

## TR-30 Old Barn Staging Area

A memo entitled “Assessment of Soils and Vegetation on the Barn Staging Site for the East Alkali Gulch Low Cover Crossing Project”, March 12, 2021, has been prepared by SME Environmental Consultants. This memo can be located in King II Appendix 6(4). Below are text excerpts from that memo. Additional maps and figures can be found within that memo.

### Soils

SME reviewed the GCC soils and vegetation map along with soils data obtained from the USDA NRCS. A soils map with data from the USDA NRCS within the barn staging site is included as Figure 3 and the GCC soils and vegetation map has been provided as Appendix B. Per the GCC map and the NRCS data, the barn staging area is located within the mapped *Lazear-Rock outcrop complex, 12-65% slopes* soils unit. This mapped soils unit is not considered hydric based on major or minor components in the map unit (State Soil Data Access Hydric Soils List, NRCS 2021). A description of the soil unit from the NRCS has been provided below.

*La Plata County Area, Colorado*

**Map Unit:** 42—Lazear-Rock outcrop complex, 12 to 65 percent slopes

**Component:** Lazear (50%)

The Lazear component makes up 50 percent of the map unit. Slopes are 12 to 40 percent. This component is on edges breaks, edges mesas. The parent material consists of residuum and/or slope alluvium derived from sandstone and shale. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent. There are no saline horizons within 30 inches of the soil surface.

**Component:** Rock outcrop (30%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

**Component:** Pulpit (10%)

Generated brief soil descriptions are created for major soil components. The Pulpit soil is a minor component.

**Component:** Other soils (10%)

Generated brief soil descriptions are created for major soil components. The Other soils soil is a minor component.

A quick overall field assessment of the soils revealed light grey clay soils that have washed down from the two-track road as well as a more brown soil with some clay and gravel/sandstone fragments mixed in. As stated in the NRCS data above, this would be relatively consistent with the specified soils unit as the parent material consists of residuum and/or slope alluvium derived from sandstone and shale. However, it should be noted that the barn staging area looks to have been disturbed in the past. Gravel has been deposited on site and the site experiences disturbance from adjacent road plowing, making it difficult to isolate the native soil.