APPENDIX

J. EXFILTRATION DESIGN - HYDRO-GEOTECHNICAL AIDS - K FOR SATURATED AND COMPACTED LAB SOIL SPECIMENS

Table J-1: Coefficient of Permeability (k) for Saturated and Compacted Laboratory Soil Specimens

SOIL TYPICAL NAME	SOIL CLASSIFICATION		PERMEABILITY (ft/day)
	UNIFIED	AASHTO	
Well-graded gravels or gravel-sand mixtures with little or no fines	GW	A-3	300 to 0.3 Pervious
Poorly graded gravels or gravel-sand mixtures with little or no fines	GP	A-3	3×10^{4} to 30 Very pervious
Silty gravels, gravel-sand-silt mixtures	GM	A-2-4	3 to 3×10^{-3} Semi-pervious to pervious
Clayey gravels, gravel-sand-clay mixtures	GC	A-2-6	3×10^{-3} to 3×10^{-5} Impervious
Well-graded sands or gravelly sands with little or no fines	SW	A-3	30 to 0.3 Pervious
Poorly graded sands or gravelly sands with little or no fines	SP	A-3	300 to 3 Pervious
Silty sands, sand-silt mixtures	SM	A-2-4	3 to 3×10^{-3} Semi-pervious to pervious
Clayey sands, sand-clay mixtures	SC	A-6	3×10^{-3} to 3×10^{-5} Impervious
Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slightly plasticity	ML	A-6	3 to 3×10^{-3} Semi-pervious to pervious
Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays	CL	A-7	3×10^{-3} to 3×10^{-5} Impervious
Organic silts and organic silty clays of low plasticity	OL	A-6	0.3 to 3×10^{-3} Semi-pervious to pervious
Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	MH	A-6	0.03 to 3×10^{-4} Semi-pervious to pervious
Organic clays of high plasticity, fat clays	CH	A-8	3×10^{-3} to 3×10^{-6} Impervious

NOTE: Table adapted from Drainage Manual Volume 2, FDOT 1987.

Table J-2: Coefficient of Permeabilty (k) for SCS Hydrological Soils

HYDROLOGICAL SOIL CLASSIFICATION		PERMEABILITY (ft/day)
TYPE	**CHARACTERISTICS**	
A	Soils that have high infiltration rates even when thoroughly wetted and a high rate of water transmission	60
B	Soils that have moderated infiltration rates when thoroughly wetted and a moderated rate of water transmission	48
C	Soils that have slow infiltration rates when thoroughly wetted and a slow rate of water transmission	24
D	Soils having very slow infiltration rates when thoroughly wetted and a very slow rate of water transmission	12
A/D	Soils Type A under saturated natural conditions that can be adequately drained, considering that drainage is feasible and practical.	60
B/D	Soils Type B under saturated natural conditions that can be adequately drained, considering that drainage is feasible and practical.	36
C/D	Soils Type C under saturated natural conditions that can be adequately drained, considering that drainage is feasible and practical.	12

NOTE: Table adapted from Applicant's Handbook: Regulation of Stormwater Management Systems. SJRWMD, 2005