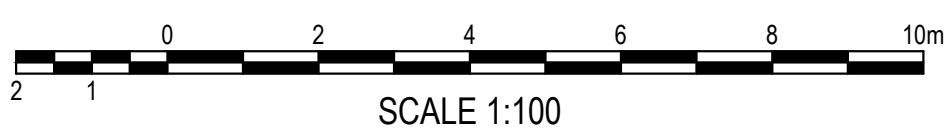
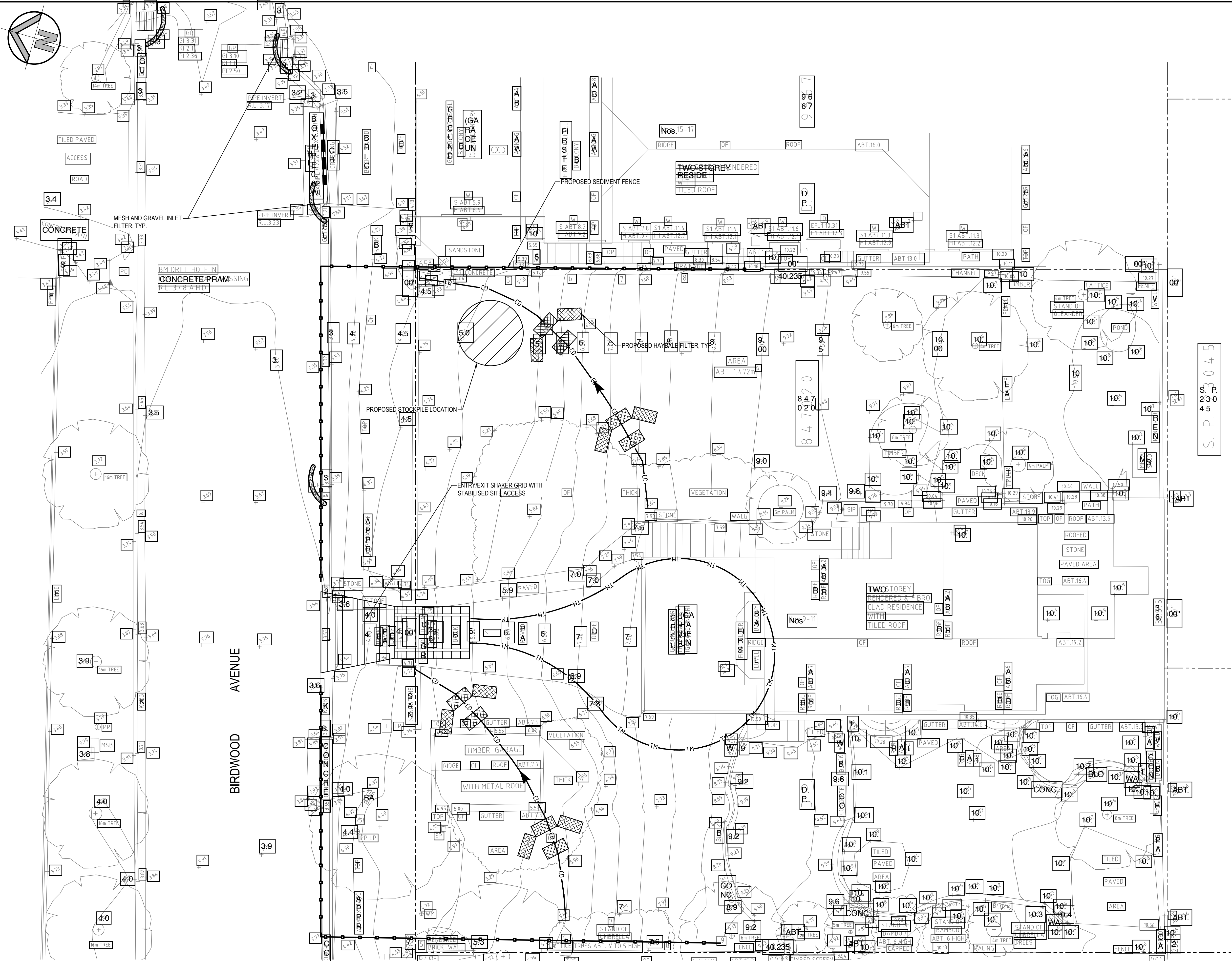


LEGEND

- TM → TM → TRAFFIC MANOEUVRING
- CD → CD → CATCH DIVERSION DRAIN
- PROPOSED SEDIMENTATION FENCE
- PROPOSED VEHICLE SHAKER GRID
- PROPOSED STABILISED SITE ACCESS
- PROPOSED MESH & GRAVEL INLET FILTER
- PROPOSED STOCKPILE LOCATION
- PROPOSED HAYBALE FILTER

SEDIMENT & EROSION CONTROL NOTES

- ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE NORTHERN BEACHES COUNCIL'S SPECIFICATIONS AND LANDCOM'S "SOIL AND CONSTRUCTION" MANUAL.
- ALL PERIMETER & SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN EARTH WORKS AND/OR CLEARING.
- THE SEDIMENT & EROSION CONTROL PLAN MAY REQUIRE FUTURE ADJUSTMENT TO REFLECT CONSTRUCTION STAGING. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO PREPARE THEIR OWN SEDIMENT AND EROSION CONTROL PLAN WHICH SUITS THE DESIGNED CONSTRUCTION STAGING.
- FILTRATION BUFFER ZONES ARE TO BE FENCED OFF AND ACCESS PROHIBITED TO ALL PLANT AND MACHINERY.
- ALL TEMPORARY EARTH BERMS, DIVERSIONS & SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED & MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE LOCATION.
- ALL TOPSOIL IS TO BE STOCKPILED ON SITE FOR REUSE (AWAY FROM TREES AND DRAINAGE LINES). MEASURES SHALL BE APPLIED TO PREVENT EROSION OF THE STOCKPILES.
- ALL EARTHWORK AREAS SHALL BE ROLLED EACH EVENING TO SEAL THE EARTHWORKS.
- ALL FILLS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND STRAW MULCHED WITHIN 14 DAYS OF COMPLETION OF FORMATION U.N.O. BY LANDSCAPE ARCHITECTS.
- UPON COMPLETION OF ALL EARTHWORKS OR AS DIRECTED BY COUNCIL SOIL CONSERVATION TREATMENTS SHALL BE APPLIED SO AS TO RENDER AREAS THAT HAVE BEEN DISTURBED, EROSION PROOF WITHIN 14 DAYS.
- EROSION AND SILT PROTECTION MEASURES ARE TO BE MAINTAINED AT ALL TIMES.
- THESE DRAWINGS SHOW THE INITIAL STAGES OF THE SITE CONSTRUCTION AND EROSION CONTROLS. AS CONSTRUCTION CONTINUES IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PITS ARE PROGRESSIVELY FITTED WITH MESH AND GRAVEL INLET FILTERS AS REQUIRED
- ALL EXISTING COUNCIL PITS WITHIN 50m OF THE SITE BOUNDARIES ARE TO BE FITTED WITH MESH AND GRAVEL INLET FILTERS

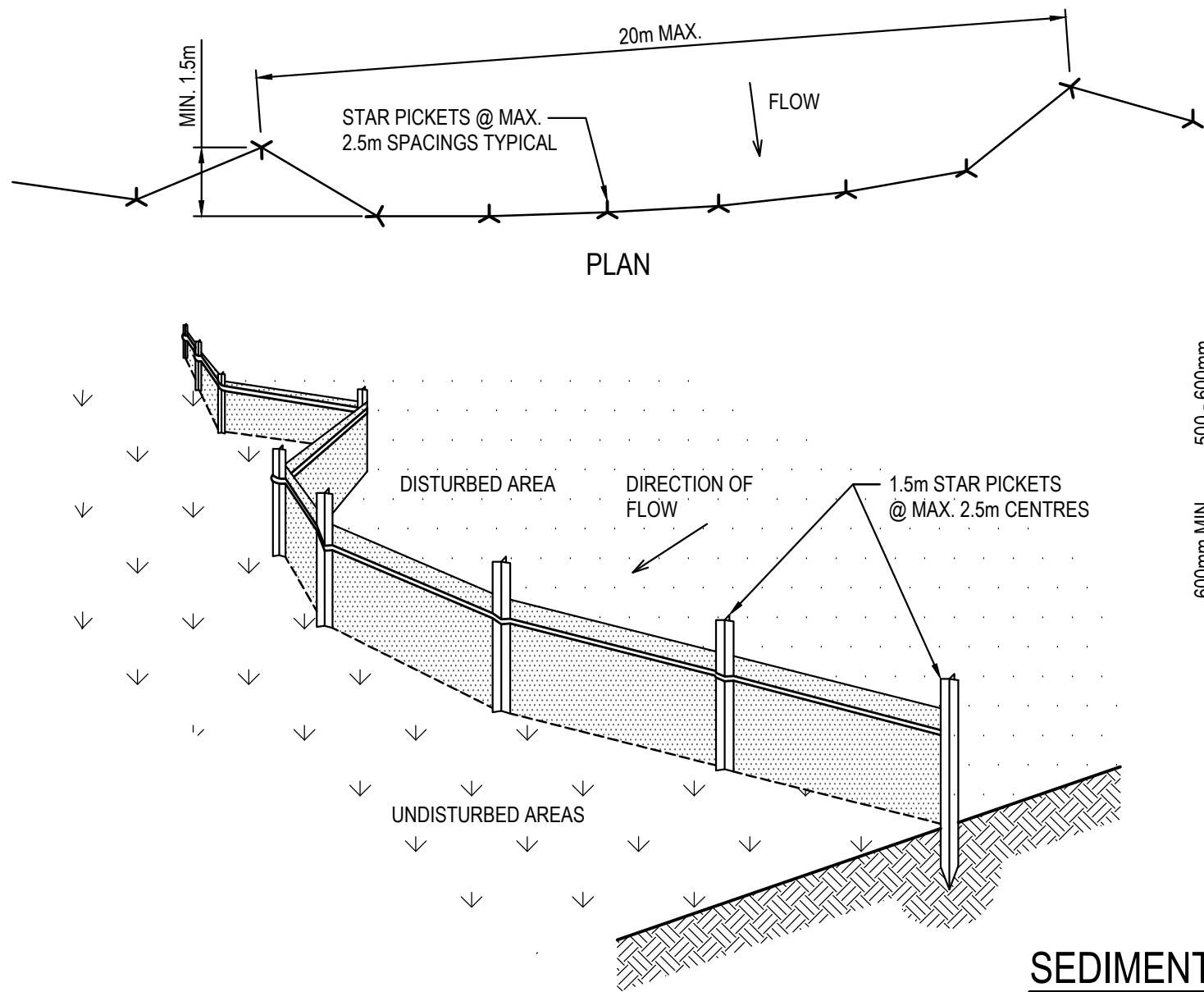


SEDIMENT AND EROSION CONTROL PLAN

SCALE: 1:100

FOR DA ONLY

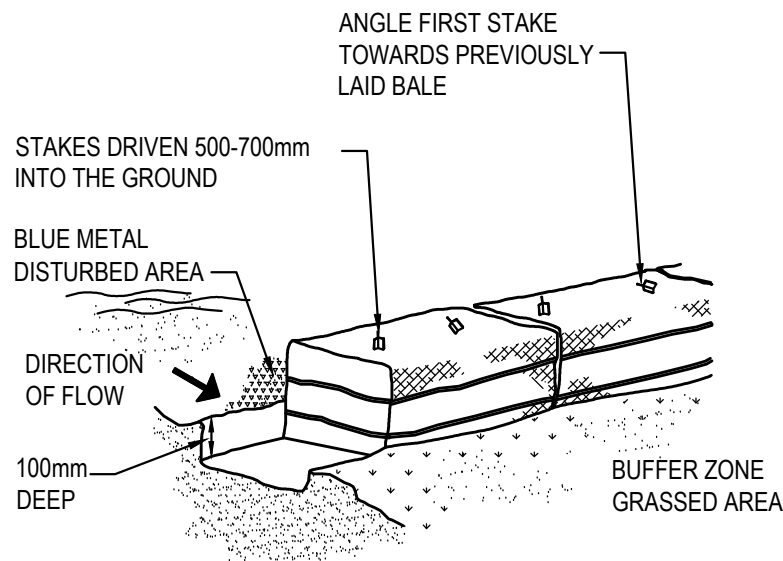
<div>SURVEY INFORMATION</div> <div>SURVEYED BY BYRNE & ASSOCIATES</div> <div>DATUM: AHD</div> <div>ORIGIN OF LEVELS: PM 3981 R.L. 11.53</div>										<div>Client</div> <div>BIRDWOOD PROJECTS PTY LTD</div> <div>Surveyor</div> <div>BYRNE & ASSOCIATES</div> <div>This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.</div>										<div>Suite 2.01 828 Pacific Highway Gordon NSW 2072</div> <div>The logo of the Surveying and Mapping Institute of Australia (SMIA) is a circular emblem with a blue border. Inside, there is a red and white design that resembles a stylized 'S' or a surveying instrument. Below the emblem, the text 'Surveying and Mapping Institute of Australia' is written in a small font.</div> <div>Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@bhconsult.com.au Web www.henryandhymas.com.au</div> <div>The logo for Henry & Hymas features a large, stylized red paperclip. To the right of the paperclip, the company name 'henry&hymas' is written in a lowercase, sans-serif font.</div> <div>Project PROPOSED RESIDENTIAL DEVELOPMENT 9-11 BIRDWOOD AVENUE, COLLAROY, NSW</div> <div>Title SEDIMENT AND EROSION CONTROL PLAN</div>										<div>Drawn M.Cerna</div> <div>Checked L.Villa</div> <div>Drawing number 19685_DA_SE01</div>		<div>Designed L.Villa</div> <div>Approved A.Francis</div> <div>Revision 02</div>		<div>Date JAN 20</div> <div>Scale @A1 1:100</div>	
<div>02</div> <div>ISSUED FOR DA ONLY</div>		<div>KR</div> <div>LV</div> <div>24.03.2020</div>		<div>01</div> <div>ISSUE FOR DA</div>		<div>MC</div> <div>LV</div> <div>22.01.2019</div>		<div>REVISION</div> <div>AMENDMENT</div> <div>DRAWN</div> <div>DESIGNED</div> <div>DATE</div>		<div>REVISION</div> <div>AMENDMENT</div> <div>DRAWN</div> <div>DESIGNED</div> <div>DATE</div>																									



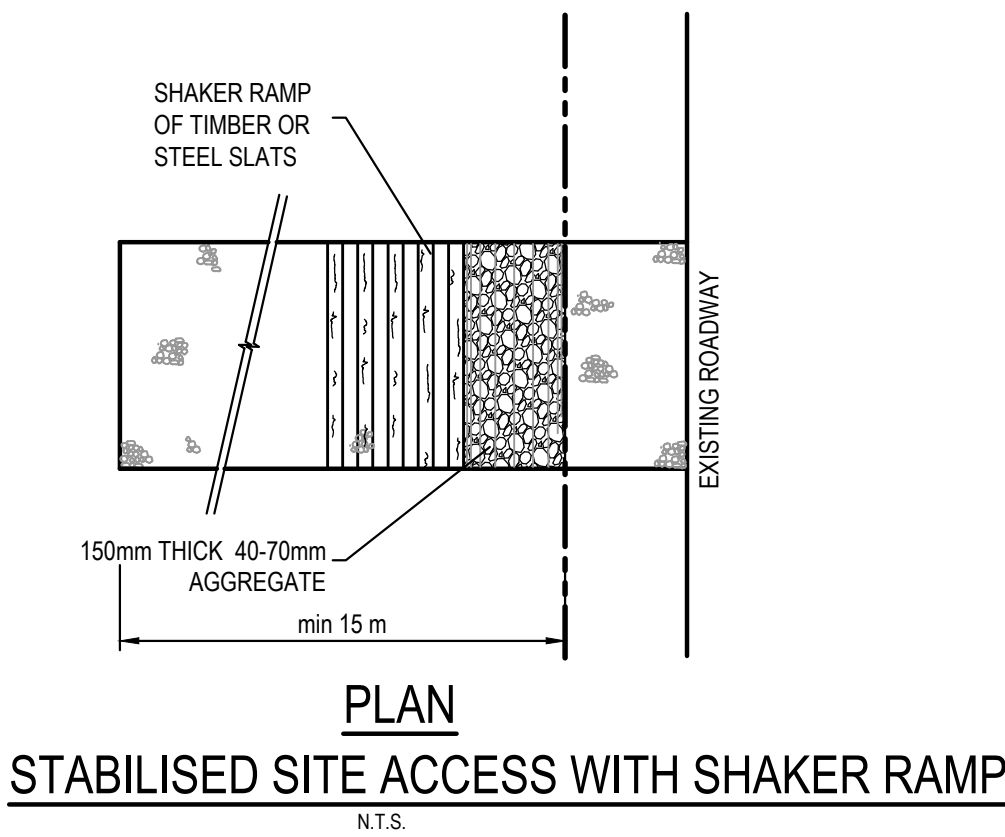
SEDIMENT FENCE
SCALE N.T.S.

SEDIMENT FENCE CONSTRUCTION NOTES:

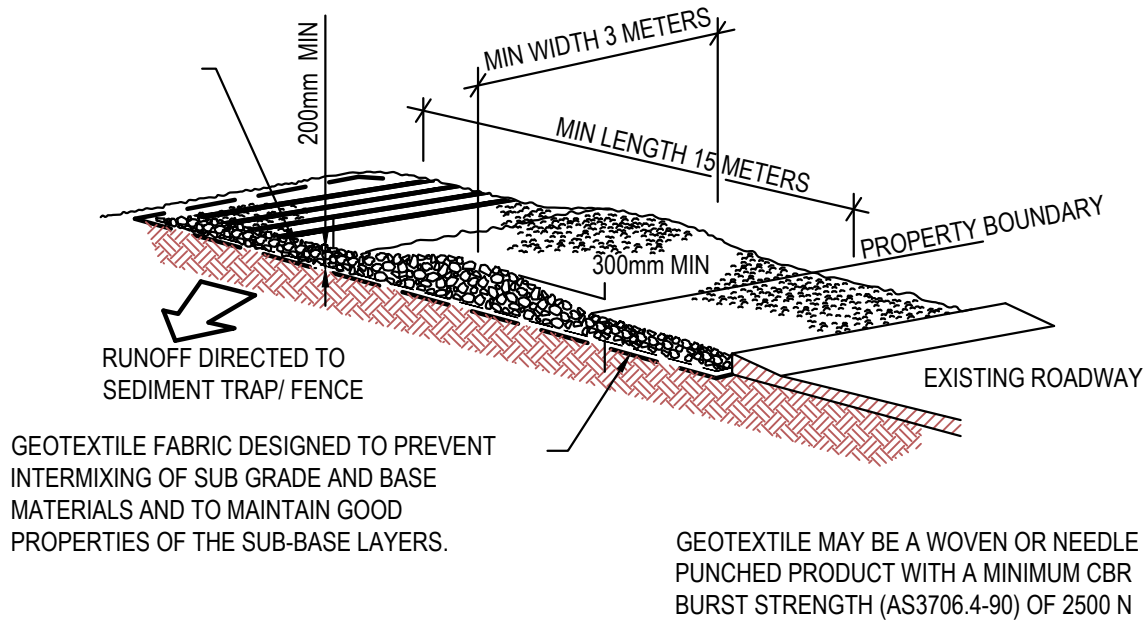
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5m LONG STAR PICKETS INTO GROUND @ 2.5m INTERVALS (MAX.) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP. 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



HAYBALE BARRIERS
N.T.S.



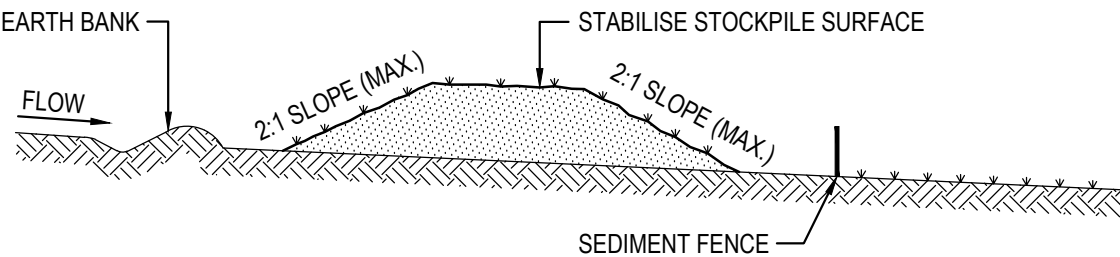
STABILISED SITE ACCESS WITH SHAKER RAMP
N.T.S.



STABILISED SITE ACCESS WITH SHAKER RAMP
N.T.S.

STABILISED SITE ACCESS WITH SHAKER RAMP NOTES:

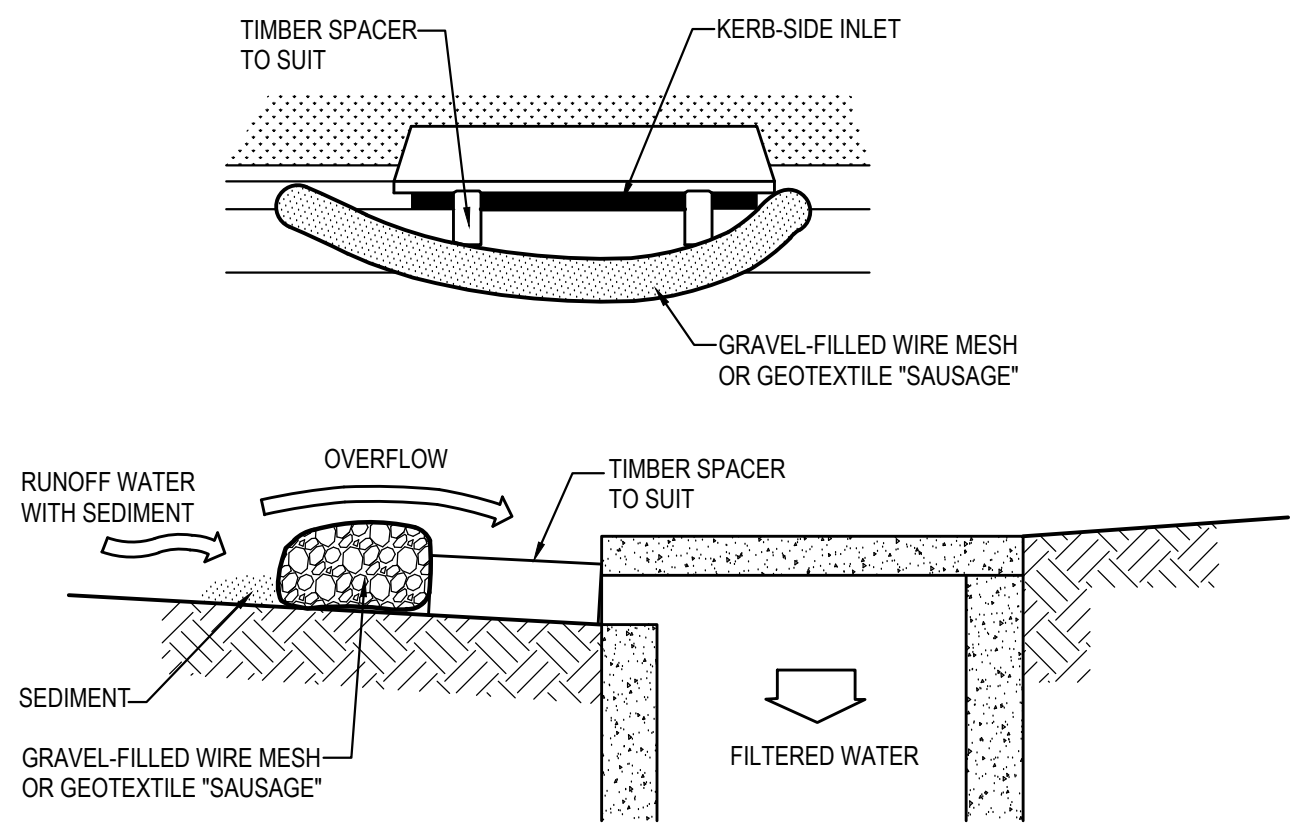
1. THIS DEVICE IS TO BE LOCATED AT ALL EXITS FROM CONSTRUCTION SITE.
2. THIS DEVICE IS TO BE REGULARLY CLEANED OF DEPOSITED MATERIAL SO AS TO MAINTAIN A 50mm DEEP SPACE BETWEEN PLANKS.
3. ANY UNSEALED ROAD BETWEEN THIS DEVICE AND NEAREST ROADWAY IS TO BE TOPPED WITH 100mm THICK 40-70mm SIZE AGGREGATE.
4. ALTERNATIVELY, THREE(3) PRECAST CONCRETE CATTLE GRIDS (AS MANUFACTURED BY *HUMES CONCRETE MAY BE USED. 1, 2 & 3 ABOVE ALSO APPLY.



STOCKPILE CONSTRUCTION NOTES:

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 PLACED FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED E.S.C.P. OR S.W.M.P. TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

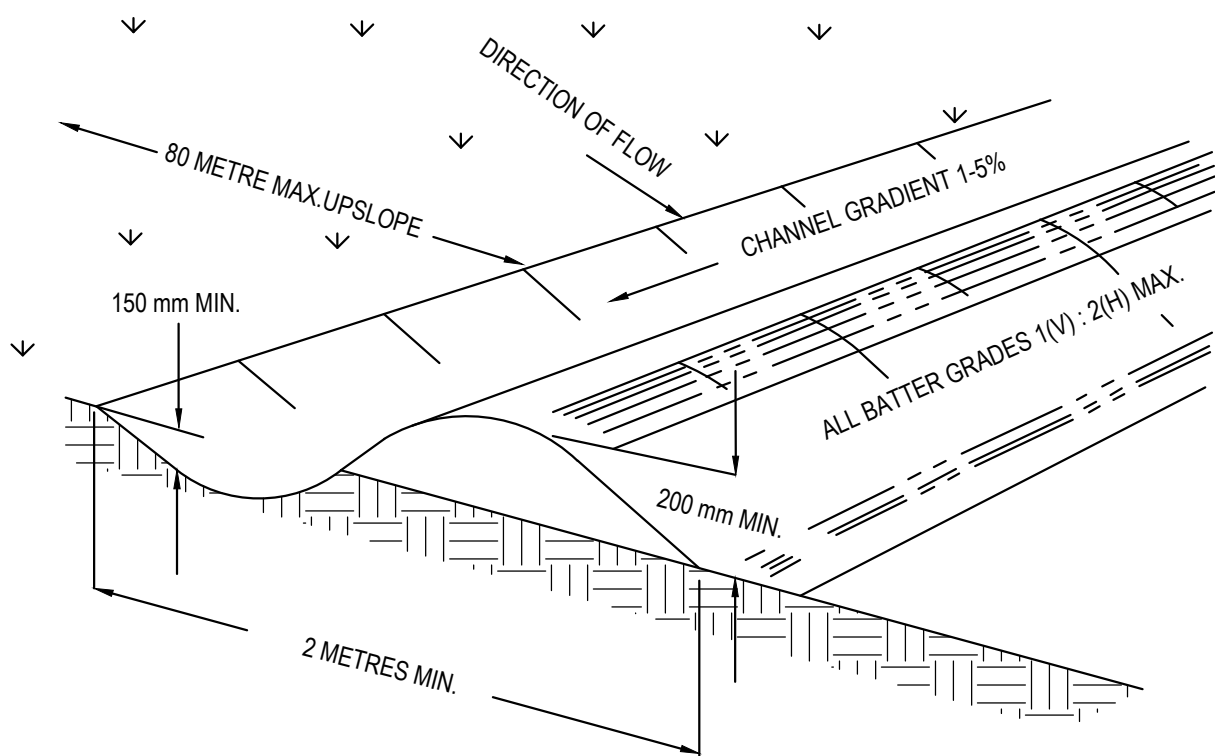
STOCKPILES
SCALE N.T.S.



MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:

1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
2. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
5. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY CAN FIRMLY ABUT EACH OTHER AND SEDIMENT / LADEN WATERS CANNOT PASS BETWEEN.

MESH & GRAVEL INLET FILTER
SCALE N.T.S.





NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAC UPSLOPE LENGTH IS 80 METERS.

CATCH DRAIN CONSTRUCTION NOTES:

1. CONSTRUCT ALONG GRADIENT AS SPECIFIED.
2. MAXIMUM SPACING BETWEEN BANKS SHALL BE 80 METRES.
3. DRAINS TO BE OF PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED.
4. EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE.
5. CONSTRUCTION IS OF A TEMPORARY NATURE AND SHALL BE COMPACTED AT THE END A DAYS WORK OR IMMEDIATELY PRIOR RAIN.
6. ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO SEDIMENT BASIN OR SIMILAR.
7. DISCHARGE RUNOFF COLLECTED FROM UNDISTURBED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL AISTE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED.
8. COMPACT WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS.
9. EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDE NORMAL FLOW.

CATCH DRAINS SD 5-8
SCALE N.T.S.

FOR DA ONLY

										Client		BIRDWOOD PROJECTS PTY LTD		Suite 2.01 828 Pacific Highway Gordon NSW 2072		Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hhconsult.com.au Web www.henryandhymas.com.au				Project		PROPOSED RESIDENTIAL DEVELOPMENT BIRDWOOD AVENUE, COLLAROY, NSW		Drawn M.Cerna	Designed L.Villa	Date JAN 20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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