



TYPICAL CONCRETE SLEEPER WALL SECTION

1:30

DESIGN 1: INTERALLOTMENT AND PMT SINGLE TIERED CONCRETE SLEEPER RETAINING WALLS

DESIGN
LOADS:

Dead load, $g = \text{nil}$
Live load, $q = 5\text{kPa}$
Wind pressure to 1.8m high fence = 0.73kPa

SOIL PARAMETERS: Characteristic retained internal friction angle, $\Phi_i = 28^\circ$
Retained soil density, $\gamma^*i = 18\text{kN/m}^3$
Characteristic foundation internal friction angle, $\Phi_f = 28^\circ$
Characteristic cohesion (for foundation), $c = 2\text{kPa}$
Foundation soil density, $\gamma^*f = 18\text{kN/m}^3$

Pier diameter = 450mm (uno)

Design Height 'H' (mm)	Crest Slope (maximum)	2400 SLEEPER LENGTH			2000 SLEEPER LENGTH			Minimum Corner Post Detail~
		Sleeper designation* (qty @ thickness in mm)	Steel Post Required	Pier Depth (mm)	Sleeper designation* (qty @ thickness in mm)	Steel Post Required	Pier Depth (mm)	
400	Level	2 @ 80	B-2000^	1300	2 @ 80	B-2000^	1200	100PFC
600	Level	3 @ 80	B-2000	1400	3 @ 80	B-2000	1300	100PFC
800	Level	4 @ 80	B-2600^	1600	4 @ 80	B-2600^	1500	100PFC
1000	Level	5 @ 80	B-2600	1800	5 @ 80	B-2600	1700	100PFC
1200	Level	6 @ 80	B-2900	2000	6 @ 80	B-2900	1900	100PFC
1400	Level	top 6 @ 80, 1 @ 100 btm	C-3500	2300	7 @ 80	B-3200	2100	100PFC
1600	Level	top 6 @ 80, 2 @ 100 btm	C-3900	2600	top 7 @ 80, 1 @ 100 btm	C-3900	2400	125PFC
1800	Level	top 7 @ 80, 2 @ 100 btm	C-4400	2800	top 7 @ 80, 2 @ 100 btm	C-4400	2600	125PFC
2000	Level	top 7 @ 80, 3 @ 100 btm	C-4400	3000	top 7 @ 80, 3 @ 100 btm	C-4400	2800	125PFC
2200	Level	top 7 @ 80, 4 @ 100 btm	D-4900	3300	top 7 @ 80, 4 @ 100 btm	D-4900	3000	150PFC
2400	Level	top 7 @ 80, 5 @ 100 btm	D-5500	3500	top 8 @ 80, 4 @ 100 btm	D-5500	3300	150PFC
2600	Level	top 7 @ 80, 6 @ 100 btm	E-5900	3800	top 8 @ 80, 5 @ 100 btm	D-5500	3500	180PFC
2800	Level	top 7 @ 80, 7 @ 100 btm	E-6600	4000	top 8 @ 80, 6 @ 100 btm	E-5900	3700	180PFC
3000	Level	top 7 @ 80, 7 @ 100, 1 @ 120 btm	F-7000^	3800 (600 dia)	top 8 @ 80, 7 @ 100 btm	E-6600	3900	200PFC

* THICKER SLEEPERS TO BE INSTALLED AT BOTTOM OF WALL PANEL.
Sleeper thickness designation in table refers to quantity of sleepers @ thickness (mm).
^ denotes steel reinforcement at base of post assembly will need to be trimmed to fit bored pier depth.
~ CORNER POST DETAIL TO BE 2 PFC POSTS AS DESIGNATED OR 1 PFC NESTED IN DESIGNATED UC
" denotes steel assembly upgraded due to overall length and may be adjusted if reo extensions used instead

REFER TO SHEET 001 FOR ALL SPECIFICATION NOTES

-			DESIGNED BY	WK	<div><div></div><div>adbri</div><div>MASONRY</div></div> <div>Adbri Masonry Pty Ltd ABN: 31 009 687 521</div> <div>P.O. Box 623 Beenleigh, QLD 4207</div> <div>Phone: (07) 3382 4100 Fax: (07) 3382 4185 Web: www.adbrimasonry.com.au</div> <div>Fishwick (ACT): (02) 6239 1255 Coffs Harbour (NSW): (02) 6655 9972 Moorebank (NSW): (02) 9822 6822 Newcastle (NSW): (02) 4967 3611 Nowra (NSW): (02) 4421 3500 Brisbane (QLD): (07) 3382 4100 Cairns (QLD): (07) 4051 6944 Gladstone (QLD): (07) 4979 3355 Mackay (QLD): (07) 4955 6966 Maroochydore (QLD): (07) 5477 3300 Toowoomba (QLD): (07) 4688 9600 Townsville (QLD): (07) 4774 5155 Ottaway (SA): (08) 8304 2323 Bendigo (VIC): (03) 5447 8866 Combefield (VIC): (03) 9305 0900 Essendon (VIC): (03) 9375 8500 Hobart (TAS): (03) 6244 3822 Ulverstone (TAS): (03) 6425 1899</div>
-			DRAWN BY	WK	
-			APPROVED BY		
B	04/11/22	DESIGNS UPDATED TO ASCT SOIL REPORT	QUALIFICATIONS	RPEQ 08869	
A	29/08/22	ISSUED FOR CONSTRUCTION			
No.	DATE	AMENDMENT			
			PROJECT TITLE		SHEET TITLE
			SUNVALE CALAMVALE RECONFIGURE LOT 3 ON SP186470		CONCRETE SLEEPER RETAINING WALLS INTERALLOTMENT WALL DESIGN TABLE
			148 ALGESTER ROAD CALAMVALE QLD 4116		CLIENT
			DAC CONSTRUCTIONS		
			DRAWING SCALE	ORIGINAL DRAWING SIZE	DRAWING No.
			1:30	A3	CIV-3043-002
					ISSUE
					B