## Keystone Buildout Rail Extension-Construction Engineering & Surveying

Client: Norfolk Southern Railway Co.

Atlanta, GA

Year: 2006 Cost: \$15,000,000



Norfolk Southern selected Gwin, Dobson & Foreman, Inc. to provide construction engineering and surveying services for six miles of new railroad. Serving a power generation facility, the railroad extends from Clarksburg to Saltsburg, in Conemaugh Township, Indiana Co., PA.

The construction components laid out by GD&F include the following:

- Centerline stakeout, cross-sections, slope staking, and right-of-way limits surveying for six miles of new railroad
- Setting of project horizontal and vertical control
- Quantity determination and verification for 1.5 million cubic yards of earthwork
- Structure staking for railroad bridges over Blacklick Creek and Marshall Run including steel pilings, piers and abutments
- Staking of three box culverts, two arch culvers, pipe crossings, endwalls, ditches and channels
- Surveying for slope stabilization measures including soil nails, rock anchors, geogrids and concrete slope protection
- Wetland replacement and erosion and sedimentation control measures
- Coordination of work with railroad contractor and Norfolk Southern engineers

GD&F also provides construction surveying for regional rail improvement projects under a multi-year, open-end agreement with Norfolk Southern.

