

PROJECT SHEET

GOEDGEVONDEN

Client : Xstrata Coal (S.A.) (Pty) Ltd
Location : Ogies, Mpumalanga,
Involvement : New Private Siding
Value : R134 million
Purpose : To link the Mine's new rapid loadout facility to the export coal line
Duration : April 2007 – November 2008

R&H was appointed by Xstrata Coal SA for the design and construction supervision of a new private siding for their Goedgevonden Mine.

The siding is to take off from the 3rd Coal Line near the Saaiwater Station, including a Domestic Link. It will run from the Saaiwater Station, crosses the Coal line, Saaiwaterspruit, Ogies to Bethal Road (R545) and terminates in a balloon near the proposed Colliery.

The export line will consist of a take off turnout from the 3rd Coal Line, safety set and a running line consisting of 60 kg/m rails on PY concrete sleepers in a ballast bed of 1600 m³/km. The balloon will be a single line layout with a 1:12 turnout. The Domestic Link will consist of second hand 48 kg/m rails to Class A on second hand P2 concrete sleepers. The total length of the siding is approximately 9.4km.



The associated works include:

- construction of the necessary earthworks
- construction of associated drainage works (i.e. pre-cast concrete pipe and portal culverts, culvert wing walls)
- the construction of four bridges
- the deviation and reconstruction of a surfaced mine road
- the vertical adjustment of a gravel road associated with the road over rail bridge
- the construction of a service road and a standard 6-strand stock fence along the boundary of the rail link
- the installation and commissioning of 3kV D.C. Overhead Track Equipment (OHTE) as well as the supply and installation of yard lighting along the balloon section of the siding.

The four bridges which are being constructed, are all pseudo-box type bridges, consisting of precast pretensioned beams and an in situ concrete slab. The bridges are; a rail-over-road bridge (over R545), a railway bridge over the Saaiwater Spruit, a rail-over-rail bridge over existing Spoornet Lines, and a road-over-rail bridge over the new siding.

Earthworks for the siding consist of some 45,000 m³ dumprock, 355,000 m³ bulk fill and 30,000 m³ selected layer work.



RAILWAY ENGINEERING