Slide Repair - US 34, MM 164.1

From approximate Station 623+40 to Station 627+50 on the south side of U.S. 34, bench, rebuild, and flatten the existing backslope as depicted on sheets W.1-W.7.

The rebuilt backslope shall blend into the existing backslope to the east and west.

Benches shall extend a minimum of 5 feet into the undisturbed backslope.

Install DR-304 backslope drains on specific benches. (See Tab 104-9 & W.1-W.7 for details).

Cleanout and shape the existing ditch as needed to allow for water to flow properly.

Actual limits of the repair will depend on the conditions at the time of construction.

Place 6 inches of topsoil on the rebuilt backslope.

Quantities	
Bid Items	Quantity
Embankment in Place	9,714 CY
Class 10 Excavation and Waste	6,556 CY
Topsoil, Furnish & Spread	448 CY
Granular Material Blankets & Subdrains	129 CY
Clearing & Grubbing	1.2 Acres

Slide Repair - US 34, MP 170.68

From Station 1005+70 to Station 1007+20 on the north side of U.S. 34, bench and flatten the foreslope to a 3.5:1 slope using Class 10 material.

Install DR-304 backslope drains on specific benches. (See Tab 104-9 and sheets W.8-W.10 for details).

Benches shall extend a minimum of 5 feet into the undisturbed foreslope.

Clean out and shape the roadside ditch to allow for proper surface drainage.

The rebuilt foreslope shall blend into the unaffected foreslope to the east and west of the repair.

Actual limits of the repair will depend on the conditions at the time of construction.

The top 12 inches of excavated material shall be considered "topsoil" and should be stripped, stockpiled, and reused to topsoil the site.

Quantities	
Bid Items	Quantity
Embankment in Place	563 CY
Embankment in Place Contractor Furnished	244 CY
Topsoil, Strip, Salvage, & Spread	61 CY
Granular Material Blankets & Subdrains	37 CY

Slide Repair - US 34, MM 171.12

From Station 1025+75 to Station 1026+85 on the south side of U.S. 34, bench and flatten the foreslope to an approximate 3:1 slope using Class 10 material.

Install DR-304 backslope drains on specific benches. (See Tab 104-9 and Sheets W.11-W.13 for details).

Benches shall extend a minimum of 5 feet into the undisturbed foreslope.

Clean out and re-shape the roadside ditch to allow for proper surface drainage and for the installation of rock-lining (see Tab 100-23 for quantities and details)

The rebuilt foreslope shall blend into the unaffected foreslope to the east and west of the repair.

Actual limits of the repair will depend on the conditions at the time of construction.

The top 12 inches of excavated material shall be considered "topsoil" and should be stripped, stockpiled, and reused to topsoil the site.

Quantities	
Bid Items	Quantity
Embankment in Place	1205 CY
Embankment in Place Contractor Furnished	342 CY
Topsoil, Strip, Salvage, & Spread	288 CY
Granular Material Blankets & Subdrains	41 CY
Clearing & Grubbing	0.2 Acres

Channel Reshaping - U.S. 34, MM 173.8

From Station 1168+75 to Station 1170+50 on the north side of U.S. 34, rebuild/reshape the outside bank (as depicted on Sheets W.14 to W.16) of the meander with Erosion Stone underlain with Engineering Fabric so that the top of the new bank created using a 2:1 channel side slope is completely within the existing ROW limits.

The top 3 feet of the new bank shall be comprised of Class 10 Embankment covered with 1 foot of topsoil.

Re-establish the grass pasture present adjacent to the ROW.

Armor the Erosion Stone of the new bank with a two foot thick layer of Class E Revetment. Continue to armor with Revetment the outside and inside channel bank beyond the proposed repair extending past the meander on each end into the straight portion of the channel.

Underlay the Class E Revetment with Engineering Fabric in areas beyond the channel reshaping where the Revetment will be placed on existing soils.

The armoring shall blend into the natural channel banks at the outside limits of the repair.

Remove the existing vegetation within the limits of reshaping/armoring prior to placing the Engineering Fabric.

Remove and replace the existing fence.

Quantities	
Bid Items	Quantity
Class E Revetment	257 Tons
Erosion Stone	201 Tons
Engineering Fabric	707 SY
Embankment In Place	80 CY
Class 10 Excavation and Waste	582 CY
Topsoil Furnished & Spread	36 CY
Clearing & Grubbing	0.3 Acres

Slide Repair - US 34, MM 180.45

From Station 191+60 to Station 192+40, bench and rebuild the existing foreslope using Erosion Stone underlain with Engineering Fabric. The existing Erosion Stone used in the previous repair of the site may be reused if it is clean from comtamination and meet the specification for Erosion Stone.

The Erosion Stone shall be capped with a 1-foot thick layer of Macadam Stone Base Material (Gradation No.13 no choke stone course).

The Rebuild foreslope shall blend into the existing foreslope to the east and west.

Benches shall extend a minimum of 5 feet into the undisturbed foreslope.

Actual limits of the repair will depend on the conditions at the time of construction.

See Sheets W.17 -W.18 for details on benching.

Quantities	
Bid Items	Quantity
Class 10, Excavation & Waste	542 CY
Class 12, Boulders & Rock Fragments*	120 CY
Erosion Stone	824 Tons
Engineering Fabric	596 SY
Macadam Stone Slope Protection	160 SY

* Quantity includs existing Erosion Stone material placed as part of the previous repair.