

## **Engineering Services**

Whether you need to determine mine feasibility or optimise economics; are developing an operation or are already in production, GEOVIA's engineers are available to assist you. As the largest global provider of mining software, we have more than 25 years of expertise working with diverse commodities and mining environments, and delivering solutions for many different engineering challenges.

Our engineering services include pit design, generation of pit shells, sequencing, and more. We ensure you are able to best leverage your geological and mining data to unlock your project's full economic potential.

Using our software, we offer the following engineering services to help you with your project:

- · Open Pit Mine Design
- **Underground Mine Design**

GEOVIA's engineers are available to help with your project.

- Pit Optimisation
- Development Scheduling
- **Production Scheduling**
- Block and Sub-level Cave Planning
- Tailings Modelling

Here are some examples of engineering services we've provided for clients:

## **OPEN PIT MINE DESIGN**

A nickel operation urgently needed to complete six pit designs in one week as part of a feasibility study, but they were short staffed for mining engineers. A GEOVIA engineer who was an expert in Surpac worked with the client's existing engineering team to complete all six designs, merged with local topography and adjacent pits, within the required timeline.

## UNDERGROUND MINE DESIGN

Dealing with staffing issues and a skills shortage, a client in Chile needed assistance in creating a new mine design using the room and pillar method. GEOVIA's experts used GEMS to update and revise the client's block model, and ensure their drillhole database was organised and accurate in order to create the new room and pillar design. They also validated all resource estimation data to ensure accurate reporting.

## PRODUCTION SCHEDULING

Currently in a development phase with the haul roads, plant and conveyor belt under construction, a nickel operation needed a tactical schedule to improve on their strategic mine plan. GEOVIA created a sustainable solution for scheduling the deposit, delivering a one year and three year scheduling plan which routed materials for feed based on targeted ratios and also satisfied tight constraints with regards to stockpile capacities.

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