

Reinforced Earth Company

RECON NEWS

SPRING 1999

A SHOW CASE ABUTMENT WALL FOR NEWFOUNDLAND

As part of the Outer Ring Road By-Pass for St. John's Newfoundland, Reinforced Earth Company Ltd. was selected by Pyramid Construction Company over 3 other competing wall systems. When Pyramid was awarded the contract they immediately awarded the retaining wall supply to RECo based on engineering, competitive pricing and a proven track record in the area.

The wall was delivered on time, and was constructed with ease by Pyramid. The construction duration was less than the time allowed by the tender documents resulting in the walls being finished ahead of schedule.

The Government of Newfoundland and



With the application of an anti-graffiti finish the Reinforced Earth Abutment wall for the Groves Road Overpass exhibits a brilliant and uniform finish.



The simple wall alignment makes for an economical and visually pleasing design

Labrador, Department of Works, Services and Transportation consider the Groves Road Overpass to be a "show case" structure on the Outer Ring Road By-Pass.

Installed in May of 1998 the precast panels were fabricated by Capital Ready Mix Ltd. of St. John's to specifications set by RECo and the Owner.

Providing a complete package of design and supply is something RECo has held paramount in their commitment to serving all customers.

The use of this true abutment wall eliminates the need and cost of piles or rigid walls to support the bridge.

Local Experience

www.RECoUSA.com

World Expertise

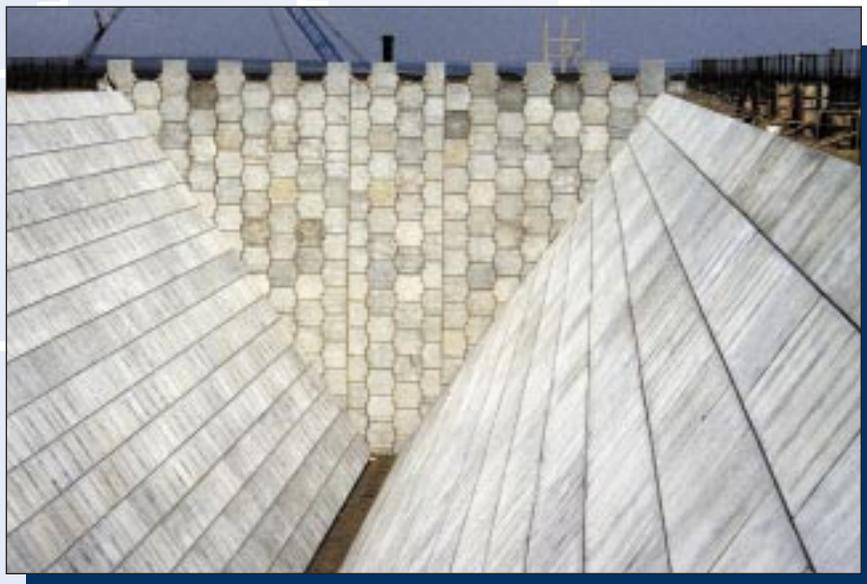
NORTH ROCHELLE MINE



Permanent 18m tall Terratrel wire-faced head walls

The Reinforced Earth Company (RECo) successfully completed the 22nd bulk material storage bunker constructed in the United States. Under a contract from Roberts & Schaeffer Company, the owner's engineer and construction manager, RECo's involvement included the design and supply of materials for a 50,000 ton coal storage slot for Triton Coal Company's North Rochelle Mine located in the Powder River Basin near Wright, Wyoming.

The high-volume, slot-type coal bunker, is 110m long and 23m tall and utilizes Reinforced Earth precast concrete faced sloped wall technology to form a steeply sloped V-shaped gravity feed structure referred to as a slot. Vertical Reinforced Earth end walls contain the ends of the



Storage facility 110m long, 23m tall, 50,000 ton capacity

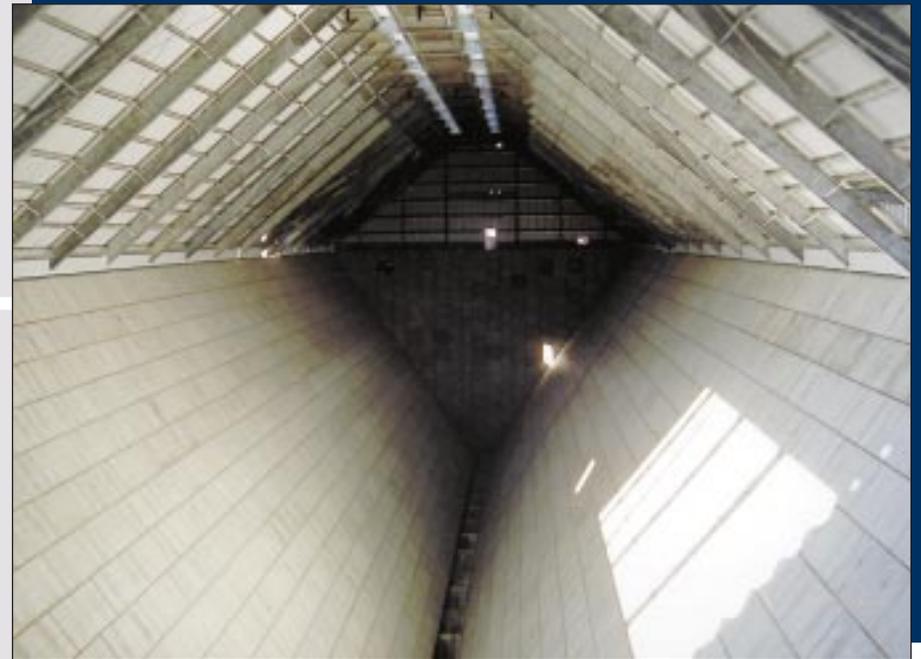
Local Experience

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slot. Coal is brought into the structure using traveling tripper-conveyors and is stacked evenly within the length of the slot. Vibratory feeders located in a poured in-place reclaim gallery load the reclaim conveyor that carries the coal at a rate of flow as high as 4000 tons / hour to unit trains.

“Our employees were very impressed with the RECo design system and that RECo provided Hladkey Construction with the information and quality control to assure the client a quality project which was completed on time.”

The combination of utilizing the on-site backfill material and prefabricated components, along with the simple and repetitive construction process of the Reinforced Earth® system, allowed Hladkey Construction, Inc. to achieve production rates of over 140m² of sloped wall facing area per day. Construction of the slot bunker began in April 1998 and was completed by September 1998. After completion of



the slot bunker, Mr. Mike Hladkey, President of Hladkey Construction, Inc. stated that their “employees were very impressed with the RECo design system” and that “RECo provided Hladkey Construction with the information and quality control to assure the client a quality project which was completed on time.”

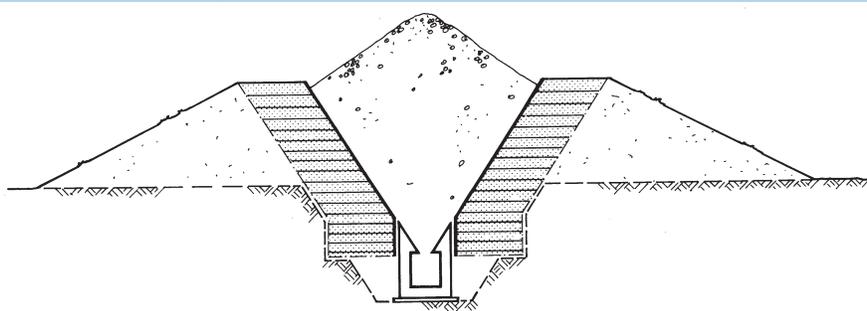
In addition to the slot structure, RECo also supplied design, materials and

construction assistance for the 18m tall permanent headwall at North Rochelle’s primary crusher unit utilizing the Terratrel wire-faced Reinforced Earth system. The wall is designed for a live load surcharge of 240-ton trucks, which supply coal to the primary crusher. The coal is then transported via conveyor to the slot for live storage.

FEATURED PRODUCT “Slope Wall Technology”

As a compliment to Reinforced Earth vertical wall applications, a slope wall technology was developed in the late 1970’s. Used mainly for the storage of bulk material such as coal, these storage structures are typically constructed to form a “slot” or conical “glory hole” shape. Key to this technology was the development of a precast sloped wall panel.

This panel is capable of being stable during placement, backfilling and loading and unloading cycles. Inclined wall design methods have been confirmed through test walls, scale models, finite element studies, and the instrumental of actual structures. The same slope wall design theories have also been used for other slope wall applications with vegetated facing.



For more details on this and any other featured projects visit our website
www.RECoUSA.com

WE HAVE MOVED

The Reinforced Earth Company Ltd. Canadian Head office and Vancouver Regional offices have moved:

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ANOTHER WORLD RECORD FOR FREEPORT AND RECO



Two of the six dumping points.

The highest Reinforced Earth wall in the world was completed at the Freeport copper and gold mine in the highlands of Irian Jaya, Indonesia, (4,300 meters above sea level) and stands at a height just over 37 meters. Although there are a couple of other Reinforced Earth Walls slightly higher than this one the Freeport wall is the highest without a tiered configuration to the facing.

This massive rear dump structure provides six dumping points for the Komatsu 930 E dump trucks used at this material handling facility, (420 ton gross vehicle weight).

All retaining wall components were supplied from Australia and with a wall face area of 7,300 square metres, this project brings that total to six structures supplied by RECo Australia to Freeport since 1994.

The design and supply contract for the project was awarded to The Reinforced Earth Company within 8 weeks of the initial feasibility inquiry.

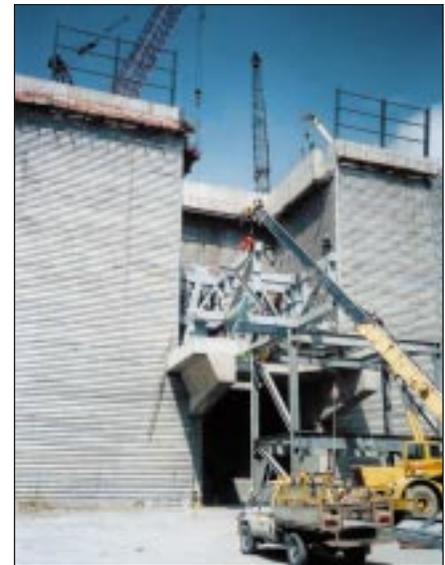
During this period, RECo Australia's design and operation's staff liaised with other technical experts within Groupe Terre Armée Internationale (TAI) to ensure all details such as embankment consolidation, compres-

sion of the galvanized steel facing panels and drainage requirements to name a few, had been investigated.

Construction was completed in October 1997.

The end result was a structure, which fulfilled the client's expectations for rapid construction and provided significant cost savings over other solutions.

Portions of this article were originally published in RECo Australia's newsletter "Earthworks".



37 meters high and equivalent to a 12 story building.

Canada

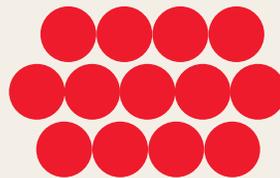
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