

# GIT-R-DONE WITH THE DIRT YOU GOT - LANDSLIDE REMEDICATION

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**Abstract:** A PowerPoint overview of a recent AML landslide Emergency in eastern Kentucky. Demonstrating the concept of "back to basics". Utilizing native soils, geogrid, welded wire and turf reinforcement matting integrated into in a stable matrix to create a gravity wall. These techniques have shown promise in highway construction for years in steep slope remediation and now have been added to the toolbox for abating emergencies worked on by the team at OSM Federal Reclamation Projects Division Ashland Office.

The Shawne Wells Landslide II site is located in a subdivision in Pikeville, KY. The hillside adjacent to the residence was comprised of native soils with some redeeming engineering qualities. This fact made it feasible to use most of the material in a retaining structure along with the fact that the slide material was not totally saturated. The retaining structure or gravity wall was constructed as an integrated system primarily by stacking geogrid wrapped compacted layers of native soil. "L" shaped welded wire facing units lined with geogrid and turf reinforcement mat helped maintain some reasonable structural geometry.

Some of the engineering and construction methodologies implemented were:

- Constructing a reasonably firm foundation
- Geogrid reinforcing the compacted fill material
- Maintaining a blanket drain isolating the compacted fill from infiltrating water
- Sequencing construction to limit excavation area exposure
- The structure to ultimately support vegetative growth
- Limiting disturbed area
- Protecting stockpiled material from rainfall events
- Addressing drainage issues

**Additional Keywords:** gravity wall, welded wire facing units, geogrid, sequenced construction, native soils, turf reinforcement mat, soil compaction, AML emergency, OSM FRPD Ashland Office

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