



1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANCES (STANDARD DRAWING 5-6) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) TO 2 METRES DOWNSLOPE.

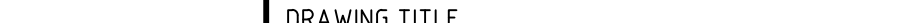




1. CHECK DAMS CAN BE BUILT WITH VARIOUS MATERIALS, INCLUDING ROCKS, LOGS, SANDBAGS AND STRAW BALES. THE MAINTENANCE PROGRAM SHOULD ENSURE THEIR INTEGRITY IS RETAINED, ESPECIALLY WHERE CONSTRUCTED WITH STRAW BALES. IN THE CASE OF BALES, THIS MIGHT REQUIRE THEIR REPLACEMENT EACH TWO TO FOUR MONTHS.
2. TRENCH THE CHECK DAM 200mm INTO THE GROUND ACROSS ITS WHOLE WIDTH. WHERE ROCK IS USED, FILL THE TRENCHES TO AT LEAST 100mm ABOVE THE GROUND SURFACE TO REDUCE THE RISK OF UNDERCUTTING.
3. NORMALLY THEIR MAXIMUM HEIGHT SHOULD NOT EXCEED 600mm ABOVE THE GULLY FLOOR. THE CENTRE SHOULD ACT AS A SPILLWAY, BEING AT LEAST 150mm LOWER THAN THE OUTER EDGES.
4. SPACE THE DAMS SO THE TOE OF THE UPSTREAM DAM IS LEVEL WITH THE SPILLWAY OF THE NEXT DOWNSTREAM DAM.



1. BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.



REVISION		DESCRIPTION				ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	ALL SETOUT TO ARCHITECT'S DRAWINGS, DIMENSIONS TO BE VERIFIED WITH THE ARCHITECT AND ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.		 Newcastle Suite 4, 215 Pacific Hwy, Charlestown NSW 2290 P.O. Box 180, Charlestown NSW 2290 Ph (02) 4943 1777 Fax (02) 4943 1577 Email newcastle@northrop.com.au ABN 81 094 433 100		PROJECT	DRAWING TITLE		JOB NUMBER
A		ISSUED FOR D.A.				K.H.	B.C.	E.A.	11.04.14	ELEEBA NA SHORES RETIREMENT LIVING PTY LTD		DETAILS: 1:20 			ELEEBA NA SHORES PROPOSED SENIORS LIVING RETIREMENT VILLAGE DEVELOPMENT 40 & 48 BURTON RD, MOUNT HUTTON	CIVIL DETAILS SHEET 3	NL130193		
B		RE-ISSUED FOR D.A.				K.H.	B.C.	E.A.	22.05.14								DRAWING NUMBER	REVISION	
C		RE-ISSUED FOR D.A.				J.B.	B.C.	E.A.	05.06.14								C10DA	C	
										DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD								DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION