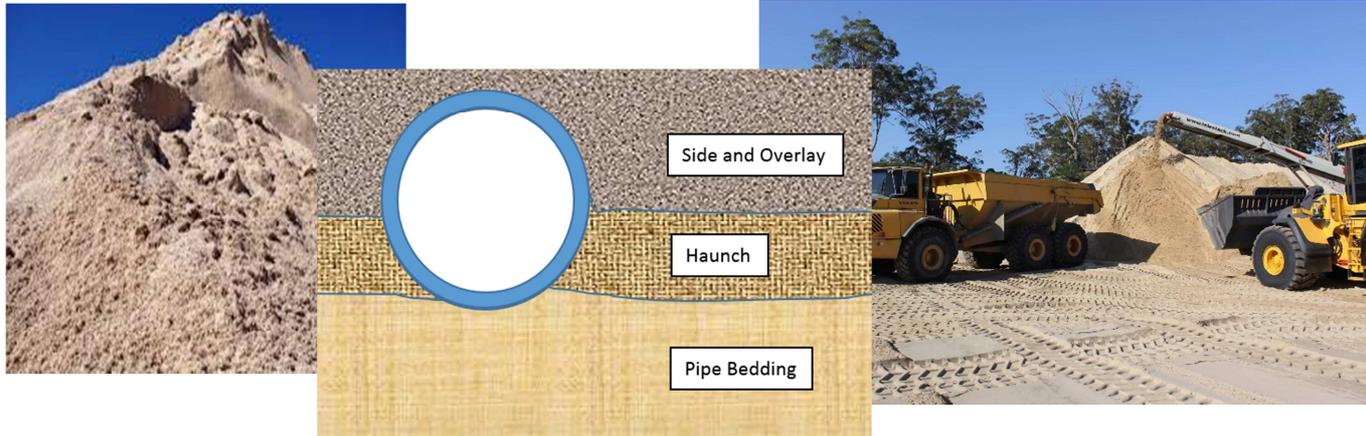


## Civil Engineering & Construction Materials

### Stormwater Pipe Sands



#### Macka's Screened Sand:

Macka's screened sand is extracted directly from our clean dune deposit and produced through a customised screening operation to ensure consistent ongoing quality and consistency essential for civil engineering construction.

Macka's Screened Sand – Pipe Bedding (PB) , and Haunch Zones (H)				
Material Properties				
Method	Property		Specification	Comments
	Grading / Detail	Result	Pipes	Box Culverts
AS1141.11.1	Sieve (mm)	% Pass	AS3725 Table 6	Table 5.1 in AS1597.2
	1.18 mm	100	100	Soil with internal angle of friction $\leq 30^\circ$ Gravity Force/m <sup>3</sup> = 20kN/m <sup>3</sup>
	0.6 mm	100	20 – 90	
	0.425 mm	95	-	
	0.3 mm	50	10 – 60	
0.15 mm	1	0 - 25		
RMS T109	Plasticity Index (PI)	Non Plastic	PI $\leq$ 6	
AS1141.4	Bulk Density (Loose)	1.48 T/m <sup>3</sup>		
	Bulk Density (Compacted)	1.61 T/m <sup>3</sup>		
AS1012.20	Chlorides	0.002%	< 0.0126%	Very Low
	Sulphates	<0.001%	<3%	Extremely Low

Macka's Screened Sand – Side & Overlay (SO) Zones				
Material Properties				
Method	Property		Specification	Comments
	Detail	Result		
RMS T109	Plasticity Index (PI)	Non Plastic	PI of 2 to 12	Trialling recommended may be suitable
AS1141.4	Bulk Density (Loose)	1.48 T/m <sup>3</sup>		
	Bulk Density (Compacted)	1.61 T/m <sup>3</sup>		
AS1141.33	Clay & Fine Silt	2		Very Low
AS1012.20	Chlorides	0.002%	< 0.0126%	Very Low
	Sulphates	<0.001%	<3%	Extremely Low
AS 1289.4.3.1 – 1997	pH	6.1	>5 for concrete	Very slightly Acidic
Petrographic Examination	Hard, Strong, and durable, Physically suitable for concrete sand and other applications	98% free silica		

*Please Note: The information provided in this product guide should be used as a guide only. For further details or for design and application support, please contact us.*

*Macka's Sand and Soil:*

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