



# DESIGN CRITERIA CHECKLIST

DCC/02

Issue Date/Revision:  
01-Mar-04/1

## CONCRIB® SLEEPER WALL

### PROJECT INFORMATION

REQUEST FROM		COMPANY	
TELEPHONE		FAX	EMAIL
PROJECT NAME			
LOCATION		CITY/REGION	

### STRUCTURE CLASSIFICATION

For guidance refer AS4678 Table 1.1

Structure Classification	Examples	Please Tick
C (1)	Failure would result in significant damage or risk to life	
B (2)	Failure would result in moderate damage and loss of services	
A (3)	Failure would result in minimal damage and loss of access	

### STRUCTURE DESIGN LIFE

For guidance refer AS4678 Table 3.1

Type of structure	Design life	Please tick	Type of structure	Design Life	Please tick
Temporary site works	5 yrs		Residential dwellings, river & marine structures	60 yrs	
Mine structures	10 yrs		Minor public works	90yrs	
Industrial structures	30 yrs		Major public works	120yrs	

### WALL PROPERTIES

Wall height above GL (Ht)		m	Sleeper wall face angle (Please Tick)		
Pier depth (Hf = Ht)		m	Typical	90 deg	
Filter fabric behind wall	(Y/N)		Expansive soil sites 1: 20	87 deg	

### LOADS ON STRUCTURE

Distributed Loads	(w1)	(w2)	Line Loads	P1	P2	P3
Magnitude (kPa)			Magnitude (kN/m)			
Offset X from top of wall (m)			Offset X from top of wall (m)			
Earthquake Site Factor (s)			Earthquake Coefficient (α)			

### RETAINED SLOPE GEOMETRY BACKFILL PROPERTIES (Drained)

Bulk Soil Density (γ)		kN/m <sup>3</sup>	2 <sup>nd</sup> horizontal distance from top of batter behind top sleeper (L2)		m
Effective Internal friction angle (φ')		deg	2 <sup>nd</sup> batter slope angle (ψ2')		deg
Effective Cohesion (c')		kPa	3 <sup>rd</sup> batter slope angle (ψ3')		deg
1 <sup>st</sup> horizontal distance from top of batter behind top sleeper (L1)		m			
1 <sup>st</sup> Batter slope angle (ψ1')		deg			

## FOUNDATION MATERIAL PROPERTIES (Drained)

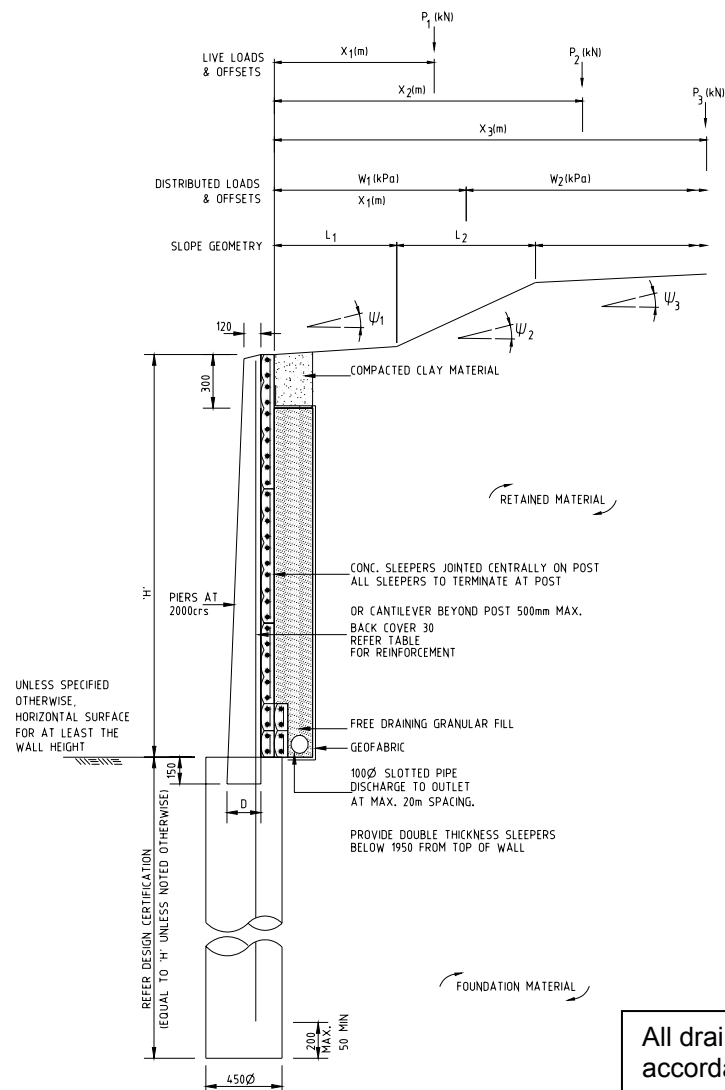
Soil density ( $\gamma_f$ )		kN/m <sup>3</sup>
Effective Internal friction angle ( $\phi_f'$ )		deg
Effective Cohesion ( $c_f'$ )		kPa
Foundation Slope at toe ( $\alpha$ )		deg
Allowable bearing capacity		kPa
Is footing in "rock"	Yes	No

Please circle

## OTHER NOTES

- If toe slopes exist below toe of retaining structures then global stability requires assessment. A suitably qualified and experienced geotechnical engineer SHALL be engaged to assess such criteria.
- Overland flow shall not be discharged over the retaining walls, unless it is contained in a drop structure.
- General guide for wall founding conditions:
  - Wall is deemed to founded in rock when rock cannot be drilled utilizing backhoe OR equivalent with rock

## KEY DIAGRAM



**HAND SKETCH AREA:**

**PLEASE INDICATE:**

1. existing site profile
2. slope geometry
3. water and groundwater location
4. location of surcharges
5. location of services
6. fill material on site
7. adjacent creeks/waterways