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Town of Amherstburg Excess Soils Strategy

Purpose

This Strategy was prepared to outline the rationale and recommendations for the development and application of a Permit for Town of Amherstburg: By-law 2024-XXXX, a By-law to Regulate Site Alteration and the Removal, Placement and Movement of Fill within the Town of Amherstburg.

The On-Site and Excess Soil Management regulation (O.Reg. 406/19) under the Environmental Protection Act, R.S.O. 1990, c. E.19, establishes a framework for the proper management of excess soil in Ontario. This Strategy outlines the steps and considerations necessary to comply with the regulation and the accompanying Rules for Soil Management and Excess Soil Quality Standards. The objectives of the strategy and by-law are:

- Comply with O.Reg. 406/19.
- Minimize environmental impact.
- Promote sustainable soil management practices.
- Facilitate beneficial reuse of excess soil.

The Strategy is divided into the following parts:

- Part 1 – Rationale, which describes the purpose and reasons for the By-law and why it is designed as it is, including a best practices review.
- Part 2 – Strategic Recommendations, which describes the specific recommendations included within the Town of Amherstburg By-law 2024-XXXX, a By-law to Regulate Site Alteration and the Removal, Placement and Movement of Fill in the Town of Amherstburg.

Refer to the following related documents:

- Town of Amherstburg By-law 2024-XXXX, a By-law to Regulate Site Alteration and the Removal, Placement and Movement of Fill in the Town of Amherstburg; and
- Town of Amherstburg User Fee Schedule.

Part 1 - Rationale:

Why Regulate Excess Soils?

Provincial policy supports the proper management of excess soils as a valuable resource, and has provided clear rules for the recycling and reuse of fill and excess soils between sites. In order to maintain environmental integrity and protect residents, environmentally sensitive areas, groundwater and surface water resources, the Town of Amherstburg has decided to regulate excess soils in a manner that aligns with the Provincial interest, facilitates local beneficial reuse of excess soil, and supports careful review of site alteration.

Recent discussion and approvals of the Howard Industrial Park District Secondary Plan identified a need within the Town to have an Excess Soils and Reuse Strategy to help manage the site alteration of large-scale development and consider the aforementioned social, health, and environmental concerns, and the enjoyment of neighboring landowners on their properties.

The scope of the Strategy and By-law is all lands within the Town of Amherstburg.

Regulatory Framework

The regulatory authority to create the Town of Amherstburg Site Alteration By-law is outlined in the Municipal Act, 2001, S.O. 2001, c. 25.

The On-Site and Excess Soil Management regulation (O.Reg. 406/19) under the *Environmental Protection Act, R.S.O. 1990, c. E.19* and accompanying Rules for Soil Management and Excess Soil Quality Standards addresses requirements for management of on-site and excess soils, including designation of excess soil as a waste, registry requirements, documentation and tracking, transportation of soil, deposit of excess soil, requirements for various types of soil management sites, excavation requirements, and soil storage requirements.

The Site Alteration By-Law and Excess Soils Strategy are intended to be applied in conjunction with existing regulations and by-laws. The application of the Site Alteration By-Law does not exempt any Person from following existing regulations and by-laws.

Best Practices

A best practices review was conducted, including the Ontario Soil Regulation Task Force (OSRTF) Model By-law (2017) and the Excess Soils By-law Tool 2.0 (2020). The OSRTF is a citizens' coalition group. The Excess Soils By-law Tool 2.0 was developed via funding provided by the Government of Ontario, and included input from members of various municipalities, citizens' coalitions including OSRTF, Ministry of the Environment, Conservation and Parks (MECP), Ministry of Municipal Affairs, Ontario Society of

Professional Engineers, Ontario Sewer and Watermain Construction Association, Professional Engineers Ontario, Residential and Civil Construction Alliance of Ontario, and Supporting Ontario Infrastructure Investments and Lands. These examples were compared against the elected peer-review samples to develop Amherstburg's comprehensive Excess Soils By-law.

Both best practices documents provide model language and examples for the following sections:

- DEFINITIONS
- GENERAL PROHIBITIONS & REGULATIONS
- EXEMPTIONS
- COMPLIANCE WITH OTHER REGULATIONS & STATUTES
- REQUIREMENTS FOR ISSUANCE OF A PERMIT
- PERMIT ISSUANCE
- PERMIT EXPIRY, RENEWAL, REVOCATION, TRANSFER
- PERMIT AGREEMENT
- INSPECTION, ADMINISTRATION & ENFORCEMENT
- APPEALS
- NOTICES & ORDERS
- PENALTY
- FEES
- SEVERABILITY
- EFFECTIVE DATES & REPEAL OF PREDECESSOR BY-LAWS

Generally, the best practices documents provide high-level guiding language that allows for the development of a base By-law that can be molded to custom criteria as required by the subject municipality. Part 2 - Strategic Recommendations describes the desktop assessment of comparative municipal site alteration By-laws that helped further refine and shape the draft Town of Amherstburg Excess Soils By-law.

Part 2 - Strategic Recommendations:

Identification of Issues

The Town of Amherstburg's 2022-2026 Community Strategic Plan (the "Plan") has identified a vision of "Preserving our past while forging our future". The Plan is built around four key strategic pillars:

1. Deliver trusted and accountable local government
2. Invest in community amenities and infrastructure
3. Encourage local economic prosperity
4. Shape growth aligned with local identity

This Excess Soils Strategy fits within the vision as it develops clear tools that encourage soil reuse as a valuable resource while preserving the Town's green spaces, agricultural lands, and natural environment.

The Town of Amherstburg has identified the need for an Excess Soils Strategy to allow for increased control and oversight on the movement of excess soils within the municipal boundaries. Items of particular concern for the Town include the movement, management and placement of liquid soils, the transfer and placement of large volumes of soils, and the ability to monitor soil quality and potential impacts on nearby properties, groundwater, and surface water resources.

Desktop Assessment

A desktop assessment of site alteration and fill By-laws across Ontario identified three By-laws for peer review - the Town of Mono, the Town of East Gwillimbury, and the Town of Whitchurch-Stouffville. A comparative analysis of definitions, general provisions, exceptions, punitive measures, and administrative sections was completed to compare the examples against each other and against the components of the best practices documents (OSRTF Model By-law and the Excess Soils By-law Tool 2.0).

Generally, the By-laws included in the desktop assessment aligned with regards to structure and general definitions. Between the three desktop assessment By-laws, variations were identified in what is considered a Minor versus Large Site Alteration, requirements associated with liquid soils placement, permit exemptions, and the level of detail required within a permit application.

A comparison matrix between the three desktop assessment by-laws and the best practices document can be found in the Decision Matrix section.

Decision Matrix

To develop a comprehensive and effective new by-law for excess soils management, it is essential to compare existing best practices documents. This process involves identifying common elements and best practices that can be integrated into the new by-law. To do so, the following methodology was applied:

1. Document Collection and Review

- **Collect Documents:** Gather the three example by-laws as best practices documents related to excess soils management, as well as the two sources of model by-law language.
- **Initial Review:** Conduct an initial review of each document to understand its structure, scope, and key focus areas.

3. Create a Comparison Matrix

- **Matrix Setup:** Create a comparison matrix with columns for each document and rows for each identified section/theme.
- **Populate Matrix:** Fill in the matrix with relevant information from each document, noting similarities and differences.

2. Identify Key Sections and Themes

- **Key Sections:** Identify and list the key sections in each document (e.g., soil assessment, transportation, reuse, documentation, compliance).
- **Themes:** Note recurring themes or topics across the documents (e.g., environmental protection, regulatory compliance, stakeholder engagement).

4. Analyze Common Elements

- **Common Practices:** Identify practices that are common across all or most documents.
- **Unique Practices:** Note any unique practices that could provide additional value if included in the new by-law.
- **Best Practices:** Highlight practices that are considered best practices based on effectiveness, feasibility, and alignment with regulatory standards.

5. Synthesize Findings

- **Summarize Common Elements:** Summarize the common elements identified in the comparison matrix.
- **Evaluate Relevance:** Evaluate the relevance and applicability of these elements to the new by-law context.
- **Draft Recommendations:** Draft recommendations for the new by-law based on the synthesized findings.

By systematically comparing excess soils best practices documents, common elements and best practices can be identified and integrated into a new by-law. This approach structures the new by-law in a way that is comprehensive, effective, and aligned with regulatory standards and industry best practices.

The following tables display the comparison matrices.

Table 1: By-law Sections Comparison Matrix

| Section | Town of Mono | Town of East Gwillimbury | Town of Whitchurch-Stouffville | OSRTF Model By-law | Excess Soil By-Law Tool 2.0 | Other Considerations | Town of Amherstburg |
|---|---------------------|--|---------------------------------------|---------------------------|------------------------------------|---|----------------------------|
| Definitions | present | present | present | present | present | | present |
| Application of By-law | | | | | | | |
| Site Alteration Prohibited | | | | | | | |
| General Provisions/Regulations | present | present | | present | present | | present |
| General Prohibitions | | | present | | | included under Section 2 | |
| Exemptions | present | present | | present | present | | present |
| Exceptions | | | present | | | included under Section 3 | |
| Compliance with other Regulations and Statutes | | | | | present | no | |
| Oak Ridges Moraine | | | | | | | |
| Application for Variance | | | | | | | |
| Minimum Standards | | | | | | | |
| Requirements for Issuance of a Permit / Applications for a Permit | present | present | present | present | present | | present |
| Abandonment, Expiry, Renewal, Transfer, Revocation, Amendment and Closure of Permits | present | present (order of this and below are reversed) | present | present | present | | present |
| Agreements | | | | | present | no | |
| Permit Conditions | | present | | present | | | |
| Small Scale Site Alteration (less than 1k m3) | | | | | | | |
| Large Scale Site Alteration (more than 1k m3) | | | | present | | | |
| Permit Conditions for Commercial Fill Operations or Site Alteration Projects Greater than 10k m3 | | present | | | | Amherstburg has pits/quarries including at least one currently accepting fill, so this could apply. Would those sites be grandfathered? | |

| | | | | | | | |
|--|---------|---------|---------|---------|---------|--|---------|
| Replacement of Topsoil for Agricultural Purposes | | | | | | | |
| Fees and Securities | | | | present | present | can put in Schedule or User Fees By-law | |
| Notice to Public and Consideration of Council | | present | | present | present | considered under Seciton 4 | |
| Enforcement and Administration | present | present | present | present | present | | present |
| Appeals | | | present | | present | not included in By-law - does Town require an appeals process? | |
| Orders | present | present | present | present | present | | present |
| Work Order | | | | | | | |
| Work Done by the Town | present | | present | | | Included under Section 7 | |
| Service of a Work Order | | | | | | | |
| Presumption | | | present | | | included under Section 6 | |
| Recovery of Costs | | | | | | | |
| Power of Entry | | | | | | | |
| Obstruction | | | | | | | |
| Penalties and Offences | present | present | present | present | present | | present |
| Interpretation and Validity | | | | | | | |
| Order upon Conviction | | | | | | | |
| Assisstance for Inspector | | | | | | | |
| Conflicting Legislation | | | | | | | |
| Severability and Conflicts | present | present | present | present | present | | present |
| Schedules | | | | present | | TBD | present |
| Short Title | | | | | | | |
| Transition Provision | present | | present | | | not applicable | |
| Effective Dates and Repeal of Predecessor By-laws | present | present | present | | present | | present |
| Application Doc | present | present | | | | TBD | present |

Table 2: By-law Definitions Comparison Matrix

| Definition | Town of Mono | Town of East Gwillimbury | Town of Whitchurch-Stouffville | OSRTF Model By-law | Excess Soil By-Law Tool 2.0 | #/5 | Other Considerations | Town of Amherstburg |
|--|--------------|--------------------------|--------------------------------|--------------------|-----------------------------|-----|--|---------------------|
| Adverse Effect | present | | | present | [see website] | 2 | | present |
| Agreement | | | present | | | 1 | currently included, but optional depending on how Town wants to structure requirements | present |
| Agricultural | present | | present | present | | 3 | | present |
| Alter / Altered | | | present | | | 1 | | |
| Applicant | present | | | | | 1 | | present |
| Application | present | | | present | | 2 | | present |
| Asphalt | | | present | | | 1 | | |
| By-law | | | | present | | 1 | | |
| By-law Enforcement Officer | | | present | | | 1 | | |
| Conservation Authority | present | | present | | | 2 | | present |
| Condition(s) | present | | | | | 1 | | |
| Contaminant | present | | present | present | | 3 | | present |
| Corporation | | | | present | | 1 | | present |
| Council | present | present | present | | | 3 | | present |
| Director | present | | present | present | | 3 | | present |
| Drainage | present | present | present | | | 3 | | present |
| Dump / Dumping | | present | | | | 1 | | |
| Engineer | | present | | | | 1 | | |
| Environmentally Sensitive Areas | | | | present | | 1 | | |
| Erosion | | present | | | | 1 | | |
| Fill | present | present | present | present | | 4 | | present |
| Soil | present | | | | | 1 | | present |
| Excess Soil | present | | | | | 1 | | present |
| Liquid Soil | present | | | | | 1 | | present |
| Rock | present | | | | | 1 | | present |
| Crushed Rock | | | | | | 0 | | present |
| Sod | present | | | | | 1 | | present |
| Compost | present | | | | | 1 | | present |
| Aggregate | present | | | | | 1 | | present |
| Clean concrete and brick | present | | | | | 1 | | present |
| Fill Transfer Site | | | present | | | 1 | | |

| | | | | | | | | |
|-------------------------------------|---------|---------|---------|---------|--|---|--|---------|
| Fill Management Plan | | | present | | | 1 | | present |
| Garden Supply Establishment | | | present | | | 1 | | |
| Grade | present | present | present | present | | 4 | | present |
| Existing Grade | present | | present | present | | 3 | | present |
| Approved Grade | present | | present | | | 2 | | present |
| Finished Grade | | | present | present | | 2 | | |
| Proposed Grade | | | | present | | 1 | | |
| Unapproved Grade | present | | | | | 1 | | |
| Guidelines Manual | present | | present | | | 2 | | present |
| Haul Routes | | | | present | | 1 | | present |
| Highway | present | present | | | | 2 | | |
| Hydrologically Sensitive Features | | | | present | | 1 | | |
| Hydro-Excavation Truck | | | present | | | 1 | | |
| Inspector | | | present | present | | 2 | | |
| Insurance | | | | present | | 1 | | |
| Invasive Species | present | | present | | | 2 | | present |
| Key Natural Heritage Features | | | | present | | 1 | | |
| Lagoon | | | present | | | 1 | | |
| Large Site Alteration | present | | present | present | | 3 | | present |
| Minor Site Alteration | present | | | | | 1 | have large and minor to define volumetric splits | present |
| Minor Amendment | | | present | | | 1 | | present |
| Minimum Vegetative Protective Zones | | | | present | | 1 | | |
| Movement of Fill | present | | | | | 1 | | present |
| Municipality | | | | present | | 1 | | |
| Native Fill | | | present | | | 1 | | |
| Normal Farm Practice | present | | present | | | 2 | | present |
| Oak Ridges Moraine | | | present | | | 1 | | |
| Offence | present | | | | | 1 | | |
| Officer | present | present | | | | 2 | | present |
| Ontario Regulation 153/04 | present | | present | | | 2 | | present |
| Ontario Regulation 406/19 | present | | | | | 1 | | present |
| Order | present | | present | present | | 3 | | present |
| Owner | present | present | present | present | | 4 | | present |
| Permit | present | | | present | | 2 | | present |
| Person | present | | present | present | | 3 | | present |
| Project Area | | | | | | 0 | | present |
| Provincial Plans | | | | present | | 1 | | |
| Place/Placed/Placing | | | present | | | 1 | | |

| | | | | | | | | |
|---|---------|---------|---------|---------|---------|---|-----------------------------------|---------|
| Property | present | | | | | 1 | | present |
| Public Information Centre | present | | present | | | 2 | | present |
| Putrescible Organic Material | | | | present | | 1 | | |
| Qualified Person | present | | | present | | 2 | | |
| Reclaimed Fill | | | present | | | 1 | | |
| Record of Site Condition | | | present | | | 1 | | |
| Receiving Site | | | | present | | 1 | | |
| Reuse Site | present | | | | | 1 | | |
| Site | present | present | present | present | present | 4 | | present |
| Site Alteration | present | present | present | present | present | 4 | | present |
| Site Alteration Permit | | | present | | | 1 | | |
| Site Alteration Agreement | | | | present | | 1 | | |
| Site Alteration and Fill Management Plan | present | | | | | 1 | | |
| Site Condition Standards | | | present | | | 1 | | |
| Small Site Alteration | present | | | | | 1 | | |
| Soil | | | | present | | 1 | | |
| Soil Bank Storage Site | present | | | | | 1 | | |
| Soil Processing Site | present | | | | | 1 | | |
| Surveyor | | present | | | | 1 | | |
| Temporary/Temporarily | | | present | | | 1 | | |
| Temporary Fill Storage Site | present | | | | | 1 | | |
| Temporary Storage of Fill | present | | | | | 1 | | |
| Tree | present | | | | | 1 | | |
| Topsoil | | | present | present | | 2 | included under definition of Fill | present |
| Town | present | present | present | | | 3 | | present |
| Town Engineer | | present | present | | | 2 | | |
| Watercourse | present | present | | | | 2 | | present |

Custom Criteria

To address the specific characteristics of Fill that were not explicitly mentioned in other by-laws, we recommend the following custom measures:

- Fill is defined to include Soil, Excess Soil, Liquid Soil, Rock, Crushed Rock, and Topsoil to include the materials covered within O.Reg. 406/19.
- The role of Director is assigned to [TBD].
- The By-law considers Large Site Alteration to be the movement, removal, placement or relocation of Fill in excess of 350 m³, or placement of over 100 m³ of Liquid Soils.
- Subject to Section 2, Site Alterations involving the application of Topsoil spread over Agricultural Property provided that the Existing Grade of the Property is not increased by more than 200 mm at any given point is exempt from the provisions of the By-law.
- Subject to Section 2, one-time small volumes of dry Fill placement relative to the size of the Property are exempt from requiring a Site Alteration Permit.
- Subject to the exemptions, the By-law requires temporary soil storage sites (e.g. landscaping depots, residential soil depots, aggregate depots, small liquid soil depots) to obtain a Site Alteration Permit.
- The By-law requires any placement of any volume of Liquid Soils and/or Site Alteration involving greater than 10,000 m³ of Fill to trigger a public notification process.
- The By-law is written with the ability of the Town, at the discretion of the Director, to require the Property Owner of a Large Site Alteration to enter into an Agreement with the Town.

Fill is defined to include Soil, Excess Soil, Liquid Soil, Rock, Crushed Rock, and Topsoil for clarity to include the materials covered within O.Reg. 406/19, as well as other materials such as Sod, Compost, Aggregate, and Clean concrete and brick, to account for other material movements within typical Site Alteration activities. Topsoil was added into the definition of Fill instead of as a separate definition to provide clarity that Topsoil is considered as a Fill material. Where Topsoil is used separately within the By-law (in comparison to reference as Fill), it is to keep wording consistent with the Planning Act. Note that this By-law does not consider placement of waste, which is governed under R.R.O. 1990, Regulation 347: General – Waste Management.

Large Site Alteration has been defined as Site Alteration involving over 350 m³. This volume was selected based on input from the Town indicating a preference for conservatism to protect the natural environment. The volume of 350 m³ aligns with the small soil volume description in the Rules for Soil Management and Excess Soil Quality Standards document associated with O.Reg. 406/19, for which the 350 m³ soil volume

is a criteria that applies in the selection of soil quality standards that apply to a reuse site.

Subject to the provisions of Section 2, an exemption was included for the application of Topsoil spread over Agricultural Property provided that the Existing Grade of the Property is not increased by more than 200 mm. This exemption was provided to align with soil movements associated with Normal Farm Practice as the By-law cannot override the Farming and Food Production Protection Act. The exemption provides a limit on topsoil height to prevent illegal Fill operations attempting to pass as normal agricultural practice, however it should be recognized that Normal Farm Practice can involve a topsoil height raise of greater than 200 mm. If there is a complaint that the use of excess soil is inappropriate, the issue can go to the Normal Farm Practices Protection Board after due conflict resolution/mediation process.

Subject to the provisions of Section 2, one-time small volumes of dry Fill placement are exempted from requiring a Site Alteration permit to allow low risk Fill deposit to occur without causing undue administrative burden on the Town and on the Property Owners.

Other example by-laws exempt temporary soil storage sites such as garden centres and soil processing and storage sites from requiring a Site Permit, subject to other provisions within the By-law, and appropriate zoning and planning requirements, commercial product requirements, and other regulatory requirements, to recognize that permanent Fill placement typically carries higher risks to the environment in comparison to temporary soil storage. It is noted that the example by-laws with such exemptions include a minimum soil quality standard of Table 1: Full Depth Background Site Condition Standards for Agricultural or Other Property Use (Table 1 AgO SCS) from the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act as the default comparative criteria to evaluate the quality of soil being imported. This soil quality standard is the most stringent standard provided in O.Reg. 153/04 and O.Reg. 406/19. The guidelines accompanying the by-law allow for rationalization of importing soil of differing quality within the proposed Fill Management Plan that would accompany a Site Alteration Permit Application. The proposed By-law does not set a base standard of Table 1 AgO SCS as this soil quality is often more stringent than would typically be required for import, and as such may be overly limiting to Property owners to be able to source soil meeting this quality. As such, the prepared By-law document requires that a Qualified Person define acceptable soil quality standards for import of soil, and does not exempt temporary soil storage sites from requiring a Site Alteration Permit, subject to the exemptions provided within the By-law.

The methods in which Liquid Soils are generated can include hydrovacuum excavation, where typically soil quality is not sampled in advance and thus soil quality is unknown. Due to the nature of Liquid Soil, there is a higher risk of groundwater and surface water impacts on sites where Liquid Soils are placed, depending on the soil quality, volume and location of the final placement of soils. Large volumes of soil (i.e. greater than 10,000 m³) can present a greater risk of impacts to the community and natural environment due to more frequent truck movements, potential for contamination, and potential changes to drainage patterns. As such, an additional level of review and transparency involving public consultation and Council approval are deemed necessary for such Site Alteration Permit Applications.

The By-law does not require the property Owner of a Large Site Alteration to enter into an Agreement with the Town regarding Site Alteration, however it provides the flexibility for the Director to require such Agreement. This may be advantageous for Large Site Alterations that extend over multiple years, rather than requiring permit renewal.

Strategic Recommendations

It is recommended that Council delegate authority of applying this By-law to Town staff, in order to expedite approvals and / or denials and to ease the administrative burden of applying the By-law Town-wide. Large Site Alteration Permit Applications involving more than 10,000 m³ and/or the deposit of >100 m³ of Liquid Soils will be brought to Council once applications are deemed complete by those with the delegated authority.

To require alignment of Site Alteration projects with Town of Amherstburg goals, Officers of the Town may enforce Orders upon landowners including completing the required conditions imposed within the site alteration permit, at the cost of the landowner. This aligns development projects with municipal objectives and abates social, health, and environmental concerns.

Instead of codifying the requirements of a Site Alteration Permit application into the By-law, reference is made to an accompanying Guidelines Document to allow the Town to more readily make changes to the requirements based on updates to provincial policy, best management practices and regulatory updates, as well as input from stakeholders to the process. This “living document” approach allows the Town to remain nimble and continue fostering sustainable development.

Conclusion

This Excess Soils Strategy aims to require that excess soil generated from construction and development projects, temporarily stored, or finally deposited within the Town of Amherstburg is treated as a resource and is managed in an environmentally responsible and compliant manner. By adhering to O.Reg. 406/19 and the accompanying Rules for Soil Management and Excess Soil Quality Standards, we can promote sustainable soil management practices and contribute to environmental protection.

This Strategy should be reviewed and updated regularly to reflect any changes in regulations or project-specific requirements.