

BURRARD THERMAL G SUBSTATION PORT MOODY, BRITISH COLUMBIA, CANADA

ROCKFALL MITIGATION DRAPERY SYSTEM

Product: RockMesh B900

Rock Mesh was used by British Columbia Hydro at the Burrard Thermal Substation in Port Moody B.C. as a rockfall mitigation system. The system consists of PVC Coated double twisted mesh with steel cable integrated within the mesh during the manufacturing process. The incorporation of steel cables within the mesh provides multiple advantages in the installation and in the product characteristics. In the project, the maximum height of the rock slope protection was 6 m with a set back of 2.5m from the crest of the slope.

Problem

The North access road into the Burrard Thermal Substation passed quite close to a rock slope that had exhibited some instability with rock pieces falling onto the road. The available right of way was only about 5m. South of that was a grade falling off at 24% so moving the road away from the rock face was not an option. The municipal road passed quite close to the crest of the rock face so cutting back the slope was also impossible.

SOLUTION

The geotechnical engineer felt that because of the size of rock which could potentially be dislodged from the slope, simple Double Twist mesh might be a bit light for the job. However, he thought that the cable enhanced version of that same mesh could offer more resistance to larger pieces breaking off. This product consists of PVC coated double twist steel wire mesh with steel cable of 8mm inserted within the mesh during the weaving process. The steel cables are inserted every 0.6m in the mesh direction and 0.9m in the cross direction. The transversal cables are secured at both ends with aluminum sleeves. The Rock Mesh B900 rolls were made 3.66m wide x 45.7m long. The Rock Mesh was installed with all adjacent panel sections connected together using lacing cables 8mm and secured at the end. The system required no overlap for the panel to panel connection.

RockMesh B900 is a woven composite product made of steel wire and metallic ropes woven together during the production of the hexagonal double twisted wire mesh. The metallic ropes are used in place of the conventional selvedge wire and are also

Client:

BRITISH COLUMBIA HYDRO POWER AUTHORITY

General Contractor:

Pacific Drilling & Demolition Ltd.

Designer:

Golder Associates Ltd.

Products used:

Maccaferri RockMesh B900

Date of construction

2010

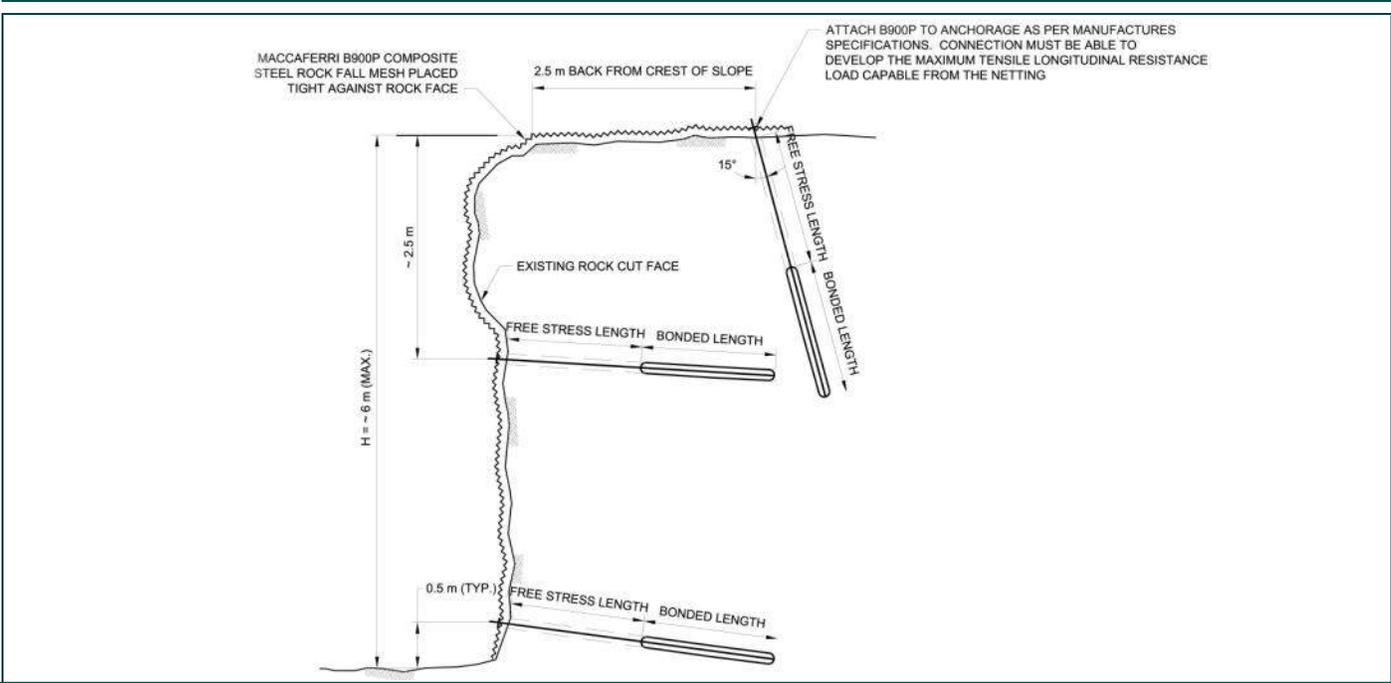


Rock face before installation



Adjacent panels laced together

MACCAFERRI



XXXXXXXXXXXX

inserted longitudinally in the woven mesh. Metallic ropes are also inserted in the cross direction of the double twist of the mesh and secured to the edge ropes during the production (B – bi oriented).

The multidisciplinary experience and scope of the Maccaferri Group, enables it to propose and develop low environmental impact solutions for the protection and rehabilitation of coastal and harbour infrastructure.



Anchor with plate



Installed RockMesh B900

<p>400 Collier MacMillan Drive, Unit B Cambridge, ON N1R 7H7 Tel: 519-623-9990 Fax: 519-623-1309</p>	<p>MACCAFERRI CANADA LTD. email: info@maccaferri.ca website: www.maccaferri.ca</p>	<p>Halifax, NS tel: 902-468-8615 Montréal, QC tel: 450-420-1845 Calgary, AB tel: 403-244-6556 Edmonton, AB tel: 780-447-2719 Vancouver, BC tel: 604-683-4824</p>
---	--	--