

## **Project Profile**



# AIL designs and supplies heavy haul road crossing for Western Australia mine expansion

AlL's Super-Cor Arch supports autonomous haul trucks travelling over access road

AIL Mining recently designed and supplied a Super•Cor heavy haul road arch for the Cloudbreak iron ore mine in Western Australia.



### **Project at a glance:**

**Project Name:** FMG Cloudbreak - Abrolhos

Overpass

**Location:** Pilbara Region, Western Australia

**Owner:** Fortescue Metals Group (FMG)

Consultant: BG&E

**Contractor:** Centrals

**AlL Group Licencee:** Australian Construction

Products (ACP)

**Application:** Haul Road Crossings

Product: Super-Cor

**Dimensions:** Span 7.9 m, Rise 6.7 m



## **Project Profile**

#### Heavy haul road crossing part of Abrolhos Pit development at Cloudbreak mine

The owner, Fortescue Metals Group (FMG), was expanding the Cloudbreak site to begin working in the Abrolhos Pit and hauling with autonomous trucks. However, the pit and the ROM pad were on opposite sides of an established corridor, which consisted of both an ore train line and a local vehicle road. The AIL Super•Cor Arch was to enable the road traffic to pass under the haul road.

## Project in partnership with AIL Group Licensee, Australian Construction Products (ACP)

This project was another great example of our successful partnership with ACP, a collaboration which has led to many new opportunities for The AIL Group's efficient engineered infrastructure solutions.

#### Innovative soil reinforcement on bevelled end saves time and money

The structure featured soil reinforcement on the bevelled ends using AIL's Grid-Strip Soil Reinforcement System. On top of each backfill lift along the bevel area, welded wire Grid-Strips were attached to a series of integrated connection anchors along the exterior sides of the bevel. These alternating layers of soil reinforcement and compacted backfill created a mechanically stabilized backfill that held the bevel's shape and saved time and money on two fronts:

- No need to reinforce the bevels with concrete
- No need for interior false-work bracing during backfill

#### AIL Mining lightens the load in heavy haul road crossings

With their light weight and superior strength, our structural steel plate products are a natural choice for haul road arches. Ultra•Cor, the world's strongest structural steel plate, and Super•Cor are natural solutions for larger engineered structures that need to withstand the heaviest of loads. For mid-sized structures, Bolt-A-Plate is usually recommended. All are available in a wide range of shapes and sizes, including bottomless, fish-friendly arches.



Smaller concrete footings on prepared foundation soils



Markings and attachment brackets for soil reinforcement



Grid-Strip Soil Reinforcement System

#### **AIL Mining**

The AIL Group of Companies PO Box 6161, 32 York Street Sackville, New Brunswick E4L 1G6 In Canada: 1-877-245-7473 International: +1-778-355-7000 ailmining.com

See all Project Profiles on ailmining.com