MATRIX'S EXCESS SOIL 3D RAPID VOLUME ESTIMATION TOOL

The Ontario Ministry of the Environment's On-Site and Excess Soil Management regulation has been implemented to promote the beneficial reuse of excavated soil. Excess soils from a *Project Area* can no longer be directly discarded at landfills, but must first be characterized and assessed for potential reuse or directed to one or more suitable off-site receiving sites. Beneficial reuse of excess soil requires a comprehensive understanding of site conditions and detailed soil quality characterization to pair a source site to a suitable receiving site.

Matrix Solutions' rapid volume estimation tool (*3D RaVE*) generates a 3D visualization of excess soil source sites. RaVE allows for easy interactive display of environmental site data and produces a quantitative model of clean and impacted soil volumes.

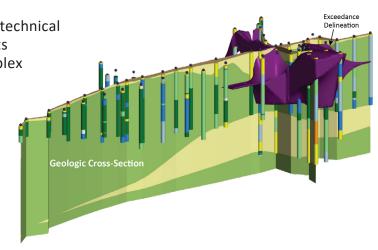


Our innovative approach facilitates stakeholder regulatory compliance and can be used to develop or enhance site characterization, plan and visualize excavations, improve construction schedule management, and promote efficient excess soil reuse and off-site soil management decisions.

MATRIX EXPERIENCE

The Matrix team's depth of experience, specialized technical skills, and understanding of regulatory requirements give us the unique ability to simplify the most complex problems, helping you make the best decisions for your construction, contaminated site, or soil management projects at local and regional scales.

Our team employs the latest in advanced threedimensional (3-D) modelling systems (Leapfrog, ArcScene, SGeMS, GOCAD, Civil3D) to quickly generate comprehensive realizations of natural systems.

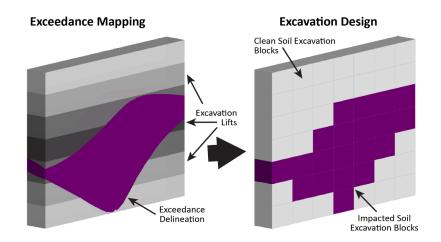




MATRIX'S EXCESS SOIL 3D RAPID VOLUME ESTIMATION TOOL

3D RaVE – MATRIX'S MAPPING ADVANTAGES

- Create 3D conceptual site model with statistical analyses
- Rapid 3D delineation of soil and groundwater impacts
- Interactive visualization of site data
- Export to GPS-controlled excavators
- Cost-saving excess soil management
- Beneficial soil reuse strategies
- Enhanced excavation visualization and planning
- Improved construction schedule management



THE MATRIX SOLUTION

Matrix is committed to providing practical, innovative, cost-effective, and site-specific solutions to assist our clients to manage their environmental risk and liabilities.

- Web-based management tools enable our clients to effectively manage and interpret data to meet their business needs.
- Clients benefit from fully interactive, user-friendly, 3D models that can be updated on the fly.

