	Soil type	Height (m)	Unit weight (kN m^{-3})	Elastic modulus (kPa)	Poisson's ratio (υ)	Cohesion (kPa)	Friction angle (°)	Coefficient of permeability (cm s^{-1})	K_o
Soil	Ballast stone	0.3	19.0	133 900	0.30	–	35	–	0.43
	Upper roadbed	1.5	18.0	81 600	0.20	3.0	32	–	0.47
	Lower roadbed	1.5	18.0	51 000	0.30	10.0	30	–	0.50
	Land fill	1.5	17.0	30 000	0.35	5.0	24	1.0×10^{-3}	0.59
	Silty clay	1.5	17.0	20 000	0.35	5.0	25	5.0×10^{-4}	0.58
	Weathered soil I	15.0	19.0	75 000	0.33	10.0	30	1.0×10^{-4}	0.50
	Weathered soil II	15.0	19.0	70 000	0.33	10.0	33	1.0×10^{-4}	0.46
	Weathered rock	7.0	20.0	110 000	0.31	60.0	42	1.0×10^{-5}	0.33

	Area (mm^2)	Unit weight (kN m^{-3})	Elastic modulus (kPa)	Moment of inertia (m^4)	
				I_{XX}	I_{YY}
KS60 rail	7,741	77.5	$21\,000 \times 10^4$	$30\,820 \times 10^{-9}$	5120×10^{-9}
	Length (m)	Width (m)	Height (m)	Interval between sleepers (m)	
PC sleeper	2.45	0.28	0.20	0.58	
	Thickness (mm)		Unit weight (kN m^{-3})	Vertical spring coefficient of rail pad (kPa)	
Rail pad	5		11.5	15.3×10^7	