

APPENDIX I SITE WATER BALANCE CALCULATIONS

Design Rainfall Depths
(Intensity-Frequency-Duration)

63.2% AEP 24 hour duration is 43.9 mm

43.9 mm
0.0439 m

	ha	m2	
Development site	1317	13170000	
Creeks	9.013	90130	0.684358
Solar panel area	629.8	6298000	47.8208
gravel compound areas	11.8	118000	0.895976
gravel roads	22	220000	1.670463
Inverter hardstands	0.1	1000	0.007593
Substation	4	40000	0.303721
Dams	1.607289	16072.89	0.122042
O&M	0.038	380	0.421613
BESS	1.9	19000	0.301683
	Total	52.22825	
	6802583		6367417 Remaining m2

Work out volume on to two channels			
Work out volume on access tracks and impervious fraction			
Work out as above for any hardstand areas.			
	m2		
Development site no infrastructure	6367417	279529.6	
		44724.74	m3
Solar panel area	6298000	276482.2	
		60826.08	
Creeks	90130	3956.707	
Wetland / remaining dams	16073	705.6047	
		706	
Gravel compounds (including O and M)	118380	5196.882	
		3689.786	
Internal gravel roads	220000	9658	
		6857.18	
Inverter hardstands & BESS	20000	878	
		623.38	
Substation	40000	1756	
		1246.76	
	13170000		

578163 63.2% AEP
118673.9 86527.93 Dams will be able to store this

12417.10622 High fraction impervious