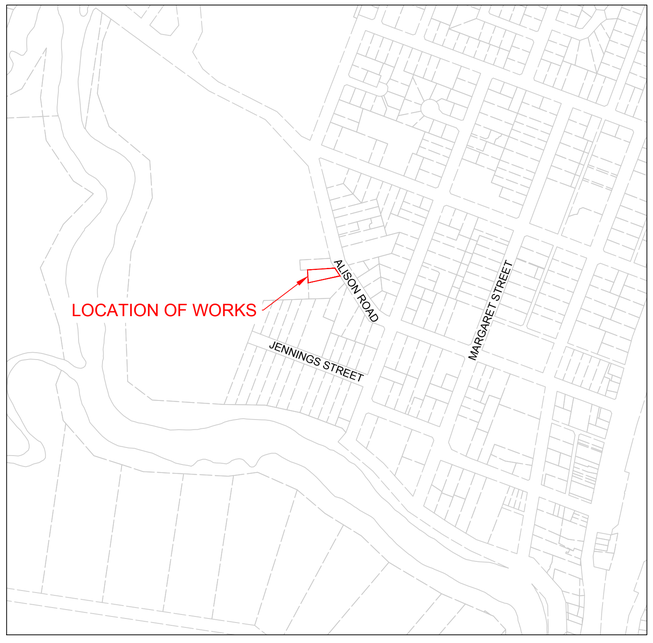
MULTI-DWELLING RESIDENTIAL DEVELOPMENT

LOT 2 DP 604561

49 ALISON ROAD, WYONG

DRAWING SCHEDULE		
Sheet Number	Sheet Title	Revision
C01	22081.RevB - COVER SHEET	B
C02	22081.RevB - STORMWATER MANAGEMENT PLAN	B
C03	22081.RevB - TYPICAL SECTIONS	B
C04	22081.RevB - EROSION AND SEDIMENT CONTROL PLAN	B
C05	22081.RevB - EROSION AND SEDIMENT CONTROL DETAILS	B
C06	22081.RevB - EROSION AND SEDIMENT CONTROL NOTES	B



issue	date	comment
B	02.05.23	AMENDED ARCHITECTURALS
A	26.05.22	ISSUE FOR DA

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DATE	CERTIFIED	ISSUE
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project
MULTI-DWELLING RESIDENTIAL DEVELOPMENT

LOT 2 DP 604561
49 ALISON ROAD, WYONG

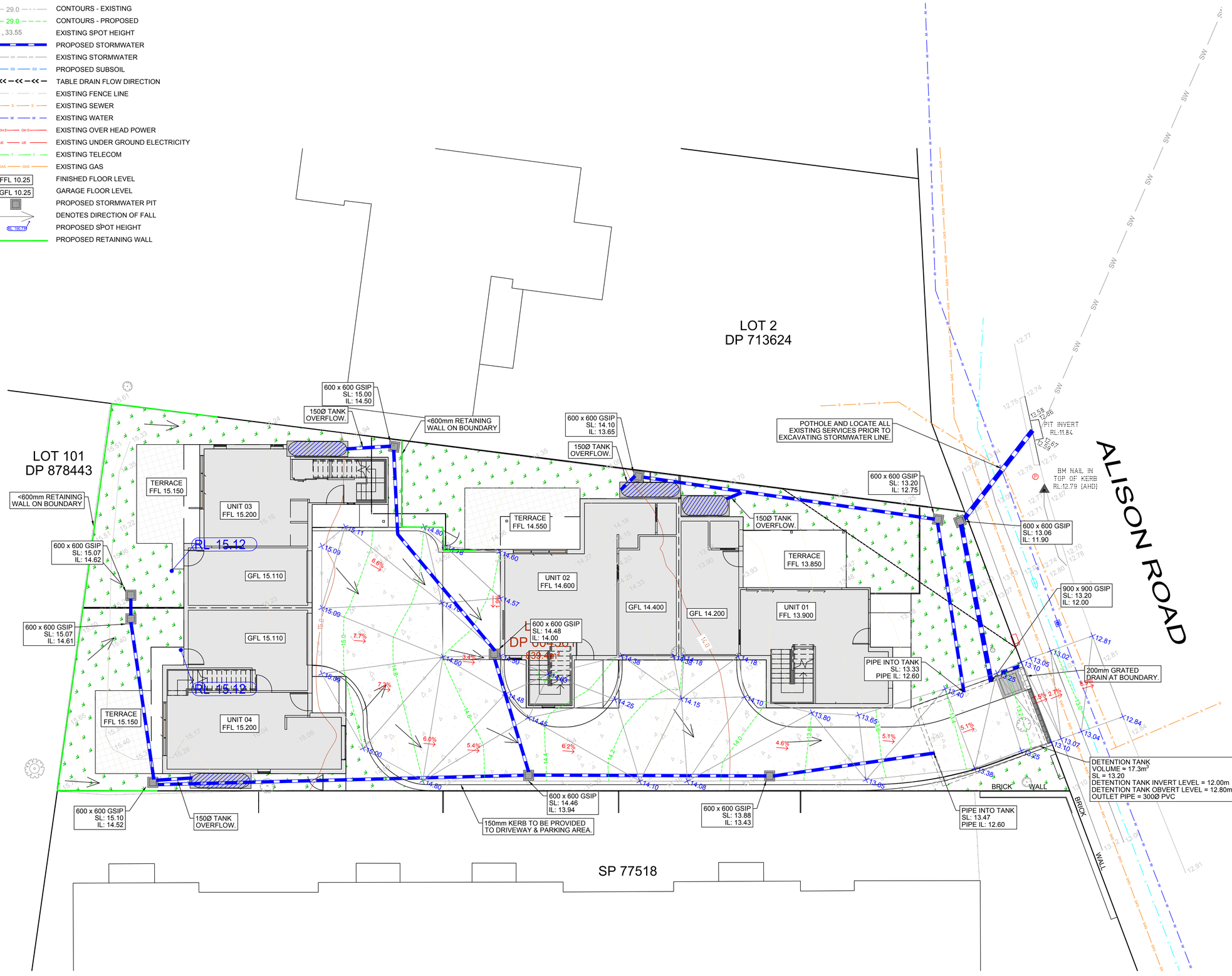
client
GHANSHYAM PROJECTS PTY LTD

drawing
COVER SHEET

job no.	
22081	
date: May 22	scales: AS NOTED
engineer: MJM	drawn: MM
drawing no.: C01 OF C06	issue: A

LEGEND

- CONTOURS - EXISTING
- CONTOURS - PROPOSED
- EXISTING SPOT HEIGHT
- PROPOSED STORMWATER
- EXISTING STORMWATER
- PROPOSED SUBSOIL
- TABLE DRAIN FLOW DIRECTION
- EXISTING FENCE LINE
- EXISTING SEWER
- EXISTING WATER
- EXISTING OVER HEAD POWER
- EXISTING UNDER GROUND ELECTRICITY
- EXISTING TELECOM
- EXISTING GAS
- FFL 10.25 — FINISHED FLOOR LEVEL
- GFL 10.25 — GARAGE FLOOR LEVEL
- PROPOSED STORMWATER PIT
- DENOTES DIRECTION OF FALL
- PROPOSED SPOT HEIGHT
- PROPOSED RETAINING WALL



GENERAL NOTES

- DRAWINGS ARE CONCEPTUAL ONLY AND HAVE BEEN PREPARED TO SUPPORT A DEVELOPMENT APPLICATION TO COUNCIL. DETAILS MAY CHANGE AS PART OF THE FUTURE DETAILED DESIGN WORK.
- DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL PLANS BY RAINSFORD ARCHITECTURE + DESIGN.
- ARCHITECTURAL BASE ADOPTED FROM DESIGN BY RAINSFORD ARCHITECTURE + DESIGN.
- SURVEY INFORMATION ADOPTED FROM SURVEY BY GEBERN SURVEYS.
- ALL LEVELS ARE APPROXIMATE ONLY, CONFIRM ON SITE.
- ALL LEVELS ARE FINISHED PAVEMENT OR LAWN LEVELS.
- EXISTING LEVELS SHOWN eg. 4.79E NEW LEVELS SHOWN eg. *20.84.

DEVELOPMENT SUMMARY

- THE PROPOSED DEVELOPMENT CONSISTS OF THE CONSTRUCTION OF FOUR UNITS AND ASSOCIATED DRIVEWAY AND LANDSCAPING.

SITE ANALYSIS

- THE SITE CONSISTS SLIGHT GRADE, SLOPING TOWARDS THE CENTER OF THE SITE.
- A TYPICAL GRADE WOULD BE APPROXIMATELY 5.5% WITH LEVELS RANGING FROM 15.76 TO 13.06 AHD.

STORMWATER MANAGEMENT STRATEGY

- ALL WORKS IN ACCORDANCE WITH AS 3500, COUNCIL DEVELOPMENT CONTROL PLANS, HWC REQUIREMENTS AND PROPRIETARY MANUFACTURER'S RECOMMENDATIONS.
- RUNOFF FROM THE ROOF AREAS FOR THE NEW DWELLINGS IS TO BE COLLECTED AND DIRECTED TO RAINWATER REUSE TANKS AS SHOWN ON THE PLAN. LOCATION OF TANKS & TANK TYPES CAN BE VARIED AT OWNER'S DISCRETION.
- ROOF WATER IS TO PASS THROUGH A SUITABLE FIRST FLUSH BYPASS DEVICE PRIOR TO ENTERING THE TANK.
- HARVESTED RAINWATER IS TO BE REUSED FOR EXTERNAL IRRIGATION, TOILET FLUSHING AND CLOTHES WASHING.
- TANK OVERFLOW IS TO BE CONVEYED THROUGH THE INTERNAL STORMWATER DRAINAGE NETWORK TO THE DETENTION TANK AS SHOWN ON THE PLAN.
- ALL STORMWATER PIPES, INCLUDING DOWNPIPES AND RAINWATER TANK OVERFLOW PIPES, TO BE 100Ø UPVC STORMWATER GRADE, U.N.O. JOINTED & INSTALLED TO MANUFACTURER'S RECOMMENDATIONS
- ALL DOWNPIPES TO BE FITTER WITH LEAF EATER™ RAIN HEAD TO PROVIDE INSECT, VERMIN AND DEBRIS CONTROL
- UPVC PIPES TO CONFROM TO AS 1260.
- OVERFLOWS FROM THE DETENTION TANK IS TO DISCHARGE TO THE NOMINATED DISCHARGE POINT AS SHOWN ON THE PLAN.
- MINIMUM COVER TO STORMWATER PIPES TO BE AS FOLLOWS:
  - TRAFFICABLE AREAS - 450mm
  - LANDSCAPED AREAS - 300mm

PIPES TO BE CONCRETE ENCASED IF MINIMUM COVERS CANNOT BE OBTAINED IN TRAFFICABLE AREAS, REFER TO CLAUSE 3.8 AS 3500.3 ALTERNATIVELY USED USE UPVC SEWER GRADE PIPES UNDER ROADS AND BUILDINGS.

STORMWATER

SITE AREA	≈ 839.4m²
IMPERVIOUS AREA (ROOF)	≈ 318.2m²
IMPERVIOUS AREA (TERRACE)	≈ 38.1m²
IMPERVIOUS AREA (DRIVEWAY)	≈ 276.1m²
PERVIOUS AREA (GRASS)	≈ 207m²
TOTAL IMPERVIOUS AREA	≈ 632.4m²
IMPERVIOUS AREA RATIO	≈ 0.75
PRE-DEVELOPED AVG. SLOPE	= 5.5%
DEVELOPED AVG. SLOPE	= 5.0%

REFER TO TABLE ON DRAWING C04 FOR PRE AND POST DEVELOPED (UNDETAINED) AND POST DEVELOPED (DETAINED) FLOWS BASED ON THE ABOVE AREA CALCULATIONS.

DETENTION REQUIRED	= 16.75m³
TOTAL DETENTION PROVIDED	= 17.30m³

RAINWATER TANK SIZE TO BE 4,000L AS PER ARCHITECT PLAN.

STORMWATER MANAGEMENT PLAN

SCALE 1:100 (A1)

2 1 0 2 4 6
1:100 (A1)

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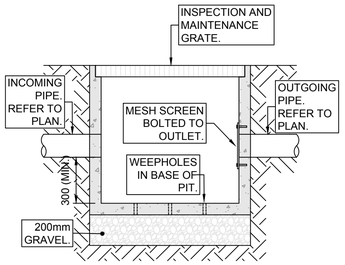
LOT 2 DP 604561
49 ALISON ROAD, WYONG

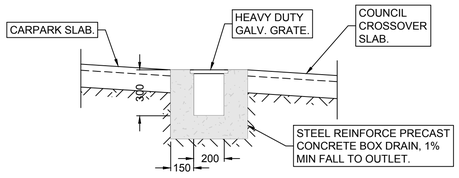
client: GHANSHYAM PROJECTS PTY LTD

drawing: STORMWATER MANAGEMENT PLAN

job no.	
22081	
date: May 22	scales: AS NOTED
engineer: MJM	drawn: MM
drawing no.: C02 OF C06	issue: A

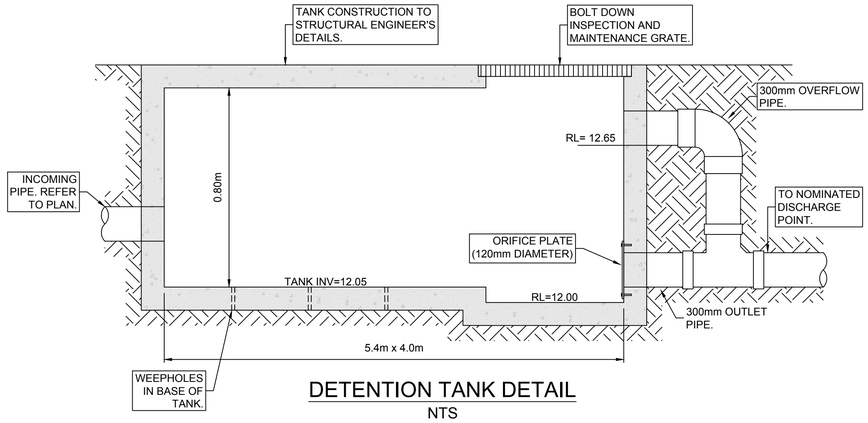


SEDIMENT TRAP PIT DETAIL
NTS



GRATED DRAIN DETAIL
SCALE: 1:20

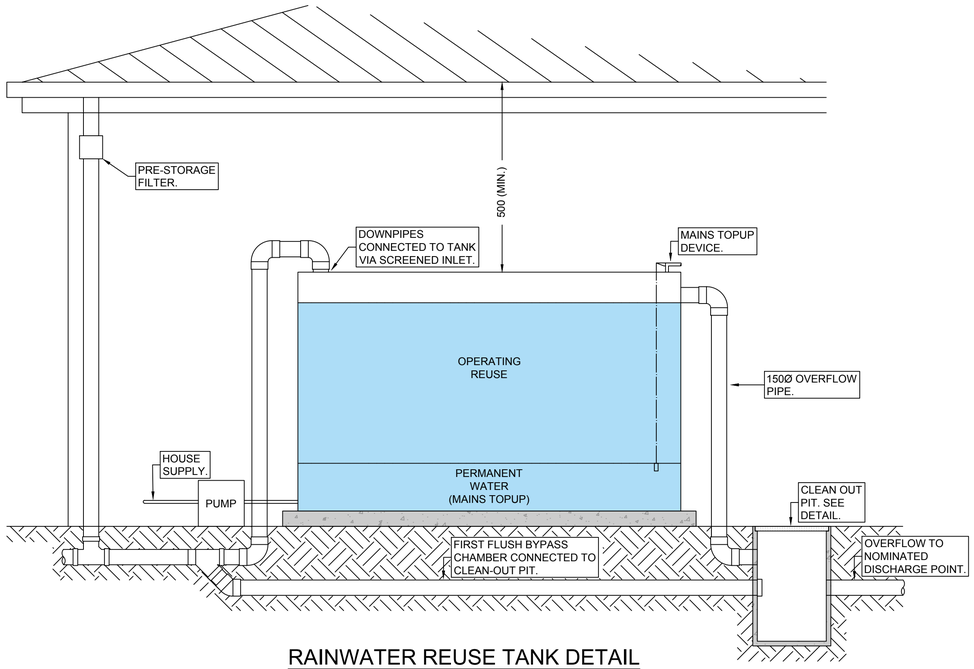
NOTES
DETENTION TANK MATERIAL WILL BE SELECTED AT CC STAGE. THIS INCLUDES IF TANK WILL BE PRECAST, CAST IN SITU, BLOCKS OR ANY EQUIVALENT ALTERNATIVE.



DETENTION TANK DETAIL
NTS

NOTES
REFER TO TABLE ON BELOW FOR PRE DEVELOPED, POST DEVELOPED (UNDETAINED) AND POST DEVELOPED (DETAINED) FLOWS FOR THE ANNUAL EXCEEDANCE PROBABILITY (AEP).

AEP	ARI	EY	Allowable Pre Developed Flow (m3/s)	Post Developed Flow (m3/s)	Detained Post Developed Flow (m3/s)	TWL
1	100		0.052	0.066	0.05	12.78
2	50		0.043	0.056	0.035	12.74
5	20		0.03	0.044	0.022	12.59
10	10		0.023	0.036	0.019	12.44
20	5		0.016	0.029	0.016	12.32



RAINWATER REUSE TANK DETAIL
NTS

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drawing
TYPICAL SECTIONS

job no.	22081
date	May 22
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engineer	MJM
drawn	MM
drawing no.	C03 OF C06
issue	A

LOT 101
DP 878443

LOT 2
DP 713624

LOT 2
DP 604561
639.4m²

SP 77518

ALISON ROAD

TERRACE
FFL 15.150

UNIT 03
FFL 15.200

GFL 15.110

GFL 15.110

TERRACE
FFL 15.150

UNIT 04
FFL 15.200

TERRACE
FFL 14.550

UNIT 02
FFL 14.600

GFL 14.400

GFL 14.200

TERRACE
FFL 13.850

UNIT 01
FFL 13.900

INSTALL AND MAINTAIN
SEDIMENT FENCING.

INSTALL AND MAINTAIN
MESH AND GRAVEL
INLET FILTER.

INVERT
RL.11.84

BM NAIL IN
TOP OF KERB
RL.12.79 (AHD)

SOIL STOCKPILE (INDICATIVE LOCATION).
EXACT LOCATION TO BE DETERMINED ON-SITE
IN ACCORDANCE WITH SITE FORMAN.

INSTALL AND MAINTAIN
STABILISED SITE ACCESS.

INSTALL AND MAINTAIN
SEDIMENT FENCING.

INSTALL AND MAINTAIN
GEOTEXTILE INLET FILTER.

BRICK WALL

BRICK WALL

LEGEND

- SEDIMENT FENCE (SD6-8)
- MESH AND GRAVEL INLET FILTER (SD6-11)
- GEOTEXTILE INLET FILTER (SD6-12)
- STABILISED SITE ACCESS (SD6-14
- STOCKPILE (SD4-1)

CONSTRUCTION SEQUENCE

1. CONSTRUCT STABILISED SITE ACCESS.
2. INSTALL CLEAN WATER DIVERSION DRAINS UP-SLOPE OF PROPOSED EARTHWORKS. (IF REQUIRED)
3. INSTALL SEDIMENT FENCING DOWN-SLOPE OF PROPOSED EARTHWORKS.
4. CONSTRUCT DIRTY WATER DIVERSION DRAINS. (IF REQUIRED)
5. CONSTRUCT REMAINING CONTROL MEASURES AS SHOWN ON PLAN AND TO COUNCIL'S ON-SITE REQUIREMENTS.
6. CARRY OUT CLEARING AND STRIPPING WORKS. MINIMISE DISTURBANCE TO AREAS OUTSIDE EARTHWORKS EXTENT.
7. REPLACE TOPSOIL AND SEED DISTURBED AREAS.
8. APPLY PERMANENT STABILISATION (LANDSCAPING)
9. REMOVE SEDIMENT CONTROLS.

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1:100 (A1)

2 1 0 2 4 6
1:100 (A1)

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EROSION AND SEDIMENT CONTROL PLAN

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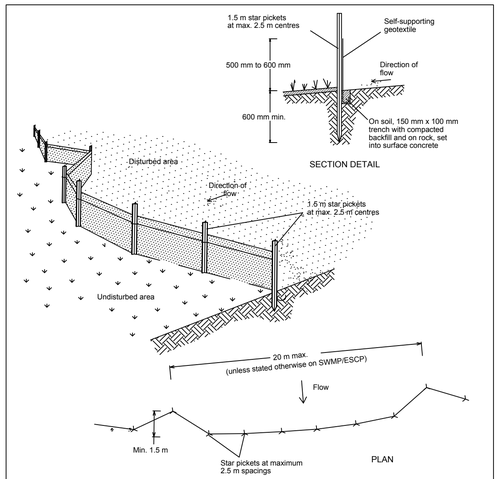
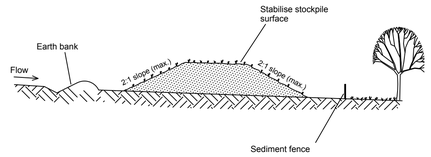


Construction Notes

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 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metre long star pickets into ground at 2.5 metre 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 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

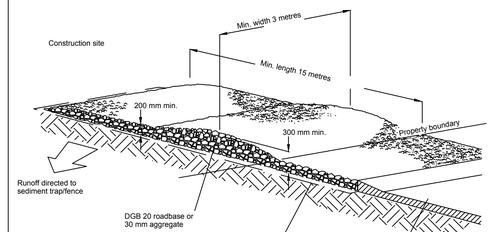
SEDIMENT FENCE SD 6-8



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 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 banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

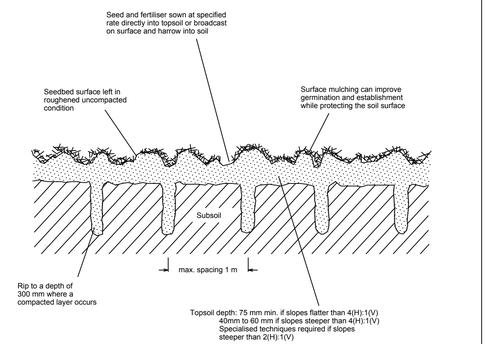
STOCKPILES SD 4-1



Construction Notes

1. Strip the topsoil, level the site and compact the subgrade.
2. Cover the area with needle-punched geotextile.
3. Construct a 200 mm thick pad over the geotextile using road base or 30 mm aggregate.
4. Ensure the structure is at least 15 metres long or to building alignment and at least 3 metres wide.
5. Where a sediment fence joins onto the stabilised access, construct a hump in the stabilised access to divert water to the sediment fence

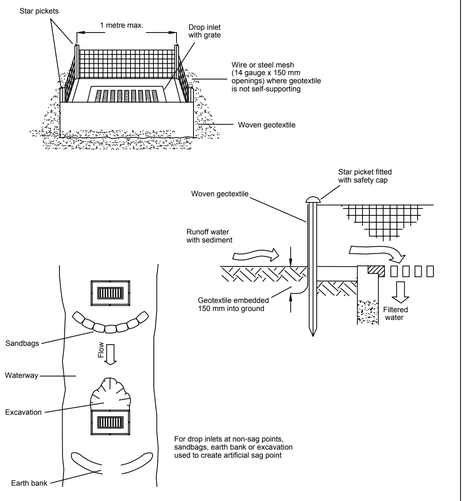
STABILISED SITE ACCESS SD 6-14



Construction Notes

1. Loosen compacted soil before sowing any seed. If necessary, rip the soil to a depth of 300 mm. Avoid rotary hoe cultivation.
2. Work the ground only as much as necessary to achieve the desired tilth and prepare a good seedbed.
3. Avoid cultivation in very wet or very dry conditions.
4. Cultivate on or close to the contour where possible, not up and down the slope.

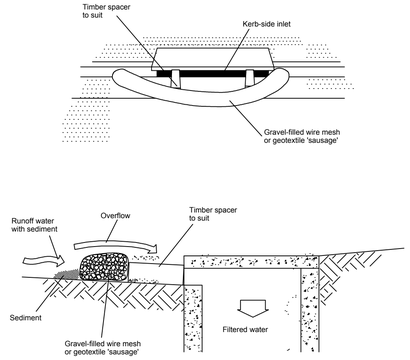
SEEDBED PREPARATION SD 7-1



Construction Notes

1. Fabricate a sediment barrier made from geotextile or straw bales.
2. Follow Standard Drawing 6-7 and Standard Drawing 6-8 for installation procedures for the straw bales or geofabric. Reduce the picket spacing to 1 metre centres.
3. In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
4. Do not cover the inlet with geotextile unless the design is adequate to allow for all waters to bypass it.

GEOTEXTILE INLET FILTER SD 6-12

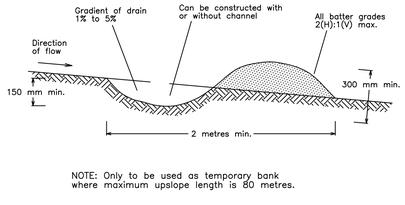


NOTE: This practice only to be used where specified in an approved SWMP/ESCP.

Construction Notes

1. Install filters to kerb inlets only at sag points.
2. Fabricate a sleeve made from geotextile or wire mesh longer than the length of the inlet pit and fill it with 25 mm to 50 mm gravel.
3. Form an elliptical cross-section about 150 mm high x 400 mm wide.
4. Place the filter at the opening leaving at least a 100-mm space between it and the kerb inlet. Maintain the opening with spacer blocks.
5. Form a seal with the kerb to prevent sediment bypassing the filter.
6. Sandbags filled with gravel can substitute for the mesh or geotextile providing they are placed so that they firmly abut each other and sediment-laden waters cannot pass between.

MESH AND GRAVEL INLET FILTER SD 6-11



NOTE: Only to be used as temporary bank where maximum upslope length is 80 metres.

Construction Notes

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.

EARTH BANK (LOW FLOW) SD 5-5

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drawing: EROSION AND SEDIMENT CONTROL DETAILS

job no.	
22081	
date: May 22	scales: AS NOTED
engineer: MJM	drawn: MM
drawing no.: C05 OF C06	issue: A

EROSION & SEDIMENT CONTROL NOTES

GENERAL

1. SEDIMENT, INCLUDES, BUT IS NOT LIMITED TO, CLAY, SILT, SAND, GRAVEL, SOIL, MUD, CEMENT, AND CERAMIC WASTE.
2. ANY MATERIAL DEPOSITED ON/IN ANY CONSERVATION AREA/LOT/ EASEMENT FROM WORKS ASSOCIATED WITH THE DEVELOPMENT SHALL BE REMOVED IMMEDIATELY BY MEASURES INVOLVING MINIMAL GROUND AND/OR VEGETATION DISTURBANCE AND NO MACHINERY, OR FOLLOWING DIRECTIONS BY COUNCIL AND/OR WITHIN A TIMEFRAME ADVISED BY COUNCIL.
3. VEHICLE ACCESS AND ALL SERVICES ADJOINING ON ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION WORKS SHALL BE MAINTAINED AT ALL TIMES.
4. ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

THE EROSION AND SEDIMENT CONTROL PLAN/SOIL AND WATER MANAGEMENT PLAN (ESCP/SWMP)

1. THE ESCP AND ITS ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTANTLY MONITORED, REVIEWED, AND MODIFIED AS REQUIRED TO CORRECT DEFICIENCIES. COUNCIL HAS THE RIGHT TO REQUEST CHANGES IF, IN ITS OPINION, THE MEASURES THAT ARE PROPOSED OR HAVE BEEN INSTALLED ARE INADEQUATE TO PREVENT POLLUTION.
2. PRIOR TO ANY ACTIVITIES ONSITE, THE RESPONSIBLE PERSON(S) IS TO BE NOMINATED. THE RESPONSIBLE PERSON(S) SHALL BE RESPONSIBLE FOR THE EROSION AND SEDIMENT CONTROL (ESC) MEASURES ONSITE. THE NAME, ADDRESS AND 24 HOUR CONTACT DETAILS OF THE PERSON(S) SHALL BE PROVIDED TO COUNCIL IN WRITING. COUNCIL SHALL BE ADVISED WITHIN 48 HOURS OF ANY CHANGES TO THE RESPONSIBLE PERSON(S), OR THEIR CONTACT DETAILS, IN WRITING.
3. AT LEAST 14 DAYS BEFORE THE NATURAL SURFACE IS DISTURBED IN ANY NEW STAGE, THE CONTRACTOR SHALL SUBMIT TO THE CERTIFIER, A PLAN SHOWING ESC MEASURES FOR THAT STAGE. THE DEGREE OF DESIGN DETAIL SHALL VARY BASED ON THE EXTENT OF THE AREA TO BE DISTURBED.
4. AT ANY TIME DURING ONSITE WORKS, THE CONTRACTOR SHALL BE ABLE TO DEMONSTRATE THAT ADEQUATE CAPACITY EXISTS FOR SEDIMENT CAPTURE AND TREATMENT IN ONSITE EROSION AND SEDIMENT CONTROL MEASURES FOR THE AREA DISTURBED AND THE SEDIMENT TYPE EXPOSED.
5. NO SITE WORKS SHALL COMMENCE PRIOR TO THE APPROVAL OF THE DETAILED ENGINEERING DESIGN. ITS IMPLEMENTATION SHALL BE SUPERVISED BY PERSONNEL WITH APPROPRIATE QUALIFICATIONS AND/OR EXPERIENCE IN ESC ON CONSTRUCTION SITES.
6. THE APPROVED ESCP SHALL BE AVAILABLE ON-SITE FOR INSPECTION BY COUNCIL OFFICERS WHILE WORK ACTIVITIES ARE OCCURRING.
7. THE APPROVED ESCP SHALL BE KEPT UP TO DATE AND SHOW A TIMELINE OF INSTALLATION, MAINTENANCE AND REMOVAL EROSION AND SEDIMENT CONTROLS.
8. ALL ESC MEASURES SHALL BE APPROPRIATE FOR THE SEDIMENT TYPE(S) OF THE SOILS ONSITE, IN ACCORDANCE WITH THE BLUE BOOK (MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION. LANDCOM, 2004), OR OTHER CURRENT RECOGNISED INDUSTRY STANDARD FOR EROSION AND SEDIMENT CONTROL FOR AUSTRALIAN CONDITIONS. THIS INCLUDES SEDIMENT TRAPS AND LINING OF CHANNELS.
9. ADEQUATE SITE DATA, INCLUDING SOIL DATA FROM A NATA APPROVED LABORATORY, SHALL BE OBTAINED TO ALLOW THE PREPARATION OF AN APPROPRIATE ESCP, AND ALLOW THE SELECTION, DESIGN AND SPECIFICATION OF REQUIRED ESC MEASURES.
10. THE ESCP SHALL CLEARLY STATE THAT NO LAND-DISTURBING ACTIVITIES ON THE SITE SHALL OCCUR UNTIL ALL PERIMETER ESC MEASURES, SEDIMENT BASINS, AND ASSOCIATED TEMPORARY DRAINAGE CONTROLS, HAVE BEEN CONSTRUCTED AND ARE FULLY OPERATIONAL, IN ACCORDANCE WITH CURRENT BEST PRACTICE ESC. THIS IS UNLESS SUCH CLEARING IS REQUIRED FOR THE PURPOSE OF INSTALLING SUCH MEASURES, IN WHICH CASE ONLY THE MINIMUM CLEARING REQUIRED TO INSTALL SUCH MEASURES SHALL OCCUR.
11. ADDITIONAL ESC MEASURES SHALL BE IMPLEMENTED, AND A REVISED ESCP IS TO BE SUBMITTED FOR APPROVAL TO THE CERTIFIER (WITHIN FIVE (5) BUSINESS DAYS OF ANY SUCH AMENDMENTS) IN THE EVENT THAT:
    - 11.1. THERE IS A HIGH PROBABILITY THAT SERIOUS OR MATERIAL ENVIRONMENTAL HARM MAY OCCUR AS A RESULT OF SEDIMENT LEAVING THE SITE; OR
    - 11.2. THE IMPLEMENTED WORKS FAIL TO ACHIEVE COUNCIL'S WATER QUALITY OBJECTIVES SPECIFIED IN THESE CONDITIONS; OR
    - 11.3. SITE CONDITIONS SIGNIFICANTLY CHANGE; OR
    - 11.4. SITE INSPECTIONS INDICATE THAT THE IMPLEMENTED WORKS ARE FAILING TO ACHIEVE THE “OBJECTIVE” OF THE ESCP.
12. A COPY OF ANY AMENDED ESCP SHALL BE FORWARDED TO AN APPROPRIATE COUNCIL OFFICER, WITHIN FIVE (5) BUSINESS DAYS OF ANY SUCH AMENDMENTS.

SITE ESTABLISHMENT

1. ALL OFFICE FACILITIES AND OPERATIONAL ACTIVITIES SHALL BE LOCATED SUCH THAT ANY EFFLUENT, INCLUDING WASH-DOWN WATER, CAN BE TOTALLY CONTAINED AND TREATED WITHIN THE SITE.
2. ALL REASONABLE AND PRACTICABLE MEASURES SHALL BE TAKEN TO ENSURE STORMWATER RUNOFF FROM ACCESS ROADS AND STABILISED ENTRY/EXIT SYSTEMS, DRAINS TO AN APPROPRIATE SEDIMENT CONTROL DEVICE.
3. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED ESCP (AS AMENDED FROM TIME TO TIME) UNLESS CIRCUMSTANCES ARISE WHERE:
    - 3.1. COMPLIANCE WITH THE ESCP WOULD INCREASE THE POTENTIAL FOR ENVIRONMENTAL HARM AS ASSESSED BY AN AUTHORITY RECOGNISED BY COUNCIL; OR
    - 3.2. CIRCUMSTANCES CHANGE DURING CONSTRUCTION AND THOSE CIRCUMSTANCES COULD NOT HAVE BEEN FORESEEN; OR
    - 3.3. COUNCIL OR ITS REPRESENTATIVE DETERMINES THAT UNACCEPTABLE OFF-SITE SEDIMENTATION IS OCCURRING AS A RESULT OF A LAND-DISTURBING ACTIVITY. IN EITHER CASE, THE PERSON(S) RESPONSIBLE MAY BE REQUIRED TO TAKE ADDITIONAL, OR ALTERNATIVE PROTECTIVE ACTION, AND/OR UNDERTAKE REASONABLE RESTORATION WORKS WITHIN THE TIMEFRAME SPECIFIED BY THE COUNCIL.
4. THE APPLICANT SHALL ENSURE AN ADEQUATE SUPPLY OF ESC, AND APPROPRIATE POLLUTION CLEAN-UP MATERIALS ARE AVAILABLE ON-SITE AT ALL TIMES.
5. ALL TEMPORARY EARTH BANKS, FLOW DIVERSION SYSTEMS, AND SEDIMENT BASIN EMBANKMENTS SHALL BE MACHINE-COMPACTED, SEEDED AND MULCHED WITHIN TEN (10) DAYS OF FORMATION FOR THE PURPOSE OF ESTABLISHING A VEGETATIVE COVER, OR LINED APPROPRIATELY
6. SEDIMENT DEPOSITED OFF SITE AS A RESULT OF ON-SITE ACTIVITIES SHALL BE COLLECTED AND THE AREA CLEANED/REHABILITATED AS SOON AS REASONABLE AND PRACTICABLE.
7. CONCRETE WASTE AND CHEMICAL PRODUCTS, INCLUDING PETROLEUM AND OIL-BASED PRODUCTS, SHALL BE PREVENTED FROM ENTERING ANY INTERNAL OR EXTERNAL WATER BODY, OR ANY EXTERNAL DRAINAGE SYSTEM, EXCLUDING THOSE ON-SITE WATER BODIES SPECIFICALLY DESIGNED TO CONTAIN AND/OR TREAT SUCH MATERIAL. APPROPRIATE MEASURES SHALL BE INSTALLED TO TRAP THESE MATERIALS ONSITE.
8. BRICK, TILE OR MASONRY CUTTING SHALL BE CARRIED OUT ON A PERVIOUS SURFACE (E.G. GRASS OR OPEN SOIL), OR IN SUCH A MANNER THAT ANY RESULTING SEDIMENT-LADEN RUNOFF IS PREVENTED FROM DISCHARGING INTO A GUTTER, DRAIN OR WATER. APPROPRIATE MEASURES SHALL BE INSTALLED TO TRAP THESE MATERIALS ONSITE.
9. NEWLY SEALED HARD-STAND AREAS (E.G. ROADS, DRIVEWAYS AND CAR PARKS) SHALL BE SWEPT THOROUGHLY AS SOON AS PRACTICABLE AFTER SEALING/SURFACING TO MINIMISE THE RISK OF COMPONENTS OF THE SURFACING COMPOUND ENTERING STORMWATER DRAINS.
10. STOCKPILES OF ERODIBLE MATERIAL SHALL BE PROVIDED WITH AN APPROPRIATE PROTECTIVE COVER (SYNTHETIC OR ORGANIC) IF THE MATERIALS ARE LIKELY TO BE STOCKPILED FOR MORE THAN 10 DAYS.
11. STOCKPILES, TEMPORARY OR PERMANENT, SHALL NOT BE LOCATED IN AREAS IDENTIFIED AS NO-GO ZONES (INCLUDING, BUT NOT LIMITED TO, RESTRICTED ACCESS AREAS, BUFFER ZONES, OR AREAS OF NON-DISTURBANCE) ON THE ESCP.

SITE CLEARING AND MULCHING

1. BULK TREE CLEARING AND GRUBBING OF THE SITE SHALL BE IMMEDIATELY FOLLOWED BY SPECIFIED TEMPORARY EROSION CONTROL MEASURES (E.G. TEMPORARY GRASSING OR MULCHING) PRIOR TO COMMENCEMENT OF EACH STAGE OF CONSTRUCTION WORKS;
2. TREES AND VEGETATION CLEARED FROM THE SITE SHALL BE MULCHED ONSITE WITHIN 7 DAYS OF CLEARING.

MANAGEMENT OF DUST

1. APPROPRIATE MEASURES SHALL BE UNDERTAKEN TO CONTROL ANY DUST ORIGINATING DUE TO THE MULCHING OF VEGETATION ONSITE;
2. PRIORITY SHALL BE GIVEN TO THE PREVENTION, OR AT LEAST THE MINIMISATION, OF SOIL EROSION, RATHER THAN THE TRAPPING OF DISPLACED SEDIMENT. SUCH A CLAUSE SHALL NOT REDUCE THE RESPONSIBILITY TO APPLY AND MAINTAIN, AT ALL TIMES, ALL NECESSARY SEDIMENT CONTROL MEASURES.
3. MEASURES USED TO CONTROL WIND EROSION SHALL BE APPROPRIATE FOR THE LOCATION AND PREVENT SOIL EROSION AT ALL TIMES, INCLUDING WORKING HOURS, OUT OF HOURS, WEEKENDS, PUBLIC HOLIDAYS, AND DURING ANY OTHER SHUTDOWN PERIODS.
4. THE APPLICATION OF LIQUID OR CHEMICAL-BASED DUST SUPPRESSION MEASURES SHALL ENSURE THAT SEDIMENT-LADEN RUNOFF RESULTING FROM SUCH MEASURES (E.G. RUNOFF OF EXCESS WATER) DOES NOT CREATE A TRAFFIC OR ENVIRONMENTAL HAZARD.

REVEGETATION/STABILISATION

1. ALL CUT AND FILL EARTH BATTERS LESS THAN 3M IN ELEVATION SHALL BE TOPSOILED, AND GRASS SEEDED/HYDROMULCHED WITHIN 10 DAYS OF COMPLETION OF GRADING IN CONSULTATION WITH COUNCIL.
2. THE LMCC SEED MIX SHALL BE USED UNLESS STATED ON THE ESCP/SWMP.
3. THE PH LEVEL OF TOPSOIL SHALL BE APPROPRIATE TO ENABLE ESTABLISHMENT AND GROWTH OF SPECIFIED VEGETATION PRIOR TO INITIATING THE ESTABLISHMENT OF VEGETATION.
4. NON REWETTABLE BINDER TO BE USED IN ALL HYDROMULCH/HYDROSEED/POLYMER MIXES ON SLOPES OR WORKS ADJACENT TO A WATER COURSE.
5. SOIL AMELIORANTS SHALL BE ADDED TO THE SOIL IN ACCORDANCE WITH AN APPROVED LANDSCAPE PLAN, VEGETATION MANAGEMENT PLAN, AND/OR SOIL ANALYSIS.
6. SURFACE SOIL DENSITY, COMPACTION AND SURFACE ROUGHNESS SHALL BE ADJUSTED PRIOR TO SEEDING/PLANTING IN ACCORDANCE WITH AN APPROVED LANDSCAPE PLAN, VEGETATION MANAGEMENT PLAN, AND/OR SOIL ANALYSIS.
7. PROCEDURES FOR INITIATING A SITE SHUTDOWN, WHETHER PROGRAMMED OR UN-PROGRAMMED, SHALL INCORPORATE REVEGETATION OF ALL SOIL DISTURBANCES UNLESS OTHERWISE APPROVED BY COUNCIL. THE STABILISATION WORKS SHALL NOT RELY UPON THE LONGEVITY OF NON-VEGETATED EROSION CONTROL BLANKETS, OR TEMPORARY SOIL BINDERS.

INSPECTION AND MAINTENANCE

1. THE APPLICANT SHALL ENSURE THAT APPROPRIATE PROCEDURES AND SUITABLY QUALIFIED PERSONNEL ARE ENGAGED TO PLAN AND CONDUCT SITE INSPECTIONS AND WATER QUALITY MONITORING THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PHASE.
2. ALL ESC MEASURES SHALL BE INSPECTED:
    - 2.1. AT LEAST DAILY (WHEN WORK IS OCCURRING ON-SITE); AND
    - 2.2. AT LEAST WEEKLY (WHEN WORK IS NOT OCCURRING ON-SITE); AND
    - 2.3. WITHIN 24HRS OF EXPECTED RAINFALL; AND
    - 2.4. WITHIN 18HRS OF A RAINFALL EVENT THAT CAUSES RUNOFF ON THE SITE.
3. WRITTEN RECORDS SHALL BE KEPT ONSITE OF ESC MONITORING AND MAINTENANCE ACTIVITIES CONDUCTED DURING THE CONSTRUCTION AND MAINTENANCE PERIODS, AND BE AVAILABLE TO COUNCIL OFFICERS ON REQUEST.
4. ALL SITE MONITORING DATA INCLUDING RAINFALL RECORDS, DATES OF WATER QUALITY TESTING, TESTING RESULTS AND RECORDS OF CONTROLLED WATER RELEASES FROM THE SITE, SHALL BE KEPT IN AN ON-SITE REGISTER. THE REGISTER IS TO BE MAINTAINED UP TO DATE FOR THE DURATION OF THE APPROVED WORKS AND BE AVAILABLE ON-SITE FOR INSPECTION BY COUNCIL OFFICERS ON REQUEST.
5. ALL ENVIRONMENTAL INCIDENTS SHALL BE RECORDED IN A FIELD LOG THAT SHALL REMAIN ACCESSIBLE TO ALL RELEVANT REGULATORY AUTHORITIES ON REQUEST.

issue	date	comment
B	02.05.23	AMENDED ARCHITECTURALS
A	26.05.22	ISSUE FOR DA

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED BELOW

DATE	CERTIFIED	ISSUE
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NORTH

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drawing: EROSION AND SEDIMENT CONTROL NOTES

job no.	22081
date: May 22	scales: AS NOTED
engineer: MJM	drawn: MM
drawing no.: C06 OF C06	issue: A