

Attachment 3: Ellesmere Employment Study Final Report



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ELLESMERE EMPLOYMENT STUDY

Final Report – April 2015

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INDEX	<u>Page</u>
1. Introduction:	1
2. Context:	3
3. Development Applications:	9
4. Policy Framework:	10
Provincial Policy Statement and Provincial Plans	10
Ministry of the Environment	10
Official Plan and OPA 231	14
Zoning	18
5. Study Consultations:	22
City Staff	22
Public Consultations	22
MOE Engagement	24
6. Emerging Themes:	25
Economic Function	25
Land Use	26
Recycling	28
Scarborough Recycling and Recovery Uses	32
Recycling Zoning Regulation in Other Municipalities	33
Land Use Compatibility	35
7. 21 Principal Road at the Ontario Municipal Board	36
8. Options to Address Recycling/Recovery Use Compatibility	37
9. Conclusions	39

LIST OF MAPS

Map 1: Ellesmere Employment Study Area Map	3
Map 2: Toronto Official Plan 'Map 2 – Urban Structure' (Excerpt)	15
Map 3: Toronto Official Plan 'Land Use Plan' (Map 19 Excerpt)	16
Map 4: Official Plan – Land Use Plan from OPA 231	17
Map 5: Zoning Map	18
Map 6: Recycling Operations in Scarborough	33
Map 7: Sensitive Uses In/Adjacent to Study Area	35

LIST OF TABLES

Table 1: Development Applications within the Study Area	9
Table 2: Zone Permissions - By-law No. 24982	19
Table 3: Minor Variance Approvals	20
Table 4: Employment Industrial Zone (E) Permissions - By-law No. 569-2013	21
Table 5: Study Area Employment	25
Table 6: Establishments by Years at Present Location	26
Table 7: Components of the Municipal Waste Stream	29
Table 8(a): Components of Residential Construction Waste	31
Table 8(b): Components of Residential Construction Waste	31
Table 9: Recycling Operations in Scarborough	32

APPENDICES

Appendix 1:	Site and Zoning Information by Property	41
Appendix 2:	Designation and Zoning of Scarborough Recycling/Recovery Industries	44
Appendix 3:	References	45

1. Introduction

The Ellesmere Employment Study Area is comprised of 41 hectares of established, successful employment uses within the South West Scarborough Employment District. Encompassing lands north and south of Ellesmere Road and Canadian Road, between Warden Avenue and Birchmount Avenue, the Study Area includes primarily lands designated as *Employment Areas* by the City of Toronto Official Plan (OP), and forms part of an *Employment District* as shown on the OP Urban Structure Map.



These lands are retained as employment lands through the City's recent OP Municipal Comprehensive Review exercise (as implemented in December 2013 through Official Plan Amendment (OPA) 231), and are designated partially *Core Employment Areas* and partially *General Employment Areas*.

In light of existing uses and recent applications to expand and establish new permitted sensitive uses in the Study Area, including schools, places of worship and community centres, as well as a current site plan application to establish a construction and demolition waste recycling facility, staff were directed to assess the compatibility of established employment uses with the array of use permissions that exist through in-force zoning in the Study Area, as well as the compatibility of land use permissions with the City's policy direction established through OPA 231 and to be implemented through the City's comprehensive Zoning By-law 569-2013.

Staff have given particular consideration to recycling use permissions in the Study Area. Both the former Scarborough and new consolidated City of Toronto by-laws permit recycling/recovery facilities through much of the Study Area. The former Scarborough By-law generally permits sensitive uses such as education and training facilities, places of worship in certain locations, and community centres on most of the lands still regulated thereby. Heavier industries, including some recycling/recovery uses, are not compatible with sensitive uses without generous separation

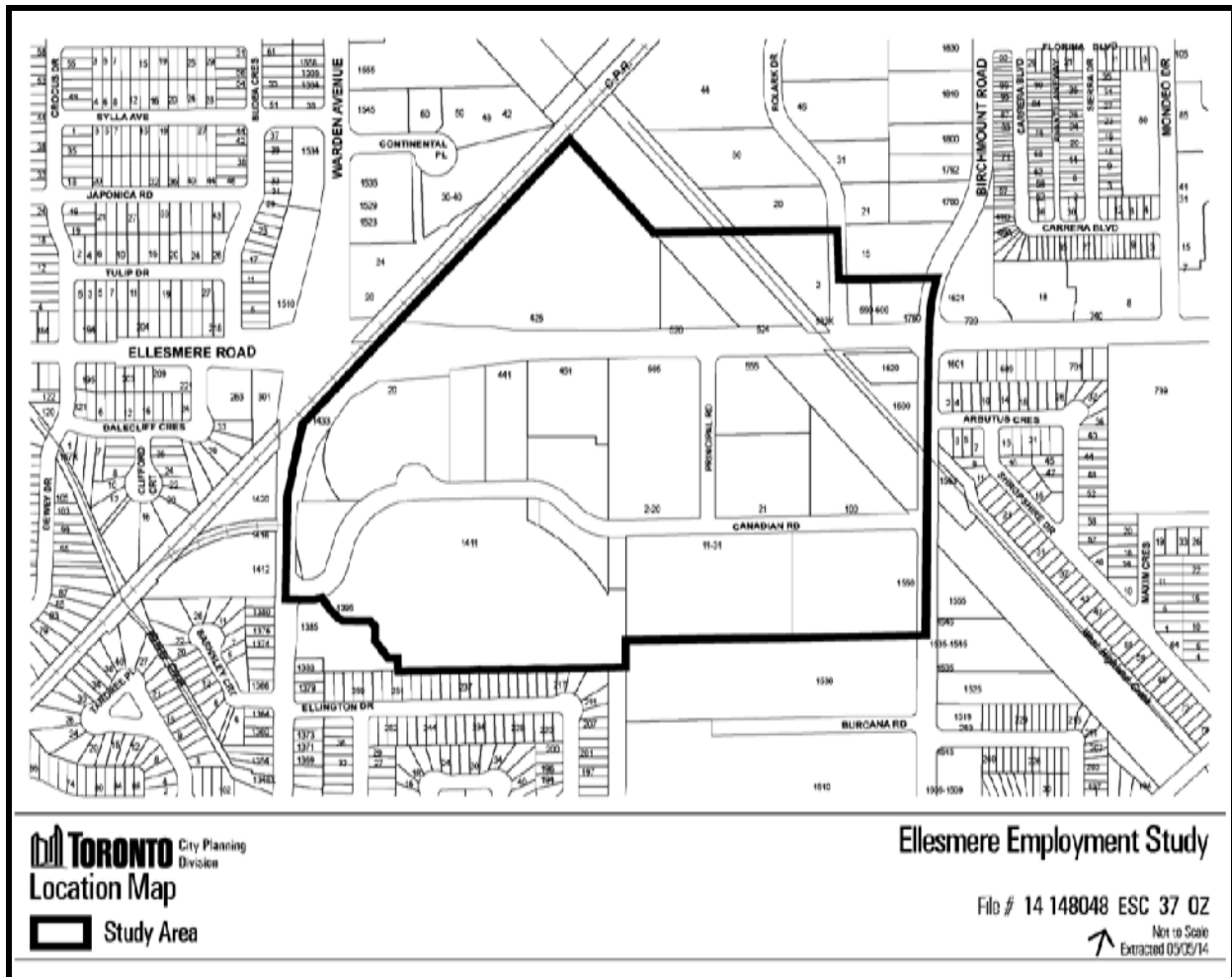
distances and appropriate screening and mitigation measures. Staff have assessed the appropriateness of the current permissions and their compatibility accordingly.

What follows is a Final Report summarizing City Planning staff's research and community engagement completed through the Study and conclusions which form the basis for further recommended actions.

2. Context

Ellesmere Road is a major east-west arterial in Scarborough connecting Victoria Park in the west to Kingston Road and the 401 in the east. It has a significant concentration of designated *Employment Areas* along its length, including lands within the Study Area, an *Employment District* between Kennedy Road to west of Brimley Road and the concentration of *Employment Areas* designated lands north of Ellesmere, east of the Scarborough Centre. The Study Area encompasses an area of approximately 41 hectares (100 acres) of primarily employment lands within the Wexford and Ellesmere *Employment Districts*, as well as the Ellesmere Park and Community Centre adjacent to Warden Avenue and Ellesmere Avenue.

Map 1: Ellesmere Employment Study Area Map



The Study Area includes 19 key properties, described along with their current known/proposed uses (as of spring 2015) below. (Additional more specific information for each property is contained in Appendix 1.)

On the north side of Ellesmere Road are the 23,248 m² Home Depot store at 426 Ellesmere and the 11,932 m² Ellesmere Medical Health Care Centre at 520 Ellesmere (nearing completion).



Home Depot – 426 Ellesmere Rd.



**Ellesmere Medical Health Care Centre –
520 Ellesmere Rd.**

At 2 Rolark Drive is a 3,201 m² industrial building. East of Rolark Drive at 590 Ellesmere is a home decorating store and a Pizza Hut restaurant at 600 Ellesmere Road.



2 Rolark Drive



590 Ellesmere Road



600 Ellesmere Road

At the south-east corner of Warden Avenue and Ellesmere Road is the 4 hectare (10 acre) Ellesmere Park providing mini soccer fields, a playground, a skateboard park and the 1,784 m² Ellesmere Community Centre.



Ellesmere Park and Community Centre (with Skateboard Park)

To the east at 441 Ellesmere Road is a proposed place of worship and associated cultural centre currently under construction, and a private new elementary school at 451 Ellesmere Road within the existing building currently under conversion.



441 Ellesmere Road



451 Ellesmere Road

At the south-west corner of Ellesmere Road and Principal Road and extending down to Canadian Road at various addresses are a mix of restaurants, numerous retail stores and business offices, industrial uses and a wholesale seafood market. The existing private school at 505 Ellesmere Road will be relocating to 451 Ellesmere, and is proposed to be replaced by another private school.



475-477 Ellesmere Road



501-505 Ellesmere Road



505 Ellesmere Road (current location of Sathya Sai School)



2-12 Principal Road

East of the Ellesmere Road and Principal Road intersection are the Pattison Sign Group business offices at 555 Ellesmere, north of 21 Principal Road which is currently vacant but being used for outdoor storage of a variety of items including bins, portable toilets, and soil. East of that at 100 Canadian Road is a 6,397 m² Access Self Storage facility accommodating approximately 600 tenant lockers and a 120 m² United Parcel Service (UPS) store.



555 Ellesmere Road (upper left), 21 Principal Road (centre) and 100 Canadian Road (right)

On the south side of Ellesmere Road at Birchmount Road are two restaurants, a clinic and a dental office, with Toronto Fire Station No. 245 immediately to the south at 1600 Birchmount Road.



South-West Corner of Ellesmere Road and Birchmount Road



Toronto Fire Hall No. 245

On the south side of Canadian Road at 1411 Warden Avenue is the 12,851 m² Costco store and gas bar, east of which at 11, 21 and 31 Canadian Road are multiple industrial units including an industrial bakery. At the south-west corner of Canadian Road and Birchmount Road is the 10,219 m² Rapid Refridgeration industrial plant at 1550 Birchmount Road.



Costco - 1411 Warden Avenue

3. Development Applications

There are four active or recently-approved Site Plan Control development applications within the Study Area, at 441, 451 and 520 Ellesmere Road (a place of worship and cultural centre, a private school and a medical office building respectively), and 21 Principal Road (a construction and demolition waste recycling/recovery facility). Additional information on these applications is detailed in Table 1 below:

Table 1: Development Applications within the Study Area

Address	Application/Status	Proposal
441 Ellesmere Road Jain Society of Toronto	Site Plan Control Application No.: 13 240860 ESC 37 SA Under review. (An application to Committee of Adjustment for minor variance relief to parking requirements not yet filed.)	Place of Worship and Community Centre. The application proposes to complete the partially constructed building under prior site plan approval for a Greek Cultural Centre. When completed, the three-storey, 5 197 m ² building will be used as a cultural community centre and place of worship. A second Phase 2 building of 1 420 m ² proposed to be constructed on the north portion of site will be used to relocate the temple from the first building.
451 Ellesmere Road Sri Sathya Sai Education Trust of Canada	Site Plan Control Application No.: 12 248143 ESC 37 SA Final Approval issued on January 29, 2014. (Minor Variance related to parking requirements approved 2013.)	Proposed one-storey addition and conversion of the existing industrial building to a private 2 251 m ² elementary school.
520 Ellesmere Road Ellesmere Medical Health Care Centre	Site Plan Control Application No.: 12 248143 ESC 37 SA Revised Notice of Approval Conditions issued on December 23, 2014. Site Plan Agreement and Final Approval pending. (Minor Variance relating to use permissions approved 2012.)	11 932 m ² medical office building with laboratory, therapy and associated services (under construction)
21 Principal Road Principal 21 Inc.	Site Plan Control Application No.: 13 113297 ESC 37 SA Application conditionally approved by the OMB on September 29, 2014. (Discussed in Section 7)	Proposed 2 174 m ² facility for the sorting and recovery of recyclable building and construction wastes and demolition debris. Includes proposed 937 m ² enclosed transfer/sorting building, 697 m ² two-storey administration office with vehicular service bays (523 m ²), truck scale and scale house (18 m ²) and associated outdoor storage.

4. Policy Framework

i. Provincial Policy Statement and Provincial Plans

The Provincial Policy Statement (PPS), 2014 provides policy direction on matters of provincial interest related to land use planning and development. These policies support the goal of enhancing the quality of life for all Ontarians. Key policy objectives include: building strong healthy communities; wise use and management of resources; and protecting public health and safety.

The PPS contains specific policy guidance on land use compatibility, requiring that major facilities (defined to include all facilities requiring separation from sensitive land uses) and sensitive land uses be planned, designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and ensure long-term viability of major facilities. The PPS recognizes that local context and character is important. Policies are outcome-oriented, and some policies provide flexibility in their implementation provided that provincial interests are upheld.

The Growth Plan for the Greater Golden Horseshoe provides a framework for managing growth in the Greater Golden Horseshoe including: directions for where and how to grow; the provision of infrastructure to support growth; and protecting natural systems and cultivating a culture of conservation. City Council's planning decisions are required to conform, or not conflict, with the Growth Plan for the Greater Golden Horseshoe.

Staff have completed the Study having regard to consistency with the PPS and conformity with the Growth Plan for the Greater Golden Horseshoe.

ii. Ministry of the Environment and Climate Change

Land Use Compatibility Guidelines

The Ministry of the Environment and Climate Change (MOECC) land use compatibility Guidelines D1 and D6 (the "Guidelines") are intended to provide guidance on how to minimize adverse effects between incompatible land uses. (The Guidelines currently reflect earlier Provincial Policy Statements and have not yet been updated to reflect the new 2014 PPS.) Under the Guidelines, municipalities are encouraged to address land use compatibility early during planning approvals, having regard to adverse effects of noise, vibration, odours and air emissions, litter, dust and other particulate, and other contaminants. The Guidelines are intended to assist in minimizing future land use problems due to the "encroachment" of sensitive land uses and industrial uses on one another.

'Guideline D-1: Land Use Compatibility' applies where site-specific development plans would result in a change in land use that would place or would be likely to place sensitive land uses within the potential influence area of an industrial facility. While this Guideline is not intended to apply to situations where incompatible land uses already exist, the MOECC does encourage mitigation measures to minimize existing compatibility problems and may undertake abatement activities if there is non-compliance with a Ministry-issued Environmental Compliance Approval Certificate, or where such is not in place.

'Guideline D-6: Compatibility Between Industrial Facilities and Sensitive Land Uses' applies to all types of proposed, committed or existing industrial land uses which have the potential to produce point source and/or fugitive air emissions such as noise, vibration, odour, dust and others. Certain

facilities, such as landfills, sewage treatment facilities, and railways, are not subject to this Guideline, and certain such uses have specific alternative D-Series Guidelines which apply to the use specifically.

The Guideline applies the following process:

- a) Industrial facilities are classified into one of three classes based upon analyses of the character of the industrial use/process, scale, probability for fugitive emissions; hours of operation, production volumes, movement of goods and employees and outdoor activity.
- b) Depending upon the classification, three potential influence areas, namely the overall range within which an adverse effect would be or is experienced, are established by industrial facility Class based on past experience:
 - i) Class 1 Industrial: 70 m potential influence area;
 - ii) Class 2 Industrial: 300 m potential influence area; and
 - iii) Class 3 Industrial: 1000 m potential influence area.

Unless detailed studies demonstrate these potential areas can be varied, sensitive uses are to be separated from industrial facilities by these distances.

- c) The Guideline also establishes minimum separation distances by industrial facility Class, defining an area within which no incompatible development should occur for each Class:
 - i) Class 1 Industrial: 20 m;
 - ii) Class 2 Industrial: 70 m; and
 - iii) Class 3 Industrial: 300 m
- d) Subject to site-specific study, these separation distances may be reduced and/or can be provided on site or on adjoining lands. Under the Guideline, sensitive land uses should not be permitted within the actual or potential areas of influence without evidence through supporting studies (e.g. noise, dust, odour) to substantiate the absence of any problem.

It is the application of these Guidelines which is often of greatest concern to industries when considering (re)investment decisions requiring, or to otherwise maintain, Environmental Compliance Approvals from MOECC for their operations given proximity to potentially sensitive land uses.

Guideline D-6 indicates that sensitive land uses are considered to be all residential uses 24 hours a day, and may include recreational uses deemed sensitive by the municipality or a provincial agency, and or any building or associated amenity area (indoor or outdoor) where humans or the environment may be adversely affected by emissions from nearby industry. Such sensitive uses are not otherwise specifically identified by the Guideline, but by way of example provided may include "a building or amenity area associated with residences, senior citizen homes, schools, day care facilities, hospitals, churches and other similar institutional uses, or campgrounds". Non-sensitive uses associated with a sensitive use, such as a parking lot serving a hospital, may be included within the relevant separation distance between the sensitive and industrial land uses.

The Guidelines are not intended to replace municipal zoning authority or otherwise prescribe where certain land uses should or should not be permitted. The Guidelines are intended to be referred to, however, where changes in land use are proposed within the framework of established zoning permissions.

Noise Guidelines

On October 21, 2013, MOECC published new noise guidelines entitled “*Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning: Publication NPC-300*” (NPC-300). This publication consolidates and replaces the following four previous guidelines dealing with both land use planning and the approval of industrial and commercial facilities to eliminate inconsistencies in requirements, procedures and implementation:

- "Publication LU-131 – Noise Assessment Criteria in Land Use Planning." October 1997;
- "Noise Assessment Criteria in Land Use Planning: Requirements, Procedures and Implementation." October 1997;
- "Publication NPC-205 – Sound Level Limits for Stationary Sources in Class 1 and 2 Areas (Urban)." October 1995; and
- "Publication NPC-232 – Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)." October 1995.

NPC-300 applies to stationary sources such as industries, and to transportation sources of noise, including road, rail and air traffic. The Guideline defines the operational requirements used by the MOECC when issuing approvals for noise from stationary sources (which includes most industrial-type equipment and activities that are noise sources). The types of approvals MOECC issues for noise include Environmental Compliance Approvals issued under Part II.1 of the *Environmental Protection Act* (EPA) and Renewable Energy Approvals under section 47.3 of the EPA.

Additionally, NPC-300 provides advice concerning noise which may be applied in planning decisions by land use planning approval authorities to promote appropriate new development in a manner that is compatible with existing land uses. The Guideline reflects the objectives of the previous 2005 PPS to promote new development that will facilitate urban intensification, while protecting the viability of existing industries in urban settings.

Again, this Guideline is not intended to replace municipal zoning authority or otherwise prescribe where certain land uses should or should not be permitted. The Guideline is intended, however, to inform land use planning decisions where changes in land use are proposed within the framework of established zoning permissions.

Where the former guidelines provided for three 'classes' of acoustical environments (two for urban situations differentiated by night background sound levels, and one for rural) the new Guideline has created new Class 4 areas applying to areas or specific sites otherwise defined as (urban) Class 1 or 2, intended for development with new sensitive land use(s) that are not yet built, in proximity to existing, lawfully established stationary noise source(s).

NPC-300 also sets out technical changes to the manner in which the background or ambient sound level is to be measured and modeled (e.g. how certain sources of sound are to be treated in noise assessments, clarification as to where points of reception are to be taken, how infrequent sounds are treated, etc.), within one consolidated document. It is also intended to simplify enforcement of noise excesses through complaints to the Ministry or consistent municipal noise bylaws.

NPC-300 contains various definitions for what constitutes noise sensitive uses.

"Noise sensitive land use" means:

- a property of a person that accommodates a dwelling and includes a legal non-conforming residential use; or
- a property of a person that accommodates a building used for a noise sensitive commercial purpose; or
- a property of a person that accommodates a building used for a noise sensitive institutional purpose.

Outdoor living areas ("intended and designed for the quiet enjoyment of the outdoor environment") associated with the above are also considered to be noise sensitive space. (Any residential use on the site of a stationary source is not considered a noise sensitive land use).

A "noise sensitive commercial purpose building" means a building used for a commercial purpose that includes one or more habitable rooms used as sleeping facilities such as a hotel and a motel.

A "noise sensitive institutional purpose building" means a building used for an institutional purpose, including an educational facility, a day nursery, a hospital, a health care facility, a shelter for emergency housing, a community centre, a place of worship and a detention centre. A place of worship located in commercially or industrially zoned lands, however is not considered a noise sensitive institutional purpose building.

"Noise sensitive space" means the living and sleeping quarters of dwellings, and sleeping quarters of noise sensitive commercial or institutional land uses. Examples include, but are not limited to: bedrooms, sleeping quarters such as patient rooms, living/dining rooms, eat-in kitchens, dens, lounges, classrooms, therapy or treatment rooms, assembly spaces for worship, and sleeping quarters of detention centres.

NPC-300 appears to recognize that places of worship have generally gravitated into industrial areas largely due to higher parking standards applied to such uses and generally lower industrial land costs to meet these requirements. Accordingly, a place of worship located on commercially or industrially zoned land is now not considered to be noise sensitive, so as not to jeopardize the continued operation of nearby industries and enterprises. Places of worship within residential areas, however, retain their reasonable expectations of a low noise environment from nearby industries.

Lastly, a "noise sensitive zoned lot" means a lot or a property of a person that has been zoned to permit a noise sensitive land use and that is either currently vacant, or has an existing land use that is not a noise sensitive land use.

Regulations Respecting Recycling and Waste Transfer

The handling, transportation and disposal of wastes generally, and particularly hazardous wastes, is currently regulated under the EPA through Regulation 347/90. Section 2 of the Regulation sets out a very lengthy list of what materials constitute 'waste' and are further regulated thereby, however the Regulation also establishes a wide variety of waste materials and products that are exempted in various ways on the basis they will be subjected to further forms of recovery, recycling and/or reuse. Activities regulated under the EPA, as well as through the *Ontario Water Resources Act*, must be carried out in accordance with those Acts, applicable regulations, and MOECC guidelines. In many instances this requires obtaining an approval under Part II.1 of the EPA, namely an Environmental Compliance Approval (ECA).

Section 4 of EPA Regulation 347/90 further identifies and regulates 'waste disposal sites' and 'waste management systems' covering a wide range of facilities from landfills to other more specific types of activity. This includes a 'waste generation facility' which is a facility/operation that is involved in the production, collection, handling or storage of waste (such as a construction and demolition waste (C&D) collection and sorting operation). Many activities, however, are also exempted in various respects, such as facilities for the collection, handling, transportation, storage or transfer of waste electrical/electronic equipment, circuit boards, batteries or mercury destined for a material recovery facility.

In 1994, the MOECC also passed "3R" (Reduce, Reuse and Recycle) Regulations 102/94 and 103/94 specifically applicable to construction and demolition projects consisting of one or more buildings with a floor area greater than 2,000 m².

Regulation 102/94 requires the following:

- Completion of an on-site waste audit identifying the amount and nature of the waste that will be generated;
- Development of a waste reduction work plan that outlines specific achievable diversion options for reduction, reuse, and recycling;
- Implementation of the waste reduction workplan; and
- Documentation of the waste audit and work plan results to MOE.

Under Regulation 102/94, the waste audit is to be conducted and the work plan completed before the beginning of the project.

Regulation 103/94 requires the following:

- Implementation of a source separation program for the reusable and recyclable materials listed in Regulation 102/94;
- Specification of facilities that are sufficient for the collection, sorting, handling and storage of these materials;
- Communication of the source separation program and its successes to employees, patrons, and tenants; and
- Reasonable effort in ensuring that the separated waste is reused or recycled.

Environment Canada indicates the federal government adheres to the Ontario 3Rs Regulations as representing best practices in the industry.

iii. Official Plan and OPA 231

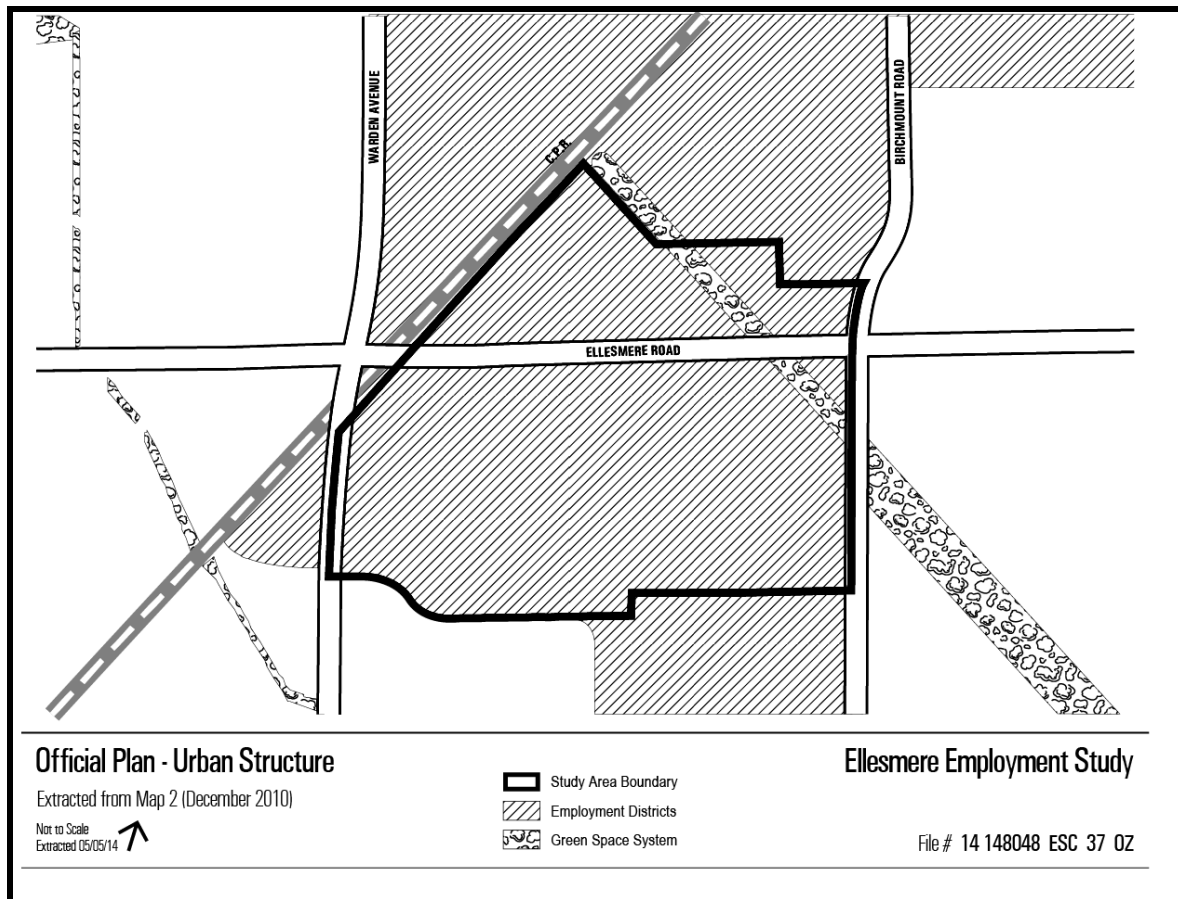
The Official Plan recognizes that strong communities, a competitive economy and a high quality of life require a healthy natural environment. The Plan contains numerous policies addressing actions to protect, conserve and regenerate the natural environment, prevent pollution and reduce consumption of valuable natural resources. Of particular relevance when considering the compatibility of sensitive uses with recycling/recovery uses in the Study Area is Policy 21 in Section 3.4 (Natural Environment) of the Plan. The policy states that "Major facilities such as airports, transportation/rail infrastructure, corridors and yards, waste management facilities and industries and sensitive land uses such as residences and educational and health facilities will be appropriately designed, buffered and/or separated from each other to prevent adverse effects from noise, vibration, odour and other contaminants, and to promote safety. To assist in identifying impacts and mitigative measures, the proponent may be required to prepare studies in accordance

with guidelines established for this purpose. The proponent will be responsible for implementing any required mitigative measures."

As indicated on Map 2 below, the entire Study Area is identified as *Employment Districts* on 'Map 2 - Urban Structure' of the Official Plan.

Employment Districts shown on Map 2 - Urban Structure will be protected and promoted exclusively for economic activity in order to, among other matters maintain and grow the City's tax base, attract new and expand existing employment clusters that are key to Toronto's competitive advantage, and nurture Toronto's diverse economic base.

Map 2: Toronto Official Plan 'Map 2 – Urban Structure' (Excerpt)

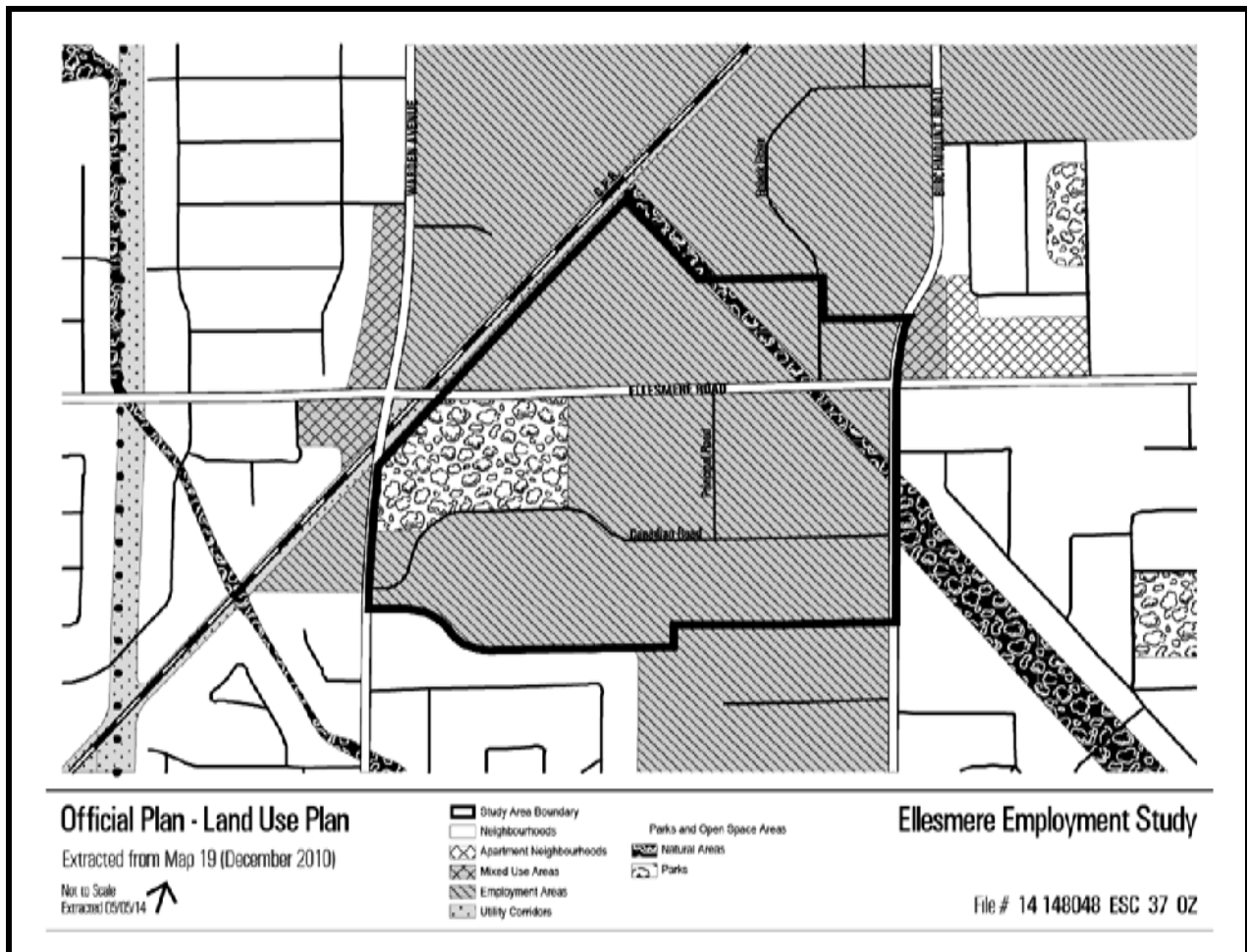


With the exception of the Ellesmere Park and Community Centre, which are designated *Parks*, the Study Area is predominantly designated *Employment Areas* on Land Use Plan Map 19 of the Official Plan (Map 3 below).

Employment Areas are places of business and economic activity. Uses that support this function consist of: offices, manufacturing, warehousing, distribution, research and development facilities, utilities, media facilities, parks, hotels, retail outlets ancillary to the preceding uses, and restaurants and small scale stores and services that serve area businesses and workers. Places of worship, recreation and entertainment facilities, business and trade schools and branches of community colleges or universities are also permitted on major streets as shown on Map 3 of the Plan only, or where already legally existing.

Development in *Employment Areas* will contribute to the area's competitiveness, attractiveness and function. Outside storage and outside processing, where permitted, is to be limited in extent, generally located at the rear of the property, well screened, and not detrimental to neighbouring land uses in terms of dust, noise and odours.

Map 3: Toronto Official Plan 'Land Use Plan' (Map 19 Excerpt)



On November 21, 2013, Planning and Growth Management Committee conducted a Public Meeting to consider the Chief Planner and Executive Director's report entitled 'Official Plan and Municipal Comprehensive Reviews: Amendments to the Official Plan for Economic Health and Employment Lands Policies and Designations and Recommendations on Conversion Requests'. The report culminated an approximately two year process to complete the '5 Year' review of the Plan required by the *Planning Act* and the associated Municipal Comprehensive Review (MCR). Pursuant to numerous Planning staff and Committee recommendations, City Council on December 16, 17 and 18, 2013 adopted Official Plan Amendment (OPA) No. 231. OPA 231 was approved by the Minister of Municipal Affairs and Housing on July 9, 2014 and is now subject to approximately 170 appeals pending consideration by the Ontario Municipal Board. The Council record in this regard is available at:

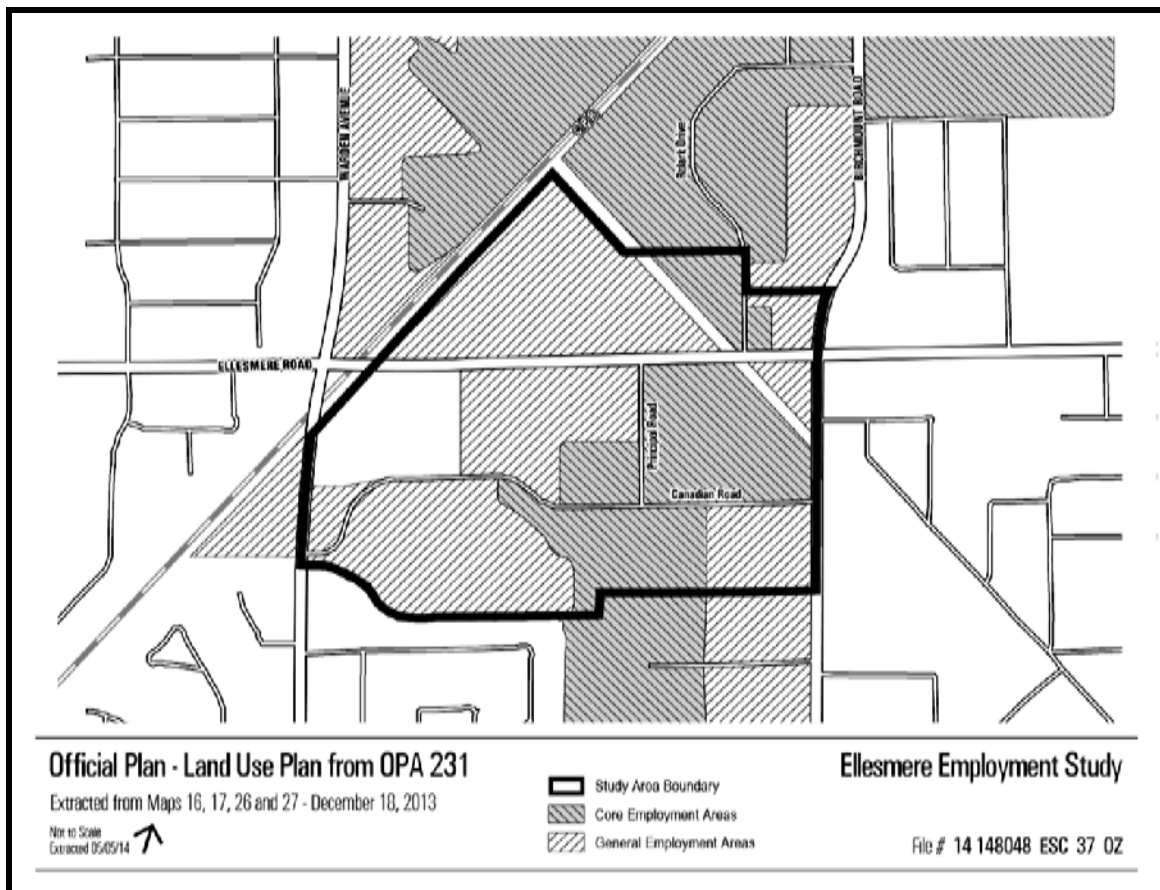
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PG28.2>

In general terms, OPA 231 retains most of the Study Area for employment land uses. All *Employment Areas* are now identified on Urban Structure Map 2 of the Official Plan (which includes the Study Area), and the previous *Employment Areas* land use designation of the Study Area (excluding Ellesmere Park) on the Plan's Chapter 4 Land Use Plan Maps are replaced with two more specific new designations: *Core Employment Areas* and *General Employment Areas* as indicated on Map 4 below.

Core Employment Areas are now reserved for business and economic activities such as offices, manufacturing, warehousing, transportation facilities, research and development facilities, utilities, media facilities, industrial trade schools and vertical agriculture. The term 'Core' refers primarily to the function of the area, although a majority of lands designated *Core Employment* are located within the interior of *Employment Areas*.

General Employment Areas now permit restaurants and all forms of retail uses, fitness centres and ice arenas in addition to the uses permitted in *Core Employment Areas*. The majority of *General Employment Areas* are found on the periphery of *Employment Areas* on major roads where retail, restaurants and fitness centres benefit from greater visibility and access, and can serve both *Employment Area* workers and the broader public without drawing the public into the heart of *Employment Areas*.

Map 4: Official Plan – Land Use Plan from OPA 231



Within all *Employment Areas*, development is to enhance function and competitiveness by, among other criteria: providing a high quality public realm; limiting or mitigating the effects of traffic

generated by the development; mitigating effects of noise, vibration, dust, odours or particulate matter that will be detrimental to other businesses or the amenity of neighbouring areas; landscaping and screening property edges; and ensure that open storage and/or processing where permitted is limited in extent, generally located at the rear of the property, well screened, and not adversely affecting existing and planned neighbouring land uses in terms of dust, noise and odours.

It is important for the purposes of this Study to note that day nurseries, places of worship, recreation uses, business and trade schools and branches of community colleges and universities were previously permitted within the former *Employment Areas* land use designation. As these can largely be considered to be sensitive land uses, and occupy valuable lands that could otherwise be utilized for employment and related economic purposes, OPA 231 has now eliminated such permissions for day nurseries and places of worship in the two new land use designations. Previously permitted education uses have now been limited to industrial trade schools and like university/college campuses only, with recreation uses now limited to just fitness centres and ice arenas within *General Employment Areas* only.

Staff have completed this Study having full regard to these new OP policy changes.

iv. Zoning

Under the former Scarborough Zoning By-law Number No. 24982, the Study Area includes areas zoned Industrial Zone (M), General Industrial Zone (MG), Mixed Employment Zone (ME), Industrial District Commercial Zone (MDC), Industrial Commercial Zone (MC), Office Uses Zone (OU), Public Utilities (PU) and Institutional-Public Service Zone (I-PS), as indicated on Map 5. As is common under the former Scarborough by-laws, many of the properties in the Study Area are subject to more than one zone category.

Map 5: Zoning By-law Map

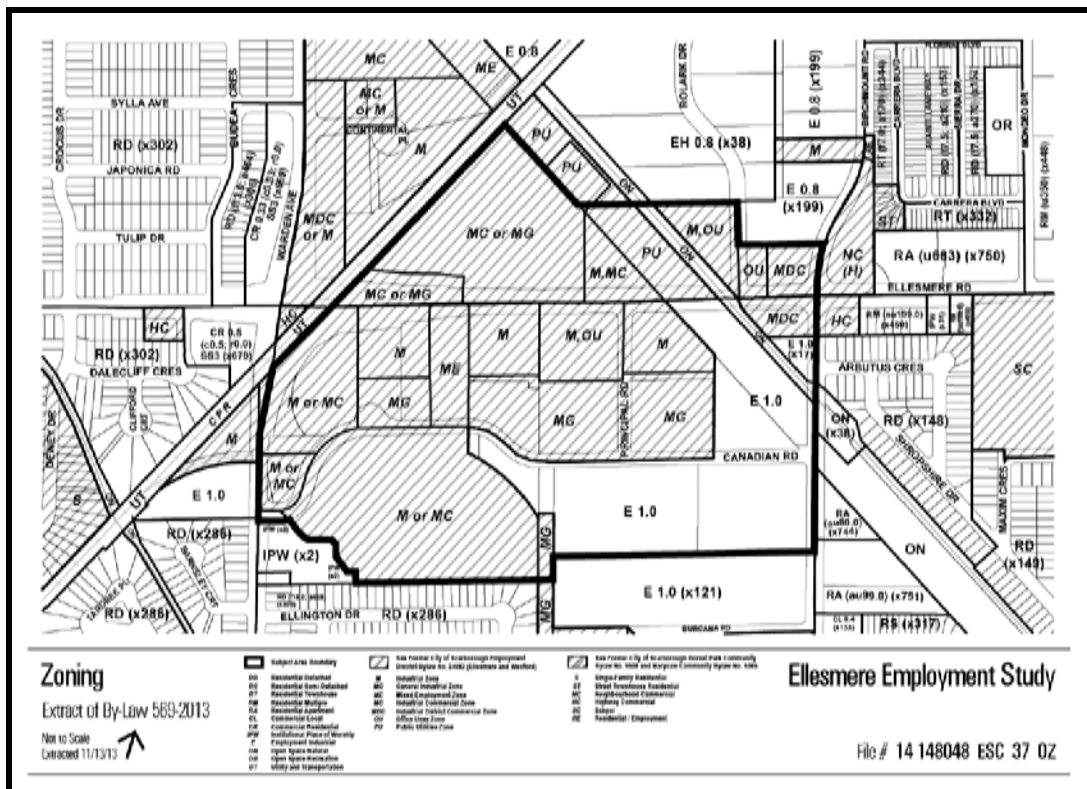


Table 2 lists the land uses generally permitted in each of these zones within the Study Area under By-law No. 24982.

Table 2: Zone Permissions - By-law No. 24982

Industrial (M)	General Industrial (MG)	Mixed Employment (ME)	Industrial District Commercial (MDC)
Industrial Uses* Offices, excluding Medical and Dental Offices Educational & Training Facility Uses Day Nurseries Places of Worship Recreational Uses (All uses shall be conducted wholly within an enclosed building.)	Industrial Uses* Open Storage Offices, excluding Medical and Dental Offices Educational & Training Facility Uses Day Nurseries Places of Worship Recreational Uses	Industrial Uses* Offices Educational & Training Facility Uses Day Nurseries Places of Worship Recreational Uses Financial Institutions Personal Service Shops Restaurants Retail Stores (All uses shall be conducted wholly within an enclosed building.)	Offices Financial Institutions Restaurants Day Nurseries Places of Worship Vehicle Repair Garages Vehicle Sales Vehicle Service Garages Vehicle Service Stations
Industrial Commercial (MC)	Office Uses (OU)	Public Utilities (PU)	Institutional – Public Service (I-PS)
Lumber Yards and Building Supply Warehouses Machinery Sales and Service Day Nurseries Dry Cleaning Plants Garden Nurseries Places of Worship Vehicle Repair Garages Vehicle Sales Vehicle Service Garages Vehicle Service Stations Furniture Warehouses Mechanical or Automatic Car Washes	Offices Educational & Training Facility Uses Financial Institutions Libraries Personal Service Shops Places of Worship Recreational Uses Restaurants Retail Stores Day Nurseries	Public Utilities Pipelines Horticulture	Ambulance Depots Fire Halls Police Stations Public Utilities Public Works Yards
Definitions:			
<p>*Industrial Use means land, buildings or structures or parts thereof used for one or more of assembling, manufacturing, processing including computer and data processing, warehousing, recycling**, research and development uses, and associated ancillary uses, excluding 'Municipally Prohibited Uses' and 'Special Industrial Uses'.</p>			
<p>**Recycling means the collection and sorting of recyclable materials***.</p>			
<p>***Recyclable Material means re-usable material which can be separated for the purpose of recycling. Recyclable material shall not include food waste, hazardous waste as defined by Environmental Protection Act regulations, as amended, materials that cause noxious odours, organic waste.</p>			

The last significant rezoning within the Study Area occurred in 1995, to permit a Price Club store (now Costco) at 1411 Warden Avenue. Since that time, a number of properties have had their use permissions varied by way of applications to the Committee of Adjustment as indicated on Table 3.

Table 3: Minor Variance Approvals – Use Permissions

426 Ellesmere Road	Permission for a home improvement retail centre (now Home Depot) and associated uses (1990 and 2006)
505 Ellesmere Road (et. al.)	Five variances permitting places of worship in a multi-use building (1991, 1993, 1997, 2000, 2001) Permission for a restaurant ancillary to a bakery (1990)
590 Ellesmere Road	Permission to use 100% GFA for retail and restaurant uses (1992)
1620 Birchmount Road	Additional personal service shop permissions (2002)
441 Ellesmere Road	Permission for a restaurant (2003)
100 Canadian Road	Permission to use a portion of office space on ground floor as a (UPS) retail store (2008)
1411 Warden Avenue	Permission to establish and expand the Costco gas bar (2009 and 2011 respectively)
520 Ellesmere Road	Permission for medical and dental offices (Ellesmere Medical health Care Centre), restaurants, accessory health care related retail uses (2012)
451 Ellesmere Road	Permission for outdoor (school) recreation space (2013)

The new City of Toronto By-law No. 569-2013 does not zone the majority of the lands within the Study Area. It does capture certain sites in the vicinity of Birchmount Road and Canadian Road, zoning these Employment Industrial (E) as also indicated on Map 5, with permitted and conditionally permitted uses as set out on Table 4. Recycling facilities in particular are now defined as a separate use category, "recovery facilities", which are permitted within the (E) zone subject to conditions as noted on Table 4, and are permitted without conditions in the Employment Heavy Industrial (EH) Zone. Recovery facilities are not permitted in the Employment Light Industrial (EL) or Employment Industrial Office (EO) Zones.

Given the overall approximately 72,500 m² (780,400 sq.ft.) of development already existing within the Study Area, the two Zoning By-laws combine to afford overall permission for a potential doubling of this amount by approximately 80,100 m² (862,200 sq.ft.) of additional development, subject to other applicable zoning provisions such as required parking or minimum building setbacks, as further detailed by property in Appendix 1.

Table 4: Employment Industrial Zone (E) Permissions - By-law No. 569-2013

Permitted Uses	Conditionally^(**) Permitted Uses
Ambulance Depot Animal Shelter Artist Studio Automated Banking Machine Bindery Building Supply Yards Carpenter's Shop Cold Storage Contractor's Establishment Custom Workshop Dry Cleaning or Laundry Plant Financial Institution Fire Hall Industrial Sales and Service Use Kennel Laboratory Manufacturing Use if it is not one of the following: 1) Abattoir, Slaughterhouse or Rendering of Animals Factory; 2) Ammunition, Firearms or Fireworks Factory; 3) Asphalt Plant; 4) Cement Plant, or Concrete Batching Plant; 5) Crude Petroleum Oil or Coal Refinery; 6) Explosives Factory; 7) Industrial Gas Manufacturing; 8) Large Scale Smelting or Foundry Operations for the Primary Processing of Metals; 9) Pesticide or Fertilizer Manufacturing; 10) Petrochemical Manufacturing; 11) Primary Processing of Gypsum; 12) Primary Processing of Limestone; 13) Primary Processing of Oil-based Paints, Oil-based Coatings or Adhesives; 14) Pulp Mill, using pulpwood or other vegetable fibres; 15) Resin, Natural or Synthetic Rubber Manufacturing; 16) Tannery Office Park Performing Arts Studio Pet Services Police Station Printing Establishment Production Studio Public Works Yard Service Shop Software Development and Processing Warehouse Wholesaling Use	Body Rub Service (32) Cogeneration Energy (26) Crematorium (33) Drive Through Facility (5,21) Eating Establishment (3,19,30) Metal Factory involving Forging and Stamping (25) Open Storage (10) Public Utility (27,29) Recovery Facility* (8**) Recreation Use (7) Renewable Energy (26) Retail Service (3) Retail Store (4,30) Shipping Terminal (11) Take-out Eating Establishment (3,30) Transportation Use (28) Vehicle Depot (6) Vehicle Fuel Station (16,30) Vehicle Repair Shop (23) Vehicle Service Shop (17,31) Vehicle Washing Establishment (18) * Recovery Facility is defined as "premises used for separating or sorting recyclable material . A salvage yard is not a recovery facility". (Recyclable Material means "material that is separated into specific categories for purposes of reuse, recycling or composting".) (8**) In the E zone, a recovery facility: (A) May not be: (i) an asphalt recovery facility; (ii) a concrete recovery facility; (iii) a heavy metal recovery facility (arsenic, lead, mercury, cadmium); (iv) a hazardous chemical recovery facility; (v) a petrochemical recovery facility; (vi) an industrial gas recovery facility; (vii) a rubber recovery facility; and (viii) an asbestos recovery facility; (B) Must be located at least 70.0 metres from a lot in the Residential Zone category or the Residential Apartment Zone category; and (C) The separating or sorting of materials must be within a wholly enclosed building.

5. Study Consultations

i. City Staff

While the Study was led by Community Planning staff, additional assistance and information was contributed by City Planning staff from the Official Plan Review and Zoning Teams, Transportation Planning, Research and Information, and Graphics and Visualization. Planning staff from other District offices were also consulted on relevant employment area land use studies, including the study currently underway as directed by Planning and Growth Management Committee in June 2014 on a city-wide approach to deal with concrete batching facilities, as well as other development proposals of interest to the Study.

Additional input and assistance with the Study was also provided by staff from other City Divisions including Economic Development and Culture, Transportation Services and Municipal Licensing and Standards.

ii. Public Consultations

City Planning staff, with assistance from Economic Development and Culture and Municipal Licensing and Standards staff, conducted initial community and area business owner consultation meetings during June 2014. The purpose of the meetings was to advise as to the purpose of the Study and progress to date, the context of recent changes in Official Plan policy and zoning regulation, to provide an opportunity to raise and discuss comments or concerns on the question of possible land use conflicts within and adjacent to the Study Area, and to describe next steps in the planning process.

An evening meeting for residents from the immediately adjacent neighbourhoods was held at the Scarborough Civic Centre on Monday, June 16, 2014. Approximately 1,200 Notices for this meeting were mailed out, with approximately 40 residents attending the meeting. The majority of the attendees resided to the south of the Study Area in Wexford Community, while approximately one-third were members of the Jain Society which is currently redeveloping the lands at 441 Ellesmere Road with a new place of worship and cultural centre. Some attendees also represented the Sathya Sai School at the south-west corner of Principal Road and Ellesmere Road. Three area business owner representatives also attended.

Strengths exhibited by existing land uses within the Study Area noted by residents included the existing recreation and cultural diversity of uses including schools, places of worship, the park and the community centre in the western portion of the area, together with healthy and stable adjacent residential neighbourhoods; good roads and transit access; and the employment base and tax support provided by other employment uses in the Study Area.

Significantly more discussion, however, focused on problems and concerns with industrial activities in the Study Area generally and particularly the construction and demolition waste recycling/recovery facility proposed at 21 Principal Road. The concerns most frequently expressed were almost evenly split between issues of health and safety, and land use compatibility. Health and safety issues raised focused primarily on air-borne pollution and respiratory concerns largely associated with dust or other pollutants likely to be generated by the proposed recycling facility, as well as from increased heavy truck traffic and other industrial operations generally, that can impact both residents in close proximity and school children within the area itself. Traffic safety for pedestrians, particularly these same school children and users of Ellesmere Park and Community

Centre, was also a very common concern. Additional concerns expressed include public exposure to potentially hazardous materials and risk from fire or explosive hazards.

Land use concerns largely focussed on the incompatibility of heavier industrial uses such as the proposed recycling facility with nearby neighbourhoods and the park, community centre, school, places of worship, medical office centre and cultural centre within the Study Area particularly. Existing lighter industrial uses were viewed to be much more preferable than heavy industries from the standpoint of compatibility with existing neighbourhoods and sensitive uses within the Study Area, employment and tax generation, traffic, noise and air quality.

Residents also expressed concerns regarding the adequacy of existing regulatory controls and need for costly enforcement to address dust and odour issues, spills and handling of noxious or hazardous materials occurring and problems with poor property maintenance associated with heavier industrial uses.

The remaining concerns expressed were about evenly split over existing traffic problems on area roads that will be worsened by additional volumes of heavy trucks, noise from both traffic and industrial operations, impacts from heavier industrial operations on existing office and lighter industrial uses in this area and possible local employment losses should such uses elect to leave this area as a result.

A meeting was also held on Wednesday, June 25, 2014 for land and business owners within the Study Area, at which similar information on the Study was presented, with approximately 10 attendees from the business community. No particular land use conflicts or compatibility concerns were raised regarding existing industrial operations and existing/proposed sensitive land uses in the Study Area. Significant concerns were expressed, however, particularly from businesses directly north, south, east and west of the site, regarding current property maintenance issues at 21 Principal Road and noise, dust and traffic impacts likely to be generated by the proposed recycling facility. These neighbouring businesses include a corporate office building immediately to the north, a self-storage facility immediately to the east, and a mix of over 40 light industrial, office and service uses to the west and south directly opposite the site including cosmetics and electronics manufacturing, and a number of food processing operations.

City Planning staff also conducted further community and area business owner consultation meetings on March 24, 2015. The purpose of the meetings was to provide community members and area business owners with an update on the September 2014 OMB decision regarding 21 Principal Road, and an overview of the work completed on the study to date and possible zoning actions to better address recycling/recovery uses in advance of Planning staff submitting a Final Report on the study for consideration by Scarborough Community Council, and to get their feedback on the proposed directions. Approximately 1,200 Notices for the meetings were mailed out. Approximately 20 residents attended the community consultation meeting and two business owners attended the business owner consultation meeting.

While area residents and business representatives continue to have concerns over potentially impactful recycling/recovery uses establishing here, no concerns were expressed regarding possible zoning actions that would further limit the types of recycling/recovery uses permitted within the Study Area.

iii. MOECC Engagement

Ministry of the Environment and Climate Change staff were consulted on questions relating to applicable Ministry land use compatibility guidelines, certification and operational requirements applying to recycling operations, considerations relating to areas of influence and sensitive uses, and matters relating to complaints and enforcement.

6. Emerging Themes

i. Economic Function

The City Planning Division maintains an up-to-date assessment of employment data within the City on the basis of an annual employment survey, and publishes highlights of this data through the annual bulletin 'Profile Toronto 2014 Toronto Employment Survey' (which may be viewed online at:

<http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/SIPA/Files/pdf/S/survey2014.pdf>)

As the Profile notes, Toronto's *Employment Districts* contain nearly 29% of the jobs within the City of Toronto, or 398,750 jobs. *Employment Districts* are particularly important to the City's manufacturing sector, with 83% of the City's manufacturing jobs being located within *Employment Districts*, which represents 92% of all manufacturing jobs within the City.

The South West Scarborough *Employment District*, at 504 hectares in area, is the City's seventh largest in land area, and is the City's eighth largest in terms of job provision, containing 19,240 jobs. The largest sectors of employment within this District are office and manufacturing.

The 41 hectare Ellesmere Employment Study Area encompasses 8% of the centre-northerly edge of the South West Scarborough *Employment District*. With a total of 1,302 jobs (823 full time and 479 part time), it comprises a commensurate percentage of jobs for that *Employment District* at approximately 7% of the total figure.

Staff have conducted a comparison of employment data in the Study Area between 1993 and 2014. A comparison of the number of jobs in these two time periods and percentage allocation by employment category is summarized on Table 5.

Table 5: Study Area Employment

	Employment Numbers							
	2014				1993			
	FT	PT	Total	% of Total	FT	PT	Total	% of total
Manufacturing	47	2	49	4%	205	7	212	26%
Office	350	80	430	33%	178	-	178	22%
Service	53	35	88	7%	10	17	27	3%
Institutional	45	-	45	3%	20	-	20	2%
Retail	326	312	638	49%	322	40	362	45%
Other	2	50	52	4%	6	-	6	1%
Total	823	479	1,302	100%	741	64	805	100%

Source: Toronto Employment Survey 2014

The above results for 2014 are actually somewhat low, due to lack of current survey data for 11, 21 and 31 Principal Road, which in 2013 reported 167 full time and 5 part-time office and manufacturing jobs. Assuming similar numbers there continued, overall jobs within the Study Area in 2014 may have actually exceeded 1,470, an increase of over 80% from 1993 (i.e. 4%± per year).

The predominant form of employment in the Study Area, both in 1993 and presently, is in the retail sector, which experienced an over 75% increase during this period, primarily through significant

growth in part-time retail jobs. The majority of all retail jobs are currently provided by the Home Depot and Costco retail stores. Offices generated the second greatest number of jobs in the area in 2014. The only sector which experienced a reduction in employment during this same period has been manufacturing (i.e. industrial), with a significant job decline of over 75% from 1993 levels. Staff consider the Study Area to be a successful, albeit largely non-industrial employment area with ongoing growth and regeneration. Employment data indicates that there are a considerable number of establishments within the Study Area newly, or fairly newly, located within the Ellesmere Employment Study Area. There are also facilities which have been located on-site for several decades.

Table 6: Establishments by Years at Present Location

Years at Present Location	0-5	6-10	11-15	16-20	21-25	26-50	51+
# of Establishments	28	16	11	3	6	1	2

ii. Land Use

In the early 1990s, in response to the economic climate at that time, evolving ideas of what constituted 'employment', and a desire to provide opportunity sites for what was then viewed as emerging new re-manufacturing industry, 'recycling', the former City of Scarborough in 1994 passed a series of by-laws expanding the range of permitted uses within designated and zoned employment areas. These by-laws permitted uses such as places of worship and education and training facilities, and expanded accessory retailing into Scarborough employment areas, while also adding recycling as a new, defined use to the range of uses encompassed under the "industrial uses" definition.

"Industrial uses" are a defined term under the former Scarborough Employment By-law, including a wide range of assembling, manufacturing, processing, warehousing, recycling, research and development uses, and associated ancillary uses.

Recycling uses were permitted/prohibited as follows:

Permitted

Industrial Zone (M)
 General Industrial Zone (MG)
 Special Industrial Zone (MS)
 Mixed Employment Zone (ME)
 Employment Zone (E)

Prohibited

Office Uses Zone (OU)
 Industrial Commercial Zone (MC)
 Industrial District Commercial Zone (MDC)
 Highway Commercial Zone (HC)

Under the Scarborough Employment By-law, properties commonly are assigned more than one zone category. The result of this framework in the Study Area is that recycling facilities are broadly permitted in areas where there are also permissions for more sensitive uses. Within the Study Area, only the small commercial properties adjacent to Birchmount Road do not permit "industrial uses" and therefore no recycling facilities.

The Scarborough Employment By-law separately defines recycling as, "the collection and sorting of recyclable materials". Recyclable material is defined in turn as, "re-usable material which can be separated for the purpose of recycling. Recyclable material shall not include food waste; hazardous

waste, as defined by the regulations, as amended, under the Environmental Protection Act, as amended; materials that cause noxious odours; and organic waste".

The consolidated City of Toronto By-law 569-2013 pulls out certain of the uses that are collected under the Scarborough Industrial Use definition in order to allow discrete consideration of their permissions, including recovery facilities. Recovery facilities are permitted unconditionally in the Employment Heavy Industrial Zone (EH) and subject to conditions in the Employment Industrial Zone (E), and are not permitted in the Employment Light Industrial Zone (EL) or Employment Office Industrial Zone (EO).

Recovery facilities are defined in By-law 569-2013 as "premises used for separating or sorting recyclable material. A salvage yard is not a recycling facility." Recyclable material is defined as "material that is separated into specific categories for purposes of reuse, recycling or composting". Conditions on recovery facilities in the "E" zone include that it may not be an asphalt, concrete, heavy metal, hazardous chemical, petrochemical, industrial gas, rubber or asbestos recycling facility.

The City has now completed a Municipal Comprehensive Review exercise respecting its OP, including a comprehensive review of the employment policies within that plan. Following Provincial direction, the employment policies now adopted through OPA 231 remove current permissions for sensitive uses such as schools, places of worship and community centres within employment areas. The rationale behind this is that sensitive uses when sited in employment areas impact the ability of certain traditional, heavier industrial and manufacturing uses to operate, particularly in regard to obtaining Environmental Compliance Approvals (ECA's, formerly known as Certificates of Approval) for expanded operations and/or new processes.

When OPA 231 is in final force and effect, there is an obligation to bring the City's zoning into compliance with its OP. Accordingly, the permissions incorporated into Scarborough zoning in 1994 and the new By-law 569-2013 will need to be revisited comprehensively.

The current Study allows an opportunity to reflect on the uptake to the broadened use permissions in Scarborough's employment zoned lands in this area, which may provide useful background for the eventual incorporation of these and other Scarborough employment lands more fully into the City-wide zoning by-law 569-2013.

At a more localized level, the Study has also considered the compatibility of established employment uses with the array of use permissions that exist through in-force zoning in the Study Area. This includes a review on the subject of recycling uses in this Study Area. Certain types of recycling facilities, including facilities such as the proposed sorting and transfer station for construction and demolition waste at 21 Principal Road, can generate land use conflicts with more sensitive uses due to the nature of their operations: they typically require substantial truck traffic, and can have noise and air quality impacts on their immediate context.

This review has been primarily conducted with a focus on Scarborough recycling activities, however respecting recycling of construction waste in particular staff engaged in discussions with Special Initiative and Policy Analysis staff within City Planning, who are also undertaking a study on appropriate siting of concrete batching plants, which can have similar impacts from both the manufacture and recycling of this kind of material.

iii. Recycling

'Recycling' has become a widely and often misused term today to apply to a broad range of activity. As an industrial practice and commonly defined, it essentially involves the collection, use and reprocessing of waste materials as primary or secondary inputs (in lieu of virgin new materials) to fabricate entirely new products. This is often confused with 're-use', which involves reprocessing a product in its current form, such as refilling beverage containers (e.g. beer bottles), re-treading used vehicle tires, or producing industrial rags from used clothing. Certain activities, like reprocessing road asphalt into new paving aggregate, can be considered to be either recycling or re-use.

The reprocessing of wastes into new products is also referred to as either 'open-loop' or 'closed-loop' recycling. Open-loop recycling, or 'down-cycling', involves converting one type of waste into an entirely different product than the original, such as recycling plastic bottles into plastic drainage pipes. Such new products will, however, ultimately lead to final end waste material that can no longer be reprocessed due to gradual aging, contamination and similar degradation of its basic properties over time, thus requiring ultimate disposal. Closed-loop recycling refers to materials, such as most metals, which have indefinite recyclability to create the same or similar products with no degradation over time, the most common example being remanufacturing aluminum cans into new cans.

Recycling as an industry really emerged during the Industrial Revolution of the late 1700s/early 1800s in regard to metals, particularly in the iron and steel industry. Further advances occurred during World Wars I and II due to pressing shortages of material, particularly metals, rubber and fabrics. In the post-war years with emerging new consumerism and the advent of large land-fill projects for waste disposal, growth in recycling declined but certainly remained an important part of many industrial operations.

Considerable new attention to recycling occurred in the 1970s, largely due to rising energy costs impacting on both waste transportation and manufacturing costs. Recycling aluminium, for example, uses only 5% of the energy required by virgin production. While less dramatic, glass, paper and metals also see significant energy savings when recycled feedstock is used.

The 1990s particularly saw significant new emphasis globally on the "3-R's" principle of 'Reduce, Reuse, Recycle' due to multiple factors. Dramatic urban, population and economic growth increased construction activity in the housing and commercial/industrial building sectors worldwide, combined with growing interest in urban redevelopment to reduce sprawl. This heightened construction activity generated increasingly large amounts of construction and demolition wastes typically disposed of previously in landfills as part of the general waste stream. The costs of transporting wastes to ever diminishing land-fill opportunities, however, coupled with global warming and heightened environmental concerns over impacts from waste disposal also saw municipalities around the world introduce curbside domestic waste recycling collection programs.

Particular emphasis has been given in recent years to diverting plastics and rubber from the waste stream and recycling these into new products. In the U.S. alone, close to 80% of the almost 300 million vehicle tires scrapped annually are now being recycled in various ways⁽¹⁾. Numerous new technologies and industries have emerged to recover, recycle and reprocess increasingly valuable waste material creatively into new products, such as electronics recycling and 'composite lumber' utilizing recovered plastics.

Commonly recycled materials have varying rates of recovery, re-use and environmental benefits. In North America, approximately 45% of aluminum cans are now recycled using 95% less energy than the original product, while reducing carbon (CO₂) emissions by 10 tons per ton of aluminum produced. Only about 25% of glass is recycled, since sand as the basic component remains both plentiful and inexpensive, with only marginal energy savings or CO₂ reductions compared to new products. About 30% of soft drink bottles (polyethylene terephthalate) are now recycled, usually down-cycled into lower grade products but with 75% energy savings and 1.7 tons of CO₂ reduction per ton. About 25 % of paper is recycled at 45% energy savings and 2.5 tons per ton in CO₂ reduction. Although 88% energy savings can be realized, recyclable polystyrene containers (e.g. yoghurt) are negligibly reprocessed primarily because of identification difficulties during the waste separation process.

Available information on the major components of the overall waste stream varies, particularly since industrial, commercial, hazardous and similar wastes are often combined with or excluded from municipal waste stream numbers. A number of North American studies, however, suggest the following breakdown on Table 7 are generally the major components of the municipal waste stream, by percentage overall. Of these wastes, approximately 24% are recycled, 7% composted, 14% incinerated with 55% going to landfills today.

Table 7: Components of the Municipal Waste Stream

Paper/cardboard	38-42%
Rubber/leather and textiles	7-8%
Glass	5.7-6%
Food	10-12%
Wood	5.4-6%
Metals	7.6-9%
Plastics	10.2-12%
Yard waste	12.6-13%
Other	3.3-3.5%

(Various Sources)

A 2005 European study⁽²⁾, however, determined that the municipal waste stream accounted for just 14% of all waste generated in Western Europe, and industrial wastes a further 15%. Taken together, these are slightly less than the 32% of all solid wastes in Western Europe particularly generated through construction, building renovation and repair, and demolition (C&D) waste. This is very close to Public Works Canada's C&D number of 33%⁽³⁾, and a 2005 U.S. study at 25%⁽⁴⁾.

Figures on how much of this particular type of waste actually gets recycled are less readily available. A 2011 Australian study⁽⁵⁾, however, concluded that of 19 million tonnes of C&D waste generated in 2008-09, 8.5 million tonnes (45%) was disposed of through landfill while 10.5 million tonnes (55%) was recovered and recycled.

Given the wide range of construction activity occurring around the world, figures are also not readily available on what portion of such wastes are generated by construction/renovation activities versus demolition activities. The available literature, however, generally suggests about 1/3 can be expected to come from construction waste versus 2/3's from demolition.

C&D wastes overall can generally be anticipated to include:

Concrete (with or without rebar), brick, asphalt, slate, aggregates;
Wood, dimensional lumber, plywood and engineered beams;
Gypsum wallboard (drywall);
Insulation (fiberglass, foam board, etc.);
Commercial membrane (e.g. building wrap);
Ferrous metals, structural steel, steel framing members;
Non-ferrous metals;
Electrical wiring, conduit and lighting fixtures;
Plumbing pipes and fixtures;
Roofing, shingles and ceiling tiles;
HVAC (ductwork, motors);
Glass;
Panels (e.g. OSB and MDF);
Carpeting, broadloom, carpet tiles and linoleum;
Architectural salvage such as furniture, doors and door frames, windows and
frames, partitions, porcelain fixtures; and
Landclearing residuals such as soil, trees, stumps, brush.

It can also be expected that some worker food wastes and illicit dumping by others can occur with unsecured waste collection bins generally placed at construction sites.

The literature is also generally consistent in suggesting that 90% to 95%⁽⁴⁾ of the above primary C&D waste materials are currently recyclable and/or reusable today utilizing available technologies. Actual numbers, however, will obviously be dependent on actual waste diversion and recovery rates being achieved, as well as transportation distances to, and availability/capacities of, local re-manufacturing industries capable of receiving and reprocessing such materials.

It should be anticipated that some potentially hazardous materials can accompany C&D wastes being collected and sorted for recycling⁽⁶⁾. These may include:

Adhesives and adhesive containers, leftover paint and paint containers, excess roofing cement and roofing cement cans;
Waste oils, gasoline, grease, and machinery fluids;
Asbestos from shingles, siding and insulation;
Creosote from treated lumber;
Pentachlorophenols from veneers and laminated wood;
Lead and mercury-based paints;
Formaldehyde present in carpet and treated or coated wood;
Batteries, fluorescent bulbs
Gases (such as refrigerants).

Available information on the constituent components of C&D wastes by their percentage/proportion also varies widely, particularly with regard to demolition wastes given the wide variety of project types involved. American information⁽⁷⁾ more specific to new residential construction, however, suggests the following breakdown:

Table 8(a): Components of Residential Construction Waste

Residential Construction Waste	Percentage of Total Volume
Primary Materials	
Wood	30% - 50%
Drywall	10% - 25%
Corrugated Cardboard	10% - 20%
Secondary materials	
Packaging (Plastic and Paper)	5% - 15%
Metals	5% - 10%
Masonry	1% - 10%
Shingles	1% - 5%
Miscellaneous Material	
Insulation	Less than 5%
Carpet/Padding Scrap	Less than 5%
Dirt and Rock	Less than 5%
Flooring Scrap	Less than 5%
Lunch Garbage	Less than 5%

Information on residential construction waste compiled by the Toronto Homebuilders Association in 1989⁽⁶⁾ suggested the following comparable numbers:

Table 8(b): Components of Residential Construction Waste

Residential Construction Waste	Percentage of Total Volume
Dimensional Lumber	25%
Manufactured Lumber	10%
Drywall	15%
Masonry and Tile	12%
Cardboard	10%
Asphalt	10%
Fiberglass	5%
Metals	4%
Plastics	4%
Other	5%

American research indicates that development investors and construction project managers have become increasingly aware of the growing value of salvageable recyclable wastes generated by large new construction projects⁽⁴⁾. Such wastes are now being increasingly and cost-effectively 'separated at source' on-site during the construction process for re-sale directly to re-manufacturing industries. This practice reflects and responds to the higher transportation and labour costs associated with multiple transfers and intermediate handling of the wastes by intervening third-party businesses, that would otherwise diminish financial returns to the source provider.

It is therefore reasonable to expect that over time, C&D waste collection and sorting facilities will receive and be processing more, predominantly 'mixed', loads of materials from demolition projects primarily or other smaller new construction and renovation projects as well.

iv. Scarborough Recycling and Recovery Uses

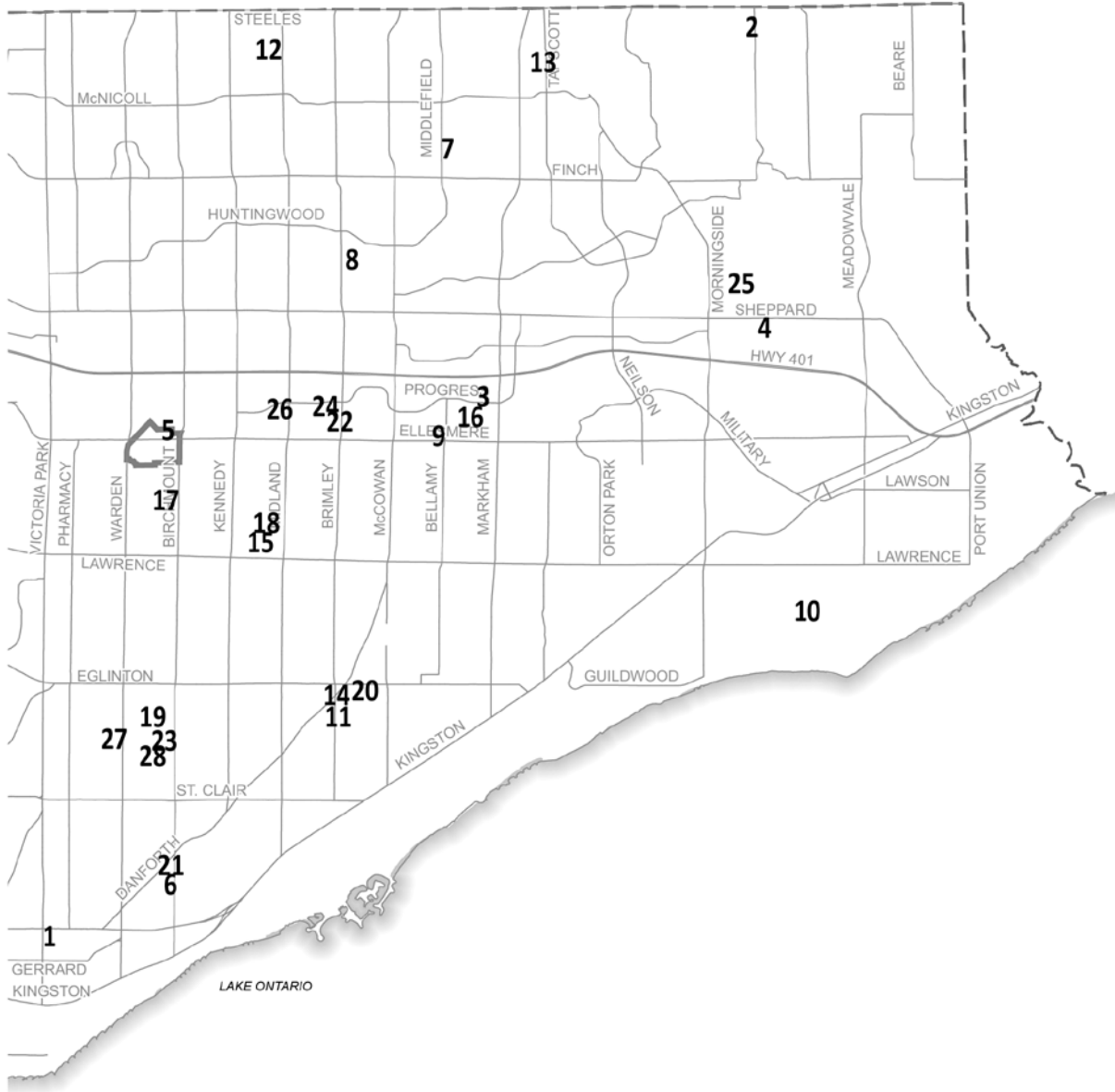
Based on information compiled by Business Retention and Expansion staff (Economic Development and Culture Division), there are currently 28 known industrial operations in Scarborough engaged in the collection, sorting and further processing of recyclable wastes, either as a primary or secondary function of their business. These are identified by address on Table 9 and located on Map 6 by corresponding numbers.

Eight enterprises are engaged in the recycling of used clothing and textiles, largely for export. There are also 8 facilities handling scrap metals. Three facilities reprocess used concrete and asphalt, while 3 others reprocess used paper and cardboard. Two facilities are engaged in the recovery of used electronics components such as computers and related hardware, televisions, etc. One facility reprocesses tree salvage into useable lumber. One facility handles C & D wastes. Lastly there are two auto scrap yards in south-west and north-east Scarborough.

Table 9: Recycling Operations in Scarborough

	Company	Address	Street	Products/Materials Handled/Processed
1	Jones Auto Wreckers Inc.	1	Thora Ave	Auto Scrap
2	Standard Auto Wreckers	1216	Sewells Rd	
3	Alysko International Group Inc.	875	Progress Ave	Clothing/ Textiles (sort/grade/export)
4	Canadian Clothing International Inc.	541	Conlins Rd	
5	Cantex Canada Limited	2	Rolark Dr	
6	Global Textiles Exporters Ltd.	390	Birchmount Rd	
7	IMP-X (Canada) Group Inc.	595	Middlefield Rd	
8	N I H Enterprises Inc.	135	Commander Blvd	
9	Rio Textiles Exporters Canada	1840	Ellesmere Rd	
10	SG Enterprises Inc.	570	Coronation Dr	
11	Crupi Group (The)	477	Brimley Rd	Concrete/ Asphalt
12	Crupi Group (The)	85	Passmore Ave	
13	Furfari Paving Co. Ltd.	1159	Tapscott Rd	Electronics (computers, etc.)
14	Delta Recycling	491	Brimley Rd	
15	ERS International	2450	Lawrence Ave E	Metal Scrap
16	Dandas Metals Recycling	50-52	Production Dr	
17	Eagle Ontario Recycling	105	Howden Rd	
18	Fortune Forever Canada	140	Midwest Rd	
19	Manville Metal Recycling	107	Manville Rd	
20	Scrapper Jim Ltd.	20	Barbados Blvd	
21	Super Metal Recycling and Equipment	446	Birchmount Rd	
22	Total Scrapdepot Inc.	34	Golden Gate Crt	
23	Triple M Metals (Scarborough Depot) Inc.	80	Sinnott Rd	
24	Atlantic Packaging Products Ltd.	111	Progress Ave	
25	Metro Waste Paper Recovery Inc.	45	Thornmount Dr	
26	New Forest Paper Mill	333	Progress Ave	Tree Salvage/ Lumber
27	Urban Tree Salvage	753	Warden Ave	
28	Promed Recycle Inc.	32	Upton Rd	Construction/ Demolition Waste

Map 6: Recycling Operations in Scarborough



Recycling Operations Scarborough - Map

Ellesmere Employment Study

Not to Scale 
 Prepared 05/15/14; Updated 11/24/14

File # 14 148048 ESC 37 OZ

v. Recycling Zoning Regulation in Other Municipalities

Planning staff have reviewed the treatment of recycling and waste recovery facilities in the zoning by-laws of other Southern Ontario municipalities including Mississauga, Vaughan, Markham, Ajax, Whitby, Oshawa, Cobourg, Kingston, Barrie, Hamilton, Guelph, Kitchener, Waterloo and London.

The review determined broad inconsistency in terminologies, definitions and applicable regulation approaches exist among the by-laws considered. For example, only Hamilton and Mississauga's by-laws define 'waste', while only Kitchener's by-law defines 'recycling' (as 'a process whereby waste is converted to re-usable material'). Only Barrie defines 'recyclable materials' only 'as materials sorted and separated from the waste stream at a transfer/recovery facility for reprocessing into useable products or as raw materials for further manufacturing'. Only London defines a 'construction and demolition recycling facility', which 'processes non-hazardous materials from construction and demolition projects and other sources including wood, drywall, brick, concrete, asphalt shingles, glass and scrap metals'.

Seven of the by-laws reviewed defined 'salvage yards' or 'junkyards', the definitions for most of which suggest some combination of both scrapping of materials for disposal and salvage for re-use. Only Guelph, Kitchener and London contained definitions for 'manufacturing' that reference some form of recycling activity.

A much greater variety in definitions were found, however, for such facilities as 'waste processing facility/station' (two by-laws), 'waste transfer facility/station' (3), 'recycling facility/depot/transfer station' (3), 'waste management/resource recovery facility' (1) and 'material recovery facility' (2).

Six of the fourteen by-laws reviewed contained very few, if any, zoning provisions relating to recycling or waste recovery. Markham's by-law contains no relevant provisions. Kingston's by-law simply prohibits 'junkyards' in all zones, while Whitby and Waterloo similarly prohibit 'salvage/junkyards' in certain industrial zones. Cobourg permits a 'recycling facility' by way of one site specific Exception only. Lastly Ajax, also by way of one site specific Exception, permits a wholly enclosed 'waste material recycling facility' (undefined) to a maximum size and cap on store materials of 540 metric tonnes.

Interestingly, very few of the by-laws reviewed contained general 'as-or-right' zoning permissions within their industrial zones for uses particularly related to recycling and the various types of waste handling facilities. Accordingly, many by-laws (particularly Hamilton's, Mississauga's and London's) instead utilize numerous special provisions and particularly many site specific Exceptions to regulate where such facilities will be permitted. Such zoning approaches are appropriate for similar application within the Study Area.

Six of the by-laws reviewed contained provisions regulating or prohibiting the handling of hazardous wastes. Only Hamilton's by-law contains specific regulations specifically relating to "hazardous waste management" facilities. Four of the by-laws contained provisions intended to control noxious uses, commonly defined as uses which are 'offensive by reason of the emission of odour, smoke, dust, noise, gas fumes, vibration or refuse matter'. Similarly, two by-laws make specific distinctions to ensure only inert 'dry' wastes are processed and to prohibit the handling of 'putrescible' (i.e. wet organic) wastes.

Only two of the by-laws set minimum separation distances from residential zones (300 and 800 metres) for certain waste handling facilities. Only the Hamilton by-law applies requirements for MOE certificates of approval and compliance with applicable regulations under the Environmental Protection Act.

Only three by-laws apply specific regulations on the size and location of outdoor storage areas for waste handling facilities, including limitations on the nature of materials stored.

Just two by-laws require the waste handling operation to be conducted wholly within an enclosed building. Interestingly, Oshawa's by-law also applies two site specific provisions requiring a 'recycling establishment and/or transfer station' within such enclosed buildings to have 'negative pressure', presumably to minimize impactful fugitive dust and similar emissions from the operation.

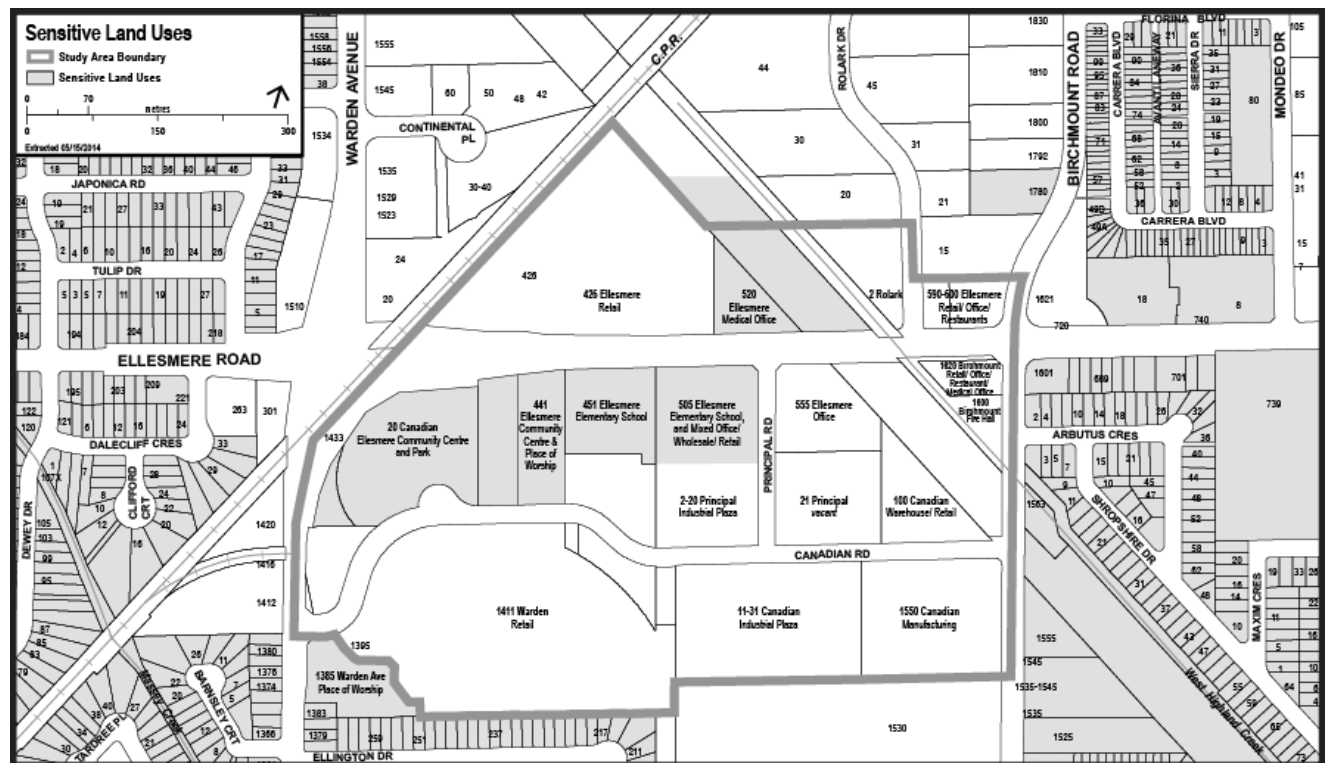
While some reliance is placed on compliance with provincial requirements, most of the by-law provisions reviewed from other municipalities appear to have resulted from consideration of, and particular responses to, specific waste handling proposals, rather than from a more comprehensive response to implement more generally applicable by-law provisions.

vi. Land Use Compatibility

The Ministry of Environment D-Series Guidelines are intended to protect incompatible land uses from one another. The Guidelines establish broader areas of influence and more narrow separation distances, as noted in Section 4.ii. above. Without mitigation, the minimum separation distance between a sensitive or incompatible land use and Class 1 and Class 2 uses, as noted in Section 4.ii. above, is 20 metres and 70 metres respectively (typically measured from lot line to lot line between industrial and nearby sensitive uses).

As indicated on Map 7, the Study Area is flanked on the east, west and south sides by stable residential neighbourhoods, and has a series of sensitive uses – established and proposed schools, places of worship, community centres – along Ellesmere Road's southern frontage and a new medical centre on the north side of Ellesmere Road. A significant component of staff's continued review and analysis is an assessment of the success of this close relationship with current uses, as well as potential issues which could result from introduction of new uses permitted through zoning.

Map 7: Sensitive Uses In/Adjacent to Study Area



The OPA 231 process has recognized the potential difficulties in having sensitive and employment uses at close proximity, and has accordingly removed permissions for sensitive uses from the City's employment lands. This locational tension is often reflected through complaints to appropriate licensing bodies, including the City's MLS Division and the enforcement branch of the MOE's Environmental Approvals group, which receives and reviews complaints about businesses operating under a MOE Environmental Compliance Approval.

Within the Study Area, property standards issues have been reported and investigated by MLS. Topics of complaint have included refuse, noise, traffic, infestations, abandoned construction debris, odour (including from waste and from the storage of portable toilets) and illegal dumping.

Staff have assessed the compatibility of existing uses within the Study Area through policy and zoning by-law review as well as through a review of complaints received to date. Staff have also attempted to identify trends in compatibility reflected through MLS and MOE Environmental Compliance Approval complaints for recycling facilities within Scarborough more broadly. Complaints associated with recycling operations generally pertain to noise and air quality issues, litter, tracked debris on roads and in a few cases, hours of operation. Such complaints are generally associated with larger, heavier types of recycling operations, and reflect more on poor management practices by the facility operator than on inherent characteristics of the type of recycling/recovery facility itself, which is already heavily regulated by the province to prevent such problems.

7. 21 Principal Road at the Ontario Municipal Board

An application for site plan approval of the proposed construction and demolition waste recycling facility on this site was filed with the City of Toronto on January 30, 2014. Subsequent to the enactment of Interim Control By-law No. 1431-2013 in November 2013, the owner on January 8, 2014 appealed the by-law to the OMB pursuant to subsection 38(4) of the *Planning Act*. The owner subsequently on June 9, 2014 also referred its site plan application for the facility to the Board, requesting that the appeals be heard together. Pursuant to the hearing conducted on September 8, 9 and 11, 2014, the Board on September 29, 2014 issued its decision on the appeals.

The first appeal relating to Interim Control By-law No. 1431-2013 was allowed in part by excluding the subject property from the by-law. The Board will also approve the site plan, but its final Order has been withheld pending confirmation by the City that the pre-conditions attached to the decision, including the owner entering a Site Plan Agreement with the City, have been satisfied. The Board's decision is available at:

<http://www.omb.gov.on.ca/e-decisions/pl140034-sep-29-2014.pdf>

In addition to the Site Plan Agreement requirement, the decision sets out 26 additional 'pre-approval' conditions to be satisfied by the owner. Key elements of these conditions beyond usual City site plan requirements include:

- a) Submission of all required and revised final plans, studies and reports to the City prior to the agreement. These include, in part, revised site plan drawings providing for all required parking and revised landscape drawings to provide 3.0 m high 'tight wood board on board' fencing along the north, west and south property lines (1.8 m heights originally proposed);

- b) The owner obtain an Environmental Compliance Approval (ECA) from the MOECC, or demonstrate that an application for same has been filed that is complete to satisfy the Ministry's requirements;
- c) The owner is to advise the City of the ECA application for this facility;
- d) The ECA application is to contain a Best Management Practices Plan to address fugitive dust emissions;
- e) The owner is to submit an updated quantitative respirable crystalline silica (PM₁₀) assessment for the operation for peer review by the City's expert environmental air quality consultant;
- f) The owner is to also submit an updated quantitative odour assessment to the City which addresses all materials stored outdoors from any of the owner's other business activities likely to be undertaken on the site, beyond just the recycling facility, also for peer review; and
- g) Similarly, an updated traffic operations assessment is also required reflecting both the recycling operation and all other industrial activities proposed on this site pursuant to a revised Design and Operations Report (required for the ECA application).

The Site Plan Agreement itself to be registered on title will contain, in addition to usual City 'post approval conditions' relating to site servicing, road improvements and street trees, further conditions requiring that:

- a) All materials to be stored outdoors, beyond construction and demolition wastes, will also be within fully enclosed and covered bins only;
- b) The owner advise the City within two weeks of all future applications for new or revised ECA's;
- c) Revised Environmental Noise or Air Quality Assessments and/or Design and Operations Reports in support of new or revised ECA's applications as may be required by the MOECC for any reason, will also be provided to the City within two weeks of their filing with the Ministry;
- d) The recycling facility hours of operation are limited to the hours of 6:00 a.m to 8:00 p.m. Monday through Saturday only; and
- e) The maximum daily tonnage of construction and demolition waste which can be accepted at this recycling facility is 200 tonnes per day. Any proposals to increase this amount, aside from usual ECA application requirements, will require an application with all supporting documentation to the City.

The above conditions were largely developed by City staff during the hearing process as a basis for potential settlement. To date since the OMB rendered its decision, however, City Planning staff have had no further contact from the owner or its representatives in regard to satisfying any of the Board's conditions or advancing the Site Plan Agreement itself.

8. Options to Address Recycling/Recovery Use Compatibility

To address what zoning framework may be appropriate for application to the Study Area, Planning staff have looked in greater detail at all 28 recycling/recovery facilities in Scarborough. The results of this review are set out in Appendix 2.

As is clearly evidenced on that table, the majority of Scarborough's recycling/recovery industries are currently located within the new *Core Employment Areas* designation under OPA 231. As indicated on Map 4 in Section 4 above, within the Study Area this new designation will only apply to the eastern portion of the Study Area. Most of the Study Area will be designated *General Employment Areas* permitting a broader range of non-industrial land uses. Proximity to heavier forms of recycling/recovery activity, however, could create potential compatibility issues for such other employment uses and potentially discourage many from establishing here.

Under the former City of Scarborough Employment Districts Zoning By-law No. 24982, almost all of the 28 Scarborough sites have base industrial zoning permissions. The heavier types of recycling activity involving outdoor handling and storage, such as the concrete, asphalt and scrap metal recyclers, are also generally zoned to permit outdoor storage with many also zoned to permit Special Industrial (MS) uses as well, which includes permission for such uses as chemical manufacturing and metal smelting.

The by-law also prohibits recycling uses within 100 m from a residential zone, as measured between property boundaries. Within the Study area, this means that due to their proximity to nearby residential zones, recycling uses are already not permitted on all properties on the west side of Birchmount Road and the south side of Canadian Road.

Under the City's new comprehensive Zoning By-law 569-2013, many of the heavier forms of recovery facilities in Scarborough are found within the Employment Heavy Industrial Zone (EH). Such zones are typically found within the interiors of employment districts and would not be appropriate for consideration within the Study Area. (The closest such zone is located north of the Study Area along Rolark Drive within the Ellesmere Employment District.)

Similar to By-law 24982, the new by-law 569-2013 also contains recovery facility separation distancing requirements from a residential zone, but relaxes the distance somewhat down to 70 m. Within the Study area, the properties currently subject to this by-law as well would still not be permitted recovery facility uses.

In zoning terms under either by-law, therefore, the only portion of the Study Area where recycling/recovery uses are currently permitted today are just the ten properties fronting Ellesmere or Principal Roads. Of these, only two (11/21/31 Canadian Road and 2 Rolark Drive) are actively used purely for industrial purposes today, with a third site (21 Principal Road) currently vacant.

Similar to OPA 231 as well, the new Zoning By-law remains under appeal. It is therefore not appropriate to consider either expanding the general application of By-law 569-2013 to all of the Study Area, or to otherwise revise zoning restrictions on recovery uses under the parent by-law generally, at this time. The application of limitations on certain recovery uses by way of Exception specific to the Study Area, however, is clearly warranted.

Within the Employment Industrial Zone (E) generally, including that part of the Study Area having this zoning under By-law 569-2013, all recovery uses are permitted with the express exception of 'asphalt, concrete, heavy metal (arsenic, lead, mercury and cadmium), hazardous chemical, industrial gas, rubber and asbestos' recovery facilities. Having regard to the intent of this limitation and the general, largely non-industrial employment character of the Study Area, it is appropriate to consider adding 'construction and demolition waste material' recovery facility to the above list of

prohibited uses by way of Exception introduced through zoning by-law amendment for the (E) zoned lands only within this Study Area.

Similarly for consistency and greater certainty, this same expanded list of prohibited recycling/recovery facilities should then also be added by amendment to the Employment Districts By-law 24982 as an Exception applying to those properties in the balance of the Study Area where recycling is currently permitted under this by-law.

21 Principal Road is a unique situation. It has received conditional OMB approval for a construction and demolition waste recycling facility as currently permitted under the former Scarborough Employment Districts Zoning By-law 24982. As this use would no longer be permitted under the Exception limitations proposed above, it is appropriate to establish some zoning clarity that this approved facility may still proceed to development within the conditions imposed by the OMB. Chapter 2 of By-law 569-2013 contains 'transitioning' provisions to enable complete applications received prior to enactment of that by-law in May 2013 to proceed through final site plan approval and building permitting, if they comply with the zoning by-laws of the former area municipalities, notwithstanding that some aspect of the proposal does not conform with the new by-law. It would be appropriate in this case to apply a similar transitioning provision by way of separate Exception for this property in the proposed amendment to By-law 24982. This will ensure that the owner's current site plan application on the date of enacting the amending by-law, as conditionally approved by the OMB, may continue to construction and operation without zoning impediment. Should the requisite site plan agreement for the specific facility proposed by that application ultimately not be executed and registered or the facility does not otherwise proceed to development, however, construction and demolition waste material recycling (in addition to the other recycling uses being restricted) would no longer be permitted on this property.

Lastly, the City's Ellesmere Park and Community Centre at 20 Canadian Road continue to be subject to industrial zoning under Scarborough's By-law 24982. While public parks are a permitted use in all zones under this by-law, it would be reasonable and appropriate to now apply Parks (P) zoning, to reflect the established uses of these lands, through the zoning amendment to this by-law proposed above.

The City of Toronto Official Plan, particularly as now amended by OPA 231, does not contain industrial policies specifically addressing industrial recycling/recovery facilities. In the absence of a larger City-wide policy review focusing on possible compatibility issues associated with recycling/recovery industries, the introduction of new and potentially restrictive Official Plan policies to the Study Area at this time may result in an unexpected and potentially undesirable precedent. Similarly, as OPA 231 remains under appeal, it is not appropriate at this time to also consider revising the application of the new *General Employment Areas* and *Core Employment Areas* land uses designations already proposed through that amendment to the Study Area pursuant to this Study. Accordingly, further amendment to the Official Plan addressing recycling/recovery land uses is not warranted pursuant to the findings of this Study.

9. Conclusions

Waste recycling/recovery industries are increasingly vital from both an environmental and economic standpoint, and adequate provisions to accommodate them at appropriate locations within the City of Toronto is essential. Most recycling industries are generally indistinguishable from, and

operate compatibly with, other types of industrial uses. Some recycling/recovery activities, however, such as concrete, asphalt, scrap metal, hazardous materials and construction and demolition waste material recovery can require expansive outdoor storage areas, process significant volumes of waste materials, and potentially generate higher volumes of noise, dust, odours, vibration and/or greater numbers of heavy trucks that may not be conducive with other industrial activities or nearby sensitive land uses. Such activities can reasonably be considered to be 'heavy' industry and should be located appropriately under Official Plan land use policy and zoning designations.

Notwithstanding significant employment growth over the past two decades, the Ellesmere Employment Study Area has gradually evolved into a notably mixed, largely non-industrial employment character. This includes some sensitive uses that are existing or currently under development in the area that, while perhaps no longer provided for under OPA 231, will likely continue to exist here for many years to come. It is important to area businesses and the local community that this mixed character be respected and reinforced. It is also important to the City of Toronto that economic and employment opportunities continue here. While already limited in the Study Area under existing zoning, recycling/recovery activities can make a contribution to the extent they do not create incompatible conditions or impacts on industrial or other employment uses and nearby sensitive land uses. Uses that recycle/recover materials such as concrete, asphalt, scrap metal, hazardous materials or construction and demolition waste material recovery, however, have a higher potential risk of generating undesirable off-site impacts and deterring other employment uses from locating within Study Area. Conversely, given the nature of this area and proximity of nearby residential uses to the west, south and east, such uses here already face significant increased challenges for obtaining provincial Environmental Compliance Approvals.

On balance, it is therefore appropriate that consideration be given to implementing further zoning limitations to avoid such conflicts and incompatibilities in the future by further limiting permissions for heavier forms of recycling/recovery activity within the Ellesmere Employment Study Area.

Appendix 1: Site and Zoning Information by Property

Address	Current User	Zoning		Density Permission (A) (F.S.I.)	Site Area (B) (M ²)	Permitted G.F.A. (C) (A x B) (M ²)	Built G.F.A. (D) (M ²)	Estimated Residual Density Available (C-D) (M ²)
		Scarborough	ZBL 569-2013					
2 Rolark Drive	Cantex Canada Ltd.	M (Industrial Zone), OU (Office Uses Zone)	N/A	0.5	7 688.97	3 844.5	3 201.53	643
1620 Birchmount Road	Coffee Time, Subway, Dentist	MDC (Industrial District Commercial Zone)	N/A	0.4	3 157.22	1 262.9	753.8	509.2
1600 Birchmount Road	Toronto Fire Station No. 245	I-PS (Institutional-Public Service Zone)	E (Employment Industrial)*	1.0*	4 937.13	4 937.13*	488.95	4 448.2
1550 Birchmount Road	Rapid Refrigeration Manufacturing Co. Industrial	M	E*	1.0*	21 367.24	21 367.24*	10 269	11 148.2
11-21, 31 Canadian Road	Industrial Plaza	MG (General Industrial Zone)	E*	1.0*	28 327.24	28 327.24*	4 987.87	23 339.4
100 Canadian Road	Access Self Storage Warehousing	M	E*	1.0*	23 100.0 (incl. former Hydro Corridor)	23 100.0* (significantly impacted by TRCA regulated floodplain)	6 396.5	16 703.5 (subject to TRCA approvals)
20 Canadian Road	Ellesmere Community Centre	M, MC (Industrial Commercial Zone)	N/A	0.4	26 911.39	10 764.6	731.43	10 033.2
1411 Warden Avenue	Costco Retail	M, MC	N/A	0.4	62 644.85	25 057.9	12 851.37	12 206.5

Address	Current User	Zoning		Density Permission (A) (F.S.I.)	Site Area (B) (M2)	Permitted G.F.A. (C) (A x B) (M ²)	Built G.F.A. (D) (M ²)	Estimated Residual Density Available (C - D) (M ²)
		Scarborough	ZBL 569-2013					
1407 Warden Avenue	Park	M, MC	N/A	0.4	40 000.0	16 000.0	1 784.0	14 216
426 Ellesmere Road	Home Depot Retail	MC	N/A	0.4	48 723.77	19 489.5	23 248.34	0
441 Ellesmere Road	Jain Society of Toronto	ME (Mixed Employment Zone)	N/A	0.75	16 389.64	12 292.2	6 763.65 (Proposed, mainly existing)	5 528.6
451 Ellesmere Road	Sathyas Sai School (new location)	M	N/A	0.75	10 481.28	7 861.0	2 806.0	5 055.0
475 Ellesmere Road	Industrial Plaza: Eggsmart restaurant, realtor, décor store	M, OU	N/A	0.75	(Included with 2, 12 and 20 Principal Rd. and 505 Ellesmere Rd.)			
2, 12 and 20 Principal Road, and 505 Ellesmere Road	Industrial Plaza: Maritime Lobster Wholesale Fish Market, existing location of Sathvas Sai School, law office, decorating supplies store, kitchen supply store	M, OU	N/A	0.75	24 402.35	18 301.8	11 327.39	6 974.4

Address	Current User	Zoning		Density Permission (A) (F.S.I.)	Site Area (B) (M ²)	Permitted G.F.A. (C) (A x B) (M ²)	Built G.F.A. (D) (M ²)	Estimated Residual Density Available (C-D) (M ²)	
		Scarborough	ZBL 569-2013						
520 Ellesmere Road	Medical Office Building	M, MC	N/A	(0.4 on part only)	22 464.40 (9 145.82)	Offices to a max. 10 000 m ²	10 010.33		0
555 Ellesmere Road	Pattison Sign Group Industrial Office Building	M	N/A	0.75	10 400.34	7 800.3	3 392.0		4 408.3
590 Ellesmere Road	Plaza: Boyd's Decorating Centre	OU	N/A	2.2	1 858.06	4 087.7	277.69		3 810.0
600 Ellesmere Road	Pizza Hut Restaurant	MDC (Industrial District Commercial Zone)	N/A	0.4	3 872.76	1 549.1	465.07		1 084.0
12 Principal Road	Industrial Plaza: Kachina Foods LTD. Food Processing Facility	MG	N/A		(Included with 2, 12 and 20 Principal Rd. and 505 Ellesmere Rd.)				
21 Principal Road	Vacant Industrial	MG	N/A	0.75	12 990.31	9 742.7	Vacant		9 742.7

Appendix 2: Designation and Zoning of Scarborough Recycling/Recovery Industries

No.	Company	Address	Recycling	OPA 231	By-law 24982	By-law 569-2013
1	Jones Auto Wreckers Inc.	1 Thora Ave.	Auto Scrap	N/A (Mixed Use Areas)	N/A (General Industrial Uses (MG) under Oakridge Community Zoning By-law 9812, excludes auto wrecking, junk and salvage yards)	
2	Standard auto Wreckers	1216 Sewells Rd.		N/A (Natural Areas)	N/A (Natural Environment Zone (NE) under Upper Rouge-Hillside Community Zoning By-law 25278, permitting only recreational uses and existing dwellings)	
3	AlySCO International Group Inc.	875 Progress Ave.		Core Employment	Industrial (M)	Employment (E)
4	Canadian Clothing International Inc.	541 Conlins Rd.		Core Employment	Industrial (M)	
5	Cantex Canada Limited	2 Rolark Dr.		Core Employment	Industrial (M), Office Uses (OU)	
6	Global Textiles Exporters Ltd.	390 Birchmount Rd.	Clothing/Textiles	Core Employment	Industrial (M)	Employment (E)
7	IMP-X (Canada) Group Inc.	595 Middlefield Rd.		General Employment	Industrial (M) and General Industrial (MG)	Employment (E)
8	N I H Enterprises Inc.	135 Commander Blvd.		Core Employment	Industrial (M)	Employment (E)
9	Rio Textiles Exporters Canada.	1840 Ellesmere Rd.		General Employment	Industrial (M)	Employment (E)
10	SG Enterprises Inc.	570 Coronation Dr.		Core Employment	Industrial (M)	Employment (E)
11	Crupt Group (The)	477 Brimley Rd.	Concrete/Asphalt	Core Employment	Industrial (M), General Industrial (MG) and Special Industrial (MS)	Employment (E)
12	Crupt Group (The)	85 Passmore Ave.		Core Employment	Industrial (M), General Industrial (MG) and Special Industrial (MS)	Employment Heavy (EH)
13	Furfari Paving Co. Ltd.	1159 Tapscott Rd.		Core Employment	General Industrial (MG)	Employment (E)
14	Delta Recycling	491 Brimley Rd.	Electronics	Core Employment	Industrial (M)	Employment (E)
15	ERS International	2450 Lawrence Ave. East		N/A (Mixed Use Areas)	Industrial Commercial (MC)	Employment (E)
16	Dandas Metals Recycling	50-52 Production Dr.		Core Employment	Industrial (M)	Employment (E)
17	Eagle Ontario Recycling	105 Howden Rd.		Core Employment	General Industrial (MG)*	Employment (E)
18	Fortune Forever Canada	140 Midwest Rd.		Core Employment	General Industrial (MG) and Special Industrial (MS)*	Employment Heavy (EH)
19	Manville Metal Recycling	107 Manville Rd.	Metal Scrap	Core Employment	Special Industrial (MS)*	Employment Heavy (EH)
20	Scraper Jim Ltd.	20 Barbados Blvd.		Core Employment	Industrial (M), General Industrial (MG) and Special Industrial (MS)	Employment Heavy (EH)
21	Super Metal Recycling and Equipment	446 Birchmount Rd.		Core Employment	Industrial (M)	Employment (E)
22	Total Scrapdepot Inc.	34 Golden Gate Cr.		N/A (Mixed Use Areas)	City Centre Residential (CCR)	Employment (E)
23	Triple M Metals (Scarborough Depot) Inc.	80 Sinnott Rd.		Core Employment	General Industrial (MG)*	Employment (E)
24	Atlantic Packaging Products Ltd.	111 Progress Ave.		Core Employment	Industrial (M)	Employment (E)
25	Metro Waste Paper Recovery Inc.	45 Thornmount Dr.	Paper/Cardboard	Core Employment	Industrial (M)	Employment (E)
26	New Forest Paper Mill	333 Progress Ave.		Core Employment	Industrial (M)	Employment (E)
27	Urban Tree Salvage	753 Warden Ave.	Tree Salvage/Lumber	General Employment	Industrial (M)	
28	Promed Recycle Inc.	32 Upton Rd.	Construction/Demolition Waste	Core Employment	Special Industrial (MS)	Employment Heavy (EH)

*Also Vehicle Service (VS)

Appendix 3: References

- (1) U.S. Environmental Protection Agency (EPA) web-site (Nov. 14, 2012)
- (2) Jan Stenis, *Industrial Management Models with Emphasis on Construction Waste*, (Doctoral Thesis, Lund Institute of Technology, (Lund, Sweden, 2005)
- (3) Public Works and Government Services Canada, *The Environmentally Responsible Construction and Renovation Handbook*, Government of Canada web-site (January 24, 2014)
- (4) Mark Lennon, The Institution Recycling Network, *Recycling Construction and Demolition Wastes: A Guide for Architects and Contractors* (Concord, New Hampshire US, April 2005)
- (5) Hyder Consulting Pty Ltd., *Construction and Demolition Status Report* to the Queensland Department of Environment and Resource Management (Melbourne, Australia, 2011)
- (6) Kurt Rathmann, *Recycling and Reuse of Building Materials*, National Pollution Prevention Centre for Higher Education (Ann Arbor, Michigan US, October 1998)
- (7) Robert Walther, *Builders' Guidebook to Reducing, Reusing and Recycling Residential Construction Waste in Wisconsin*, University of Wisconsin-Madison (Wisconsin US, 1993)