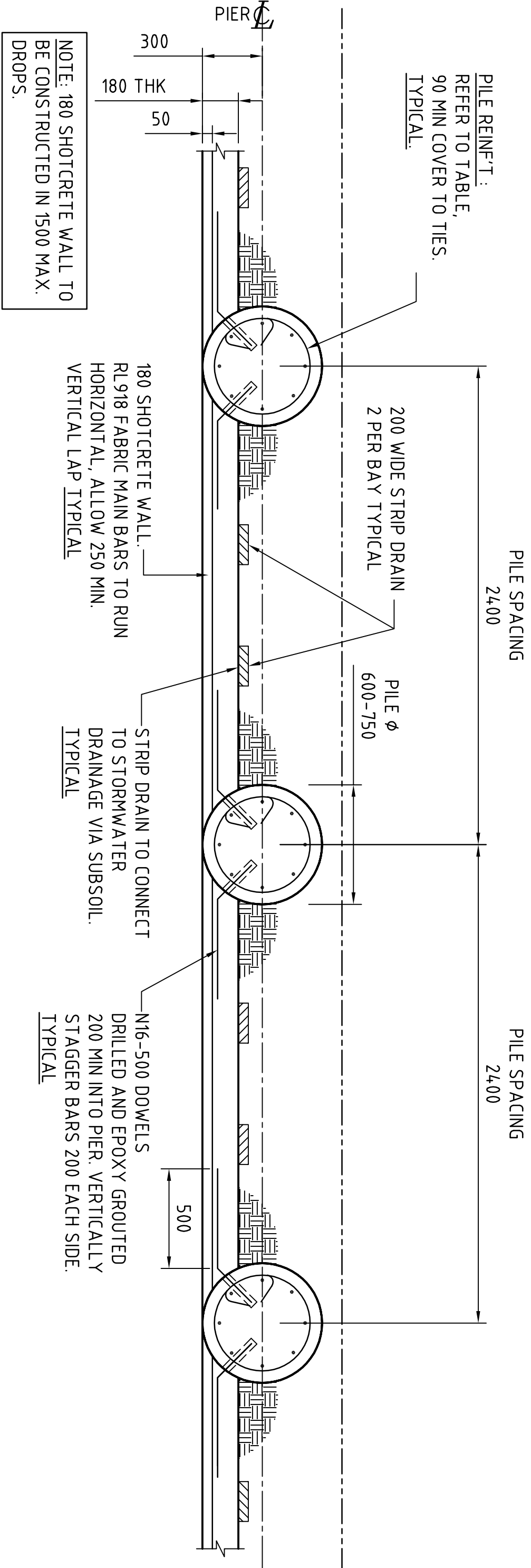
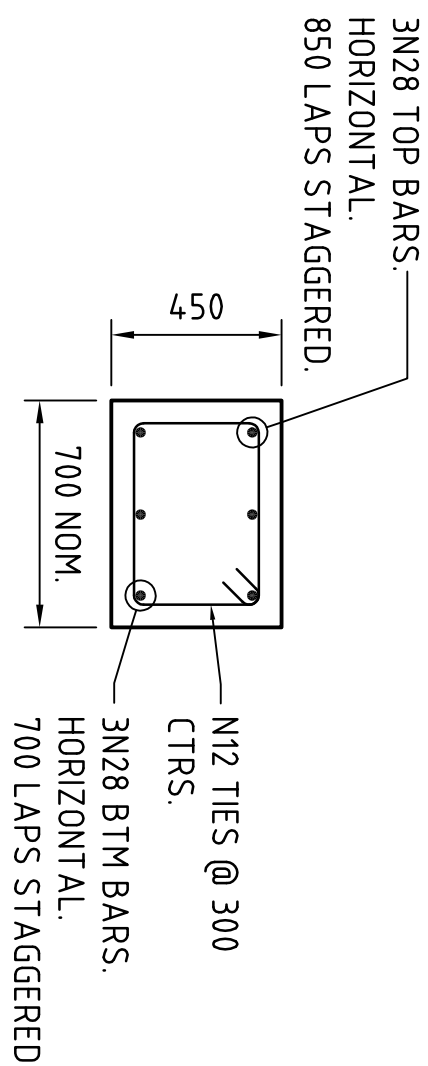


SOLDIER PILE WALL TYPICAL SECTION
SCALE 1:50

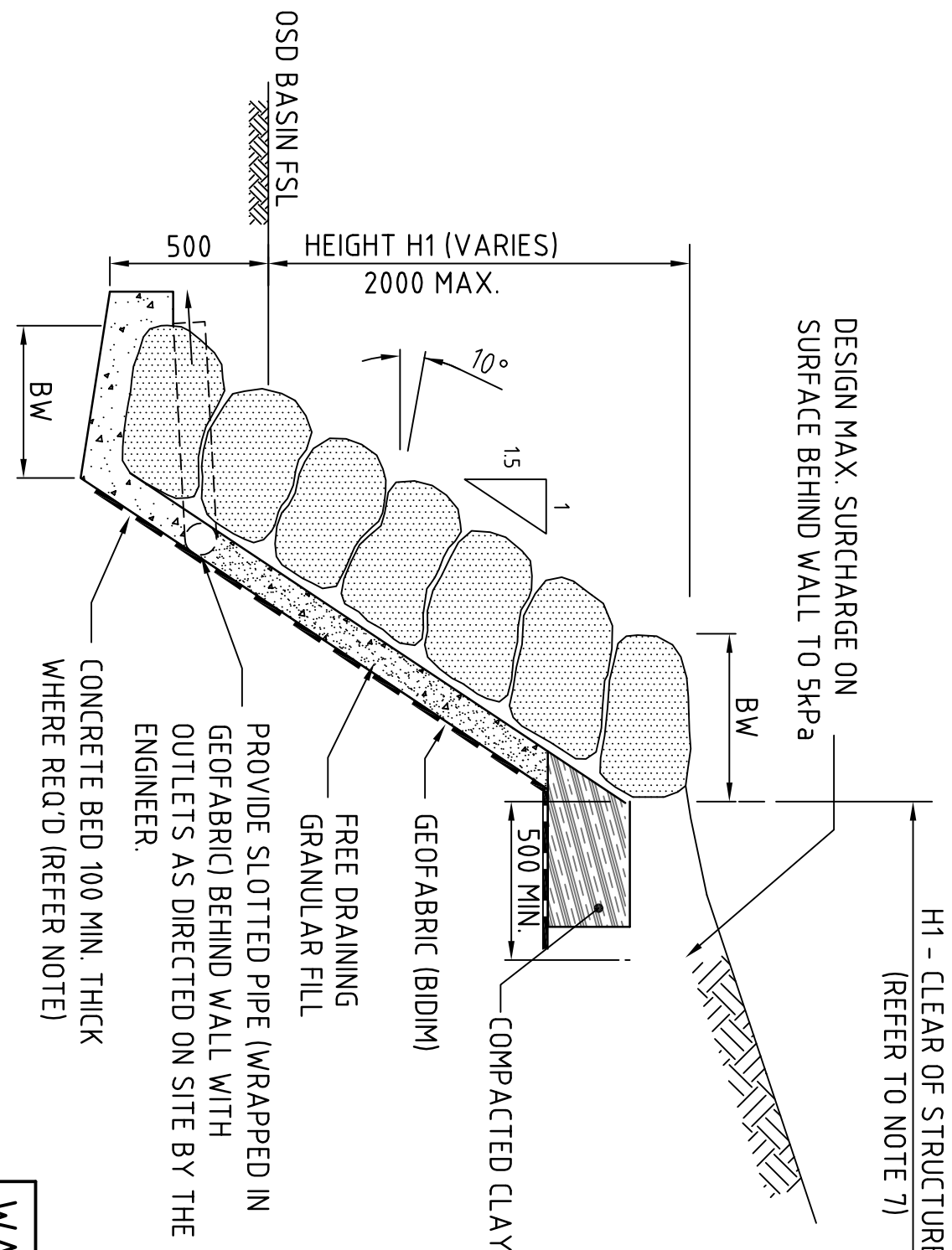


SOLDIER PILE WALL – TYPICAL DETAIL

- SCALE 1:20
- REFER TO PLAN AND ELEVATION FOR LOCATION.
 - SOLDIER PILE WALL DESIGN TO BE CONFIRMED DURING DETAIL DESIGN STAGE. DETAILS SHOWN ARE INDICATIVE ONLY & NOT SUITABLE FOR CONSTRUCTION PURPOSES



CONCRETE QUALITY					
ELEMENT	SOUND	AGGREGATE (MAX SIZE)	CEMENT TYPE	ADmixTURE	F/C (MPa)
PILES	80	20	SL	NIL	32
SHOT CRETE	230	10	SL	NIL	32

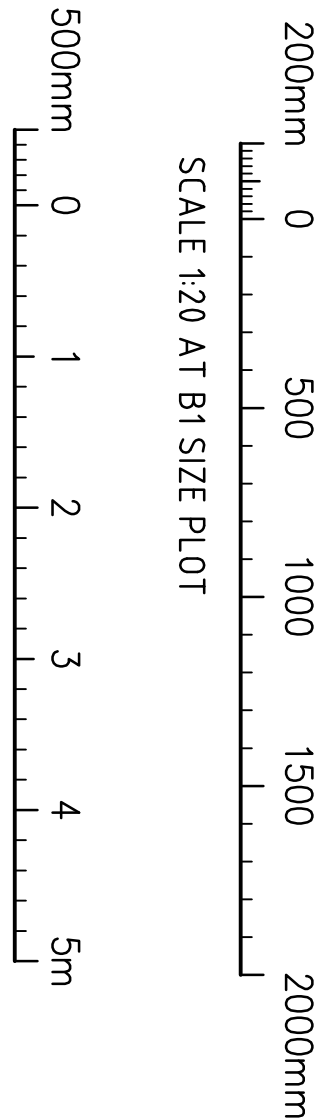


BASIN RETAINING WALL TYPICAL DETAIL
N.T.S.

WALL DIMENSIONS	
HEIGHT	BW
H1	
500	500
1000	500
1500	500
2000	750

BOULDER RETAINING WALL NOTES

- MINIMUM BEARING CAPACITY OF FOUNDATION TO BE 100kPa ASSUMING THE FOLLOWING
- CLAY FOUNDATION C_u ≥ 50kPa, φ = 0
 - SLIDING STABILITY IS BASED ON THE FOLLOWING
 - FRICTION ANGLE OF BOULDER WALL, NOT LESS THAN 4.0°
 - FRICTION ANGLE OF SOIL, SUBGRADE, NOT LESS THAN 30° FOR SOIL OR 35° FOR ROCK
- SOIL AND ROCK DESIGN PARAMETERS SHALL BE GOVERNED BY GEOTECHNICAL ENGINEER FROM 1:10 EXCEPT IF BOULDERS ON CONCRETE BED
- BOULDERS TO BE A MINIMUM 175mm DIA. 1.00mm DIA. UP TO 800mm DIA PLACED IN 100mm LAYERS WITH 10mm MAX. GAPS BETWEEN BOULDERS. THE ARRANGEMENT ON THE CONTACT SURFACES SHIPING TOWARDS BACK OF THE WALL AT 30° AND SHALL BE INSPECTED BY THE ENGINEER DURING CONSTRUCTION
- DENSITY OF INDIVIDUAL BOULDERS SHALL BE MINIMUM 2.5 TONNES/m³
- FOR WALLS ABOVE 800mm HEIGHT, THE FIRST LAYER OF BOULDERS ARE TO BE SPREAD OVER A 100mm THICK BED OF 10mm MAX. GAPS BETWEEN BOULDERS WITH CONCRETE TO A LEVEL EQUAL TO THE SURFACE LEVEL OF THE TOP OF THE WALL
- NO STRUCTURE TO BE BUILT WITHIN H1 FROM THE BACK OF THE TOP OF THE WALL (WHERE HEIGHT OF WALL) UNLESS THE STRUCTURE IS FOUNDED ON ROCK WITH 30:1 SLOPE
- CONSTRUCTION METHODS AND SEQUENCE TO ENSURE THAT DESIGN MAX. SURCHARGE OF 5kPa IS NOT EXCEEDED
- CONSTRUCTION TO BE IN ACCORDANCE WITH AS 4578:2002



FOR S75W APPLICATION				ARCHITECT				CLIENT				PROJECT				CONSULTING ENGINEERS			
FOR INFORMATION ONLY				7.11.12				B				AMENDMENTS				A			
DATE				30.10.12				DATE				DATE				DATE			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
AMENDMENTS				AMENDMENTS				AMENDMENTS											