

Heart Lake Employment Lands

Year of Construction: 2021
Location: Brampton, ON —
Heart Lake Employment Lands
Product Installed: Flexamat Plus

CASE STUDY

CHALLENGE

The project involved constructing four hard armour overland spillways and one forebay spillway into a SWM pond for a new municipal employment lands development.

SOLUTION

Flexamat Plus was the design choice, offering robust protection while facilitating vegetative growth.

PROJECT OVERVIEW

Flexamat Plus comprises concrete blocks interconnected with a bi-axial geogrid, underlaid with wood fibre (curlex) erosion control blanket and turf reinforcement mat. The 1.5" spacing between the blocks ensures flexibility and allows vegetation growth, with roots providing additional protection alongside the mat's weight of 48.8 kg/sqm. Tested to ASTM D6460, Flexamat has performance ratings of 1149 Pa of shear and 9.1m/s of flow under unvegetated condition. It offers customizable fabrication to meet site-specific requirements and reduce unnecessary waste. The contractor selected roll widths ranging from 2.4m to 4.8m and roll lengths from 11m to 15m. Installation was efficient, with each roll placed in minutes. Unlike traditional rip rap, Flexamat offers a softer appearance, blending better with the natural environment while ensuring robust erosion control and long term sustainability.

Case Study Video:

https://youtu.be/P-xoDFrjPSM?si=kB_ix5lqu1O_T1fu

