division of Toronto, urban design guidelines for drive-through facilities are currently in final draft form and are scheduled to be presented to the community and council this fall.

The Zoning By-law amendment was appealed to the Ontario Municipal Board by the industry, but was upheld in the City's favour in 2006. The zoning changes have defined drive-through facilities as a separate and distinct land use, and established provisions to regulate the locations where such uses are permitted. Toronto prohibits drive-through facilities in residential or mixed use zones containing residential permissions. Additionally, drive-through facilities are not to be permitted in the designated Centres of North York, Scarborough, Etobicoke, Yonge/Eglinton and the Downtown of the former City of Toronto. These prohibitions apply regardless of whether a development application has the ability to meet the proposed urban design guidelines.

The City of Toronto Zoning By-law permits the development of drive-through facilities in industrial and commercial zones provided that a 30 meter separation distance is provided from all parts of the drive-through facility, including stacking lanes, to the edge of the lot line of any residential use or zone where residential uses are permitted.

5.2 City of Mississauga

In January 2005, the City of Mississauga adopted in principle the "Drive-through Stacking Lanes, Design Reference Notes" manual and design guidelines. Mississauga has been using this document in evaluating development applications for drive-throughs until such time as new guidelines, Zoning By-law Amendments and Official Plan Amendments have come into full force and effect by Council. The zoning provisions amend the Former Town of Mississauga (By-law 5500), the Former Town of Streetsville (By-law 65-30) and Former Town of Port Credit (By-law 1227).

The zoning provisions and guidelines set standards for stacking lanes, signage, access, noise and setbacks. Highlights include the following:

Stacking Lanes

- are not to be located in the front or exterior side yard
- be defined by a min 3m landscaped island abutting the stacking lane

Signage

- anti litter signage should be incorporated into the site, visible to vehicles in stacking lanes and parking areas.

Access

- access points into the site should be as far away from an intersection as possible
- access points into the stacking lanes should be located as deeply into the site as possible

Setbacks (from residential)

- convenience restaurant (20m)
- car wash (50m)
- banks / pharmacies (4.5m – 6m) setback depending on which zone category
- stacking space (16m)

Noise (adjacent to residential)

- 2.4m noise barrier or combination of barrier/berming to mitigate noise, and also to minimize the visual impact on surrounding residential areas.

Mississauga intends to eventually adopt a complete set of design guidelines beyond the design brief noted above. As well, associated Zoning and Official Plan Amendments will be explored in the future.

It is noted that the City of Mississauga Official Plan restricts drive-through restaurants from main street commercial areas such as in Streetsville and Port Credit.

5.3 City of Ottawa

In May 2006, the City of Ottawa adopted a set of Urban Design Guidelines for Drive-through Facilities. This document followed the policy framework created by the City of Ottawa Official Plan. The Ottawa Official Plan provides the following:

“New gas bars, service stations, automobile sales and drive-through facilities will not be permitted on Traditional Mainstreets in order to protect and enhance the pedestrian environment. However, there may be exceptional circumstances where a drive-through facility may be located on a Traditional Mainstreet where the intent of this Official Plan regarding Traditional Mainstreets can otherwise be preserved.”

However, based on OMB Decision #2649 – September 21, 2006, the Official Plan language was revised to include drive-through facilities as a permitted use on Arterial Mainstreets pending compliance with the design objectives in Section 2.5.1, any applicable council-approved design guidelines, and compatibility policies set out in Section 4.11.

The City of Ottawa Zoning By-law defines a drive-through facility as a separate land use. Locations of where the use can be allowed are regulated as well in keeping with their Official Plan Policy. Drive-through facilities are not permitted in the (MD) Mixed Downtown Zone, (LC) Local Commercial and (TM) Traditional Mainstreet Zones. Additionally, stacking lanes are not permitted within 3 metres of a lot line abutting a residential zone. Furthermore, where a stacking line, drive-through window or order board is located 3 metres or more from a residential zone, but is still within a yard abutting a residential zone, it must be screened from view from that residential zone by an opaque screen with a minimum height of 1.5m.

5.4 City of Kingston

The City of Kingston is currently reviewing their policy on drive-through guidelines, with the intent of adopting drive-through facility urban design guidelines in the near future. Currently, their Official Plan policy “discourages” drive-through facilities town-wide. This policy has been appealed to the Ontario Municipal Board by the Canadian Petroleum Products Institute.

The City of Kingston currently has five zoning by-laws in place. Only one of those by-laws contains general provisions speaking to drive-through facilities. This zoning by-law regulates the proximity and buffering of the facilities to residential areas. Specifically, drive-through facilities are not permitted within 50m of a residential zone, or zone that permits a residential use. Additionally, a 3m wide planting strip must be provided along the lot line between the property containing the drive-through service facility and a residential use or zone that permits a residential use.

5.5 Town of Oakville

The Town of Oakville adopted a set of drive-through urban design guidelines in June 2003. There are no plans to review the Official Plan policy as it pertains to drive-through facilities. The Town of Oakville Drive-through Guidelines contain a total of 39 guidelines covering: stacking lanes; building and site organization; streetscapes and signage; and landscaping.

In terms of contributing to a pedestrian supportive and high quality urban environment, the guidelines promote the following:

- locating access points away from the intersection
- minimize access points into site
- well articulated pedestrian routes
- 10 stacking spaces minimum for restaurants
- 4 stacking spaces minimum for financial institutions
- provide a minimum 7.5m landscaped buffer zone along each yard abutting residential

- provide a 1.5m perimeter landscaped strip along lot lines abutting a residential zone,
- provide a 1.8m high screen fence along the property line of adjacent properties
- place the building at or near the street edge frontage
- provide direct pedestrian access from the public realm
- well articulated facades adjacent public streets and spaces
- outdoor seating spaces and patios next to the building and close to the street
- corner building that address both streets
- signage that is incorporated into the building facades

Additional highlights include, prohibiting drive-through facilities within certain areas of the Town and establishing a minimum lot area for drive-through facilities to allow for sufficient space to buffer and accommodate stacking lanes on site.

Brenda Stan of the Town staff stated that Oakville has begun a process of preparing a zoning by-law as a means of implementing the urban design guidelines. In summary, the staff report to the Planning and Development Council meeting on September 14th, 2009 provided the following:

- The Town of Oakville conducted an on-line survey of residents and established that a significant number of residents (86%) use drive-through facilities as a result of their convenience. Additionally, the survey identified that the top four concerns associated with drive-through facilities in order of importance are:
 - Traffic;
 - Air Quality;
 - Litter; and
 - Noise
- The Staff Report outlined the proposed direction of the implementing zoning by-law under the following headings:

Locational Criteria

- That drive-throughs be restricted from locating within the C3R (commercial/residential) zones of Downtown Oakville, Bronte and Kerr Villages, and further, that drive-throughs be restricted from locating within the Midtown Oakville, Palermo Village and the Uptown Core growth areas.

Separation distance from adjacent residential uses

- A minimum 15m setback is recommended for all yards of a drive-through facility, including the order station (intercom ordering station) which abuts a residential zone.

Landscaped Buffers and Fencing

- That a 7.62m wide landscaped buffer be required for all yards abutting a residential zone, and further, that a 1.8m high solid board fence or masonry wall be provided along all property boundaries abutting a residential zone for the purpose of screening the drive-through use.

Stacking or Queuing Spaces

- For fast food eating establishments a minimum of 10 vehicle stacking spaces be provided, 7 of which shall be accommodated between the entrance to the stacking lane and the order station, and further, that for all other drive-throughs a minimum of 4 vehicle stacking spaces shall be provided.

Minimum Site Size

- That drive-throughs not be permitted on sites less than 0.3 hectares in size when abutting residential zones.

5.6 City of Waterloo

In March 2008, the City of Waterloo adopted OPA 72, which implemented the Bill 51 policies relating to pedestrianism, streetscapes, safety and design guidelines implementation policies. The goals of OPA 72 included the following:

1. To promote a high standard of urban design
2. To respect site context and enhance sense of place
3. To promote connectivity and interaction
4. To promote creativity and innovation
5. To encourage sustainable design

These policies formed the basis for a set of town wide urban design guidelines. Within those guidelines, there are specific guidelines for drive-through facilities, which speak to parking, pedestrian crossing, stacking, signage and access. Currently, the guidelines are in final draft form, and are scheduled to be presented to Council and the community in late September 2009.

Ryan Mounsey of the Town staff stated that pending approval, the City of Waterloo intends on referencing the Urban Design Manual as part of the Official Plan review. There is no scheduled work to be completed on updating the Zoning By-law provisions as a means of implementing the town-wide urban design standards. The Waterloo guidelines focus on building location, stacking lanes, signage and landscaping.

5.7 City of Kitchener

Kitchener currently uses their Urban Design Manual, which was adopted by Council in 1999 as their reference document for drive-through facilities. Michael Palmer of the City has indicated that this manual doesn't specifically regulate drive-throughs and as industry requirements have changed, they have begun preparing an urban design brief, specific to drive-through facilities which will be incorporated into the City-wide Urban Design Manual.

It is anticipated that the brief will be presented to the Development Services Committee sometime in the fall. As such, the document has not been made public. There is no plan to adopt an implementing zoning by-law, but the draft guidelines may include recommendations for separation distances from residential areas.

Currently, the City of Kitchener Official Plan does not provide any framework for drive-through facilities. Within the General Provisions, the Kitchener Zoning By-law requires that:

5.26 All commercial uses having a drive-through facility which contains an intercom order station shall comply with the Ministry of the Environment's noise levels for stationary sources of noise. Where a drive-through facility contains an intercom order station and is situated within 60 metres of a Residential Zone, or an Institutional Zone except for lands fully developed for an Arena, Auditorium, Health Clinic, Health Office, Medical Laboratory, Social Services Establishment, Stadium, or Veterinary Services, the drive-through facility shall not be permitted unless:

a) a noise study certified by a professional engineer demonstrates that noise levels will not exceed the maximum levels specified by the Ministry of the Environment in publication NPC-206 as amended from time to time;

b) a noise study certified by a professional engineer demonstrates that noise levels will not exceed the maximum levels set out in clause a) above by the employment of measures to mitigate noise and such measures are employed prior to occupancy of the drive-through facility; or

c) a noise wall certified by a professional engineer is installed prior to occupancy of the drive-through facility which will ensure that noise levels do not exceed the maximum levels set out in clause a) above.

5.8 City of Oshawa

A "Joint Municipal Study of Fast Food Restaurant Drive-through and Parking" was prepared for municipalities in Durham Region on February 2000 by SRM Associates Inc. This document focuses on standards to evaluate drive-through developments in the City. This document provides a basis to establish minimum by-law standards and guidelines for performance standards. The report focuses on standards for parking and stacking.

The City of Oshawa Official Plan does not contain any policies relating prohibiting drive-through facilities. However, drive-through facilities are not permitted in the Central Business District and Mixed Use zones, with financial institutions being exempt. The City of Oshawa does not have any drive through guidelines in place at this time.

5.9 City of London

In June 2008, the City of London adopted a set of urban design guidelines and associated implementing Official Plan and Zoning by-law amendments. Prior to adoption, the Official Plan did not contain specific policies regulating drive-through facilities. In the absence of those policies, the general commercial and urban design policies spoke to land use compatibility, beautification of streetscapes and creating safe and healthy communities.

The implementing Official Plan amendment had two purposes. Firstly, the newly adopted design guidelines were referenced into the Official Plan as the primary means of mitigating any adverse impacts. Additionally, drive-through facilities were not permitted in the Business District Commercial and Convenience Commercial designations.

Furthermore, the Zoning By-law amendment had the effect of expanding the zone categories where drive-through facilities were not permitted. Those zones included the Downtown Area, Office Residential, Office Conversion, Business Park and Rural Settlement Commercial zones.

The general Provisions of the Zoning By-law were updated to include a requirement for a separation distance from a residential zone of 15m where a 2.4 m noise attenuation wall is provided, and 30m where a privacy fence is provided from a drive-through lane.

Based on their own background work, the City of London devised a set of revised stacking space standards which set out minimum space standards for specific retailers. This is summarized in the table below.

Coffee – Tim Horton's	12 spaces
Fast Food Group A –Burger King, McDonalds	11spaces
Fast Food Group B – Wendy's	9 spaces
Fast Food Group C – Harvey's	6 spaces
Automated Teller – Financial Institutions	4 spaces

Summary Comments

- *In many instances several municipalities have included language in their Official Plan which directly references their existing design guidelines document and the requirement to adhere to it.*
- *In some municipalities Official Plan language includes restrictions on locations where drive-through facilities are to be permitted. Typical restrictions apply to mainstreets, downtowns, and local commercial and dense commercial nodes.*
- *In many instances, the drive-through design guidelines also include locational criteria, outlining areas where drive-through facilities are not appropriate within the municipality.*
- *With regard to design guidelines, all municipalities surveyed either have guidelines in place, or are in the process of creating specific design guidelines for drive-through facilities. The guidelines vary on what aspects they regulate but generally speak to stacking lanes, site access (vehicular/pedestrian), relationship to adjacent uses, building location, signage and lighting, garbage enclosures and service areas, streetscapes and landscaping.*
- *With regard to zoning, the following common elements have been identified:*
 - *Majority of municipalities have taken steps to regulate drive-through facilities in all residential and mixed use land use zones. Depending on the structure of the Zoning By-law, other municipalities have restricted drive-through facilities in local/convenience commercial zones one would typically find within close proximity to residential areas, as well as downtown commercial/business nodes.*
 - *Many municipalities have established a general minimum distance separation between 30-50m from residential zones.*
 - *Minimum setback distances have been further utilized which address specific setback distances from the building, the order box and the stacking lane itself. Distances vary from 3m to 15m.*
 - *Many municipalities have included the requirement for fencing and noise attenuation. A few municipalities allow for minimized setback distances provided proper noise attenuation is provided. (i.e. 15m instead of 30m provided a 2.4m noise wall is provided.)*
 - *A few municipalities have adopted the requirement of a noise study for drive-through applications within a certain distance to residential. The City of London requires a noise study to be completed for any applications within 60m of residential properties.*
 - *Many municipalities are requiring a landscaped buffer along the property line abutting residential lands, ranging from 2m to 7.5m.*
 - *Similarly, municipalities often require the provision of landscaping between stacking lanes and on-site parking.*
 - *Most municipalities surveyed have restricted stacking lanes from being located within the front and exterior side yards.*
 - *Some municipalities have provided new standards for minimum stacking spaces. The City of London has further regulated stacking lanes by setting out minimums for specific retailers.*

6.0 Summary Observations and Considerations

The following matters will require further consideration and elaboration in the preparation of drive-through guidelines for the Town of Markham:

- Council adoption of design guidelines enhances their effectiveness as policy.
- Detailed Official Plan language pertaining to the regulation of drive-through facilities, and in what designations they are permitted, provides municipalities with a stronger policy framework for protecting their pedestrian-oriented areas.
- Outright prohibition of drive-through facilities on a town wide basis would probably not be held up before the Ontario Municipal Board, as stated in the legal opinion prepared by Ritchie Ketcheson Hart & Biggart LLP. In this regard, consideration should be given to identifying locations within Markham where drive-through facilities are to be allowed and where they should be prohibited. These locations include but are not limited to: Markham Centre, Historic Main Street and Heritage District areas.
- With regard to noise, other municipalities have updated either their Official Plan or Zoning By-law to include the requirement of a noise attenuation study when proposing a drive-through facility in proximity to a residential zone. The threshold distance varies from 30-50m.
- Minimum setback distances from residential and mixed use areas containing residential permissions have been utilized in most municipalities as a way to buffer/protect residential areas.
- Minimum lot areas for drive-through facilities have also been utilized to allow for sufficient space to adequately buffer and accommodate stacking lanes on site.
- With regard to stacking spaces, some municipalities have provided minimum stacking standards. Consideration may also be given to providing a maximum standard for stacking spaces as a means of optimizing stacking / parking areas to establish an appropriate balance between landscaping, building footprint and asphalt areas.
- Further consideration may be given to brand specific stacking requirements. The City of London has established a framework which requires varied minimum stacking spaces dependant upon the specific retailer.
- In keeping with its Official Plan, and as demonstrated with design guidelines for other municipalities dealing with drive-through facilities, Markham's design guidelines should help regulate the layout, built form and appearance of drive-through facilities and mitigate any adverse impacts. As such, the drive-through guidelines should primarily focus on the following:
 - setting a high standard of urban design
 - providing a pedestrian and transit supportive interface between the adjacent street/s and the building/s - location of the building/s within the site
 - measures to help animate the adjacent public streets and open spaces such as outdoor seating areas/patios

- location of entrances into the facility in terms of their relationship to the public realm such as streets and open spaces
- appropriate treatment of street facing building facades – visibility of the public areas of the building from adjacent streets
- location and length of stacking
- measures for avoiding any impacts on traffic on adjacent streets
- location of on-site parking in relation to the building and the stacking lane
- measures for avoiding any on-site pedestrian-vehicular conflicts
- landscaping and streetscaping, including buffering, noise attenuation and signage
- location of service areas including loading and garbage enclosures
- mitigating impacts on adjacent areas, particularly residential properties

Appendix 'A' - Photographic Inventory of Markham Drive-through Facilities

Highway 7 & 9th Line – Tim Hortons



Highway 7 & McCowan Road – McDonald's



Highway 7 & McCowan Road – Tim Hortons



Highway 7 (south side) – Royal Bank



Highway 407 & 9th Line – Royal Bank



Highway 407 & 9th Line – Starbucks Coffee



Highway 407 & 9th Line – TD Bank



Kennedy Road & Duffield Drive – Tim Hortons



Kennedy Road & Gorvette – Burger King



Kennedy Road (west side) - McDonalds



Markham Road & 14th Avenue – Royal Bank



Markham Road & Denison - McDonalds



Warden Avenue & Steeles Avenue - Wendy's



Woodbine Avenue & 16th Avenue (southeast corner) – Royal Bank



Woodbine Avenue & 16th Avenue (northeast corner) - CIBC



Woodbine Avenue & 16th Avenue (northeast corner # 2) – Tim Hortons



Woodbine Avenue & Apple Creek Boulevard – Wendy's / Tim Hortons



Woodbine Avenue & Denison Street – Swiss Chalet



Highway 7 & Warden Avenue - McDonalds



16th Avenue & Kennedy Road - Pharmacy



Markham Road & 16th Avenue (southwest corner) – Tim Hortons / Gas Bar



Markham Road & 16th Avenue (northeast corner) – McDonalds



Markham Road & Major MacKenzie Drive – Wendy's / Tim Hortons



Bur Oak Drive & McCowan (northwest corner) – Tim Hortons / Gas Bar



Bur Oak Drive & McCowan (southwest corner) – TD Bank



Yonge Street and Steeles Avenue – Tim Hortons / Gas Bar



Highway 7 east of Woodbine Avenue – Burger King



Woodbine Avenue – Tim Hortons / Wendy's

