TIPS
Technical Innovation and Professional Services

Carlson Mining's Natural Regrade Module

Carlson Natural Regrade with GeoFluv™ applies fluvial geomorphic principles to upland landform design. This module helps you create a landscape design that mimics functions of a natural landscape that would naturally evolve over time. The result is a stable hydrologic equilibrium… naturally.

Geomorphic Reclamation

The essence of the GeoFluv™ approach is to identify the type of drainage network, i.e., stream channels and valleys, which would tend to form over a long time given the site's earth materials, relief, and climate to achieve a stable landform, and to design and build that landform. The resulting slopes and stream channels are stable because they are in balance with these conditions. They are a reclamation alternative to uniform slopes with terraces and down-drains. Rather than fight the natural forces that shape the land, GeoFluv™ helps the user create a landscape that harmonizes with these forces.

Increased Accuracy and Flexibility of Designs

- View topographic maps and three-dimensional images of the landscape design.
- One-button volumes and cut/fill material balance calculations for designs.
- Rapid evaluation of many landscape design alternatives allows the user to select the optimum design for bond alternatives, construction costs, changing mine plans, land use, etc.
- Ideal for integrating with GPS and laser machine control to simplify and speed up construction and reduce costs.

SOFTWARE:

Carlson Mining/Civil Suite

SMCRA BENEFITS/USES:

- Based on all discharges.
- Natural channel morphology conveys water and sediment discharge; hydrologic balance.
- Built with on-site materials.
- Cost is significantly lower than gradient terraces and down drains on steep slopes.
- Self-maintaining.
- Can reclaim steep slopes in stable and suitable configurations, save money on material moving.
- Increased slope aspect diversity promotes vegetation success and animal habitat.
- Natural beauty.
- Landscape designs can vary and provide alternatives.

TIPS TRAINING CLASSES:

CAD301: Carlson Mining; Field, Hydrology, and Natural Regrade for Permitting and Reclamation

NEED HELP ????

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