

# **Excess Soil Management under O. Reg. 406/19**

## **Challenges and Opportunities for Municipalities**

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# Excess Soil Management and Municipalities



- What is Excess Soil?
- How much do we generate and why?
- Excess Soil Regulation Overview
- Are we achieving the intended benefits?
- Challenges and Opportunities for Municipalities
- Cost Implications on Infrastructure Projects
- The Future Dream State

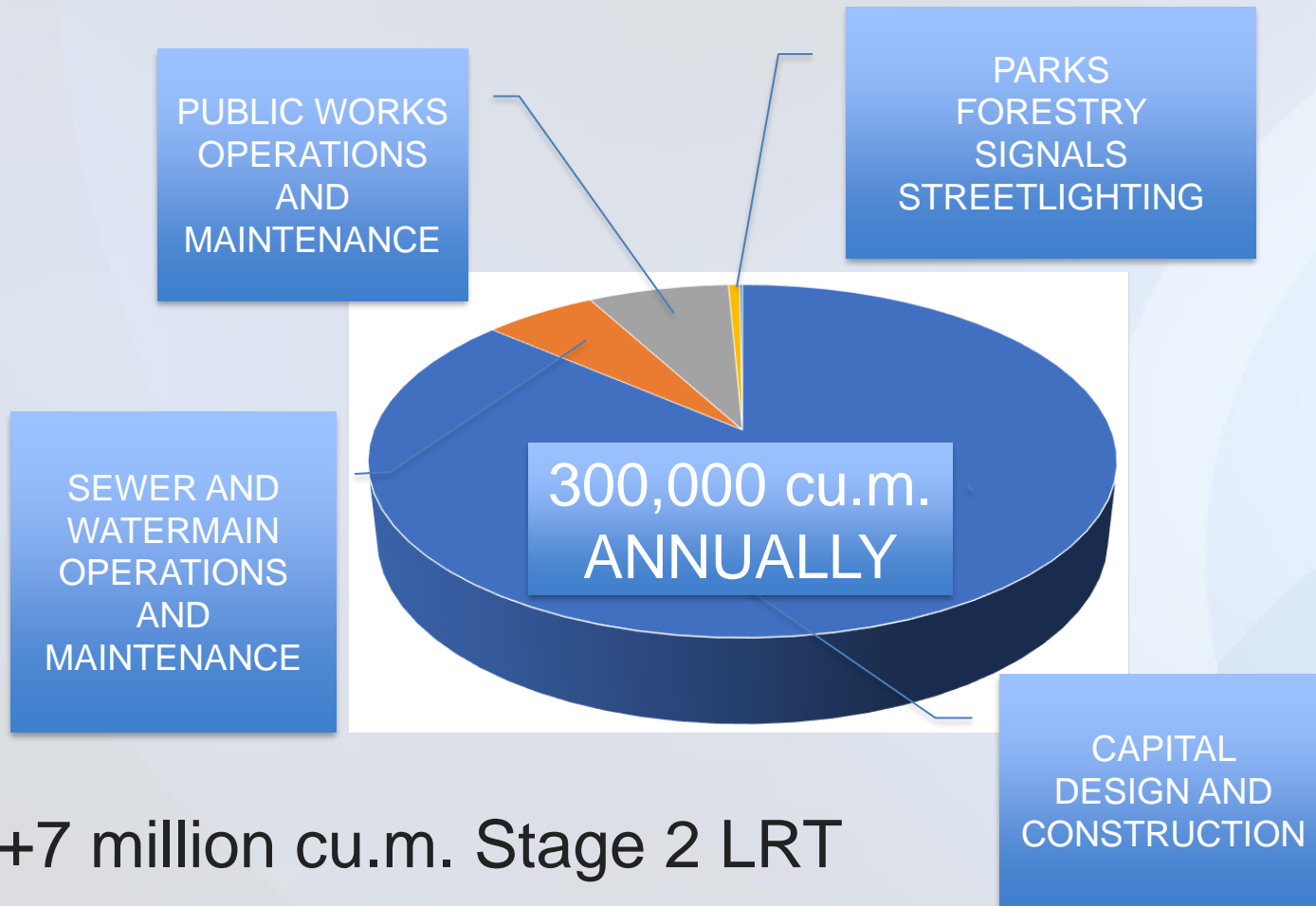
# What is Excess Soil?



**Excess Soil:** 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.



# How Much Excess Soil do we Generate?



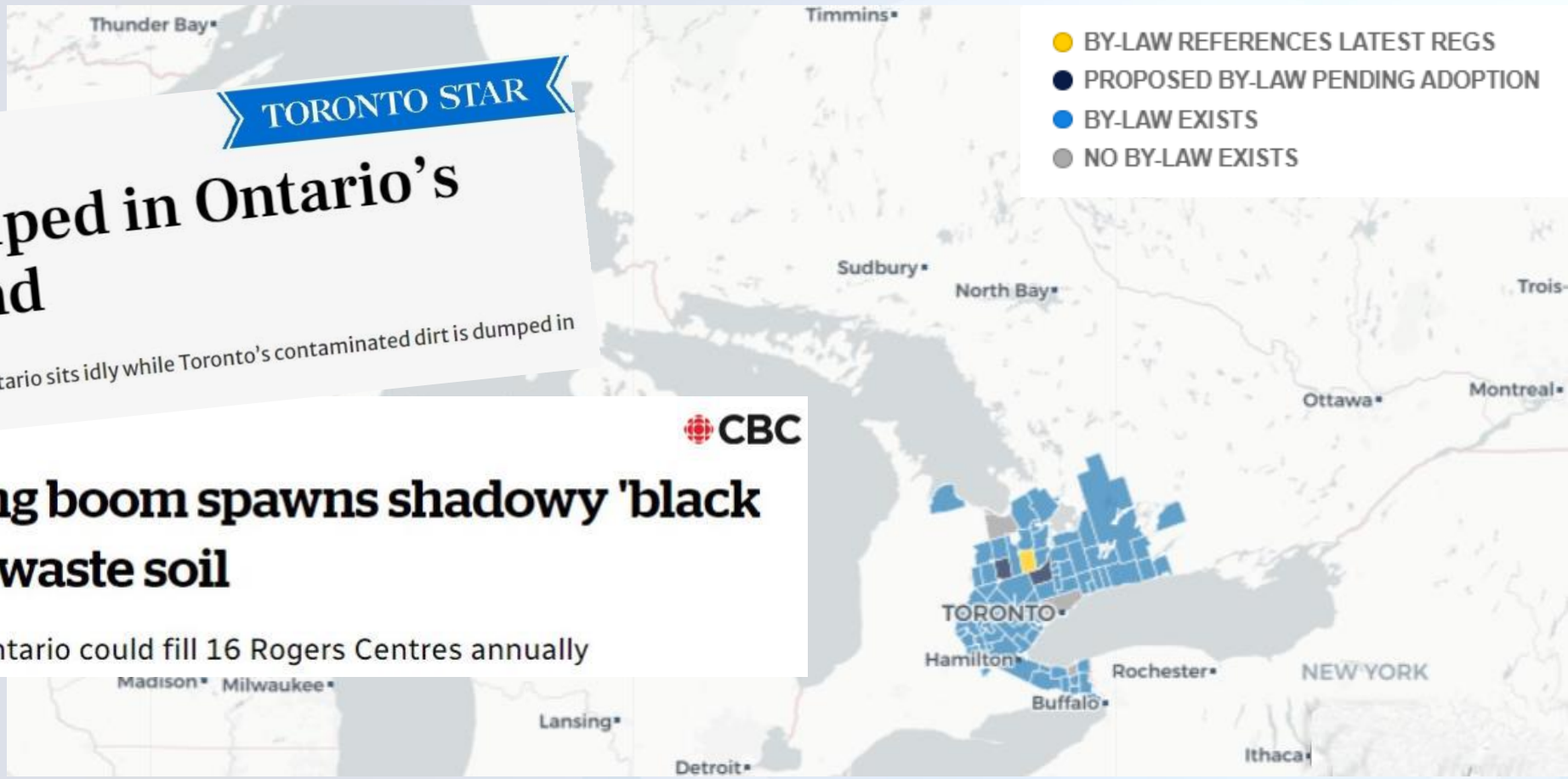
“An estimated **25 million** cubic metres of excess soil is generated in Ontario every year” (source MECP)



# Municipal Activities that Generates Excess Soil



# Drivers for a new Ontario Regulation



GTA Oct. 20, 2014

TORONTO STAR

## Toxic dirt dumped in Ontario's prime farmland

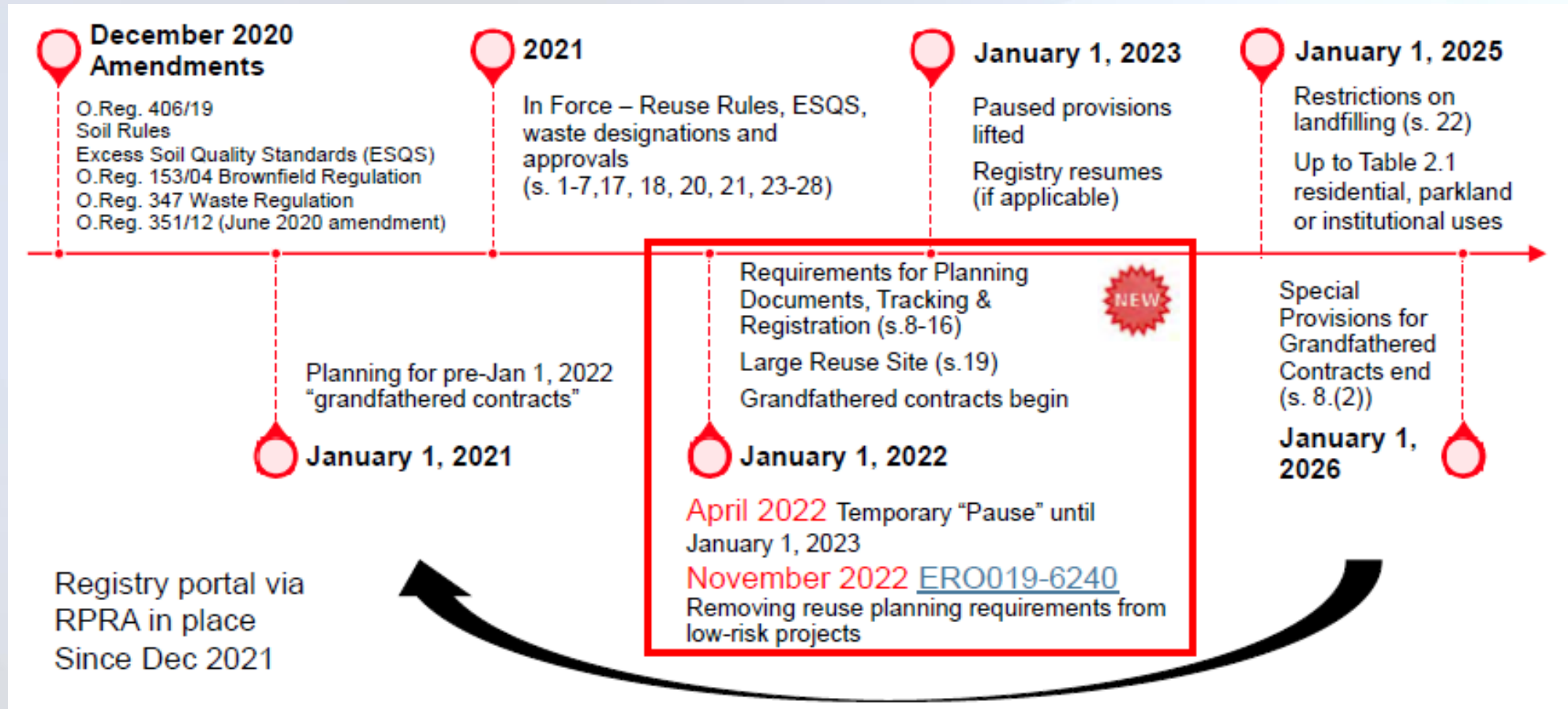
With lax rules and no tracking system, Ontario sits idly while Toronto's contaminated dirt is dumped in the countryside.

CBC

## GTA building boom spawns shadowy 'black market' for waste soil

Excavated soil in Ontario could fill 16 Rogers Centres annually

# Ontario Regulation 406/19



# Key Elements of O. Reg. 406/19

Common Requirements for ALL projects (effective Jan 1, 2021):

New Excess  
Soil Quality  
Standards

Reuse Site  
Requirements

Storage Rules  
and  
Restrictions

Transportation  
and  
Documentation  
Requirements

Additional Elements for “higher-risk” projects (effective Jan 1, 2023)

Planning Studies

Notice Filing and  
Updates on RPRA  
Provincial Registry

Soil Tracking System



# Who is Responsible for Regulatory Compliance?

**Project Leader:** the person or persons who are ultimately responsible for making decisions relating to the planning and implementation of the project.



## CRADLE TO GRAVE

# Exemptions from Planning Requirements

## Special conditions

Emergency work  
(e.g., spills, watermain  
breaks, sinkholes)

Project Area is of  
Residential, Parkland  
Industrial, Institutional,  
Agricultural and natural  
resources and no  
remediation

Topsoil  
conditions  
reuse requirements)

## Volume-based

<2,000 cu.m in  
settlement area and not  
part of an "Enhanced  
Investigation Project  
Area"

disposal facility  
(landfill, Class 1 SMS)

## Time-based\*

Project entered into  
soil management  
contract before  
Jan 1, 2026

Time-based  
Exemptions expire  
Jan 1, 2026

## Infrastructure Exemptions

Soil excavated to  
maintain infrastructure  
air

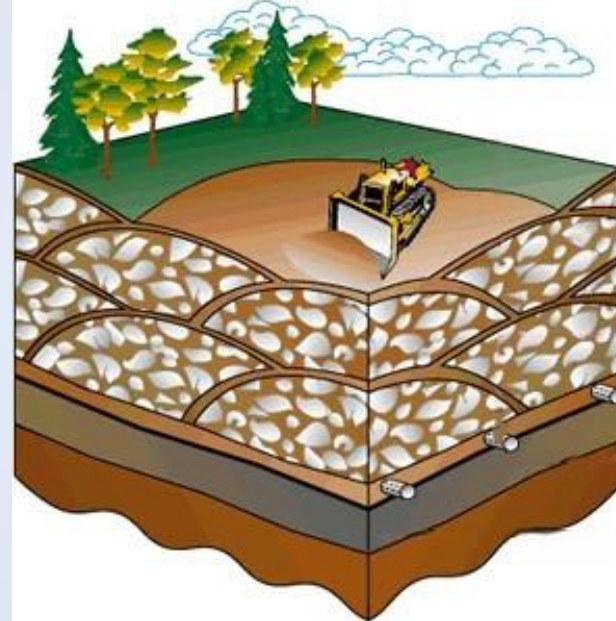
not well

reused at another  
infrastructure project of  
the same owner or a  
public body

Exemptions do not eliminate the need to confirm soil quality is appropriate for selected receiving sites.  
3rd Party sites may insist on full testing/reporting requirements.  
If you are doing field investigations, test for soil quality.

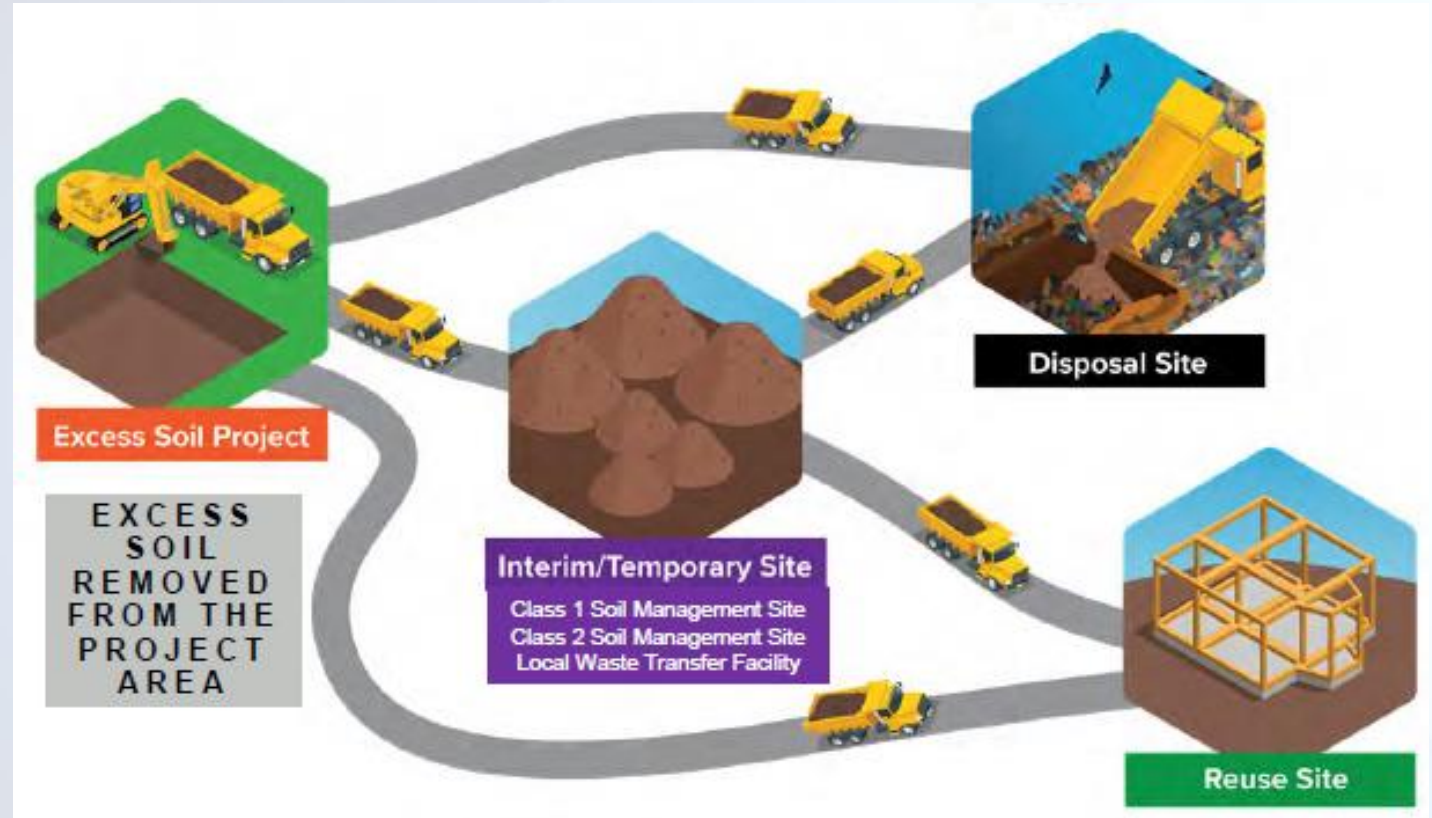
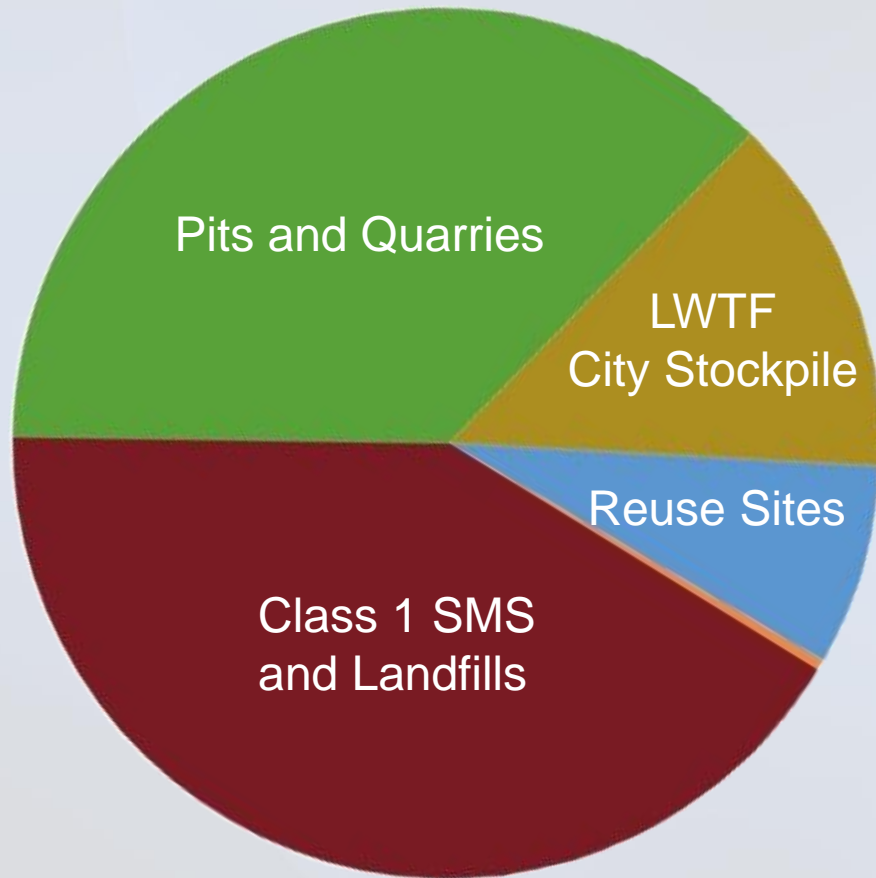
# Intended Benefits of the Regulation

MECP Stated Benefits:

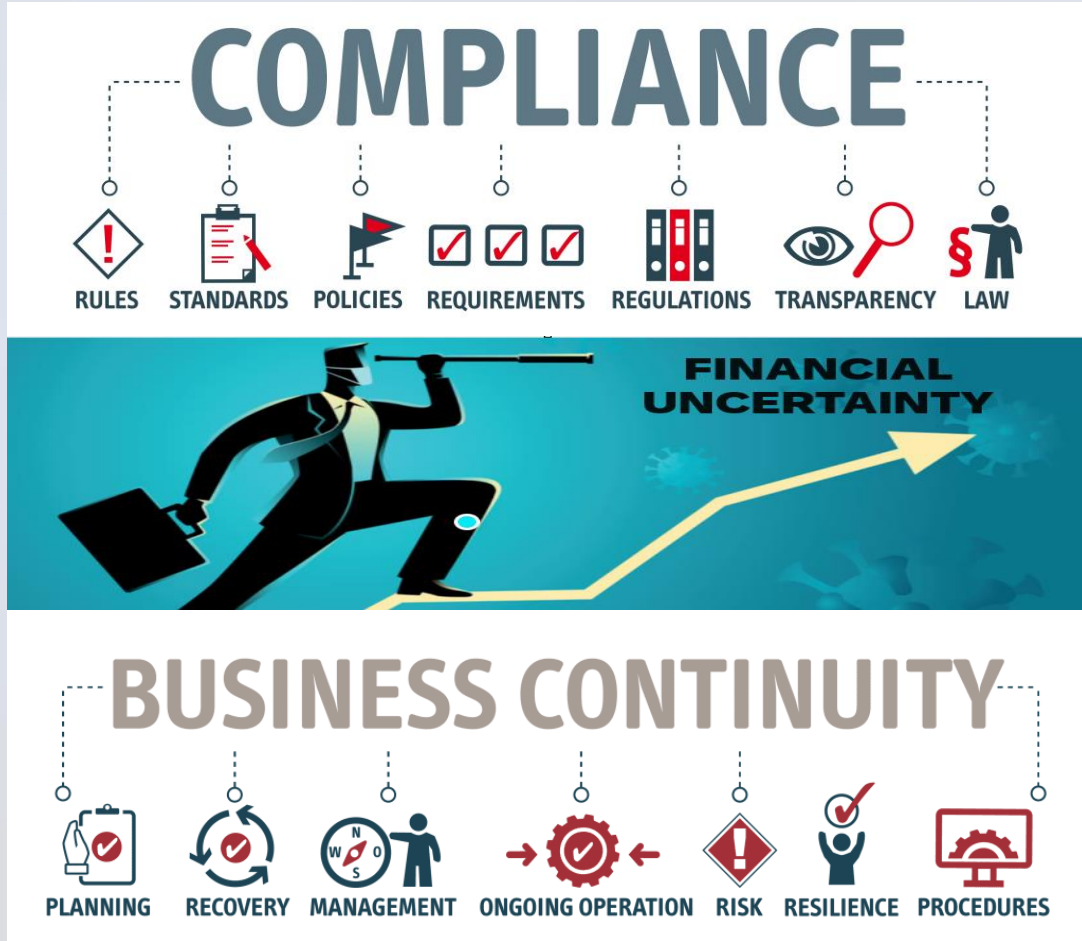


**ARE WE REALIZING THESE?**

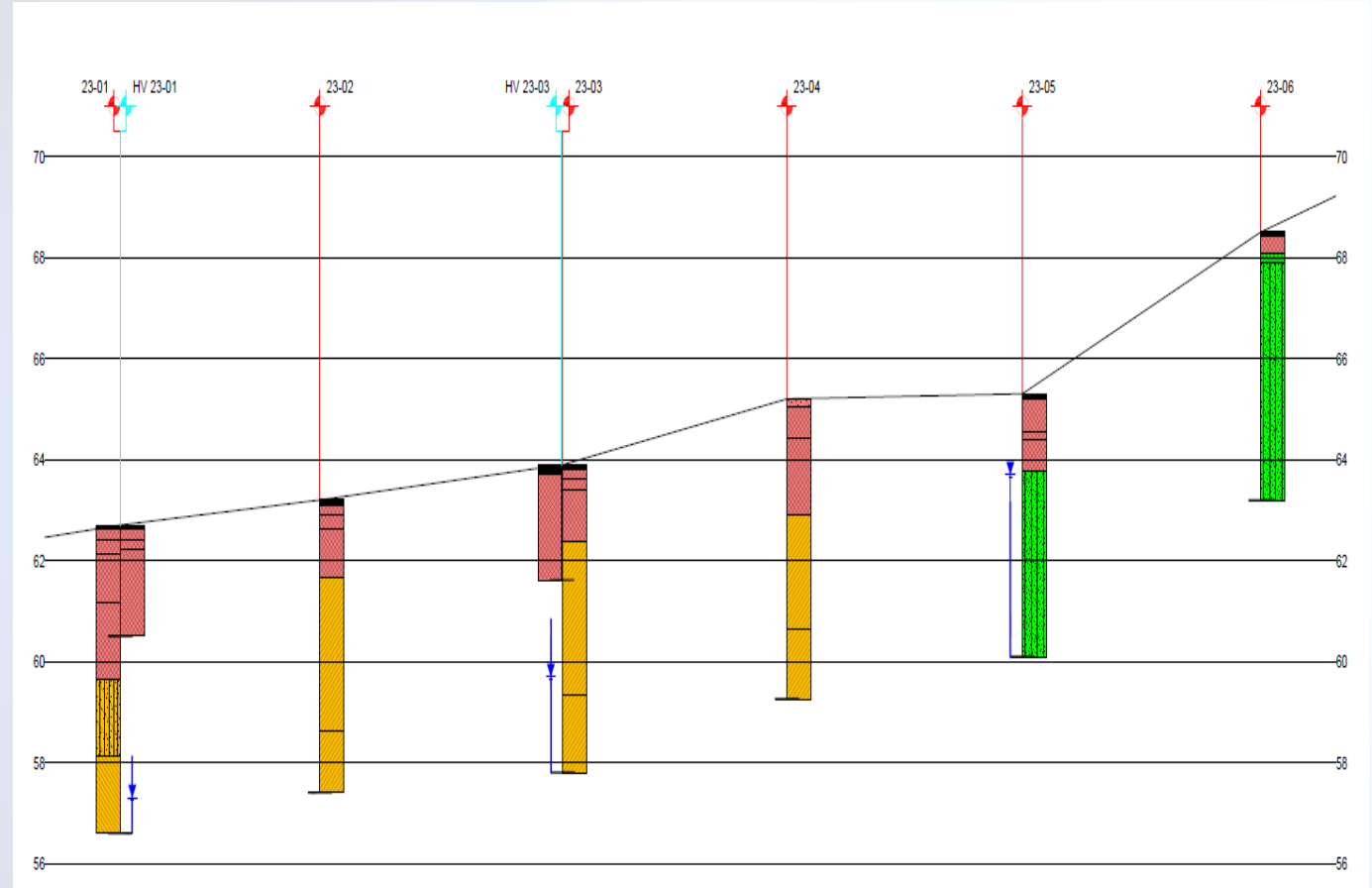
# Reuse, Stockpiling and Waste Disposal



# Municipal Risks and Mitigations



# Soil Characterization and On-Site Reuse



# Current Construction Delivery Process – Larger Projects with Soil of Known Quality

Excess Soil  
Records  
maintained for  
7 years

## Pre-design & Design Phase

Review EIPA  
Assess Exemptions  
Characterize Quality  
Quantify Soil Volumes  
Planning Studies\*

## Tendering Phase

Contractor-Designated  
Receiver Sites  
based on  
Soil Quality and  
Risk Review

## Pre-Construction Phase

Receiver Site  
Confirmation and  
Approvals, Soil  
Management Plans  
Project Registration\*  
Additional Soil Sampling  
(if required)

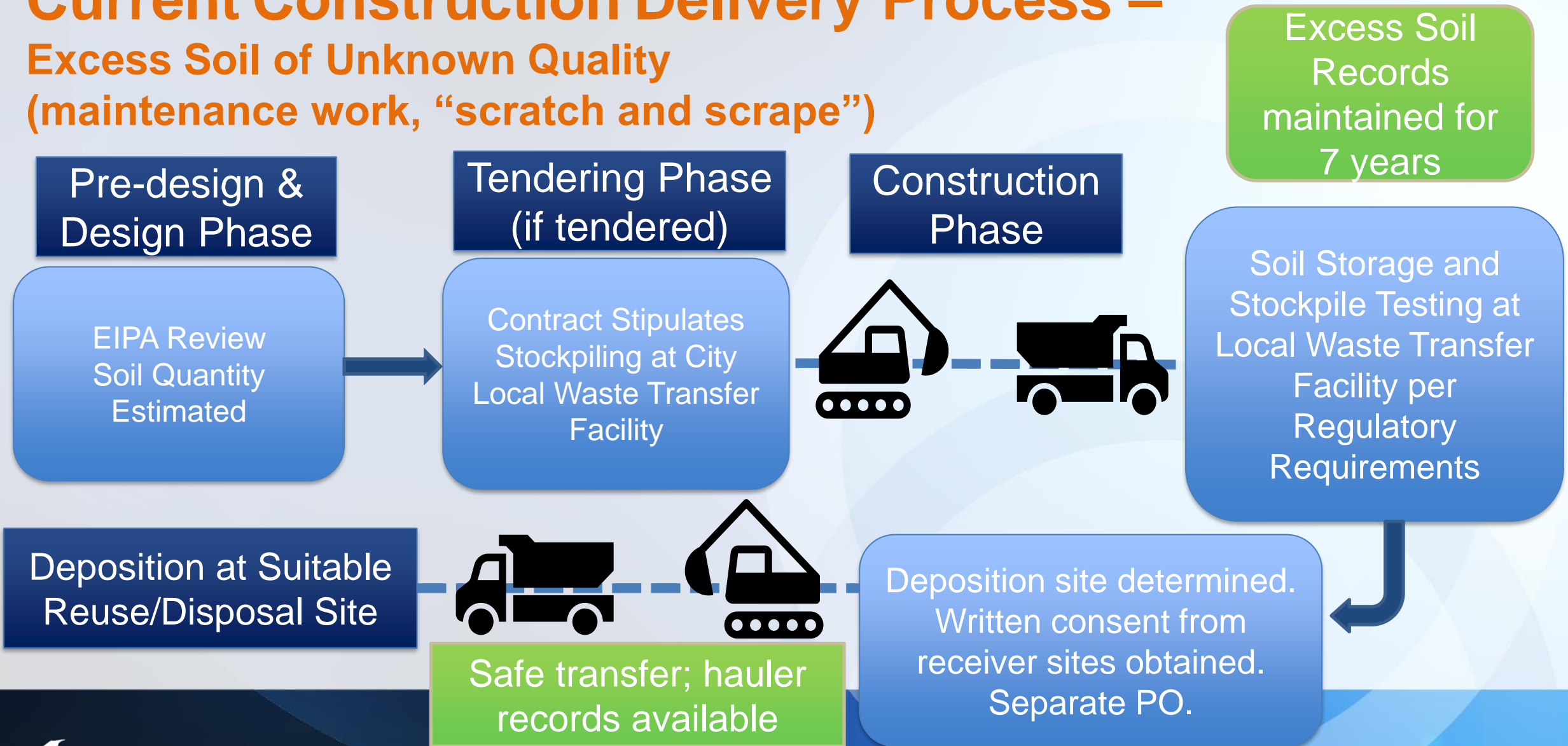
## Construction Phase

Maximize onsite reuse.  
QP monitors compliance.  
Changes updated on  
RPRA\*

Deposition at Approved 3rd  
Party Reuse/Disposal Site  
Documented

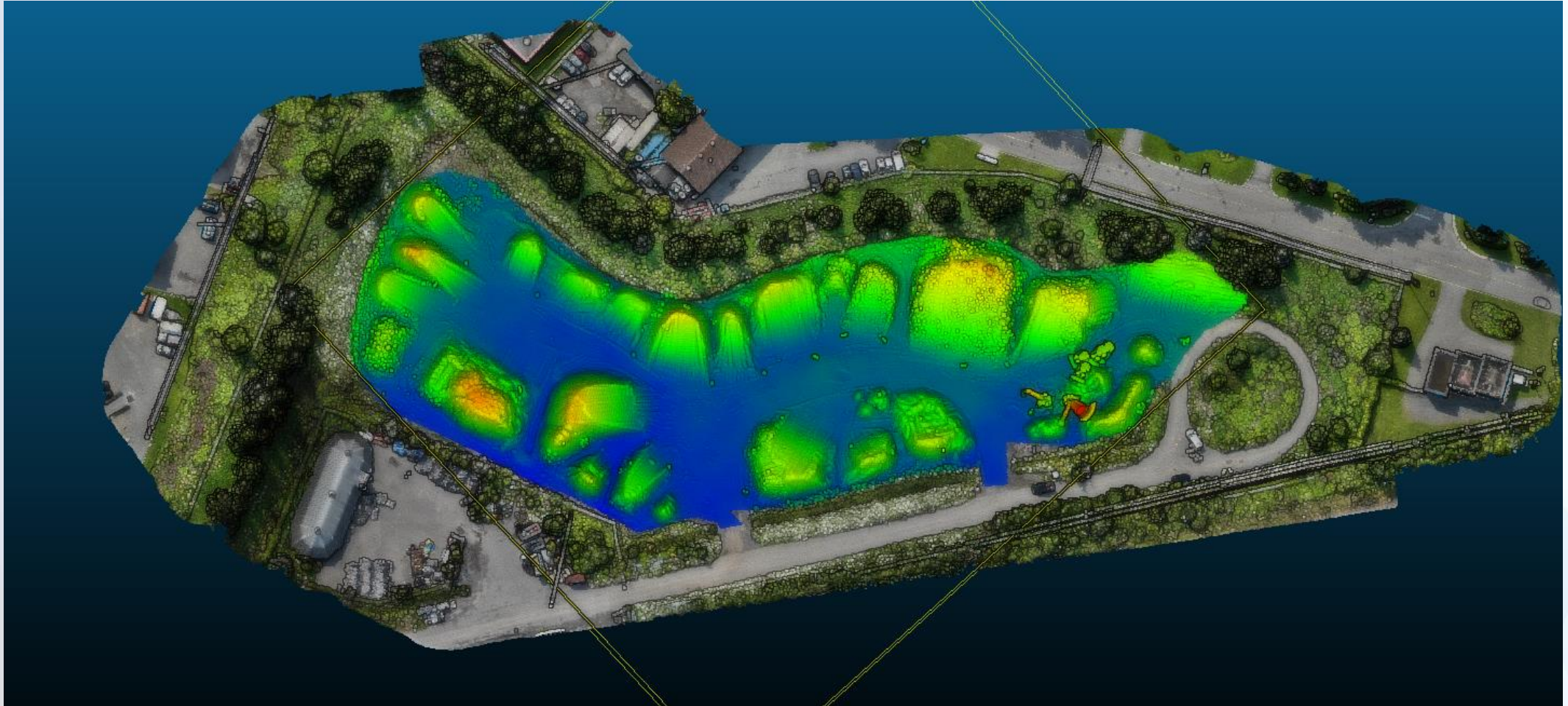


# Current Construction Delivery Process – Excess Soil of Unknown Quality (maintenance work, “scratch and scrape”)

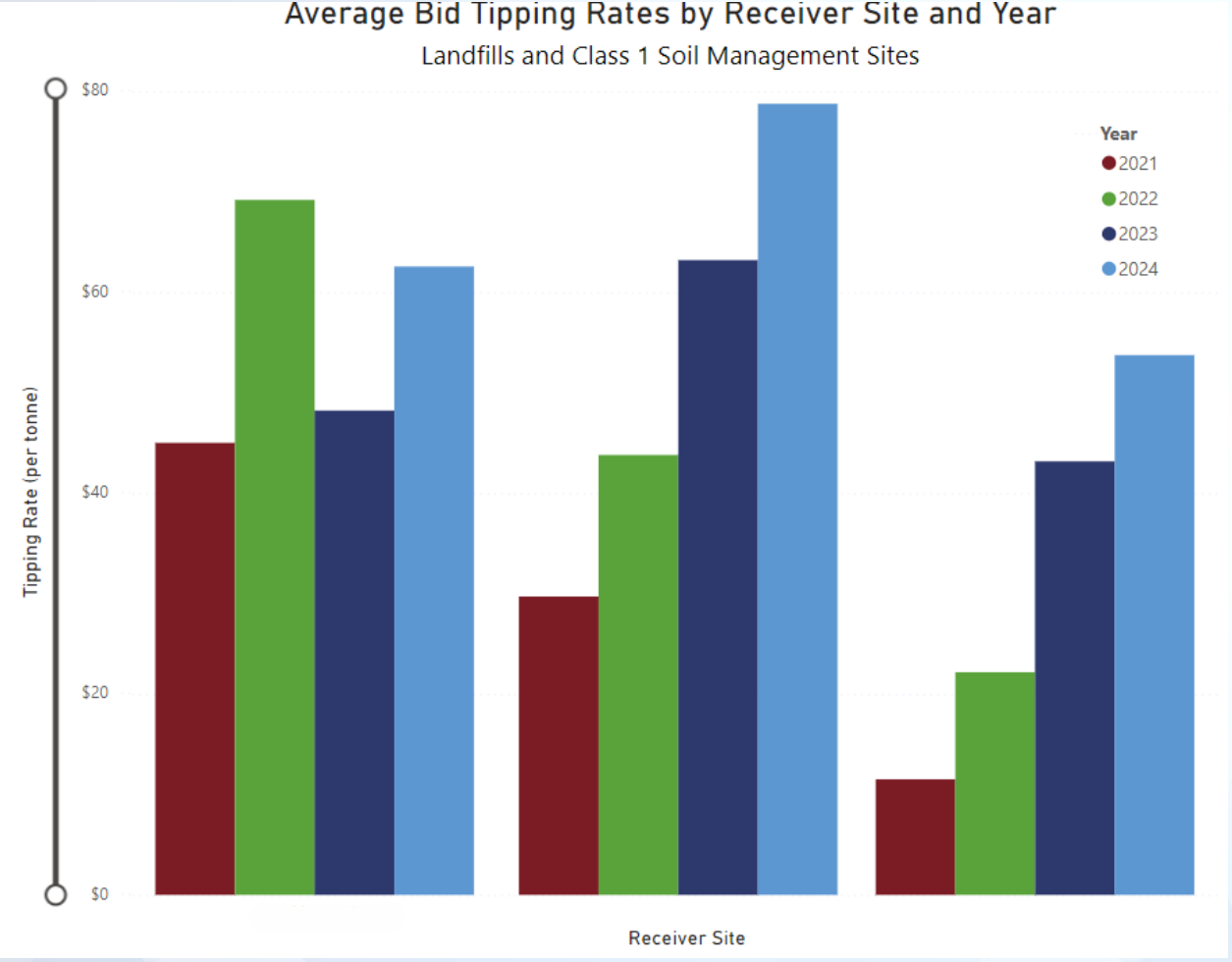
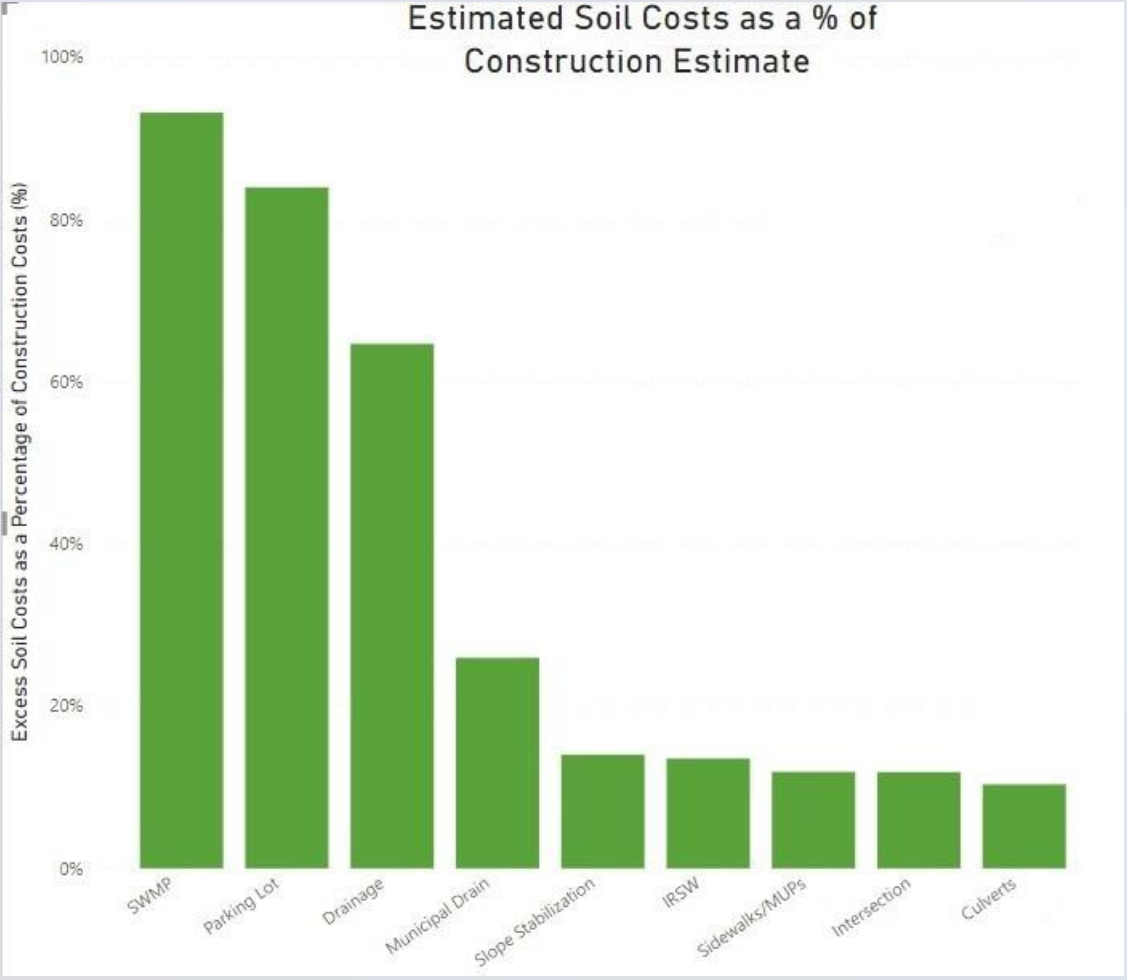




# Local Waste Transfer Facility



# Cost Implications to Infrastructure Projects



# The Future Dream State

Balance cuts/fills  
Maximize onsite reuse

Soil Landfill



Soil Bank Sites  
Dating System  
Create Opportunities

Aggregate Reuse Depot  
Liquid and Dry  
Soil Processing