

LTS

DATUM: AHD

02

01

REVISION

ISSUED FOR 75% TENDER

AMENDMENT

ISSUED FOR CC/ TENDER

JK

LV 01.04.2021

DRAWN DESIGNED DATE REVISION

AMENDMENT

DRAWN DESIGNED DATE

JK LV 18.03.2021

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email@hhconsult.com.au www.henrvandhvmas.com.au

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SEDIMENT /

SEDIMENT BASIN SIZING

THE SEDIMENT BASIN SHALL BE CONSTRUCTED ON A RATE PER HECTARE BASIS AND HAS BEEN IN ACCORDANCE WITH THE REQUIREMENTS OF THE LANDCOM MANUAL "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION". FOR SEDIMENTATION TYPE D SOILS. THE DISTURBED AREA WITHIN THIS CATCHMENT AT ANY ONE TIME SHOULD BE LIMITED TO AN AREA FOR WHICH EACH SEDIMENT BASIN CAN HANDLE. EACH BASIN SHALL BE SIZED IN ACCORDANCE WITH THE TABLE BELOW.

SEDIMENT BASIN SIZING TYPE D SOILS				
VOLUMETRIC RUNOFF COEFFICIENT, CV 0.50 (APPENDIX F - TABLE F2)				
TH PERCENTILE 5 DAY TOTAL RAINFALL DEPTH, R 33.1 mm				
CATCHMENT AREA, A 1 Ha (UNIT AREA)				
TTLING ZONE VOLUME (PER HECTARE) 10 CV A R	165.5 m³			
DISTURBED CATCHMENT AREA	1 Ha (UNIT AREA)			
R K LS P C	30.38m ³			
SEDIMENT ZONE VOLUME (0.17 A (R K LS P C)/1.3	3.97m ³ < 50% SETTLING VOL			
TOTAL SEDIMENT BASIN VOLUME REQUIRED :	248.25 m³/Ha			

* (LANDCOM MANAGING URBAN STORMWATER MANUAL REFERENCE)

2. THE FOLLOWING DESIGN PARAMETERS HAVE BEEN ASSESSED FOR THE SITE

CONSTRAINT	VALUE	(SOURCE)*	
NFALL EROSIVITY (R-FACTOR)	3000	APPENDIX B	
H/SLOPE GRADIENT FACTOR, LS	0.41	APPENDIX A - TABLE A1	
DIL ERODIBILITY (K-FACTOR)	0.019	TABLE C20	
DN CONTROL PRACTICE FACTOR (P-FACTOR)	1.3 (COMPACTED)	APPENDIX A - TABLE A2	
OVER FACTOR (C-FACTOR)	1.0 (DURING EARTHWORKS)	APPENDIX A - FIGURE A5	
CULATED SOIL LOSS, A (RUSLE EQUATION)	30.38t/Ha/YR	A = R K LS P C	
SOIL HYDROLOGIC GROUP	GROUP B	APPENDIX C TABLE 20	
SEDIMENT TYPE	TYPE C APPENDIX C TABLE 4		
RCENTILE 5-DAY RAINFALL EVENT	33.1mm	TABLE 6.3A	

* (LANDCOM MANAGING URBAN STORMWATER MANUAL REFERENCE)

BASIN MANAGEMENT

1. THE CAPTURED STORMWATER IN THE SETTLING ZONE SHOULD BE DRAINED TO MEET THE MINIMUM STORAGE CAPACITY REQUIRED WITHIN A FIVE (5) DAY PERIOD FOLLOWING RAINFALL, PROVIDED THE ACCEPTABLE WATER QUALITY (NFR) AND TURBIDITY HAVE BEEN

2. CHEMICAL FLOCCULENT SUCH AS GYPSUM MAY BE DOSED TO AID SETTLING WITHIN 24 HOURS OF CONCLUSION OF EACH STORM. THE APPLIED DOSING RATES SHOULD ACHIEVE THE TARGET QUALITY WITHIN 36 TO 72 HOURS OF THE STORM EVENT.

INSPECT THE SEDIMENT BASINS AFTER EACH RAINFALL EVENT AND/OR WEEKLY. ENSURE THAT ALL SEDIMENT IS REMOVED ONCE THE SEDIMENT STORAGE ZONE IS FULL (REFER TO PEGS INSTALLED IN BASINS IN ACCORDANCE WITH THE SWMP). ENSURE THAT OUTLET AND EMERGENCY SPILLWAY WORKS ARE MAINTAINED IN A FULLY OPERATIONAL CONDITION AT ALL TIMES

SOWING SEASON	SEED MIX	
AUTUMN/WINTER	OATS@40KG/Ha + JAPANESE MILLET@10kg/Ha	
SPRING/SUMMER	OATS@20kg/Ha + JAPANESE MILLET@20kg/Ha	

NOTE : THESE PLANT SPECIES ARE FOR TEMPORARY REVEGETATION ONLY. THEY WILL ONLY PROVIDE PROTECTION FROM EROSION FOR SIX MONTHS. WHERE THE LOTS ARE TO BE LEFT UNDEVELOPED FOR A LONGER PERIOD. THE CONTRACTOR SHALL SEEK ADVICE FROM THE SITE SUPERINTENDENT AS TO MORE APPROPRIATE REVEGETATION METHODS.

REVEGETATION IN ACCORDANCE WITH THE ABOVE TABLE WILL BE ENHANCED BY ADDING LIME AT A RATE OF 4kg/TONNE OF TOPSOIL AND 7.5kg/TONNE OF SUBSOIL.

4. THE LONG TERM GROUND COVER FACTORS FOR THE CONSTRUCTION WORKS IS NOT TO EXCEED THE FOLLOWING LIMITS:

LAND	MAXIMUM C-FACTOR	REMARKS	
ERWAYS AND OTHER AREAS OF NCENTRATED FLOWS, POST CONSTRUCTION	0.05	APPLIES AFTER TEN WORKING DAYS OF COMPLETION OF FORMATION AND BEFORE CONCENTRATED FLOWS ARE APPLIED. FOOT AND VEHICULAR TRAFFIC IS PROHIBITED IN THIS AREA AND 70% GROUND COVER IS REQUIRED.	
KPILES, POST CONSTRUCTION	0.10	APPLIES AFTER TEN WORKING DAYS FROM COMPLETION OF FORMATION. 60% GROUND COVER IS REQUIRED.	
DS, INCLUDING WATERWAYS AND PILES, DURING CONSTRUCTION.	0.15	APPLIES AFTER 20 DAYS OF INACTIVITY, EVEN THOUGH WORKS MAY BE INCOMPLETE. 50% GROUND COVER IS REQUIRED.	

F	FOR TE	INDER	ONLY
D WAREHOUSE DARK STORE CY STREET, AUBURN NSW	Drawn J.Knight Checked B.Seizov	Designed L.Villa Approved A.Francis	Date JULY 2020 Scale @A1 NTS
AND EROSION CONTROL DETAILS	⁵ 19513_	_CC_SE	E02 04