

City of Peterborough

Proposed Leaf and Yard Material Compost Facility

Part Lot 16, Concession 14 - Otonabee Ward

Township of Otonabee-South Monaghan

PLANNING REPORT

Prepared By Peterborough County Planning Department

December 2015

Introduction

The City of Peterborough is proposing a Leaf and Yard Material Compost Facility (LYMCF) on City owned lands located in southern half of Lot 16, Concession 14 of the Otonabee Ward, Township of Otonabee – South Monaghan. This new site is to replace the existing City LYMCF site currently located on Harper Road within the City of Peterborough.

In order to permit the proposed use on the site, an amendment to the Township Official Plan and an amendment to the Township Zoning By-law is required. In addition, the City has made application to the Ministry of Environment and Climate Change for an Environmental Compliance Approval.

The following report represents the Planning Report in support of the Planning Act applications.

Location and Site Characteristics

The subject site represents approximately 11.8 ha (~29.1 acres) of land with approximately 295 m (970 ft) frontage on Bensfort Road. The site is vacant and has historically been utilized for field crop production. A low ridge runs through the site from the north-east to the south-west which currently acts as a drainage divide for the site.

To the north, east and west the lands are surrounded by other rural lands that are utilized for hay and/or crop production. A small ephemeral watercourse is located directly adjacent on the west side of the site. Small pockets of non-evaluated wetland features are located to the west and north of the site. South of the site is the location of the City-County landfill site (open and closed portions).

Development Proposal

The City is proposing the development of a LYMCF for the site in order to replace the existing Harper Road site which currently operates within the City limits. Due to the success of the leaf and yard waste program within the City and some areas within the County, the existing Harper Road location is insufficient for the volume of materials brought to the site. In addition, relocating the operation next to the active landfill site will allow for efficient and inexpensive transfer of leaf and yard material from the landfill public drop-off area to the LYMCF.

The LYMCF is not proposed to be directly accessible to the public and will only be accessible by City/contract staff from within the existing City landfill site. No direct access to the LYMCF will be obtained from Bensfort Road as the existing landfill entrance to the south will be utilized in this regard..

The drumlin feature will be leveled to accommodate the composting windrows on an asphalt pad however a berm feature will be constructed around the east side of the pad in order to provide a visual buffer from Bensfort Road. This was an item requested for consideration by the Township during the pre-consultation review of the proposal and has now been implemented into the design. A berm will also be located on the west side of the asphalt pad in order to prevent surface water from entering the neighbouring creek. This was also another pre-consultation consideration identified by ORCA.

All processing activities associated with the LYMCF will be conducted on the asphalt pad. These include receiving and processing material, forming windrows, compost curing, screening and final product storage.

Stormwater run-off from the site will be directed to a stormwater management pond which will be constructed on the east side of the site. Flows from the pond will discharge into the City's municipal waste water collection system which currently services the landfill site.

Further detailed description of the LYMCF design and operation is contained in the supporting studies listed below.

In support of the development proposal the following reports have been undertaken:

1. Species at Risk Survey, prepared by Oakridge Environmental Limited dated September 2015;
2. Stormwater Management Addendum, prepared by UEM dated July 14, 2015;
3. Design and Operation Report, prepared by UEM dated August 31, 2015
4. Traffic Impact Study, prepared by City Manager of Transportation, dated May 20, 2015 (located as Appendix B to the Design and Operations Report)

Planning Analysis

The Township of Otonabee-South Monaghan has applicable planning policy stemming from a number of planning documents at the Provincial, County and Township levels. The following is an analysis of the LYCMF in light of those planning documents.

Provincial Policy

The Township of Otonabee-South Monaghan is subject to the policies of the Growth Plan for the Golden Horseshoe. The fundamental principle of the Growth Plan is to implement the Provincial government's vision for building stronger, prosperous communities by better managing growth within the region. The Plan provides policy direction related to residential growth and economic development in addition to planning for infrastructure needs of municipalities. Of interest to this particular amendment application would be the policies of section 4 entitled "Protecting what is valuable". The subject lands have been identified as having prime agricultural area characteristics and have therefore been recognized as such and appropriate policy developed in the OSM OP in accordance with section 4.2.2.1 of the Growth Plan. However section 4.2.4.1 states:

"Municipalities will develop and implement official plan policies and other strategies in support of the following conservation objectives:

d) Integrated waste management including –

- i. enhanced waste reduction, composting and recycling initiatives and the identification of new opportunities for source reduction, reuse and diversion where appropriate*
- ii a comprehensive plan with integrated approaches to waste management , including reduction, reuse, recycling, composting, diversion and the disposal of residual waste*
- iii promotion of reuse and recycling of construction materials*
- iv consideration of waste management initiatives within the context of long term regional planning, and in collaboration with neighbouring municipalities"*

Through the proposed Official Plan Amendment application lands are being identified to allow a composting use which is supportive of the above-noted policy. In addition, the use of the site is collaborative in nature and would be utilized by both the City of Peterborough and County of Peterborough which supports the idea of planning for these types of uses on a regional basis using a collaborative approach.

Based on this analysis the LYMCF is considered to be a use that would be consistent with the intent of the Growth Plan.

The 2014 Provincial Policy Statement (PPS) also has applicability to the development and the lands subject to the amendment proposal. The PPS provides policy direction on matters of provincial interest related to land use planning and development.

Section 1.6.10 of the PPS provides policy direction with respect to waste management. The policy acknowledges that waste management systems need to be provided that are of appropriate size and type to accommodate present and future requirements and facilitate, encourage and promote reduction, reuse and recycling objectives. Planning authorities should consider the implications of development and land use patterns on waste generation, management and diversion.

As discussed previously the City/County landfill is located immediately south of the subject lands and the proposal is to share infrastructure (internal access to site and leachate system) with the landfill, in addition to shared public drop-off of the compostable material. Situating these waste diversion functions adjacent to the landfill in shared location satisfies the intent of section 1.6.10 by providing a management system of appropriate size to deal with present and future requirements. In addition, having diversion uses consolidated in the same area provides a better level of management of the system and coordination of land use patterns.

The subject lands are within a prime agricultural area and the intent is to protect such lands for the long-term use for agriculture. Section 2.3.3.1 recognizes that in prime agricultural areas permitted uses include agricultural related uses and that such uses should be compatible with and not hinder surrounding agricultural operations.

Considering the proposed use deals with processing of compostables and ultimately produces an end-product (soil) it is interpreted that this use is somewhat agriculturally related in nature. The use is considered to be more compatible in nature with the surrounding agricultural lands as it is less intensive than the landfill operation.

Section 2.1 relates to the protection of natural features. Development of the site has been designed to provide a buffer from the adjacent watercourse to the west. In addition a Species at Risk survey was undertaken and it was identified that habitat for Bobolink and Eastern Meadowlark exist on the site. It is anticipated that up to 1.94 ha of habitat could be lost as a result of the development of the LYMCF however it is proposed that additional habitat of 3.65 ha be created adjacent to the site to compensate for the loss of this habitat. ORCA noted during pre-consultation that no EIS for the two small unevaluated wetlands located north and west of the facility would be required.

Lastly, section 2.6 deals with policies relating to cultural heritage and archaeology. There are no existing buildings located with the area subject to the OPA and rezoning therefore no cultural heritage buildings will be impacted by the change in land use.

Also a review of existing Ministry of Tourism, Culture and Sport archaeological mapping for the area does not indicate any resources in the immediate area which would trigger and archaeology study. Similarly there are no features within immediately proximately which would trigger an archaeological study to be undertaken. Therefore the development is not in conflict with section 2.6 of the PPS.

Based on this analysis the LYCMF is considered to be consistent with the PPS.

County Official Plan

The policies of section 4.3 Rural and Cultural Landscape apply to the subject lands. Within the Rural landscape it is recognized that agricultural lands exist and will be identified through the local OP. Overall the goal is to encourage the protection of agricultural lands and retain viable farm size units and to take into consideration the existing character of the agricultural community when allowing development in prime agricultural areas. MDS criteria have been applied and are addressed later in this report.

The proposal to develop the site for a leaf and yard material compost facility immediately adjacent the existing City-County landfill isn't perceived to impact existing agricultural uses in the area and in reality will create a more logical land use transition between the landfill operation and agricultural uses.

Section 4.7.3.3 provides policy direction with respect to waste disposal and emphasizes the need to promote reduction and to participate in waste management initiatives. The development of a LYCMF is one such approach to implementing this policy and reducing the volume of material that go into the City-County landfill site.

Based on these principles, the development of the LYCMF is considered to be in conformity with the County OP.

Township of Otonabee-South Monaghan Official Plan

Section 3.18 identifies types of major land uses within the municipality. Subsection 3.18.1(o) recognizes Waste Management Facilities including compost facilities as a major land use. Section 3.18.2 requires that an amendment to the plan will be required where the current land use designation does not provide for the major land use or infrastructure. In this particular case the subject lands are designated "Agricultural" in the Township OP Schedule "A". Section 5.8.5 states that major land uses or infrastructure may be permitted in agricultural areas in accordance with section 3.18.

Although the lands have been identified as Agricultural in the OP a review of the Canada Land Inventory mapping for the subject site on the County GIS system indicates that the site has Bondhead Sandy Loam which has a soil classification of 4

due to crop production limitations with the soil. Considering the lands do not fall within the class 1-3 soil types the site is not considered prime agricultural land as defined in the PPS. However, because there are class 1-3 soils in the vicinity it is acknowledged that it is a prime agricultural area. In recognition of the Agricultural designation the Township has placed on the lands it proposed that the land use designation not change and that a site specific policy be added to the lands to allow for the LYCMF use. Proceeding in this fashion makes it clear that agriculture is still the primary focus of the area and that the special policy is simply adding an additional use to the property. Maintaining the Agricultural designation also makes it very clear to the public that this does not represent an expansion to the adjacent County-City landfill operation. Providing a site specific policy within the Agricultural designation for the LYCMF use eliminates any confusion that would be associated with a Waste Disposal designation being applied to the lands similar to the designation of the landfill. To be abundantly clear – this is not a landfill use.

In accordance with section 3.18.3, studies as identified through pre-consultation with the municipality and ORCA a number of studies are submitted in support of this amendment proposal. A brief summary of these studies is as follows:

Species at Risk Survey Report - prepared by Oakridge Environmental Ltd.

This report concluded that 4 species of birds which are each classified as “threatened” would find the area to be suitable of habitat. Of those only one species was observed in the area (Bobolink) and it is recommended that the 1.94 hectares of lost habitat be replaced with 3.2 hectares of new habitat adjacent to the area of habitat loss.

Stormwater Management addendum - prepared by UEM

This report confirms that all water from the asphalt pad will be directed to a ditch system which will flow into a new stormwater management pond for the site. This pond will then drain directly into the City-County landfill leachate system where it is then pumped to and treated at the City waste water treatment plant. In addition, to assist with the direction of stormwater run-off a berm will be constructed adjacent to the watercourse on the west side of the site to ensure that no run-off water from the operation is emptied into the watercourse.

Design and Operations Report – prepared by UEM

This report outlines facility design and layout in addition facility operations. It is inclusive of a potential nuisances and control program in addition to site closure plan in the event the site ceases to operate and is decommissioned.

Traffic Impact Study – prepared by City of Peterborough, Transportation Division

This report is included as Appendix “B” to the Design and operations report. The findings of the study propose an estimated 44 additional trips per day on Bensfort road during peak season. This increase should have no noticeable effect on the operation of the road and does not trigger the need for any road improvements to support the project.

Section 3.18.3(a) of the Township OP addresses the background study requirements in support of an application for the development of a major land use or infrastructure. It requires the studies to address the following:

- i) The suitability of the selected location to accommodate the proposed use in the context of the polies of the plan;

Response: The information provided throughout this Planning Report provides justification for the selected location adjacent to the existing landfill operation. In addition the Stormwater Management Report and the Traffic Impact Study further support the location on this site.

- ii) The potential for land use conflicts and nuisance impacts on other properties in the Municipality together with proposals for reducing or eliminating those impacts;

Response: The Species at Risk Survey Report addresses potential conflicts with threatened species and proposes a method to mediate those conflicts. The Design and Operations Report clearly looks at the function of the operation and how potential impacts can and will be mitigated through site design and operation. The Stormwater Management Report addresses stormwater impacts from the site and mitigation through the design of the stormwater pond which will drain into the existing landfill leachate system. The Planning Report has also looked at land use considerations and spoken to conformity with the Provincial, County and now Township Plans.

- iii) The potential impacts on the Municipality’s services and financial resources, together with proposals for reducing or eliminating those impacts.

Response: All costs associated with the development of the site will be borne by the owner and there have been no services or financial impacts identified that would potentially impact on the Municipality’s services and financial resources.

Since a composting facility is identified as a waste management facility under section 5.12.3(a) of the Official Plan this report has also considered the policies of section 5.12.3(b) New Waste Disposal Areas and the following information is provided:

i) The physical suitability of the site for the proposed use;

Response: Currently a small drumlin feature is located on the site. This feature will be removed and a berm created along the east side of the site in order to provide a visual buffer/screening as requested by the municipality. The regrading of the site will allow for stormwater runoff to flow into a stormwater pond with outflow to the existing landfill leachate collection system. Utilization of this infrastructure feature is one of the reasons the site is physically suitable for the facility.

ii) The compatibility of the proposed use with surrounding land uses;

Response: As noted earlier in this report, the City/County Landfill operation is directly adjacent to the south boundary of the site. Utilization of the landfill entrance, weigh scales and public drop-off area support compatibility between the uses. The current/historical use of the site as hay production is not incompatible in nature. The composting use is low intensity compared to the landfill and creates an end product which is soil based.

iii) Potential impacts on the natural environment, with particular emphasis on ground water quality;

Response: Pre-consultation with ORCA and the Township assisted in the design layout of the site. A berm will be constructed on the west side of the site adjacent to the ephemeral watercourse to ensure that no stormwater from the site enters the stream. Protection of the groundwater is afforded through the asphalt pad which drains directly into a stormwater pond which then outlets into the landfill leachate system. With respect to identified species at risk the habitat of the Bobolink will be doubled through newly created habitat on the site.

iv) The degree to which the site will be exposed to the public;

Response: The only exposure the site has to the travelling public is along its east flank where it abuts Bensfort Road. The Township identified during pre-consultation that it wanted visual screening of the site from Bensfort Road. As a result a vegetated berm will be constructed to screen the public's view of the site.

- v) The ability of roads accessing the proposed disposal industrial site to carry traffic volumes projected to be generated by the proposed development, and the suitability of the proposed access points to the maintenance of a constant traffic flow pattern;

Response: As previously noted a Traffic Impact Study was completed which showed a projected increase of 44 vehicles a day during peak times. The study determined this minor increase would not change the level of service of the road or require any road or intersection improvements.

- vi) The applicable policies of section 3.0 and 8.16 of this Plan.

Response: Section 3.0 has been addressed earlier in this report. Section 8.16 will be addressed below.

Also contained within sections 5.12.4, and 5.12.7 are policies requiring the submission of a development plan inclusive of buffering. This has been included in the Design and Operation Report for Township review.

In addition, the proposed site falls within the waste disposal area of influence associated with the City/County landfill site. Section 5.12.9 speaks to proposed development within the area of influence and appropriately captures the study requirements with use of a Holding (H) symbol in the zoning by-law. As noted later in this report it is intended that the (H) symbol continue on this site until the conditions for removal are satisfied.

As noted earlier the amendment must also address the policies contained within section 8.16 of the Official Plan. These are as follows:

- a) Whether the proposed Amendment will be consistent with the overall purpose and intent of this Plan, and the objectives and policies set out in this Plan;

Response: It has been addressed throughout this report how this amendment is consistent with the plan and that supporting studies also show that the policies/requirements of the plan are being satisfactorily addressed and implemented.

- b) The need for the proposed change, use or development, having regard to lands elsewhere in the Municipality already designated for the proposed use;

Response: It has been clearly demonstrated that the use is required in order to divert leaf and yard material waste from entering the landfill site. No other area in the Township is pre-designated for this type of use. Its location adjacent to the existing landfill operation is clearly beneficial since it can utilize existing

infrastructure (i.e. access, weigh scales, public drop off area, and leachate system with minimal disruption.

- c) The suitability of the site for the proposed use, having regard to the relevant objectives and policies of this plan;

Response: It has been addressed throughout the body of this report and supported through the supporting studies that this site is a suitable location for the operation and that it also satisfies the intent of the Plan.

- d) The compatibility of the proposed use with existing or planned uses on adjacent lands and surrounding land uses.

Response: This has been addressed in earlier sections of this report and determined that the use will be compatible.

- e) The location of the subject lands with respect to:
 - i) The adequacy of the existing and proposed road system in relation to the development of the proposed use;
 - ii) The integration of the proposed land use with existing or planned land uses on adjoining lands;
 - iii) The convenience and accessibility of the site for vehicular and pedestrian traffic, and traffic safety; and,
 - iv) The physical suitability of the site considering existing or potential environmental or physical hazards, the impacts of these hazards and the feasibility of overcoming these hazards.

Response: a number of these issues are identical to section 5.12.3(b) which has been answered in detail above in this report. A Traffic Impact Study, Design and Operations Report, Stormwater Management Report and Species at Risk Assessment have all been undertaken to show that the site can be developed safely.

- f) The adequacy of potable water supply, sewage disposal facilities, stormwater management and other Municipal services;

Response: There will be no well drilled on-site in support of the use. Potable water will be in the form of bottled water for employees. Sewage disposal facilities will be the same as the landfill utilizing portable “Johnnie” type washrooms. Stormwater management has been clearly addressed in the Stormwater Management Report.

- g) The impact of the Amendment on significant environmental features and natural resources such as prime agricultural lands, mineral aggregate resources, wetlands, ANSI's, fish and wildlife habitat and significant forest resources;

Response: as identified earlier in the report the subject lands contain Class 4 soils and a drumlin feature exists on the site. These agricultural limitations have meant the site has historically been utilized for hay production. Two small unevaluated wetlands are located in the vicinity of the site however ORCA staff confirmed during pre-consultation that no EIS was required as they were far enough away from the site. A Species at Risk assessment was undertaken and it was determined that some habitat of the Bobolink would be disrupted through the location of the facility. In order to address this twice as much habitat is being created for the species on another section of the site.

h) The Minimum Distance Separation (MDS) formula requirements;

Response: MDS-1 was calculated for the barn that exists at 1910 Base Line. The barn is not utilized for livestock however MDS-1 was calculated and it was determined the barn requires a 225m setback. The proposed LYMCF is in excess of 400 m from the barn therefore the proposed use does not conflict with the barn or contravene the MDS-1 setback.

i) The potential effect of the proposed use on the financial position of the Municipality;

Response: there is no anticipated effect on the finances of the Municipality.

j) Such other matters as may be required by the municipality.

Response: No other matters were identified during pre-consultation.

As discussed earlier in this report the proposed method of amending the Official Plan will be to continue to recognize the current land use designation for the site and to add a text box to Map No. 3 to identify the area where the LYMCF will be located. In concert with this, section 5.8 Agricultural, will have a new section 5.8.12 added which will apply the special policy framework for the use of the site.

Based on the above we believe the proposed official plan amendment is in keeping with the spirit and intent of the Official plan and will provide a policy context ensuring conformity with the Plan.

Township of Otonabee-South Monaghan Zoning By-Law

The subject site is currently zoned Agricultural (A) with a Holding (H) symbol related to the adjacent landfill site. It is noted that the Waste Disposal Industrial – 6 (MD-6)

Zone (which is the zoning for the current landfill operation) permits a “composting facility” as one of the permitted uses however the use does not appear to be defined in the by-law.

It is proposed that LYMCF site be placed in an Agricultural exception zone in order to recognize that agricultural uses may still be permitted and also considering that the end product of the composting use is soil which can be utilized for agricultural uses. Setback regulations will be developed to address the layout of the site.

The Holding symbol provisions of section 4.15.4 are not proposed to be removed at this time but will carry forward with the new zoning and be lifted when the conditions of Holding have been met.

Conclusion

An application by the City of Peterborough proposes to add a special policy text section to the Agricultural policies of the Township Official Plan. The amendment would allow for the development of a Leaf and Yard Material Compost Facility to be run by the City on lands located at Part of Lot 16, Concession 14 of the Otonabee ward. The facility would utilize leaf and yard material from both City and County residents and would assist with the diversion of this form of material from the City/County landfill.

Through the body of this report and the supporting studies that have been undertaken it has been determined that the operation would be in conformity with Provincial policies as well as the County and Township Official Plans.

Site specific regulation of the site would be addressed through a rezoning of the site as well as site plan approval.

The proposal represents good planning for the area.

Prepared by,

Iain Mudd, MCIP, RPP