

PRESUMPTIVE SOIL PARAMETERS

West Virginia Division of Highways

			Existing Slides	Long Term		Short Term & Rapid Drawdown	
Description	Moist Unit Wt. (pcf)	Sat. Unit Wt. (pcf)	Residual Friction (degrees)	Effective Saturated Cohesion (psf)	Peak Effective Friction (degrees)	Cohesion (psf)	Peak Friction (degrees)
Random Fill	*	*	*	*	*	*	*
Loose Coal Refuse	90	100	25	0	30	0	30
Lean Clay	120	125	24	150	28	1000	0
Fat Clay	105	130	15	150	19	800	0
Sandy Clay	120	125	28	100	32	1000	0
Silty Clay	120	125	25	50	28	1000	0
Silt	115	120	26	50	28	500	0
Sandy Silt/Silty Sand	120	125	28	0	32	250	0
Clayey Silt	115	120	28	0	30	750	0
Sand	115	130	32	0	34	0	34
Clayey Sand/Gravel	120	130	30	0	34	0	34
Select Embankment	135	140	32	0	36	0	36
Rock Fill	125	135	32	0	36	0	36
Concrete Abutment	150	151	-	200,000	45	200,000	45
Bedrock	145	150	20	7,200	22	7,200	22
Approach Backfill**	125	135	-	900	40	900	40

Presumptive soil strength parameters shall be used in the absence of lab data or N-values. These values may be adjusted based on the geotechnical engineer's familiarity with the soils/rock.

*Random Fill parameters shall be estimated from the soil properties and classifications of material found at the project site or borrow site.

**Approach backfill consist of 18" layers of compacted WVDOH Class 1 Aggregate and Woven Geotextile (2,400 lb/ft Wide Width Tensile Strength).