

Table 1 Data required for the comparative computation between empirical and 3D numerical methods used for subsurface drainage of horizontal drains in the Jasper Landslide.

Required input parameters	Imperial unit (Crenshaw and Santi 2004)		Metric unit (Cook et al. 2012)	
	value	uint	value	uint
Hydraulic Conductivity (K)	4×10^{-6}	(ft/sec)	1.6×10^{-7}	(m/sec)
Volumetric flow rate (Q)	2.23×10^{-3}	(ft ³ /sec)	1.53×10^{-6}	(m ³ /sec)
Drain Length L_d	90.0	(ft)	27.43	(m)
Drain Spacing (S)	11.07	(ft)	5.0	(m)
plan area of drain influence (A)	2400	(ft ²)	-	-
Recharge Rate (v)	9.00×10^{-7}	(ft/sec)	-	(m/sec)
Initial Height of the Water Table (H_i)	7.10	(ft)	5.5	(m)
Equivalent Depth to Impermeable Layer (d)	0.90	(ft)	-	-
Drain radius (r_o)	0.75	(in.)	0.013	(m)
Drain angle (α)	0	(°)	10.0	(°)
Low-permeability layer angle (ϕ)	0	(°)	5.0	(°)
Corrective multiplier (M)	0	--	0.72	--
Elevation of the drain outlet (Edo)	1.59	(ft)	0.61	(m)
Elevation of the low-permeability layer at the drain outlet (Elp)	0	(ft)	0	(m)