



## HIGGINSVILLE PASTE BACKFILL PROJECT

### SCOPE OF WORK

GR Engineering was awarded the design and construct contract by Avoca to supply the continuous production paste backfill plant for the Higginsville gold mine.

The paste plant was designed to filter and then repulp the existing plant tailings in a controlled fashion with cement and deliver the resulting paste underground, via a dedicated borehole and underground reticulation system. The plant has a designed throughput rate of 123 dry tph of tailings at a feed density of 65% solids but is also designed to allow up to 160 dry tph to be handled. The project works included the installation of a high rate tailings thickener at the existing treatment plant which will improve processing efficiency even when the paste plant is not required to operate.

GR Engineering used in house design systems to model and design the paste plant enabling a high level of review from all discipline and process engineers to ensure design errors, omissions and clashes were eliminated to the maximum extent prior to fabrication and installation.

Structural, mechanical, piping and electrical installations were completed and managed on site by directly hired GR Engineering personnel. Earthworks and civil installations were subcontracted to third parties and managed by GR Engineering supervisors.

**Commodity:** Paste Backfill

**Region:** Australia

**Location:** Approximately 50 km north of Norseman in the Eastern Goldfields region of Western Australia

**Project Type:** Brownfields, open book alliance contract

**Client:** Avoca Resources Limited

**Award Date:** March 2009

**Completion Date:** October 2009

**Project Manager:** Phil Pattinson

**Process Manager:** Bill Gosling