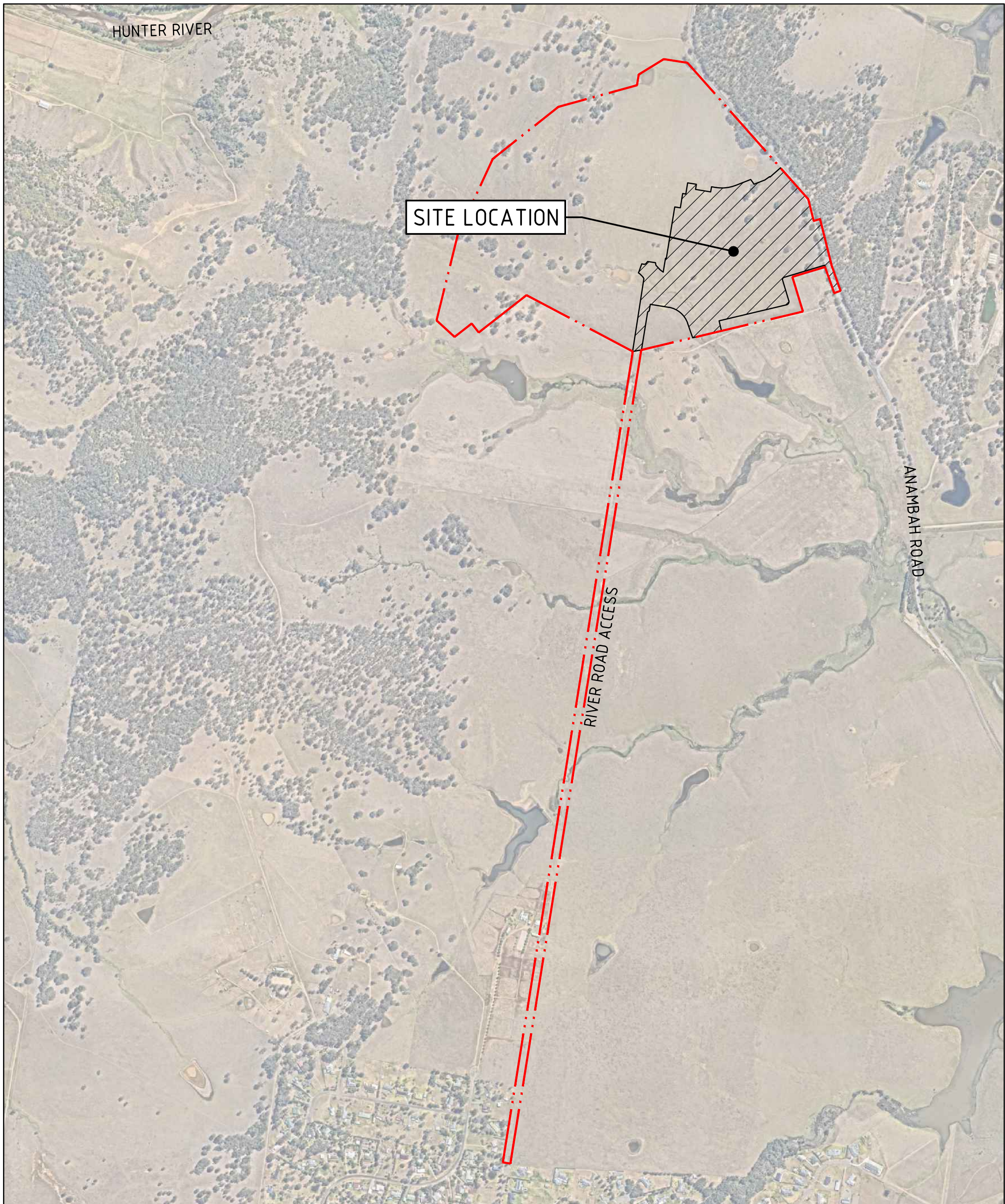


PROPOSED SUBDIVISION, 559 ANAMBAH ROAD GOSFORTH NSW 2320

STAGE 1 DEVELOPMENT APPLICATION CIVIL ENGINEERING PACKAGE



LOCALITY PLAN

IMAGE SOURCE - NEARMAPS

DRAWING LIST

DWGN0	DRAWINGTITLE
DA1-C01.01	COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN
DA1-C04.01	GENERAL ARRANGEMENT PLAN
DA1-C04.05	STAGE 1 CLEARING PLAN
DA1-C04.11	CIVIL WORKS PLAN - SHEET 1
DA1-C04.12	CIVIL WORKS PLAN - SHEET 2
DA1-C04.13	CIVIL WORKS PLAN - SHEET 3
DA1-C04.14	CIVIL WORKS PLAN - SHEET 4
DA1-C05.01	ROAD AND PATH PLAN
DA1-C05.21	TYPICAL SECTIONS - SHEET 1
DA1-C05.22	TYPICAL SECTIONS - SHEET 2
DA1-C05.25	TYPICAL SECTIONS THROUGH LOTS
DA1-C05.26	TYPICAL CIVIL DETAILS
DA1-C05.31	ROAD LONGITUDINAL SECTIONS - SHEET 1
DA1-C05.32	ROAD LONGITUDINAL SECTIONS - SHEET 2
DA1-C05.33	ROAD LONGITUDINAL SECTIONS - SHEET 3
DA1-C05.34	ROAD LONGITUDINAL SECTIONS - SHEET 4
DA1-C05.35	ROAD LONGITUDINAL SECTIONS - SHEET 5
DA1-C05.36	ROAD LONGITUDINAL SECTIONS - SHEET 6
DA1-C05.37	ROAD LONGITUDINAL SECTIONS - SHEET 7
DA1-C06.01	CONCEPT BULK EARTHWORKS PLAN
DA1-C07.01	EROSION AND SEDIMENT CONTROL PLAN
DA1-C07.11	EROSION AND SEDIMENT CONTROL NOTES
DA1-C07.12	EROSION AND SEDIMENT CONTROL DETAILS
DA1-C08.01	CONCEPT CIVIL WORKS PLAN RIVER ROAD - SHEET 1
DA1-C08.02	CONCEPT CIVIL WORKS PLAN RIVER ROAD - SHEET 2
DA1-C08.03	CONCEPT CIVIL WORKS PLAN RIVER ROAD - SHEET 3
DA1-C08.21	ROAD TYPICAL SECTIONS RIVER ROAD
DA1-C08.31	ROAD LONGITUDINAL SECTIONS RIVER ROAD - SHEET 1
DA1-C08.32	ROAD LONGITUDINAL SECTIONS RIVER ROAD - SHEET 2
DA1-C08.33	ROAD LONGITUDINAL SECTIONS RIVER ROAD - SHEET 3
DA1-C08.34	ROAD LONGITUDINAL SECTIONS RIVER ROAD - SHEET 4



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

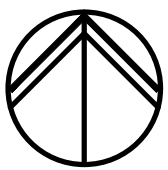
Drawn: J. STAUD, Job Manager: L. MCRAE, Designer: A. KILLEN, Verifier: L. MCRAE, Date: 30.05.25, 10:33 AM, Project: 559 Anambah Road, Gosforth, NSW 2320, Drawing: CIVIL/DA1-C01.01, Scale: 1:10000, File: DA1-C01.01-CV01.dwg



DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED



THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD



ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:10000 @ A1



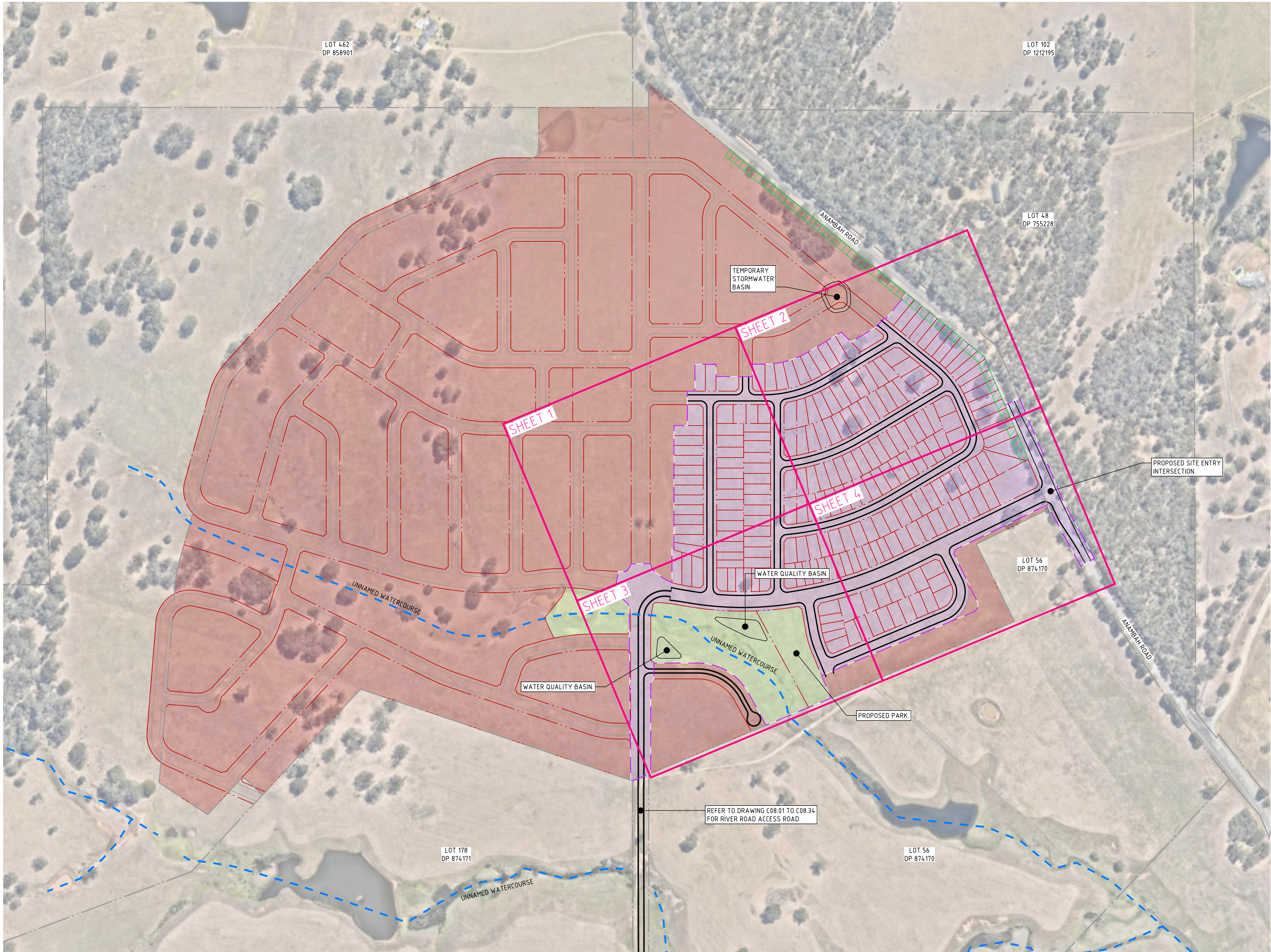
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT
PROPOSED SUBDIVISION 559 ANAMBAH ROAD GOSFORTH NSW 2320
STAGE 1 DA

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN

JOB NUMBER
NL222055-01
DRAWING NUMBER
DA1-C01.01
REVISION
E
DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: A.KILLEN
DRAWN: J.STAUB



LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE 1 RELEASE EXTENT

FUTURE STAGE WORKS

OPEN SPACE/DRAINAGE RESERVE

LANDSCAPE SETBACK

INDICATIVE LINE OF EXISTING WATERCOURSE.



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
A	DRAFT ISSUE	JS	-	AK	07.08.24	<div>Third.i COMMUNITIES</div> <div>DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED</div>
B	DRAFT ISSUE	JS	-	AK	16.08.24	
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24	
D	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24	
E	DRAFT ISSUE	JS	-	AK	16.05.25	
F	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25	

Drawn: 30.05.2025 10:34 AM Project: 559 Anambah Road, Gosforth NSW 2320
Printed by: JACOB STAUB
Format: C:\15 Proj-July 24 Projects\Newcastle\YEAR 2022\8606\NL222055-01 - 559 Anambah Road, Gosforth - Drawings\CIVIL\DA1-C04\DA1 DA STAGE 1\NL222055-01 DA1-C04-01-GENERAL ARRANGEMENT.dwg

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:2500@A1

0 25 50 75 100 125m

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

GENERAL ARRANGEMENT PLAN

JOB NUMBER

NL222055-01

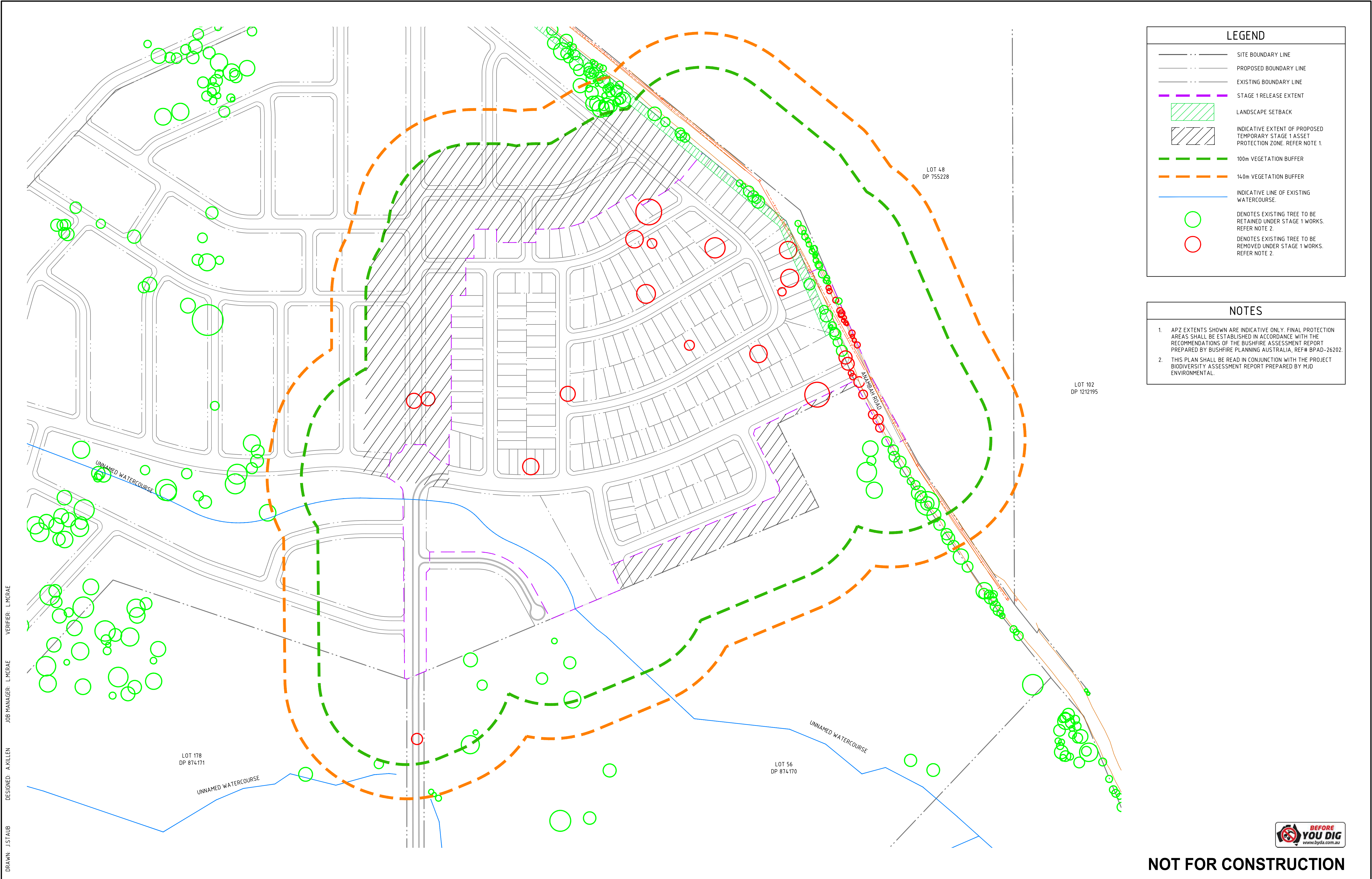
DRAWING NUMBER

DA1-C04.01

REVISION

F

DRAWING SHEET SIZE = A1



LEGEND

SITE BOUNDARY LINE

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE 1 RELEASE EXTENT

LANDSCAPE SETBACK

INDICATIVE EXTENT OF PROPOSED TEMPORARY STAGE 1 ASSET PROTECTION ZONE. REFER NOTE 1.

100m VEGETATION BUFFER

140m VEGETATION BUFFER

INDICATIVE LINE OF EXISTING WATERCOURSE.

DENOTES EXISTING TREE TO BE RETAINED UNDER STAGE 1 WORKS. REFER NOTE 2.

DENOTES EXISTING TREE TO BE REMOVED UNDER STAGE 1 WORKS. REFER NOTE 2.

NOTES

1. APZ EXTENTS SHOWN ARE INDICATIVE ONLY. FINAL PROTECTION AREAS SHALL BE ESTABLISHED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE BUSHFIRE ASSESSMENT REPORT PREPARED BY BUSHFIRE PLANNING AUSTRALIA, REF# BPAD-26202.

2. THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE PROJECT BIODIVERSITY ASSESSMENT REPORT PREPARED BY MJD ENVIRONMENTAL.

VERIFIER: LMCRAE

JOB MANAGER: LMCRAE

DESIGNED: AKILLEN

DRAWN: JSTAUB

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	ISSUED FOR APPROVAL	JS	LM	AK	28.08.24
B	DRAFT ISSUE	JS	-	AK	16.05.25
C	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

CLIENT

Third.i

COMMUNITIES

COUNCIL

m

maitland

city council

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:2000@A1

0 20 40 60 80 100m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290

Ph (02) 4943 1777 Email newcastle@northrop.com.au

ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION

559 ANAMBAH ROAD

GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

STAGE 1 CLEARING PLAN

DRAWING NUMBER

DA1-C04.05

REVISION

C

DRAWING SHEET SIZE = A1

DRAWING NUMBER

NL222055-01

DATE: 30.05.2025 10:50 AM

Printed by: ANDREW KILLEN

Filename: C:\15-Pac-Hwy-24-Projects\Newcastle\YEAR 2022-26\NL222055-01 - 559 Anambah Road - Civil\15 - Drawings\CVL1501-CA04.01-DA1-STAGE 1\NL222055-01-DA1-C04.05-CLEARING PLAN.dwg



LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE 1 RELEASE EXTENT

PROPOSED STORMWATER PIPE

PROPOSED SWALE DRAIN

PROPOSED STORMWATER OUTLET WITH SCOUR PROTECTION

DENOTES LOT FALL DIRECTION

PROPOSED RETAINING WALL UP TO 15m HIGH

PROPOSED SANDSTONE LOG WALL UP TO 0.5m HIGH

DESIGN CONTOURS (0.2m INTERVALS)

EXISTING CONTOURS (0.2m INTERVALS)

LANDSCAPE SETBACK

PROPOSED WATER QUALITY BASIN

PROPOSED ROAD

PROPOSED ACCESS TRACK

MC01 ROAD SETOUT CONTROL LINE

NOTES

1. REFER TO DRAWING C05.01 FOR FOOTPATH AND SHARED PATH LAYOUTS.

2. REQUIRED RETAINING WALLS UP TO 15m ON LOT BOUNDARIES SHOWN INDICATIVELY. FINAL LOCATIONS AND DETAILS TO BE PROVIDED AT SWC STAGE. REFER TO DRAWING C05.25 FOR TYPICAL LOT BENCHING INTENT.

3. INDICATIVE LOT GRADING SHOWN ONLY. SUBJECT TO DETAILED DESIGN AT SWC STAGE.

KEYPLAN

SHEET 1

SHEET 2

SHEET 3

SHEET 4

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB

CONTINUES ON SHEET DA1-C04.11
CONTINUES ON SHEET DA1-C04.14

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
E	REISSUED FOR APPROVAL	JS	LM	AK	07.11.24
F	DRAFT ISSUE	JS	-	AK	16.05.25
G	REISSUED FOR APPROVAL	JS	LM	AK	29.05.25

Drawn: 30.08.2025 10:34 AM
Printed by: JACOB STAUB
Project: 015 Pw-July 24 Projects/Newcastle/Year 2022-2026/DA1-C04.11-559 Anambah Road
Drawing: 015 DA1-C04.11-559 Anambah Road
Drawing: 015 DA1-C04.11-559 Anambah Road
Drawing: 015 DA1-C04.11-559 Anambah Road

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL
maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1

0 5 10 15 20 25m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290

Ph (02) 4943 1777 Email newcastle@northrop.com.au

ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

CIVIL WORKS PLAN - SHEET 2

DRAWING NUMBER

DA1-C04.12

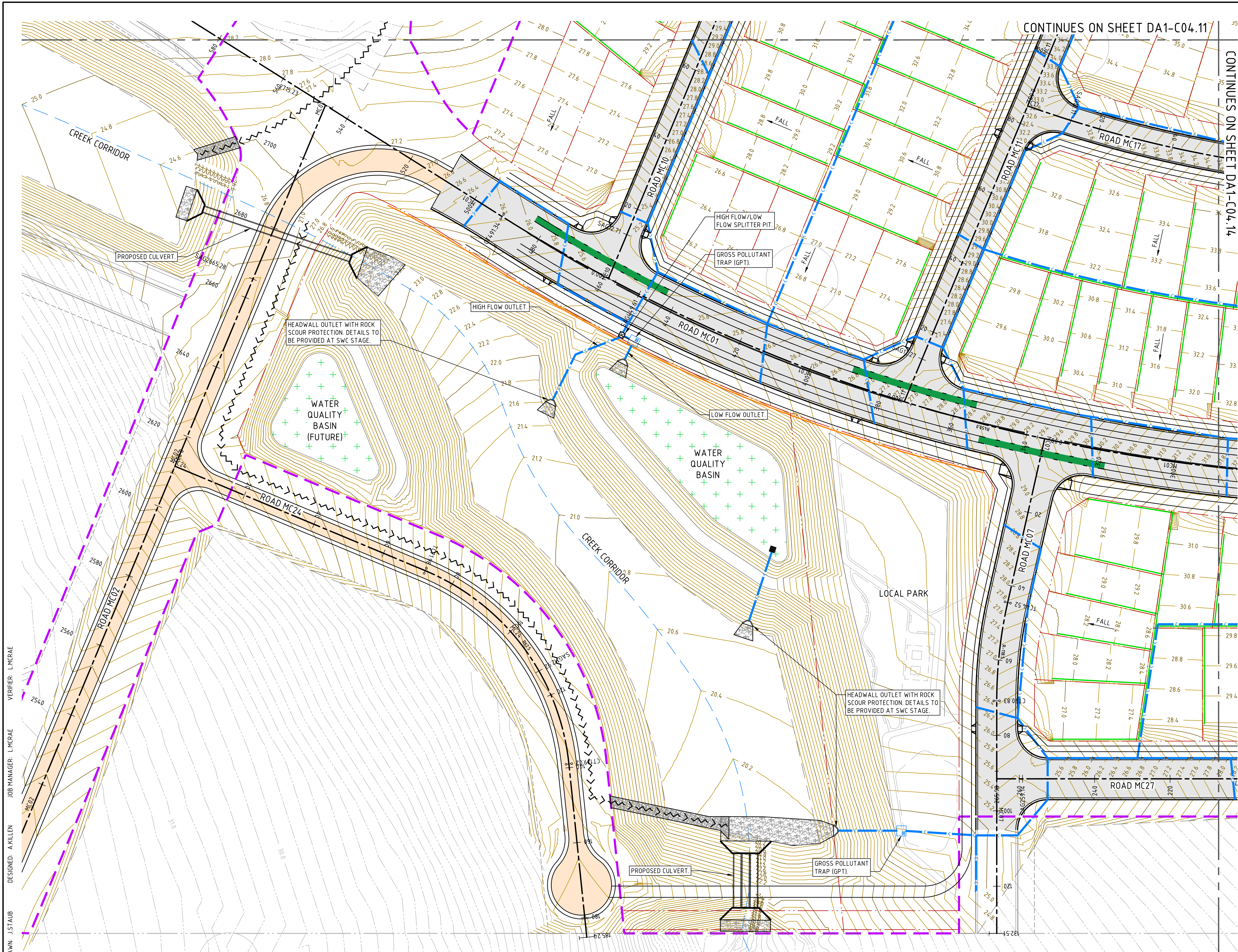
REVISION

F

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION





LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE 1 RELEASE EXTENT

PROPOSED STORMWATER PIPE

PROPOSED SWALE DRAIN

PROPOSED STORMWATER OUTLET WITH SCOUR PROTECTION

DENOTES LOT FALL DIRECTION

PROPOSED RETAINING WALL UP TO 1.5m HIGH

PROPOSED SANDSTONE LOG WALL UP TO 0.5m HIGH

DESIGN CONTOURS (0.2m INTERVALS)

EXISTING CONTOURS (0.2m INTERVALS)

LANDSCAPE SETBACK

PROPOSED WATER QUALITY BASIN

PROPOSED ROAD

PROPOSED ACCESS TRACK

MC01 ROAD SETOUT CONTROL LINE

NOTES

1. REFER TO DRAWING C05.01 FOR FOOTPATH AND SHARED PATH LAYOUTS.

2. REQUIRED RETAINING WALLS UP TO 1.5m ON LOT BOUNDARIES SHOWN INDICATIVELY. FINAL LOCATIONS AND DETAILS TO BE PROVIDED AT SWC STAGE. REFER TO DRAWING C05.25 FOR TYPICAL LOT BENCHING INTENT.

3. INDICATIVE LOT GRADING SHOWN ONLY. SUBJECT TO DETAILED DESIGN AT SWC STAGE.

KEYPLAN

SHEET 1

SHEET 2

SHEET 3

SHEET 4

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB

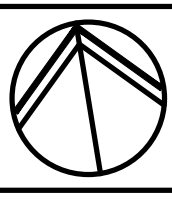
REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
E	REISSUED FOR APPROVAL	JS	LM	AK	07.11.24
F	DRAFT ISSUE	JS	-	AK	16.05.25
G	REISSUED FOR APPROVAL	JS	LM	AK	29.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED



THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD



SCALE 1:500@A1

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.



NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290

Ph (02) 4943 1777 Email newcastle@northrop.com.au

ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

CIVIL WORKS PLAN - SHEET 3

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C04.13

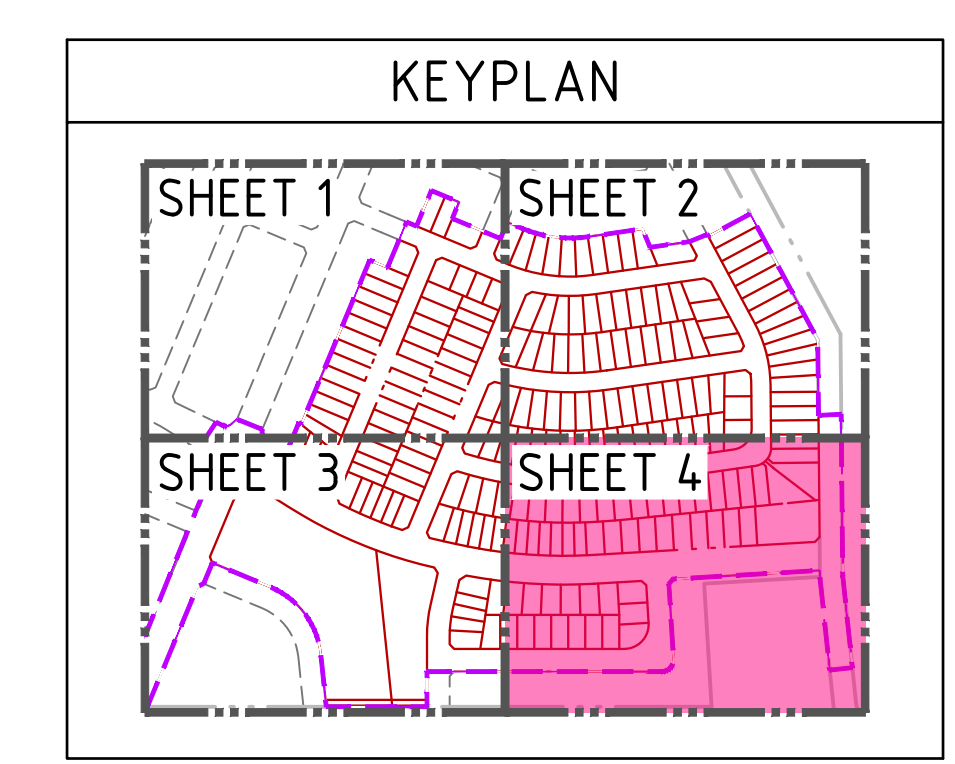
REVISION

F



DRAWING SHEET SIZE = A1



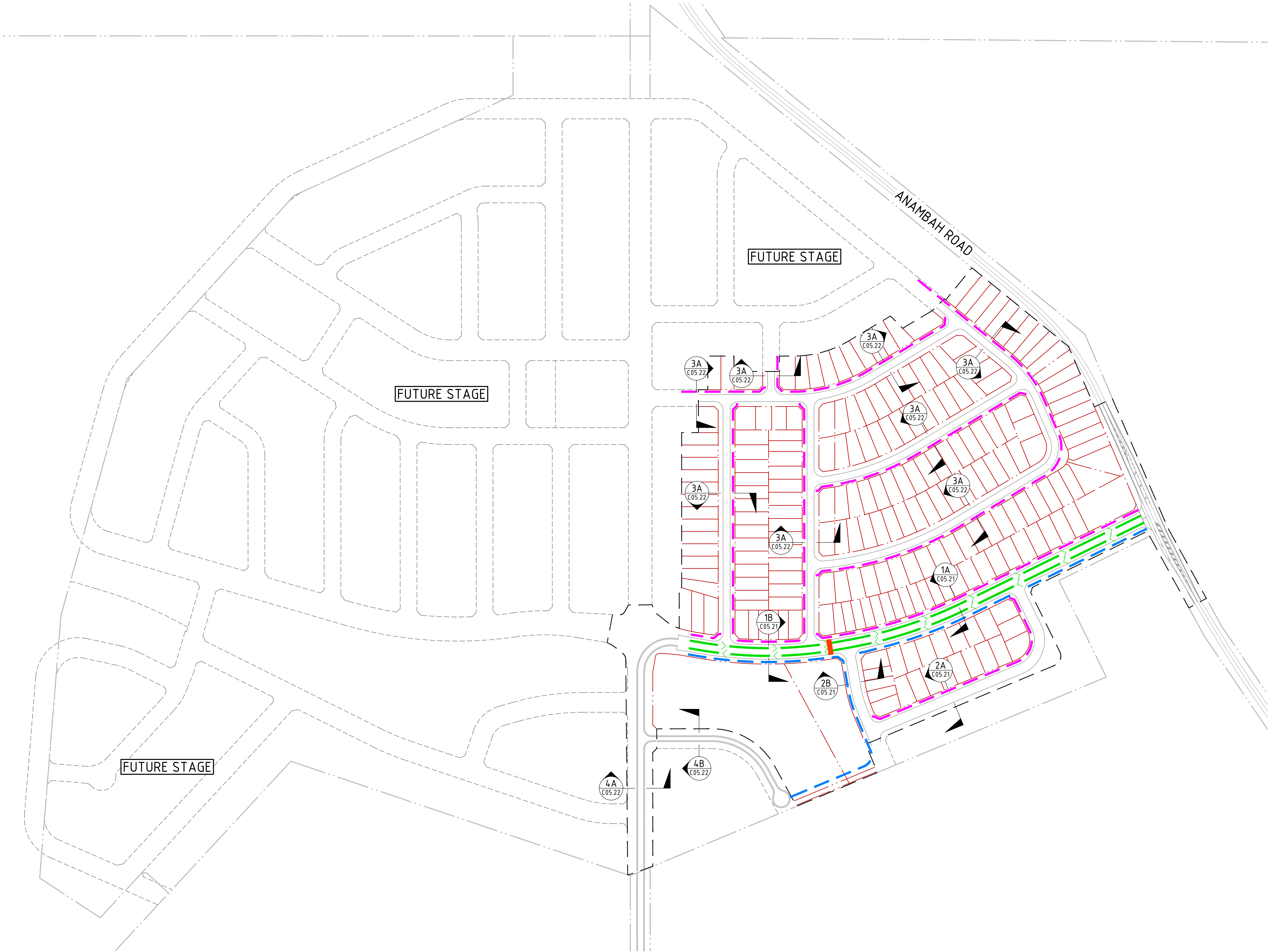
NOT FOR CONSTRUCTION



 **BEFORE
YOU DIG**
www.byda.com.au

REVISION		DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	COUNCIL		ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.	PROJECT	DRAWING TITLE	JOB NUMBER
B	DRAFT ISSUE		JS	-	AK	16.08.24	<div>Third.i</div> <div>COMMUNITIES</div>	<div>maitland</div> <div>city council</div>		<p>Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email newcastle@northrop.com.au ABN 81 094 433 100</p>	<p>PROPOSED SUBDIVISION 559 ANAMBAH ROAD GOSFORTH NSW 2320</p>	<p>CIVIL ENGINEERING PACKAGE</p>	<p>NL222055-01</p>
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24								
D	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24								
E	REISSUED FOR APPROVAL	JS	LM	AK	07.11.24								
F	DRAFT ISSUE	JS	-	AK	16.05.25								
G	REISSUED FOR APPROVAL	JS	LM	AK	29.05.25	DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED		THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	SCALE 1:500 @ A1		STAGE 1 DA	CIVIL WORKS PLAN - SHEET 4	<div>DRAWING NUMBER DA1-C04.14</div> <div>REVISION F</div>
DRAWING SHEET SIZE = A1													

DRAWN: J. STAUD
DESIGNED: A. KILLEN
JOB MANAGER: L. MCRAE
VERIFIER: L. MCRAE



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	STAGE 1 RELEASE EXTENT
	1.5m WIDE FOOTPATH
	2.5m WIDE SHARED PATH
	PROPOSED ON ROAD BIKE LANE
	PROPOSED PEDESTRIAN REFUGE DETAILS TO BE PROVIDED AT SWC STAGE.



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	DRAFT ISSUE	JS	-	AK	16.05.25
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:2000@A1

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

MASTERPLAN DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD AND PATH PLAN

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C05.01

REVISION

D

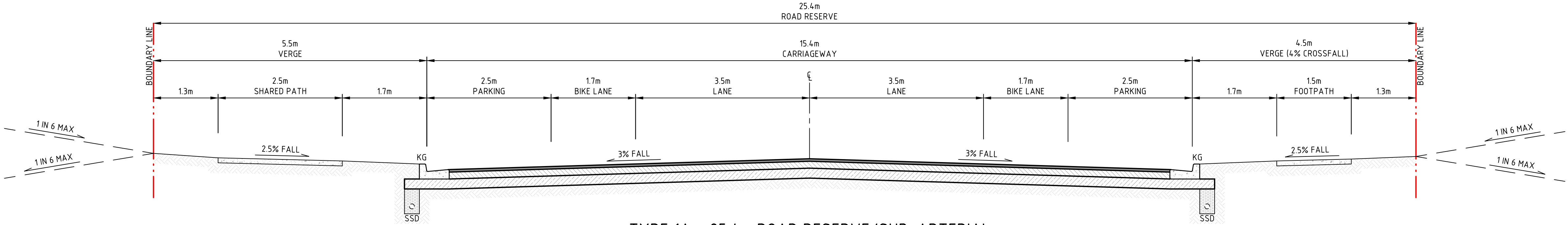
DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB

- NOTES
1.

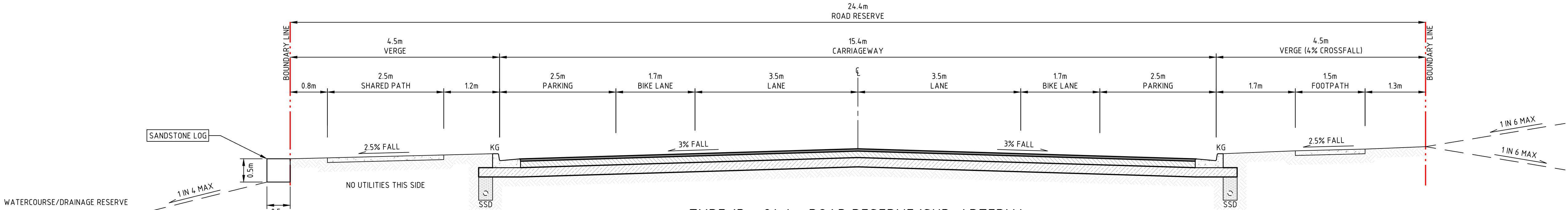
UTILITY ALLOCATIONS NOT SHOWN FOR CLARITY. FOOTPATH ALLOCATIONS TO GENERALLY BE IN ACCORDANCE WITH MCC STANDARD DRAWING S0001, UNLESS NOTED OTHERWISE.
2.

REFER TO LANDSCAPE MASTERPLAN DESIGN REPORT (TAYLORBRAMMER REF: 25-005N) FOR LOCATIONS OF PROPOSED STREET TREES. DETAILS TO BE PROVIDED AT SWC STAGE.



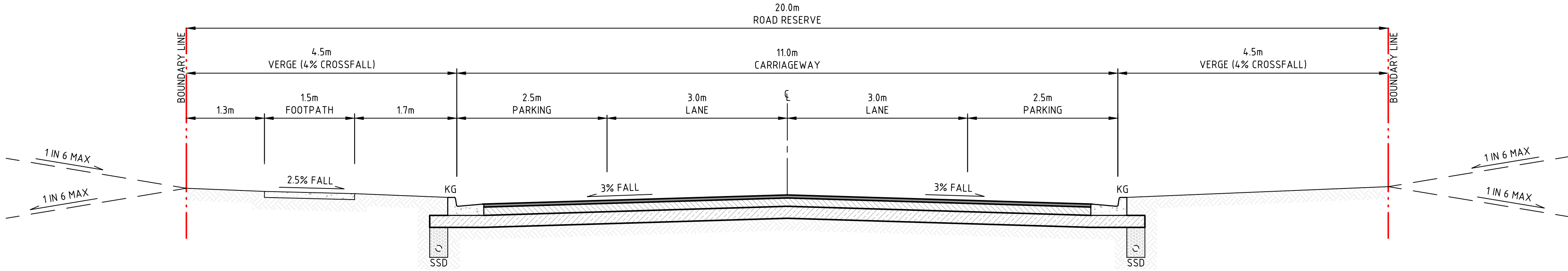
TYPE 1A - 25.4m ROAD RESERVE/SUB-ARTERIAL

SECTION 1A
SCALE 1:50



TYPE 1B - 24.4m ROAD RESERVE/SUB-ARTERIAL

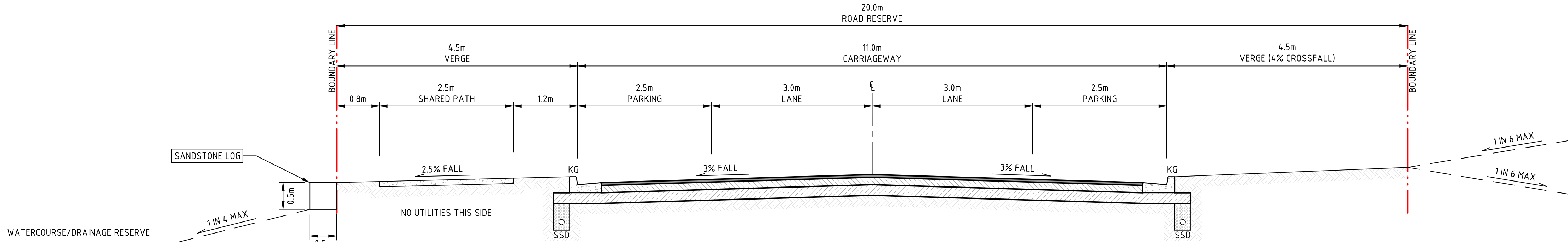
SECTION 1B
SCALE 1:50



TYPE 2A - 20m ROAD RESERVE/COLLECTOR PRIMARY WITHOUT BUS ROUTE

SECTION 2A
SCALE 1:50

SECTION 3C
SCALE 1:50



TYPE 2B - 20m ROAD RESERVE/COLLECTOR PRIMARY WITHOUT BUS ROUTE

SECTION 2B
SCALE 1:50

SECTION 3D
SCALE 1:50



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	05.11.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:50 @ A1

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

TYPICAL SECTIONS - SHEET 1

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C05.21

REVISION

E

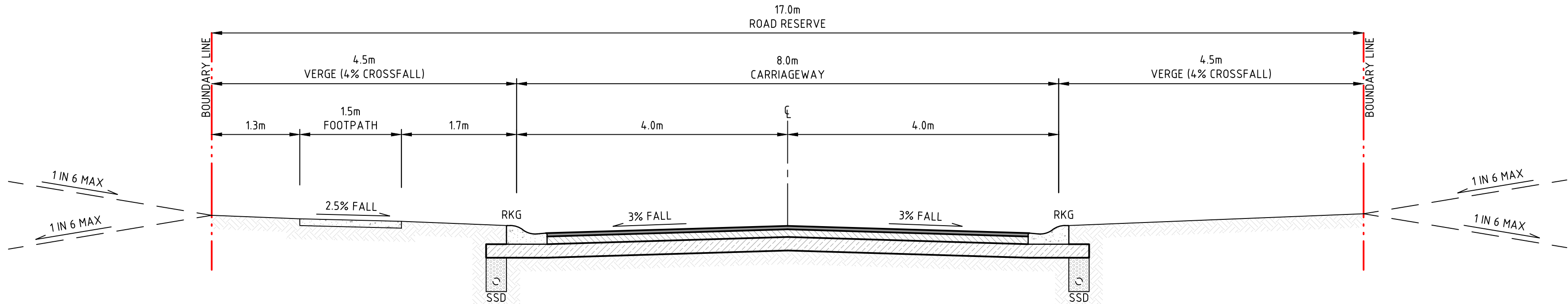
DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB

- NOTES
1.

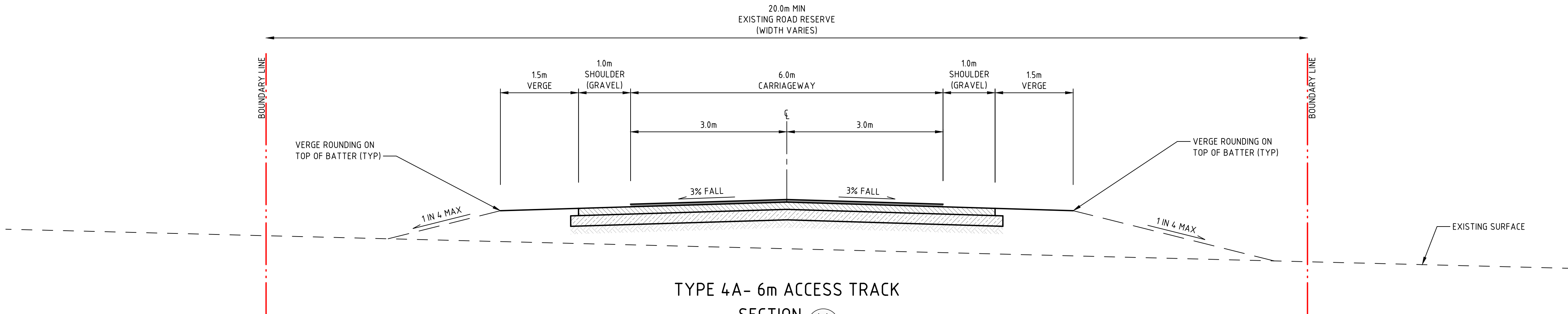
UTILITY ALLOCATIONS NOT SHOWN FOR CLARITY. FOOTPATH ALLOCATIONS TO GENERALLY BE IN ACCORDANCE WITH MCC STANDARD DRAWING SD001, UNLESS NOTED OTHERWISE.
2.

REFER TO LANDSCAPE MASTERPLAN DESIGN REPORT (TAYLORBRAMMER REF: 25-005N) FOR LOCATIONS OF PROPOSED STREET TREES. DETAILS TO BE PROVIDED AT SWC STAGE.



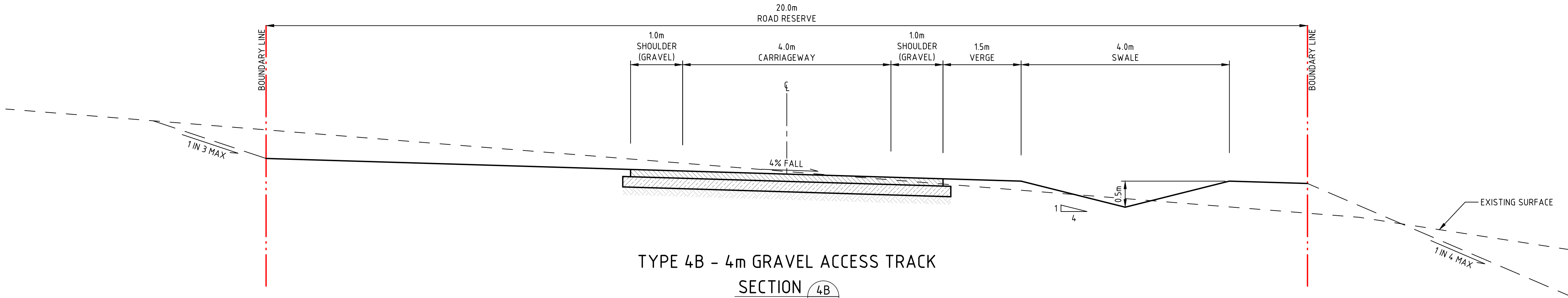
TYPE 3A - 17m ROAD RESERVE

SECTION 3A
SCALE 1:50
C05.01



TYPE 4A- 6m ACCESS TRACK

SECTION 4A
SCALE 1:50
C05.01



TYPE 4B - 4m GRAVEL ACCESS TRACK

SECTION 4B
SCALE 1:50
C05.01



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	05.11.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i

COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

m

maitland

city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:50 @ A1

0

0.5

1

1.5

2

2.5m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

TYPICAL SECTIONS - SHEET 2

JOB NUMBER

NL222055-01

DRAWING NUMBER

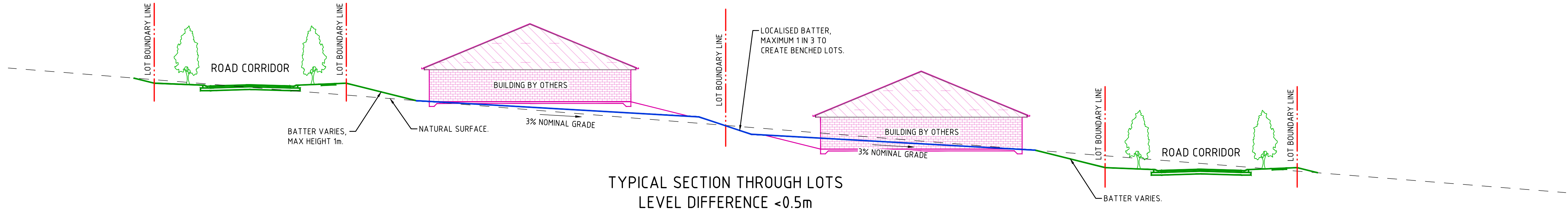
DA1-C05.22

REVISION

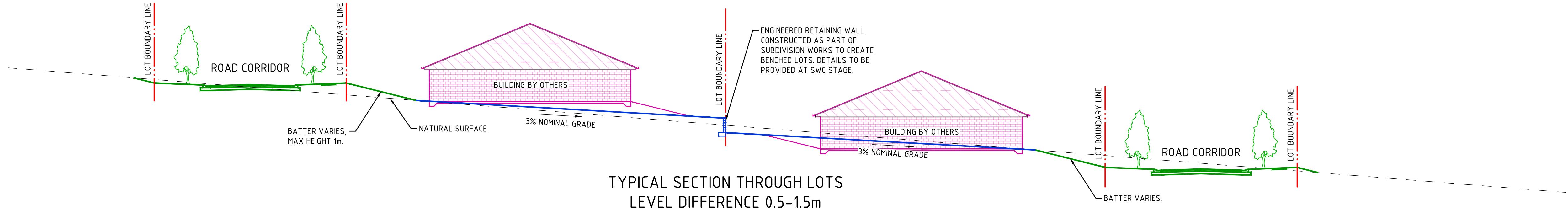
E

DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: A.KILLEN
DRAWN: J.STAUB



TYPICAL SECTION THROUGH LOTS
LEVEL DIFFERENCE <0.5m



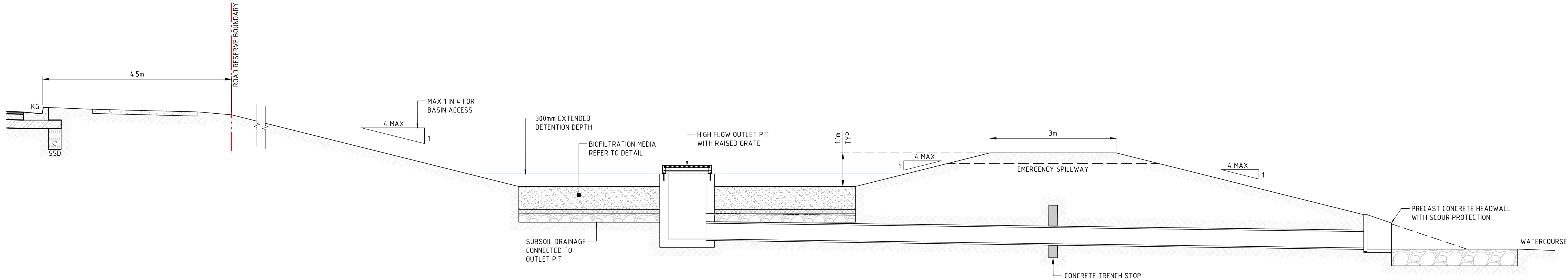
TYPICAL SECTION THROUGH LOTS
LEVEL DIFFERENCE 0.5-1.5m



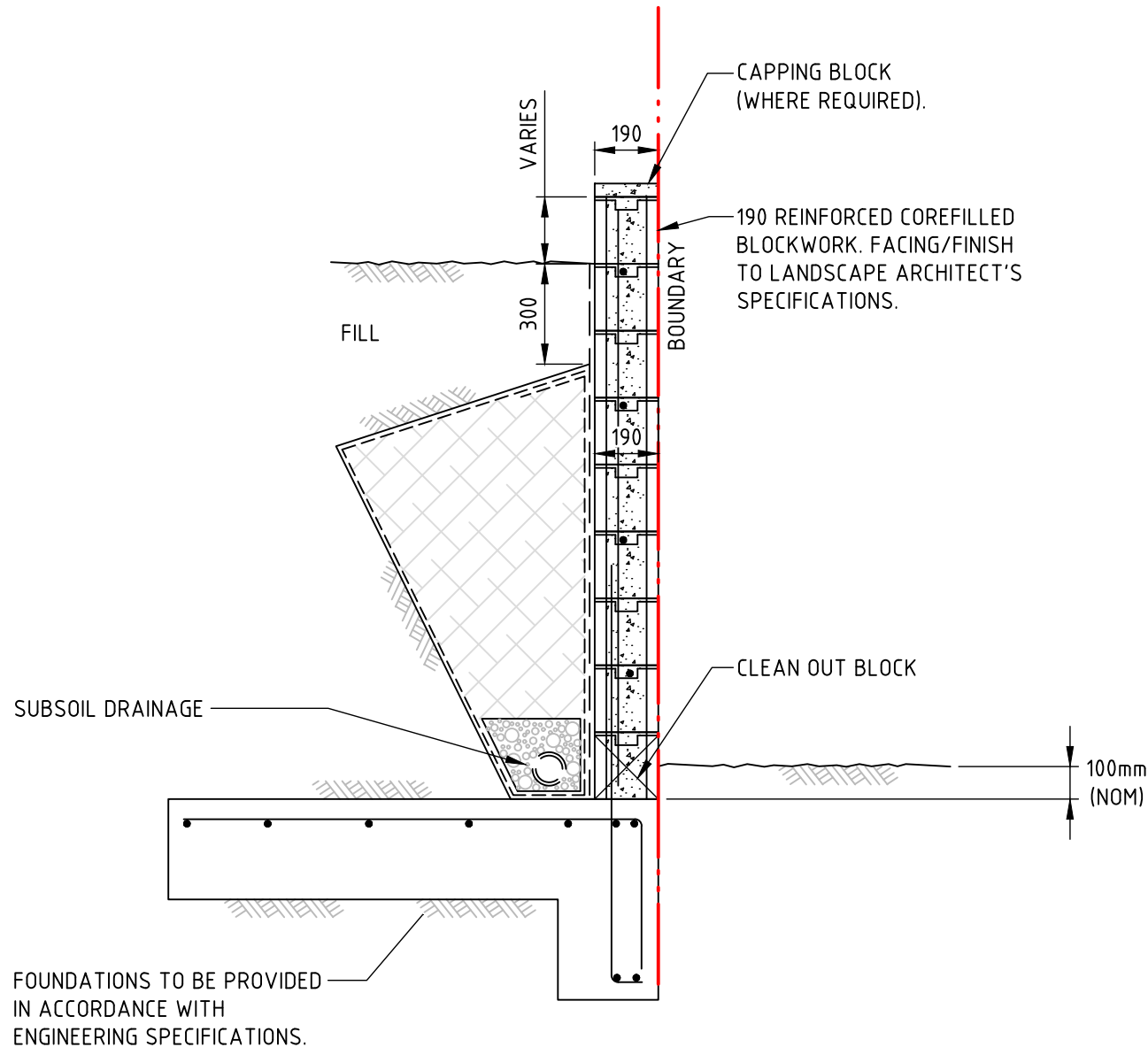
NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	COUNCIL		PROJECT	DRAWING TITLE	JOB NUMBER
A	DRAFT ISSUE	JS	-	AK	16.08.24	<div>Third.i</div> <div>COMMUNITIES</div> <div>DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED</div>	<div>m</div> <div>maitland</div> <div>city council</div> <div>THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD</div>	<div> NORTHROP</div> <div>Newcastle</div> <div>Level 1, 215 Pacific Hwy, Charlestown NSW 2290</div> <div>Ph (02) 4943 1777 Email newcastle@northrop.com.au</div> <div>ABN 81 094 433 100</div>	<div>PROPOSED SUBDIVISION</div> <div>559 ANAMBAH ROAD</div> <div>GOSFORTH NSW 2320</div> <div>STAGE 1 DA</div>	CIVIL ENGINEERING PACKAGE	NL222055-01
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24					TYPICAL SECTIONS THROUGH LOTS	
C	DRAFT ISSUE	JS	-	AK	16.05.25						
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25						

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: A.KILLEN
DRAWN: J.STAUB

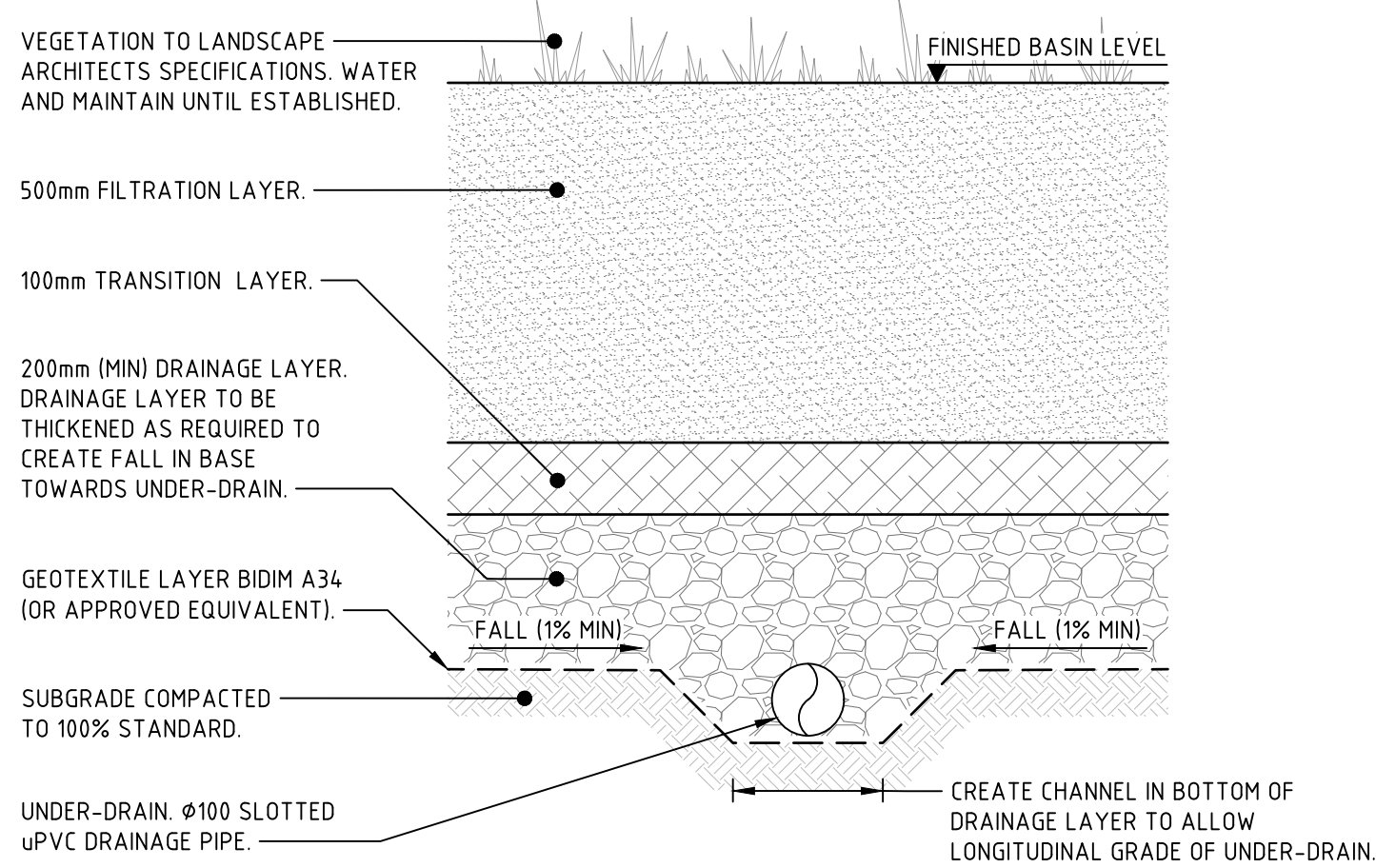


TYPICAL BIO FILTRATION BASIN SECTION
NTS



TYPICAL RETAINING WALL
UP TO 1.5m HEIGHT

BLOCKWORK RETAINING WALL OPTION SHOWN. FINAL WALL TYPE AND STRUCTURAL DETAILING TO BE CONFIRMED AT SWC STAGE.



BIOFILTRATION MEDIA DETAIL



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	05.11.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

CLIENT

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

NOT TO SCALE

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

TYPICAL CIVIL DETAILS

JOB NUMBER

NL222055-01

DRAWING NUMBER

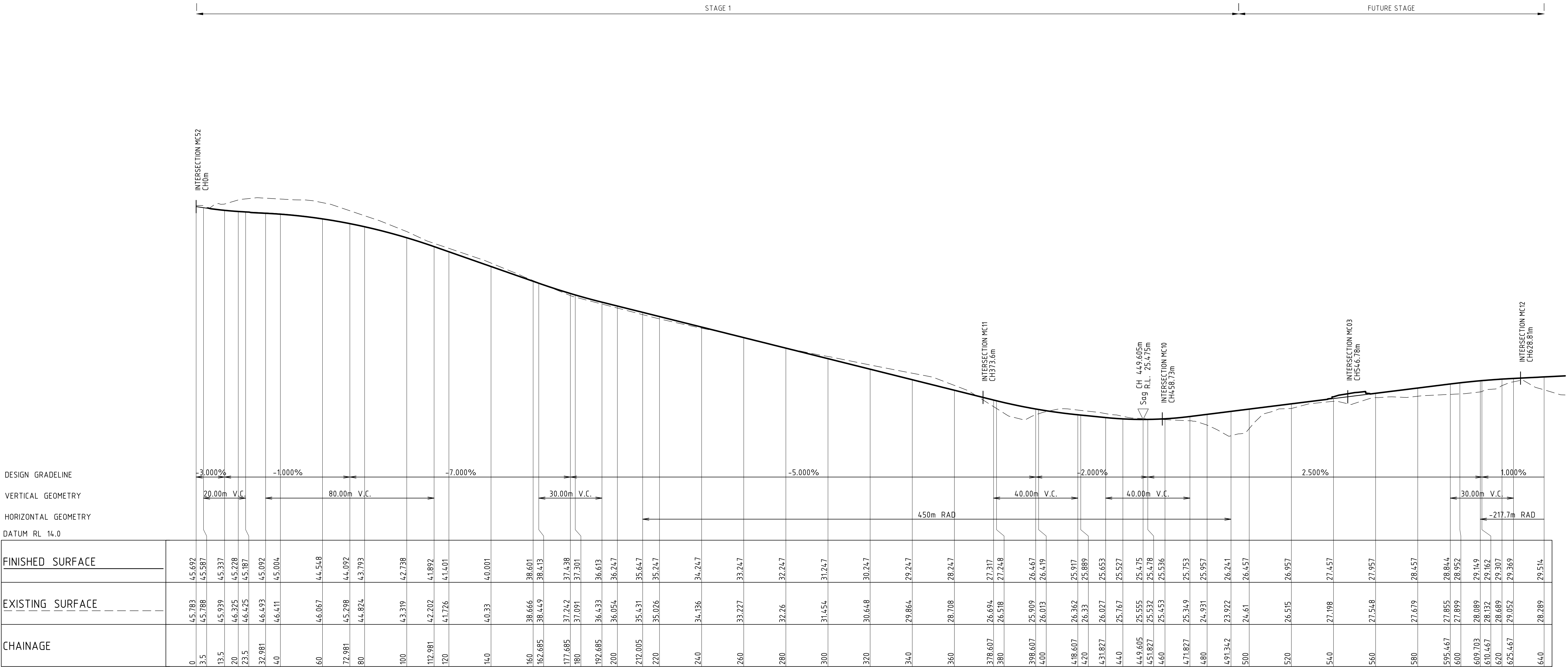
DA1-C05.26

REVISION

E

DRAWING SHEET SIZE = A1

DESIGNED: A.KILLEN VERIFIER: L.MCRAE JOB MANAGER: L.MCRAE DRAWN: J.STAUB



LONGITUDINAL SECTION ALONG MC01
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	07.08.24
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1
SCALE 1:100@A1

Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT
PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320
STAGE 1 DA

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
ROAD LONGITUDINAL SECTIONS -
SHEET 1

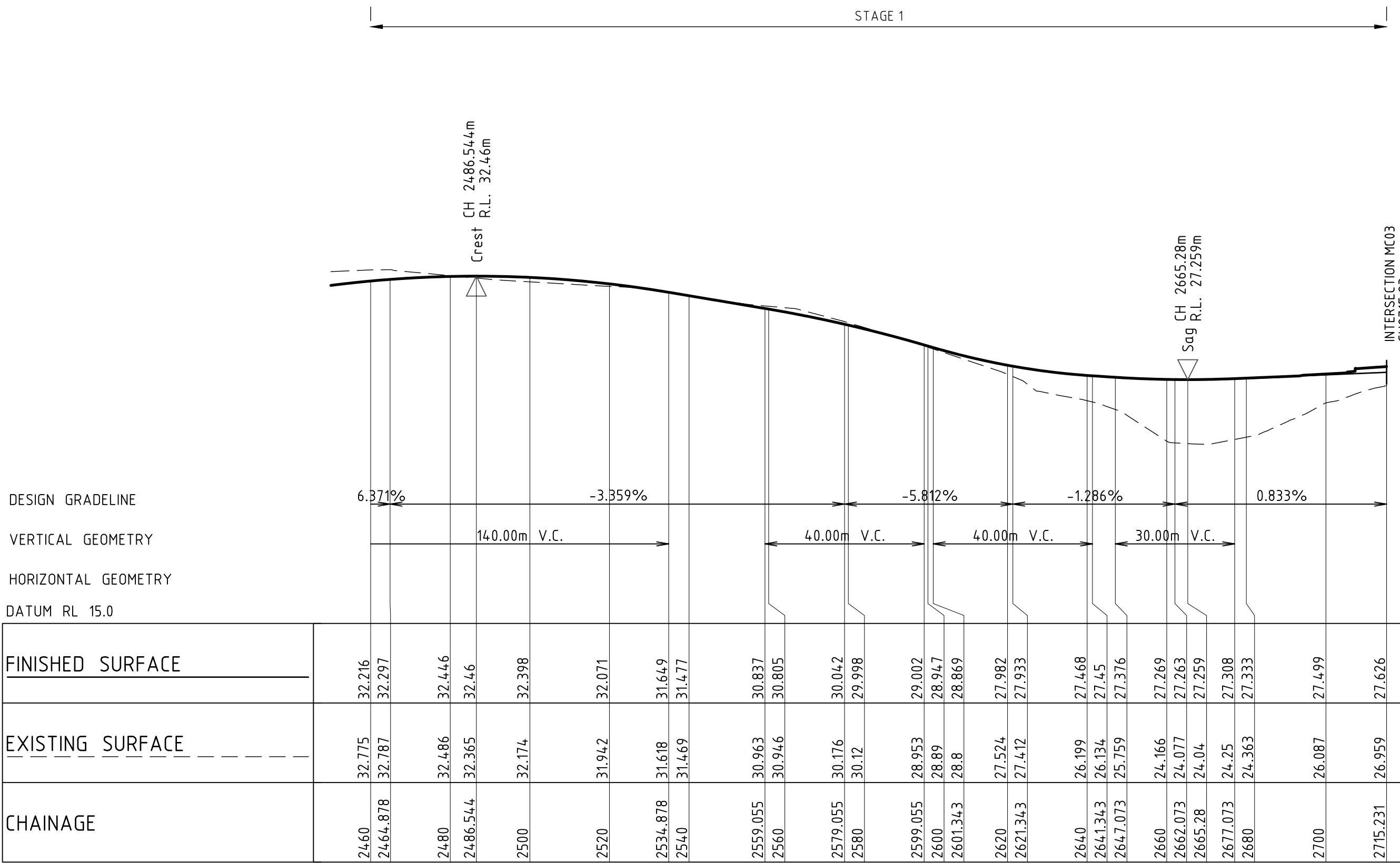
JOB NUMBER
NL222055-01

DRAWING NUMBER
DA1-C05.31

REVISION
E

DRAWING SHEET SIZE = A1

DESIGNED: A.KILLEN
DRAWN: J.STAUB
JOB MANAGER: L.MCRAE
VERIFIER: L.MCRAE



LONGITUDINAL SECTION ALONG MC02

HORIZONTAL SCALE 1:1000@A1

VERTICAL SCALE 1:200@A1



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	07.08.24
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1
SCALE 1:100@A1

Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS -
SHEET 2

JOB NUMBER

NL222055-01

DRAWING NUMBER

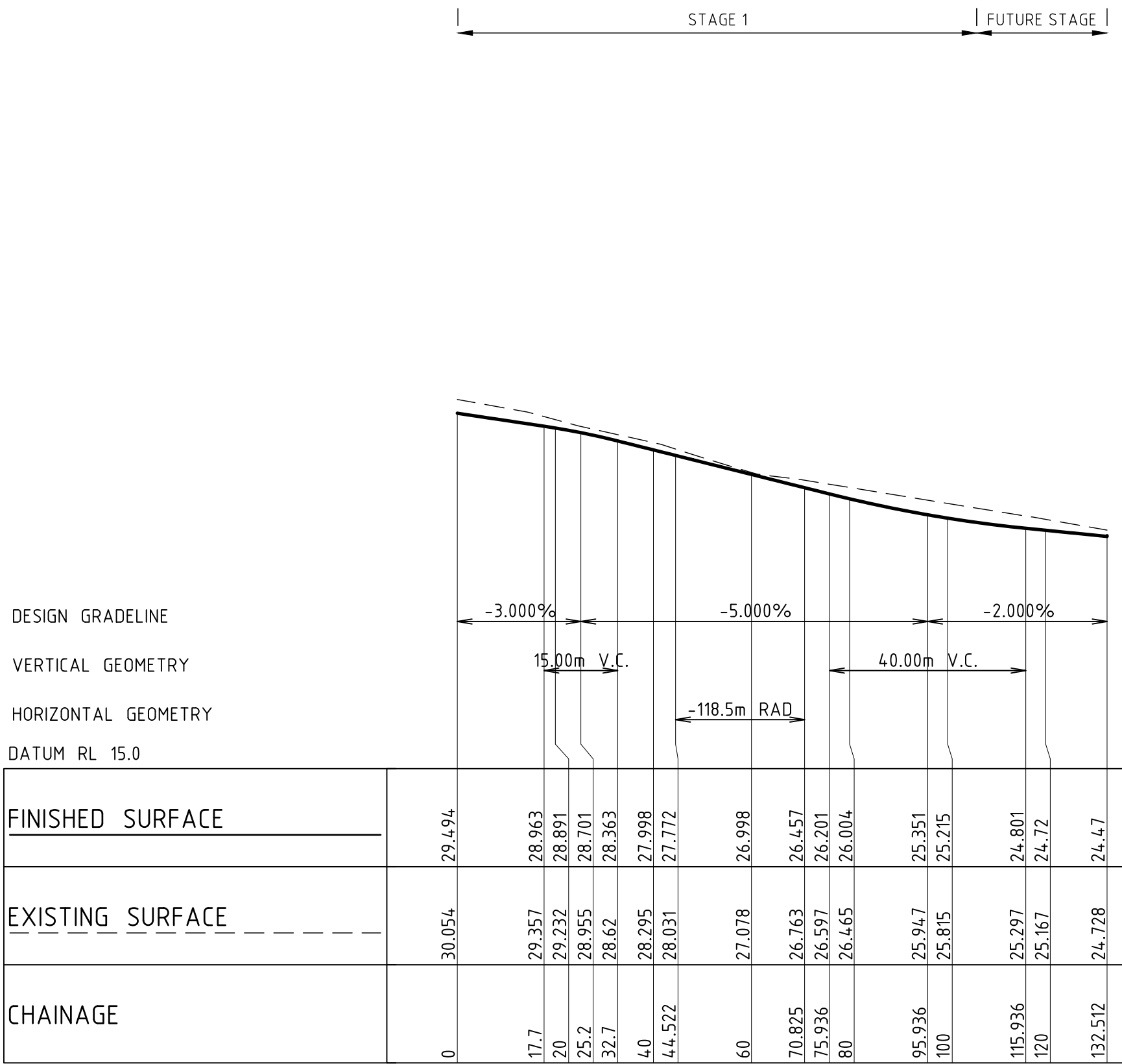
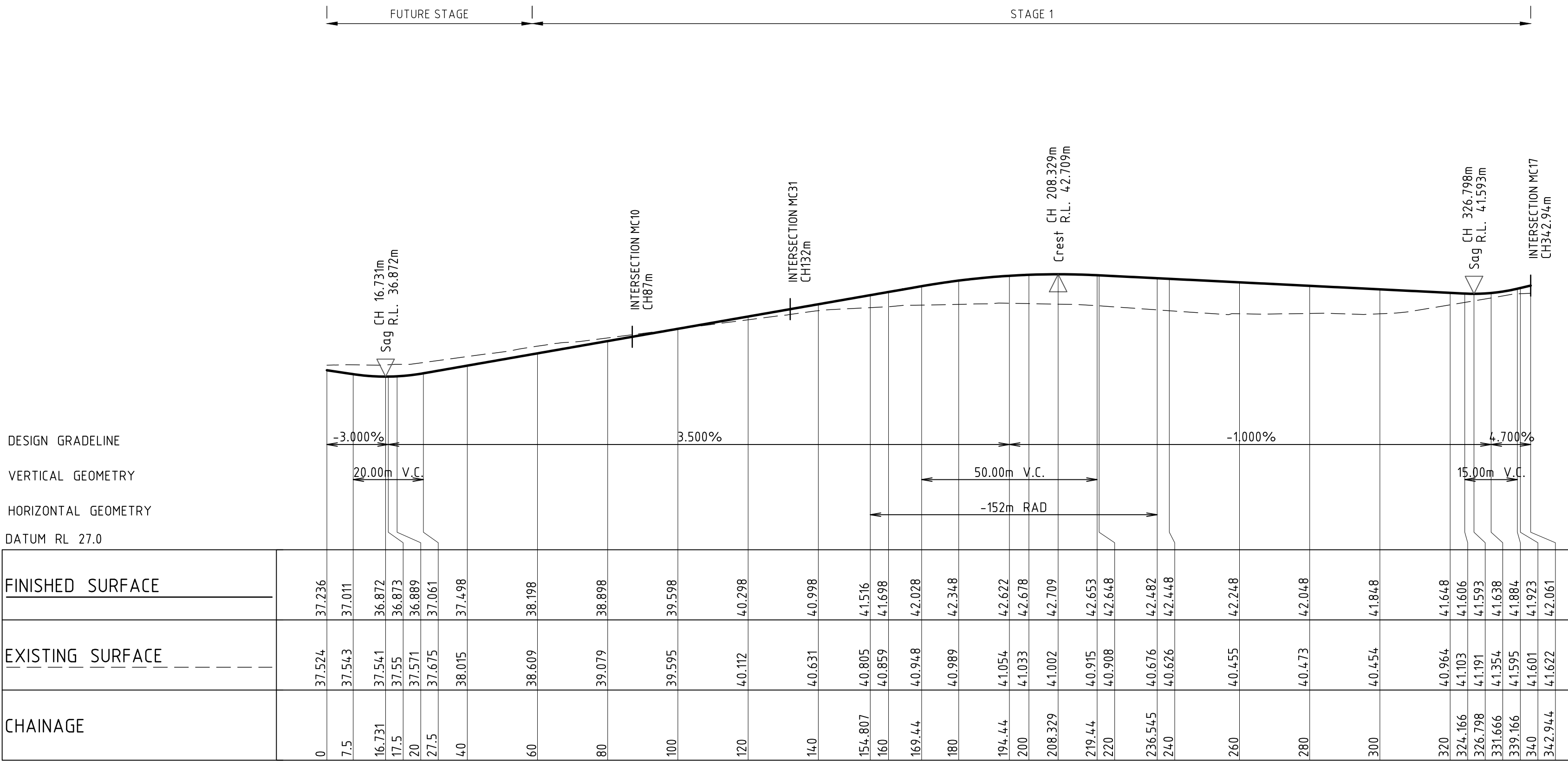
DA1-C05.32

REVISION

E

DRAWING SHEET SIZE = A1

DESIGNED: A.KILLEN
DRAWN: J.STAUB
JOB MANAGER: L.MCRAE
VERIFIER: L.MCRAE



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	07.08.24
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1
SCALE 1:100@A1

Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS -
SHEET 3

JOB NUMBER

NL222055-01

DRAWING NUMBER

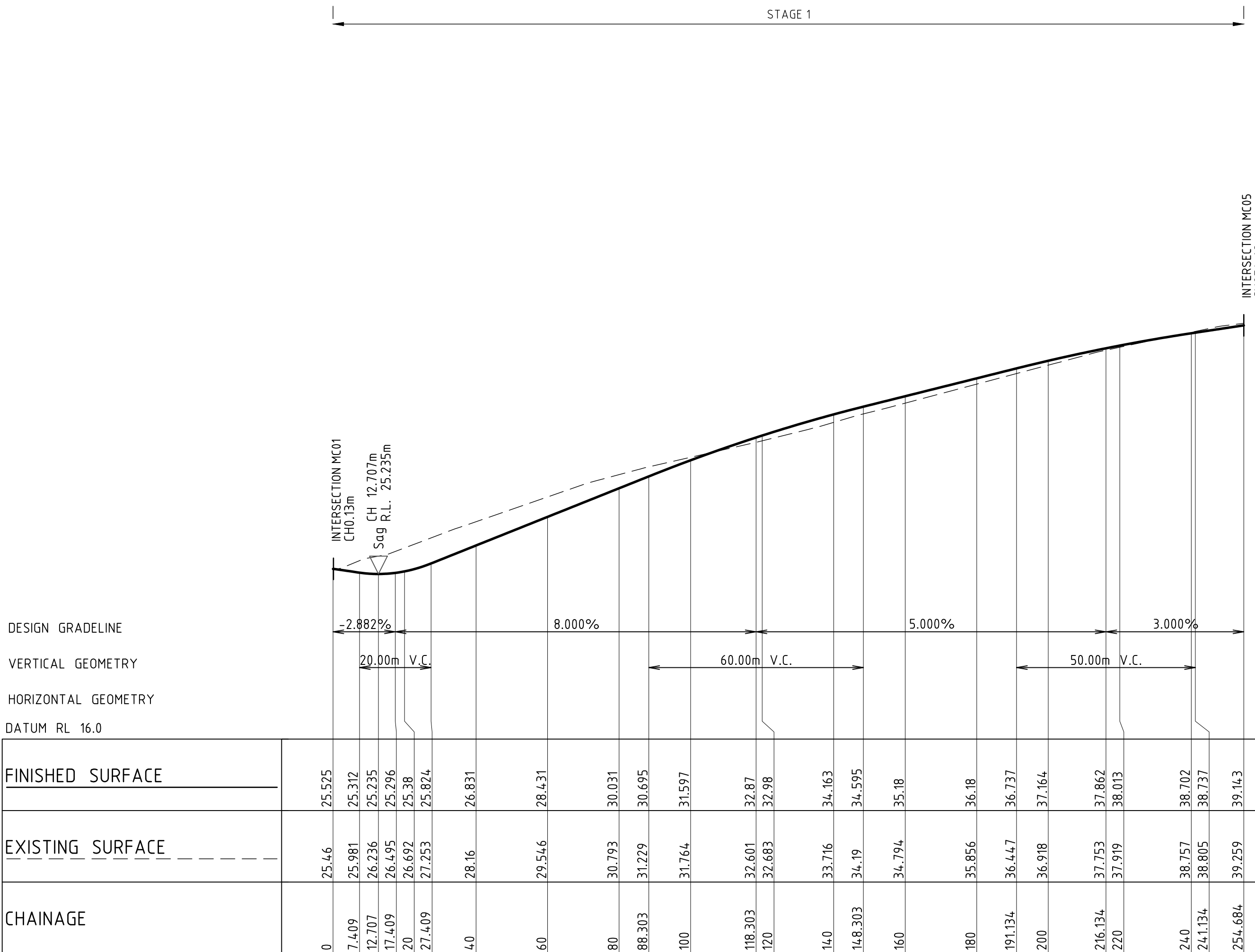
DA1-C05.33

REVISION

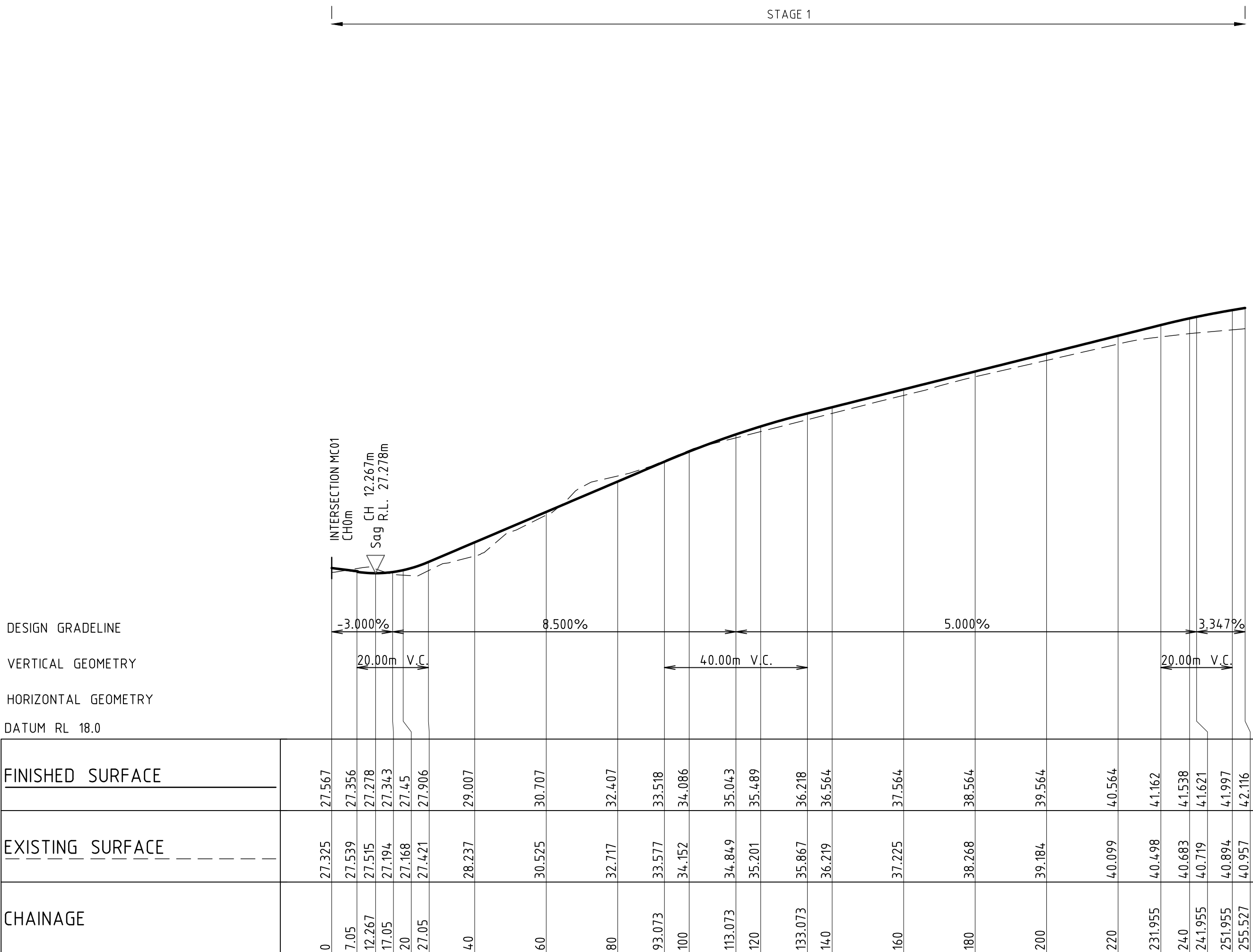
E

DRAWING SHEET SIZE = A1

DESIGNED: A.KILLEN
DRAWN: J.STAUB
JOB MANAGER: L.MCRAE
VERIFIER: L.MCRAE



LONGITUDINAL SECTION ALONG MC10
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1



LONGITUDINAL SECTION ALONG MC11
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	07.08.24
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1
SCALE 1:100@A1

Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS -
SHEET 4

JOB NUMBER

NL222055-01

DRAWING NUMBER

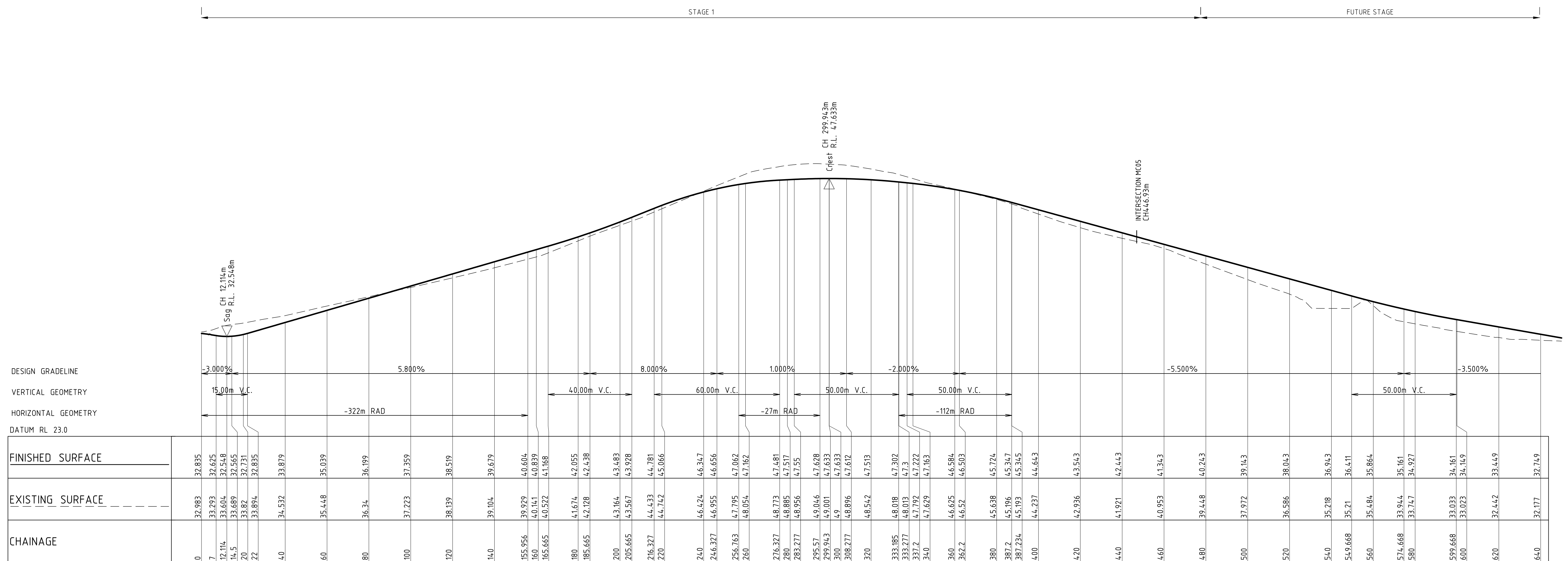
DA1-C05.34

REVISION

E

DRAWING SHEET SIZE = A1

DRAWN: J STAUB DESIGNED: A KILLEN JOB MANAGER: L MCRAE VERIFIER: L MCRAE






LONGITUDINAL SECTION ALONG MC17

HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1

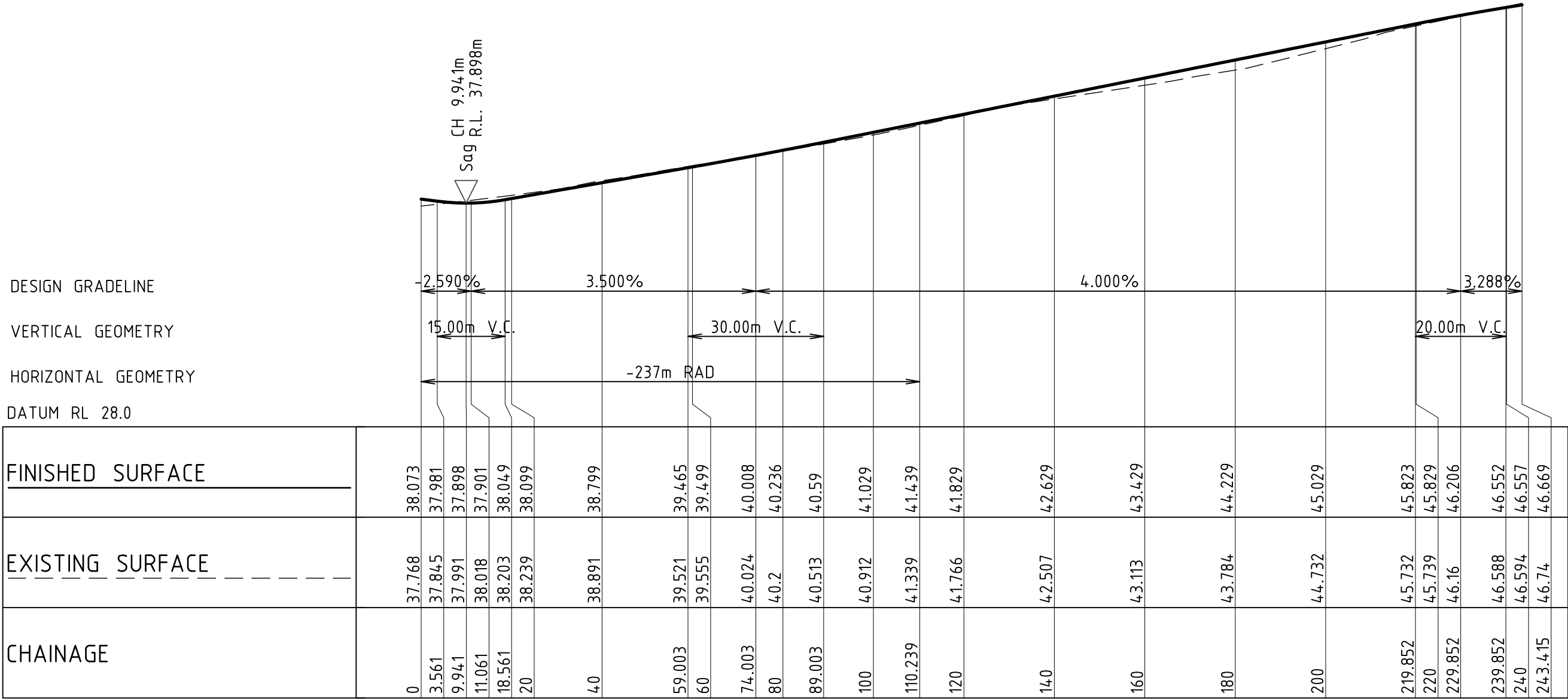


NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	COUNCIL		ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.	PROJECT	DRAWING TITLE	JOB NUMBER	
A	DRAFT ISSUE	JS	-	AK	07.08.24	<div>Third.i COMMUNITIES</div>	<div>maitland city council</div>	<div>Newcastle Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email northrop@northrop.com.au ABN 81 094 433 100</div>	<div>0 5 10 15 20 25m SCALE 1:500 @ A1 SCALE 1:100 @ A1</div> <div></div>	PROPOSED SUBDIVISION 559 ANAMBAH ROAD GOSFORTH NSW 2320	CIVIL ENGINEERING PACKAGE	NL222055-01	
B	DRAFT ISSUE	JS	-	AK	16.08.24								
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24								
D	DRAFT ISSUE	JS	-	AK	16.05.25								
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25								
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED						THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD				STAGE 1 DA	ROAD LONGITUDINAL SECTIONS - SHEET 5	DRAWING NUMBER DA1-C05.35	REVISION E
DRAWING SHEET SIZE = A1													

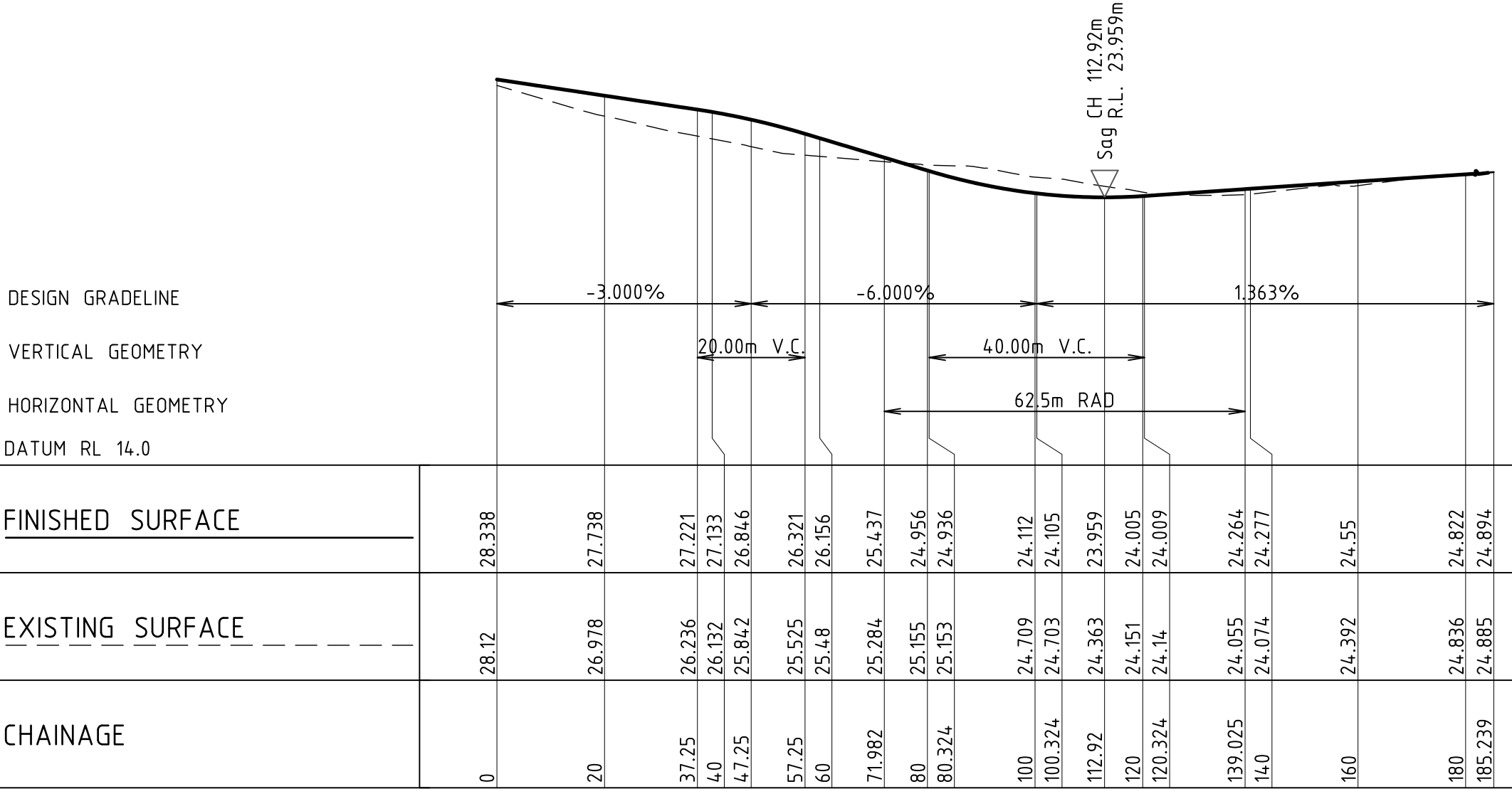
DESIGNED: A.KILLEN VERIFIER: L.MCRAE JOB MANAGER: L.MCRAE DRAWN: J.STAUB

DESIGN GRADELINE
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY
DATUM RL 28.0



LONGITUDINAL SECTION ALONG MC18
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1

DESIGN GRADELINE
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY
DATUM RL 14.0



LONGITUDINAL SECTION ALONG MC24
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	07.08.24
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1
SCALE 1:100@A1

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT
**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE
**CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS -
SHEET 6**

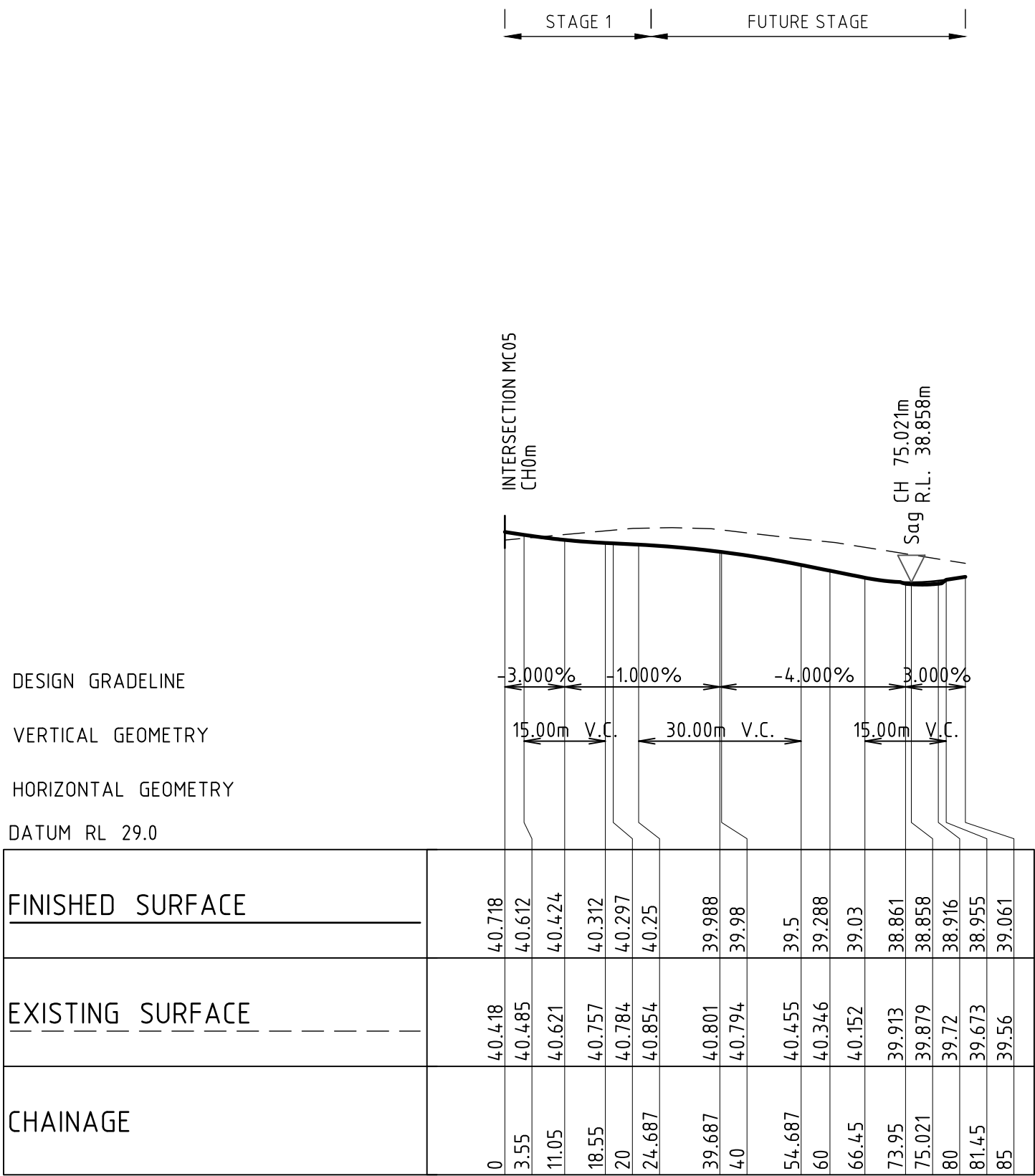
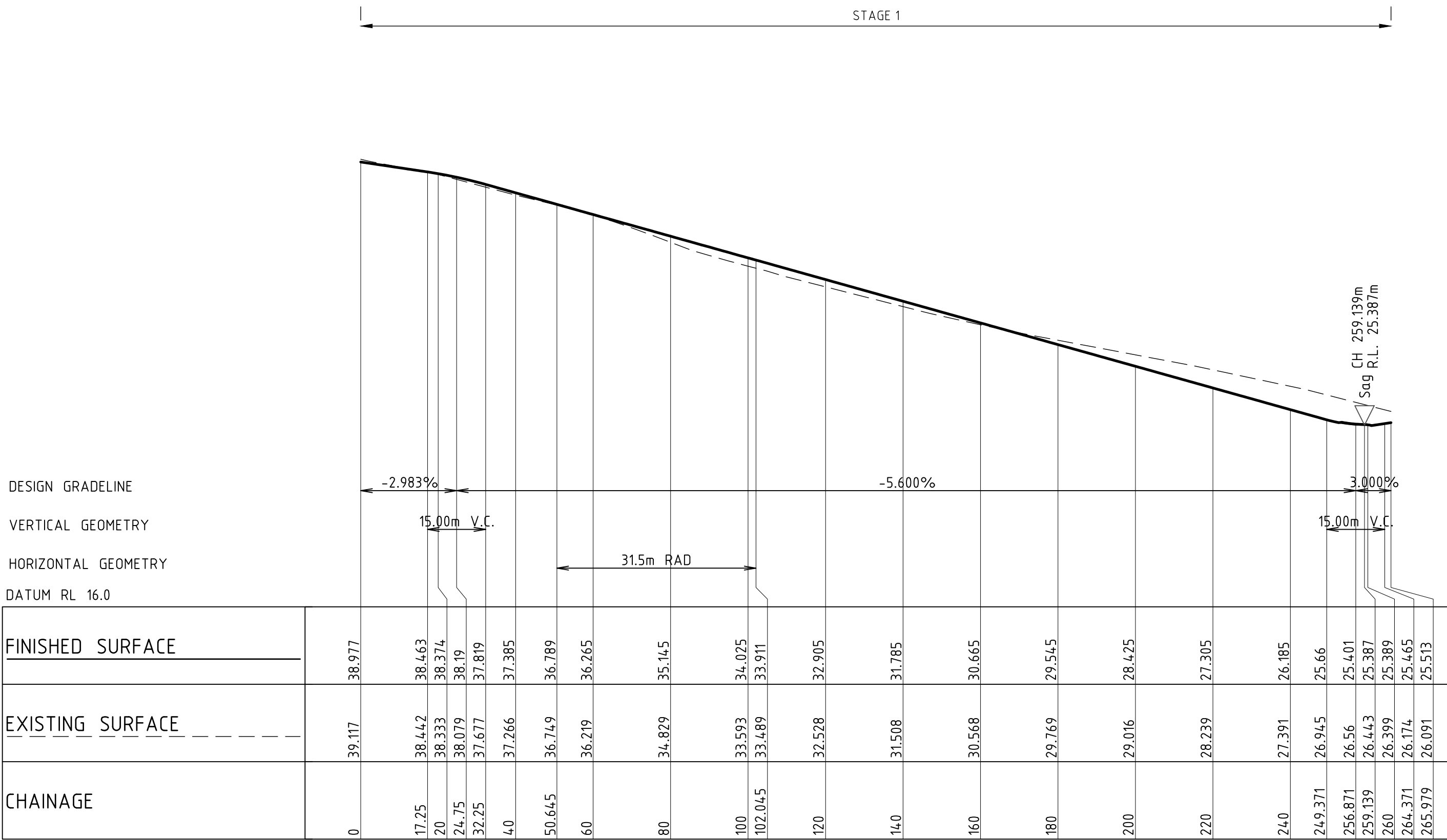
JOB NUMBER
NL222055-01

DRAWING NUMBER
DA1-C05.36

REVISION
E

DRAWING SHEET SIZE = A1

DESIGNED: A.KILLEN
DRAWN: J.STAUB
JOB MANAGER: L.MCRAE
VERIFIER: L.MCRAE



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	07.08.24
B	DRAFT ISSUE	JS	-	AK	16.08.24
C	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

CLIENT

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:500@A1
SCALE 1:100@A1

0 5 10 15 20 25m
0 1 2 3 4 5m

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
ROAD LONGITUDINAL SECTIONS -
SHEET 7**

JOB NUMBER

NL222055-01

DRAWING NUMBER

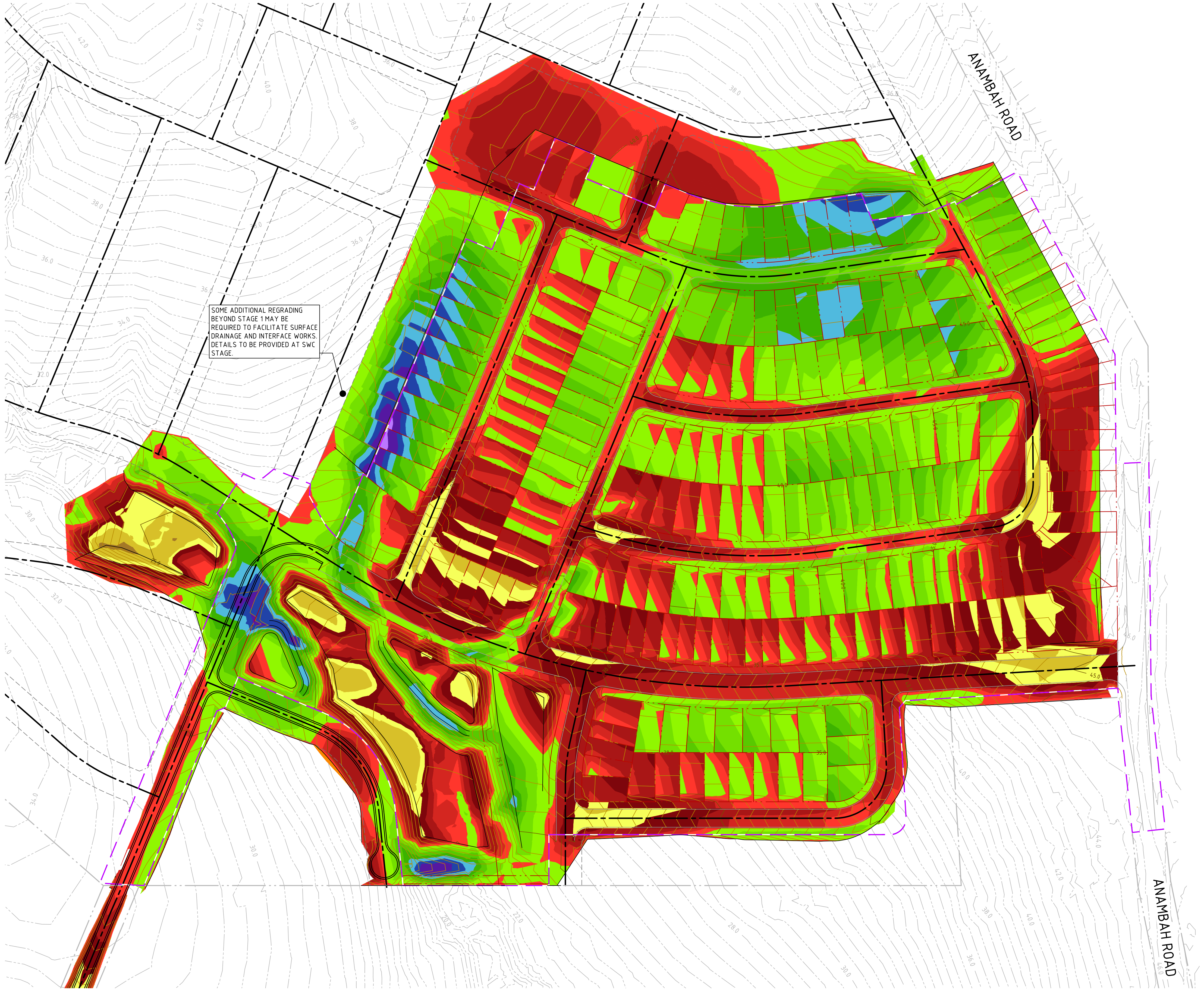
DA1-C05.37

REVISION

E

DRAWING SHEET SIZE = A1

DRAWN: J STAUB
DESIGNED: A KILLEN
JOB MANAGER: L MCRAE
VERIFIER: L MCRAE



LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE 1 RELEASE EXTENT

ROAD SETOUT CONTROL LINE

DESIGN CONTOURS (0.5m INTERVAL)

EXISTING CONTOURS (0.5m INTERVAL)

DEPTH OF CUT

- 7m

TO

- 5m

- 5m

TO

- 4m

- 4m

TO

- 3m

- 3m

TO

- 2m

- 2m

TO

- 1.5m

- 1.5m

TO

- 1m

- 1m

TO

- 0.5m

- 0.5m

TO

- 0.25m

- 0.25m

TO

0.0m

DEPTH OF FILL

0.0m

TO

0.5m

0.5m

TO

1m

1m

TO

1.5m

1.5m

TO

2m

2m

TO

2.5m

2.5m

TO

3m

3m

TO

4m

4m

TO

5m

5m

TO

8m

NOTES

1. BULK EARTHWORKS DEPICTED ARE INDICATIVE ONLY AND IT IS EXPECTED THAT ADDITIONAL AREAS OF CUT AND FILLING WILL BE REQUIRED AND THAT LEVELS/DEPTHS OF CUT AND FILL WILL BE ALTERED AND THIS WILL BE CONFIRMED AS PART OF THE DETAILED DESIGN PHASE FOR SUBDIVISION WORKS CERTIFICATE PLAN PREPARATION.

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	REISSUED FOR APPROVAL	JS	LM	AK	05.11.24
E	DRAFT ISSUE	JS	-	AK	16.05.25
F	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i

COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

m

maitland

city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1250 @ A1

0

12.5

25

37.5

50

62.5m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

CONCEPT BULK EARTHWORKS PLAN

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C06.01

REVISION

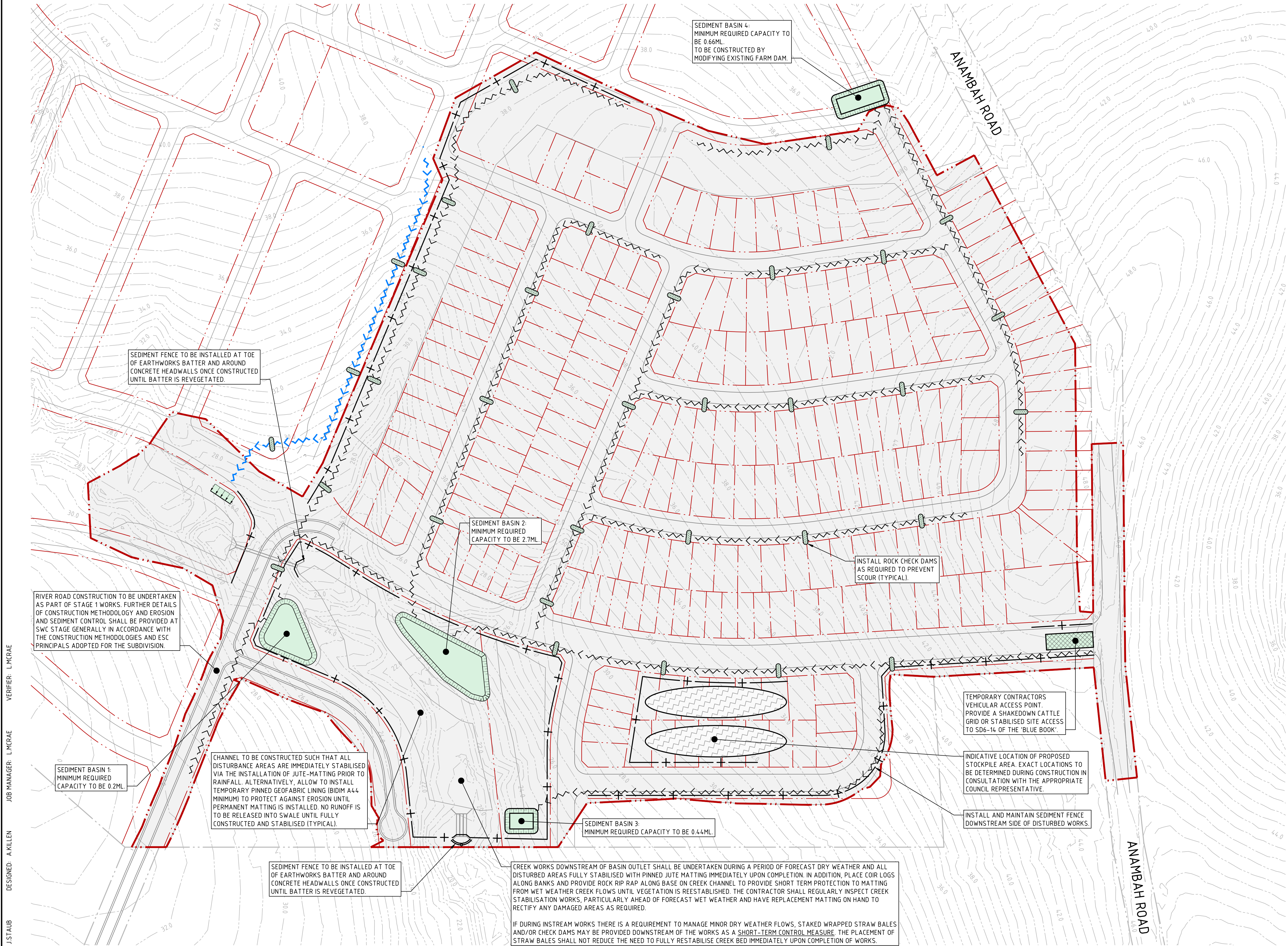
F

DRAWING SHEET SIZE = A1

0001 - 30.05.2025 10:38 AM Printed By: JACOB STAUB File: C:\15-Pac-Hwy-24-Projects\Newcastle\YEAR 2022-2025\NL222055-01 - 559 Anambah Road - GOSFORTH - Drawings\CIVIL\DA1-C06.01\DA1-C06.01-RELS EIR.dwg

NOT FOR CONSTRUCTION

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB



LEGEND

- PROPOSED BOUNDARY LINE
- EXISTING BOUNDARY LINE
- INDICATIVE STAGE 1 CIVIL WORKS DISTURBANCE AREA SUBJECT TO DETAILED DESIGN
- SEDIMENT FENCE
- DIVERSION DRAIN (CLEAN)
- DIVERSION DRAIN (DIRTY)
- STABILISED SITE ACCESS WITH SHAKER RAMP
- STOCKPILES
- SEDIMENT BASIN
- ROCK CHECK DAM
- LEVEL SPREADER
- EXISTING CONTOURS (0.5m INTERVAL)



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	REISSUED FOR APPROVAL	JS	LM	AK	05.11.24
E	DRAFT ISSUE	JS	-	AK	16.05.25
F	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1250 @ A1

0 12.5 25 37.5 50 62.5m

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

EROSION AND SEDIMENT CONTROL PLAN

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C07.01

REVISION

F

DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: A.KILLEN
DRAWN: J.STAUB

SOIL AND WATER MANAGEMENT	
1.	ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT ORDINANCES AND REGULATIONS; NOTE IN PARTICULAR THE REQUIREMENTS OF LANDCOMS MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION' (THE BLUE BOOK).
2.	THE CONTRACTOR MUST NOTIFY COUNCIL WITHIN 5 WORKING DAYS OF THE INITIAL EROSION CONTROL MEASURES BEING INSTALLED AND CHECK / MAINTAIN THE INSTALLED CONTROL MEASURES DAILY.
3.	INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
4.	ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
5.	INSTALL SEDIMENT FENCING AROUND INDIVIDUAL BUILDING ZONES / AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT.
6.	ALL TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAYS WORK.
7.	THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB & GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED THROUGH THE DURATION OF CONSTRUCTION. REFER ARCHITECTS PLANS FOR TREES TO BE KEPT.
8.	ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ONSITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
9.	STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
10.	CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE). NOTABLY, ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. IF MATERIALS ARE LIKELY TO BE STOCKPILED FOR MORE THAN 10 DAYS, THE CONTRACTOR SHALL PROVIDE AN APPROPRIATE PROTECTIVE COVER (SYNTHETIC OR ORGANIC).
11.	PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST. WHERE COUNCIL CONSIDERS THAT THE DUST IS NOT ADEQUATELY CONTROLLED, THE CONTRACTOR MUST INVESTIGATE OTHER DUST MITIGATION MEASURES SUCH AS DUST SUPPRESSANTS. THE CONTRACTOR MUST ENSURE THE CHEMICAL BASED DUST SUPPRESSANT DOES NOT CREATE A TRAFFIC OR ENVIRONMENTAL HAZARD.
12.	SHOULD ANY SEDIMENT LADEN WATER LEAVE THE SITE, THE INCIDENT MUST BE REPORTED TO COUNCIL WITHIN 2 HOURS OF THE SITE MANAGER BECOMING AWARE OF THE INCIDENT.
13.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION & SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A WEEKLY BASIS & SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY / ALL MAINTENANCE, CLEANING & BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.
14.	MEASURES USED TO CONTROL WIND EROSION MUST BE APPROPRIATE FOR THE LOCATION AND PREVENT SOIL EROSION AT ALL TIMES, INCLUDING WORK HOURS, WEEKENDS, PUBLIC HOLIDAYS AND DURING ANY OTHER SHUTDOWN PERIODS.
15.	ONCE CUT / FILL OPERATIONS HAVE BEEN FINALISED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.
16.	PRIORITY MUST BE GIVEN TO THE PREVENTION, OR AT LEAST MINIMISATION, OF SOIL EROSION, RATHER THAN THE TRAPPING OF DISPLACED SEDIMENT. SUCH A CLAUSE SHALL NOT REDUCE THE RESPONSIBILITY OF A CONTRACTOR TO APPLY AND MAINTAIN, AT ALL TIMES, ALL NECESSARY SEDIMENT CONTROL MEASURES.
17.	ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE APPROPRIATE FOR THE SEDIMENT TYPE(S) OF THE SOILS ON-SITE, IN ACCORDANCE WITH THE 'BLUE BOOK' (MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION, LANDCOM, 2004), OR OTHER CURRENT RECOGNISED INDUSTRY STANDARDS FOR EROSION AND SEDIMENT CONTROL FOR AUSTRALIAN CONDITIONS. THIS INCLUDES SEDIMENT TRAPS AND LINING OF CHANNELS.

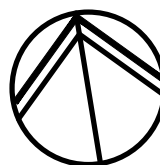



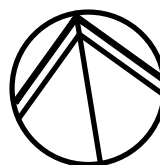

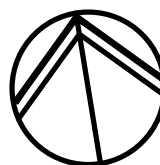
CONSTRUCTION SEQUENCE	
1.	INSTALL SEDIMENT FENCING AND CUT DRAINS TO MEET THE REQUIREMENTS OF THE SEDIMENT AND EROSION CONTROL PLAN AND MAITLAND CITY COUNCIL'S REQUIREMENTS.
2.	CONSTRUCT STABILISED SITE ACCESS.
3.	REDIRECT CLEAN WATER AROUND THE CONSTRUCTION SITE.
4.	INSTALL SEDIMENT CONTROL PROTECTION MEASURES AT NATURAL AND MAN-MADE DRAINAGE STRUCTURES. MAINTAIN UNTIL ALL THE DISTURBED AREAS ARE STABILISED.
5.	CLEAR AND STRIP THE WORK AREAS. MINIMISE THE DAMAGE TO GRASS AND LOW GROUND COVER OF NON-DISTURBED AREAS.
6.	ANY DISTURBED AREAS, OTHER THAN ROAD PAVEMENT AREAS, SHALL BE COVERED WITH SITE TOPSOIL AND SEEDED WITHIN 7 DAYS OF COMPLETION OF BULK LEVELS.
7.	APPLY PERMANENT STABILISATION TO SITE (LANDSCAPING).

GENERAL NOTES	
1.	THE CONTRACTOR SHALL PROVIDE BARRIER / PERSON PROOF FENCE TO THE SITE / THEIR COMPOUND TO ENSURE THE SITE IS MADE SAFE TO THE PUBLIC FOR THE DURATION OF CONSTRUCTION.
2.	THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN ON THIS PLAN ARE GENERAL. SITE MEASURES, ADDITIONAL MEASURES MAY BE REQUIRED AROUND INDIVIDUAL BUILDING ZONES DEPENDENT ON THE SEQUENCE OF CONSTRUCTION.

GROUND COVER FACTORS		
THE LONG TERM GROUND COVER FACTORS FOR THE CONSTRUCTION WORKS IS NOT TO EXCEED THE FOLLOWING LIMITS:		
LAND	MAXIMUM C-FACTOR	REMARKS
WATERWAYS AND OTHER AREAS OF CONCENTRATED 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.
STOCKPILES, POST CONSTRUCTION	0.10	APPLIES AFTER TEN WORKING DAYS FROM COMPLETION OF FORMATION. 60% GROUND COVER IS REQUIRED.
ALL LANDS, INCLUDING WATERWAYS AND STOCKPILES, DURING CONSTRUCTION	0.15	APPLIES AFTER 20 DAYS OF INACTIVITY, EVEN THOUGH WORKS MAY BE INCOMPLETE. 50% GROUND COVER IS REQUIRED.

BASIN MANAGEMENT NOTES	
1.	PRIOR TO ANY FORECAST WEATHER EVENT, LIKELY TO RESULT IN SEDIMENT LADEN RUNOFF ON THE SITE, ANY EXISTING DETENTION BASINS/TRAPS SHALL BE DEWATERED TO PROVIDE SUFFICIENT CAPACITY TO CAPTURE SEDIMENT LADEN WATER FROM THE SITE.
2.	ANY SEDIMENT LADEN WATER CAPTURED ON-SITE MUST BE TREATED TO ENSURE IT WILL ACHIEVE COUNCIL'S WATER QUALITY OBJECTIVES PRIOR TO ITS RELEASE FROM SITE. A SAMPLE OF THE RELEASED TREATED WATER MUST BE KEPT ON-SITE IN A CLEAR CONTAINER WITH THE SAMPLE DATE RECORDED.
3.	NO ALUMINIUM BASED PRODUCTS MAY BE USED TO TREAT TURBID WATER (FLOCCULATING/COAGULANTS) ON-SITE WITHOUT THE PRIOR WRITTEN PERMISSION FROM AN APPROPRIATE COUNCIL OFFICER. THE APPLICANT MUST HAVE DEMONSTRATED ABILITY TO USE SUCH PRODUCTS CORRECTLY AND WITHOUT ENVIRONMENTAL HARM PRIOR TO ANY APPROVAL.
4.	THE CHEMICAL/AGENT (FLOCCULATING/COAGULANTS) USED IN TYPE D AND TYPE F BASINS TO TREAT TURBID WATER CAPTURED IN THE BASIN MUST BE APPLIED IN CONCENTRATIONS SUFFICIENT TO ACHIEVE COUNCIL'S WATER QUALITY OBJECTIVES (TSS < 50mg/L, TURBIDITY < 60 NTU, 6.5 < pH < 8.5) WITHIN THE 5-DAY RAINFALL DEPTH USED TO CALCULATE THE CAPACITY OF THE BASIN, AFTER A RAINFALL EVENT.
5.	ALL MANUFACTURERS INSTRUCTIONS MUST BE FOLLOWED FOR THE USE OF ANY CHEMICALS/AGENTS USED ON-SITE, EXCEPT WHERE APPROVED BY THE RESPONSIBLE PERSON OR AN APPROPRIATE COUNCIL OFFICER.
6.	SUFFICIENT QUANTITIES OF CHEMICALS/AGENTS TO TREAT TURBID WATER (FLOCCULATING/COAGULANTS) MUST BE PLACED SUCH THAT WATER ENTERING THE BASINS/SEDIMENT TRAP MIXES WITH THE CHEMICALS/AGENTS AND IS CARRIED INTO THE BASIN/TRAP.
7.	ANY BASIN MUST BE DEWATERED AS SOON AS PRACTICAL, ONCE WATER CAPTURED IN THE BASIN ACHIEVES COUNCIL'S WATER QUALITY OBJECTIVES.
8.	INSPECT THE SEDIMENT BASINS AFTER EACH RAINFALL EVENT AND/OR WEEKLY. ENSURE THAT ALL SEDIMENT IS REMOVED ONCE THE SEDIMENT STORAGE ZONE IS FULL. ENSURE THAT OUTLET AND EMERGENCY SPILLWAY WORKS ARE MAINTAINED IN A FULLY OPERATIONAL CONDITION AT ALL TIMES.
9.	STAGE BASIN CONSTRUCTION TO ENSURE EXISTING STORMWATER SYSTEM DISCHARGE AND NATURAL CREEK RUNOFF REMAINS FREE OF SEDIMENT. PRIOR TO COMMENCEMENT THE CONTRACTOR SHALL PREPARE A MANAGEMENT PLAN DETAILING PROPOSED METHODOLOGY TO MANAGE EXISTING WATERCOURSE FLOWS TO SUIT PROPOSED CONSTRUCTION METHODOLOGY.

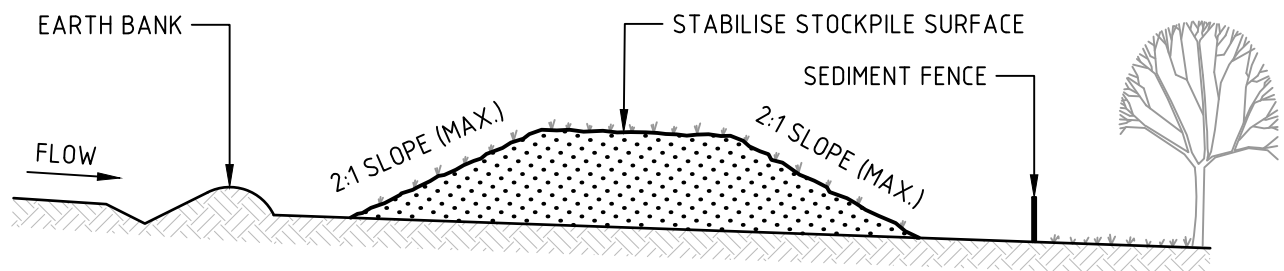
SEDIMENT BASINS SIZING CALCULATIONS							
TOTAL BASIN VOLUME (STAGE 1 DA)							
LOCATION	C _v	5-DAY, 80-%ile	TOTAL CATCHMENT AREA (ha)	DISTURBED CATCHMENT AREA (ha)	SETTLING ZONE VOLUME (m³)	SEDIMENT STORAGE VOLUME (m³)	TOTAL BASIN VOLUME (m³)
SEDIMENT BASIN 1	0.56	30.0	1.0	1.28	215	40	200
SEDIMENT BASIN 2	0.56	30.0	12.5	12.5	2100	489	2700
SEDIMENT BASIN 3	0.56	30.0	2.2	1.89	318	58	440
SEDIMENT BASIN 4	0.56	30.0	3.3	3.61	606	127	660
THE SITE IS LOCATED WITHIN THE BRANXTON AND ROTHBURY SOIL LANDSCAPE, WHICH HAS THE FOLLOWING PROPERTIES (BASED ON SITE SPECIFIC GEOTECH REPORT #EP3627.002 PREPARED BY EP RISK):							
<ul style="list-style-type: none">• PRIMARILY SILTY AND SANDY CLAYS• SEDIMENT TYPE D• SOIL HYDROLOGY GROUP D• K-FACTOR OF 0.050 (ROTHBURY AND BRANXTON SOIL LANDSCAPE)							
THE SIZING OF THE SEDIMENT STORAGE VOLUME OF THE SITES PROPOSED SEDIMENTATION BASINS WERE CALCULATED BY APPLYING THE REVISED UNIVERSAL SOIL LOSS EQUATION (RUSLE) METHOD:							
SOIL LOSS = R K L S P C							
WHERE; R = RAINFALL EROSIVITY FACTOR = 1820							
2 YEAR, 6 HOUR STORM INTENSITY = 8.89 mm/hr							
LS = SLOPE LENGTH/GRADIENT FACTOR = 2.00-2.53 (VARIES PER BASIN)							
K = SOIL ERODIBILITY FACTOR = 0.05							
P = EROSION CONTROL PRACTICE (P-FACTOR) = 1.3 (TYPICAL)							
C = GROUND COVER (C-FACTOR) = 1.0 (TYPICAL FOR STRIPPED SITE)							
THE REMAINING VARIABLES ARE PRESENTED WITHIN THE TEMPORARY SEDIMENT BASIN CAPACITY TABLE.							
THE SETTLING ZONE VOLUME OF THE BASIN WAS CALCULATED FOR A 2 MONTHS SOIL LOSS AS CALCULATED BY THE RUSLE METHOD:							
SETTLING ZONE VOLUME = 10 CV RX-DAY, Y-%ILE x CATCHMENT AREA							
WHERE RX-DAY, Y-%ILE = 30.5 mm/hr							
[5 DAY, 80th PERCENTILE RAINFALL EVENT]							

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	COUNCIL		ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.		PROJECT	DRAWING TITLE	JOB NUMBER		
A	DRAFT ISSUE	JS	-	AK	16.08.24				SCALE 1:2000@A1		PROPOSED SUBDIVISION 559 ANAMBAH ROAD GOSFORTH NSW 2320	CIVIL ENGINEERING PACKAGE EROSION AND SEDIMENT CONTROL NOTES	NL222055-01		
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24										
C	DRAFT ISSUE	JS	-	AK	16.05.25										
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25										
						DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD		0 20 40 60 80 100m			STAGE 1 DA	DRAWING NUMBER DA1-C07.11	REVISION D	
DRAWING SHEET SIZE = A1															



NOT FOR CONSTRUCTION

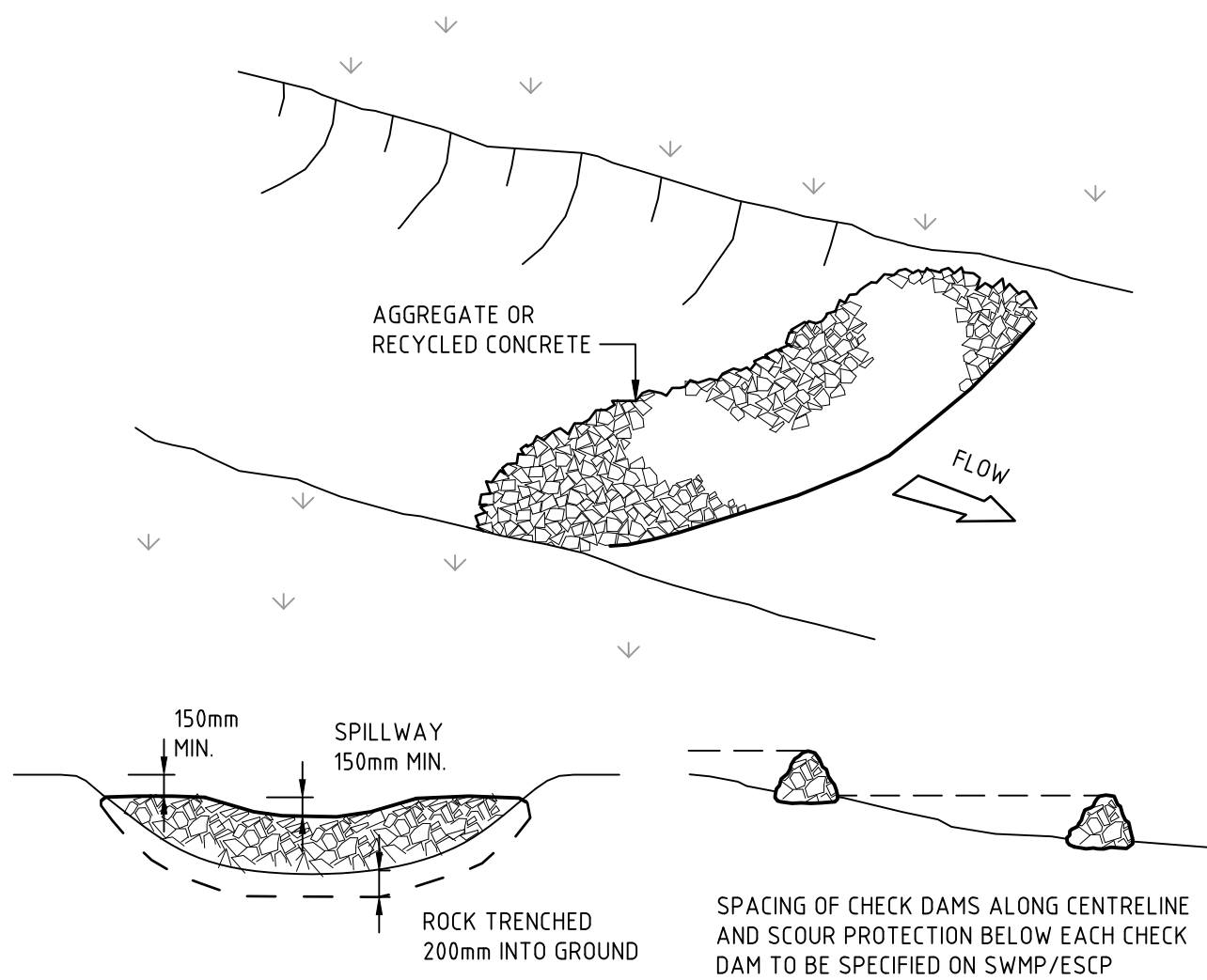
VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: A.KILLEN
DRAWN: J.STAUB



CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) 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 2m 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 2m DOWNSLOPE.

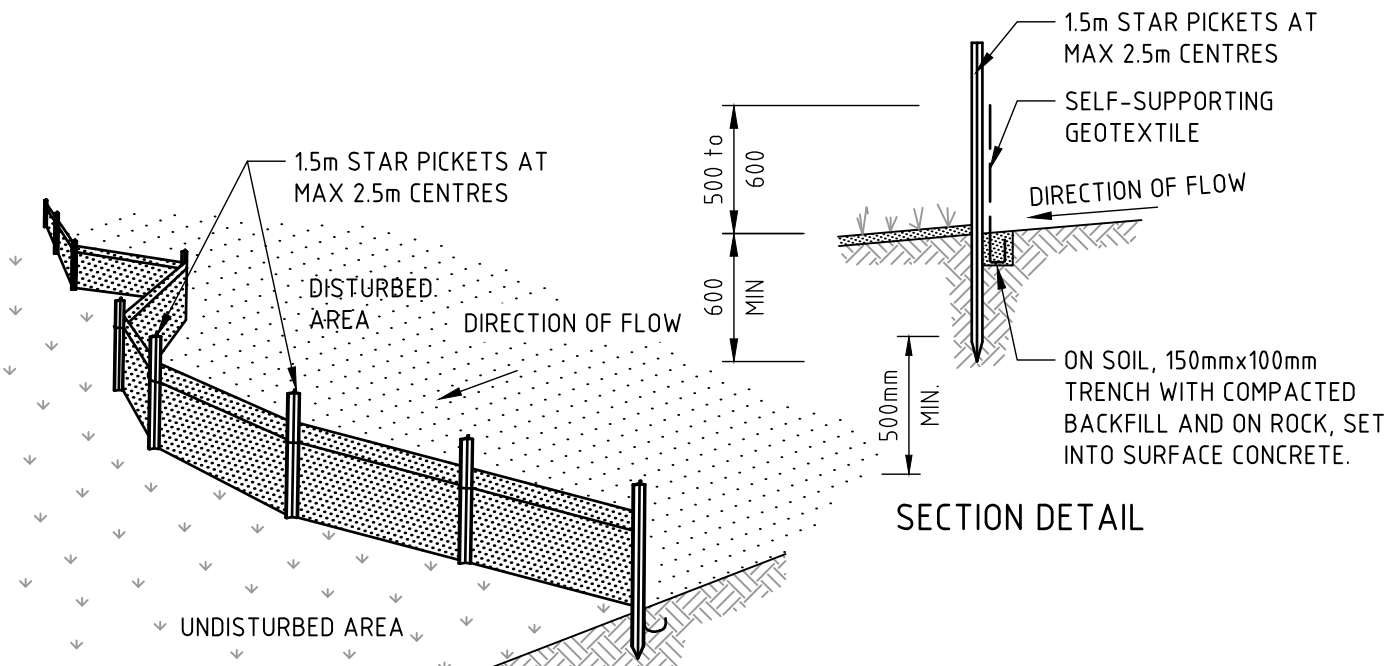
STOCKPILES (SD 4-1)



CONSTRUCTION NOTES

1. CHECK DAMS CAN BE BUILT WITH VARIOUS MATERIALS, INCLUDING ROCKS, LOGS, SANDBAGS AND STRAW BALES. THE MAINTENANCE PROGRAM SHOULD ENSURE THEIR INTEGRITY IS RETAINED, ESPECIALLY WHERE CONSTRUCTED WITH STRAW BALES. IN THE CASE OF BALES, THIS MIGHT REQUIRE THEIR REPLACEMENT EACH TWO TO FOUR MONTHS.
2. TRENCH THE CHECK DAM 200mm INTO THE GROUND ACROSS ITS WHOLE WIDTH. WHERE ROCK IS USED, FILL THE TRENCHES TO AT LEAST 100mm ABOVE THE GROUND SURFACE TO REDUCE THE RISK OF UNDERCUTTING.
3. NORMALLY, THEIR MAXIMUM HEIGHT SHOULD NOT EXCEED 600mm ABOVE THE GULLY FLOOR. THE CENTRE SHOULD ACT AS A SPILLWAY, BEING AT LEAST 150mm LOWER THAN THE OUTER EDGES.
4. SPACE THE DAMS SO THE TOE OF THE UPSTREAM DAM IS LEVEL WITH THE SPILLWAY OF THE NEXT DOWNSTREAM DAM.

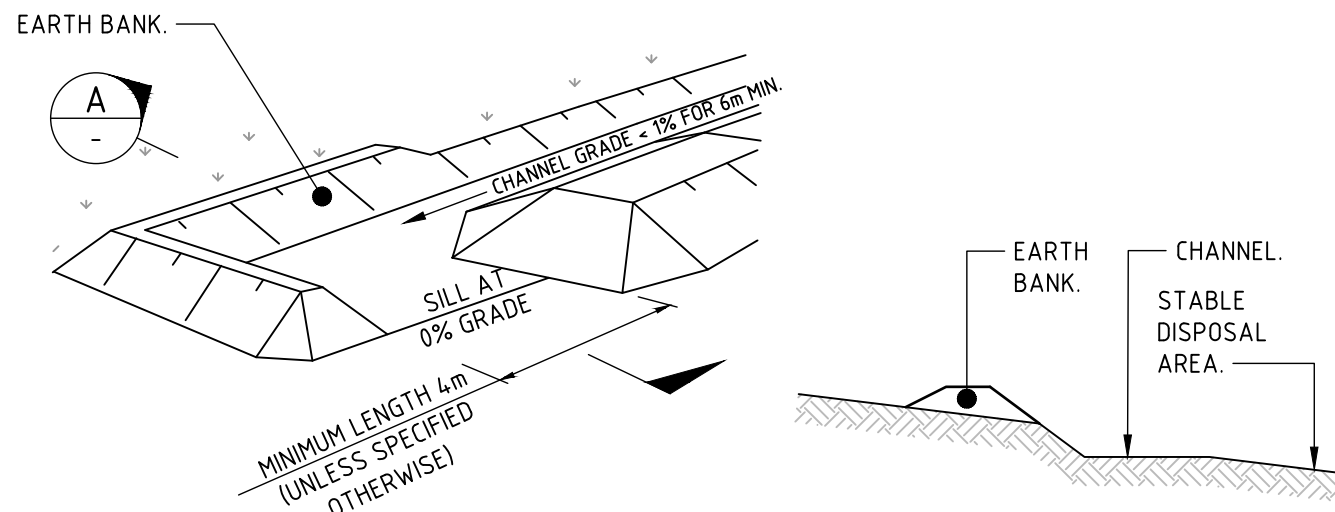
ROCK CHECK DAM (SD 5-4)



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 15 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 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE (SD 6-8)

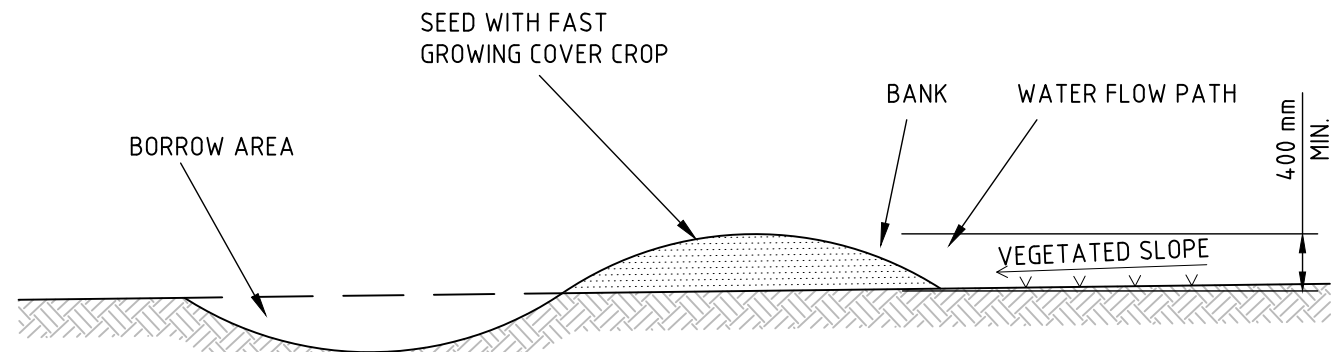


LEVEL SPREADER (OR SILL)

CONSTRUCTION NOTES

1. CONSTRUCT THE LEVEL SPREADER AT THE GRADIENT SPECIFIED ON THE ESCP OR SWMP, NORMALLY LESS THAN 1 PERCENT OR LEVEL.
2. WHERE POSSIBLE, ENSURE THEY DISCHARGE WATERS ONTO EITHER STABILISED OR UNDISTURBED DISPOSAL SITES WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED. APPROVAL MIGHT BE REQUIRED TO DISCHARGE INTO OTHER SUBCATCHMENTS.

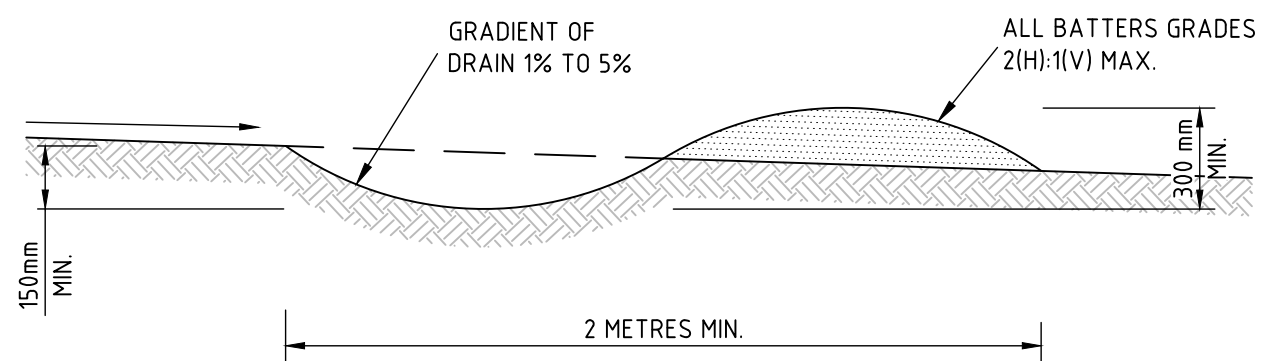
LEVEL SPREADER



CONSTRUCTION NOTES

1. TO BE USED FOR CLEAN WATER DIVERSION DRAINS.
2. BORROW AREA TO BE ON DISTURBED (DIRTY) SIDE OF DRAIN.
3. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
4. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
5. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
6. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
7. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

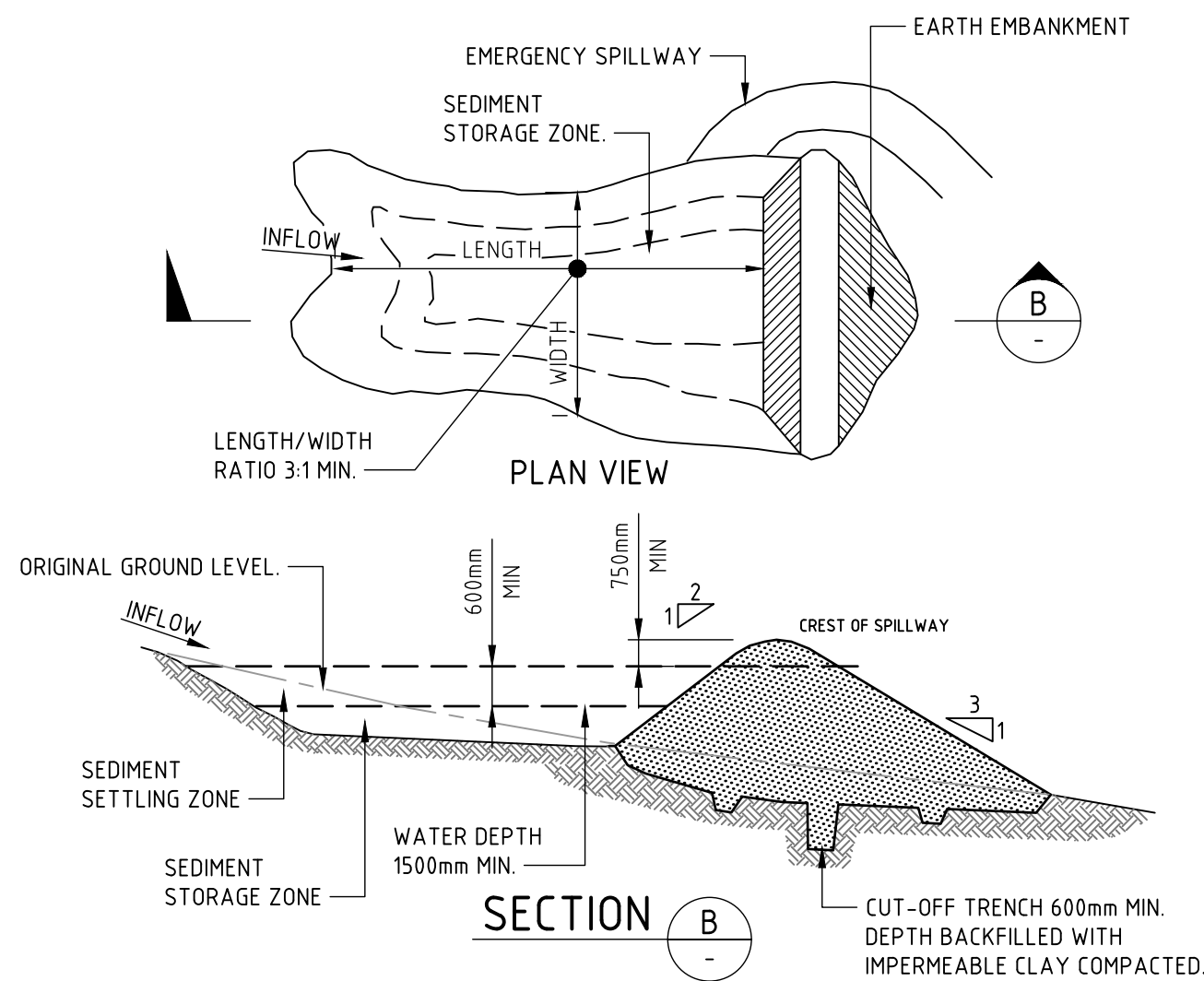
CLEAN WATER DIVERSION SWALE (BACK PUSH BANK)



CONSTRUCTION NOTES

1. TO BE USED FOR DIRTY WATER CUT OFF SWALES & CAN BE USED FOR CLEAN WATER DIVERSION DRAINS (IF LINED).
2. PROVIDE GEOTEXTILE LINING TO SECTIONS OF CLEAN WATER DIVERSION.
3. BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
4. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
5. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
6. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
7. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
8. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

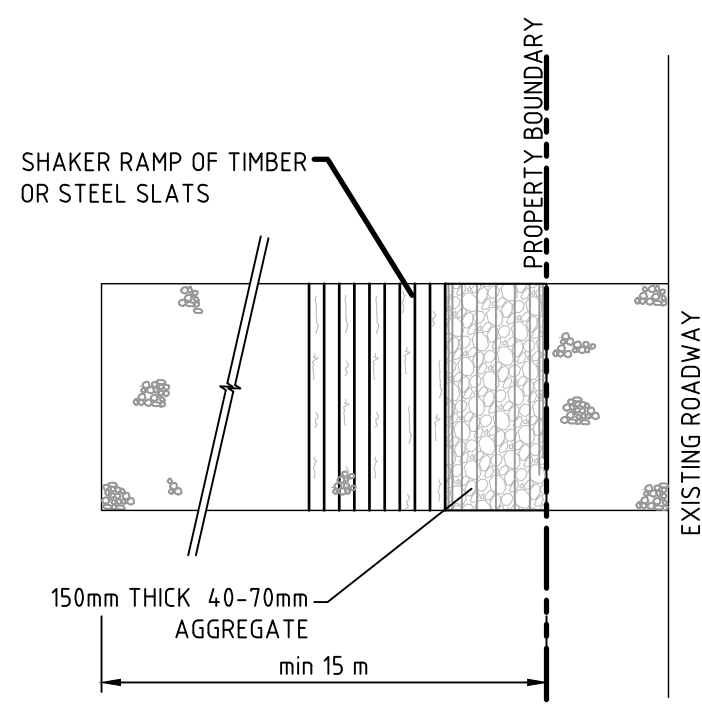
DIRTY WATER DIVERSION SWALE



CONSTRUCTION NOTES

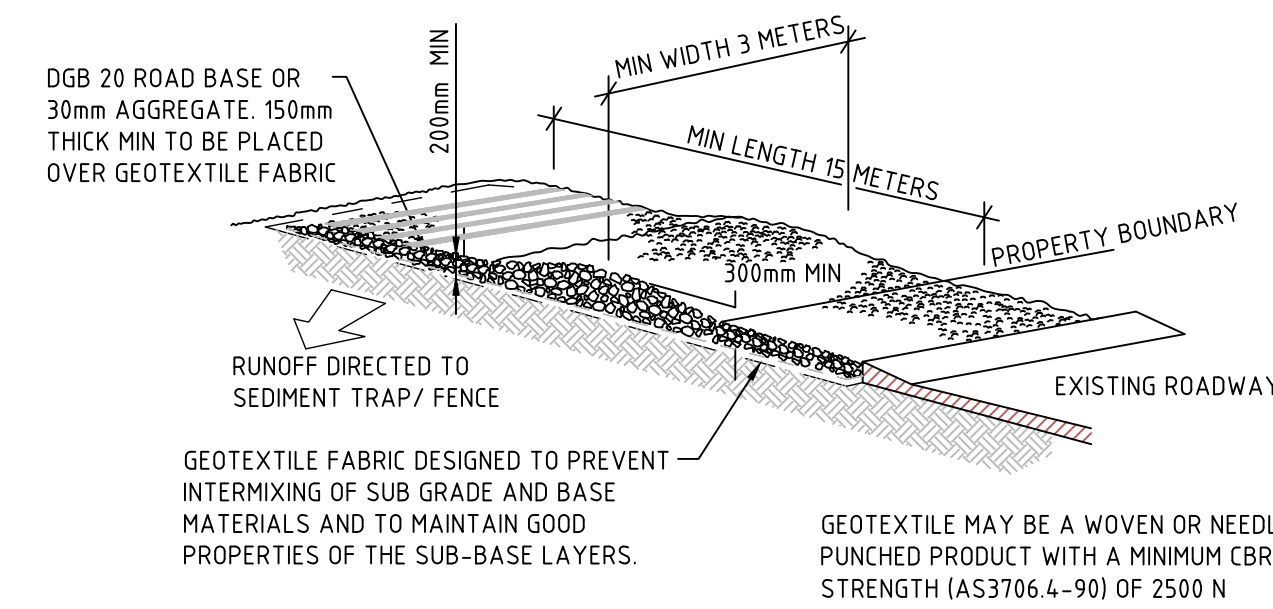
1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
2. CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.
4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE.
6. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
7. CONSTRUCT THE EMERGENCY SPILLWAY.
8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)
EARTH SEDIMENT BASIN - WET (SD 6-4)



PLAN
STABILISED SITE ACCESS WITH SHAKER RAMP

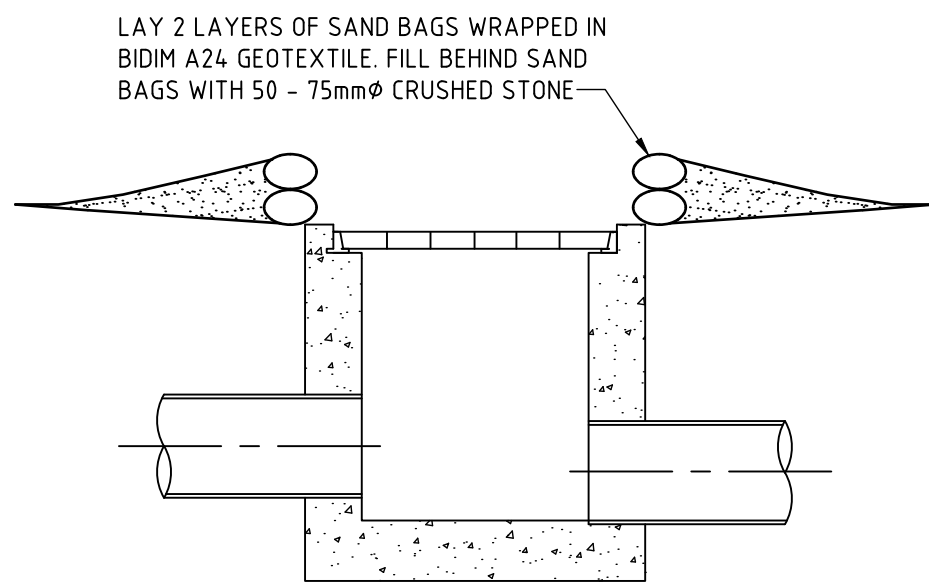
CONSTRUCTION SITE



STABILISED SITE ACCESS WITH SHAKER RAMP

STABILISED SITE ACCESS WITH SHAKER RAMP CONSTRUCTION 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, PRECAST CONCRETE CATTLE GRIDS MAY BE USED. 1, 2 & 3 ABOVE ALSO APPLY.



PIT PROTECTION DETAIL
(ALTERNATIVE DETAIL SD6-11 OR SD6-12 OF THE BLUE BOOK AS APPROPRIATE)

INSTALL PIT PROTECTION TO ALL
NEW & EXISTING STORMWATER PITS.



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
A	DRAFT ISSUE	JS	-	AK	16.08.24	Third.i COMMUNITIES
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24	
C	DRAFT ISSUE	JS	-	AK	16.05.25	
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25	
						DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL	CLIENT
maitland city council	Third.i COMMUNITIES
THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	

SCALE 1:2000@A1	0 20 40 60 80 100m
-----------------	--------------------

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

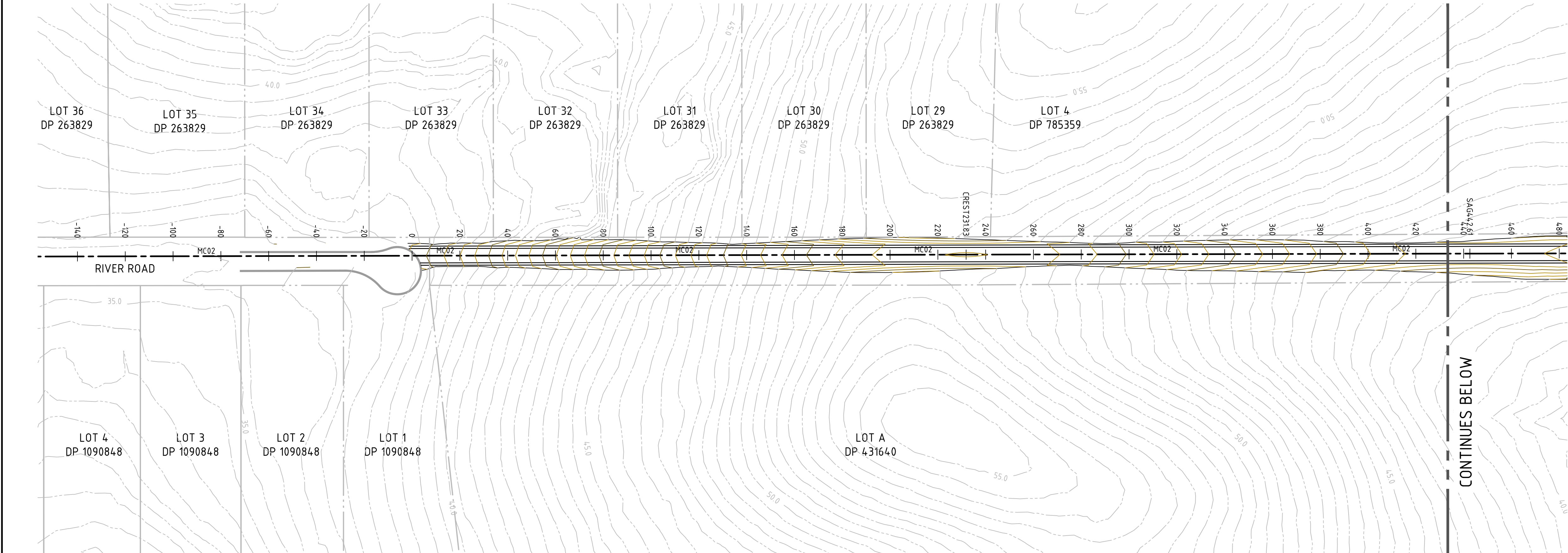
NORTHROP Newcastle Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email newcastle@northrop.com.au ABN 81 094 433 100

PROJECT PROPOSED SUBDIVISION 559 ANAMBAH ROAD GOSFORTH NSW 2320 STAGE 1 DA
--

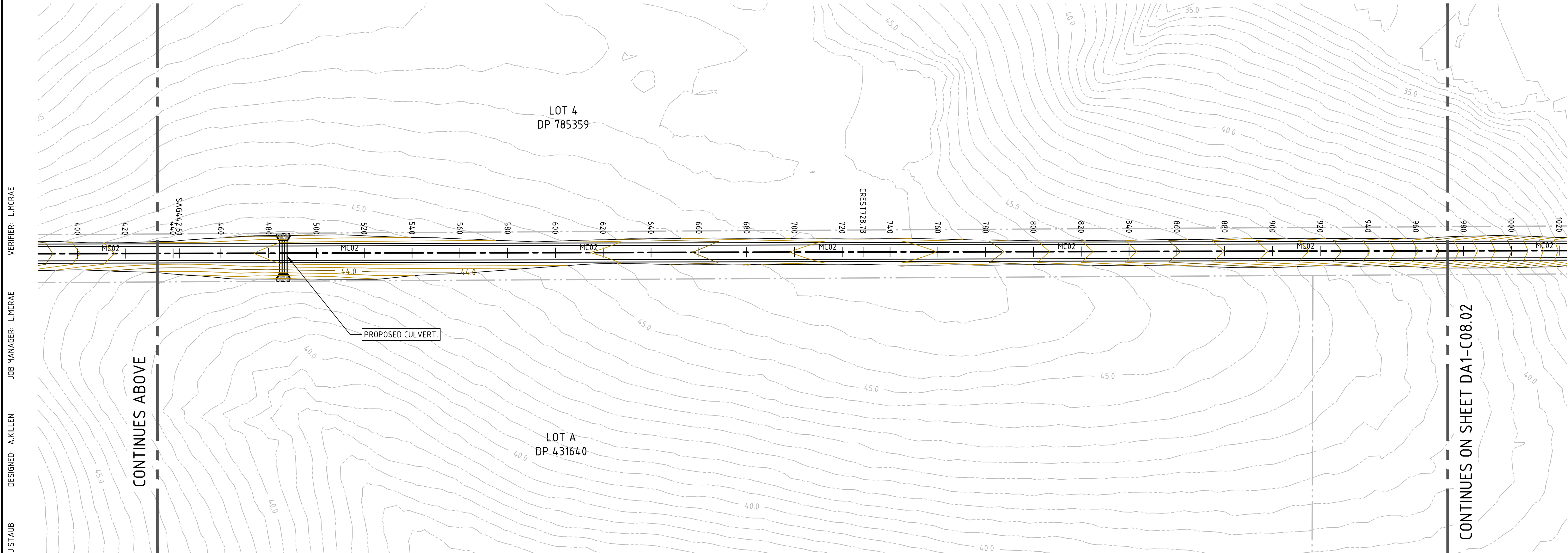
DRAWING TITLE CIVIL ENGINEERING PACKAGE EROSION AND SEDIMENT CONTROL DETAILS

JOB NUMBER NL222055-01	DRAWING NUMBER DA1-C07.12	REVISION D
DRAWING SHEET SIZE = A1		

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	DESIGN CONTOURS (0.5m INTERVALS)
	EXISTING CONTOURS (0.5m INTERVALS)



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

CLIENT

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1

0 10 20 30 40 50m

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**CONCEPT CIVIL WORKS PLAN RIVER
ROAD - SHEET 1**

JOB NUMBER

NL222055-01

DRAWING NUMBER

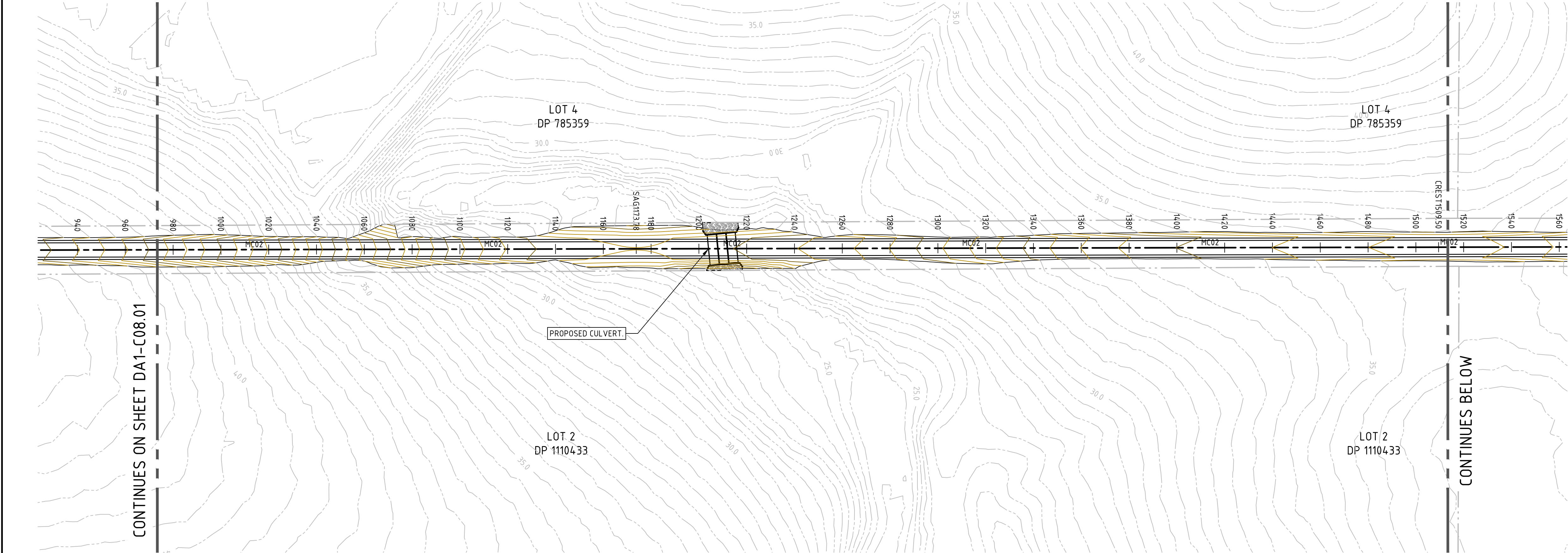
DA1-C08.01

REVISION

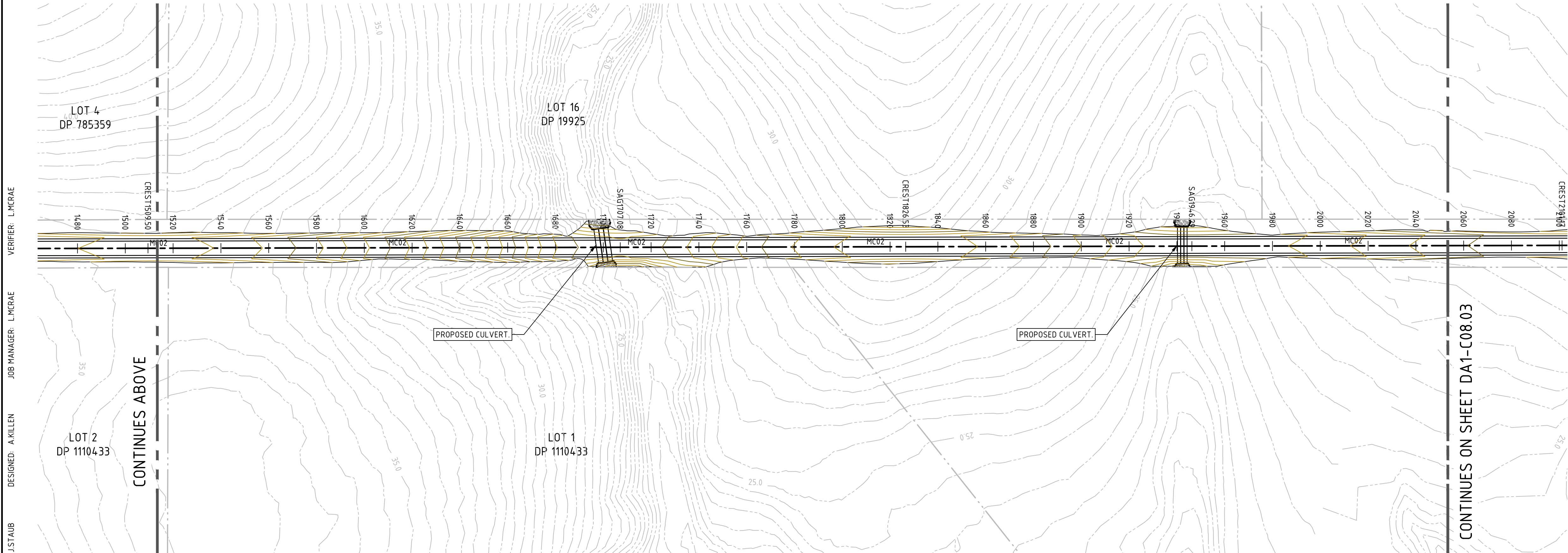
E

DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: J STAUB



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	DESIGN CONTOURS (0.5m INTERVALS)
	EXISTING CONTOURS (0.5m INTERVALS)



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE
**CONCEPT CIVIL WORKS PLAN RIVER
ROAD - SHEET 2**

JOB NUMBER

NL222055-01

DRAWING NUMBER

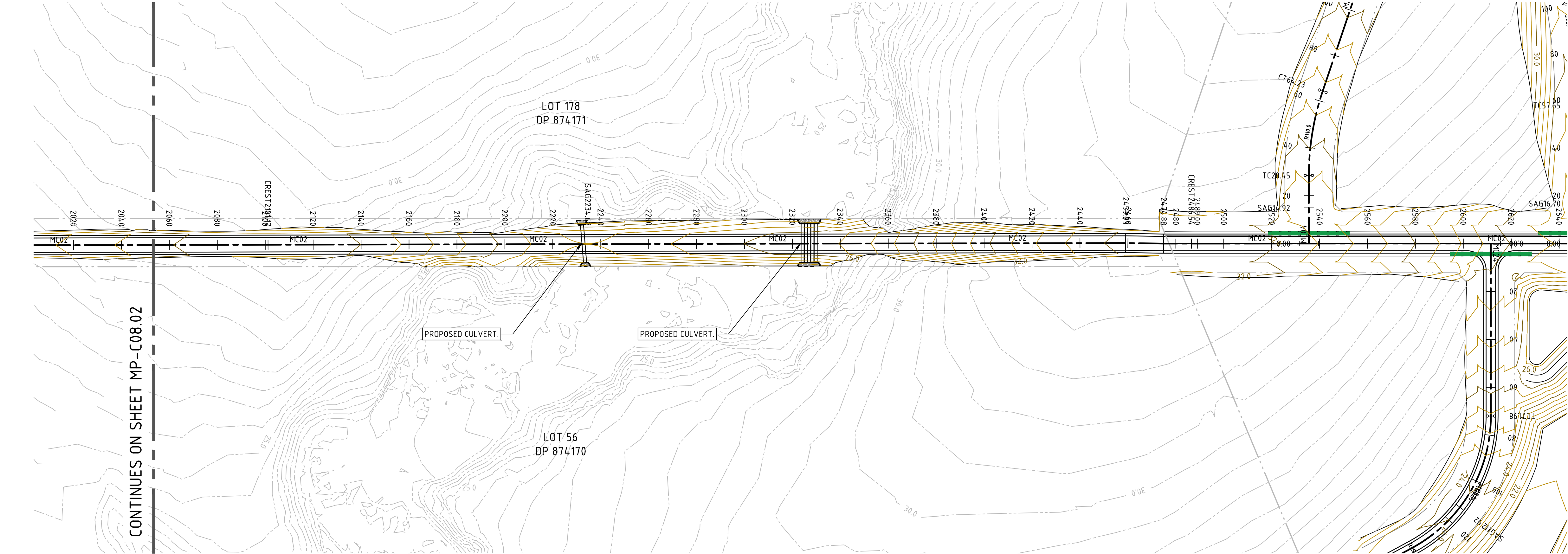
DA1-C08.02

REVISION

E

DRAWING SHEET SIZE = A1

DRAWN: J.STAUB
DESIGNED: A.KILLEN
JOB MANAGER: L.MCRAE
VERIFIER: L.MCRAE



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	DESIGN CONTOURS (0.5m INTERVALS)
	EXISTING CONTOURS (0.5m INTERVALS)



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
CONCEPT CIVIL WORKS PLAN RIVER
ROAD - SHEET 3**

JOB NUMBER

NL222055-01

DRAWING NUMBER

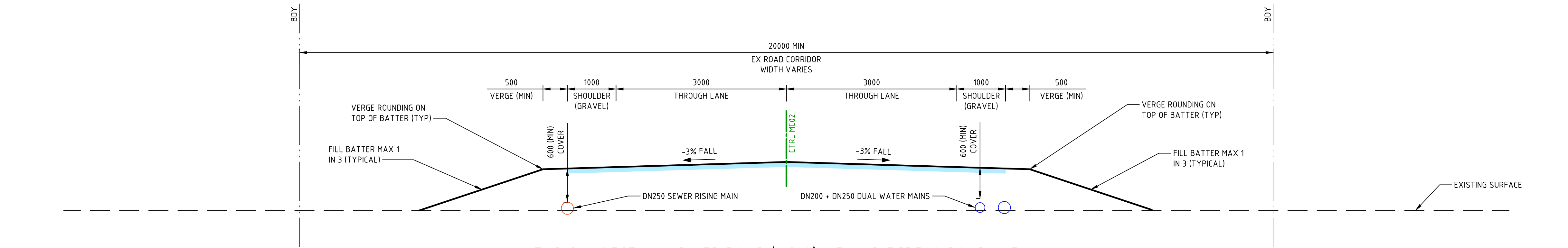
DA1-C08.03

REVISION

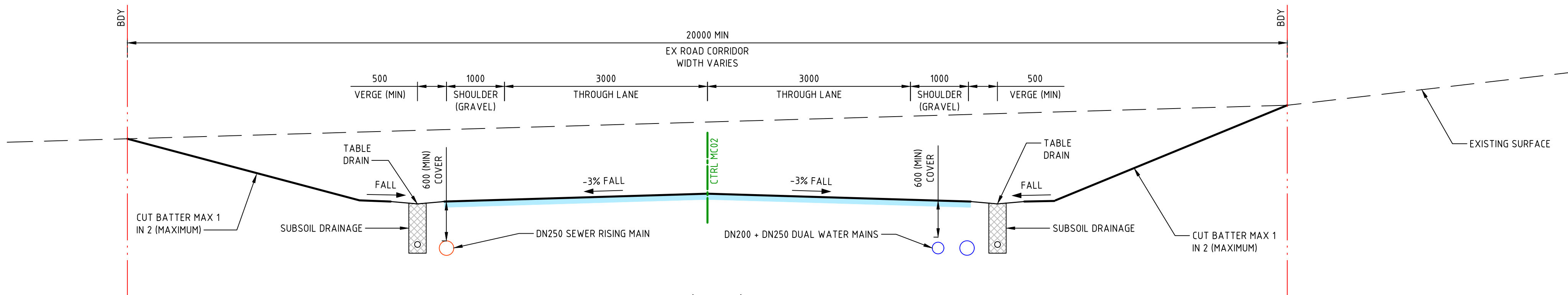
E

DRAWING SHEET SIZE = A1

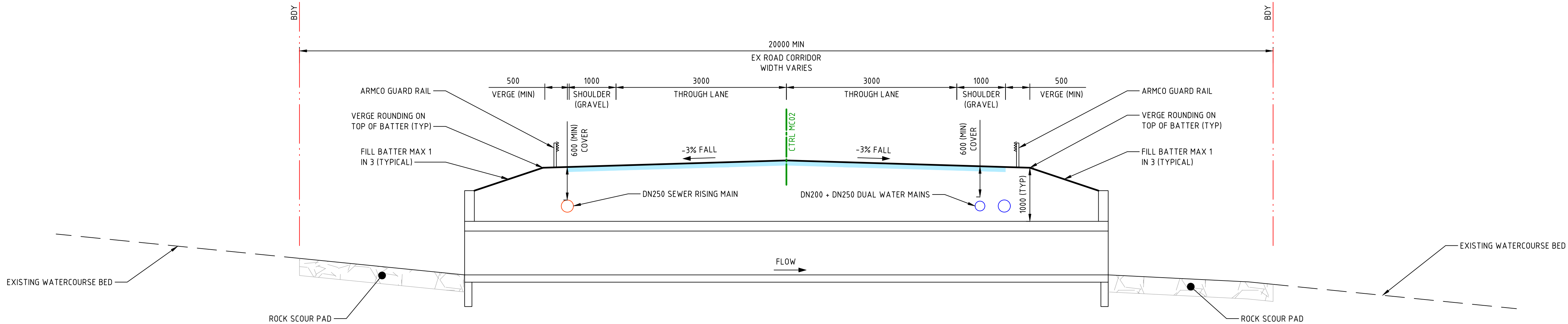
VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: A KILLEN
DRAWN: J STAUB



TYPICAL SECTION - RIVER ROAD (MC02) - FLOOD EGRESS ROAD IN FILL



TYPICAL SECTION - RIVER ROAD (MC02) - FLOOD EGRESS ROAD IN CUT



TYPICAL SECTION - RIVER ROAD (MC02) - FLOOD EGRESS ROAD CULVERT CROSSING



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	DRAFT ISSUE	JS	-	AK	16.05.25
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

CLIENT

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:50 @ A1

0 0.5 1 1.5 2 2.5m

NORTHROP
Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

**PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320**

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**ROAD TYPICAL SECTIONS RIVER
ROAD**

JOB NUMBER

NL222055-01

DRAWING NUMBER

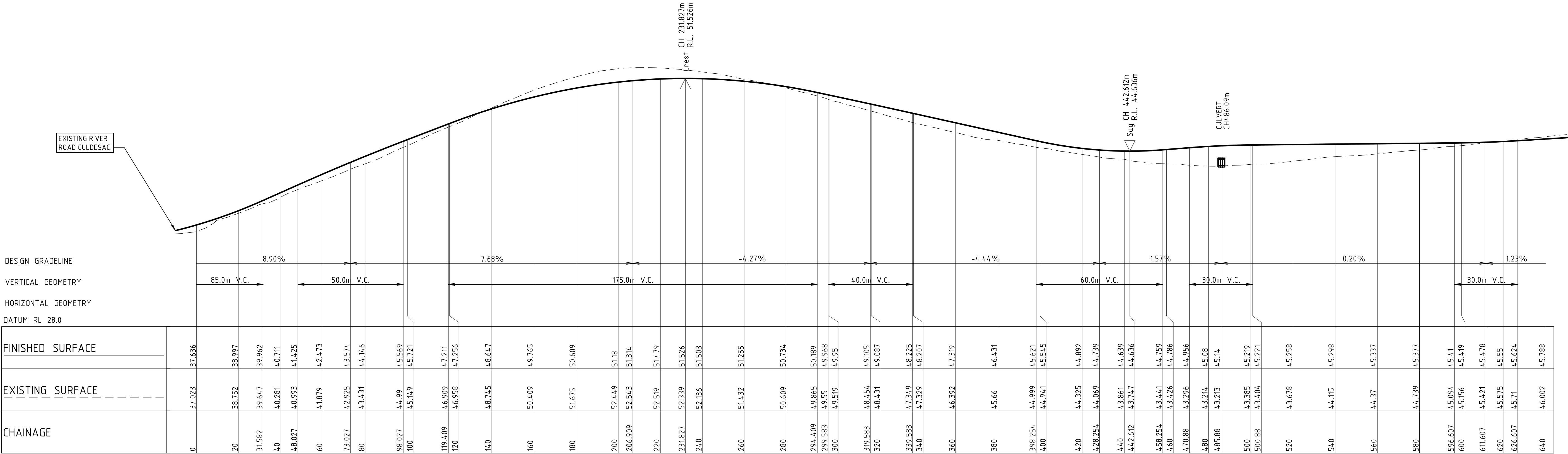
DA1-C08.21

REVISION

D

DRAWING SHEET SIZE = A1

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: J STAUB



LONGITUDINAL SECTION ALONG MC02

HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	REISSUED FOR APPROVAL	JS	LM	AK	28.08.24
D	DRAFT ISSUE	JS	-	AK	16.05.25
E	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i

COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

m

maitland

city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1

SCALE 1:200 @ A1

0 10 20 30 40 50m

0 2 4 6 8 10m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290

Ph (02) 4943 1777 Email newcastle@northrop.com.au

ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS
RIVER ROAD - SHEET 1

JOB NUMBER

NL222055-01

DRAWING NUMBER

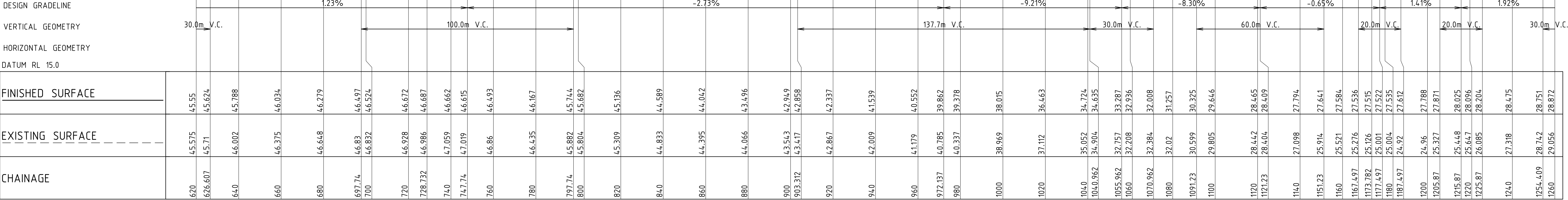
DA1-C08.31

REVISION

E

DRAWING SHEET SIZE = A1

DESIGNED: AKILLEN
DRAWN: J STAUB
JOB MANAGER: L MCRAE
VERIFIER: L MCRAE



LONGITUDINAL SECTION ALONG MC02
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	DRAFT ISSUE	JS	-	AK	16.05.25
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i

COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

COUNCIL

m

maitland

city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1

0 10 20 30 40 50m

SCALE 1:200 @ A1

0 2 4 6 8 10m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS
RIVER ROAD - SHEET 2

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C08.32

REVISION

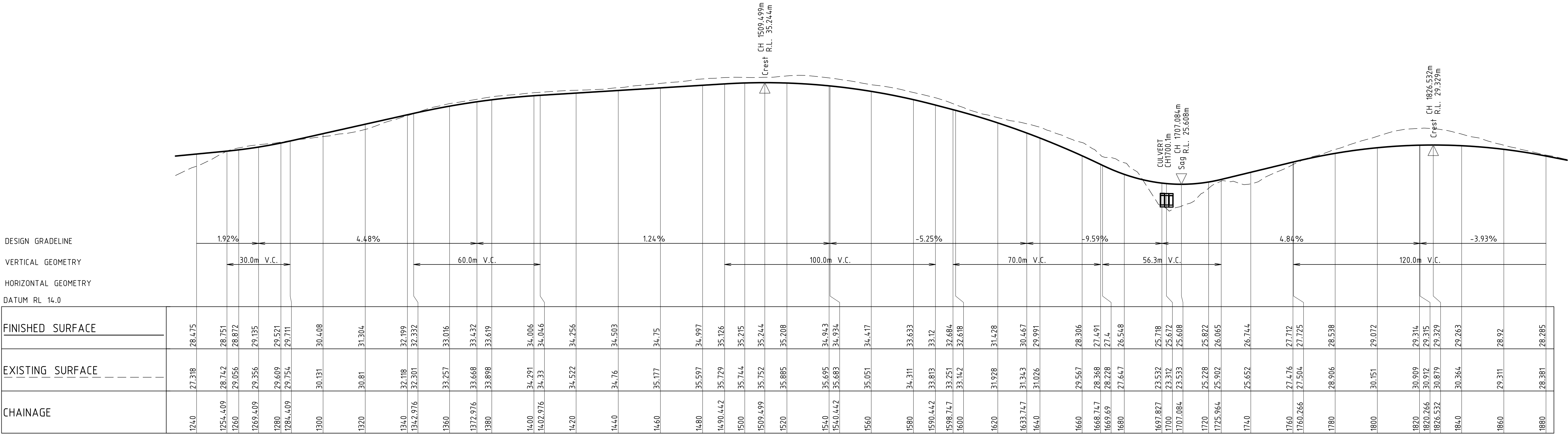
D

DRAWING SHEET SIZE = A1

DWG: 30.05.2025 10:38 AM Printed by: JACOB STAUB File: C:\S Pw-July 24 Projects\Newcastle\YEAR 2022 2806\NL222055-01 - 559 Anambah Road, Gosforth - Drawings\CIVIL\DA1-C08.32\DA1-C08.32-LONG SECTIONS (REVISI RCL).dwg

VERIFIER: LMCRAE
JOB MANAGER: LMCRAE
DESIGNED: AKILLEN
DRAWN: JSTAUB

DESIGN GRADELINE
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY
DATUM RL 14.0



LONGITUDINAL SECTION ALONG MC02
HORIZONTAL SCALE 1:1000@A1
VERTICAL SCALE 1:200@A1

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	DRAFT ISSUE	JS	-	AK	16.08.24
B	ISSUED FOR APPROVAL	JS	LM	AK	22.08.24
C	DRAFT ISSUE	JS	-	AK	16.05.25
D	REISSUED FOR APPROVAL	JS	LM	AK	30.05.25

Third.i
COMMUNITIES

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

maitland
city council

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE
COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE
USABILITY, COMPLETENESS OR SCALE OF DRAWINGS
TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR,
AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1
SCALE 1:200 @ A1

0 10 20 30 40 50m

0 2 4 6 8 10m

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED SUBDIVISION
559 ANAMBAH ROAD
GOSFORTH NSW 2320

STAGE 1 DA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ROAD LONGITUDINAL SECTIONS
RIVER ROAD - SHEET 3

JOB NUMBER

NL222055-01

DRAWING NUMBER

DA1-C08.33

REVISION

D

DRAWING SHEET SIZE = A1

