



CASE STUDY

MSE Slope Stabilization – Titan Earth Slope® – Honeycomb

LOCATION: Richmond Hill, Ontario, Canada

PROJECT TYPE: Engineering Design, Material Supply &
Certificate of Conformance

PRODUCT USED: Titan Earth Slope® – Honeycomb, Titan Pyramid Geogrid



CHALLENGE:

The project required a stable, vegetated slope to tie into the surrounding landscape, but site constraints created design challenges that could only be resolved by Titan's MSE design team. Limited space between the curb and an existing retaining wall left almost no room to grade a natural slope, while a mature tree root ball sat just metres away. To complicate matters further, on-site elevations differed from the original design, requiring the slope to be redesigned based on site field measurements, without compromising stability or engineering approval.

TITAN SOLUTION:

Titan's engineering team worked alongside the contractor and consulting engineers to assess actual site conditions and revise the design in the field. The Titan Earth Slope – Honeycomb structure was modified while maintaining the geogrid orientation and reinforcement lengths specified in Titan's stamped design. This allowed the slope to be constructed within the site's actual geometry without compromising stability.



Geocell built around root ball



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TITAN SOLUTION CONT'D

By resolving the design in the field rather than restarting the engineering process, the team kept the project on schedule and avoided costly delays. The installed Titan Earth Slope® – Honeycomb system provides immediate slope stabilization while creating a foundation for vegetation to establish, allowing the finished slope to integrate naturally with the surrounding landscape and preserve the protected trees.

ACHIEVEMENT:

King EPCM, the engineer of record, confirmed the revised design maintained slope stability and signed off on the MSE reinforced slope. Titan issued a Certificate of Conformance following a final engineering inspection walkthrough, providing a full turnkey solution.



Field installation on slope