

ProMatrix™ EFM™ Provides Erosion Control for Right-of-Way, Exceeding Environmental Standards

PROJECT STAKEHOLDERS

- Coastal GasLink Pipeline, Project Owner
- Skeena Sawmills, Project Owner
- BrettYoung™, Distributor
- Daudet Creek Contracting, Prime Contractor
- MALT Ventures, Seeding Contractor

CHALLENGE

- Revegetate a 2:1 sloped pipeline right-of-way while meeting strict environmental and safety standards.

RESULTS

- Six months after application, the site was thriving with strong root systems. The solution exceeded all environmental and safety standards.

PRODUCTS USED

- ProMatrix™ Engineered Fiber Matrix™: 3,900 kg/ha (3,500 lb/ac)
- Fertilizer 18-24-12: 400 kg/ha (350 lb/ac)
- North West General Mix

The Coastal GasLink pipeline project is a 670-kilometer natural gas pipeline spanning British Columbia. The route was carefully determined based on Indigenous community, landowner and stakeholder input; the environment, archaeological and cultural values; land use compatibility, safety, constructability, and economics. In other words, with that much scrutiny, the project needed to meet strict environmental and safety standards.

After a road owned and maintained by Skeena Sawmills near a portion of the pipeline was upgraded to support pipeline traffic safety near Kitimat BC, the landowner for the project needed to revegetate the steep slopes to stabilize the new construction. They worked with prime contractor Daudet Creek Contracting, seeding contractor MALT Ventures, distributor BrettYoung™ and Profile® Products to develop an erosion control solution that would hold seed and soil in place until germination. Because most of the work was on 2:1 slopes adjacent to the right-of-way, the contractors needed a solution that would not only be effective but would also be safe for the employees to install and leave a positive environmental impact.

SELECTING THE RIGHT PRODUCTS

The first step for any land reclamation project is to start with the soil. MALT Ventures took a soil test to determine if there was any need for modifications that could enhance growth. The test showed aggregate soil from 15-centimeter rock down to fine particles with limited organic matter.

MALT Ventures chose to apply fertilizer 18-24-12 at 400 kg/ha (350 lb/ac). MALT Ventures also applied the North West General Mix seed, as specified by the BC Ministry of Transportation. This mix is used in inland areas where mean annual precipitation is more than 50 centimeters (19 inches).

For erosion control, MALT Ventures chose to apply Profile's ProMatrix™ Engineered Fiber Matrix™. ProMatrix is designed to achieve erosion control protection up to the level of a Bonded Fiber Matrix (BFM). It combines quick germination and rapid vegetative establishment with lasting performance and functional longevity. It's made from recycled Thermally Refined® wood fibers, is non-toxic and 100% biodegradable. The ProMatrix was applied at 3,900 kg/ha (3,500 lb/ac) for sufficient coverage on the slopes. MALT Ventures was able to hydraulically apply all three components with minimal interference on the roadway and without needing to place workers on the steep slopes.

THE RESULTS

In follow-up visits six months after application, the site had lush vegetation with strong root systems. ProMatrix held the seed, fertilizer and soil in place long enough for it to germinate. By taking a holistic approach to revegetating the site with proper seed, fertilizer and HECF selection, MALT Ventures was able to succeed on their first try. Skeena Sawmills was pleased with the results, and most importantly, they were able to exceed the strict environmental and safety standards in place for the project.



Root system growth one month after application



Vegetative growth one month after application



Additional growth three months after application



Healthy root systems established in follow-up visit six months after application