Stability Risk Matrices and Ratings.

File Ref.: 604569-Geo-R2-App10.1 - App B (b)-(00)-Risk Matrices

		Landslide History (μ_{His})		
Accounting for Landslide History and Substrate Topology with a view to adjusting calculated FoS (FoS Adjustment = μ_{STop} * μ_{His})		No History of Landslides in the vicinity of site.	Some instances of landslides in the vicinity of site	Recorded landslides occerences within the site
Substrate Topology Characteristics (μ_{Topo})	μ	1	2	4
Substrate is parallel to surface topology.	4	FoS -0.25	FoS - 0.5	FoS - 0.75
Substrate varies from surface topology to a minor extent.	2	FoS + 0.0	FoS -0.25	FoS - 0.5
Substrate varies from surface topology to a significant extent.	1	FoS + 0.25	FoS + 0.0	FoS -0.25

FoS Adjustment Coefficient (μ)			
4	8	16
2	4	8
1	2	4

		FoS re Slope Stability (μ_{FoS})		
Ranking Risk re Potential for Adverse Consequences on Sensitive Receptors (RR_{SF} = μ_{FoS} * μ_{SF})		Acceptable (FoS = >1.3)	Marginally Stable (Acceptable) (FoS = 1-1.3)	Unstable (FoS = <1)
Significant Feature (μ_{SF})	μ	1	2	4
Non-critical infrastructure.	1	Very Low	Very Low	Low
Sensitive receptors e.g. surface water feature	2	Very Low	Low	Mod.
Community, dwellings and buildings.	4	Low	Mod.	High

RR_{SF} Coefficient (μ)		
1	2	4
2	4	8
4	8	16

		Distance to Sig. Feature ($\mu_{Dist.}$)		
Acounting for distance to Sensitive Receptors (RR_D = μ_{RRSF} * $\mu_{Dist.}$)		>150m	50-150m	<50m
Risk Ranking re Significant Feature (μ_{RRSF})	μ	1	2	4
Very Low (RR_{SF} = 1-2)	1	Very Low	Low	Mod.
Low (RR_{SF} = 4)	2	Low	Mod.	High
Mod. (RR_{SF} = 8)	4	Mod.	High	Very High
High (RR_{SF} = 16)	8	High	Very High	Extremely High

RR_D Coefficient (μ)		
1	2	4
2	4	8
4	8	16
8	16	32