

## **APPENDIX C SOIL TYPES**



### Appendix C. Soil Types and Characteristics along the Hughes Transmission Line Corridor

Map Unit	Major Soil Series	Surface Texture	Slope Range	Soil Characteristics			
				Hazard	Severe Wind Erosion	Severe Water Erosion	Potential Shrink-swell
WY048	Riverwash	—	—				
	Haverdad	Fine Loam	0–6	■	■	Very deep, well-drained soils formed in stratified alluvium on floodplains and low terraces. Permeability is moderate. Slopes range from 0 to 6 percent. The mean annual precipitation is about 11 inches, and the mean annual temperature is about 45 degrees F.	
	Clarkelen	Loam	0–3			Very deep, well-drained, moderately well-drained, or somewhat excessively drained soils formed in stratified recent stream alluvium from mixed sedimentary sources. Clarkelen soils are on floodplains and terraces, adjacent to floodplains. Slopes range from 0 to 6 percent. The average annual precipitation is about 12 inches, and the mean annual air temperature is about 46 degrees F.	
WY049	Shingle	Clay loam	0–80	■	■	Well-drained soils that are very shallow or shallow to bedrock. Formed in residuum and colluvium derived from interbedded shale and sandstone or in alluvium from mudstone. Shingle soils are on bedrock-controlled hillslopes and ridges. Slopes are 0 to 80 percent. The mean annual precipitation is about 13 inches, and the mean annual temperature is 45 degrees F.	
	Renohill	Clay Loam	3–25	■	■	Well-drained soils that are moderately deep to soft bedrock. These soils formed in alluvium, colluvium, and residuum. Renohill soils are on bedrock-controlled plateaus, alluvial fans, hills, and ridges. Slopes are 0 to 30 percent. The mean annual precipitation is about 12 inches, and the mean annual air temperature is about 45 degrees F.	
WY049 (cont.)	Forkwood	Clay Loam	0–15	■	■	Very deep, well-drained soils formed in alluvium. Forkwood soils are on terraces, alluvial fans, fan remnants, hills, ridges, and pediments. Slopes range from 0 to 15 percent. The mean annual precipitation is about 11 inches, and the mean annual air temperature is about 45 degrees F.	
WY050	Shingle	Loam	10–40	■	■	Well-drained soils that are very shallow or shallow to bedrock. Formed in residuum and colluvium derived from interbedded shale and sandstone or in alluvium from mudstone. Shingle soils are on bedrock-controlled hillslopes and ridges. Slopes are 0 to 80 percent. The mean annual precipitation is about 13 inches, and the mean annual temperature is 45 degrees F.	

Map Unit	Major Soil Series	Surface Texture	Slope Range	Soil Characteristics	
				Poor Revegetation Potential	Well-drained soils that are very shallow or shallow to soft sandstone. Formed in residuum and slope alluvium derived from sandstone. Located on ridges and hills. Slopes range from 3 to 70 percent. The mean annual precipitation is about 12 inches, and the mean annual air temperature is about 46 degrees F.
Taluce	Sandy Loam	15–40		■	Very deep, well-drained soils formed in alluvium on fan aprons, alluvial fans, fan remnants, hills, ridges, and terraces. Permeability is moderate. Slopes range from 0 to 30 percent. The average annual precipitation is about 12 inches, and the mean annual temperature is about 46 degrees F.
Kishona	Loam	3–6			Deep, well-drained soils that formed in fine-textured, calcareous alluvium derived predominantly from shale. Wyarno soils are on fan remnants, fan piedmonts, alluvial fans, and hills. Slopes are 0 to 15 percent. The mean annual precipitation is about 13 inches, and the mean annual air temperature is about 46 degrees F.
WY051	Wyarno	Clay Loam	0–9	■	Severe Shrink-swell Potential
Hargreave	Fine Sandy Loam	3–15			Severe Water Erosion Hazard
Moskee	Fine Sandy Loam	0–45		■	Severe Wind Erosion Hazard
WY064	Platsher	Gravelly Clay Loam or Gravelly Loam	0–3	■	Severe Water Erosion Hazard
Recluse	Fine Loam, Mixed			■	Poor Revegetation Potential

Map Unit	Major Soil Series	Surface Texture	Slope Range		Severe Wind Erosion Hazard	Severe Water Erosion Hazard	Severe Shrink-swell Potential	Salinity	Prime Agricultural Soils	Poor Reforestation Potential	Soil Characteristics
			0-9	3-9							
WY124	Platsher	Loam	■								Very deep, well-drained soils formed in alluvium on fan aprons, alluvial fans, fan remnants, hills, ridges, and terraces. Permeability is moderate. Slopes range from 0 to 30 percent. The average annual precipitation is about 12 inches, and the mean annual temperature is about 46 degrees F.
Kishona	Very Fine Sandy Loam, Fine Sandy Loam, Loam, Silt Loam, Silty Clay Loam or Clay Loam	0-15									Moderately deep, well-drained soils that formed in material weathered from sandstone and shale. Parent soils are on hills, terraces, ridges, and plateaus. Slopes of 0 to 25 percent. The mean annual precipitation is about 13 inches, and the mean annual temperature is about 45 degrees F.
Hiland	Sandy Loam, Fine Sandy Loam, Very Fine Sandy Loam, Sandy Clay Loam or Loamy Sand	3-15	■								Very deep, well-drained soils formed in alluvium or eolian deposits on relict surfaces consisting of terraces, fans, fan remnants pediments, ridges, hills, and stabilized dunes. Permeability is moderate. Slopes range from 0 to 20 percent. The average annual precipitation is about 12 inches, and the mean annual air temperature is about 45 degrees F.

Map Unit	Major Soil Series	Surface Texture	Slope Range	Soil Characteristics	
				Poor Revegetation Potential	Poor Revegetation Potential
WY125	Shingle	Clay Loam	0-75	■	Well-drained soils that are very shallow or shallow to bedrock. Formed in residuum and colluvium derived from interbedded shale and sandstone or in alluvium from mudstone. Shingle soils are on bedrock-controlled hillslopes and ridges. Slopes are 0 to 80 percent. The mean annual precipitation is about 13 inches, and the mean annual temperature is 45 degrees F.
	Theedle	Loam	3-40	■	Well-drained soils that are moderately deep to soft bedrock. Formed in residuum and slope alluvium weathered from soft sandstone. The Theedle soils are on hills, ridges, and fan remnants. Slopes are 0 to 75 percent. The mean annual precipitation is about 12 inches, and the mean annual air temperature is 45 degrees F.
	Wibaux	Gravelly Loam	0-75	■	Very deep, well-drained soils formed in colluvium and alluvium derived from porcelanite. Wibaux soils are on hillslopes, knolls, and ridges. Slopes range from 0 to 75 percent. The mean annual precipitation is about 15 inches, and the mean annual temperature is about 46 degrees F.
WY126	Hiland	Sandy Loam	0-15	■	Very deep, well-drained soils formed in alluvium or eolian deposits on relict surfaces consisting of terraces, fans, fan remnants pediments, ridges, hills, and stabilized dunes. Permeability is moderate. Slopes range from 0 to 20 percent. The average annual precipitation is about 12 inches, and the mean annual air temperature is about 45 degrees F.
	Vonalee	Sandy Loam	0-15	■	Very deep, well-drained soils on upland ridges and hills, alluvial fans, fan remnants, and on high terrace positions. Formed in alluvium or eolian deposits derived from sandstone. Slopes range from 0 to 30 percent. The average annual precipitation is about 12 inches, and the mean annual air temperature is about 46 degrees F.
WY126 (cont.)	Maysdorf	Sandy Loam	0-15		Very deep, well-drained, moderately permeable soils formed in alluvium or eolian deposits on terraces, fan remnants, alluvial fans, ridges, and hills. Slopes are 0 to 15 percent. Elevation is 3,800 to 5,500 feet. The mean annual air temperature is about 46 degrees F. The mean annual precipitation is about 12 inches. The frost-free period is 105 to 130 days.
WY127	Kishona	Loam	0-15		Very deep, well-drained soils formed in alluvium on fan aprons, alluvial fans, fan remnants, hills, ridges, and terraces. Permeability is moderate. Slopes range from 0 to 30 percent. The average annual precipitation is about 12

Map Unit	Major Soil Series	Surface Texture	Slope Range	Soil Characteristics		
				Poor Retention Potential	Well-drained soils that are very shallow or shallow to bedrock. Formed in residuum and colluvium derived from interbedded shale and sandstone or in alluvium from mudstone. Shingle soils are on bedrock-controlled hillslopes and ridges. Slopes are 0 to 80 percent. The mean annual precipitation is about 13 inches, and the mean annual temperature is 45 degrees F.	
Theedle	Loam	3–40	■	Well-drained soils that are moderately deep to soft bedrock. Formed in residuum and slope alluvium weathered from soft sandstone. The Theedle soils are on hills, ridges, and fan remnants. Slopes are 0 to 75 percent. The mean annual precipitation is about 12 inches, and the mean annual air temperature is 45 degrees F.	Well-drained soils that are moderately deep to soft bedrock. Formed in alluvium, colluvium, and residuum. Renohill soils are on bedrock-controlled plateaus, alluvial fans, hills and ridges. Slopes are 0 to 30 percent. The mean annual precipitation is about 12 inches, and the mean annual air temperature is 45 degrees F.	
WY128	Renohill	Clay Loam	3–15	■	Well-drained soils that are moderately deep to soft bedrock. These soils formed in alluvium and residuum. Renohill soils are on bedrock-controlled plateaus, alluvial fans, hills and ridges. Slopes are 0 to 30 percent. The mean annual precipitation is about 12 inches, and the mean annual air temperature is 45 degrees F.	Well-drained soils that are moderately deep to bedrock. These soils formed in slopewash alluvium and residuum from interbedded shales and siltstone and fine-grained argillaceous sandstone. Cushman soils are on buttes, fan remnants, hills, piedmonts, ridges, and terraces. Slopes are 0 to 20 percent. The mean annual precipitation is about 13 inches, and the mean annual air temperature is about 45 degrees F.
WY128 (cont.)	Cushman	Loam	0–15		Very deep, well-drained, moderately permeable soils that formed in alluvium and slope alluvium on fan remnants, alluvial fans, fan piedmonts, terraces, ridges, and hills. Slopes range from 0 to 15 percent and are usually simple but may be complex where the area has been dissected by ephemeral streams. The mean annual precipitation is about 12 inches, and the mean annual air temperature is about 45 degrees F.	Very deep, well-drained, moderately permeable soils that formed in alluvium and slope alluvium on fan remnants, alluvial fans, fan piedmonts, terraces, ridges, and hills. Slopes range from 0 to 15 percent and are usually simple but may be complex where the area has been dissected by ephemeral streams. The mean annual precipitation is about 12 inches, and the mean annual air temperature is about 45 degrees F.
	Cambria	Loam	0–9			

