2023 Excess Soil Management on City Contracts

Paul Javor, MASc.,P.Eng.
Drainage Engineer

Sudbury Greater Grand















2019-2027 Strategic Plan Priorities

Outline

- Key Definitions
- Exemptions
- City Approach to Excess Soils
- Excess Soils Process on CGS Contracts
- Example Project

















Key Definitions

Excess soil means soil, crushed rock or soil mixed with rock or crushed rock, that has been excavated as part of a project and removed from the project area for the project;

Crushed Rock means a naturally occurring aggregation of one or more naturally occurring minerals that is mechanically broken down into particles that are smaller than 2 mm in size or that pass the #10 sieve

Granular A, B and Type II B by gradation have particles that pass the #10 sieve and if from sources other than a licensed pit or quarry would be considered excess soil and require QP verification for reuse

Soil - means unconsolidated naturally occurring mineral particles and other naturally occurring materials resulting from the natural breakdown of rock or organic matter by physical, chemical or biological processes that are smaller than 2 mm in size or that pass the #10 sieve

Key Definitions

Qualified Person - is a professional engineer or professional geoscientist for the purpose of completing or supervising excess soil planning requirements under the regulation

Project Leader - the person or persons who are ultimately responsible for making decisions relating to the planning and implementation of the project (CITY)

Exemptions

- Maintenance of Infrastructure
 - Fits most of our Contracts
 - Exempts the projects from various planning documents in Section 8 of the Regulation
- However.....
 - The City is taking a risk based approach to mitigate risks by
 - Characterizing the material within the project area
 - Providing details how the material can be reused or how it needs to be disposed of
 - Tracking where the materials are being reused
 - Additionally the City would not be exempt from the Reuse Rules, Excess Soil Standards, Clear Waste Designation and Approvals and the private property receiving the material would not be exempt of following the Excess Soils Rules.

Risk Based Approach to Excess Soils

- City has adopted OPSS.MUNI 180, November 2021, General Specification for the Management of Excess Materials
 - Focus on planning and tracking the movement of Excess Materials
- General Condition updates
 - 105-9 Excess Soil has been added
 - Tracking of Excess Soils Movements
 - Record retention

















Risk Based Approach to Excess Soils

- Characterization Report
 - City will provide a report detailing the characteristics of the soils in the project area prepared by a Qualified Person
 - The report will make recommendation for re-use site standards, types of properties suitable for re-use
- How this approach helps bidders
 - Provides critical information at tender to assist bidders
 - Provides equal information to all bidders
 - Decreases the required effort to bid
 - Contractors need to know what type of material their preferred reuse sites will accept

















Excess Soils Process

- 1. Assessment of Past Uses Report
- 2. Develop a Sampling and Analysis Plan
- 3. Prepare Soil Characterization Report
- 4. Complete an Excess Soil Reuse Plan (180.04.01.08)
- 5. Implement a Tracking and Registration System (180.07.08)
- 6. Maintain Records

City completes these steps prior to the contract and includes with the tender package

Contractor to complete these steps during the execution of the contract

Example

- Watermain replacement with estimated 3200 m³ of excavated material
- Characterization report prepared by the City Qualified Person shows no contamination and material can be beneficially reused on site and off site

















Example – City Responsibility

- Project Leader
- Provide Characterization Report during tender period prepared by City Retained Qualified Person
- Provide separate bid item for quantities of impacted material that has limited reuse
- Review Excess Soils Reuse Plan
- Review of Excess Soil Quantity Report at all meetings
- Maintain documentation

















Example – Contractor Responsibility

- Bid contract with costs for; management of OPSS.MUNI 180 documentation, disposal site and transportation in applicable bid item for example excavation or pipe bid item
- Preform some Project Lead responsibilities per OPSS 180
- Determine reuse site per the characterization report recommendations
- Maximize potential of on-site reuse
- Complete Excess Soils Re-Use Plan in advance of Pre-Construction meeting
- Track movement of excess soils that are not reuse on site through OPSS.MUNI 180 Forms
- Retain documentation for a period of 7 years
- Payment is received through normal quantity measurement pending receipt of documentation as stated in OPSS.MUNI 180

















Important Notes

- Familiarize yourself with O.Reg. 406 and OPSS 180
- This regulation applies to all properties receiving or generating excess soils, likely not well understood by private property owners at this time
- Confirm how this may impact your private projects or private properties – generation of granular from blasting on development projects
- Seek professional assistance knowledgeable in this regulation

















Links

Excess Soils Regulation with all amendments

https://www.ontario.ca/laws/regulation/190406

Regulation Information

https://files.ontario.ca/mecp-soil-rules-en-2020-12-21.pdf

https://www.ontario.ca/page/management-excess-soil-guide-best-management-practices

OPSS.MUNI 180 Nov 2021

https://www.library.mto.gov.on.ca/SydneyPLUS/TechPubs/Portal/tp/opsViews.aspx?lang=en_-US

MECP Webinar Series

https://qpco.ca/2021/12/09/mecp-excess-soil-webinar-slides/

















Sudbury Greater Grand















greatersudbury.ca