

LOCATION: C:\users\cowlint\data\local\project\twis\jacobs\_anz\_ie\40546552\IW2596100-JAB1-CG-DRG-0000.dwg  
DATE: 28/10/2021 8:19:28 AM NAME: COWLING, ROBERT

TENDER ISSUE

# Jacobs

ABN 37 001 024 095 and ACN 001 024 095  
Jacobs Group (Australia) Pty Ltd  
2 James Street  
CAIRNS, QLD 4870  
AUSTRALIA

Tel: +61 7 4031 4599  
Fax: +61 7 4031 3967  
Web: [www.jacobs.com](http://www.jacobs.com)



## GENERAL, SITE PREPARATION AND CONTROLS NOTES

1. THE CONTRACTOR SHOULD MAKE ANY ALLOWANCE THEY DEEM NECESSARY TO SATISFACTORILY INSTALL THE WORKS (PARTICULARLY THE SOIL NAILS AND ANCHORS). IT IS RECOMMENDED THAT A SITE INSPECTION BE UNDERTAKEN PRIOR TO SUBMITTING A TENDER FOR THE WORKS.
2. THE QUALITY SYSTEM REQUIREMENTS AND QUALITY OF MATERIALS AND WORKMANSHIP OF ALL WORKS SHALL COMPLY WITH THE REQUIREMENTS OF THE TECHNICAL SPECIFICATION AND THE DRAWINGS.
3. THE DRAWINGS AND TECHNICAL SPECIFICATION SHALL BE USED IN CONJUNCTION WITH ONE ANOTHER. FAILURE TO READ THE TECHNICAL SPECIFICATION PRIOR TO PERFORMING ANY WORK DOES NOT RELIEVE THE CONTRACTOR OR SUBCONTRACTORS FROM THE RESPONSIBILITY OF CONSTRUCTING THE WORK IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION.
4. WHERE TRADE NAMES HAVE BEEN USED FOR A PRODUCT, EQUIVALENT PRODUCTS MAY BE USED, SUBJECT TO APPROVAL BY THE PRINCIPAL'S GEOTECHNICAL ENGINEER.
5. SITE WORKS SHALL CEASE FOLLOWING ANY PERIOD OF RAINFALL EXCEEDING 40mm WITH A 24 HOUR PERIOD. WORK SHALL NOT COMMENCE UNTIL THERE HAS BEEN AT LEAST 24 HOURS WITHOUT ANY RAINFALL OR OTHERWISE AS ADVISED BY THE PRINCIPAL'S GEOTECHNICAL ENGINEER.
6. IF DURING THE WORKS THERE ARE ANY SIGNS OF TENSION CRACKING OR INDICATIONS OF SLOPE MOVEMENT, THEN WORKS ARE TO CEASE IMMEDIATELY AND THE PRINCIPAL'S GEOTECHNICAL ENGINEER NOTIFIED SO AN INSPECTION CAN BE UNDERTAKEN. THIS CONSTITUTES A HOLD POINT.
7. THE DESIGN AND CONSTRUCTION OF ANY TEMPORARY WORK IS THE RESPONSIBILITY OF THE CONTRACTOR
8. IF PAVEMENT IS DAMAGED DURING CONSTRUCTION, THEN THE PAVEMENT AND SURFACING IS TO BE REPLACED. THE EXTENTS ARE TO BE CONFIRMED ON SITE BY THE ADMINISTRATOR. EXISTING PAVEMENT MARKING IS TO BE REINSTATED WHERE NECESSARY.

## SERVICES NOTES

1. ALL SERVICES MUST BE LOCATED, IDENTIFIED AND PROTECTED BEFORE WORKS ARE CARRIED OUT IN AREAS WHERE EARTHWORKS ARE TO BE UNDERTAKEN.

### DIMENSIONS, ELEVATIONS, COORDINATES NOTES

1. HEIGHTS, CHAINAGES AND CO-ORDINATES ARE ALL IN METRES. ALL OTHER DIMENSIONS ARE IN MILLIMETRES, UNO.
2. ALL ELEVATIONS ARE IN METRES AHD.
3. CO-ORDINATES ARE UTM, GDA94, Z55.
4. THE PROJECT COMPRISES A SINGLE SITE LOCATED ALONG ABERGOWRIE ROAD CH 45,736.6-45,753.0M. CHAINAGES ARE RELATIVE TO THE EXISTING ABERGOWRIE ROAD CENTRELINE (NOMINATED MC01) WITH CHAINAGE 45,736.6 (THE START OF THE SITE ALONG MC01) LOCATED AT UTM COORDINATES 377160.906 EAST, 7959935.818 NORTH (MGA 20, ZONE 55).

## ABBREVIATIONS

AHD	AUSTRALIAN HEIGHT DATUM
UNO	UNLESS NOTED OTHERWISE
GDA94	GEOCENTRIC DATUM OF AUSTRALIA 1994
UTM	UNIVERSAL TRANSVERSE MERCATOR

## EARTHWORKS NOTES

1. CLEARING OF VEGETATION SHALL BE LIMITED TO THE MINIMUM REQUIRED TO UNDERTAKE THE SLOPE REMEDIATION WORKS. ANY DISTURBED AREAS WHERE VEGETATION HAS BEEN REMOVED SHALL BE REVEGETATED WITH HYDROMULCH OR AS APPROVED BY THE ADMINISTRATOR.
2. THE EXTENT OF CLEARING SHALL BE CLEARLY DELINEATED ON SITE AND SHALL BE APPROVED BY ADMINISTRATOR PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. ANY TREES TO BE REMOVED SHALL BE CLEARLY MARKED WITH PINK FLAGGING TAPE. TREES ABOVE THE CREST OF THE PROPOSED CUTTING FACE AND EITHER SIDE ON THE CUTTING SLOPE ARE TO REMAIN UNLESS APPROVED BY THE ADMINISTRATOR PRIOR TO REMOVAL. THIS CONSTITUTES A **HOLD POINT**.
3. WHERE REMOVAL OF TREES GREATER THAN 150mm IN DIAMETER IS REQUIRED AND APPROVED, TREES SHALL BE CUT OFF AT THE BASE NO LESS THAN 150mm ABOVE

GROUND LEVEL AND TREE STUMP POISONED.

4. REGRADING AND SCALING OF THE SLOPE SHALL BE UNDERTAKEN UNDER THE DIRECTION OF THE ADMINISTRATOR OR PRINCIPAL'S GEOTECHNICAL ENGINEER. THIS CONSTITUTES A **HOLD POINT**.
5. TOPSOIL SHALL BE STOCKPILED AND KEPT SEPARATE FROM OTHER MATERIALS.
6. THE SLOPE FACE SHALL BE FREE OF MINOR VEGETATION, LOOSE SOIL, COBBLES AND BOULDERS AND LOCALLY MECHANICALLY REGRADED USING AN EXCAVATOR AND THE REMAINDER SHALL BE HAND SCALED, TO ENSURE THE SLOPE SURFACE IS FREE OF LOCALISED UNDULATION TO ENSURE THE STEEL TURF REINFORCEMENT GEOMAT/MESH IS ENGAGED AND PRESSED FIRMLY ONTO THE GROUND.
7. THE CONTRACTOR SHALL ENSURE TRAFFIC FLOW IN ONE LANE IS MAINTAINED AT ALL TIMES DURING WORK HOURS AND THAT TWO LANES ARE OPEN OUTSIDE OF WORK HOURS. THE CONTRACTOR SHALL ENSURE THAT SUITABLE WORK METHODS AND EQUIPMENT ARE USED FOR ALL WORKS SO THAT TRAFFIC FLOW REQUIREMENTS ARE ADHERED TO AT ALL TIMES.

## SOIL NAILING

1. REFER TO SOIL NAIL DETAIL DRG - 0002 TO 0004.
2. SOIL NAILS SHALL BE SPACED AT 1.5m VERTICAL AND 2.0m HORIZONTAL SPACING IN A STAGGERED PATTERN AS PER THE LAYOUT AND SETOUT TABLE ON DRG-0002.
3. THE LOCATION OF THE SOIL NAILS AT THE ENDS OF EACH ROW OF SOIL NAILS SHALL BE SURVEYED AND SETOUT. THE LOCATION OF INDIVIDUAL SOIL NAILS SHALL BE SET OUT ON A STAGGERED PATTERN AND MARKED USING FLAGGING PINS. FOLLOWING SETOUT, THE LOCATIONS OF SOIL NAILS SHALL BE CONFIRMED ON SITE BY THE ADMINISTRATOR OR THE PRINCIPAL'S GEOTECHNICAL ENGINEER. THIS CONSTITUTES A **HOLD POINT**.
4. SOIL NAILS SHALL BE DSI GEWI@28 THREADED REINFORCEMENT BARS (OR APPROVED EQUIVALENT).
5. SOIL NAIL EMBEDMENT LENGTH SHALL BE 7.0m.
6. THE BAR LENGTH SHALL BE THE EMBEDMENT LENGTH PLUS ALLOWANCE FOR HEAD ASSEMBLY.
7. SOIL NAILS SHALL BE DRILLED AT 15° DOWNWARDS FROM THE HORIZONTAL AND BEARING SHALL BE PERPENDICULAR TO THE CENTERLINE OF THE ROAD.
8. FORMED FACE PLATES TO BE A MINIMUM OF 250mm x 250mm x 14mm THICK TO ACCOMMODATE HEMISPHERICAL NUTS (OR APPROVED EQUIVALENT). OTHER VARIABLE THICKNESS FACE PLATES MAY BE CONSIDERED IF THE FACE PLATE CAN ACCEPT A FORCE OF 30.39kN ON IT DUE TO A MAXIMUM FACTORED (BASED ON BS8006-2011) TENSILE FORCE APPLIED BY THE NAIL OF 60.79kN.
9. DRILL RECORDS TO BE KEPT INDICATING LENGTHS OF CONTINUOUS DRILLING IN SOIL AND ROCK FOR EACH NAIL.
10. SOIL NAIL WORKING LOAD IS 82kN PER NAIL. ACCEPTANCE TESTING LOCATIONS AND REQUIRED WORKING LOADS ARE TO BE CONFIRMED BY THE PRINCIPAL'S GEOTECHNICAL ENGINEER FOLLOWING THE REVIEW OF DRILLING AND GROUT RECORDS PRIOR TO COMMENCEMENT OF ACCEPTANCE TESTING.

## STEEL REINFORCED GEOMAT/MESH AND REVEGETATION BY HYDROMULCHING

1. STEEL REINFORCED GEOMAT/MESH SHALL BE MACMAT-R® (OR APPROVED EQUIVALENT) AND SHALL BE INSTALLED AS PER MANUFACTURER'S REQUIREMENTS.
2. FOLLOWING SURVEY SETOUT, THE EXTENT OF THE STEEL REINFORCED GEOMAT/MESH TO BE CONFIRMED ON SITE BY THE ADMINISTRATOR OR PRINCIPAL'S GEOTECHNICAL ENGINEER. THIS CONSTITUTES A **HOLD POINT**.
3. WHERE STUMPS OF TREES GREATER THAN 150mm REMAIN WITHIN THE LIMITS OF STEEL REINFORCED GEOMAT/MESH, STEEL REINFORCED GEOMAT/MESH SHALL BE CUT AND THE EDGE OF EROSION PREVENTION MATTING TAPED TO ENABLE INSTALLATION AROUND THE TREE/S. IT SHOULD BE ENSURED THAT THE TREE STUMP IS POISONED PRIOR TO INSTALLATION OF STEEL REINFORCED GEOMAT/MESH.
4. THE OVERLAP BETWEEN CONSECUTIVE PANELS OF MESH REINFORCEMENT SHOULD BE 0.5m IN ALL DIRECTIONS.
5. STEEL MESH REINFORCEMENT SHOULD NOT EXTEND ANY MORE THAN 250mm BEYOND THE EXTENT OF THE OUTER SOIL NAILS FORMING THE UPPER, LOWER AND OUTER BOUNDARIES OF THE SITE.
6. THE BOTTOM AND VERTICAL EDGE CONNECTIONS OF THE STEEL REINFORCED GEOMAT/MESH TO BE SECURED BY ANCHORS AS SHOWN IN DRGS - 0002 TO 0005.
7. FIXING PINS SHALL BE 600mm LENGTH, GALVANISED N12 BARS WITH A 40mm RADIUS HOOK (R40) AND SHALL BE INSTALLED/DRIVEN THROUGH THE MESH AND INTO THE SLOPE SURFACE NO MORE THAN 300mm BELOW THE CREST OF THE SLOPE AND ALONG THE SIDE BOUNDARIES (VERTICAL EXTENTS) OF THE MACMAT-R SUCH THAT THERE IS EITHER A SOIL NAIL OR ANCHOR FACE PLATE OR FIXING PIN NO LESS THAN 1m APART.

8. FOLLOWING SOIL NAIL INSTALLATION AND PRIOR TO STEEL REINFORCED GEOMAT/MESH INSTALLATION, HYDROMULCH IS TO BE APPLIED TO ALL AREAS WITH STEEL REINFORCED GEOMAT/MESH OR BARE SURFACES WHERE VEGETATION HAS BEEN REMOVED.
9. FOLLOWING INSTALLATION OF GEOMAT/MESH, IF SEEDLINGS HAVE NOT SPROUTED WITHIN 7 DAYS FROM FIRST HYDROMULCH LAYER, A SECOND LAYER OF HYDROMULCH SPRAY SHALL BE SPRAYED OVER THE GEOMAT/MESH.
10. THE HYDROMULCH SUBCONTRACTOR SHALL SELECT THE TYPE OF SEEDING THAT IS APPROPRIATE FOR THE SITE AND CONFIRM TO THE REQUIREMENTS STATED IN MRTS16 FOR HYDROMULCHING.

## GROUND ANCHORS

1. GROUND ANCHORS SHALL BE INSTALLED AS PER SOIL NAILS.
2. ANCHORS FOR FIXING THE STEEL REINFORCED GEOMAT/MESH BEYOND THE CREST OF THE SLOPE ARE 2.0m LONG AND POSITIONED IN LINE WITH THE 7.0m LONG SOIL NAILS NEAREST TO THE CREST OF THE SLOPE. ANCHORS FOR RETAINMENT OF STEEL REINFORCED GEOMAT/MESH AT THE TOE OF THE SLOPE ARE 1m LONG AND POSITIONED IN LINE WITH THE SECOND ROW OF 7.0m LONG SOIL NAILS FROM THE TOE OF THE SLOPE.

## HORIZONTAL DRAINAGE

1. REFER TO HORIZONTAL DRAIN DETAIL ON DRG-0004.
2. THE LOCATION OF THE HORIZONTAL DRAINS SHALL BE CONFIRMED ON SITE BY THE ADMINISTRATOR OR PRINCIPAL'S GEOTECHNICAL ENGINEER. THIS CONSTITUTES A **HOLD POINT**.
3. HORIZONTAL DRAINS SHALL BE DRILLED AT 5° UPWARDS FROM THE HORIZONTAL AND BEARING SHALL BE PERPENDICULAR TO THE CENTERLINE OF THE ROAD.
4. HORIZONTAL DRAINS SHALL BE 9.0m LONG INSTALLED AT MAXIMUM 4.0m HORIZONTAL SPACING AND SPACED VERTICALLY (IN TWO ROWS) BETWEEN THE BOTTOM THREE ROWS OF 7.0m LONG SOIL NAILS.

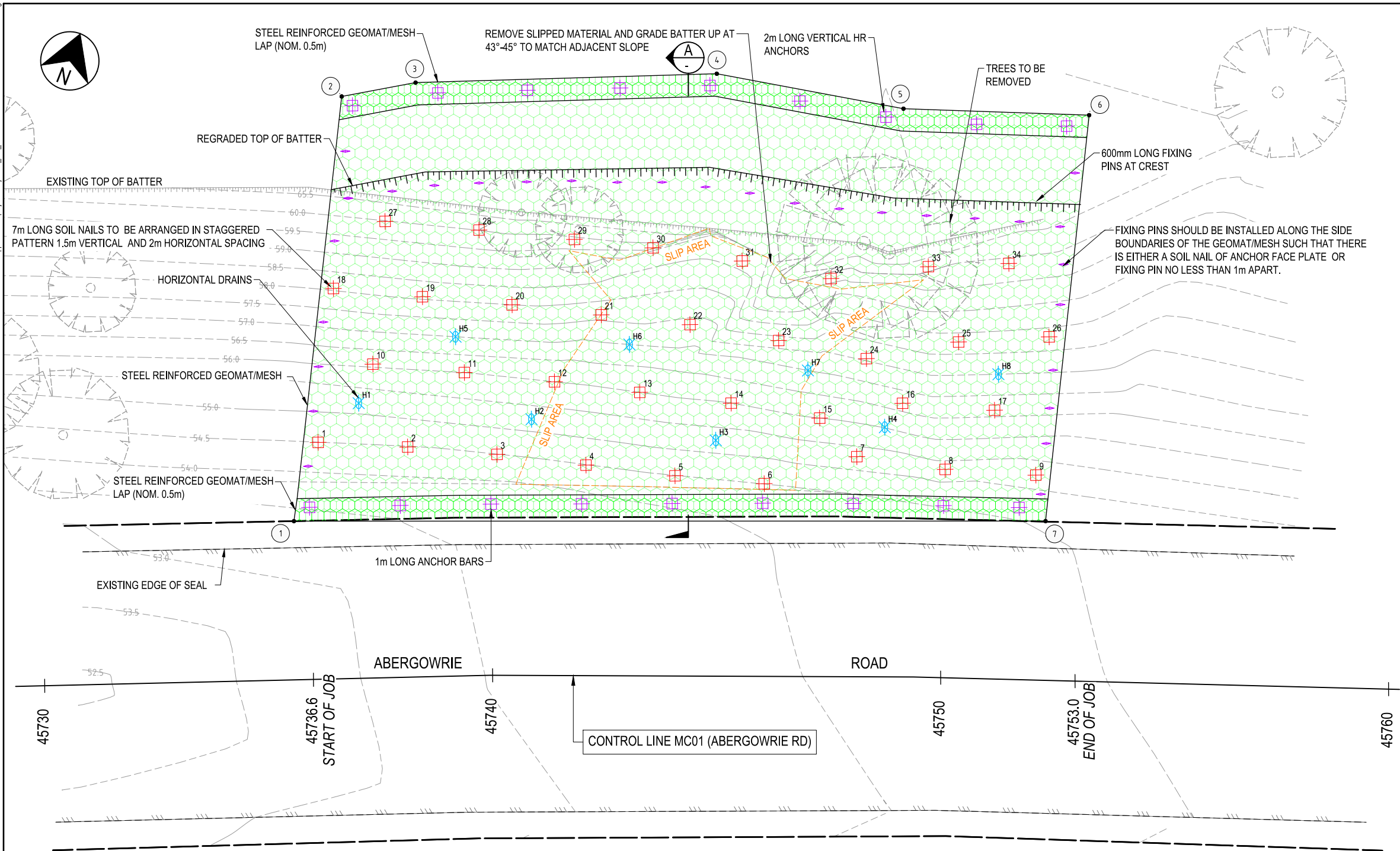
## CONSTRUCTION SEQUENCE

THE CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS (UNLESS DIRECTED OR APPROVED OTHERWISE BY THE ADMINISTRATOR OR PRINCIPAL'S GEOTECHNICAL ENGINEER):

- a. PRIOR TO COMMENCING REMEDIAL WORKS ENSURE THAT ALL RELEVANT APPROVALS ARE OBTAINED FROM COUNCIL TO PROCEED.
- b. THE EXTENT OF WORKS AND CLEARING SHALL BE CLEARLY DELINEATED ON SITE AND SHALL BE APPROVED BY THE PRINCIPAL'S GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING. THIS CONSTITUTES A **HOLD POINT**.
- c. INSTALLATION OF ANY TEMPORARY STABILISATION WORKS SHALL BE COMPLETED PRIOR TO THE ASSOCIATED CONSTRUCTION ACTIVITIES AS DEEMED NECESSARY BY THE CONTRACTOR.
- d. CLEAR SLIP FAILURE DEBRIS, ANY MOIST-WET SURFACE SOILS (WITHIN THE UPPER 300mm OF THE SLOPE) AND VEGETATION WITHIN THE EXTENT OF WORKS AND CLEARING AREA, AND IN THE PROCESS RE-GRADE THE SECTION OF THE CUTTING SLOPE AT NO STEEPER THAN 45 DEGREES AS PER THE DESIGN DRAWING DRG-0003. THE FINAL RE-GRADED SLOPE SHOULD BE INSPECTED AND APPROVED BY THE PRINCIPAL'S GEOTECHNICAL ENGINEER. THIS CONSTITUTES A **HOLD POINT**.
- e. SET OUT AND INSTALLATION OF SOIL NAILS (INCLUDING ACCEPTANCE TESTING OF SOIL NAILS).
- f. SET OUT AND INSTALLATION OF HORIZONTAL DRAINS.
- g. APPLICATION OF HYDROMULCH AS PER THE TECHNICAL SPECIFICATION.
- h. INSTALLATION OF STEEL REINFORCED GEOMAT/MESH.
- i. INSTALLATION OF SOIL NAIL FACE PLATES.
- j. IF SEEDLINGS HAVE NOT SPROUTED WITHIN 7 DAYS FROM FIRST HYDROMULCH LAYER, APPLY A SECOND LAYER OF HYDROMULCH SPRAY OVER THE GEOMAT/MESH.

[illegible]

© Jacobs Group (Australia) Pty Ltd. ASB 37 001 024 085. No part of this document or the information it contains may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from Jacobs Group (Australia) Pty Ltd.

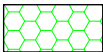


# SITE PLAN

---

SCALE 1:50

## LEGEND



STEEL REINFORCED GEOMAT/MESH  
(REFER DRG's 0004 AND 0005)



SOIL NAIL (REFER DRG's 0003 and 0004)



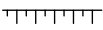
HORIZONTAL DRAIN (REFER DRG's 0003 AND 0004)



ANCHOR BAR (REFER DRG's 0003 AND 0004)



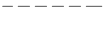
FIXING PIN (REFER DRG's 0003 AND 0004)



REGRADED TOP OF BATTER



EXISTING TOP OF BATTER



EXISTING TOE OF BATTER



BOUNDARY OF SLIP AREA



EXISTING EDGE OF BITUMEN



EXISTING CENTERLINE OF ROAD

EXISTING KERB AND CHANNEL

## NOTES

1. REFER TO DRG 0001 FOR NOTES.
2. REFER TO DRG 0003 FOR TYPICAL SECTIONS/DETAILS AND SITE OVERVIEW.

## SOIL NAIL SETOUT COORDINATES

PT NO	EASTING	NORTHING	RL
1	377159.950	7959930.607	54.500
6	377150.608	7959934.200	54.500
7	377148.465	7959934.179	55.250
9	377144.732	7959935.659	55.250
10	377158.299	7959929.257	56.000
15	377149.029	7959933.125	56.000
16	377147.159	7959933.309	56.750
17	377145.224	7959934.016	56.750
18	377158.689	7959927.395	57.500
24	377147.665	7959932.131	57.500
25	377145.585	7959932.333	58.250
26	377143.609	7959932.771	58.250
27	377157.172	7959926.266	59.000
32	377147.939	7959930.197	59.000
33	377145.777	7959930.532	59.750
34	377144.030	7959930.949	59.750

## HORIZONTAL DRAIN SETOUT CO-ORDINATES

PT NO	EASTING	NORTHING	RL
1	377158.842	7959930.010	55.203
2	377155.226	7959931.402	55.237
3	377151.396	7959932.972	55.250
4	377147.687	7959933.715	56.016
5	377156.358	7959929.170	56.729
6	377152.669	7959930.391	56.935
7	377148.993	7959932.030	56.997
8	377144.924	7959933.265	57.445

## GEOMAT/MESH SETOUT

PT NO	EASTING	NORTHING
1	377160.947	7959932.151
2	377157.347	7959923.320
3	377155.676	7959923.469
4	377149.152	7959925.104
5	377145.354	7959926.987
6	377141.405	7959928.252
7	377144.801	7959936.705

## TENDER ISSUE

[illegible]

# Jacobs

ABN 37 001 024 095 and ACN 001 024 095  
Jacobs Group (Australia) Pty Ltd  
2 James Street  
CAIRNS, QLD 4870  
AUSTRALIA

Tel: +61 7 4031 4599  
Fax: +61 7 4031 3967  
Web: [www.jacobs.com](http://www.jacobs.com)

CLIENT **HINCHINBROOK SHIRE COUNCIL**

PROJECT ABERGOWRIE ROAD LANDSLIDE REMEDIATION  
AT CH 45,736.6 - CH 45,753.0

DRAWN LWC	DRAWING CHECK RC	REVIEWED R.Davis	APPROVED R.Davis
DESIGNED RD	DESIGN REVIEW RD	DATE 27.10.21	DATE 27.10.21

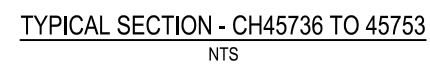
TITLE

SITE LAYOUT PLAN  
PROPOSED CONSTRUCTION

SCALE AS SHOWN	DRAWING No IW259600-0AB1-CG-DRG-0002
-------------------	---

REV  
A





1. REFER TO DRG 0001 FOR NOTES.
2. REFER TO DRG 0002 FOR SITE LAYOUT PLAN.

[illegible]

**Jacobs**

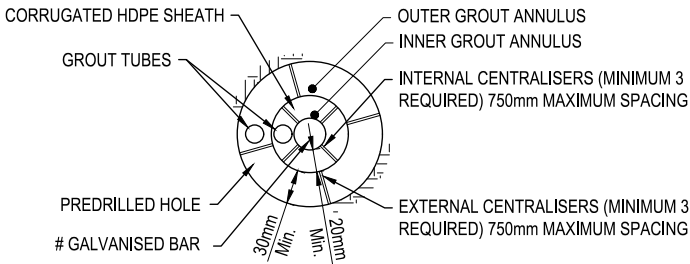
ABN 37 001 024 095 and ACN 001 024 095  
Jacobs Group (Australia) Pty Ltd  
2 James Street  
CAIRNS, QLD 4870  
AUSTRALIA

Tel: +61 7 4031 4599  
Fax: +61 7 4031 3967  
Web: [www.jacobs.com](http://www.jacobs.com)

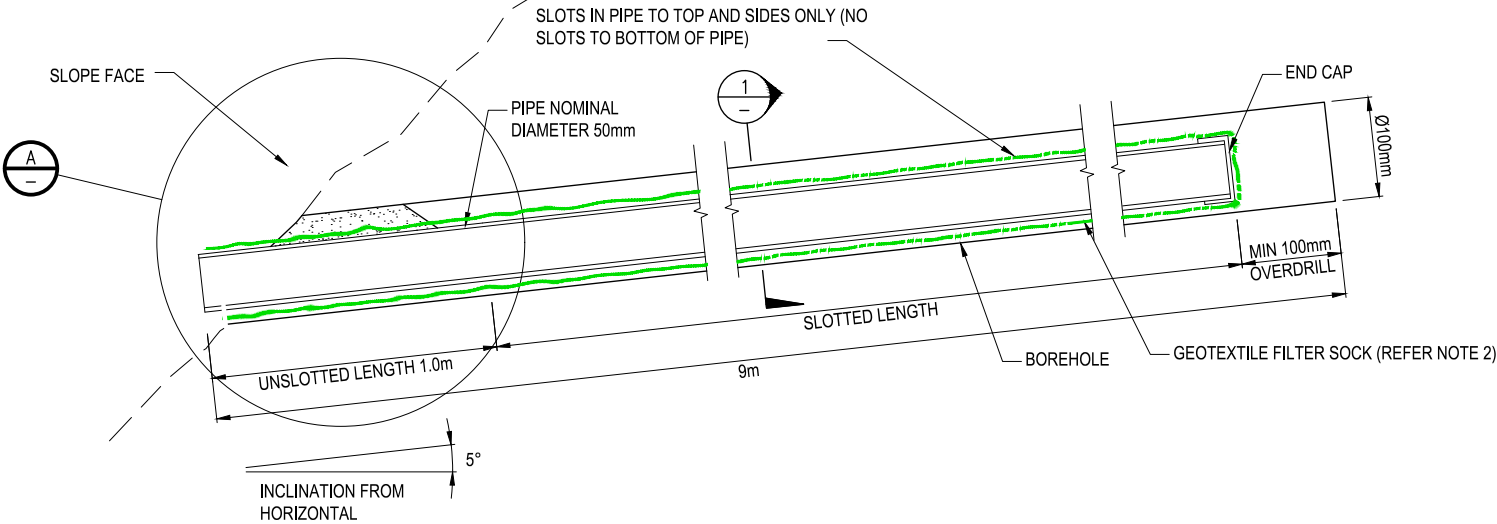
CLIENT HINCHINBROOK SHIRE COUNCIL		TITLE TYPICAL SECTION AND SITE OVERVIEW	
PROJECT ABERGOWRIE ROAD LANDSLIDE REMEDIATION AT CH 45,736.6 - CH 45,753.0			
DRAWN LWC	DRAWING CHECK R.Davis	REVIEWED R.Davis	APPROVED RC
DESIGNED RD	DESIGN REVIEW RD	DATE 27.10.21	DATE 27.10.21
		SCALE AS SHOWN	DRAWING No IW259600-0AB1-CG-DRG-0003
			REV A

NOTES

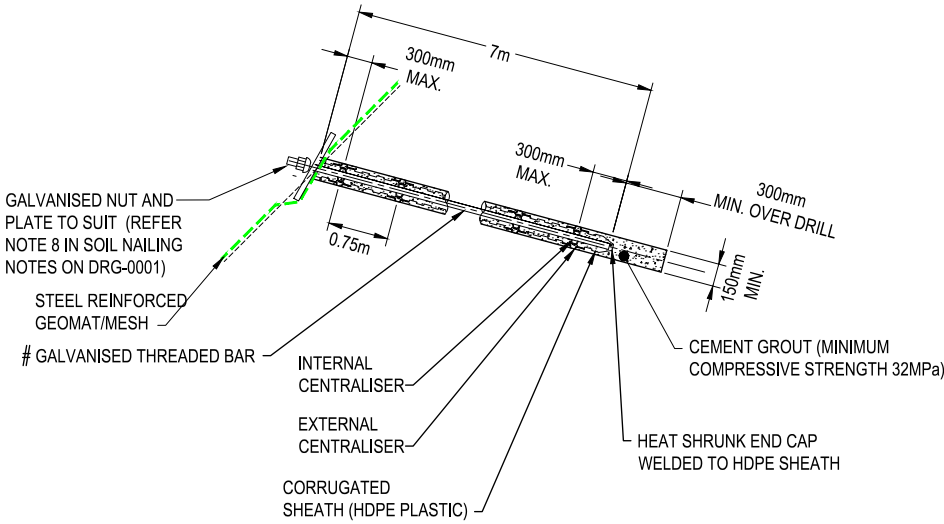
1. REFER TO DRG 0001 FOR NOTES.
2. GEOTEXTILE FILTER SOCK SHALL BE GREENFLO OR APPROVED EQUIVALENT.



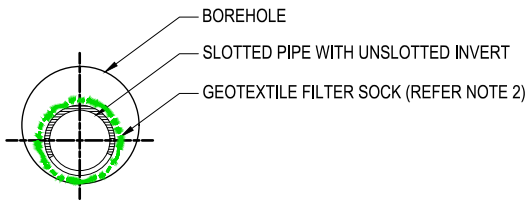
TYPICAL SECTION THROUGH ENCAPSULATED BAR  
N.T.S.



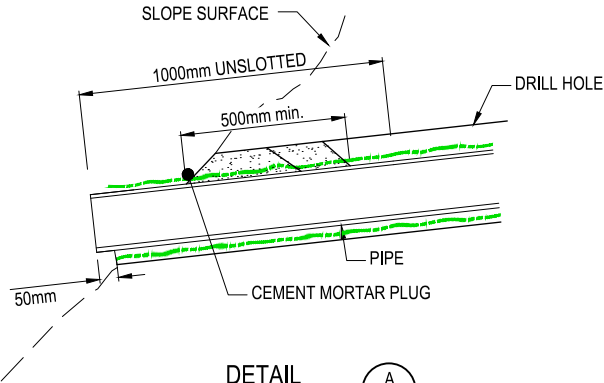
HORIZONTAL DRAIN  
N.T.S.



TYPICAL ENCAPSULATED SOIL NAIL AND ANCHOR  
WITH FLEXIBLE FACING  
N.T.S.



SECTION 1  
N.T.S.



DETAIL A  
N.T.S.

TENDER ISSUE

REV	DATE	DRAWN	REV'D	APP'D	REVISION	DRAWING NUMBER	REFERENCE DRAWING TITLE
A	27.10.21	LWC	RD	RD	TENDER ISSUE		



Jacobs

ABN 97 001 024 095 and ACN 001 024 095  
Jacobs Group (Australia) Pty Ltd  
2 James Street  
CAIRNS, QLD 4870  
AUSTRALIA

Tel: +61 7 4031 4599  
Fax: +61 7 4031 3967  
Web: www.jacobs.com

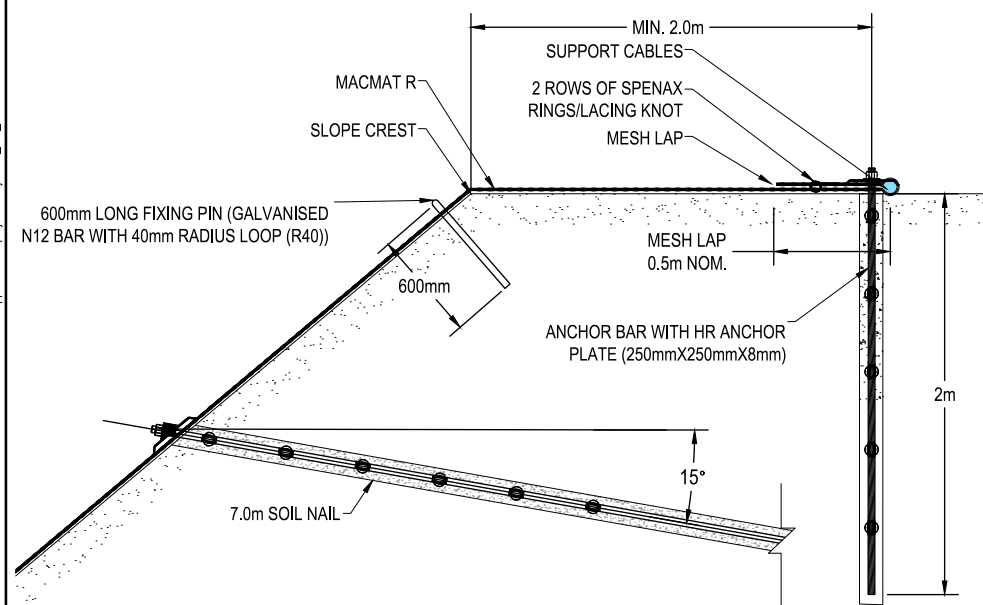
CLIENT HINCHINBROOK SHIRE COUNCIL  
PROJECT ABERGOWRIE ROAD LANDSLIDE REMEDIATION  
AT CH 45,736.6 - CH 45,753.0

DRAWN LWC	DRAWING CHECK RC	REVIEWED R.Davis	APPROVED R.Davis
DESIGNED RD	DESIGN REVIEW RD	DATE 27.10.21	DATE 27.10.21

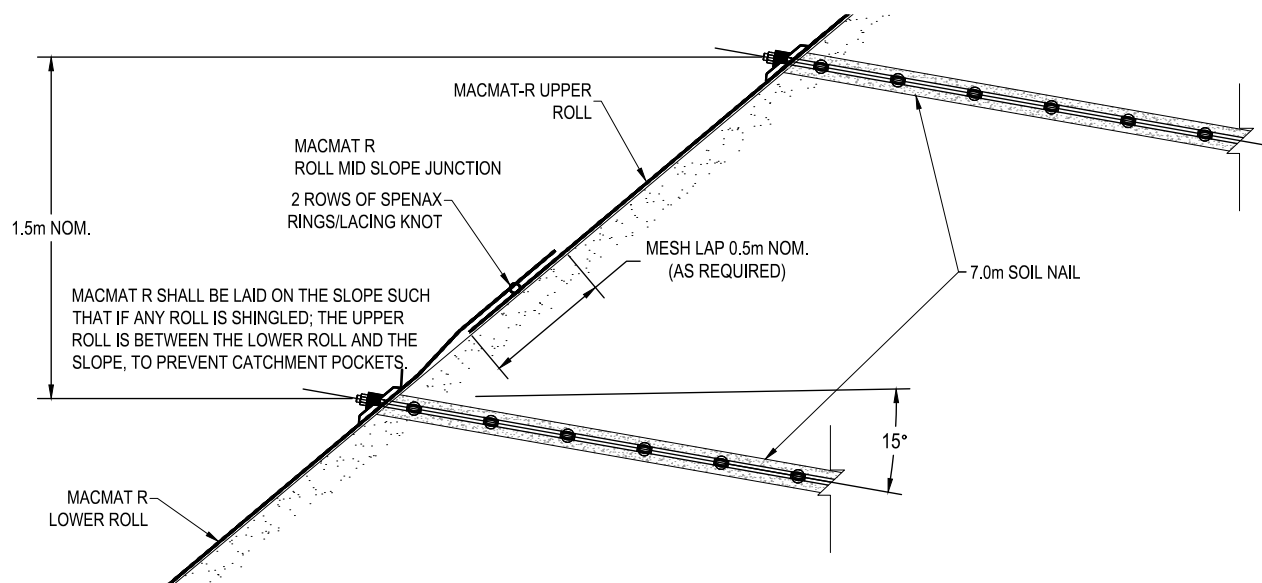
TITLE  
TYPICAL DETAILS  
SHEET 1 OF 2

SCALE AS SHOWN  
DRAWING No. IW259600-0AB1-CG-DRG-0004  
REV A





TOP OF SLOPE DETAIL  
N.T.S.



MID-SLOPE MESH OVERLAP DETAIL  
N.T.S.

## NOTES

1. REFER TO DRG 0001 FOR NOTES.
2. REFER TO DRG 0002 FOR SITE LAYOUT PLAN.

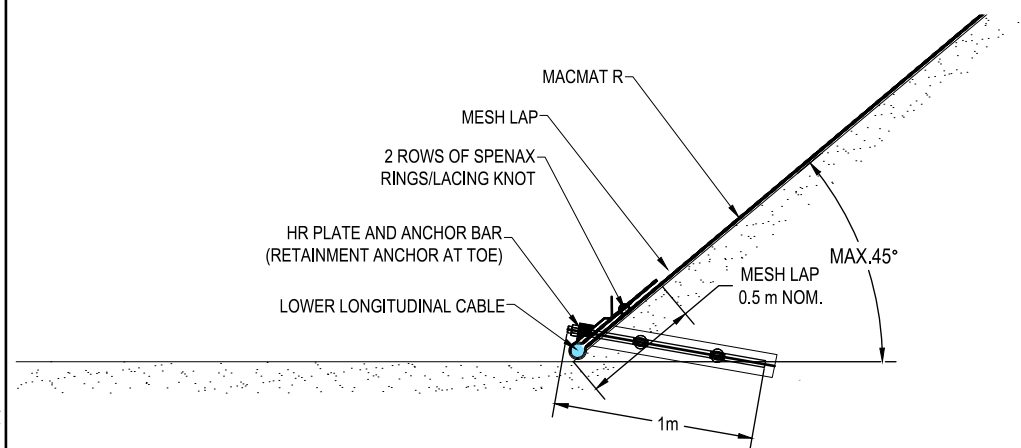
NOTES:

ALL WIRE ROPES AS LISTED UNLESS OTHERWISE NOTED.

1. PERIMETER SUPPORT CABLES,  $\phi=16\text{mm}$  WIRE ROPE CLASS 6x19 IWRC EIPS, GALVANIZED OR EQUIVALENT.
2. PANEL TO PANEL & PANEL MESH OVERLAP CONNECTIONS VIA HIGH TENSILE SPENAX HOG RINGS GALVANIZED OR LACING KNOT.
3. SOIL NAILS AND ANCHORS: TYPE AND INSTALLATION: SEE DETAILS ON DRG-0001-0004.

STEEL REINFORCED GEOMAT/MESH FLEXIBLE FACING.

4. MACMAT R IS A REINFORCED GEOMAT OBTAINED BY A POLYMER MADE THREE-DIMENSIONAL MATRIX EXTRUDED ONTO A DOUBLE TWISTED STEEL WOVEN MESH.

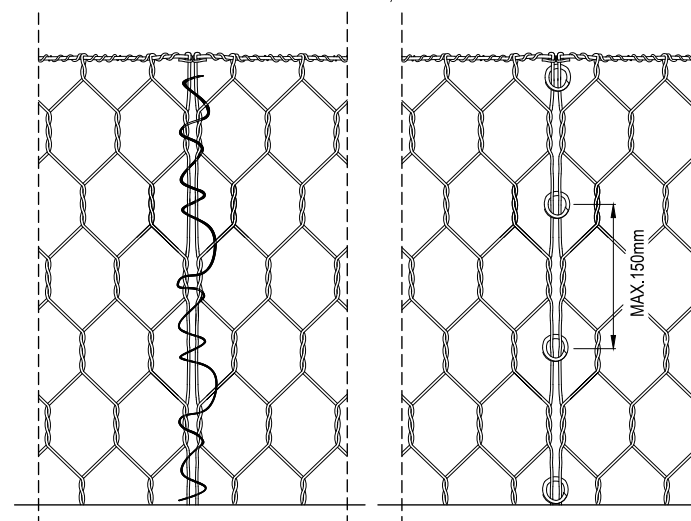


TOE OF SLOPE DETAIL  
N.T.S.

EDGES ARE JOINED TOGETHER USING THE APPROPRIATE LACING TECHNIQUES.

**MANUAL:** CONTINUOUS WIRE LOOPED TIGHTLY AROUND EVERY OTHER MESH OPENING, ALTERNATING SINGLE AND DOUBLE LOOPS.

**MECHANICAL:** USING A PNEUMATIC OR HAND POWER TOOL, EMPLOYING GALVANIZED "C" SHAPED FASTENERS. FOR CONTINUITY AND STRENGTH, THE RECOMMENDED SPACING IS MAX 150MM



DETAIL - GABION LACING WIRE FASTENER



- 1.) SPENAX FASTENER Ø= 44 mm OPEN AND 19 mm CLOSED.
- 2.) SPENAX FASTENER HAS 1720 N/mm<sup>2</sup> BREAKING LOAD
- 3.) SPENAX FASTENER WIRE Ø= 3.00mm

- 1.) LACING WIRE  $\varnothing = 2.20\text{mm}$
- 2.) LACING WIRE HAS BETWEEN 350-550 N/mm<sup>2</sup> BREAKING LOAD

### DETAIL - SPENAX FASTNER

[illegible]

**Jacobs**

ABN 37 001 024 095 and ACN 001 024 095  
Jacobs Group (Australia) Pty Ltd  
2 James Street  
CAIRNS, QLD 4870  
AUSTRALIA

Tel: +61 7 4031 4599  
Fax: +61 7 4031 3967  
Web: [www.jacobs.com](http://www.jacobs.com)

CLIENT HINCHINBROOK SHIRE COUNCIL				TITLE TYPICAL DETAILS SHEET 2 OF 2			
PROJECT ABERGOWRIE ROAD LANDSLIDE REMEDIATION AT CH 45,736.6 - CH 45,753.0							
DRAWN LWC		CRAWLING CHECK RC		REVIEWED R.Davis		APPROVED R.Davis	
DESIGNED RD		DESIGN REVIEW RD		DATE 27.10.21		DATE 27.10.21	
				SCALE AS SHOWN		DRAWING No IW259600-0AB1-CG-DRG-0005	
						REV A	