Substructure Repair by Michael Close, PE
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY
Proposed End Bent Cap Repair
See Detail Sheet

Micropiles Typ.
See Pile Layout Sheet

Soil Nails embedded into solid rock and fully grouted. See End Bent Details.
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY
New Salem Loop Rd Bridge over CSX R&R – Nortonville, KY

Note Dimensions and Reinforcement Symmetrical unless otherwise noted.

SECTION A-A

SECTION B-B
Nassau County, Florida new GRS-IBS bridge with culvert
Nassau County, Florida new GRS-IBS bridge with culvert

Option 2
Nassau County, Florida new GRS-IBS bridge with culvert
New GRS Abutments behind Existing Abutments

**GRS Structure Fabricated in Existing Abutment w/o Soil Anchors in Face**

**GRS Structure Fabricated in Existing Abutment with Shotcrete Facing & Wall Anchors**

- Existing Backwall Sawcut
- Jointless GRS Approach
- Replacement Superstructure
- Secondary Reinforcement
- Blended Approach
- GRS Abutment
- Reinforced Soil Foundation
- Riprap Scour Protection
- Shotcrete Facing & Wall Anchors
New Micropile Abutments behind Existing Abutments

**VERTICAL & BATTERED MICROPILES W/O SOIL ANCHORS IN FACE**

**VERTICAL & BATTERED MICROPILES WITH SHOTCRETE FACING & WALL ANCHORS**

Diagram showing the placement of micropiles and superstructure.
SCI 136 280 (Gibson Rd) over Grove Run – Pickaway Co., Ohio
SCI 136 280 (Gibson Rd) over Grove Run – Pickaway Co., Ohio
Smith Creek Road Bridge – Repair of abutment undermining
Smith Creek Road Bridge – Repair of abutment undermining
Smith Creek Road Bridge – Repair of abutment undermining

135°SE (T) 38.339680°N, 81.813210°W ±16.4ft ▲ 628ft
Smith Creek Road Bridge – Repair of abutment undermining
Smith Creek Road Bridge – Repair of abutment undermining

120°SE (T) 38.339676°N, 81.813240°W ±16.4ft ▲ 629ft
Smith Creek Road Bridge – Repair of abutment undermining
Smith Creek Road Bridge – Repair of abutment undermining
Smith Creek Road Bridge – Repair of abutment undermining

Typical Cross-Section & Elevation View

Sheet Revision

Date: September 2017

Project No.: 170314WV01

GeoStabilization International
Corporate Address: PO Box 4709
Grand Junction, CO 81502
P: 970.245.7737
www.geostabilization.com
Smith Creek Road Bridge – Repair of abutment undermining
Smith Creek Road Bridge – Repair of abutment undermining
Rocky Fork Road Bridge – Wingwall Stabilization

179°S (T)  38.609661°N, 82.144470°W ±32.8ft ▲ 551ft

06 Dec 2017, 12:21
Rocky Fork Road Bridge – Wingwall Stabilization
Rocky Fork Road Bridge – Wingwall Stabilization

231°SW (T) 38.609650°N, 82.144402°W ±32.8ft ▲ 555ft

01 Feb 2018, 09:31
Rocky Fork Road Bridge – Wingwall Stabilization

27°NE (T)  38.609581°N, 82.144447°W ±16.4ft  ▲ 564ft

01 Feb 2018, 09:30
Rocky Fork Road Bridge – Wingwall Stabilization
New Hope Road Bridge over Blue Creek – Crib Wall Stabilization
New Hope Road Bridge over Blue Creek – Crib Wall Stabilization
New Hope Road Bridge over Blue Creek – Crib Wall Stabilization

∠ 228°SW (T) 〇 38.447567°N, 81.456284°W ±16.4ft ▲ 614ft

06 Dec 2017, 15:05
New Hope Road Bridge over Blue Creek – Crib Wall Stabilization
New Hope Road Bridge over Blue Creek – Crib Wall Stabilization
Vanderbilt Road Bridge – WingWall Stabilization
Vanderbilt Road Bridge – WingWall Stabilization
Vanderbilt Road Bridge – WingWall Stabilization
Vanderbilt Road Bridge – WingWall Stabilization
Vanderbilt Road Bridge – WingWall Stabilization
Cow Creek Road Bridge Reconstruction, Putnam Co., WV
Cow Creek Road Bridge Reconstruction, Putnam Co., WV
Cow Creek Road Bridge Reconstruction, Putnam Co., WV
Walke Rd. Bridges, Laurens Co., GA – GRS-IBS & Scour Micropiles
Walke Rd. Bridges, Laurens Co., GA – GRS-IBS & Scour Micropiles
SR 129 over Raccoon Cr, Ripley Co., Indiana – Wingwall Reconstruct.
SR 129 over Raccoon Cr, Ripley Co., Indiana – Wingwall Reconstruct.
Thank You