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Scale: AS SHOWN	Datum: AHD
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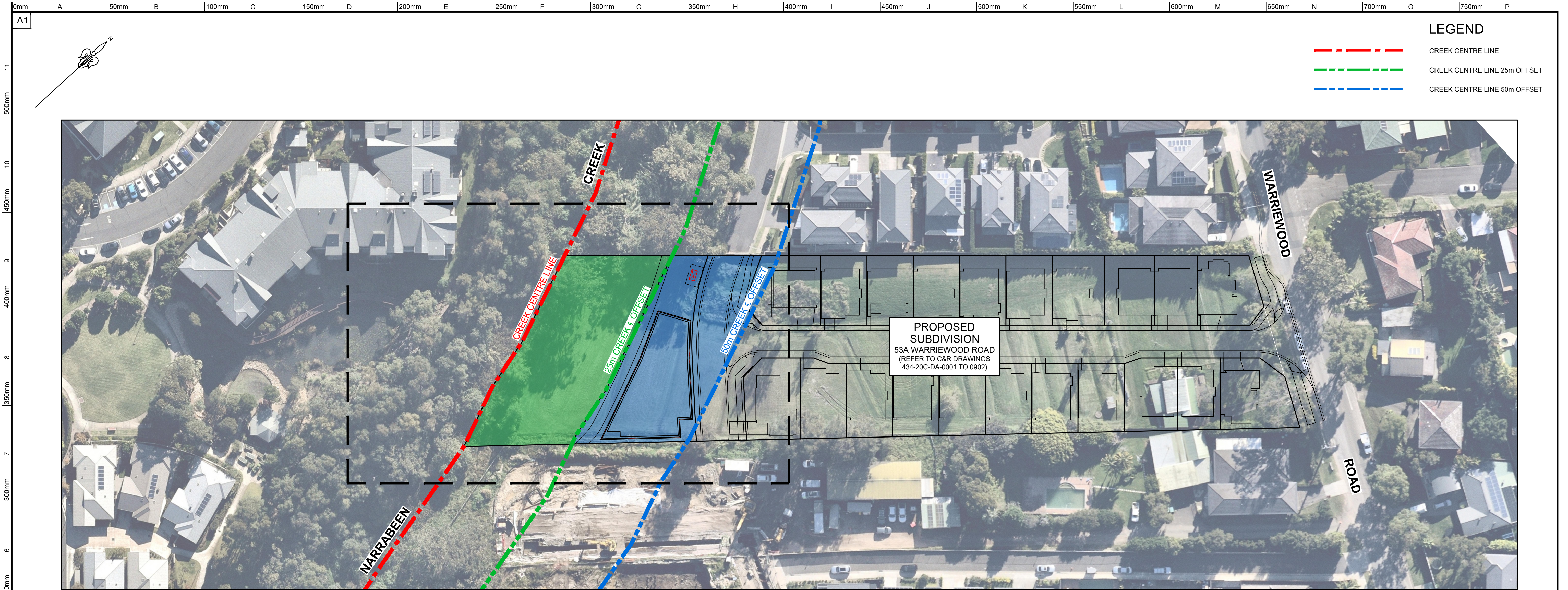


**CRAIG &
RHODES**
TAKE THE LEAD

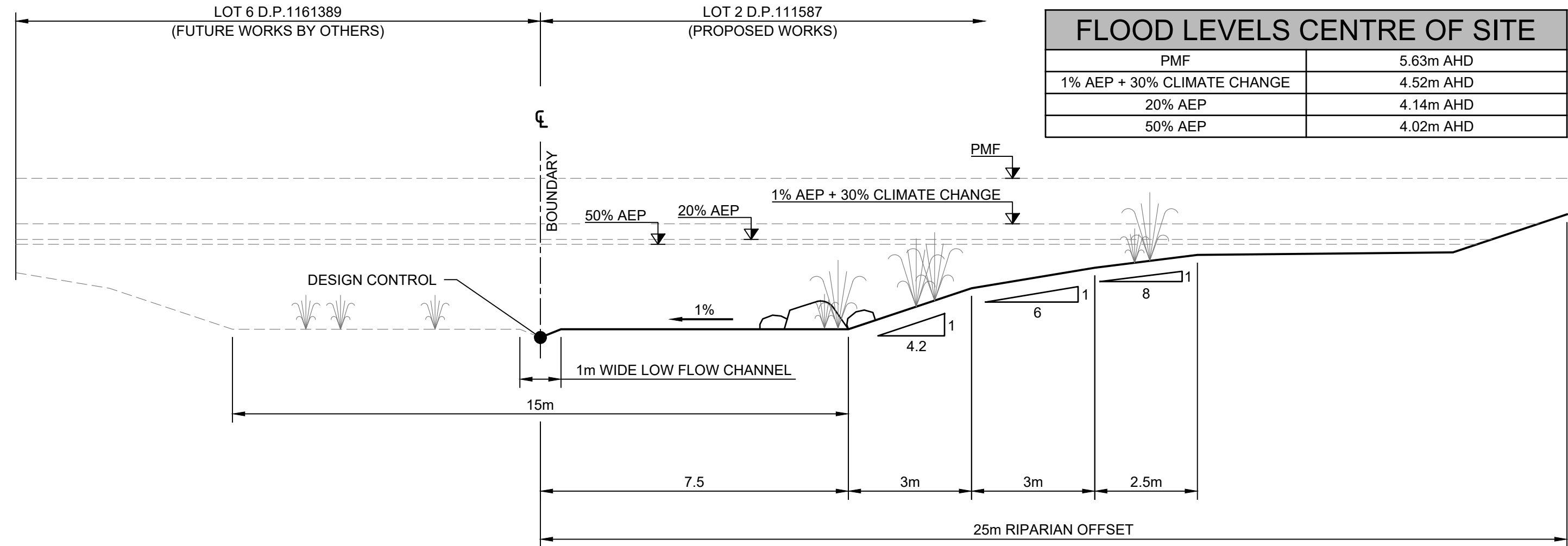
Drawing Title		
COVER SHEET, LOCALITY PLAN AND GENERAL NOTES		
C&R Ref. 434-20	Drawing Ref. 434-20C-DA-1001	Revision A

1. ALL CREEK WORKS TO TIE INTO EXISTING LOW FLOW CHANNEL AT BOTH UPSTREAM AND DOWNSTREAM LIMIT OF WORKS. TRANSITION TIE IN OVER 5m.

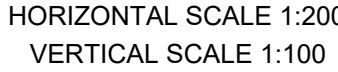
DEVELOPMENT APPLICATION



PLAN
SCALE 1:500

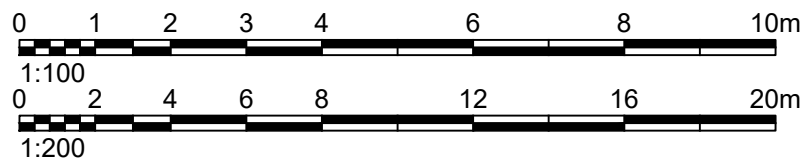


TYPICAL CREEK REHABILITATION SECTION
NOT TO SCALE



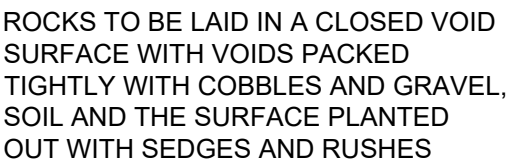
1. REFER TO NORTHERN BEACHES COUNCIL FOR STANDARD DETAIL DRAWINGS.
2. ALL SERVICES SHOWN ARE INDICATIVE ONLY. REFER TO RELEVANT AUTHORITY FOR SERVICES DETAILS.
3. STORMWATER DRAINAGE DESIGN IS CONCEPT ONLY AND SUBJECT TO FINAL DETAIL DESIGN.

	EXISTING SEWER LINE
	PROPOSED STORMWATER DRAINAGE LINE (REFER TO CIVIL WORKS DRAWINGS)
	PROPOSED STORMWATER PIT (REFER TO CIVIL WORKS DRAWINGS)
	DESIGN CONTOUR
	EXISTING CONTOUR
	PROPOSED CREEK REHABILITATION WORKS BOUNDARY
	FUTURE WORKS BY OTHERS
	PROPOSED 50m RIPARIAN CORRIDOR
	PROPOSED 25m RIPARIAN CORRIDOR
	FLOW DIRECTION
	PIT NUMBER
	EXISTING TREES TO BE REMAIN
	EXISTING TREES TO BE REMOVED AT DIRECTION OF SUPERINTENDENT
	JUTE MESH AND RIPARIAN PLANTING



DEVELOPMENT APPLICATION

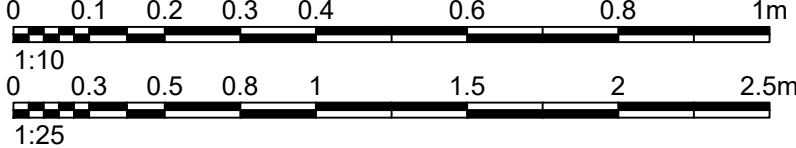
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1102

NOTE

STORMWATER OUTLETS TO BE ORIENTATED IN THE DIRECTION OF NATURAL FLOW OF THE RECEIVING WATER COURSE AND NOT OBSTRUCTING FLOW FROM UPSTREAM. OUTLETS TO BE INSTALLED IN ACCORDANCE WITH NSW OFFICE OF WATER REQUIREMENTS



Three circular logos for 'APPROVED COMPANY' are displayed side-by-side. Each logo has a different colored border (blue, green, red) and a central icon. The text inside each logo reads: 'APPROVED COMPANY', 'ADVISE 8001', 'Quality Management System', and 'ISO 9001'.

Below each logo is a small icon and the text 'Certification Services'.

Authorised for issue by:

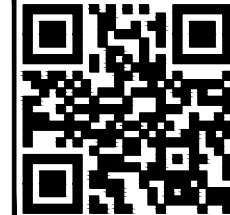
A. MORELLI

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Signature:

Principal: PVD No. 21 PTY LTD	
G.A. NORTHERN BEACHES COUNCIL	
Scale: AS SHOWN	Datum: AHD

project: PROPOSED RESIDENTIAL SUBDIVISION OF
LOT 2 DP 111587 (53A WARRIEWOOD RD, WARRIEWOOD)
NARRABEEN CREEK REHABILITATION WORKS



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Drawing Title		
TYPICAL DETAILS		
C&R Ref. 434-20	Drawing Ref. 434-20C-DA-1103	Revision A

Revision
A

THIS PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS AND ANY WRITTEN INSTRUCTIONS THAT MAY BE ISSUED.

2. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO DISTURBANCE OF THE RELATED CATCHMENT AREA AND TO THE STANDARDS OF 'MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION' & PITTWATER COUNCIL SPECIFICATIONS.
3. ALL SUBCONTRACTORS SHALL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWN SLOPE AREAS.
4. LAND DISTURBANCE SHALL BE LIMITED TO THAT NECESSARY FOR IMPLEMENTATION OF THE PLANS OF WORKS. BUFFER ZONES AND LANDS NOT TO BE DISTURBED SHALL BE CLEARLY MARKED WITH BARRIER FENCES. "SILT" FENCES OR STRAW BALE SEDIMENT TRAPS SHALL BE PLACED AT REGULAR INTERVALS IMMEDIATELY DOWNSLOPE OF ALL UNPROTECTED DISTURBED LANDS.
5. THE LOCATION OF "SILT" FENCES, BARRIER FENCES, SEDIMENT TRAPS AND OTHER DEVICES ARE INDICATIVE ONLY AND FINAL LOCATIONS ARE TO BE DECIDED ON SITE. VARIATIONS WILL BE PERMITTED TO BEST SUIT THE CIRCUMSTANCES. CONTRACTOR TO PREPARE DETAILED CONSTRUCTION SEDIMENT AND EROSION CONTROL PLAN FOR APPROVAL BY THE SUPERINTENDENT.
6. ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED BY THE CONTRACTOR FOLLOWING EACH STORM EVENT AND ANY NECESSARY MAINTENANCE WORK SHALL BE UNDERTAKEN TO ENSURE THEIR CONTINUED PROPER OPERATION. SEDIMENT SHALL BE REMOVED FROM THE THE SOIL EROSION & SEDIMENT CONTROL STRUCTURES WHEN NO MORE THAN 40% CAPACITY HAS BEEN REACHED. THESE STRUCTURES SHALL CONTINUE IN PROPER OPERATION UNTIL ALL DEVELOPMENT ACTIVITIES HAVE BEEN COMPLETED AND THE SITE FULLY STABILISED.
7. TEMPORARY REHABILITATION SHALL BE UNDERTAKEN WITHIN 14 WORKING DAYS ON DISTURBED AREAS WHERE WORKS HAVE STOPPED AND SOILS ARE EXPECTED TO REMAIN EXPOSED FOR MORE THAN 14 DAYS BEFORE EITHER WORKS CONTINUE OR PERMANENT REHABILITATION IS UNDERTAKEN.
8. AT LEAST WEEKLY, THE CONTRACTOR WILL INSPECT THE SITE, PROVIDING PARTICULAR ATTENTION TO THE FOLLOWING MATTERS :
 - A. ENSURE DRAINS OPERATE EFFECTIVELY AND INITIATE REPAIR AS REQUIRED.
 - B. REMOVE SPILLED SAND (OR OTHER MATERIALS) FROM HAZARD AREAS, INCLUDING LANDS.
 - C. REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS
 - D. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND INITIATE UPGRADING OR REPAIR AS APPROPRIATE
 - E. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS, i.e. MAKE ONGOING CHANGES TO THE PLAN.
 - F. MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN A FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
 - G. REMOVE TEMPORARY SOIL CONSERVATION STRUCTURES AS A LAST ACTIVITY IN THE REHABILITATION PROGRAM
9. THE CONTRACTOR WILL KEEP A LOG BOOK, MAKING ENTRIES AT LEAST WEEKLY AND IMMEDIATELY PRIOR TO FORECAST RAINFALL AND/OR SITE CLOSURE. RECORD:
 - A. THE VOLUME OF ANY RAINFALL EVENTS;
 - B. THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS;
 - C. APPLICATIONS OF FLOCCULATING AGENTS TO SEDIMENT RETENTION SYSTEMS;
 - D. VOLUMES OF WATER DISCHARGED FROM SEDIMENT RETENTION SYSTEMS; AND
 - E. REMEDIAL WORKS.

THE BOOK WILL BE KEPT ON-SITE AND MADE AVAILABLE TO ANY AUTHORISED PERSON ON REQUEST, IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF WORKS. COPIES OF MONTHLY ENTRIES ARE TO BE PROVIDED WITH PROGRESS CLAIMS.

10. DO NOT TAINT CLEAN CATCHMENT WATER WITH SILT FROM THE WORKS.
11. FACILITIES AND/OR EQUIPMENT MUST BE PROVIDED FOR THE APPLICATION OF WATER TO DISTURBED AREAS TO MINIMISE THE GENERATION OF AIRBORNE DUST FROM ANY AREA DISTURBED BY CONSTRUCTION ACTIVITIES. DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS TO THE SATISFACTION OF THE SUPERINTENDENT AND COUNCIL.
12. MATERIAL REMOVED FROM SEDIMENT CONTROL STRUCTURES MUST BE DISPOSED OF IN A WAY THAT DOES NOT POLLUTE WORKERS OR BUSHLAND AND DISPOSED OF TO AN APPROVED DUMP SITE.
13. RUNOFF FROM VEHICLE OR CONSTRUCTION PLANT MAINTENANCE AND CLEANING AREAS SHALL BE COLLECTED AND DISPOSED OF IN A MANNER THAT DOES NOT POLLUTE.
14. CONFORMITY WITH THIS PLAN SHALL IN NO WAY REDUCE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AGAINST WATER DAMAGE DURING THE COURSE OF THE CONTRACT.

- NTS

