# **Township of Guelph/Eramosa**

# Requirements for Site Alteration and Movement of Fill By-law

57/2024

Version December 9, 2024

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# Purpose of the Requirements

This Requirements document was prepared to assist applicants, administrators, and the public with:

- Part 1 The rationale for the creation of Township of Guelph/Eramosa By-law 57/2024, a By-law to Prohibit and Regulate Site Alteration and Movement of Fill within the Township of Guelph/Eramosa. The background and supporting information primarily based on existing regulations for each section of the By-law.
- Part 2 The application processes.
- Part 3 The administrative process involved with Permit review, approval, and oversight.

The primary purpose of the Guideline is to outline:

- What Site Alteration and Movement of Fill activities are allowed when consistent with provincial and municipal policy and conducted in a manner that is protective of human health and the environment.
- The activities that are exempt from the By-law such as activities conducted under the authority of a higher regulatory agency (Provincial, Federal, County, etc.).
- When activities are waived from requiring a Permit but still must comply with all other aspects of the By-law, such as Minor Site Alterations.
- When a Permit Application is required with supporting documents prepared by appropriately qualified technical specialists (i.e., P.Eng., P.Geo., Qualified Person (QP), etc.).
- What must be included in an application, such as:
  - Application Fees and Deposits in accordance with the Fees and Charges By law
  - A Security Deposit (Irrevocable Letter of Credit, cash, or other instrument)
    required prior to the issuance of a Permit and will be calculated based on the
    total volume of Fill imported from off Site. (This recognizes the fact that the
    primary liability of a site alteration is related to the quantity and quality of
    imported fill).
- The purpose of the Cash Deposit and Security Deposit to provide the Township with the financial resources to have the application peer reviewed and have peer review oversight of the Site Alteration.

- That the imported fill quality must be managed in accordance with O. Reg. 406/19
   On-Site and Excess Soil Management and the Rules for Soil Management and
   Excess Soil Quality Standards.
- In cases where a Record of Site Condition is not required by provincial regulation the Township may, at its discretion, require a Record of Site Condition.
- Orders can be issued if the site alteration is out of compliance with the Conditions of a Permit.
- Orders must be complied with, even after the expiry or revocation of a Permit.
- When the owner/operator is unwilling or unable to fulfill the conditions of a Permit
  and/or Orders, the Township can conduct the work at the cost of the Owner using the
  Cash Deposit, Security Deposit, and other legal mechanisms to:
  - Secure the Site to prevent illegal activity;
  - Rectify the outstanding requirements of any Orders; and
  - Complete the Site Alteration to the point where it meets the minimum requirements of the Permit.
- The By law provides the Township with the financial resources (Cash Deposit, Security Deposit, etc.) to retain the technical resources to oversee the Site Alteration and if necessary, retain the resources to control the Site and mitigate any issues that are out of compliance.

#### Refer to the following related documents:

- By-law 57/2024 Being A By-Law To Prohibit and Regulate Site Alteration And Movement Of Fill Within The Township of Guelph/Eramosa;
- Fees and Charges By-law
- Permit Application Form for a Minor Site Alteration and Movement of Fill
- Permit Application Form for a Small Site Alteration and Movement of Fill
- Permit Application Form for a Large Site Alteration and Movement of Fill

#### 1.0 Part 1 - Rationale

# 1.1 Why Regulate Site Alteration and Movement of Fill?

In response to citizen pressure and the desire to protect the environment of the municipality some municipalities have instituted a ban on all fill importation or have drafted By-laws that are so onerous that it is very difficult for landowners to import fill regardless of the purpose.

The prohibition approach is contrary to provincial policy for reuse and recycling.

The MECP Excess Soil Policy Framework states;

Managing excess soil in a responsible way is integral to building sustainable communities. Improper management can result in impacts to ground or surface water quality and/or quantity, natural areas, and agricultural lands, and cause a number of local issues including concerns regarding noise, dust, truck traffic, road damage, erosion, drainage and other social, health and environmental concerns. Proper management of excess soil can result in a number of benefits to the environment and economy.

The Township of Guelph/Eramosa's Community Profile includes:

We are rich with stunning landscapes, protected natural areas and a growing network of recreational trails and features which create a unique balance for those who live and work in the Township. (Community Profile 2012 final reduced.pdf (get.on.ca)

This includes the concept of environmental stewardship while balancing the needs of the community.

The Bylaw is designed to meet these philosophical objectives.

Site alteration and movement of fill can enhance the Township and environment through:

- improved drainage, creation of noise berms, stabilization of slopes;
- increased suitability of lands for buildings, employment activities, and recreation;
- enhancement of natural features such as ponds and wetlands;
- improved use of agricultural lands, including crops, livestock, and related activities;
   and,
- rehabilitation of aggregate extraction pits and other previously disturbed areas.

It is important for all stakeholders to consider the rights of landowners to develop their properties and enhance uses while protecting the environment and limiting the impacts to neighbors.

The By-law and supporting documentation (Requirements) are aligned with the needs of the Township and all its residents.

#### 1.2 Recent Regulatory Changes and Best Management Practices

Significant regulatory changes and industry practices have occurred since the previous By-Law was prepared. These include:

- Management of Excess Soil A Guide for Best Management Practices (BMP),
   MECP, January 2014. This BMP sets out the province's expectations for all those
   managing soil and encourages the beneficial reuse of excess soil in a manner that
   promotes sustainability and the protection of the environment;
- The Excess Soil Policy Framework, MECP, December 2016. This document outlines
  the management of excess soil in a responsible way that is integral to building
  sustainable communities;
- Rationale Document for Development of Excess Soil Quality Standards, MECP, November 19, 2019. Provides the scientific derivation process to develop the Excess Soil Quality Standards;
- Ontario Regulation 406/19, On-Site and Excess Soil Management made under the Environmental Protection Act, December 4, 2019. Updated regulations for the management of excess soil along with changes to align other regulations including Ontario Regulation 153/04; and,
- Rules for Soil Management and Excess Soil Quality Standards, MECP,
  December 2019. Provides a set of soil quality tables for various land uses and site
  conditions and outlines the use of the Beneficial Reuse Assessment Tool (BRAT)
  and Risk Assessment.

The most significant impact to municipal By-laws was the issuance of Ontario Regulation 406/19 *On-Site and Excess Soil Management* which provides significant regulatory management of excess soil that relieves individual municipalities from creating and managing that detail.

In accordance with O. Reg. 406/19 a Registry has been set up by the Resource Productivity & Recovery Authority (RPRA) <a href="https://rpra.ca/excess-soil-registry/">https://rpra.ca/excess-soil-registry/</a>. From January 1, 2023, construction and development Project Leaders and Operators/Owners of soil Reuse Sites, and Residential Development Soil Depot sites must file notices about how they reuse and dispose of Excess Soil in compliance with Ontario's Excess Soil Regulation.

The Bylaw is aligned with and references Ontario Regulation 406/19.

These types of By-laws can be quite controversial due to a wide range of personal perspectives (landowners, regulators, businesses, environmental groups, etc.). The rationale for the various parts of the By-law are provided below to help all stakeholders understand the balanced approach of the By-law and to address the various perspectives.

# 1.3 The By-law is Tailored to the Township of Guelph/Eramosa

The By-law takes into consideration the unique conditions and needs of the Township. The focus is on regulating site alterations and filling for the benefit of the Township and the residents while also considering the bigger environmental, economic, and social setting of southern Ontario. This includes setting requirements to demonstrate a "need" for any site alteration and filling that is in line with provincial policy, Township policy and how the activity will be conducted to ensure environmental protection and mitigation of impacts to neighbors. The requirements of the By-law are aligned with Township By-law enforcement and includes security deposits to prevent the Township and taxpayers from a potential economic burden because of an abandoned liability.

Given the history and natural environment of the Township it is unlikely large commercial fill operations would be attracted to the Township as there are no significantly large former gravel pits or other sites that would require large amounts of fill for restoration however there may be some smaller pits that could be of interest for restoration. Each situation will be reviewed on its merits in accordance with the By-law.

The By-law aligns with the Township's environmental stewardship and economic development strategies and the requirements other agencies with jurisdiction including conservation authorities, Ministry of Natural Resources and Forestry (MNRF) and the Ministry of Environment, Conservation and Parks (MECP).

Given the presence of farming in the Township, the By-law is aligned with the policies of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMFRA). It is carefully balanced to not encroach on the rights of farmers however does restrict site alterations and filling that do not align with a carefully considered "need" rather than those driven simply by filling for profit (commercial filling).

The Township of Guelph/Eramosa deems it in the public interest to pass a By-law to regulate Site Alteration and Movement of Fill within the Township of Guelph/Eramosa to ensure that:

- a) Groundwater and surface water quality is maintained;
- b) Drainage patterns, water courses and water bodies are protected;
- c) Natural heritage features, landforms and archeological resources are protected;

- d) There is no cause for an Adverse Effect;
- e) Impacts to the Township's roads, Highways and infrastructure are minimized;
- f) Disturbances and nuisance impact to residents and businesses are minimized;
- g) Costs and liabilities are borne by Owners and Persons who undertake Site Alteration and Movement of Fill within the Township; and
- h) The Township of Guelph/Eramosa will be a safe, sustainable municipality where the Economy, the Environment, the Community and Natural Heritage can flourish in harmony.

The regulatory authority to create the By-law is outlined in the *Municipal Act*, 2001, S.O. 2001, c. 25.

# 1.4 Exemptions from Requiring a Permit

The need for a Permit is waived in certain circumstances (such as when the Site Alteration and Movement of Fill is less than 10 m<sup>3</sup> in any 12 month period) where the risk of an impact and liability to the Township is acceptably low.

Exemptions from requiring a Permit include:

- Small scale activities where the risk to the environment and liability of the Township is low;
- Where another legal instrument of the Township (such as a Planning approval or Building Permit) or the County of Wellington provide enough regulatory oversight;
- Activities where there are only temporary conditions/activities (Garden Centers, Soil Processing Sites and Temporary Fill Storage Sites) that may also have another legal instrument such as a business licence or planning approval; and
- Garden Center related business Contractors Yard Must be Industrial or Commercial zoned or have a Temporary Zoning Approval.
- The discretion of the Director.

The By-law does not conflict with the Right to Farm.

#### 1.5 Size Thresholds for Site Alteration (which includes both cut and fill)

The By-law recognizes site alteration and the movement of fill size thresholds based on the potential for activities to cause an Adverse Effect, which as defined in the Environmental Protection Act, R.S.O 1990, c. E.19 (EPA), as meaning one or more of:

 impairment of the quality of the natural environment for any use that can be made of it;

- injury or damage to property or to plant or animal life;
- harm or material discomfort to any person;
- an adverse effect on the health of any person;
- impairment of the safety of any person;
- · rendering any property or plant or animal life unfit for human use;
- · loss of enjoyment of normal use of property; and
- interference with the normal conduct of business.

The By-law is based on Site Alteration volumes. It does not differentiate between the volume of cut vs the volume of fill in the basic permit calculations. However, it does recognize in the fee structure and the requirements of a Site Alteration & Fill Management Plan (SA&FMP), the difference in liability between on-Site cut Site Alterations and the importation of Fill from off-Site. The Permit application requirements are more onerous when importing large volumes of Fill from off-Site.

The liability and issues surrounding a large site alteration with hundreds of truckloads of fill are significantly higher than the recontouring of a field. For this reason, three specific size thresholds above the threshold (10 m³) and activities where the requirement for a Permit is waived. Thresholds have been defined that have differing requirements and fee structures.

#### They are:

1. **Minor Site Alteration** "Minor Site Alteration" means a one-time maximum cumulative volume of Site Alteration per Property based on the area of Property suitable for Site Alteration (the Property area excluding buildings, structures, and fixed features) calculated as follows: Area of Property suitable for Site Alteration in hectares X 200 m³/hectare (approximately 20 triaxle truckloads) of Site Alteration, up to a maximum area of Property suitable for Site Alteration of 1.0 hectares. The maximum volume is a one-time maximum cumulative allowance.

The maximum volume calculation excludes any Site Alteration conducted under the approval of any other legal instrument of the Township such as a Building Permit or Swimming Pool Permit;

This volume is set at below the 350 m<sup>3</sup> small volume for excess soil quality standards outlined in the Rules for Soil Management and Excess Soil Quality Standards, MECP, December 2019.

Excludes the volume of any approval under another Township legal instrument such as a Building Permit or Swimming Pool Permit. It is best to exclude the volume of a swimming pool which can often be up to 6.1 m x 12.2 m and 2 m deep (20 ft x 40 ft and 6 ft deep) for a volume of approximately 150 m<sup>3</sup>. Swimming pools are common and low risk site alterations.

Items in the 2014 version of the By-law that were commonly referenced by landowners included:

f) Topdressing of lawns with topsoil not greater than 10 cm and minor landscaping works which are at least 0.6 metres from any property line and do not impact Drainage patterns on neighbouring properties.

One of most difficult aspects of municipal management of site alteration and filling is dealing with "volume creep". This is the situation where site alteration and filling start small and continues for a long period of time at a small rate that ultimately results in a cumulative large volume alteration. To address this situation Minor Site Alterations are a one-time volume limited event per property based on property size. An online no charge Permit process is used to track these activities.

This assumes that a one-time event of limited size (based on property size) is unlikely to cause a significant impact. This approach will allow landowners to conduct site alterations and filling activities that are "*Minor*" in scope, impact, and liability without direct engagement with the Township. The Township monitors the online Permit registry to track the properties and activities especially multiple Permits and cumulative volumes over time.

In this fashion the Township can monitor the impacts volume creep through the online record process.

2. **Small Site Alteration** – any site alteration that does not meet the definition of a Minor Site Alteration and is less than 1,000 m³ (approximately 100 triaxle truckloads) in any 12 month period. A Permit is required for a Small Site Alteration.

Since the volume and time schedule for a Small Site Alteration is well defined and a Permit required, volume creep can be monitored as the Permit expires when the approved volume is reached and/or the 12 month time period expires. Further site alteration would require a Permit Renewal or a new Permit.

Small Site Alterations with a maximum threshold of 1,000 m³ (approximately 100 triaxle truckloads) in any 12 month period are expected to be the most common site alterations that engage Township staff. The size is sufficiently large to accommodate most of the needs of landowners in the Township that are conducting the most common types of site alterations such as estate lot grading, laneway improvements, building site preparation (houses, barns, sheds etc.), drainage modifications, pond construction, screening berms and other property enhancements. The environmental and neighbor impact liability is typically low and easily addressed if there is an issue.

The application process and Site Alteration & Fill Management Plan requirements are scoped to be reasonable for the size of the site alteration. Township fees and requirements are also reasonable and balanced given the relatively low potential liability.

The ability to apply for a Permit Renewal or a new Permit offers the Township the discretion to consider future related site alterations as another Small Site Alteration or to define further activities as a Large Site Alteration (based on the sum of both the past site alterations and proposed future site alterations). This addresses the issue of volume creep.

3. Large Site Alteration – Any site alteration that does not meet the definition of a Small Site Alteration is considered a Large Site Alteration. A Permit is required for a Large Site Alteration.

Large Site Alterations require Pre-Consultation with the Director prior to submitting a Large Site Alteration Application.

The Director may also require for an applicant to present the merits of a "concept" to Council for consideration without investing the time and resources of both the applicant and the Township in the detailed application stage. If Council approves the applicants request to submit an application it in no way guarantees an ultimate approval as it still has to go through the scientific and engineering review, public scrutiny (PIC) and finally Council consideration of the merits of the actual application. This volume threshold requiring Council approval to submit an application reflects the sentiment of public to

restrict very large (commercial) site alterations and movement of fill activities yet recognizes that there is the possibility of an activity that would merit approval.

#### 1.5.1 The Municipal Act References Agricultural Practices

The Municipal Act makes some references to normal agricultural practices and states:

#### Exception

A by-law respecting the removal of topsoil does not apply to the removal of topsoil as an incidental part of a normal agricultural practice including such removal as an incidental part of sod-farming, greenhouse operations and nurseries for horticultural products.

#### Exclusion

The exception in respecting the removal of topsoil as an incidental part of a normal agricultural practice does not include the removal of topsoil for sale, exchange, or other disposition.

These items have been considered in the By-law.

# 1.6 Conservation Authority Regulated Lands

Changes to the Municipal Act allow the By-law to include all Conservation Authority regulated lands within the Township. Site alterations in regulated lands must comply with both the requirements of the Conservation Authority, as a provincial regulatory authority under *the Conservation Authorities Act*, and the By-law.

- Significant Natural Heritage Features are defined by the Provincial Policy Statement and include, among other things:
- Key Hydrologic and Key Natural Heritage Features as defined under the Growth Plan, and/or
- Natural heritage features regulated by Conservation Authorities.

The By-law requires that the requirements of all other agencies with jurisdiction (including the Conservation Authority) be satisfied prior to consideration of an application.

To formulate recommendations to Council on the merits of the applications based on natural heritage, climate change or other environmental matters.

# 1.7 Building Permits and Building Code Approvals

Building Permit approvals such as Building Permits and Demolition Permits have the potential to include limited focused site alterations and filling.

Although the By-law requirements still apply regarding fill quality and environmental protection etc., a Permit is not required when the work is encompassed by a Building Services approval for activities that meet specific requirements.

The municipal Building Permit approval process involves submission of a complete Building Permit application package to the Township including fees. The Township will review the application for:

- Site Plan Approval/Agreement;
- Entrance Requirements;
- Zoning;
- Setbacks & Lot Coverage;
- Grading;
- Source Water Protection;
- · Conservation Authority regulations; and,
- Site Alteration and Movement of Fill By-law.

If the Township determines that the application will trigger the volume thresholds of the Site Alteration and movement of Fill By-law the requirements of the By-law will be included in the application process.

Once the Township is satisfied that the requirements of the Township including the Site Alteration and Fill By-law are met, the Township will issue a Building Permit.

If a Site Alteration Permit is waived, a clause could be inserted into the Building Permit approval documents.

# 1.8 Temporary Fill Storage Sites

Some businesses temporarily store and move fill materials such as:

- Garden Centers Temporarily store soil, topsoil, aggregate and similar materials for sale or use elsewhere – Must meet appropriate planning and zoning requirements;
- Soil Processing Sites such as triple mix and soil amendment facilities Temporarily store soil, topsoil, manure, and similar materials for creating agricultural products for sale or use elsewhere – Must meet appropriate planning and zoning requirements;
- Fill Storage Sites (Including a Soil Bank Storage Site as per O. Reg. 406/19) temporarily store fill materials for sale or use elsewhere – Must meet appropriate planning and zoning requirements; and,

 Contaminated Soil (and other Materials) Storage and Processing Sites – These must have an Environmental Compliance Approval (ECA) from the MECP and therefore are not within the jurisdiction of the By-law.

The By-law recognizes the need for these types of operations to exist and to temporarily store and move fill materials in volumes that would normally result in triggering the site alteration volume thresholds in the By-law.

The By-law provides specific conditions where these sites are exempt from needing a Permit, however all other requirements of the By-law related to environmental protection and control of impacts to neighbors still apply.

The property and activities must also comply with all Township zoning and planning requirements.

The site operator must be able to demonstrate with documentation satisfactory to the Township that the storage is temporary and that the material quality and storage conditions meet the requirements of the By-law as well as all other Township planning and zoning requirements.

The site operator must be able to demonstrate with documentation satisfactory to the Township that the storage meets the definition of "temporary". This could include documentation to demonstrate no significant net annual increase in total volume stored and a demonstration of a significant turnover of materials (imported and exported) in comparison to the total volume stored (such as a 50 percent annual turnover).

Commercial products stored temporarily for commercial sale at a property approved for such activity, including in bulk form, such as, manure, asphalt, concrete, rock, peat, wood chips, aggregate etc. that do not meet the definitions and quality requirements of O. Reg. 406/19 must be stored in a fashion that do not have the potential to cause an environmental impact or a nuisance impact.

Excess Soil, Dry Soil and Liquid Soil (as defined by O. Reg. 406/19) that are stored temporarily must meet the definitions and quality requirements of O. Reg. 406/19 for the property on which they are stored.

The By-law has enough flexibility to Permit (or waive the requirement for a Permit) any situation of short-term or long-term activity involving site alteration and the movement of fill.

"Temporary Fill Storage Site" means any Property where Fill is stored above Existing Grade on a temporary basis as part of the activities of a licensed business.

"Temporary Storage of Fill" means the storage of Fill at a Temporary Fill Storage Site for a period of time determined by the activities of the licensed business with the

expectation that the business involves the regular movement of Fill on to and off the Site.

# 1.9 Conflicts with other By-laws or Legal Instruments and Severability

There may be occasions where there are pre-existing legal instruments or agreements with the Township concerning a property.

Where the Township and an owner or former owner have entered into an agreement with respect to land within the area to which this By-law applies, and a conflict exists between the provisions of this By-law and such agreement, the provisions of the agreement shall prevail to the extent that there is a conflict.

Severability means the continued use of the majority of the By-law even if a portion is found not to be legally applicable in some manner. This avoids the possibility of the entire By-law being discarded for a small issue.

If a court of competent jurisdiction declares any section, or any part of any section, of this By-law to be invalid, or to be of no force or effect, it is the intention of the Township that every other provision of this By-law be applied and enforced in accordance with its terms to the extent possible according to law.

Where there is a conflict between Township By-laws the most environmentally protective should prevail, which is likely this By-law so it should take precedence.

Where any conflict may arise between this By-law and any other Township By-law the provisions of this By-law shall prevail to the extent necessary to resolve the issue.

#### 1.10 Enforcement

Enforcement of the By-law is carried out by Officers appointed by the Director.

"Officer" means a police Officer, a by-law enforcement Officer, the chief building official (CBO) or other person appointed by the Director for the purpose of enforcement of this By-law;

#### 1.11 Other Legal Instruments of Township Approval

The By-law applies throughout the Township except when overruled by a higher-level regulatory authority such as the County of Wellington, the Province, and the Federal Government. In some cases, such as a Site Plan Approval or a Subdivision Agreement the Township may use these legal instruments of approval to administer the requirements of the By-law rather than issue a Permit. The Township can make that decision on a case-by-case basis.

# 1.12 Reference to Other By-laws and Regulations

Other relevant Township By-laws include:

- Clean Yards By-law;
- Fees and Charges By-law;
- Zoning By-law;
- Noise By-law, and,
- Property Standards By-law

The of *Ontario Regulation 406/19* made under the Environmental Protection Act, December 4, 2019 entitled *On-Site and Excess Soil Management*, and the associated *Rules for Soil Management and Excess Soil Quality Standards*, MECP, December 2019, have addressed the many of the soil quality and transportation aspects of Excess Soil however Township diligence for management of Sites is still required through effective By-law enforcement.

#### 1.13 Trees

The County of Wellington protects natural forests and greenbelts. The County's tree conservation By-law, applies to all natural forested areas.

Compliance with County requirements must be included in Site Alterations.

#### 1.14 Road Occupancy and Property Access

The Township has jurisdiction over Township roads. Site Alterations that will involve traffic on Township roads and access property from Township roads will require meeting the requirements of the Roads Department.

The Roads Department may require an Application/Permit for Road Occupancy/ Property Access.

The process often involves the provision of a Security Deposit and a proof of Commercial Liability Insurance.

Access to and from the property directly on to County roads and/or MTO roads with out accessing Township roads is managed in accordance with the requirements of the County and/or MTO.

#### 1.15 Soil, Groundwater, and Sediment Standards

With the passing of Ontario Regulation 406/19 (On-Site and Excess Soil Management) made under the Environmental Protection Act, R.S.O. 1990, c. E.19 (EPA) fill falling into the definition of Excess Soil must be managed in accordance with this regulation. The

document, "Rules for Soil Management and Excess Soil Quality Standards", is adopted by reference in Ontario Regulation 406/19.

Although not specifically designed for site alterations and filling, the Soil, Groundwater and Sediment Standards for Use Under Part XV.I of the Environmental Protection Act, April 15, 2011, can be used as the best available criteria for evaluating site alteration and fill activities in specific circumstances.

When determining the appropriate Standards to be used in any situation, the methodology in Ontario Regulation 153/04, as amended, will be adopted for "fill" and Ontario Regulation 406/19 for excess soil specifically. The applicable Standards (Table) selected must be consistent with the definition of the land use defined in Ontario Regulation 153/04, as amended, and that land use must be consistent with Township zoning.

The default Standards will be the Table 1: Full Depth Background Site Condition Standards for Agricultural or Other Property Use. This table is identical in Ontario Regulation 153/04 and Ontario Regulation 406/19.

The use of any other Standards will be the discretion of the Director based on the provision of scientific rationale in accordance with Ontario Regulation 406/19 and/or Ontario Regulation 153/04, as amended. In many cases Table 2 (2.1) and Table 4 (4.1) for a potable groundwater condition for various land uses would likely apply, but again this would be site specific.

In addition to the Generic Standards the MECP allows the development of Site-Specific Standards developed following an MECP approved Site Specific Risk Assessment (SSRA). Although the Generic Site Condition Standards and SSRA Standards are for the environmental assessment of sites and in particular for use when filing a Record of Site Condition, they offer the best guidance available for evaluating soil quality when importing soil during filling activities.

The applicant must demonstrate that soil sampling protocols are consistent with the document entitled "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", December 1996.

Deviation from the default standards must be consistent with the requirements of all other agencies with jurisdiction (County of Wellington) prior to consideration by the Township.

#### 1.16 Record of Site Condition

The Environmental Protection Act and regulations dictate when a Record of Site Condition (RSC) is required. In general, this is triggered by a change in land use (as defined by O. Reg. 153/04, as amended), confirmation from the Conservation Authority

that the site alteration meets their requirements and any site-specific conditions imposed by the Conservation Authority) from less sensitive land use (i.e., industrial/commercial) to more sensitive land use (i.e., residential/parkland).

In cases where the need for a Record of Site Condition is not required by provincial regulations, the Township may at its discretion, request that a Record of Site Condition be filed as part of the requirements for a Site Alteration and Movement of Fill Permit.

The reason the Township may request a Record of Site Condition when it may not be provincially required is to ensure that a consistent, industry familiar, process of environmental assessment and documentation has been followed during a site alteration and that the conditions of a site meet the appropriate standards for the legal land use.

## 1.17 Council Approval for Large Site Alteration Permit Applications

The By-law allows a Director to request an owner of any property that will be the subject of a Large Site Alteration (1,000 m<sup>3</sup> and greater in any 12 month period) to have the application approved by Council.

The Large Site Alteration Permit Application process must be followed that is initiated through a pre-consultation of the proposed concept with the Director. Following the pre-consultation with the Director, the Director may request an application to seek the approval of Council for the proposed concept in order to allow the continuance of the Large Site Alteration Permit Application process.

The Director and/or Council could add or amend conditions could include such things as:

- Site Alteration and Fill Management Plan (SA&FMP);
- Additional Security Deposit (in Cash or Irrevocable Letter of Credit);
- Additional Insurance (liability and environmental); and
- Conditions (including under what circumstances the Permit would be terminated).

The termination of a Permit (and ending the need for a Security Deposit) would be based on meeting the Conditions of the Permit and any Orders following the completion of a site alteration.

In some cases, the Conditions could include the completion of a technical report and post closure monitoring. In other cases, it could involve the filing of a Record of Site Condition.

# 2.0 Township Administration and Oversight

#### 2.1 Application Fee

The application fee applicable to a site alteration is included in the Townships' Fees and Charges By-law (as amended).

#### 2.2 Cash Deposit

The application for a Permit would require a Cash Deposit would be on account with the Township.

The Cash Deposit would be used as such things as:

- Peer Review and specialty oversight and review services;
- Field Inspections; and,
- Surveying, sampling, and monitoring to confirm compliance with the requirements of the Permit.

The Cash Deposit and Security Deposit could also be used to fulfill the Conditions of a Township Order when the owner/operator is unwilling or unable to comply, such as, cleaning roads, monitoring, site control and provision of required reports.

The un-used portion of the Cash Deposit is refundable at the termination of the Permit.

Upon submission of an application for a Site Alteration and Movement of Fill Permit the applicant will provide the application fees outlined in the Township's Fee By-law. In addition, a Cash Deposit will also be required to cover the costs of the Township's Peer Review Consultant, and any other specialized services including Township technical staff.

The Cash Deposit amount will be calculated as shown in the Fees By-law.

The Cash Deposit will be based on the site alteration volume conducted during the period of the Permit (12 months). The Cash Deposit must be topped up on a regular basis, should it become depleted.

#### 2.2.1 Cash Deposit for Major Site Alterations 1,000 m<sup>3</sup> and Greater

For site alterations of 1,000 m³ or greater (approx. 100 tri axle truck loads at 10 m³ per truck) further Director and approval will be required. The Cash Deposit requirement is outlined in the Fees By-law.

# 2.3 Security Deposit

The Security Deposit consists of a Letter of Credit or cash held by the Township that may be used at the Township's discretion to address the failure to comply with an Order. The Township may access the Security Deposit to retain professional services or contractors to conduct work to achieve compliance with an Order made under the Site Alteration and Movement of Fill By-law. The Security Deposit must be replenished when requested by the Township to stay in compliance with the Permit.

The Security Deposit is required to provide the Township with the fiscal resources to address any liabilities that could result from granting permission to conduct site alteration and movement of fill activities. The Township needs to have the fiscal resources to address any liabilities that could exist during or after the site alteration and fill activities. The fiscal resources must be enough to complete or close the site alteration at any point in time should the owner be unwilling or unable to do so. The Security Deposit must be able to survive the economic and/or business entity demise of the owner. The owner being defined as the property owner/applicant/operator. The Security Deposit must be in the form of an Irrevocable Letter of Credit or cash. The potential fiscal liabilities include such things as:

- Operational Liabilities:
  - Dirt on roads
  - Dust
  - Noise
  - Surface runoff
  - Fencing
  - Site access control
- Environmental Liabilities:
  - Contaminated soil
  - Soil, surface water and groundwater impacts
  - Dust and nuisance impacts
- Closure and Post Closure Liabilities:
  - Closure or Interim Closure of the site alteration should it be left in an uncompleted state
  - Post closure monitoring and care as required
  - File a Record of Site Condition, if required

The amount of Security Deposit would be based on the specific details of the proposed site alteration. Site alterations that did not involve the importation of fill would not have the same liability as a fill operation as the most significant environmental liability is associated with the importation of potentially contaminated or deleterious materials.

Formulas are provided in the Fees By-law as a basis for calculating the Security Deposit.

The Security Deposit is for situations when the owner/operator is unwilling or unable (due to financial, business, or other reasons) to comply with Orders issued by the Township. It is designed to cover the costs of such things as:

- Securing an uncontrolled or abandoned site out of compliance with Township Orders;
- Clean up or remediation of contaminated soil, surface water and groundwater; and,
- Interim or final closure of a site in accordance with the Site Alteration and Fill Management Plan.

The Security Deposit must be able to survive the demise of the owner/operators financial and business resources. It would only be accessed if the site is out of compliance with a Township Order and the Cash Deposit was depleted.

#### 2.3.1 Use of Cash Deposit and Security Deposit

The Cash Deposit will provide the Township the resources to retain appropriately qualified Peer Review Consultants to oversee all aspects of the Site Alteration including:

- Source Site Assessment;
- · Report, manifest, and document review;
- Site Inspections;
- Site topographic survey, to confirm contours and volumes;
- Drilling and test pitting to confirm sub-surface conditions; and,
- Collection and analysis of samples for soil, surface water, groundwater, and air quality.

The Peer Review Consultant would assist Township technical staff such as Engineering Technician, and By-law Officer with inspections and make recommendations to the Director.

The Peer Review Consultant could provide the expertise to review the completion of the site alteration and make recommendations for terminating the Permit and/or Orders to allow the return of the unused portions of the Cash Deposit and Security Deposit.

# 2.4 Application Submission

The Application for a Site Alteration and Movement of Fill Permit requires the Applicant to determine the nature, scope, and reason for conducting a site alteration.

The first step an applicant would take would be to retain the services of a suitably qualified professional licensed in the province of Ontario. This could include a Professional Engineer, (P.Eng.), Professional Geoscientist (P.Geo.) or similarly licensed qualified individual as approved by the Director. The multi-disciplinary nature of site

alterations and the potential to overlap with the jurisdiction of multiple regulatory agencies requires professional assistance.

The Site Alteration and Movement of Fill Permit Application form requires the Applicant to provide technical details regarding the Site and proposed site alteration The form outlines the Application Fees and Cash Deposit and items to be submitted with the Application.

The Application is received by Township's administrative staff, reviewed for completeness and if complete, logged into the system and forwarded to the Director.

If incomplete, the Applicant will be notified of the missing components. The application will not be processed until complete.

#### 2.5 Permit Application Review Process

Upon receipt of a complete application to the Director it will be briefly reviewed by the Township technical staff and, if required, the Township's Peer Review Consultant for a detailed technical review.

The Township's Peer Review Consultant, if required, will conduct a detailed review, liaise with other agencies with jurisdiction (if required for clarification) and provide a written response with comments and recommendations.

The comments and recommendations will be forwarded to the Applicant. The Applicant would respond to the comments and address any outstanding issues.

#### 2.6 Preparation of a Permit

#### 2.6.1 Council Approval

The Director may require Large Site Alterations Permit's to be approved by Council. Prior to the Council meeting a Public Information Center may be hosted by the Applicant.

A report will be prepared by Township staff outlining the application and the results of the public consultation. The report will be reviewed by the Director with comments and recommendations prior to submitting to Council.

During the Council meeting presentations may be made by the following:

- Applicant;
- · Township staff;
- Peer Review Consultant; and,
- Public.

Council will decide to approve or not approve the application and/or make recommendations for Conditions or other action.

# 2.7 Permit Approval and Conditions

Township staff (following Council approval of a Large Site Alteration) will address any remaining Conditions and issues. Once all is satisfactory, the Permit will be approved by the Director or designate.

#### 2.8 Oversight of Site Alteration and Movement of Fill Activities

Township oversight of the site alteration and movement of fill activities and monitoring compliance with Conditions will involve the following resources:

- Director;
- · Technical Staff;
- Peer Review Consultant; and,
- By-law Officers.

#### 2.9 Orders, Fines and Compelling Compliance

The Township will have the following fiscal resources to draw on:

- Fees for application administration cost recovery;
- Cash Deposit for Peer Reviewer, oversight monitoring and inspection costs incurred;
   and
- Security Deposit from which to draw funds if the owner/operator is unwilling or unable to comply with Permit Conditions or Orders. Should site alteration activities be out of compliance with the Conditions of the Permit the Township may issue Orders with specific requirements and timelines to achieve compliance. Fines and other penalties including the revocation of the Permit are also possible. Should the owner/operator be unwilling or unable to achieve compliance with the Orders the Township may direct its Peer Review Consultant to take over aspects of the operation or retain the services of specialists or contractors to secure the site against illegal activities and bring conditions back into compliance.

All orders must be complied with, even after the expiry or revocation of a Permit.

A Retroactive Application Fees and Deposits may apply in any situation where work or activities have been undertaken for which a Permit is required in accordance with the Site Alteration and Movement of Fill By-law but was not obtained.

They are outlined in the Fees By-law.

#### 2.10 Permit Renewal

A Minor Site Alteration Permit shall be issued for a maximum of 6 (six) months unless specified by the Director as a Condition.

A Small Site Alteration Permit shall be issued for a maximum of 1 (one) year unless specified by the Director as a Condition.

A Large Site Alteration Permit shall be issued for a maximum of 2 (two) years unless specified by the Director as a Condition.

An application for renewal must be made to the Director in writing at least three months prior to the Permit expiry date to allow sufficient time to process prior to the expiry date.

A Permit Renewal may be processed up to six months following the expiry date of a Permit. After six months a completely new application is required. All conditions of the previous Permit must be in compliance prior to receiving a new Permit. The Permit Renewal Fee is outlined in the Fee By-law.

#### 2.11 Permit Closure

The Permit can be closed at the completion of the site alteration when all final Conditions have been satisfied including:

- All Orders satisfied:
- All work completed and confirmed;
- All reports and documents submitted;
- All post closure monitoring complete; and,
- Record of Site Condition acknowledgement from the MECP provided (if required).

Once the Director is satisfied that all Conditions have been met the Permit may be closed and the unused portion of the Cash Deposit and Security Deposit will be returned.

#### 2.12 Township Council - Approvals and Updates

All Large Site Alterations require approval of Council.

#### 2.13 Peer Review Consultant and External Resources

The Township's engineering and environmental Peer Review Consultant provides outside specialized technical engineering and environmental assistance with the review and oversight of Site Alteration and Movement of Fill Permits. Staff could include:

- Engineers, scientists and technicians ranging from field inspectors to doctorate level;
- Professional Geoscientists (P. Geo.) that are Qualified Persons Environmental Site Assessment (QP<sub>ESA</sub>) recognized by the MECP as per O. Reg. 153/04;
- Professionals recognized as Expert Witness's for hearings and litigation; and,
- Survey crews with GPS equipment for sub-centimetre accuracy.

The Peer Review Consultant can assist the Township with all aspects of the oversight of site alteration and fill activities including:

- Peer review of applications and supporting technical reports;
- Recommendations of Conditions for Permits and Orders;
- Oversight of activities through auditing of paperwork and documentation;
- Site inspections, surveying and sampling (soil, air, groundwater, surface water, noise, etc.);
- Peer review of reports and cross check Guelph/Eramosa the data provided against site inspection and audit findings; and,
- Assistance with technical training of Township staff.

The cost for retaining the services of the Peer Review Consultant and outside specialist staff is paid for from the Cash Deposit and/or Security Deposit.

# 2.14 Auditing and Inspections

#### **2.14.1 Auditing**

Once a Permit has been approved the oversight of site alteration activities becomes active. Township staff with the assistance of their Peer Review Consultant will conduct regular audits of the site alteration process to confirm it is conducted as per the approved Site Alteration and Fill Management Plan. The Plan is required to include a protocol for Fill Quality Control, Environmental Protection, Monitoring and Oversight. The purpose of the audit is to ensure all aspects of the Plan are being followed in particular the documentation related to the assessment of source sites and the issuance of transportation tickets.

On a regular basis the Township will undertake site inspections and audit activities. The regular audits and inspections would focus on determining compliance with the Site Alteration and Fill Management Plan and could include:

- Review of source site assessment documentation including Phase 1 ESA reports, Phase 2 ESA reports, sampling results, Qualified Person reports approving the source site and issuing tickets for specific volumes of material;
- Review of volume and transportation tickets in comparison to receipts at the site;
- Review of placement documentation and GPS coordinates;
- Review of site records;
- Review of complaints and incidences;

- Review of sampling details and results;
- Review of deposit area sampling and results;
- Review of truck counts vs. topographic survey and site;
- Review reports and monitoring results; and,
- Check status of Permit Conditions, Cash Deposit and Security Deposit.

Any outstanding issues would be brought to the attention of the Director.

#### 2.14.2 Site Inspections

To supplement the auditing, a site inspection will be conducted as often as required to provide oversight. The site inspection will be conducted by Township staff with the assistance of specialised staff from the Peer Review Consultant. The purpose of the site inspection would be to confirm that site activities are occurring in accordance with the Site Alteration and Fill Management Plan and the Conditions of the Permit and Orders. Site inspections will be conducted randomly and without prior notice to the owner. Health and Safety is of the highest priority so it is expected that the Township inspector will comply with all site health and safety requirements which could include site specific training provided by the operator. The inspector would identify themselves to the gate house and be given immediate access to the site in accordance with health and safety protocols.

Inspections would focus on areas of concern and would include:

- Mud and dust on the road;
- Truck traffic:
- Road conditions:
- Dust, noise and impacts to public and local landowners;
- Sampling protocols and records;
- In coming truck inspections and sampling;
- Conversations with site staff and truck drivers to cross check information;
- Fill area evaluation and sampling;
- Surface water flow and conditions;
- Condition of silt fence, security fence and vegetation;
- Monitoring wells and sampling;
- Materials being dumped and sampling;
- GPS of points of interest;
- Photo documentation; and,
- Written notes.

The site inspections could include random sampling for items of concern which could include:

- Sampling of soil from trucks, at the deposition location, or anywhere on the site either at surface or below surface via test pits or drilling;
- Collection of readings using a Photo-ionization detector (PID) and similar instruments;
- Surface water and/or groundwater sampling or screening using portable instruments;
- Measurement of air and noise conditions;
- Photo documentation; and,
- GPS locations of sampling points and items of interest.

The sampling of soil would include selection of parameters of concern and typically would include:

- Metals and inorganics;
- Petroleum hydrocarbons;
- Volatile organic compounds (VOC);
- Poly-cyclic aromatic hydrocarbons (PAH);
- PCB's; and,
- Additional parameters of interest.

The results of the field inspections would be reviewed along with the reports provided by the operator and the Conditions of the Permit.

Site topography will be checked using a survey technician from the Peer Review Consultant to evaluate elevations in comparison to reports and truck count data.

The site inspections would include specialised staff from the Peer Review Consultant with instrumentation and expertise for those components where Township staff need assistance.

The Site Alteration and Fill Management Plan will be the primary document by which to evaluate the results of the site inspections and audits.

The results of the weekly inspections would be retained and tracked to provide a resource for reporting to the Director.

The cost of audits and inspection would be covered by the Cash Deposit.

#### 2.15 Maintaining Compliance

As outlined in the preceding sections the Township has developed the protocols and resources to adequately administer Site Alteration and Movement of Fill Permits including Large Site Alterations.

Compliance with the Permit and Orders will be assessed by the Township on a regular basis and issues of non-compliance identified for action. The ability to access the Cash

Deposit and Security Deposit provide the Township with the financial resources to address issues.

Site auditing and inspections provide the Township with an ongoing picture of site activities and the potential for future issues.

The requirement for regular reporting from the operator and staff provides a track record as to how the site alteration is proceeding.

Issues of non-compliance can be identified and addressed quickly and effectively.

#### 2.16 Annual Reviews

As a Condition of each Large Site Alteration, the Site Alteration and Fill Management Plan (SA&FMP) must be reviewed and updated to maintain compliance with current Township By-laws and requirements as well as maintain compliance with all other agencies with jurisdiction. The annual review and update to the SA&FMP must be submitted to the Township along with all required monitoring reports for review. Compliance with Permit Conditions is required in order for site alteration and filling activities to continue.

Revisions to the Requirements and other related documents (the Permit Template, Application Forms, etc.) will be done on an as needed basis.

# 3.0 Requirements for Issuance of a Permit

A Site Alteration and Movement of Fill Permit is required for any activity not covered under Section 4.0 Exemptions, that will alter the grade (topography) of land through the movement, removal or placement of topsoil, soil, or fill.

Section 5.1 of the By-law identifies when the By-law applies but the requirement for a Permit is waived.

Site alterations with a total cut and fill volume of 1,000 cubic metres or greater on any property in a 12-month period are deemed to be a Large Site Alteration and have additional requirements which may include the need for a Public Information Centre and approval by Council.

#### 3.1 Application

Anyone applying for a Permit shall provide a completed Application for a Site Alteration and Movement of Fill Permit with all required supporting information in the form outlined by the Director.

# 3.2 Application Fee, Cash Deposit, Security Deposit and Municipal Services Fees

- a) Anyone applying for a Permit must calculate and submit the appropriate amounts of the following items in accordance with the Townships Fee By-law, including:
  - 1) Application Fee in cash at the time of application submission;
  - 2) Cash Deposit in cash at the time of application submission;
  - 3) Security Deposit in the form of a Letter of Credit or cash prior to issuance of a Permit;
  - 4) Permit Renewal Fee (if required) in cash payable at the time of the request to the Director for a Permit renewal; and
  - 5) Retroactive Application Fees and Deposits (if applicable) in cash payable at the time of application submission as determined by the Director.
  - 6) Other fees and charges as appropriate.
- b) By submitting an Application for a Site Alteration and Movement of Fill Permit, the Applicant agrees to the Township using the provided fees and deposits in the following manner:
  - 1) Application Fee to cover the costs of the Township's administrative and technical staff to administer the application and permitting process.
  - 2) Cash Deposit to cover the costs of reviewing support documents and oversight of site alteration activities by the Township's engineering and technical staff, by-law Enforcement Officer(s), Peer Review Consultant, and other technical experts the Township may retain. The Cash Deposit must be refreshed when requested by the Director or the application process may stop and/or the Permit may be revoked.
  - 3) Security Deposit (in the form of a Letter of Credit or cash) to cover the costs incurred by the Township to address any issues of non-compliance with an Order. The Security Deposit will be used by the Township to retain professional services and/or contractors to conduct site alteration related work when the Owner/Operator is unwilling or unable to carry out the Conditions of an Order.
  - 4) Permit Renewal Fee to cover the costs of the Township's administrative and technical staff to administer the renewal application and permitting process when there are no significant changes to a site alteration other than updating the work in progress and extending the approved period of activity. The Director will determine if a renewal application has significant changes from the initial application that would warrant a new application rather than a renewal.
  - 5) Retroactive Application Fees and Deposits to cover the additional work required to bring into compliance with the by-law site alteration activities conducted without a valid Permit.

#### 3.3 Insurance

For Large Site Alterations and/or as required by the Director comprehensive insurance may be required to cover liability in an amount not less than \$5,000,000 per occurrence against all claims including personal injury, death, property damage and environmental damage resulting directly or indirectly from site alteration and filling activities, in which the policy shall include the Township as a named additional insured or insure as required by the Director based on site specific conditions. The insurance shall remain in place until the termination of all Permits and Orders related to the site alteration.

A copy of the certificate of such insurance is required prior to issuance of the Permit.

#### 3.4 Background Studies and Documents

The application must be supported by the provision of sufficient background studies and documentation prepared by appropriately qualified technical specialists including a Qualified Person (QP) as per Ontario Regulation 153/04 and Ontario Regulation 406/19. The applicant must confirm compliance with other regulatory agencies with jurisdiction and provide any conditions imposed by those other agencies related to the site alteration including, but not limited to:

- a) Where the site is within the jurisdiction of the Greenbelt Plan, provide all necessary documentation to demonstrate compliance with the Greenbelt Plan.
- b) Where the site is immediately adjacent to, or shares a common boundary with, an area under the jurisdiction of a Conservation Authority, provide confirmation from the Conservation Authority that the site alteration meets their requirements and any site-specific conditions imposed by the Conservation Authority.
- c) Where the site has previously been licensed by the Ministry of Natural Resources and Forestry (MNRF) for Aggregate extraction, provide confirmation of the surrender of the license.
- d) Where the site is in an area of Mineral Aggregate Resources, provide a description of how the site alteration is consistent with Section 2.5 of Provincial Policy Statement 2014.
- e) Where the site is within County of Wellington and in a Wellhead Protection Area, Significant Groundwater Recharge Area, or Highly Vulnerable Aquifer, as defined by the County and Province, provide confirmation from the County that the proposed site alteration meets their requirements and provide any site-specific conditions imposed by the County.
- f) Where the site alteration involves traffic and access via roads under the jurisdiction of the County provide confirmation from the County that the proposed traffic and road access components of the site alteration meets their requirements and provide any site-specific conditions imposed by the County.

- g) Where the site alteration has the potential to injure or destroy trees as outlined in the County By-law to prohibit or regulate the destruction or injuring of trees, provide confirmation from the County that the proposed site alteration meets their requirements and provide any site-specific conditions imposed by the County.
- h) Where the site alteration has the potential to discharge a contaminant into any part of the natural environment, provide a copy of the Environmental Compliance Approval (ECA) from the Ministry of Environment, Conservation and Parks (MECP) or confirmation that an ECA is not required.
- i) Where the site alteration has the potential to generate noise, complete the Noise Screening Process for ECA Applications and evaluate the potential for noise as per NPC-300. Provide a copy of the ECA or confirmation through an Acoustic Assessment that one is not required.
- j) Where the site alteration has the potential to result in unstable geotechnical conditions, provide a geotechnical assessment.
- k) Where the site alteration has the potential to disturb archaeological resources conduct an Archaeological Assessment as required by the Ministry of Tourism, Culture and Sport (MTCS).
- Where the site is potentially on or adjacent to an area of Significant Natural Heritage conduct an Environmental Impact Assessment (EIS) as per the requirements of the MNRF and/or Conservation Authority. Triggers could include but are not limited to such things as:
- Significant Natural Heritage Features as defined by the Provincial Policy Statement (PPS);
- Key Hydrologic and Key Natural Heritage Features as defined under the Growth Plan, and/or;
- Natural heritage features regulated by Conservation Authorities.
- c) Where the site alteration will result in a change to a more sensitive land use as defined by O. Reg 153/04, as amended, provide a description prepared by a Qualified Person of how a Record of Site Condition will be obtained, as it will be a Permit Condition for the completion of the site alteration.
- d) Provide a legal plan of the property and specify the location of the site alteration activities.
- e) Provide other background reports and documentation as required to support the application.

# 3.5 Site Alteration and Fill Management Plan

#### 3.5.1 Preparation of a Plan

Anyone applying for a Permit shall provide a Site Alteration and Fill Management Plan (SA&FMP). The SA&FMP must outline in detail current conditions, how the site alteration activities will be conducted, the final site conditions and the impact mitigation measures to be employed. The SA&FMP must be prepared by an appropriately qualified professional licensed in the province of Ontario and be based on the background studies and site-specific conditions of the property.

The scope and comprehensiveness of the SA&FMP is greatly dependent on the size and nature of the site alteration to be undertaken. Small site alterations with very little potential to impact surrounding lands or the environment will require a SA&FMP of limited scope and detail. Larger site alterations, especially those involving the importation of material from off-site and significant changes to grades, will require a more comprehensive SA&FMP.

The Site Alteration and Fill Management Plan will include the provision of following (where applicable):

- a) Rationale regarding the purpose of the site alteration and its conformance with good engineering and scientific practices and how the site alteration will not degrade the environmental condition of the site or surrounding properties.
- b) A work schedule for site alteration activities including:
  - Proposed start date;
  - Proposed end date; and
  - A brief description of the timing of major activities such as completion of silt fencing and preparatory work, period of filling and final surface cover application.
- c) Timing of the Site Alteration activities such that no activities occur, as a minimum:
  - Between the hours of 7:00 p.m. and 7:00 a.m. Monday to Saturday;
  - Anytime on a Sunday or Statutory Holiday;
  - During any period in which a wind warning has been issued by Environment Canada:
  - During any weather conditions where the ability to mitigate site alteration activity impacts is severely compromised (i.e., heavy rain, etc.); and
  - During any situation where site alteration activities can unduly impact adjacent landowners (i.e., brush fires, floods, unsuitable road conditions, etc.).
- d) Engineering drawings and cross-sections with sufficient topographic and site condition details to illustrate:

- Existing topography and conditions;
- Existing surface water flow on and around the site;
- Site alteration process;
- Proposed final grades and conditions; and
- Proposed final surface water flow on and around the site.
- e) Surface water flow conditions before, during, and after site alteration activities on and around the site including:
  - Mitigation methods to be used to control erosion, sedimentation and surface water flow during the site alteration;
  - Impacts of the site alteration on surface water flow; and
  - Mitigation methods employed to ensure no significant deleterious impacts (blockage, siltation, contamination, flooding, increased runoff, etc.) to water courses and surrounding properties occur as a result of the site alteration.
- f) An evaluation of the potential for the site alteration to impact groundwater on and around the site including:
  - Existing groundwater conditions;
  - Groundwater sensitivities (i.e., well head protection area, aquifer vulnerability, source water protection, groundwater discharge areas, etc.);
  - Potential impacts to groundwater;
  - Mitigation methods; and
  - Monitoring and post site alteration confirmation of groundwater conditions.
- g) Sufficient documentation to demonstrate that the site alteration will not impact a groundwater well including:
  - No site alteration activities to come within 3 metres of a well or (and in the case of all Large Site Alterations);
  - Provide a report from an appropriately qualified professional that the site alteration will not impact the well and/or the modifications to the well that will be conducted in accordance with O. Reg. 903; and
  - Maintain drainage away from the well as required by O. Reg. 903.
- h) Sufficient documentation to demonstrate that the site alteration will not impact a septic system including bed and reserve bed area including:
  - No site alteration activity to come within 3 metres of a septic system including the bed and reserve bed area or (and in the case of all Large Site Alterations);
  - Provide a report from an appropriately qualified professional that the site alteration will not impact the septic system and/or the modifications to the septic system that will be conducted in accordance with the Building Code; and

- Maintain the septic system capacity of the property in accordance with the Building Code or the Environmental Compliance Approval (if issued for the property).
- i) Sufficient documentation to demonstrate that the site alteration will not impact a house, building or other structure for which a Building Permit would be required to construct including:
  - No site alteration activities to come within 3 metres of a building or structure and/or (in the case of all Large Site Alterations);
  - A report from an appropriately qualified professional that the site alteration will
    not impact a building or structure and/or the modifications to the building and/or
    structure that will be undertaken in accordance with the Building Code to mitigate
    the impacts of the site alteration; and
  - Maintain grading, drainage and geotechnical conditions in vicinity of all buildings and structures in accordance with the Building Code.
- j) Sufficient documentation to demonstrate that the site alteration will not impact adjacent properties including:
  - No site alteration activities to come within 5 metres of a neighbouring property or (and in the case of all Large Site Alterations);
  - Provide a report from an appropriately qualified professional that the site alteration will not impact the neighbouring property and what mitigative controls will be employed to ensure the protection of the neighbouring property; and
  - Where the site alteration will impact a neighbouring property provide documentation of the neighbouring property owner's permission to carry out the activities proposed.
- k) Where the site alteration will involve the importation of topsoil, soil or fill from off-site:
  - Apply the Table 1: Full Depth Background Site Condition Standards for Agricultural or Other Property Use from the Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act as the default comparative criteria to evaluate the soil being imported from off-site. All of the imported material must meet this criterion; or

- Provide rationale in accordance with O. Reg. 153/04 and good engineering and scientific practices for the application of alternative soil quality criteria for consideration by the Director. Any deviation from the default soil quality criteria must be approved by the Director; and
- Provide rationale in accordance with relevant Ministry of Environment Regulations (O. Reg. 153/04, O. Reg. 347, etc.) Best Management Practices and good engineering and scientific practices if the imported materials are not topsoil, soil, rock, stone, clean concrete, or sod, that the material is inert and geotechnically and environmentally suitable for the proposed purpose. The use of any inert fill material that is not topsoil, soil, rock, stone, clean concrete, or sod must be approved by the Director.
- A methodology of how any imported fill will be evaluated to ensure it meets the quality requirements established for the site including:
  - Source site assessment by a Qualified Person;
  - Collection and analysis of samples of the fill material;
  - Evaluation of the material based on analytical results; and
  - Quality control/quality assurance procedures.
- m) A methodology of how any imported fill will be documented and managed from source site to receiving site including:
  - Bills of lading and trac Guelph/Eramosa;
  - Receiving site assessment; and
  - Inspection and auditing.
- n) A transportation plan when importing or exporting fill from the site, in accordance with the requirements of the Township and County to manage the traffic and access to and from the source site and the receiving site. The transportation plan must include:
  - · Haul routes;
  - Traffic control;
  - Traffic volume:
  - Road maintenance; and
  - Impacts and mitigation.
- A protocol for site alterations involving the transportation of materials on and off the site, for controlling mud and dust tracking on transportation routes to and from the site including:
  - Method of monitoring mud and dust on roadways;
  - Mitigation methods such as access road paving, mud mats, wheel wash systems, (etc.); and

- Response plan to address mud and dust incidents such as maintaining a road sweeper on standby.
- p) A protocol for site alterations where airborne dust could impact neighboring properties for controlling dust, including:
  - Method of monitoring dust;
  - Mitigation methods to control dust (road watering, surface cover, etc.); and
  - Response plan to address dust incidents, such as, reducing traffic to limit dust generation and clean-up actions to address any impacts (window washing, car washing etc.).
- q) For site alterations requiring retaining walls provide:
  - Detailed engineering design; and
  - Appropriate Building Permits.
- r) For site alterations that will involve the installation or alteration of any type of sub-surface drainage system, provide:
  - Engineering drawings for the system; and
  - Inspection report from an appropriately qualified person prepared prior to covering.
- s) For site alterations that may harm trees provide:
  - Existing vegetation and tree details;
  - Proposed changes due to site alterations;
  - Mitigation methods to limit damage to trees;
  - Restoration plan; and
  - Where required, engage a qualified tree consultant.
- t) For site alterations that will result in a change to surface cover provide:
  - Existing grade and surface cover conditions;
  - Final grade and surface cover conditions;
  - Mitigation methods employed to minimize impervious surfaces, maximize infiltration, and enhance natural vegetation and conditions; and
  - Demonstrate that existing downstream conditions will be maintained or improved.
- u) For site alterations that could impact the public and adjacent landowners provide:
  - A mechanism for public and adjacent landowner liaison;
  - Identification of potential impacts (dust, noise, traffic, etc.);
  - Proposed mitigation methods; and
  - Complaint response and resolution protocol.

- v) For large site alterations that require the regular reporting of site activities, monitoring and calculation of imported fill volumes provide:
  - Reporting program and schedule;
  - Monitoring program and schedule; and
  - Method of determining and reporting the volume of imported fill.
- w) For site alterations where there is the potential for illegal dumping and unauthorized access, provide a protocol for site security and access control.
- x) For site alterations where there is the potential for noise impacts to adjacent properties, provide:
  - An assessment of potential noise impacts (machinery, tailgate banging, etc.);
  - Mitigation methods; and
  - A monitoring program to confirm compliance.
- y) For Large Site Alterations with the potential for public complaints, unexpected incidents, or a change in conditions provide:
  - A Risk Management Matrix;
  - Response and mitigation protocol;
  - An internal improvement protocol to reduce the potential for reoccurrences and;
  - A public consultation and liaison mechanism.
- z) For site alterations that will result in a post alteration change in land use as defined by O. Reg. 153/04, as amended provide:
  - Purpose and rationale of benefits of the change in land use; and;
  - Documentation that the change in land use is consistent with Township zoning, the Oak Ridges Moraine Plan, O. Reg, 153/04, as amended and the requirements of other agencies with jurisdiction, and;
  - How a Record of Site Condition will be obtained if required by O. Reg. 153/04, as amended and/or the Township.

## 3.5.2 Fill Quality Control, Environmental Protection, Monitoring and Oversight

### 3.5.3 Overview of Strategy

The Site Alteration and Fill Management Plan (SA&FMP) must have integrated strategy for environmental protection.

There should be successive layers of control and protective activities that are in place throughout the filling operation and post closure. The multiple layers of protection are designed to limit the potential for the importation of deleterious materials and ensure there is a robust process to address any issues at an early stage in the operation. The

strategy involves assessment, documentation and certification by several professional parties and oversight of all aspects by the Township and their Peer Review Consultant. The process also includes compliance with the requirements of MECP, the primary regulatory authority with jurisdiction over the assessment and movement of fill materials. The MECP has recently updated regulations regarding the management of excess fill as outlined in O. Reg. 406/19. These regulations and best practices should be followed. The process includes the following components:

- a) Oversight by the Owner/Operator of the Site;
- Assessment of the Source Site(s) and signed reports by the professional firm on behalf of the Source Site Owner;
- c) Third Party Qualified Person (QP<sub>ESA</sub>) review of Source Site documentation by a professional consulting firm retained by the Owner, who must approve the Source Site and dictate the quantity approved and any conditions;
- d) Owner staff inspection and sampling at the gate and tipping face as well as enroute monitoring;
- e) Third party professional firm retained by Owner to conduct groundwater monitoring and reporting;
- Security Deposit posted and available to the Township for any issues of noncompliance or environmental impact;
- g) Township and their professional Peer Review Consultant to audit and oversee all aspects of the program; and,
- h) County of Wellington and other agencies with jurisdiction to provide oversight of specific areas of their mandate such as groundwater protection.

### 3.5.4 Regulatory Agencies with Jurisdiction

In addition to the requirements of the Township the SA&FMP and Site operations must follow the regulations and requirements of all regulatory agencies with jurisdiction.

This would include:

- Ministry of Natural Resources and Forestry (MNRF)
  - Aggregate license closure requirements;
  - Fish and wildlife protection;
  - Forest and vegetation protection; and
  - Control of invasive species.

- Ministry of Environment, Conservation and Parks (MECP)
  - Management of the movement of fill;
  - Waste management (O. Reg. 347);
  - Environmental protection (soil, air, groundwater and surface water);
  - Contaminated sites and Brownfields Management (O. Reg. 153/04, as amended); and
  - Land use controls and designations.
- County of Wellington
  - County road control; and
  - Groundwater resource management (well head protection and groundwater quality protection).
- Conservation Authority
  - Wetlands; and
  - Watershed management.
- Ministry of Transportation (MTO)
  - Traffic; and
  - Roads and highways.
- Police Services
  - Various police jurisdictions to enforce laws.
- Fire Services
  - Fire and emergency services.

The Township has jurisdiction for such things as:

- By-laws; and,
- Various powers as dictated by the Municipal Act.

Each of the regulatory agencies has specific mandates and carries out their mandates with various requirements and approvals. They also have staff with various powers to exercise the authority of their mandate and in most cases, this includes the ability to enter the site, request information and issue Orders to take action and/or impose penalties.

The Site Alteration and Movement of Fill Permit is conditional upon, the continual compliance of all applicable laws and regulations.

The SA&FMP must illustrate that site activities will maintain this compliance. The Owner is responsible for retaining any and all permits and requirements by other agencies with jurisdiction and operates in full compliance with such requirements.

The Permit includes among other things, the content of the SA&FMP. The Permit remains in place until the Township is satisfied that all aspects have been fulfilled. The Site Alteration and Movement of Fill Permit is issued for the period of one year for small site alterations with other durations possible at the discretion of the Township, such as,

when the filling approaches the final approval contours for Large Site Alterations with a Permit does not expire but is subject to an annual review.

## 3.6 Sampling Frequency and Protocol for Imported Fill

#### 3.6.1 Source Site

Each site alteration is unique however the requirements for sampling the imported soil must follow the current requirements and protocols established by the MECP and Ontario Regulation 406/19.

The document "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", MECP, December 1996, is the technical guidance document for assessment and sampling protocols.

Sampling frequency for imported material will be in accordance with the approach outlined in the MECP Guidance document and Ontario Regulation 153/04 which also references this document.

The actual numbers of samples and the parameters analyzed will be developed by the QP<sub>ESA</sub> in accordance with the MECP Guidance document and regulations as a minimum, as well as good engineering and scientific practices.

The selection of the number of samples begins after review of the source site Phase I ESA by the QP<sub>ESA</sub>.

In some cases, the Phase I ESA may conclude the potential source site does not require a Phase II ESA and could also conclude that a Record of Site Condition (RSC) could be filed based on the Phase I ESA alone. In this case there is no necessity for source site sampling however, the QP<sub>ESA</sub> would elect to conduct some sampling to determine the natural soil chemistry and characteristics prior to confirming the appropriateness of the source site soil chemistry in comparison to the receiving site soil criteria.

In other cases, the Phase I ESA would recommend a Phase II ESA following the completion of the Phase II ESA some remedial action could be required to meet the property use standards for the potential source site. The QP<sub>ESA</sub> would be responsible for reviewing the Phase I ESA, Phase II ESA, recommendation reports, and other documents related to the potential source site. Based on the report review the QP<sub>ESA</sub> could approve or reject the potential source site. The QP<sub>ESA</sub> could also require an additional sampling program at the completion of the potential source site assessment. The QP<sub>ESA</sub> would determine the volume of soil that is approved for shipment from the source site to the receiving site and any conditions or restrictions that may be necessary to ensure that only the approved material is shipped. This could include inspection of the source site by the QP<sub>ESA</sub> during shipment or other control measures.

Source site sampling frequency will be based on the requirements of O. Reg. 153/04, as amended. O. Reg. 406/19 and the MECP Guidance document, as well as any additional due diligence sampling as determined by the QP<sub>ESA</sub>.

## 3.6.2 In Transit Sampling

Random sampling of material leaving the source site and in transit to the receiving site will be determined by the QP<sub>ESA</sub> and the auditing procedures of the receiving site's audit protocol in their Site Alteration and Fill Management Plan. Transit monitoring will focus on truck traffic control, manifests and random inspections with actual load sampling conducted should there be a concern identified from the general auditing. The protocol will be to reject any load of suspicious origin or without appropriate documentation.

### 3.6.3 At the Gate Sampling

Sampling at the gate is an additional layer of due diligence and auditing following the source site assessment and transit management protocols. Sampling at the gate is not designed to be the primary soil monitoring mechanism. The evaluation of the soil quality is much more effective in-situ at the source site where the Assessment of Past Uses and other documents can provide a more reliable assessment, including source site sampling and evaluation than any detailed sampling program conducted at the gate of a receiving site. The site assessment process to evaluate soil quality is based on the long established and MECP regulated process of Phase I ESA, Phase II ESA and remedial action if necessary (followed by Phase II ESA confirmation report). This is often completed by the filing of a Record of Site Condition, as required by regulation or by the requirements of other parties (municipalities, banks, etc.). In many cases the filing of RSC is not required however the environmental assessment process leading up to that point is the same.

The QP<sub>ESA</sub> will evaluate the potential source site soil quality based on this established process with the addition of comparing the findings to the soil quality criteria of the receiving site. The QP<sub>ESA</sub> will determine if additional source site sampling is required to ensure the source site soil is suitable for the receiving site. Sampling at the gate is for auditing and due diligence purposes and not designed to be a primary soil screening point. In no situation would soil from an unapproved source site be allowed to access the receiving site.

The due diligence soil sampling audit at the gate would be designed to collect sufficient samples reflective of an audit. The determination of the number of samples would be based on the number of source sites, number of loads and the identification of any irregularities in the transit protocol.

Typical audit sampling frequency for a well-controlled operation bringing material from one or two well assessed source sites with no significant issues could be in the order of once per day conducted together with other inspection and evaluation protocols. The selection of audit sampling parameters would be based on the advice of the QP<sub>ESA</sub> and include typical contaminant suites such as metals, in organics, petroleum hydrocarbons and VOCs.

In any sampling program there are two components:

- sampling frequency; and,
- analytical parameters.

Basically, a soil assessment on blindly sampling unknown soil based on frequency is an inappropriate approach out of compliance with regulations and good engineering and scientific protocols. The determination of the potential contaminants of concern based on source site assessment and the selection of the appropriate suite of analytical parameters by the  $QP_{ESA}$  is of critical importance. In some situations, the  $QP_{ESA}$  may require testing for parameters not listed in the MECP Standards, such as radiation, biological materials, as well as organic and inorganic compounds not listed in the Standards. Ontario regulation requires the  $QP_{ESA}$  to evaluate the potential for parameters not listed in the Standards and conduct the appropriate assessment and determine appropriate comparative site-specific criteria. In some cases, a Risk Assessment by a  $QP_{RA}$  (Risk Assessment) may be the appropriate regulatory compliant method to develop a Site-Specific Standard (SSS).

### 3.6.4 In-situ Audit Sampling

Audit sampling must be conducted at a frequency and for parameters selected by the QP<sub>ESA</sub> of the emplaced fill at the receiving site to supplement receiving site soil assessment protocols. This will provide another layer at due diligence to the soil assessment protocols of the receiving site. Since the samples are collect in-situ they can be used at a later date to support a Phase II ESA (which would include additional sampling) when conducted as part of the process to confirm site conditions to support the filing of a Record of Site Condition.

### 3.6.5 Fill Quality, Environmental Protection, Monitoring and Oversight

Source Site Assessment and sampling protocols are part of the multi-layered quality control and environmental protection system.

## 3.7 Soil Quality Criteria Selection

### 3.7.1 Overview

The most applicable soil quality comparative criteria for use during site alterations and filling are the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, MECP, April 15, 2011. These are the Standards referenced in O. Reg. 153/04, as amended. In addition, O. Reg. 406/19 outlines Standards specific to excess soil.

Although not specifically designed for use as imported fill soil assessment criteria for filling they are the best source of soil quality criteria for use by a QP to evaluate a specific site alteration situation. The Standards were created to be conservative and to be generic for a variety of environmental conditions (i.e., potable, or non-potable ground water), and Property Uses (Agricultural, Residential, Industrial, etc.). The Standards were developed based on using a risk-based approach as outlined in the MECP document, Rationale for the Development of Soil and Ground Water Standards for use at Contaminated Sites in Ontario, dated April 15, 2011. In addition to the Generic Standards Site-Specific Standards can be derived through the Tier 2 and Tier 3 Risk Assessment approaches.

In any situation, the  $QP_{ESA}$  evaluates the actual site conditions and determines the applicable Generic Standards or, with the assistance of a  $QP_{RA}$  (Risk Assessment) develops risk-based Site-Specific Standards.

The Township has set the most stringent Standards as the Default Standards (Table 1) for the comparative criteria for imported fill soil. However, the Township recognizes the scientifically valid approaches acceptable to the MECP as outlined in O. Reg. 153/04, as amended and O. Reg. 406/19 and will consider on a case-by-case basis rationale to use Standards other than the Default Standards.

### 3.7.2 Table 1: Full Depth Background Site Condition Standards

The Table 1 Standards contained within the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, MECP, April 15, 2011, are the background values for Ontario Typical Range values for the land uses indicated and are considered representative of upper limits of typical province-wide background concentrations in soils that are not contaminated by point sources.

In the absence of any site-specific studies and site-specific rationale developed by a QP<sub>ESA</sub> and/or QP<sub>RA</sub> in accordance with O. Reg. 153/04 methodology the Table 1 Standards would be considered the Default Standards for evaluating the quality of imported soil fill during site alteration activities. Unless the current and future Property

Use is known as per O. Reg. 153/04 the Default Property Use would be Agricultural or Other Property Use.

Any deviations from the Default Standards must be supported by scientific rationale and be approved by the Director.

#### 3.7.3 Tables of Generic Site Condition Standards

When conducting environmental site assessments in accordance with O. Reg. 153/04, as amended, the Generic Standards in Tables 2 through 9 contained within the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, MECP, April 15, 2011, can be used based on Property Use and site-specific conditions to evaluate the environmental condition of a property. The QP<sub>ESA</sub> can select the appropriate table of Standards based on such things as Property Use, potable or non-potable ground water, and proximity to a water body. The Generic Standards include both Full Depth and Stratified Standards. The Stratified Standards provide values for surface soil and sub-surface soil below 1.5 m of final grade.

For any site alteration the post alteration environmental condition of the property when evaluated in accordance with O. Reg. 153/04 as part of an environmental site assessment (ESA) must meet the applicable Generic Standards or Site-Specific Standards developed from a risk assessment.

To ensure that the applicable standards can be achieved after a site alteration the quality of imported fill must, as a minimum, meet the applicable Standards for the Site.

### 3.7.4 Potable and Non-Potable Standards

In the Township of Guelph/Eramosa, the Standard for environmental site assessments is for a Potable Ground Water Condition. Any deviation from the use of Potable Ground Water Standards must be approved by the County's hydrogeologist in accordance with the County's policies. The County has approved the use of Non-Potable Ground Water Standards for the purposes of environmental site assessments to support a Record of Site Condition in rare circumstances.

The use of Non-Potable Standards as the comparative criteria for fill soil being imported for site alterations is not permitted.

# 3.7.5 Rationale for the Use of Generic Site Condition Standards as Comparative Standards for Imported Fill Soil

The use of Generic Site Condition Standards (i.e., Table 2) for Potable Ground Water Condition for various Property Uses as the comparative criteria for imported fill soil must be supported by rationale by a QP<sub>ESA</sub> based on the concepts outlined in O. Reg. 153/04, and site-specific studies. The rationale would include:

- The reason why there is a need to deviate from the Default Standards;
- Determination of the applicable Generic Site Condition Standards applicable to an ESA to support the filing of a Record of Site Condition for the post site alteration use of the property;
- Evaluation of the pathways and Drivers used to develop the Generic Standards to determine the most sensitive receptors and the potential to impact those receptors;
- Evaluate the differences between the Default Standards (Table 1) and the applicable ESA Standards based on the values of the Drivers for the most sensitive receptors; and.
- Select the applicable Standards to be used as the comparative criteria for assessing the quality of imported fill soil and any deviations from these Standards (i.e., EC and SAR below 1.5 m of final grade).

# 3.7.6 Rationale for the Use of Risk Based Site Condition Standards as Comparative Standards for Imported Fill Soil

The environmental site assessment process as outlined in O. Reg. 153/04 also allows the use of Standards developed from a site-specific risk assessment. The risk assessment approach can be based on a Tier 2 (Modified Generic Risk Assessment Model) or Tier 3 (Full Risk Assessment).

The use of Site-Specific Standards developed from a risk assessment for use as comparative criteria for imported soil fill would be considered if the risk assessment followed the full MECP peer reviewed process. The approval of the Director would also be required.

## 3.8 Compliance with Permit Conditions

Each Site Alteration and Fill Permit will be issued with mandatory Conditions for compliance including:

- a) General Conditions;
- b) Site Specific Conditions as outlined in the following:
  - i. Site Alteration and Fill Management Plan;
  - ii. Additional documentation (if applicable) such as updated reports or protocols; and
  - iii. Additional Conditions (if applicable) to address specific issues.

- c) The requirement for the Owner to sign the Permit to abide by all Terms and Conditions of the Permit and provide an indemnity to the Township.
- d) The requirement that Permits for Major of 1,000 m<sup>3</sup> and greater only be issued after Council has approved a Permit.

### 4.0 Indemnification

The Owner will, both during and following the term of the Permit indemnify and save harmless the Township from all costs, losses, damages, judgements, claims, demands, suits, actions, complaints or other proceedings in any manner based upon, occasioned by or attributable to anything done or omitted to be done by the Owner, its directors, officers, employees, agents, sub-contractors or volunteers in connection with site alteration and fill activities conducted pursuant to the Permit.

# 5.0 Requirements Reviews and Updates

This Requirements document has been prepared as a "living document" to be updated on a regular basis (annually) by the Director as part of the Township's desire to see continuous improvement. The Requirements are designed to be updated as provincial policy changes and as regulatory agencies update their regulations and best practices Requirements. Input from the public and stakeholders will be incorporated along with feedback from those applying for a Site Alteration and Movement of Fill Permit and conducting site alteration and filling activities.

## Appendix A

## SMALL SCALE SITE ALTERATION APPLICATION REQUIREMENTS

- 1. Two copies or a Digital Submission of a plan of the lot which shall include the following unless otherwise determined the Director:
  - (a) the property boundaries of the lot with dimensions;
  - (b) all existing above and below grade utilities, ditches, swales, drainage courses, storm sewers, bodies of water, watercourses, natural heritage features and environmental sensitive areas on the lot and on abutting lots and highways;
  - (c) the species and size in caliper of all trees on the lot, greater than 7.5 centimetres:
  - (d) the locations of all driveways on the lot and of all easements and rights-of-way over, under, across or through the lot;
  - (e) the location of all existing buildings and structures on the lot;
  - (f) proposed sediment and erosion controls that will be installed prior to alteration of the lot;
  - (g) proposed grades and the drainage system to be used upon completion;
  - (h) the location of all wetlands, floodplains, shoreline, top of bank features and approximate regulation limits as required by the applicable Conservation Authority;
  - (i) the quantity of fill to be received on the lot.
- 2. two copies or a digital submission of a topographic survey certified by a licensed professional engineer or Ontario Land surveyor existing elevations in the form of contours at 0.5 metre intervals or less, with spot elevations along the site boundary lines and 3.0 metres beyond the site boundary lines at sufficient intervals to clearly show the existing drainage patterns on the lot and on the abutting lots.

## Appendix B

### LARGE SCALE SITE ALTERATION APPLICATION REQUIREMENTS

- 1. Two copies or a Digital Submission of a site control plan based on a legal survey prepared by a licensed professional engineer or Ontario Land Surveyor, which shall include the following unless otherwise determined the Director:
  - (a) the scale of the drawings in metres;
  - (b) a key plan showing the location of the site and a minimum of thirty (30) metres beyond the lot:
  - (c) the lot lines of the lot, including dimensions and the number of hectares of the lot and the site:
  - (d) the location, dimensions, elevations and use of the buildings and structures existing or proposed to be erected on the lot;
  - (e) the current and proposed use of the lot;
  - (f) the location, dimensions and use of buildings and structures within thirty (30) metres beyond the lot;
  - (g) detailed locations, including dimensions, identifying the proposed locations and separated quantities for the placement and removal of fill;
  - (h) all existing above and below grade utilities, ditches, swales, drainage courses, storm sewers, bodies of water, watercourses, natural heritage features and environmental sensitive areas on the lot and on abutting lots and highways;
  - (i) the species and size in caliper of all trees on the lot, greater than 15 centimetres, measured 1.37 metres from the base;
  - (j) the locations of all driveways on the lot and of all easements and rights-of-way over, under, across or through the lot;
  - (k) the location and dimensions of all proposed land disturbing activities, including construction access roads;
  - (I) the location and dimensions of all temporary fill stockpiles;
  - (m) proposed grades and drainage systems to be used upon completion;
  - (n) the location, dimensions, height and slopes of any proposed berms;
  - (o) the location, dimensions, design details and design calculations of all construction and regular maintenance of the site control measures including details of the proposed sediment and erosion control measures that will be installed prior to alteration of the lot;
  - (p) the location of all wetlands, floodplains, shoreline, top of bank features and approximate regulation limits as required by the applicable Conservation Authority;
  - (q) the location and description of the predominant soil types;
  - (r) all tree protection measures;
  - (s) a schedule of the proposed commencement and completion of each phase of work including the installation of site erosion control measures;
  - (t) proposed ground covering to be used;
  - (u) specific details regarding haul route;
  - (v) the quantity of fill to be received on the lot.
- 2. If required by the Director, two copies of a scale drawing prepared by licensed professional engineer of any proposed retaining wall including a description, dimensions and materials to be used in the construction of such retaining wall if:
  - (a) erosion on adjacent lands may occur as a result of the works;
  - (b) the finished grade of the site is of a higher elevation at the lot line than that of the existing grade at the same lot line of the abutting lot.
- 3. two copies or a Digital Submission of a topographic survey certified by a licensed professional engineer or Ontario Land surveyor producing a 0.5 metre contour interval, defining all material and man-made features, including top and bottom of slopes, drainage patterns, tree lines, buildings, and stockpiles on the site and 30 metres beyond the lot lines of the site to clearly show the detailed existing topography of the lot and the abutting lot.

## Appendix C

## **PERMIT CONDITIONS**

A permit is subject to the following terms and conditions:

- 1. Fill shall meet the standards:
  - (a) set out in the Table 1: Full Depth Background Site Condition Standards from the Soil and Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended referenced in O. Reg. 153/04 as amended, for the established property use as agreed to by the Director; or
  - (b) set out in the Table 2 Standards from the Soil and Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended for the established property use only if the ambient **Soil** is pre-assessed to be of this quality and for all parameters contained in Table 2, and as approved by the Director;
- 2. All fill dumped or placed shall be clean and free of waste, asphalt, trash, rubbish, glass liquid or toxic chemicals, hazardous waste and contaminants.
- 3. The small scale site alteration or large scale site alteration shall not cause ponding or alteration of existing drainage, or any natural or human-made watercourse or water body, surface water flow or negatively affect neighbouring lands, wells, or the environment.
- 4. Where required, the finished grade shall be protected from erosion by sod, turf, seeding for grass, greenery, asphalt, concrete, or other means either singly or in combination, within two (2) months of completion of the works, or as specified by the Director.
- 5. All fill shall be properly compacted using acceptable engineering practices, unless it is being stockpiled on the site for future use.
- 6. All haul route highways are to be kept free of debris.
- 7. Completion of works in accordance with the permit, the site alteration agreement, approved plans, surveys and any control measures.
- 8. During performance of a large scale site alteration, perform the following minimum procedures:
  - (a) at least once per day, scrape all haul route highways that have been fouled; and
  - (b) at least once each week on Friday night or Saturday morning, clean all haul route highways that have been fouled to the satisfaction of the Director.
- 9. Completion of a small scale site alteration or a large scale site alteration in accordance with the permit, the site alteration agreement, the approved plans and the By-law.
- 10. Where insurance is required to be provided, maintain valid insurance in effect until a final inspection is conducted by the Director or Officer and the Director is satisfied that the works have been completed in accordance with the By-law, the permit, the site alteration agreement and the approved plans and the Director advises in writing the insurance is no longer required.
- 11. Maintain the works, facilities, installations, structures and features outlined on the approved plans, in good condition and repair.
- 12. Ensure that all required environmental control and or monitoring devices identified on the approved plans are properly maintained and protected from damage at all times.
- 13. Maintain a copy of the permit, all approved plans and associated records required under the Fill Management Plan.
- 14. Maintain all records required under the Fill Management Plan for a minimum of seven (7) years after the completion of the works.
- 15. No small scale site alteration shall be performed:
  - (a) using highways to access or egress from the site except those highways designated as part of the approved haul route;
  - (b) before 7:00 a.m. or after 7:00 p.m. during any weekday, Monday through Friday using highways to access or egress from the Site;

- (c) during any period in which a wind warning for the area has been issued by Environment Canada for the Township;
- (d) during or within 24 hours of the Township receiving 15 millimetres or more of precipitation within a 24 hour period:
- (e) during any period in which a smog advisory for the area has been issued by the Ontario Ministry of Environment and Climate Change or the applicable Ministry;
- (f) During any weather conditions where the ability to mitigate site alteration activity impacts is severely compromised (e.g. heavy rain, thick fog, etc.);
- (g) During any situation where site alteration activities would likely adversely impact neighbouring properties (e.g. brush fires, floods, unsuitable road conditions, dust, etc.);
- (h) in contravention of the **Township's** Noise By-law;

### 16. No large scale site alteration shall be performed:

- (a) on any Saturday or Sunday, or Statutory Holiday;
- (b) using highways to access or egress from the site except those highways designated as part of the approved haul route;
- (c) before 7:00 a.m. or after 7:00 p.m. during any weekday, Monday through Friday using highways to access or egress from the Site;
- (d) during any period in which a wind warning for the area has been issued by Environment Canada for the Township;
- (e) during or within 24 hours of the Township receiving 15 millimetres or more of precipitation within a 24 hour period;
- (f) during any period in which a smog advisory for the area has been issued by the Ontario Ministry of Environment and Climate Change or the applicable Ministry;
- (g) During any weather conditions where the ability to mitigate site alteration activity impacts is severely compromised (e.g. heavy rain, thick fog, etc.);
- (h) During any situation where site alteration activities would likely adversely impact neighbouring properties (e.g. brush fires, floods, unsuitable road conditions, dust, etc.);
- (i) in contravention of the Township's Noise By-law;
- (j) that exceeds one hundred (100) truckloads of fill per day arriving at, or leaving, the site, using highways to access or egress from the site;

### 17. An owner shall contact the Director:

- (a) prior to commencement of work for a large scale site alteration;
- (b) to arrange for an inspection for all trenches in which piping is laid as part of the drainage system prior to backfilling the excavation;
- (c) if archaeological resources are discovered or identified and immediately cease all activity on the lot:
- (d) of any change in the Qualified Person retained by the owner;
- (e) to carry out a final inspection to confirm that all work has been completed in accordance with the By-law, the permit, the approved plans and where applicable the site alteration agreement.