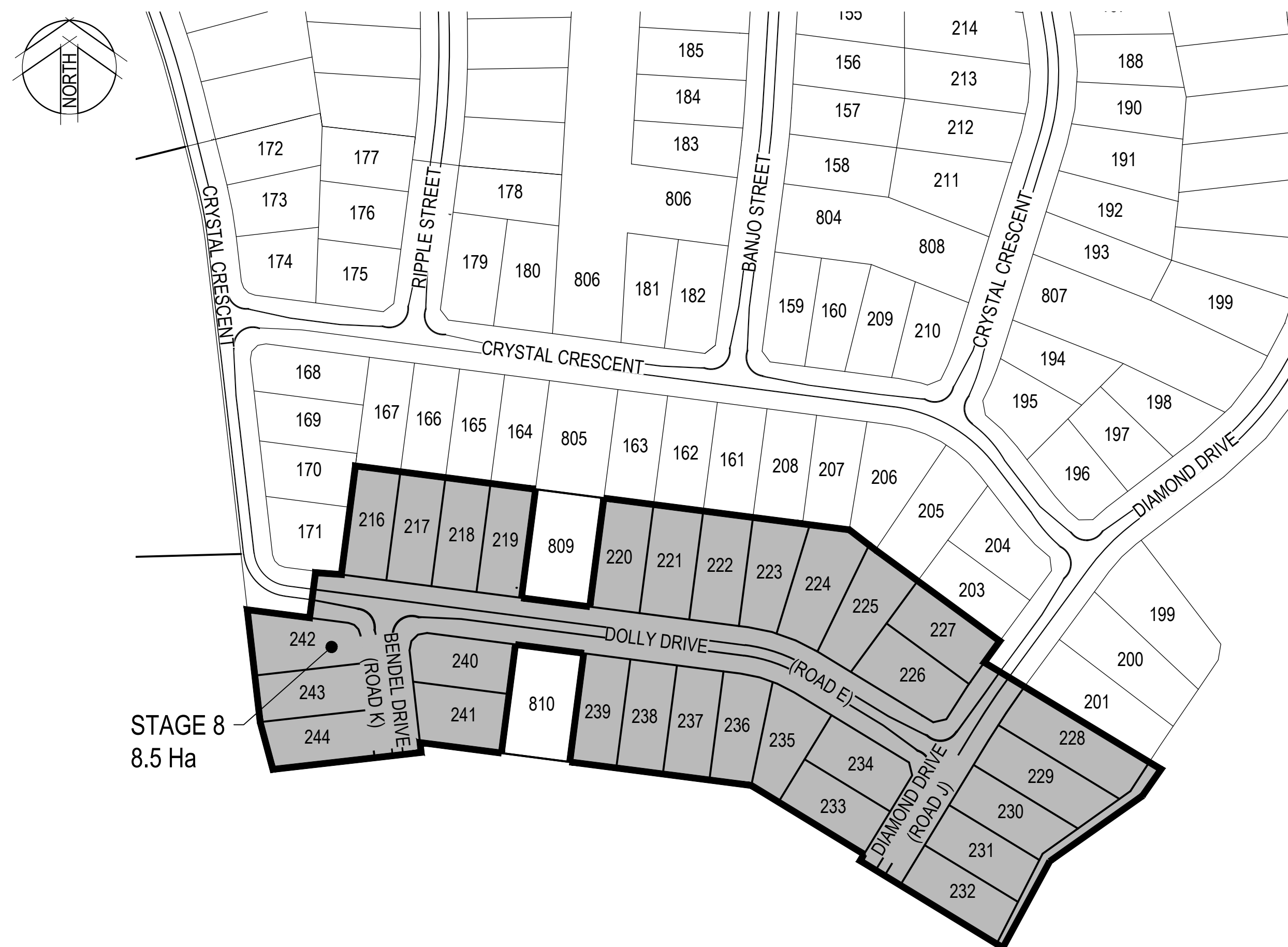


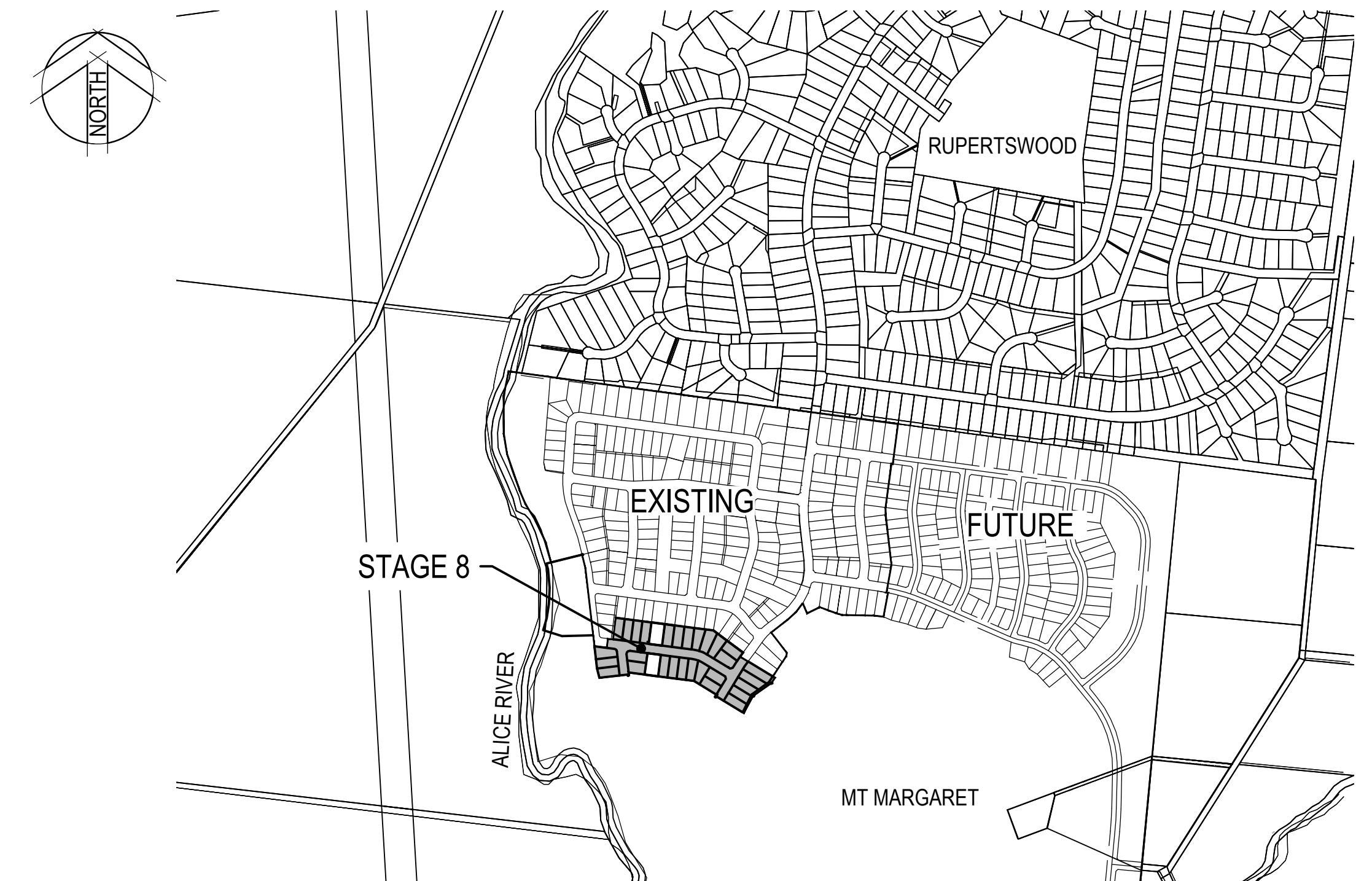


MOUNT MARGARET DEVELOPMENTS PTY LTD

MOUNT MARGARET, ALICE RIVER STAGE 8



SITE PLAN

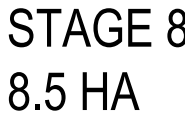


LOCALITY PLAN

SCHEDULE OF DRAWINGS

1. IF IN DOUBT ASK
2. PROJECT COMPLETED ON PSM121521, LEVEL DATUM AHD (DER) REDUCED LEVEL 50.627, AZIMUTH MGA'94
3. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL INFORMATION ISSUED BY THE SUPERINTENDENT DURING THE COURSE OF THE CONTRACT.
4. DRAWINGS SHALL NOT BE SCALED
5. ALL DIMENSIONS RELEVANT TO SETTING OUT, SURFACE LEVELS AND INVERT LEVELS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT.
6. THE CONTRACTOR SHALL ENSURE THAT ALL WORKS ARE MAINTAINED IN A SAFE AND STABLE CONDITION AND THAT ADEQUATE PROTECTION AGAINST EROSION AND SILTATION IS IN PLACE
7. WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS AND THE REQUIREMENTS OF TOWNSVILLE CITY COUNCIL AND OTHER AUTHORITIES AS REQUIRED

1. ALL EXCAVATIONS SHALL BE CARRIED OUT BY EXPERIENCED CONTRACTORS. ANY EXCAVATION SHALL BE ADEQUATELY SHORED IN ACCORDANCE WITH WORK PLACE STANDARDS WITH SUITABLE BARRICADES PLACED AROUND THE EXCAVATION.
2. CONSTRUCTION ACTIVITY CAN BE HAZARDOUS. POTENTIAL SAFETY HAZARDS CONSIDERED BY THE DESIGNERS TO HAVE A HIGHER RISK THAN NORMAL CONSTRUCTION ACTIVITY ARE IDENTIFIED WITH APPROPRIATE NOTES ON THESE DRAWINGS. IT SHOULD BE NOTED THAT DESIGNERS HAVE A LOWER LEVEL OF UNDERSTANDING OF THE RISKS INVOLVED IN CONSTRUCTION COMPARED TO THAT OF A COMPETENT CONTRACTOR. IT IS THEREFORE ESSENTIAL THAT AN ADEQUATE SAFETY PLAN IS PREPARED BY THE CONTRACTOR FOR THE WORKS. SAFETY PLANS ARE TO BE PREPARED IN COMPLIANCE WITH THE STATUTORY REQUIREMENTS. THE DESIGNERS MAY NOT BE AWARE OF ALL SAFETY RISKS AND HAZARDS INVOLVED IN THIS PROJECT AND THE ABSENCE OF COMMENT DOES NOT IMPLY THAT THERE ARE ONLY LOW LEVEL RISKS OR HAZARDS INVOLVED IN THIS PROJECT. APPROPRIATE WORK METHOD STATEMENTS ARE TO BE PREPARED FOR HIGH RISK ACTIVITY BY THE CONTRACTOR. THE DESIGNERS ARE AVAILABLE TO BE CONSULTED WHEN REQUIRED CONCERNING THEIR AREA OF CONTROL WITH REGARDS TO SAFETY PLANS.



PLAN
SCALE 1:2500 @ A1

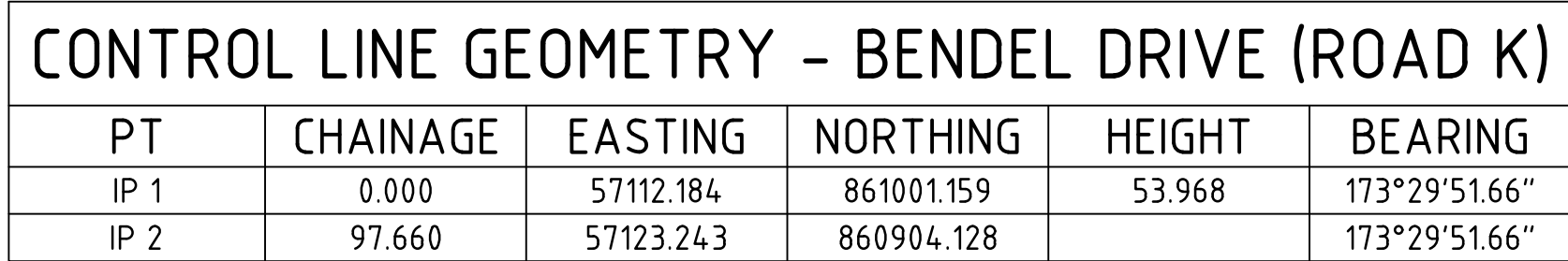
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SCALE 1:2500 @A1

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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018		Datum A.H.D		
Verified MB	Date 9/02/2018		Scale As Shown		
Approved	Date 10801	Title DRAWING INDEX & ALLOTMENT LAYOUT PLAN	Size A1		
MB	9/02/2018		Drawing Number 967192-CI-801		
			Revision A		



CONTROL LINE GEOMETRY - DOLLY DRIVE (ROAD E)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	1209.707	56992.276	861294.078	166°02'06.21"			
TC	1242.597	57000.213	861262.160	166°02'06.21"			
IP 2	1255.621	57003.361	861249.503		R = 200.000	26.049	7°27'45.45"
CT	1268.646	57004.838	861236.543	173°29'51.66"			
TC	1473.759	57028.066	861032.750	173°29'51.66"			
IP 3	1491.694	57030.459	861011.747		R = -27.000	35.869	76°06'57.13"
CT	1509.628	57051.423	861009.031	97°22'54.53"			
TC	1805.233	57344.578	860971.051	97°22'54.53"			
IP 4	1826.194	57365.675	860968.318		R = 100.000	41.922	24°01'10.90"
CT	1847.155	57383.833	860957.234	121°24'05.42"			
IP 5	1954.532	57475.483	860901.287	121°24'05.42"			

CONTROL LINE GEOMETRY - DIAMOND DRIVE (ROAD J)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	564.819	57709.635	861190.494	197°57'46.42"			
IP 2	625.096	57690.461	861131.353		R = 199.999	120.555	34°32'11.09"
IP 3	685.374	57641.138	861093.505				
TC	748.452	57591.095	861055.105	232°29'57.37"			
IP 4	769.647	57574.167	861042.115		R = -150.000	42.391	16°11'31.82"
CT	790.843	57561.533	861024.920	216°18'25.55"			
TC	875.029	57511.685	860957.078	216°18'25.55"			
IP 5	896.434	57499.003	860939.818		R = -500.000	42.809	4°54'20.13"
CT	917.839	57487.844	860921.537	211°24'05.42"			
IP 6	1026.388	57431.286	860828.887	211°24'05.42"			

A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB
Rev.	Date	Description	Des.	Verif.	Appd.



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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018		Datum A.H.D		
Verified MB	Date 9/02/2018		Scale 2/9/2018		
Approved 10801		Title CONTROL LINE GEMOETRY PLAN	Size As Shown		A1
MB	9/02/2018		Drawing Number 967192-CI-802		Revision A

Q50 LEVELS		
DOLLY DRIVE (ROAD E)		
CHAINAGE	LHS LEVEL	RHS LEVEL
1525	53.6	53.9
1550	53.4	53.9
1575	53.4	53.8
1600	53.3	53.7
1625	53.2	53.6
1650	53.2	53.5
1675	53.2	53.5
1700	53.2	53.5
1725	53.4	53.6
1750	53.6	53.8
1775	53.8	54.0
1800	54.1	54.2
1825	54.3	54.4
1850	54.5	54.6
1875	54.7	54.8
1900	54.9	54.9
1925	55.1	55.2

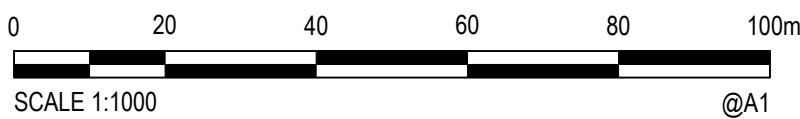
Q50 LEVELS		
BENDEL DRIVE (ROAD K)		
CHAINAGE	LHS LEVEL	RHS LEVEL
25	53.7	53.9
50	53.7	53.9
75	53.7	54.0
97.660	53.7	54.0

NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL STANDARD ROADWORKS AND STORMWATER DRAWINGS.
- ALL BACKFILL TO BE COMPACTED TO NOT LESS THAN 95% OF THE STANDARD MAXIMUM DRY DENSITY TO AS1289 IN MAXIMUM 150mm LAYERS UNLESS NOTED OTHERWISE.
- ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
- ALLOTMENTS TO BE GRADED EVENLY BETWEEN LEVELS SHOWN. CONSTRUCTED LOT GRADE TO BE MINIMUM 1:4.00.
- ALL BATTERS WITHIN ALLOTMENTS TO BE MAXIMUM 1 : 6 UNLESS NOTED OTHERWISE.

LEGEND

- 51.00— EXISTING SURFACE CONTOURS
- -51.00- - DESIGN SURFACE CONTOURS
- FS 11.05
FILL 0.40 FINISHED ALLOTMENT LEVEL WITH CUT/FILL VALUE
- FS 11.05
EXIST EXISTING ALLOTMENT LEVEL
- TOP OF BATTER
- — — BOTTOM OF BATTER



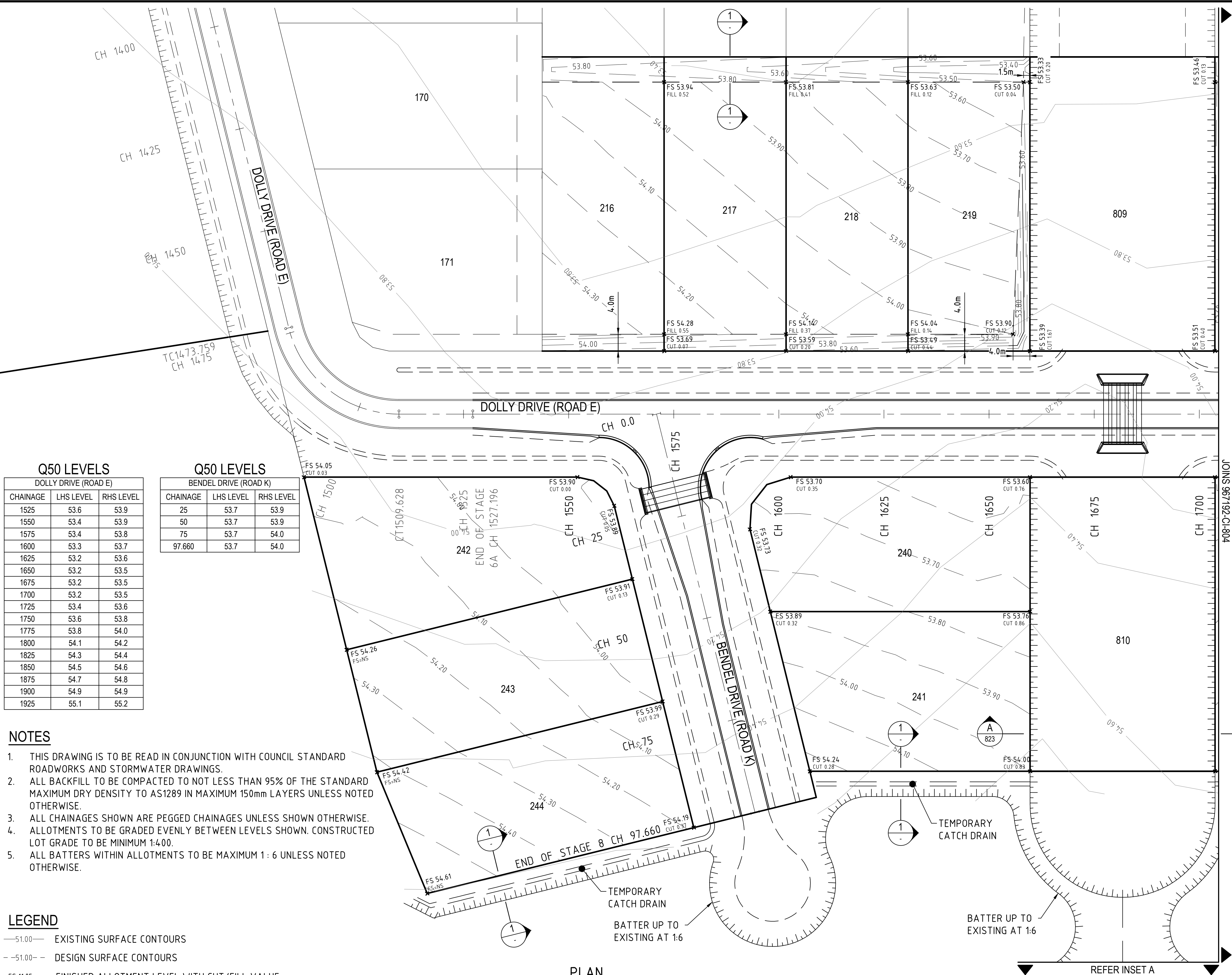
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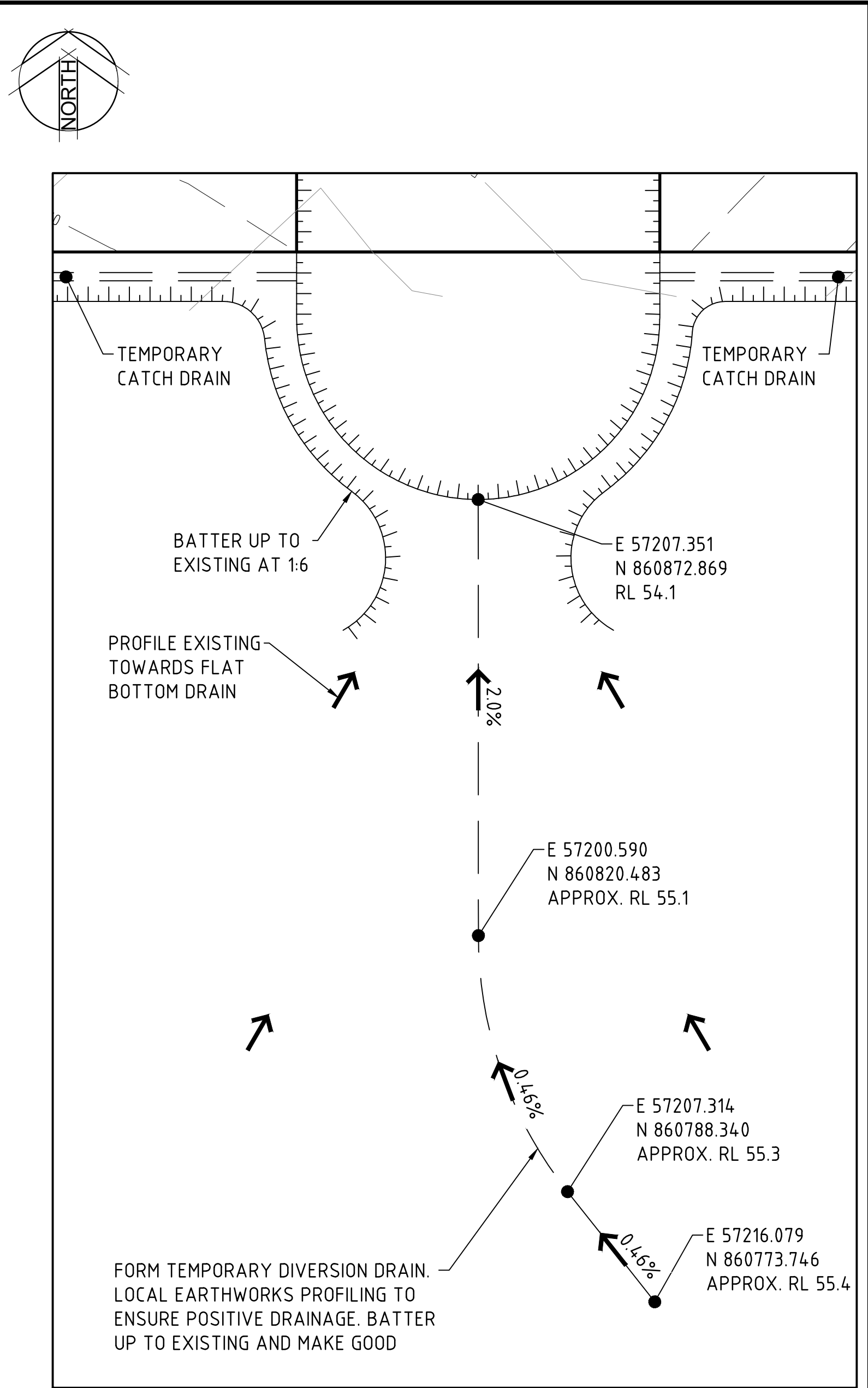
Drawn	JJ	Date	9/02/2018
Checked	MB	Date	9/02/2018
Designed	JN	Date	9/02/2018
Verified	MB	Date	9/02/2018
Approved		Date	10801
MB		Date	9/02/2018

Client	MOUNT MARGARET DEVELOPMENTS PTY LTD		
Project	MOUNT MARGARET, ALICE RIVER		
	STAGE 8		
Title	EARTHWORKS LAYOUT PLAN		
	SHEET 1 OF 3		

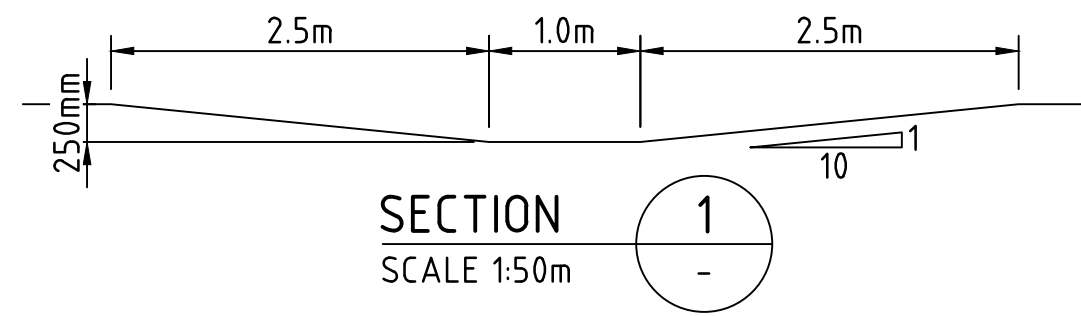
Status				FOR APPROVAL	
NOT TO BE USED FOR CONSTRUCTION PURPOSES					
Datum		Date	Scale	Size	
A.H.D		2/9/2018	As Shown	A1	
Drawing Number				Revision	
967192-CI-803				B	

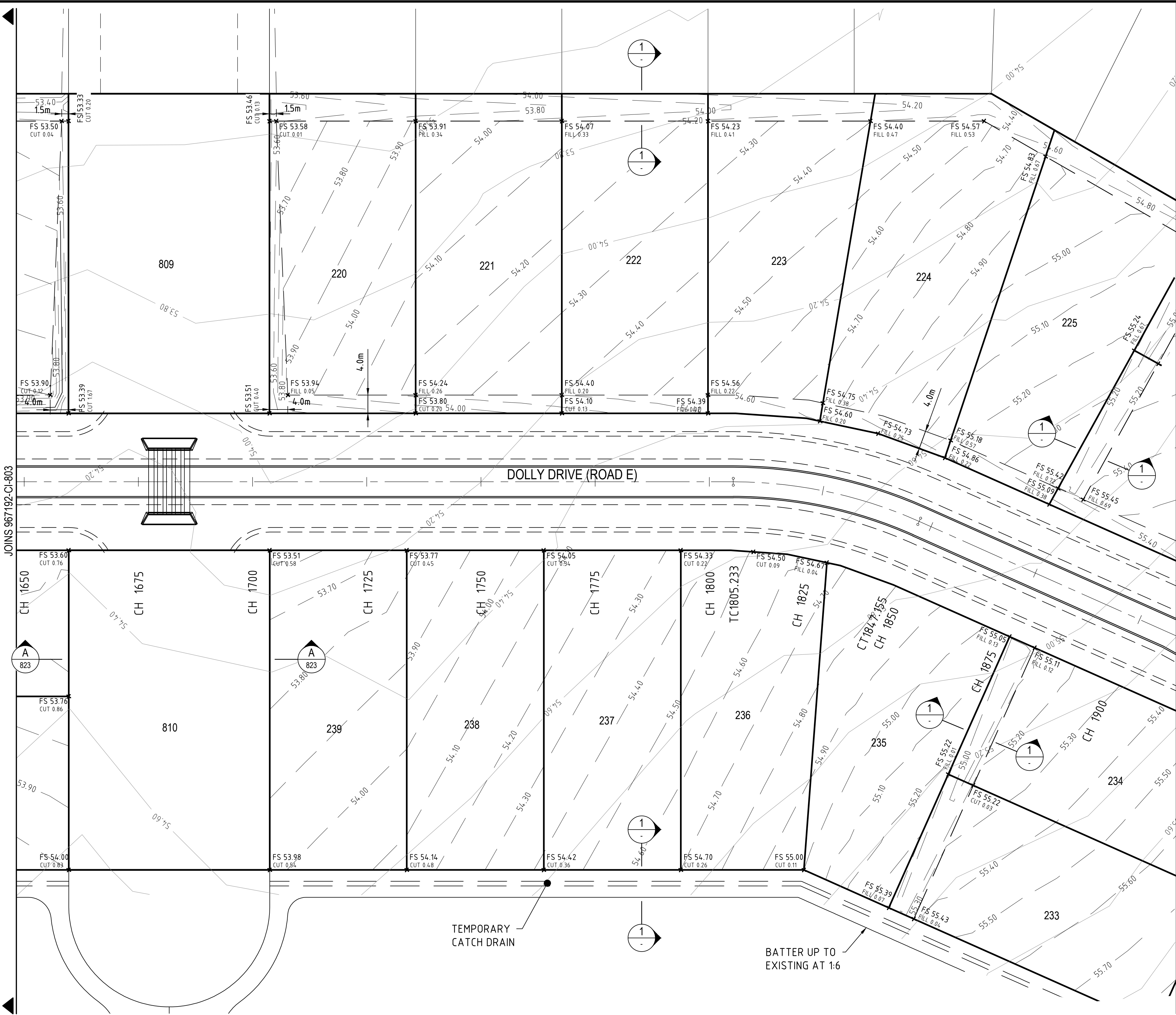


PLAN
SCALE 1:500 @ A1

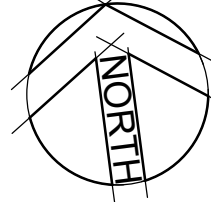


INSET A
SCALE 1:500 @ A1





PLAN
SCALE 1:500 @ A1



NOTES

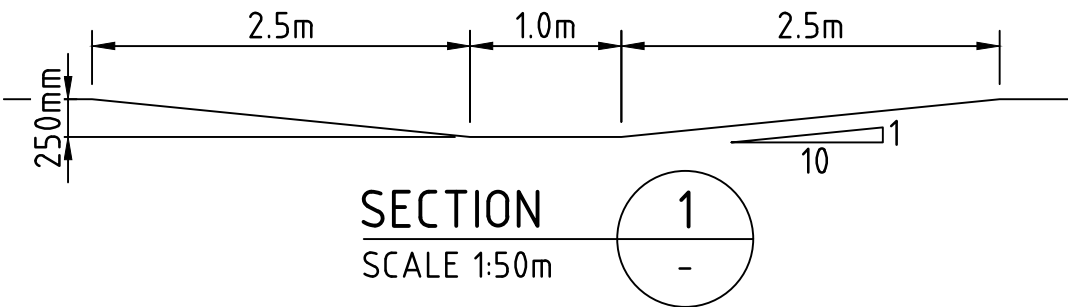
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL STANDARD ROADWORKS AND STORMWATER DRAWINGS.
2. ALL BACKFILL TO BE COMPACTED TO NOT LESS THAN 95% OF THE STANDARD MAXIMUM DRY DENSITY TO AS1289 IN MAXIMUM 150mm LAYERS UNLESS NOTED OTHERWISE.
3. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
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5. ALL BATTERS WITHIN ALLOTMENTS TO BE MAXIMUM 1 : 6 UNLESS NOTED OTHERWISE.

LEGEND

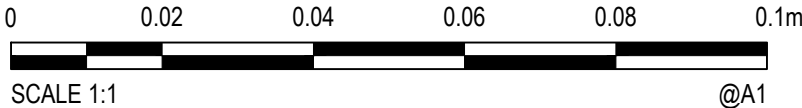
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- -51.00- - DESIGN SURFACE CONTOURS
- FS 11.05
FILL 0.40 FINISHED ALLOTMENT LEVEL WITH CUT/FILL VALUE
- FS 11.05
EXIST EXISTING ALLOTMENT LEVEL
- TOP OF BATTER
- - - - BOTTOM OF BATTER

Q50 LEVELS

DOLLY DRIVE (ROAD E)		
CHAINAGE	LHS LEVEL	RHS LEVEL
1400	-	53.9
1425	-	53.9
1450	-	53.9
1475	-	53.9
1500	-	53.9
1525	53.6	53.9
1550	53.4	53.9
1575	53.4	53.8
1600	53.3	53.7
1625	53.2	53.6
1650	53.2	53.5
1675	53.2	53.5
1700	53.2	53.5
1725	53.4	53.6
1750	53.6	53.8
1775	53.8	54.0
1800	54.1	54.2
1825	54.3	54.4
1850	54.5	54.6
1875	54.7	54.8
1900	54.9	54.9
1925	55.1	55.2



Rev.	Date	Description	Des.	Verif.	Appd.
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB



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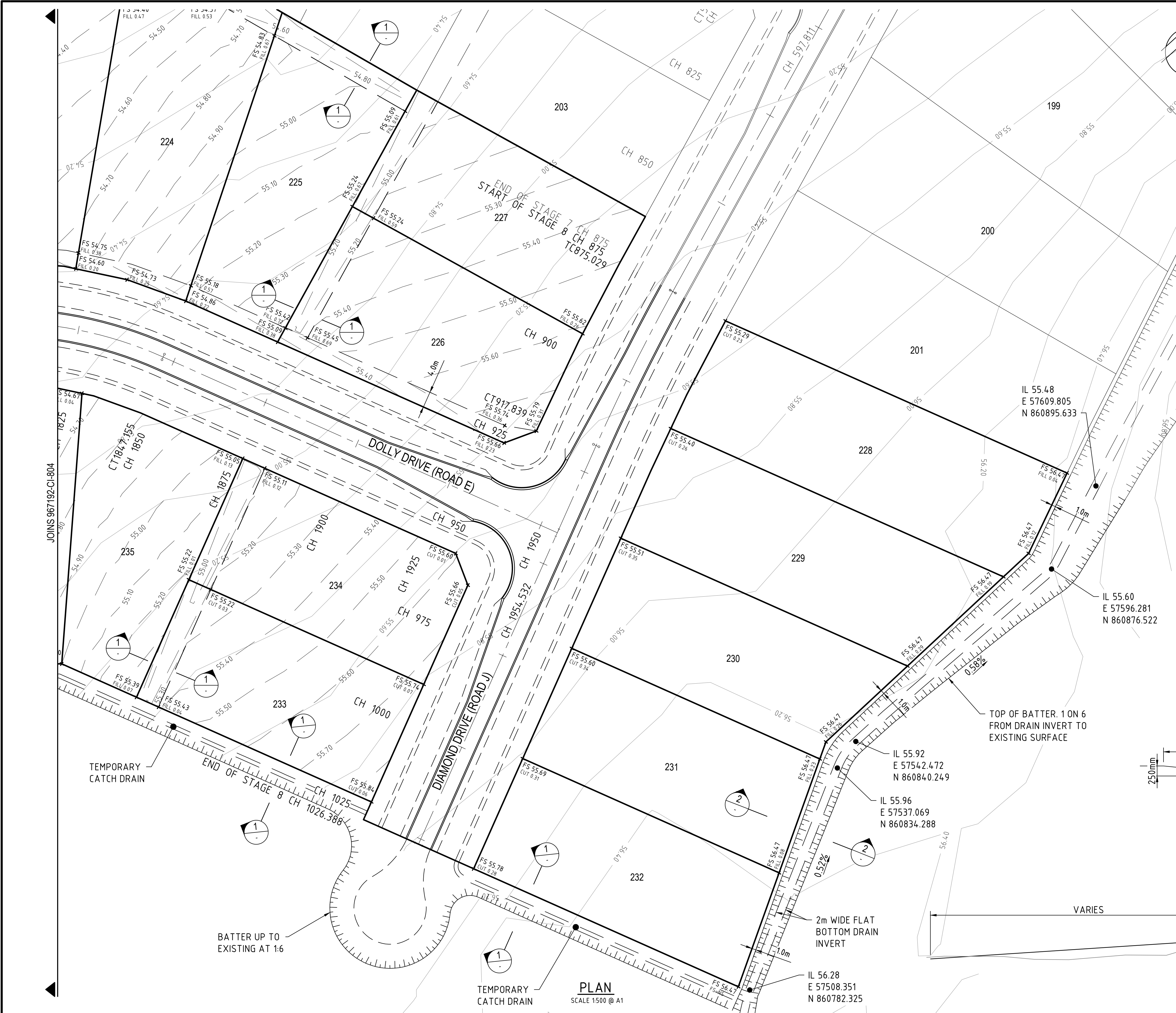
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Level 1, 520 Flinders Street
Townsville, QLD 4810
Tel: 07 4772 1166 Fax: 07 4721 2508
Web: www.cardno.com.au

Drawn JJ	Date 9/02/2018
Checked MB	Date 9/02/2018
Designed JN	Date 9/02/2018
Verified MB	Date 9/02/2018
Approved MB	Date 10/01/2018

Client MOUNT MARGARET DEVELOPMENTS PTY LTD	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Title EARTHWORKS LAYOUT PLAN SHEET 2 OF 3
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Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES	Datum A.H.D	Date 2/9/2018	Scale As Shown	Size A1
Drawing Number 967192-CI-804	Revision A			



NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL STANDARD ROADWORKS AND STORMWATER DRAWINGS.
2. ALL BACKFILL TO BE COMPACTED TO NOT LESS THAN 95% OF THE STANDARD MAXIMUM DRY DENSITY TO AS1289 IN MAXIMUM 150mm LAYERS UNLESS NOTED OTHERWISE.
3. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
4. ALLOTMENTS TO BE GRADED EVENLY BETWEEN LEVELS SHOWN. CONSTRUCTED LOT GRADE TO BE MINIMUM 1:4.00.
5. ALL BATTERS WITHIN ALLOTMENTS TO BE MAXIMUM 1 : 6 UNLESS NOTED OTHERWISE.

LEGEND

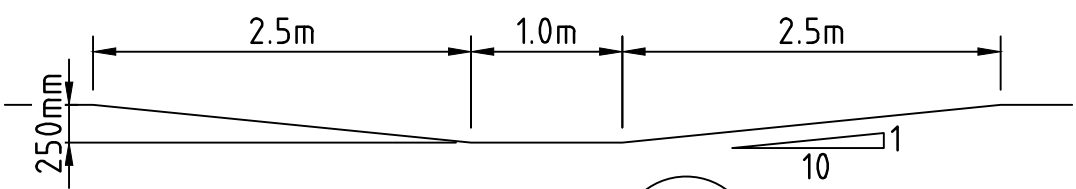
- 51.00— EXISTING SURFACE CONTOURS
- -51.00- - DESIGN SURFACE CONTOURS
- FS 11.05
FILL 0.40 FINISHED ALLOTMENT LEVEL WITH CUT/FILL VALUE
- FS 11.05
EXIST EXISTING ALLOTMENT LEVEL
- TOP OF BATTER
- BOTTOM OF BATTER

Q50 LEVELS

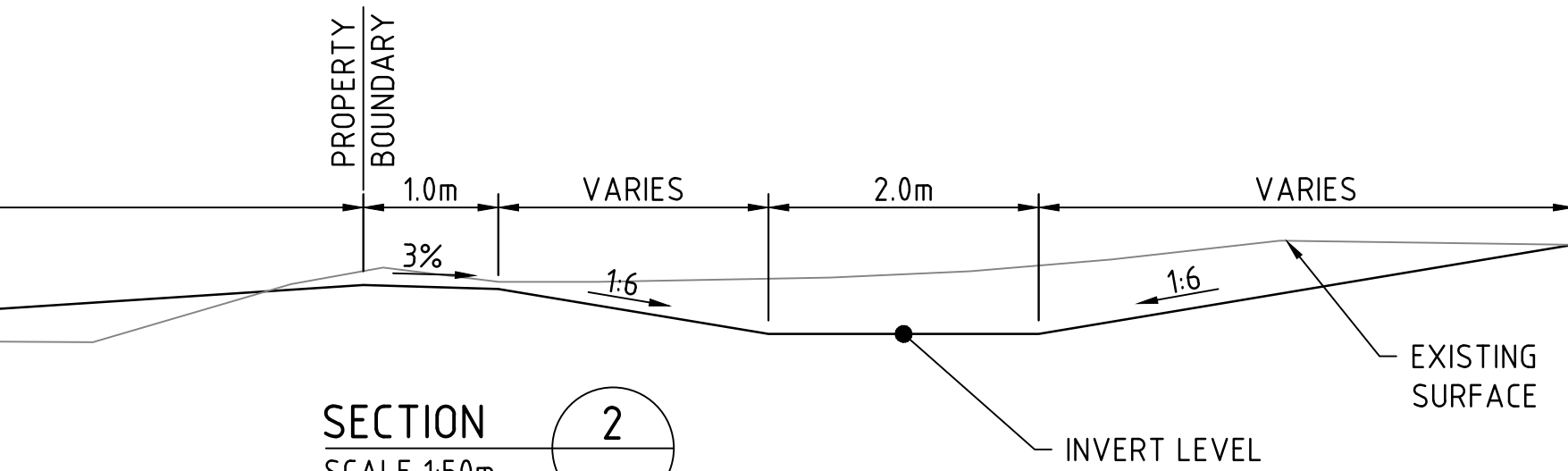
DOLLY DRIVE (ROAD E)		
CHAINAGE	LHS LEVEL	RHS LEVEL
1525	53.6	53.9
1550	53.4	53.9
1575	53.4	53.8
1600	53.3	53.7
1625	53.2	53.6
1650	53.2	53.5
1675	53.2	53.5
1700	53.2	53.5
1725	53.4	53.6
1750	53.6	53.8
1775	53.8	54.0
1800	54.1	54.2
1825	54.3	54.4
1850	54.5	54.6
1875	54.7	54.8
1900	54.9	54.9
1925	55.1	55.2

Q50 LEVELS

DIAMOND DRIVE (ROAD J)		
CHAINAGE	LHS LEVEL	RHS LEVEL
875	55.3	55.1
900	55.4	55.3
925	55.5	55.3
950	55.5	55.3
975	55.6	55.5
1000	55.7	55.6
1025	55.7	55.7

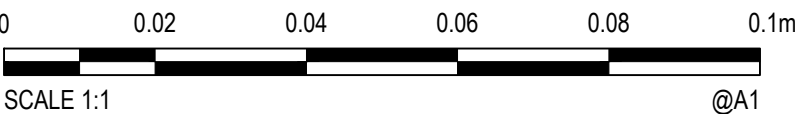


SECTION 1
SCALE 1:50m



SECTION 2
SCALE 1:50m

Rev.	Date	Description	Des.	Verif.	Appd.
B	1/07/2020	LEVEL AMMENDMENTS	JN	MB	MB
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB



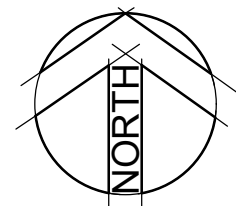
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Level 1, 520 Flinders Street
Townsville, QLD 4810
Tel: 07 4772 1166 Fax: 07 4721 2508
Web: www.cardno.com.au

Drawn JJ	Date 9/02/2018
Checked MB	Date 9/02/2018
Designed JN	Date 9/02/2018
Verified MB	Date 9/02/2018
Approved MB	Date 10/08/2018

Client MOUNT MARGARET DEVELOPMENTS PTY LTD	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Title EARTHWORKS LAYOUT PLAN SHEET 3 OF 3
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Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES	Datum A.H.D	Date 2/9/2018	Scale As Shown	Size A1
Drawing Number 967192-CI-805	Revision B			



1. ALL DRAINAGE LINES TO BE RCBC'S UNLESS NOTED OTHERWISE, REFER DRAWING 967192-CI-822 FOR DRAINAGE DETAILS
2. CRUSHER DUST TO BE USED FOR BACKFILLING OF ALL LINES THAT ARE LOCATED UNDER ROADWAYS.
3. HEADWALLS ARE BY OTHERS.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE CONSTRUCTION VEHICLES DO NOT BREAK OR DAMAGE STORMWATER ALREADY LAID DURING THE COURSE OF CONSTRUCTION.
5. TRENCH WALLS FOR SERVICES WILL NEED TO BE BATTERED FOR CONSTRUCTION SAFETY.
6. FOR MISCELLANEOUS DETAILS REFER TO DRAWING 967192-CI-823
7. FOR Q100 DRAINAGE CATCHMENT DETAILS REFER TO DRAWING 967192-CI-832

1. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
2. FOR STREET NAME SIGN AND INSTALLATION DETAILS REFER COUNCIL STANDARD DRAWING SD-065.
3. FOR ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS REFER TO DRAWINGS 967192-CI-809 TO 967192-CI-816
4. FOR INTERSECTION DETAILS REFER TO DRAWING 967192-CI-817 AND 818
5. EXISTING SERVICES ARE LOCATED WITHIN THE SITE. THE CONTRACTOR IS TO LOCATE ALL SERVICES BY CONTACTING THE RELEVANT AUTHORITY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. FOR KERB AND CHANNEL DETAILS, REFER COUNCIL STANDARD DRAWING SD-020 AND DRAWING 967192-CI-823
7. CUT BACK EXISTING PAVEMENT 100mm AND CONCRETE EDGE BEAM AND JOIN NEATLY.

	BARRIER KERB & CHANNEL (TYPE B1)
	CONCRETE EDGE BEAM (300x300)
	CONCRETE DISH DRAIN (TYPE D2)
	ROAD EDGE GUIDE POST
	DOUBLE STREET NAME PLATE
	ROAD SIGN
	BITUMEN SEAL AND PAVEMENT, REFER DRAWING 967192-(C)-809, 812, 813 & 815 FOR DETAILS
	FLOW ARROW

PLAN
SCALE 1:500 @ A1

[illegible]

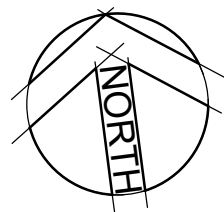
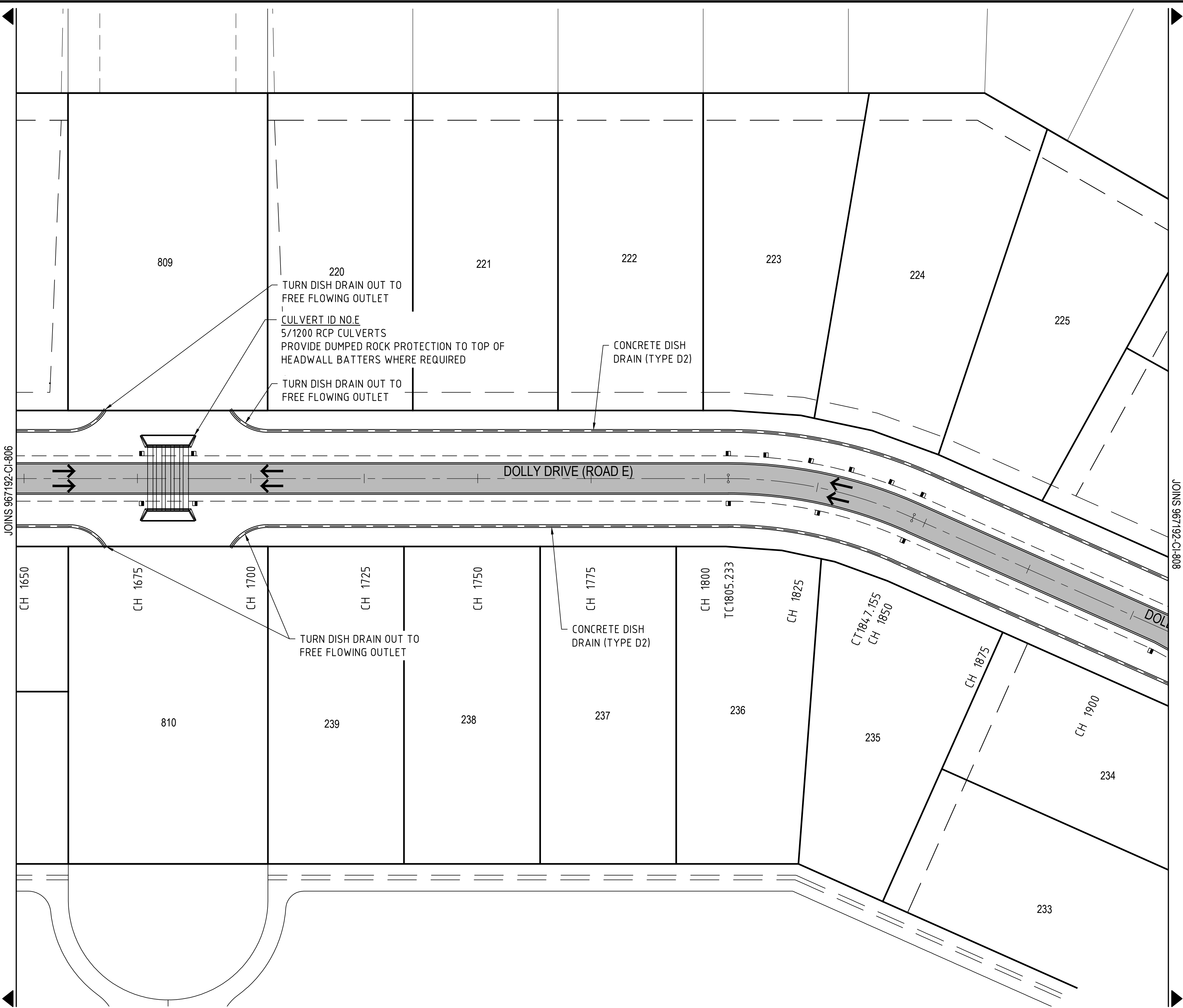
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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018				
Verified MB	Date 9/02/2018				
Approved	10801	Title	A.H.D Date 2/9/2018 Scale As Shown Size A1		
MB	9/02/2018	ROADWORKS & STORMWATER DRAINAGE PLAN SHEET 1 OF 3	Drawing Number 967192-CI-806 Revision A		

DATE PLOTTED: 2 July 2020 2:43 PM BY: JAMES WONG

XREFs: XR-967192-CADASTRAL; XR-967192-MASTER
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\96719671-92 - Mount Margaret\ENGINEERING\DRAWINGS\STAGE 6, 7 & 8\967192-CI-807.dwg



STORMWATER NOTES

1. ALL DRAINAGE LINES TO BE RCBC'S UNLESS NOTED OTHERWISE, REFER DRAWING 967192-CI-822 FOR DRAINAGE DETAILS
2. CRUSHER DUST TO BE USED FOR BACKFILLING OF ALL LINES THAT ARE LOCATED UNDER ROADWAYS.
3. HEADWALLS ARE BY OTHERS.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE CONSTRUCTION VEHICLES DO NOT BREAK OR DAMAGE STORMWATER ALREADY LAID DURING THE COURSE OF CONSTRUCTION.
5. TRENCH WALLS FOR SERVICES WILL NEED TO BE BATTERED FOR CONSTRUCTION SAFETY.
6. FOR MISCELLANEOUS DETAILS REFER TO DRAWING 967192-CI-823
7. FOR Q100 DRAINAGE CATCHMENT DETAILS REFER TO DRAWING 967192-CI-832

ROADWORKS NOTES

1. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
2. FOR STREET NAME SIGN AND INSTALLATION DETAILS REFER COUNCIL STANDARD DRAWING SD-065.
3. FOR ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS REFER TO DRAWINGS 967192-CI-809 TO 967192-CI-816
4. FOR INTERSECTION DETAILS REFER TO DRAWING 967192-CI-817 AND 818
5. EXISTING SERVICES ARE LOCATED WITHIN THE SITE. THE CONTRCTOR IS TO LOCATE ALL SERVICES BY CONTACTING THE RELEVANT AUTHORITY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. FOR KERB AND CHANNEL DETAILS, REFER COUNCIL STANDARD DRAWING SD-020 AND DRAWING 967192-CI-823
7. CUT BACK EXISTING PAVEMENT 100mm AND CONCRETE EDGE BEAM AND JOIN NEATLY.

LEGEND

- BARRIER KERB & CHANNEL (TYPE B1)
- CONCRETE EDGE BEAM (300x300)
- CONCRETE DISH DRAIN (TYPE D2)
- ROAD EDGE GUIDE POST
- DOUBLE STREET NAME PLATE
- ROAD SIGN
- BITUMEN SEAL AND PAVEMENT, REFER DRAWING 967192-CI-809, 812, 813 & 815 FOR DETAILS
- FLOW ARROW

PLAN
SCALE 1:500 @ A1



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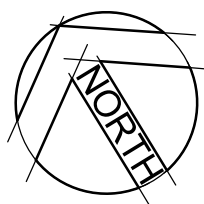
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Level 1, 520 Flinders Street
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Tel: 07 4772 1166 Fax: 07 4721 2508
Web: www.cardno.com.au

Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8
Designed JN	Date 9/02/2018	Title ROADWORKS & STORMWATER DRAINAGE PLAN SHEET 2 OF 3
Verified MB	Date 9/02/2018	Drawing Number 967192-CI-807
Approved MB	Date 9/02/2018	Revision A

Rev.	Date	Description	Des.	Verif.	Appd.
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES



1. ALL DRAINAGE LINES TO BE RCBC'S UNLESS NOTED OTHERWISE, REFER DRAWING 967192-CI-822 FOR DRAINAGE DETAILS
2. CRUSHER DUST TO BE USED FOR BACKFILLING OF ALL LINES THAT ARE LOCATED UNDER ROADWAYS.
3. HEADWALLS ARE BY OTHERS.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE CONSTRUCTION VEHICLES DO NOT BREAK OR DAMAGE STORMWATER ALREADY LAID DURING THE COURSE OF CONSTRUCTION.
5. TRENCH WALLS FOR SERVICES WILL NEED TO BE BATTERED FOR CONSTRUCTION SAFETY.
6. FOR MISCELLANEOUS DETAILS REFER TO DRAWING 967192-CI-823
7. FOR Q100 DRAINAGE CATCHMENT DETAILS REFER TO DRAWING 967192-CI-832

1. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
2. FOR STREET NAME SIGN AND INSTALLATION DETAILS REFER COUNCIL STANDARD DRAWING SD-065.
3. FOR ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS REFER TO DRAWINGS 9671192-CI-809 TO 9671192-CI-816
4. FOR INTERSECTION DETAILS REFER TO DRAWING 9671192-CI-817 AND 818
5. EXISTING SERVICES ARE LOCATED WITHIN THE SITE. THE CONTRACTOR IS TO LOCATE ALL SERVICES BY CONTACTING THE RELEVANT AUTHORITY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. FOR KERB AND CHANNEL DETAILS, REFER COUNCIL STANDARD DRAWING SD-020 AND DRAWING 9671192-CI-823
7. CUT BACK EXISTING PAVEMENT 100mm AND CONCRETE EDGE BEAM AND JOIN NEATLY.

	BARRIER KERB & CHANNEL (TYPE B1)
	CONCRETE EDGE BEAM (300x300)
	CONCRETE DISH DRAIN (TYPE D2)
	ROAD EDGE GUIDE POST
	DOUBLE STREET NAME PLATE
	ROAD SIGN
	BITUMEN SEAL AND PAVEMENT, REFER DRAWING 967192-CI-809, 812, 813 & 815 FOR DETAILS
	FLOW ARROW

[illegible]

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Drawn JJ	Date 9/02/2018	Client	MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project	MOUNT MARGARET, ALICE RIVER STAGE 8		Status	FOR APPROVAL
Designed JN	Date 9/02/2018		NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Verified MB	Date 9/02/2018	Title	ROADWORKS & STORMWATER DRAINAGE PLAN SHEET 3 OF 3		Datum	A.H.D
Approved	10801				Date	2/9/2018
					Scale	As Shown
					Size	A1
MB	9/02/2018				Drawing Number	967192-CI-808
					Revision	A

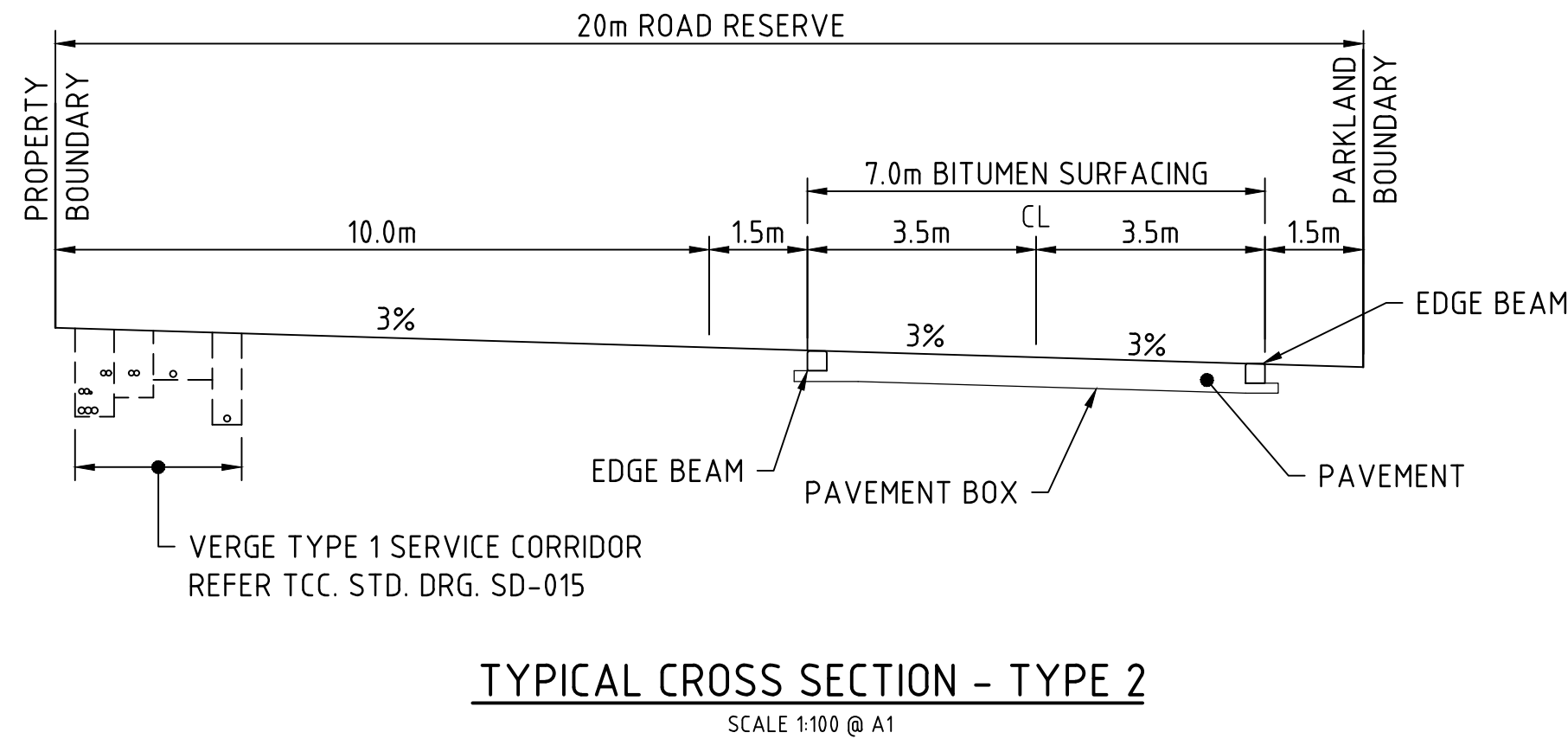
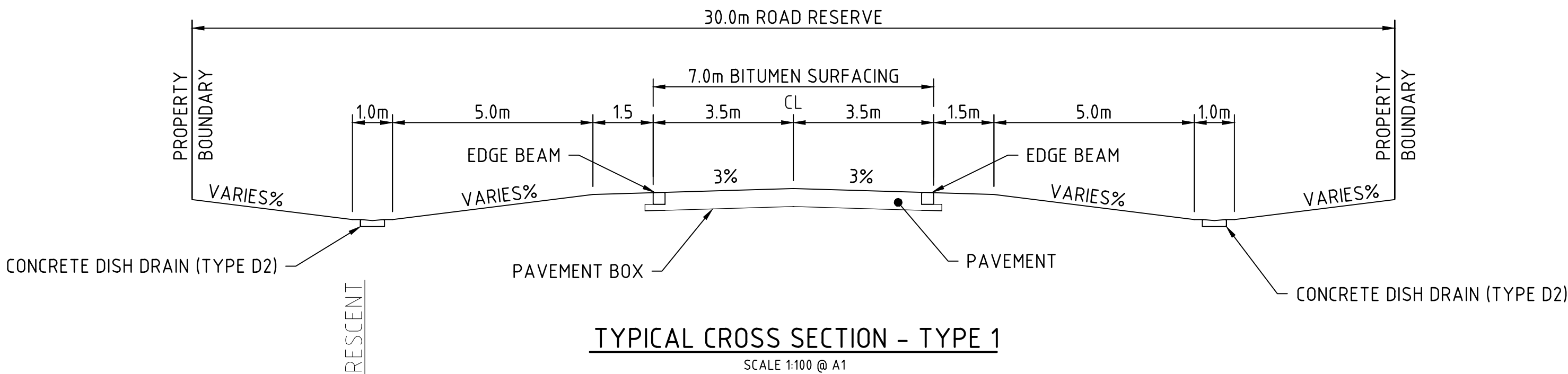
DATE PLOTTED: 2 July 2020 3:10 PM BY: JAMES WONG

DOLLY DRIVE (ROAD E)

ROAD TYPE: ACCESS STREET
DESIGN SPEED: 50km/h (NOT INCLUDING INTERSECTION)

PROVISIONAL PAVEMENT DESIGN

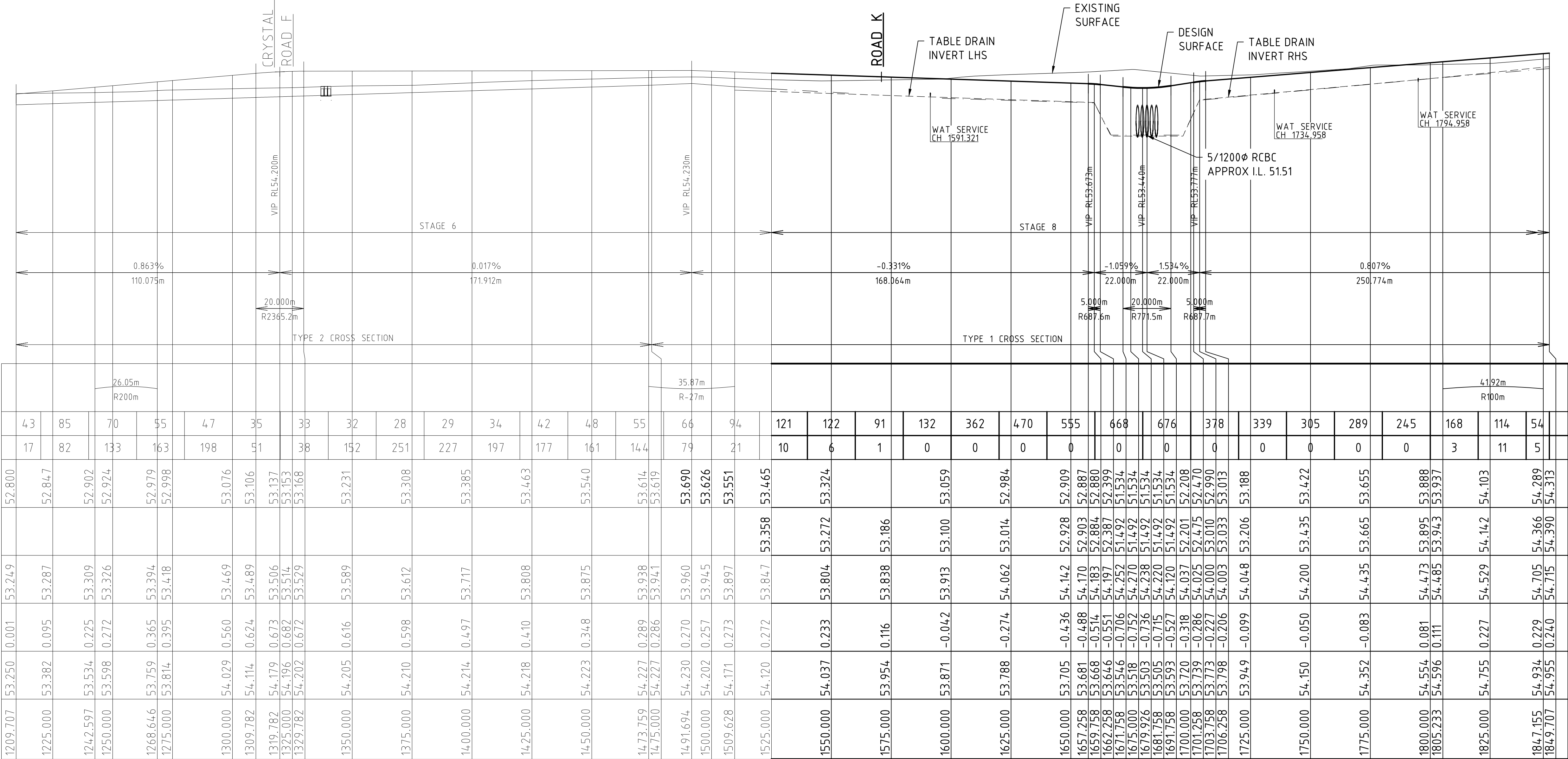
- TWO COAT BITUMEN SEAL (14mm/7mm)
- PRIME COAT - AMC00 @ 0.8 L/m²
 - SEAL COAT 1 - CL170 @ 1.5L/m²
 - 14mm PRECOATED AGG. @ 95m²/m³
 - SEAL COAT 2 - CL170 @ 1.1L/m²
 - 7mm AGG. @ 120m²/m³
- 150mm BASE (DTMR TYPE 2.1)
150mm SUB BASE (DTMR TYPE 2.3)
150mm LOWER SUB BASE (DTMR TYPE 2.5)



Vertical Geometry Grade (%)
Vertical Geometry Length (m)
Vertical Curve Length (m)
Vertical Curve Radius (m)

DATUM RL 42.000

VOLUMES		CUT
		FILL
DRAIN INVERT RHS		
DRAIN INVERT LHS		
EXISTING SURFACE LEVELS		
CUT/FILL DEPTH TO EXISTING		
CONTROL LINE FINISHED LEVEL		
CONTROL LINE CHAINAGE		



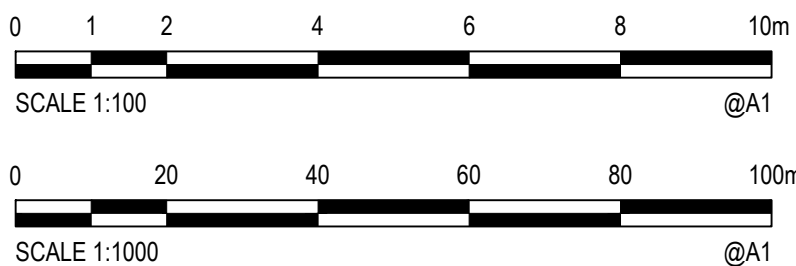
DOLLY DRIVE ROAD E - LONGITUDINAL SECTION

SCALE HORIZONTAL 1: 1000
VERTICAL 1: 100

XREFs:

CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\36719671-92 - Mount Margaret Engineering\DRAWINGS\STAGE 6.7 & 8\967192-CI-809.dwg

Rev.	Date	Description	Des.	Verf.	Appd.
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB



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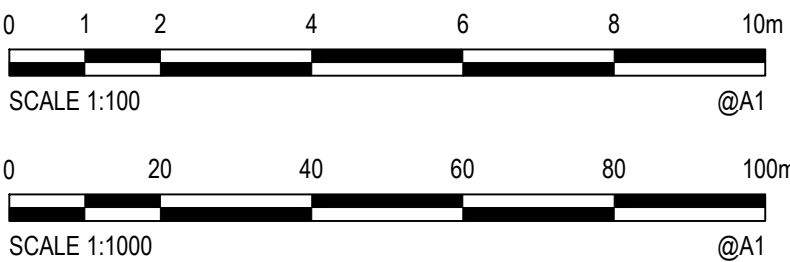
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Drawn JJ	Date 9/02/2018
Checked MB	Date 9/02/2018
Designed JN	Date 9/02/2018
Verified MB	Date 9/02/2018
Approved	Date 10/08/2018

Client	MOUNT MARGARET DEVELOPMENTS PTY LTD
Project	MOUNT MARGARET, ALICE RIVER STAGE 8
Title	ROADWORKS LONGITUDINAL SECTION DOLLY DRIVE (ROAD E) SHEET 1 OF 2

Status	FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Datum	A.H.D
Date	2/9/2018
Scale	As Shown
Size	A1
Drawing Number	967192-CI-809
Revision	A

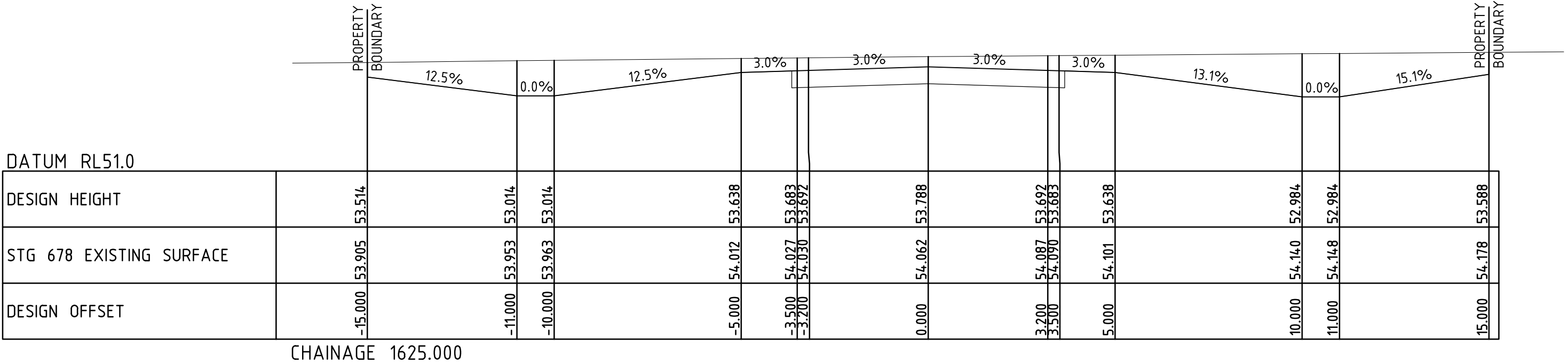
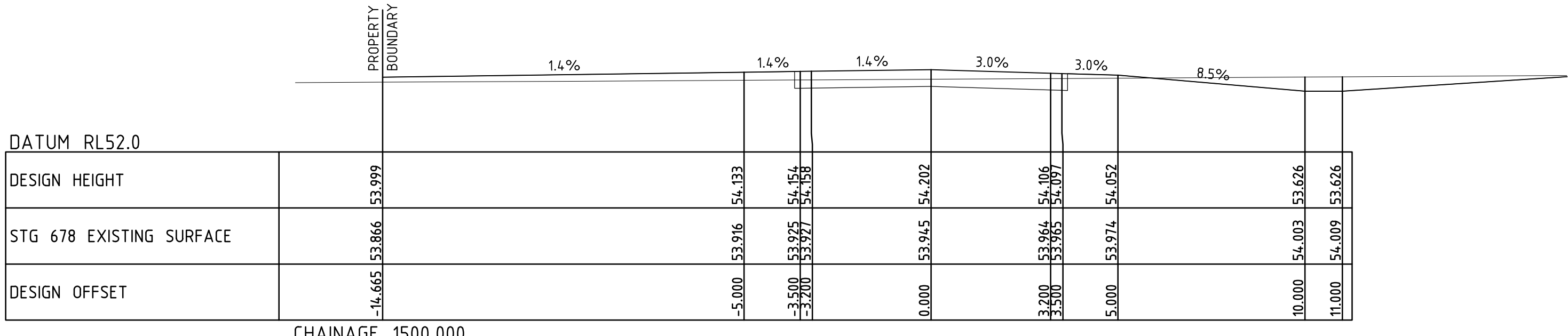
150mm BASE (DTMR TYPE 2.1)
150mm SUB BASE (DTMR TYPE 2.3)
150mm LOWER SUB BASE (DTMR TYPE 2.5)

[illegible]

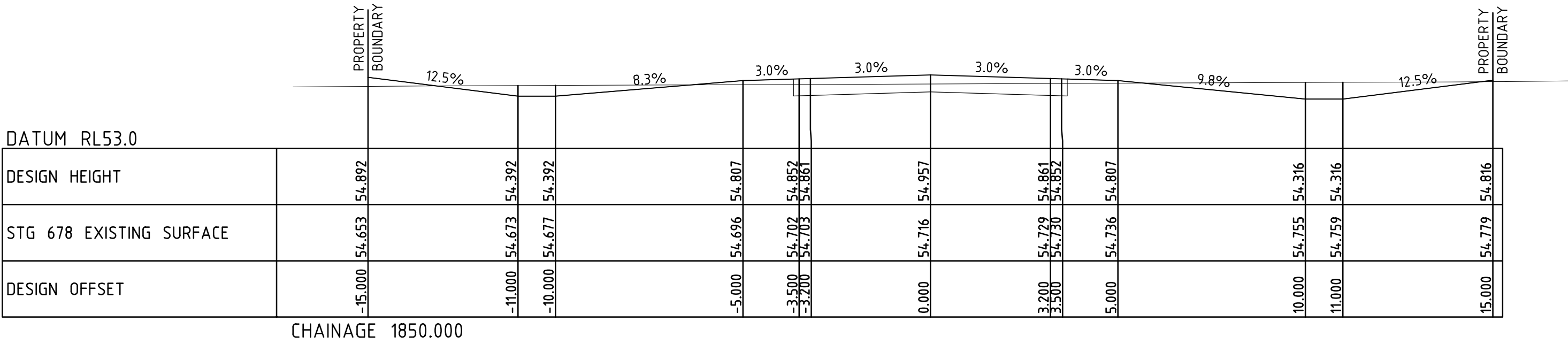
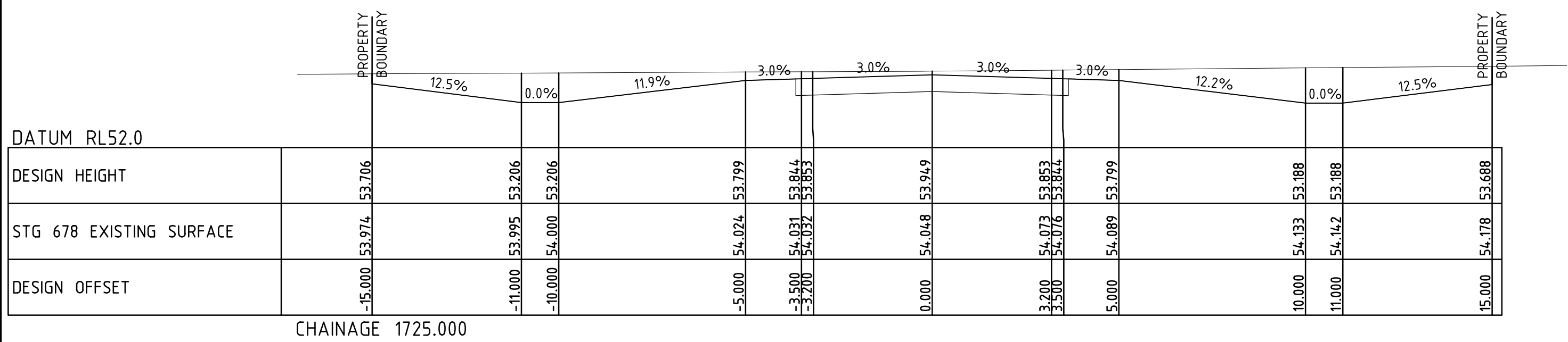
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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018		Datum A.H.D		
Verified MB	Date 9/02/2018		Date 2/9/2018		
Approved	10801	Title ROADWORKS LONGITUDINAL SECTION DOLLY DRIVE (ROAD E) SHEET 2 OF 2	Scale As Shown	Size A1	Revision A
MB	9/02/2018		Drawing Number 967192-CI-810		



FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Date	Date	Scale	Size
A.H.D	2/9/2018	As Shown	A1
Drawing Number			Revision
967192-CI-811			A



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Drawn JJ	Date 9/02/2018	Client	MOUNT MARGARET DEVELOPMENTS PTY LTD					
Checked MB	Date 9/02/2018	Project	MOUNT MARGARET, ALICE RIVER STAGE 8		Status	FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018							
Verified MB	Date 9/02/2018	Title	ROADWORKS CROSS SECTIONS DOLLY DRIVE (ROAD E) SHEET 2 OF 2		Datum	Date	Scale	Size
Approved	10801				A.H.D	2/9/2018	As Shown	A1
MB	9/02/2018				Drawing Number			Revision
					967192-CI-812			A

DATE PLOTTED: 2 July 2020 2:49 PM BY: JAMES WONG

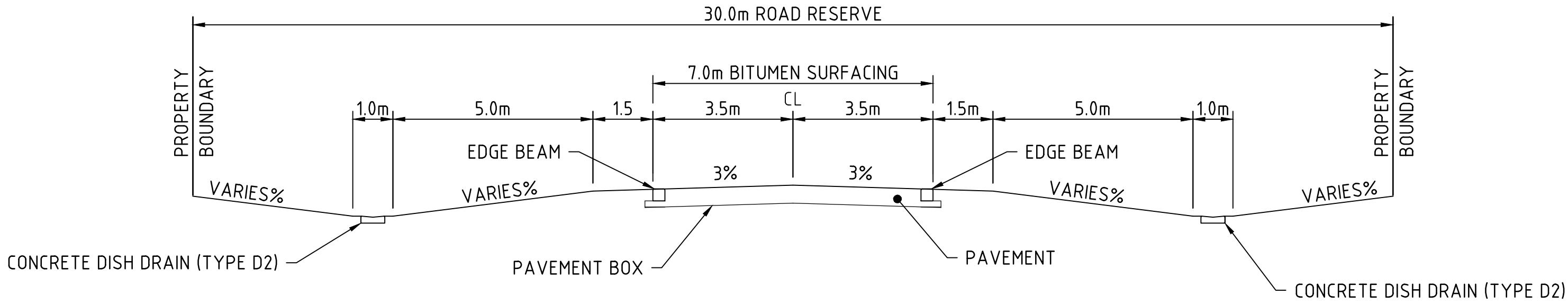
DIAMOND DRIVE (ROAD J)

ROAD TYPE: ACCESS STREET
DESIGN SPEED: 50km/h (NOT INCLUDING INTERSECTION)

PROVISIONAL PAVEMENT DESIGN

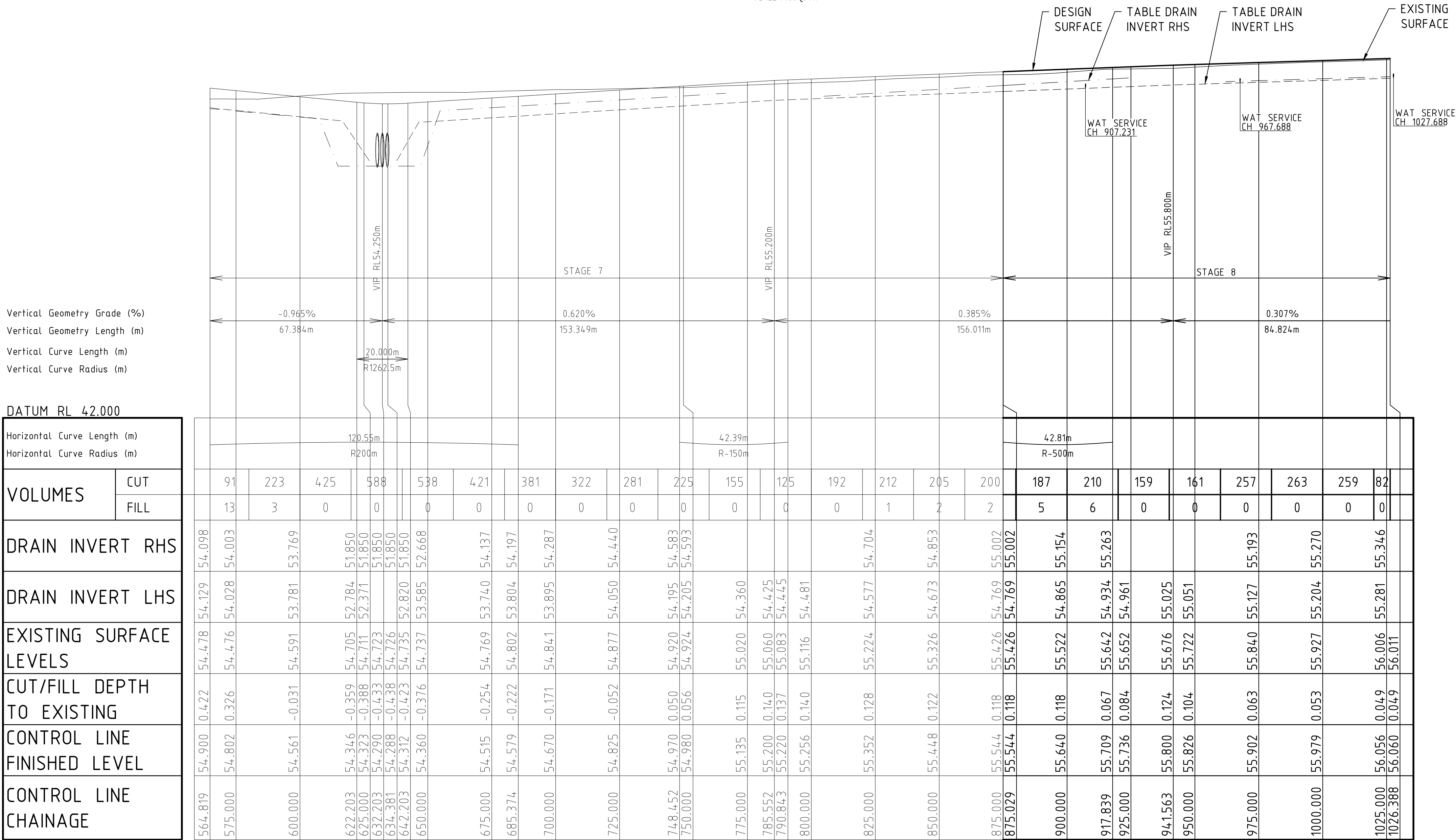
- TWO COAT BITUMEN SEAL (14mm/7mm)
- PRIME COAT - AMC00 @ 0.8 L/m²
 - SEAL COAT 1 - CL170 @ 1.5L/m²
 - 14mm PRECOATED AGG. @ 95m²/m³
 - SEAL COAT 2 - CL170 @ 1.1L/m²
 - 7mm AGG. @ 120m²/m³

150mm BASE (DTMR TYPE 2.1)
150mm SUB BASE (DTMR TYPE 2.3)
150mm LOWER SUB BASE (DTMR TYPE 2.5)



TYPICAL CROSS SECTION

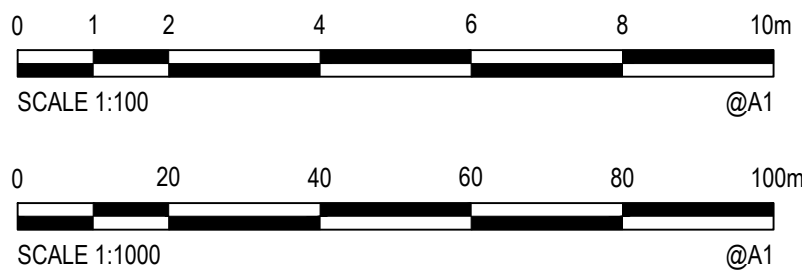
SCALE 1:100 @ A1



DIAMOND DRIVE ROAD J - LONGITUDINAL SECTION

SCALE HORIZONTAL 1: 1000
VERTICAL 1: 100

Rev.	Date	Description	Des.	Verif.	Appd.
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB

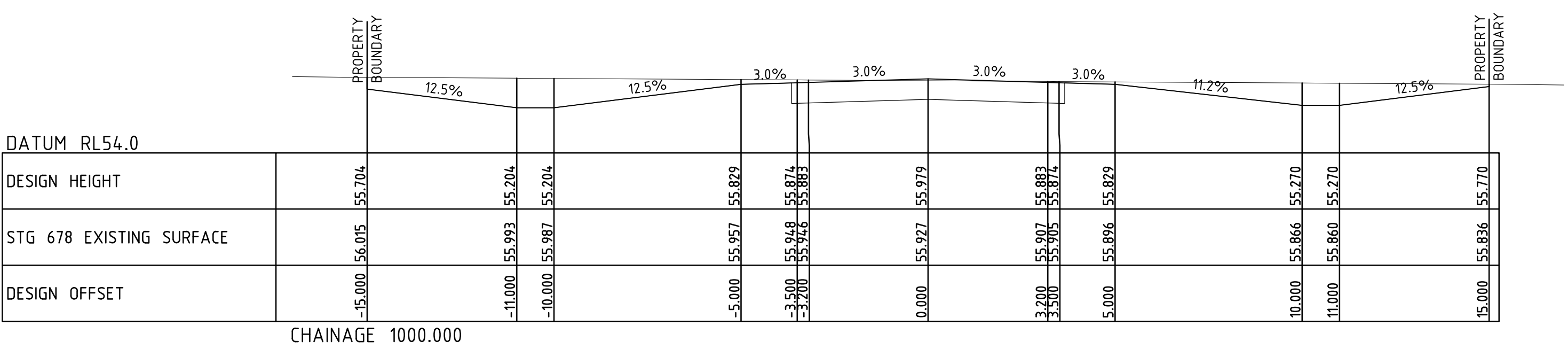
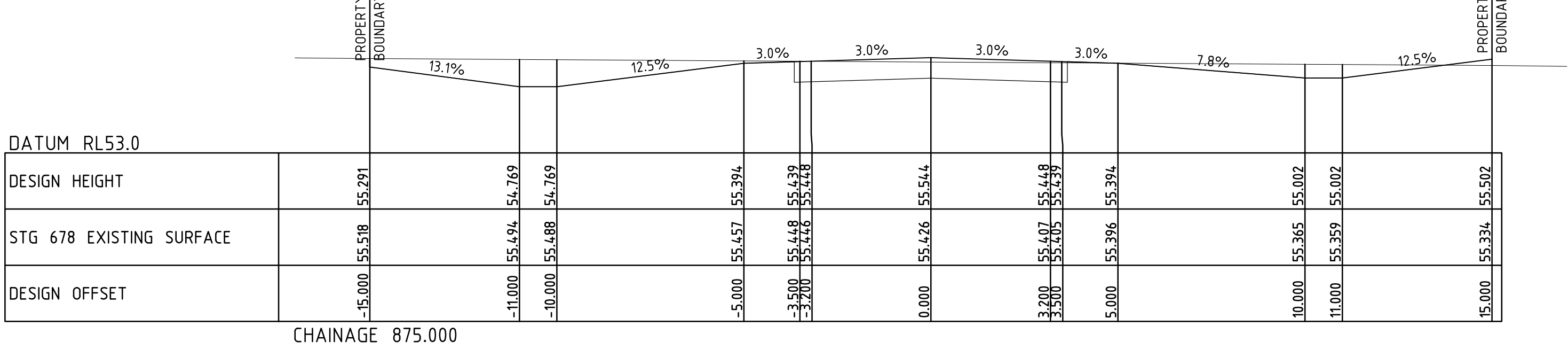


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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER
Designed JN	Date 9/02/2018	Stage STAGE 8
Verified MB	Date 9/02/2018	Title ROADWORKS LONGITUDINAL SECTION DIAMOND DRIVE (ROAD J)
Approved MB	Date 9/02/2018	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
		Datum A.H.D
		Date 2/9/2018
		Scale As Shown
		Size A1
		Drawing Number 967192-CI-813
		Revision A



Status			
FOR APPROVAL			
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Date	Date	Scale	Size
A.H.D	2/9/2018	As Shown	A1
Drawing Number			Revision
967192-CI-814			A

DATE PLOTTED: 2 July 2020 2:50 PM BY: JAMES WONG

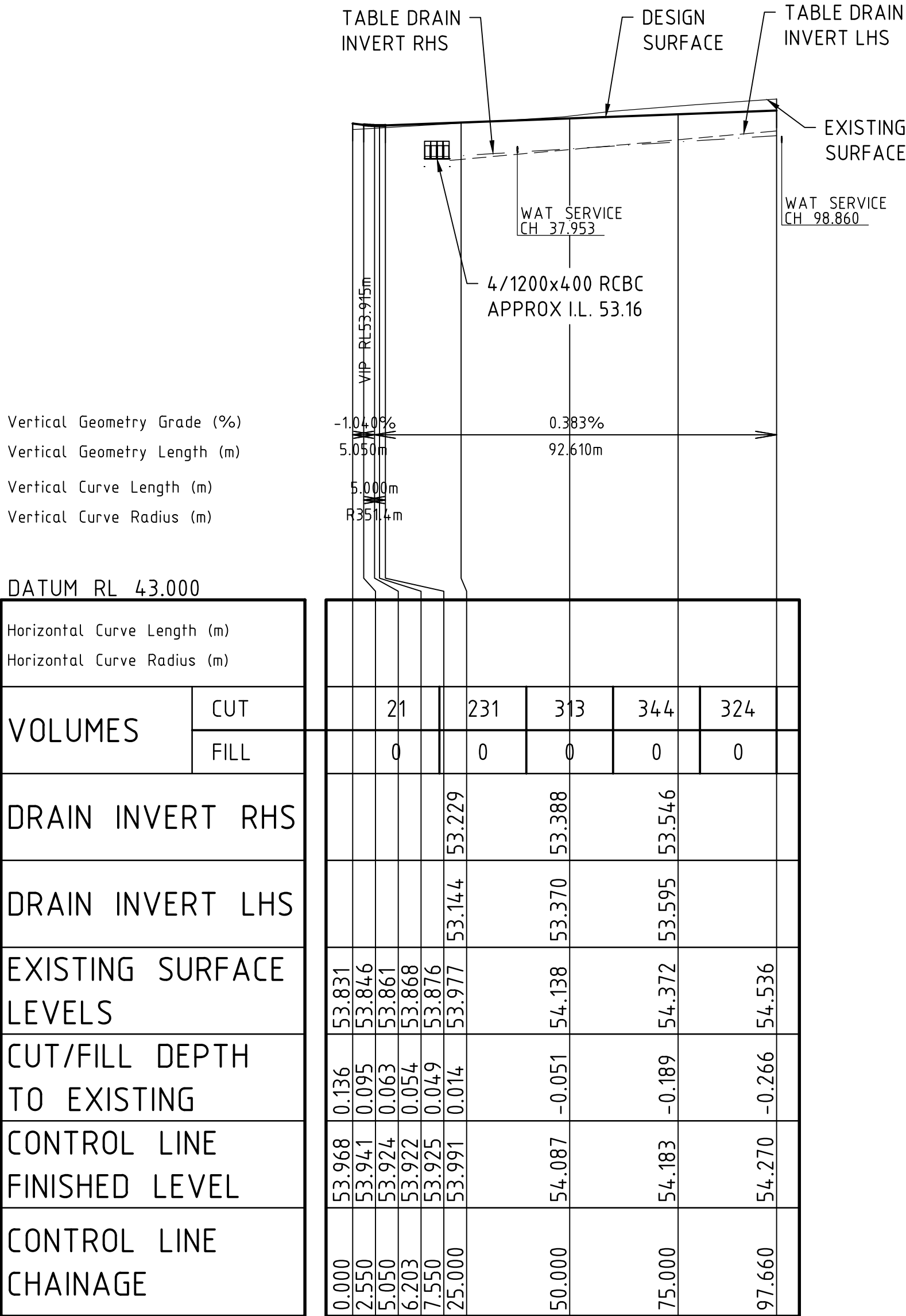
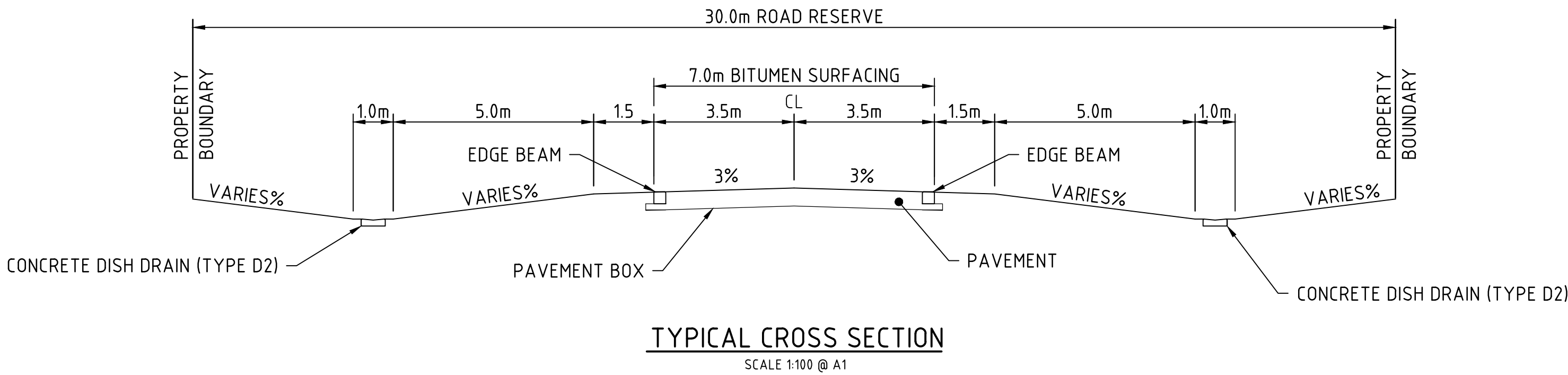
XREFs:
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\36719671-92 - Mount Margaret\ENGINEERING\DRAWINGS\STAGE 6, 7 & 8\967192-CI-815.dwg

ROAD K

ROAD TYPE: ACCESS STREET
DESIGN SPEED: 50km/h (NOT INCLUDING INTERSECTION)

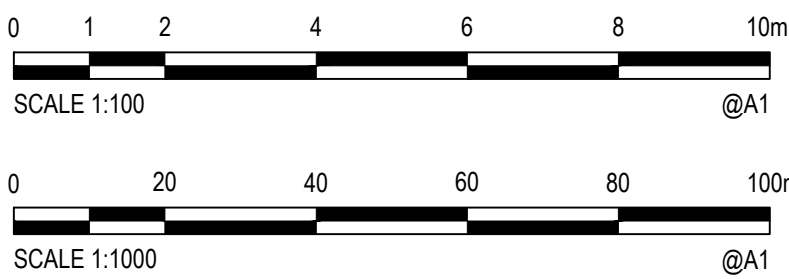
PROVISIONAL PAVEMENT DESIGN

- TWO COAT BITUMEN SEAL (14mm/7mm)
- PRIME COAT - AMC00 @ 0.8 L/m²
 - SEAL COAT 1 - CL170 @ 1.5L/m²
 - 14mm PRECOATED AGG. @ 95m²/m³
 - SEAL COAT 2 - CL170 @ 1.1L/m²
 - 7mm AGG. @ 120m²/m³
- 150mm BASE (DTMR TYPE 2.1)
150mm SUB BASE (DTMR TYPE 2.3)
150mm LOWER SUB BASE (DTMR TYPE 2.5)



ROAD K - LONGITUDINAL SECTION

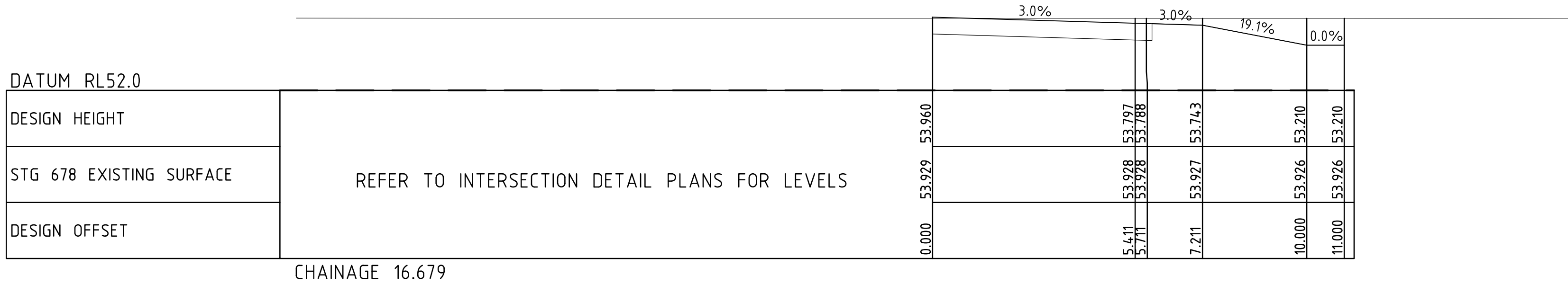
SCALE HORIZONTAL 1: 1000
VERTICAL 1: 100



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Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER
Designed JN	Date 9/02/2018	STAGE 8
Verified MB	Date 9/02/2018	Title ROADWORKS LONGITUDINAL SECTION
Approved MB	Date 9/02/2018	ROAD K
		Status FOR APPROVAL
		NOT TO BE USED FOR CONSTRUCTION PURPOSES
Datum A.H.D	Date 2/9/2018	Scale As Shown
Drawing Number 967192-CI-815	Size A1	Revision A



A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL		JN	MB
Rev.	Date	Description		Des.	Verif.
					Appd.



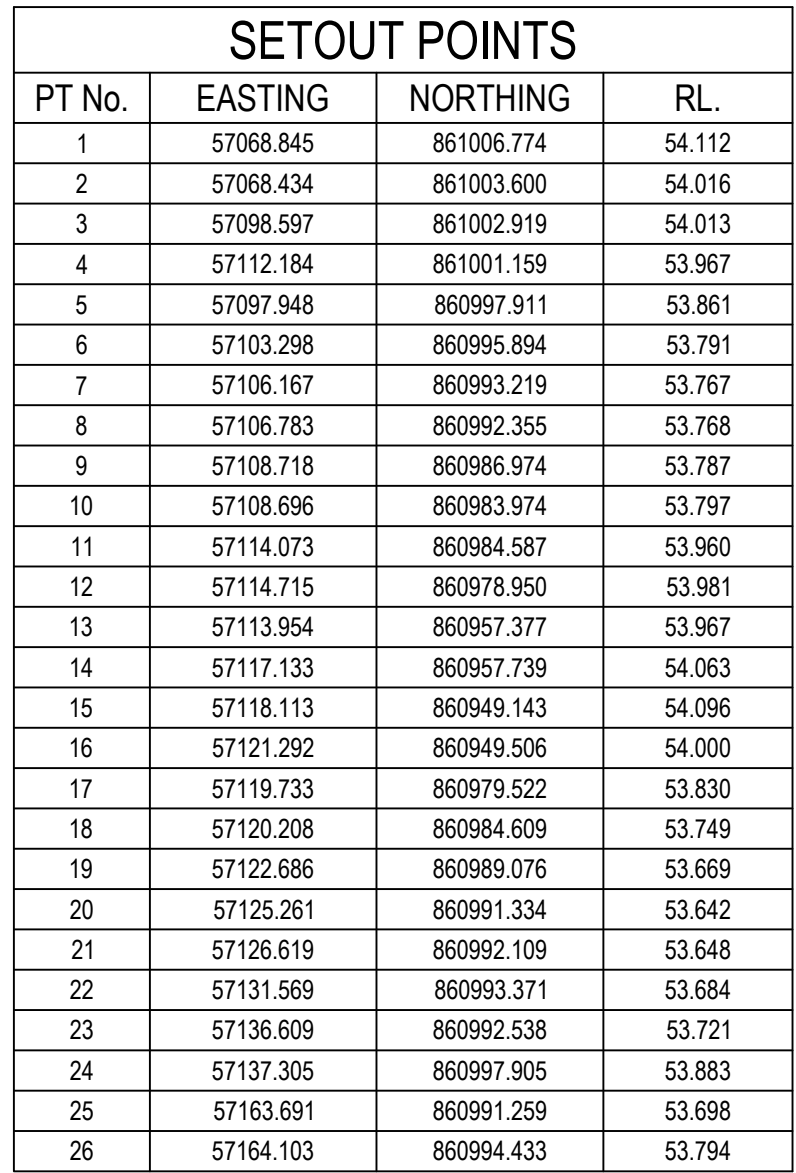
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Drawn	Date
JJ	9/02/2018
Checked	Date
MB	9/02/2018
Designed	Date
JN	9/02/2018
Verified	Date
MB	9/02/2018
Approved	10801
MB	9/02/2018

Client	MOUNT MARGARET DEVELOPMENTS PTY LTD	
Project	MOUNT MARGARET, ALICE RIVER STAGE 8	Status NOT T
		Date A.H
Title	ROADWORKS CROSS SECTIONS ROAD K	Drawing

Status			
FOR APPROVAL			
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Date	Date	Scale	Size
A.H.D	2/9/2018	As Shown	A1
Drawing Number			Revision
967192-CI-816			A



 BARRIER KERB & CHANNEL (TYPE B1)
 CONCRETE EDGE BEAM (300x300)
 CONCRETE DISH DRAIN (TYPE D2)
 SETOUT POINT
 DESIGN GRADE

1. CONTOURS DENOTED THUS INDICATE GROUND FINISHED SURFACE LEVELS.
2. ALL LEVELS ARE LIP OF KERB LEVELS OR CROWN LEVELS.
3. ALL SETOUT IS TO LIP OF KERB UNLESS OTHERWISE NOTED.
4. GRADE EVENLY BETWEEN LEVELS SHOWN.
5. CONTRACTOR SHALL ENSURE THAT ALL KERB AND CHANNEL GRADES SHALL NOT FALL BELOW 0.25% AT ANY POINT IRRESPECTIVE OF ROAD CENTRELINE GRADING SHOWN ON LONGITUDINAL SECTIONS.

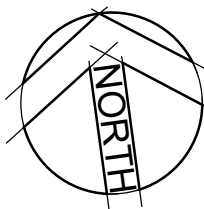
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB
Rev.	Date	Description	Des.	Verif.	Appd.



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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018		Datum A.H.D		
Verified MB	Date 9/02/2018		Scale As Shown		
Approved	10801	Title INTERSECTION DETAILS PLAN SHEET 1 OF 2	Drawing Number 967192-CI-817		Size A1
MB	9/02/2018		Revision A		



PLAN
SCALE 1:500 @ A1

SETOUT POINTS			
PT No.	EASTING	NORTHING	RL.
27	57500.711	860941.531	55.617
28	57498.062	860943.327	55.521
29	57484.061	860916.224	55.733
30	57475.483	860901.287	55.800
31	57480.290	860918.855	55.581
32	57476.999	860915.283	55.558
33	57472.591	860913.241	55.534
34	57467.737	860913.042	55.511
35	57463.177	860914.716	55.487
36	57460.823	860916.576	55.473
37	57458.004	860911.957	55.635
38	57436.607	860928.768	55.321
39	57434.940	860926.036	55.417
40	57433.272	860923.305	55.321
41	57455.194	860907.338	55.472
42	57457.914	860906.095	55.491
43	57461.487	860902.804	55.520
44	57463.529	860898.396	55.550
45	57463.728	860893.542	55.608
46	57462.054	860888.982	55.665
47	57460.194	860886.628	55.700
48	57464.813	860883.808	55.863
49	57450.734	860860.744	55.946
50	57448.002	860862.412	55.850

LEGEND

-  BARRIER KERB & CHANNEL (TYPE B1)
 CONCRETE EDGE BEAM (300x300)
 CONCRETE DISH DRAIN (TYPE D2)
 SETOUT POINT
 DESIGN GRADE

ROADWORKS NOTES

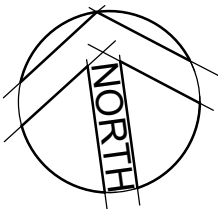
1. CONTOURS DENOTED THUS  INDICATE GROUND FINISHED SURFACE LEVELS.
2. ALL LEVELS ARE LIP OF KERB LEVELS OR CROWN LEVELS.
3. ALL SETOUT IS TO LIP OF KERB UNLESS OTHERWISE NOTED.
4. GRADE EVENLY BETWEEN LEVELS SHOWN.
5. CONTRACTOR SHALL ENSURE THAT ALL KERB AND CHANNEL GRADES SHALL NOT FALL BELOW 0.25% AT ANY POINT IRRESPECTIVE OF ROAD CENTRELINE GRADING SHOWN ON LONGITUDINAL SECTIONS.

[illegible]

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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018				
Verified MB	Date 9/02/2018				
Approved	10801				
Title		Intersection Details Plan SHEET 2 OF 2			
MB	9/02/2018	Drawing Number 967192-CI-818			Revision A



1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT CITY COUNCIL STANDARD WATER
2. DRAWINGS INCLUDING FORMER THURINGOWA STANDARD DRAWINGS.
3. CONNECTION TO EXISTING WATERMAIN TO BE CARRIED OUT BY THE COUNCIL AT CONTRACTORS COST.
4. ALL WATERMAINS TO BE LOCATED 1.8m +/- 0.1m OFF ROAD RESERVE ALIGNMENTS UNLESS NOTED OTHERWISE.
5. PIPES FOR WATER MAINS TO BE PVC-U CLASS 16, OD COMPATIBLE TO AS1477, RUBBER RING JOINTED WITH SOCKETED DICL FITTINGS.
6. PIPE FITTINGS TO BE DICL TO AS2280.
7. POLYETHENE PIPES SHALL BE MDPE PN16 TO AS4130
8. TRENCH WALLS FOR SERVICES WILL NEED TO BE BATTERED FOR CONSTRUCTION SAFETY.

	EXISTING WATERMAIN		WATERMAIN AND SIZE
	EXISTING FIRE HYDRANT		FIRE HYDRANT
	EXISTING VALVE		VALVE AND SIZE
	EXISTING TEE		TEE
	EXISTING END CAP		END CAP
			32 O.D. MDPE. WITH ENVELOPER

PLAN
SCALE 1:500 @ A1



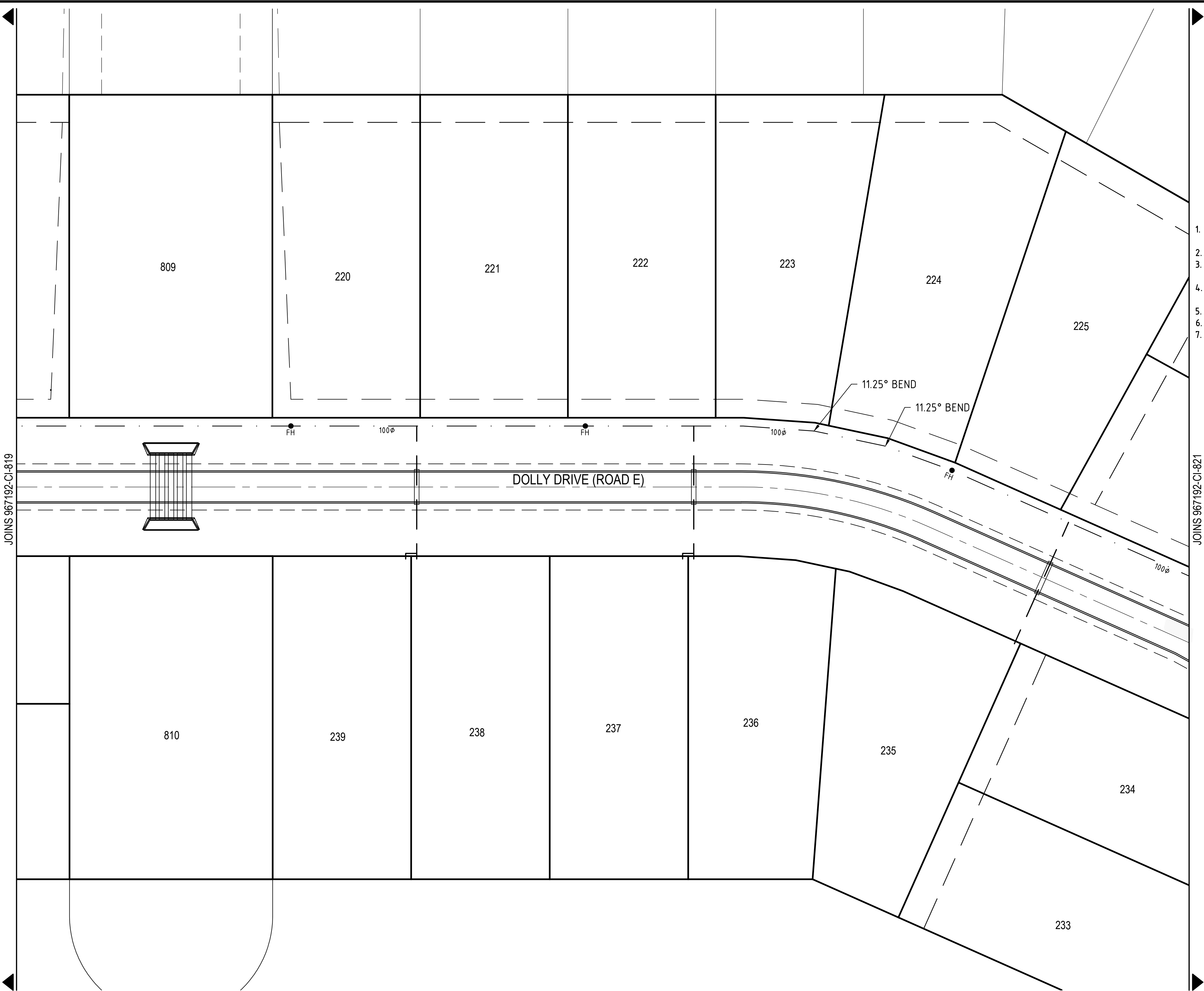
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Drawn JJ	Date 9/02/2018	Client	MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project	MOUNT MARGARET, ALICE RIVER STAGE 8		Status	FOR APPROVAL
Designed JN	Date 9/02/2018		NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Verified MB	Date 9/02/2018	Title	WATER RETICULATION LAYOUT PLAN SHEET 1 OF 3		Datum	A.H.D
Approved	10801				Date	2/9/2018
					Scale	As Shown
					Size	A1
MB	9/02/2018				Drawing Number	967192-CI-819
					Revision	A

DATE PLOTTED: 2 July 2020 2:53 PM BY: JAMES WONG

XREFs: XR-967192-CADASTRAL; XR-967192-MASTER
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\96600\96719671-92 - Mount Margaret\ENGINEERING\DRAWINGS\STAGE 6, 7 & 8\967192-CI-820.dwg



NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT CITY COUNCIL STANDARD WATER DRAWINGS INCLUDING FORMER THURINGOWA STANDARD DRAWINGS.
2. CONNECTION TO EXISTING WATERMAIN TO BE CARRIED OUT BY THE COUNCIL AT CONTRACTORS COST.
3. ALL WATERMAINS TO BE LOCATED 1.8m +/- 0.1m OFF ROAD RESERVE ALIGNMENTS UNLESS NOTED OTHERWISE.
4. PIPES FOR WATER MAINS TO BE PVC-U CLASS 16, OD COMPATIBLE TO AS1477, RUBBER RING JOINTED WITH SOCKETED DICL FITTINGS.
5. PIPE FITTINGS TO BE DICL TO AS2280.
6. POLYTHENE PIPES SHALL BE MDPE PN16 TO AS4130
7. TRENCH WALLS FOR SERVICES WILL NEED TO BE BATTERED FOR CONSTRUCTION SAFETY.

LEGEND

---	EXISTING WATERMAIN	100Ø	WATERMAIN AND SIZE
---	EXISTING FIRE HYDRANT	FH	FIRE HYDRANT
---	EXISTING VALVE	100SV	VALVE AND SIZE
---	EXISTING TEE	---	TEE
---	EXISTING END CAP	---	END CAP
---		---	32 O.D. MDPE. WITH ENVELOPER

PLAN

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Drawn	JJ	Date	9/02/2018
Checked	MB	Date	9/02/2018
Designed	JN	Date	9/02/2018
Verified	MB	Date	9/02/2018
Approved		Date	10801
MB		Date	9/02/2018

Client	MOUNT MARGARET DEVELOPMENTS PTY LTD
Project	MOUNT MARGARET, ALICE RIVER STAGE 8
Title	WATER RETICULATION LAYOUT PLAN SHEET 2 OF 3

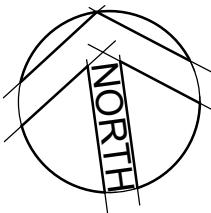
Status			
FOR APPROVAL			
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Datum	Date	Scale	Size
A.H.D	2/9/2018	As Shown	A1
Drawing Number			Revision
967192-CI-820			A

Rev.	Date	Description	Des.	Verif.	Appd.
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB

DATE PLOTTED: 2 July 2020 2:54 PM BY: JAMES WONG

JOINS 967192-CI-820

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CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\96719671\9671-92 - Mount Margaret\ENGINEERING\DRAWINGS\STAGE 6, 7 & 8\967192-CI-821.dwg



NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT CITY COUNCIL STANDARD WATER DRAWINGS INCLUDING FORMER THURINGOWA STANDARD DRAWINGS.
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7. TRENCH WALLS FOR SERVICES WILL NEED TO BE BATTERED FOR CONSTRUCTION SAFETY.

LEGEND

	EXISTING WATERMAIN		WATERMAIN AND SIZE
	EXISTING FIRE HYDRANT		FIRE HYDRANT
	EXISTING VALVE		VALVE AND SIZE
	EXISTING TEE		TEE
	EXISTING END CAP		END CAP
			32 O.D. MDPE, WITH ENVELOPER

PLAN

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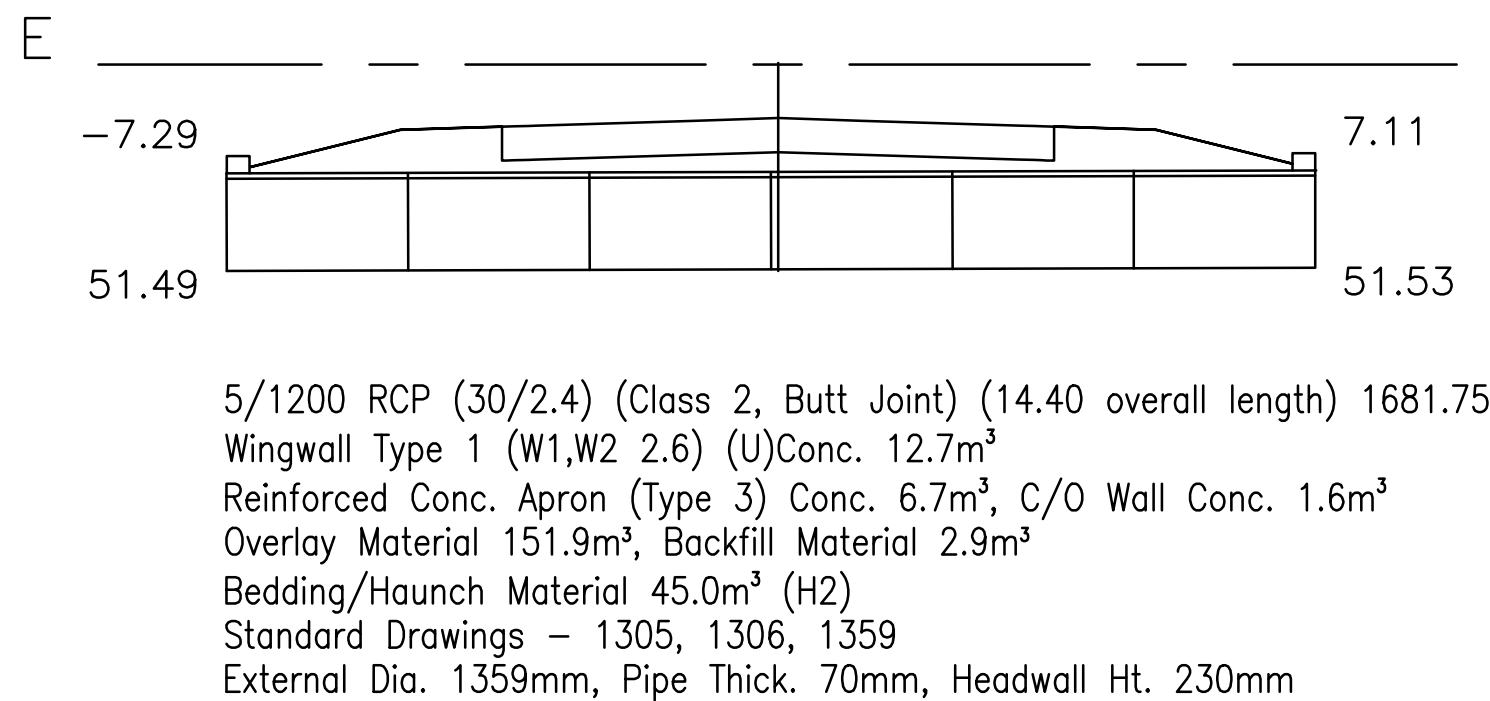
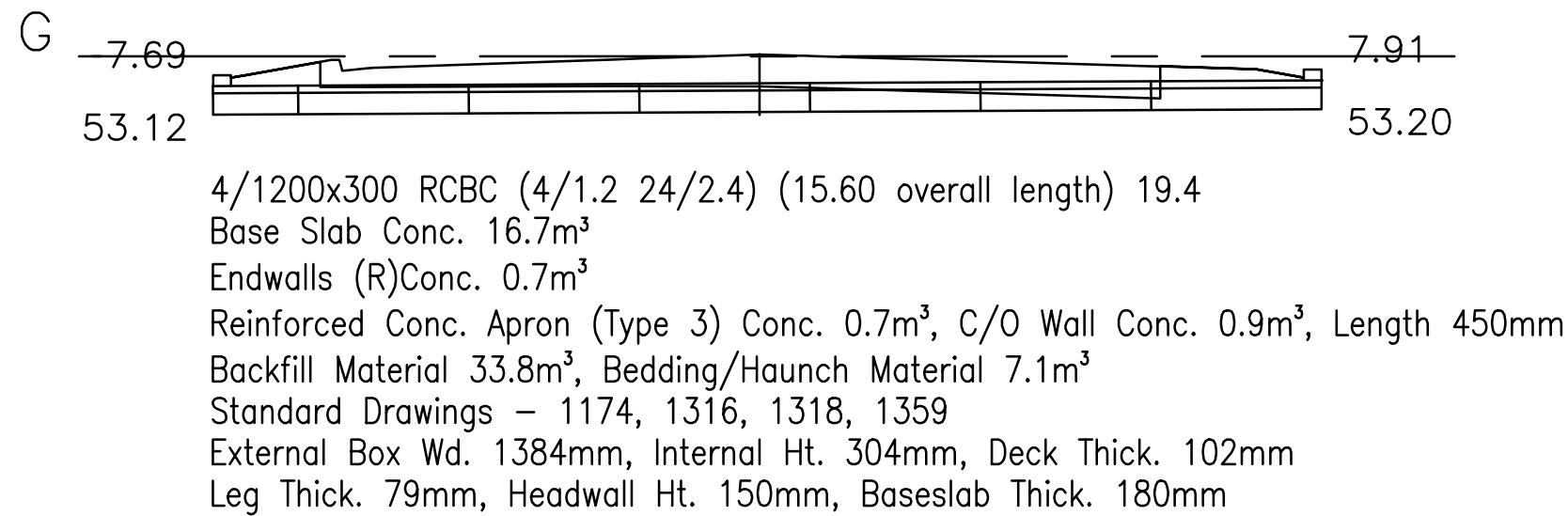
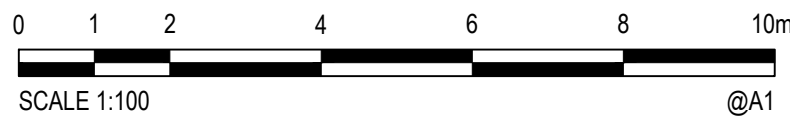
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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8			
Designed JN	Date 9/02/2018	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Verified MB	Date 9/02/2018				
Approved 10801	Title WATER RETICULATION LAYOUT PLAN SHEET 3 OF 3				
MB	9/02/2018				
		Datum A.H.D	Date 2/9/2018	Scale As Shown	Size A1
		Drawing Number 967192-CI-821			Revision A

DRAINAGE SCHEDULE

Culvert		Drainage Structure	Wingwalls			EndWalls / Wingwalls			Concrete Bases				Aprons						Cut Off Walls (m³)	Excavation (m3)			Fill / Backfill				No Fines Conc. Block	Reo. Bar Mass (kg)	OLM = Overlay Material FBM = Fill / Backfill /Side Material BHM = Bedding / Haunch Material BSP = Bedding Steel Pipes							
			S k e w	T y p e	Lengths				Conc. (m³)	Reinforcing			Rock	Wire	Matt.	Reinforced		Mass																		
W1 (m)	W2 (m)				(U)Conc. (m³)	(R)Conc. (m³)	Reinforcing (m²) (mesh)			RL1218 (m²)	N12 (m)	Nibs (m)				Area (m²)	Area (m²)			Thick (mm)	Conc. (m³)	Reinforcing (m²) (mesh)	Conc. (m³)													
No.	Chainage		0	—	—	—		0.7		16.7	92.5	449.0				0.7	9.5	SL62			0.9															
G	19.40		4/1200x300 RCBC (4/1.2 24/2.4)	0	—	—	—																													4/1200x300 RCBC
E	1681.75		5/1200 RCP (30/2.4)	0	1	2.6 2.6	2.6 2.6	12.7								6.7	53.6	SL62			1.6										2.9	45.0		8		5/1200 RCP
			Total Quantities				12.7	0.7		16.7	92.5	449				7.4			2.4									8	424	Mesh quantities are net only No allowances made for laps etc.						
			Total Mesh				92.5/RL1218 63.2/SL62																													

[illegible]

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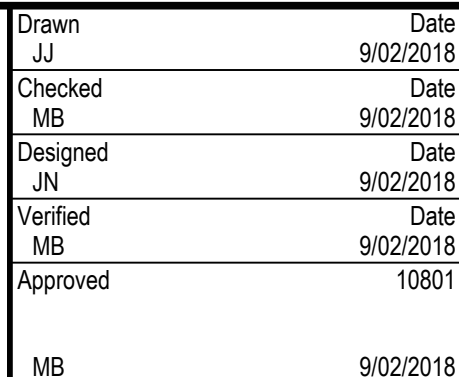
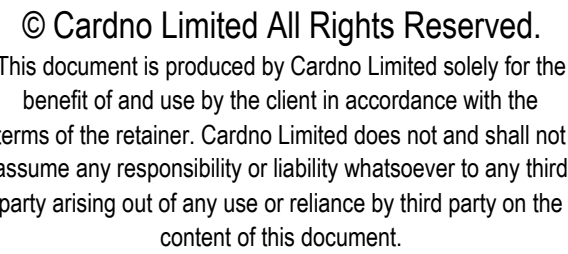


Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed JN	Date 9/02/2018		Datum A.H.D		
Verified MB	Date 9/02/2018		Date 2/9/2018		
Approved	10801		Scale As Shown		
Title CULVERT DETAILS		Size A1			
MB	9/02/2018	Drawing Number 967192-CI-822			Revision A

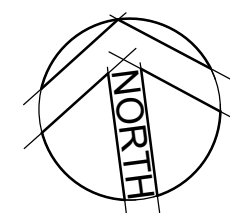
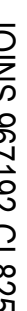


CONCRETE EDGE BEAM DETAIL

NOT TO SCALE

[illegible]

Client MOUNT MARGARET DEVELOPMENTS PTY LTD				
Project MOUNT MARGARET, ALICE RIVER STAGE 8		Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Title		Datum A.H.D	Date 2/9/2018	Scale As Shown
MISCELLANEOUS DETAILS		Drawing Number 967192-CI-823		Size A1 Revision A



1. A BUILDING ORIENTATION THAT MINIMISES THE LENGTH OF EXTERNAL WALL AREAS THAT ARE EXPOSED TO SOLAR RADIATION.
2. AN INTERNAL LAYOUT ENSURING THAT LIVING AREAS ARE PROTECTED FROM SUMMER SOLAR RADIATION (i.e. LIVING AREAS ORIENTATED NORTH TO NORTH-EAST AND SERVICE AREAS ARE ORIENTATED TO THE WEST AND SOUTH)
3. BUILDING PROJECTIONS ARE USED TO MINIMISE SUMMER SOLAR RADIATION TO EXTERNAL WALLS (i.e. CARPORTS, LARGE OVERHANGS, EXTERNAL SCREENS ARE INCORPORATED THAT FULLY SHADE WESTERN AND SOUTH-WESTERN FACING EXTERNAL WALLS FROM SOLAR RADIATION).
4. A BUILDING LAYOUT THAT MAXIMISES THE CAPTURE OF PREVAILING BREEZES (LIVING AREA WINDOWS AND DOORS ARE ORIENTATED TO THE NORTH-EAST, ROOM LAYOUTS AND INTERNAL ACCESS WAYS ARE DESIGNED TO MAXIMISE CROSS VENTILATION).

- BUILDING ENVELOPE
- ALLOWABLE DRIVEWAY ACCESS
- WATER MAIN
- HOUSE CONNECTIONS (WATER)
- FIRE HYDRANT
- SIGNS
- GUIDE POSTS

1. FOR DRIVEWAY ACCESS ENVELOPE ALLOW 0.5m MINIMUM CLEARANCE TO ALL COUNCIL INFRASTRUCTURE, EXCEPT STORMWATER PITS WHICH REQUIRE 5.0m CLEARANCE
2. ALL DRIVEWAYS REQUIRE A PERMIT TO CARRY OUT WORKS ON COUNCIL CONTROLLED LAND PRIOR TO CONSTRUCTION.
3. FOR CLEARANCES TO TELSTRA AND ERGON ENERGY INFRASTRUCTURE, REFER TO THE RELEVANT AUTHORITY.

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE

1. DIMENSIONS SHOWN APPLY TO CLASS 1 BUILDINGS. FOR CLASS 10a AND 10b BUILDINGS, SETBACKS SHALL CONFORM TO THE REQUIREMENTS OF THE QUEENSLAND DEVELOPMENT CODE (CHAPTER 12).
2. ALL SETBACK DISTANCES ARE TAKEN FROM THE OUTERMOST PROJECTION WHICH IS A DISTANCE MEASURED FROM THE EDGE OF THE FACIA BOARD TO THE PROPERTY BOUNDARY.

A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB
Rev.	Date	Description	Des.	Verif.	Appd.



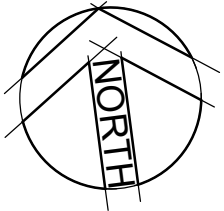
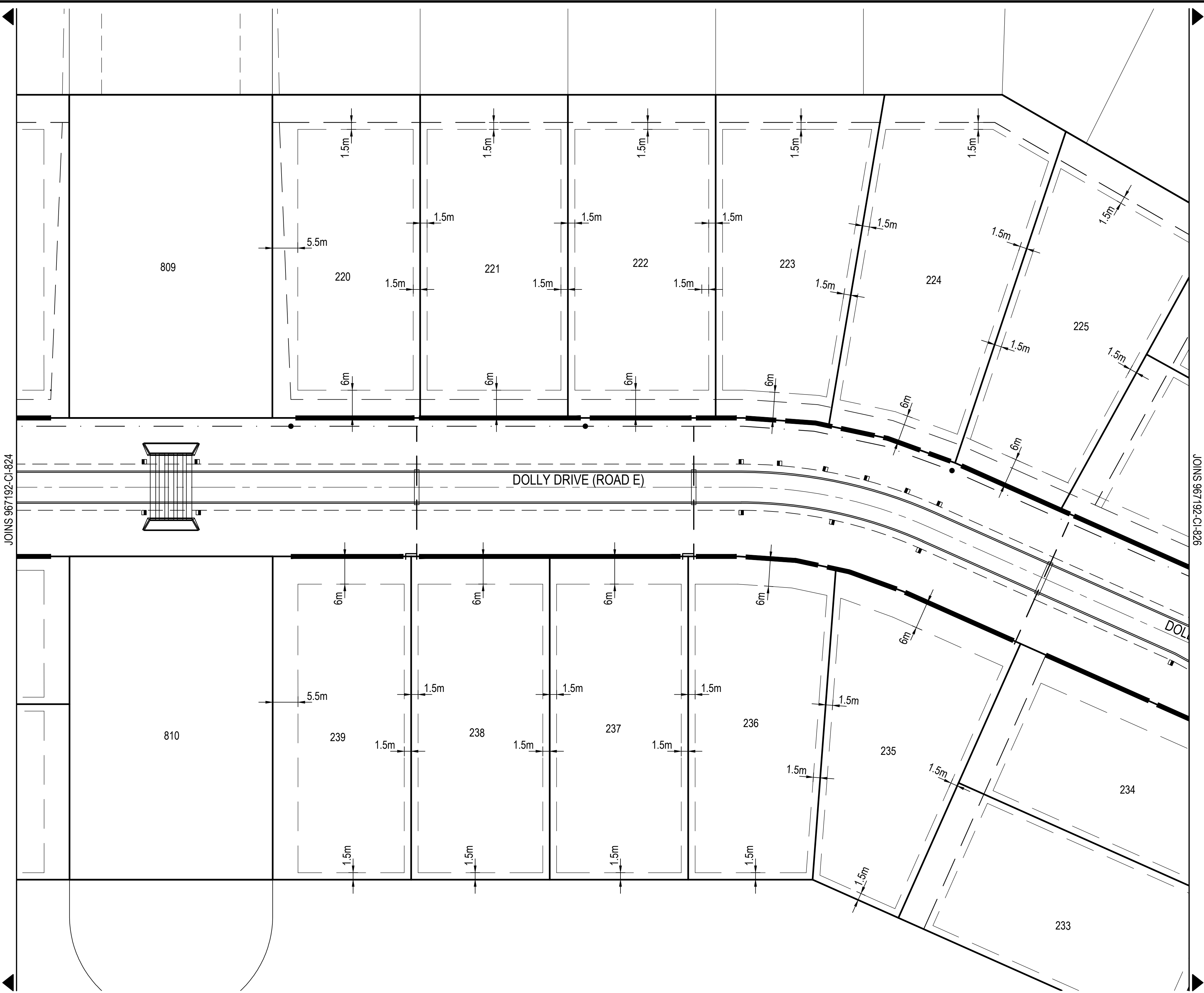
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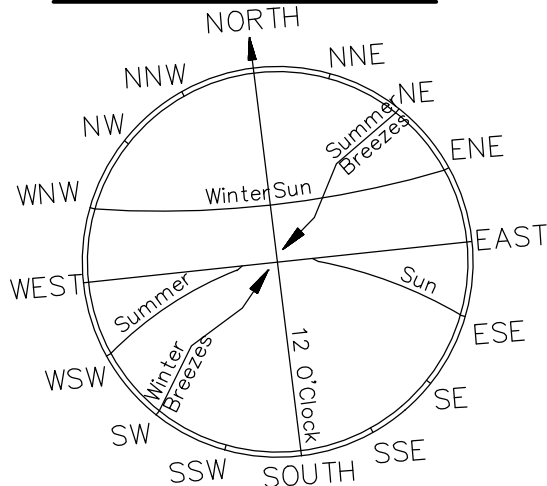
Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD				
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Designed JN	Date 9/02/2018					
Verified MB	Date 9/02/2018					
Approved	10801					
Title		BUILDING ENVELOPE & DRIVEWAY ACCESS PLAN SHEET 1 OF 3	Datum		Revision	
			A.H.D	2/9/2018	As Shown	A1
		Drawing Number 967192-CI-824				
MB	9/02/2018	A				

DATE PLOTTED: 2 July 2020 2:56 PM BY: JAMES WONG

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CLIMATICALLY RESPONSIVE
BUILDING DESIGN



- THE FOLLOWING DESIGN PARAMETERS SHOULD BE CONSIDERED DURING THE DESIGN PHASE OF PROPOSED DWELLINGS.
1. A BUILDING ORIENTATION THAT MINIMISES THE LENGTH OF EXTERNAL WALL AREAS THAT ARE EXPOSED TO SOLAR RADIATION.
 2. AN INTERNAL LAYOUT ENSURING THAT LIVING AREAS ARE PROTECTED FROM SUMMER SOLAR RADIATION (i.e. LIVING AREAS ORIENTATED NORTH TO NORTH-EAST AND SERVICE AREAS ARE ORIENTATED TO THE WEST AND SOUTH)
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 4. A BUILDING LAYOUT THAT MAXIMISES THE CAPTURE OF PREVAILING BREEZES (LIVING AREA WINDOWS AND DOORS ARE ORIENTATED TO THE NORTH-EAST, ROOM LAYOUTS AND INTERNAL ACCESS WAYS ARE DESIGNED TO MAXIMISE CROSS VENTILATION).

LEGEND

- BUILDING ENVELOPE
- ALLOWABLE DRIVEWAY ACCESS
- WATER MAIN
- HOUSE CONNECTIONS (WATER)
- FIRE HYDRANT
- SIGNS
- GUIDE POSTS

DRIVEWAY ACCESS ENVELOPE NOTES

1. FOR DRIVEWAY ACCESS ENVELOPE ALLOW 0.5m MINIMUM CLEARANCE TO ALL COUNCIL INFRASTRUCTURE, EXCEPT STORMWATER PITS WHICH REQUIRE 5.0m CLEARANCE
2. ALL DRIVEWAYS REQUIRE A PERMIT TO CARRY OUT WORKS ON COUNCIL CONTROLLED LAND PRIOR TO CONSTRUCTION.
3. FOR CLEARANCES TO TELSTRA AND ERGON ENERGY INFRASTRUCTURE, REFER TO THE RELEVANT AUTHORITY.

NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

BUILDING SETBACK NOTES

1. DIMENSIONS SHOWN APPLY TO CLASS 1 BUILDINGS. FOR CLASS 10a AND 10b BUILDINGS, SETBACKS SHALL CONFORM TO THE REQUIREMENTS OF THE QUEENSLAND DEVELOPMENT CODE (CHAPTER 12).
2. ALL SETBACK DISTANCES ARE TAKEN FROM THE OUTERMOST PROJECTION WHICH IS A DISTANCE MEASURED FROM THE EDGE OF THE FACIA BOARD TO THE PROPERTY BOUNDARY.

PLAN
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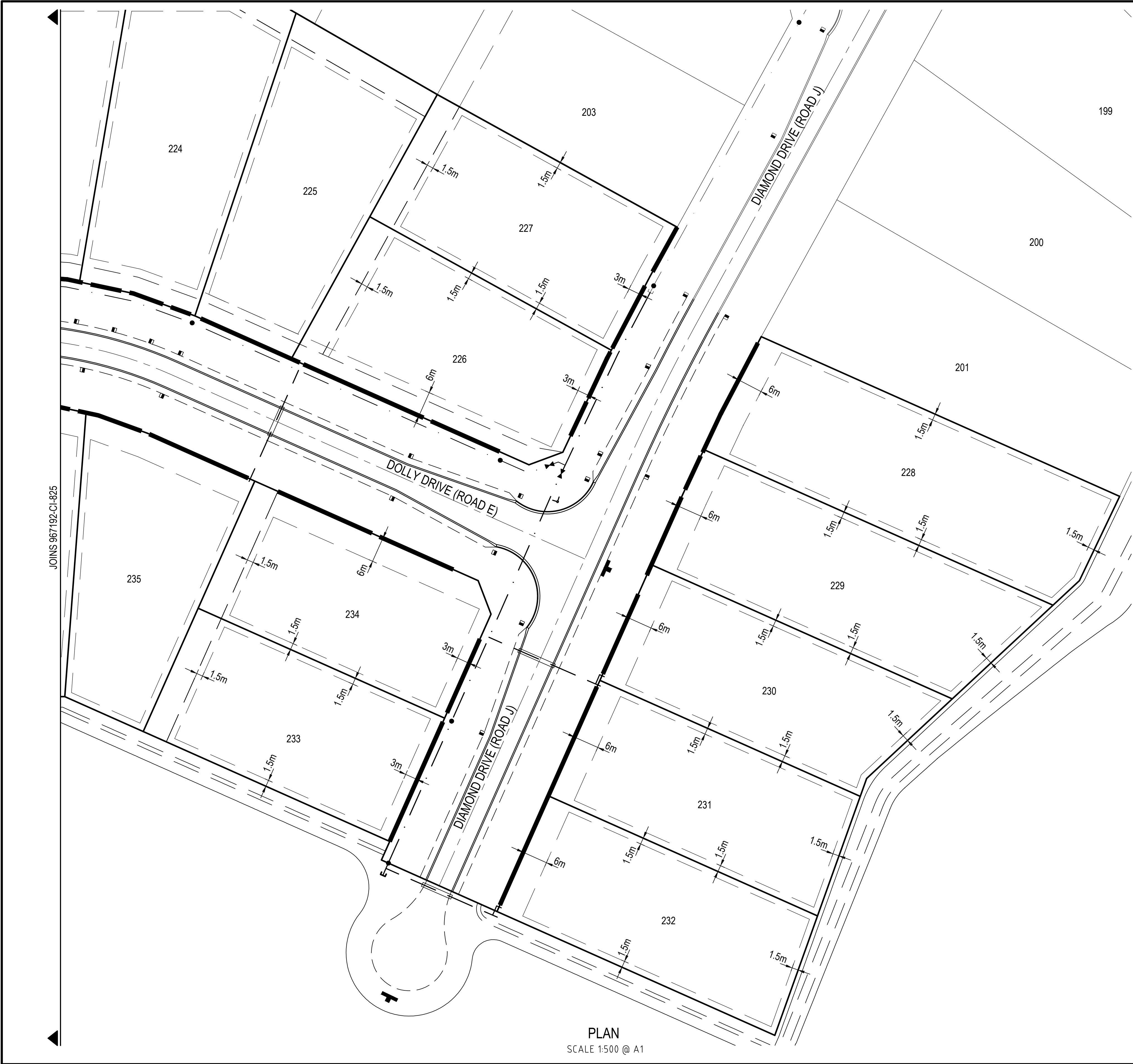
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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER
Designed JN	Date 9/02/2018	Stage STAGE 8
Verified MB	Date 9/02/2018	Title BUILDING ENVELOPE & DRIVEWAY ACCESS PLAN
Approved MB	Date 9/02/2018	Sheet SHEET 2 OF 3
		Status FOR APPROVAL
		NOT TO BE USED FOR CONSTRUCTION PURPOSES
Datum A.H.D	Date 2/9/2018	Scale As Shown
Drawing Number 967192-CI-825	Size A1	Revision A

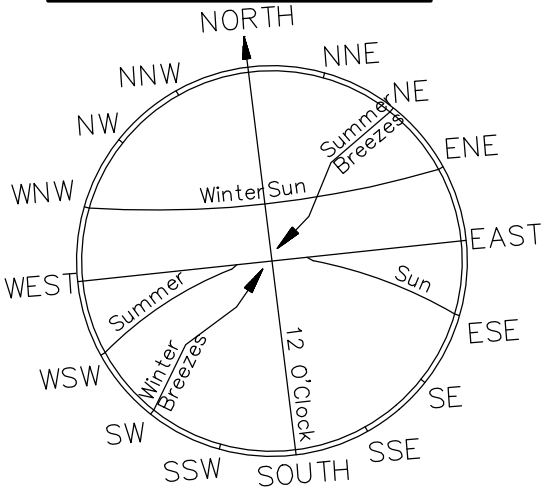
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PLAN
SCALE 1:500 @ A1

CLIMATICALLY RESPONSIVE BUILDING DESIGN



- THE FOLLOWING DESIGN PARAMETERS SHOULD BE CONSIDERED DURING THE DESIGN PHASE OF PROPOSED DWELLINGS.
1. A BUILDING ORIENTATION THAT MINIMISES THE LENGTH OF EXTERNAL WALL AREAS THAT ARE EXPOSED TO SOLAR RADIATION.
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LEGEND

- BUILDING ENVELOPE
- ALLOWABLE DRIVEWAY ACCESS
- WATER MAIN
- HOUSE CONNECTIONS (WATER)
- FH ● FIRE HYDRANT
- Signs
- GUIDE POSTS

DRIVEWAY ACCESS ENVELOPE NOTES

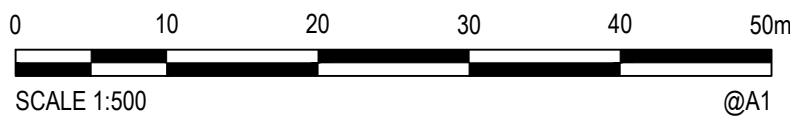
1. FOR DRIVEWAY ACCESS ENVELOPE ALLOW 0.5m MINIMUM CLEARANCE TO ALL COUNCIL INFRASTRUCTURE, EXCEPT STORMWATER PITS WHICH REQUIRE 5.0m CLEARANCE
2. ALL DRIVEWAYS REQUIRE A PERMIT TO CARRY OUT WORKS ON COUNCIL CONTROLLED LAND PRIOR TO CONSTRUCTION.
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BUILDING SETBACK NOTES

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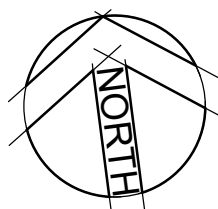
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Web: www.cardno.com.au

Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER
Designed JN	Date 9/02/2018	STAGE 8
Verified MB	Date 9/02/2018	Title
Approved MB	Date 10/08/2018	BUILDING ENVELOPE & DRIVEWAY ACCESS PLAN SHEET 3 OF 3
		Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
		Datum A.H.D
		Date 2/9/2018
		Scale As Shown
		Size A1
		Drawing Number 967192-CI-826
		Revision A

A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB
Rev.	Date	Description	Des.	Verif.	Appd.



1. REFER TO AUS-SPEC CONSTRUCTION SPECIFICATION C211 FOR DETAILS DURING CONSTRUCTION.
2. ALL STOCKPILES ARE TO HAVE SILT FENCES INSTALLED TO PREVENT SEDIMENT DISCHARGE.
3. ALL MEASURES FOR EROSION AND SEDIMENTATION CONTROL SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND THE MAINTENANCE PERIOD.
4. ALL MEASURES FOR EROSION AND SEDIMENTATION CONTROL SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR IN SUCH A MANNER SO AS NOT TO PRESENT A POTENTIAL HAZARD TO ANY PERSON OR PROPERTY.

	DESIGN SURFACE CONTOURS
	DIRECTION OF OVERLAND FLOW PATH
	HYDROMULCH (BY OTHERS)
	TOP OF BATTER
	BOTTOM OF BATTER
	ENTRY/EXIT PAD

PLAN
SCALE 1:500 @ A1

		REVISION IN PROGRESS					
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL			JN	MB	MB
Rev.	Date	Description			Des.	Verif.	Appd.



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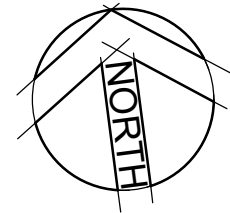
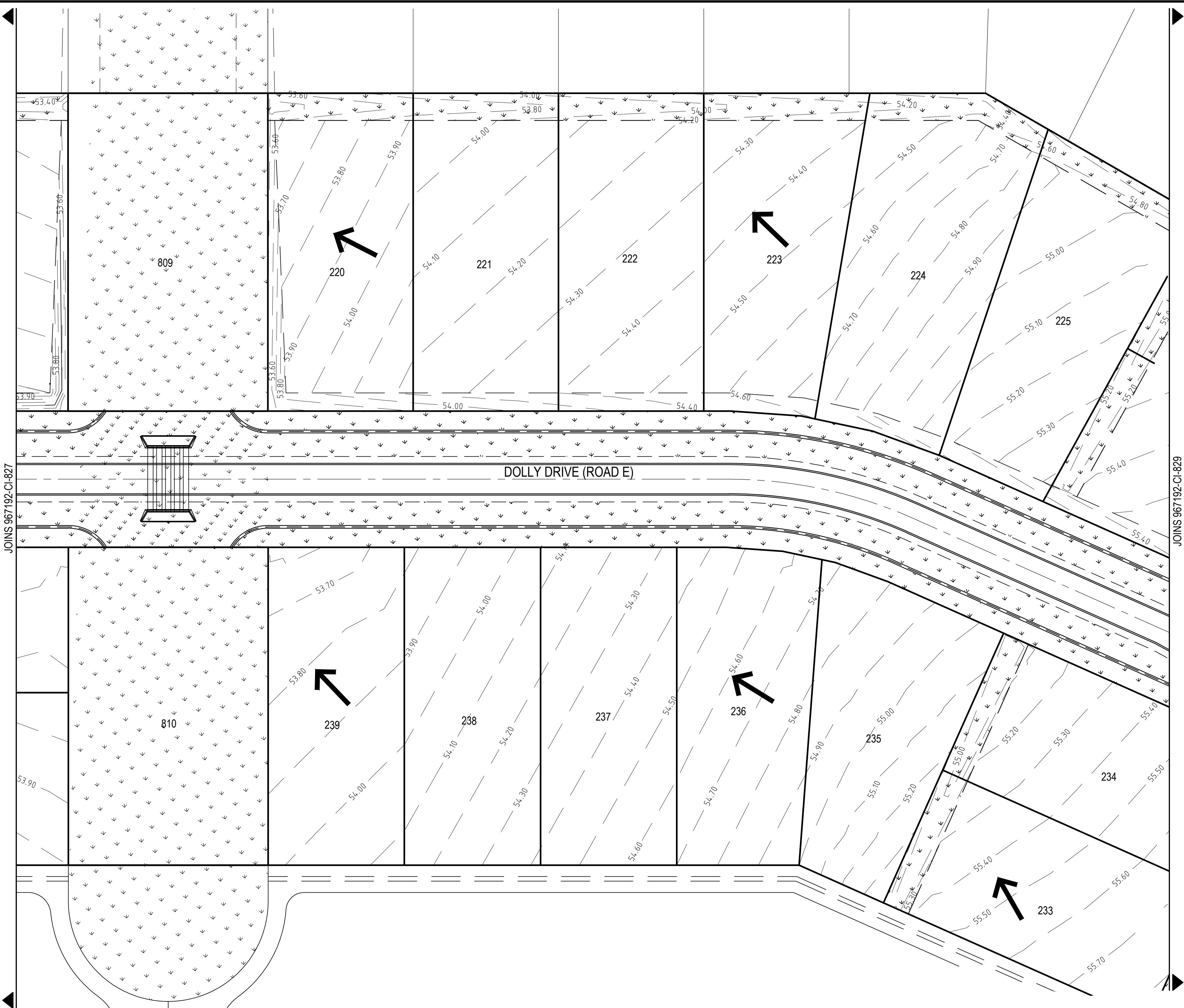
CHECK PRINT ONLY					
PRELIMINARY ☐	FINAL ☐	INITIAL	DATE	INITIAL	DATE
MARKUP					
BACKDRAFTED / CORRECTED					
CONFIRMED					
SELF CHECK					

Drawn JJ	Date 9/02/2018	Client	MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project	MOUNT MARGARET, ALICE RIVER STAGE 8		Status	FOR APPROVAL
Designed JN	Date 9/02/2018		NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Verified MB	Date 9/02/2018	Title	SOIL EROSION & SEDIMENT CONTROL PLAN SHEET 1 OF 3		Datum	A.H.D
Approved	10801				Date	2/9/2018
					Scale	As Shown
					Size	A1
MB	9/02/2018				Drawing Number	967192-CI-827
					Revision	A

DATE PLOTTED: 2 July 2020 3:13 PM BY: JAMES WONG

XREFs: XR-967192-MASTER; XR-967192-DESIGN-CONTOURS-ST08

CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\96719671-92 - Mount Margaret\ENGINEERING\DRAWINGS\STAGE 6.7 & 8\967192-CI-828.dwg



NOTES

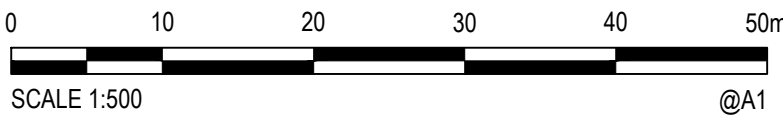
- REFER TO AUS-SPEC CONSTRUCTION SPECIFICATION C211 FOR DETAILS DURING CONSTRUCTION.
- ALL STOCKPILES ARE TO HAVE SILT FENCES INSTALLED TO PREVENT SEDIMENT DISCHARGE.
- ALL MEASURES FOR EROSION AND SEDIMENTATION CONTROL SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND THE MAINTENANCE PERIOD.
- ALL MEASURES FOR EROSION AND SEDIMENTATION CONTROL SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR IN SUCH A MANNER SO AS NOT TO PRESENT A POTENTIAL HAZARD TO ANY PERSON OR PROPERTY.

LEGEND

- 51.00 — DESIGN SURFACE CONTOURS
- ← DIRECTION OF OVERLAND FLOW PATH
- HYDROMULCH (BY OTHERS)
- TOP OF BATTER
- BOTTOM OF BATTER
- ENTRY/EXIT PAD

PLAN
SCALE 1:500 @ A1

REVISION IN PROGRESS					
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB
Rev.	Date	Description	Des.	Verif.	Appd.



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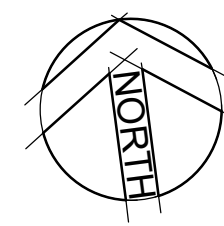
PRELIMINARY	☐	FINAL	☐	INITIAL	DATE	INITIAL	DATE
MARKUP							
BACKDRAFTED / CORRECTED							
CONFIRMED							

SELF CHECK

Drawn	JJ	Date	9/02/2018
Checked	MB	Date	9/02/2018
Designed	JN	Date	9/02/2018
Verified	MB	Date	9/02/2018
Approved			10801
MB		9/02/2018	

Client	MOUNT MARGARET DEVELOPMENTS PTY LTD		
Project	MOUNT MARGARET, ALICE RIVER		
	STAGE 8		
Title	SOIL EROSION & SEDIMENT CONTROL PLAN		
	SHEET 2 OF 3		

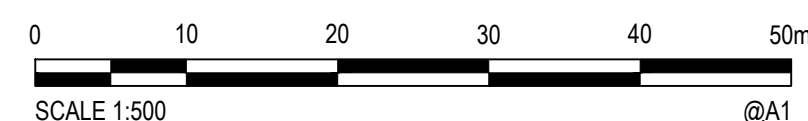
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NOT TO BE USED FOR CONSTRUCTION PURPOSES									
Datum		Date		Scale		Size			
A.H.D		2/9/2018		As Shown		A1			
Drawing Number							Revision		
967192-CI-828							A		



1. REFER TO AUS-SPEC CONSTRUCTION SPECIFICATION C211 FOR DETAILS DURING CONSTRUCTION.
2. ALL STOCKPILES ARE TO HAVE SILT FENCES INSTALLED TO PREVENT SEDIMENT DISCHARGE.
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4. ALL MEASURES FOR EROSION AND SEDIMENTATION CONTROL SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR IN SUCH A MANNER SO AS NOT TO PRESENT A POTENTIAL HAZARD TO ANY PERSON OR PROPERTY.

 51.00 — DESIGN SURFACE CONTOURS
 DIRECTION OF OVERLAND FLOW PATH
 HYDROMULCH (BY OTHERS)
 TOP OF BATTER
 BOTTOM OF BATTER
 ENTRY/EXIT PAD

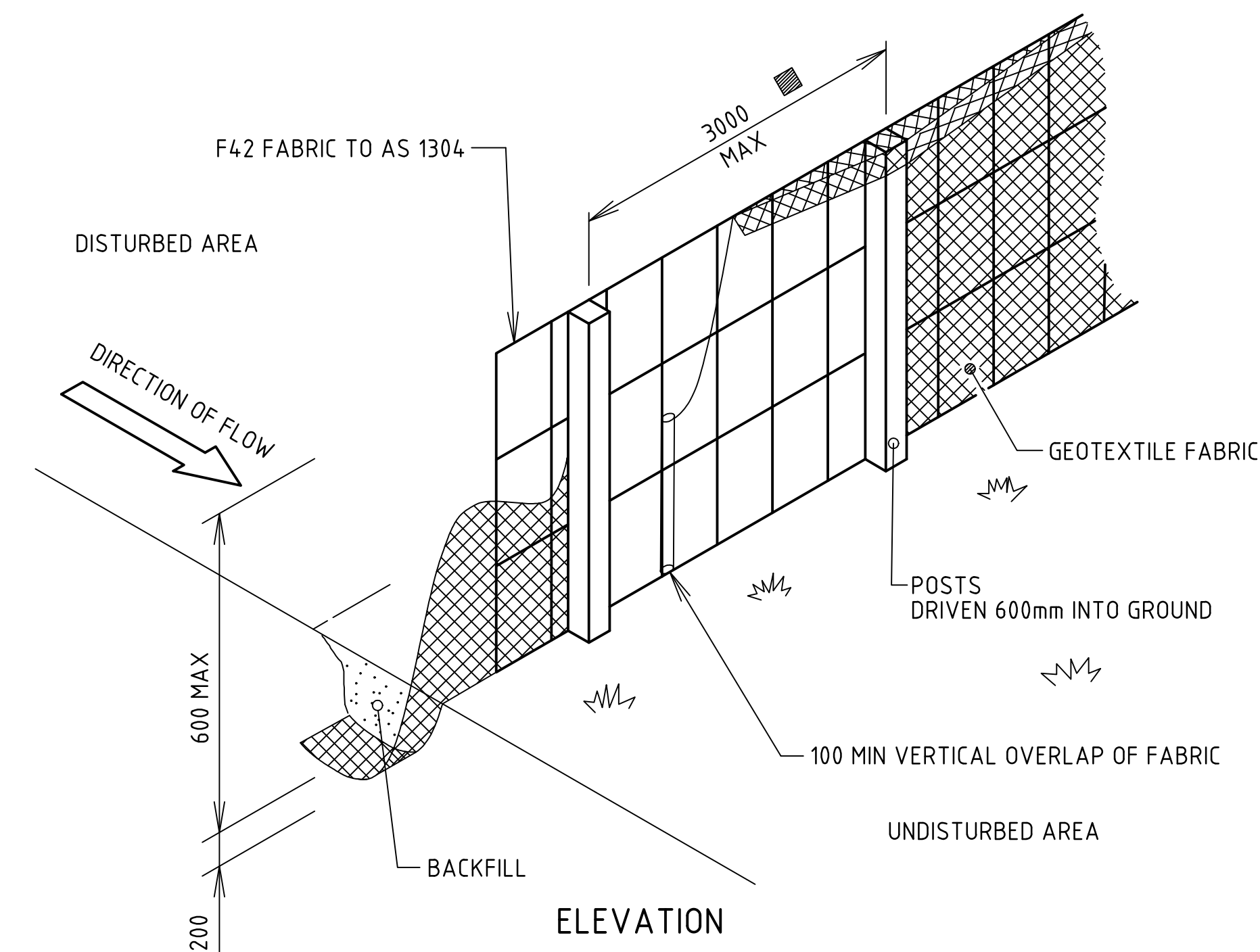
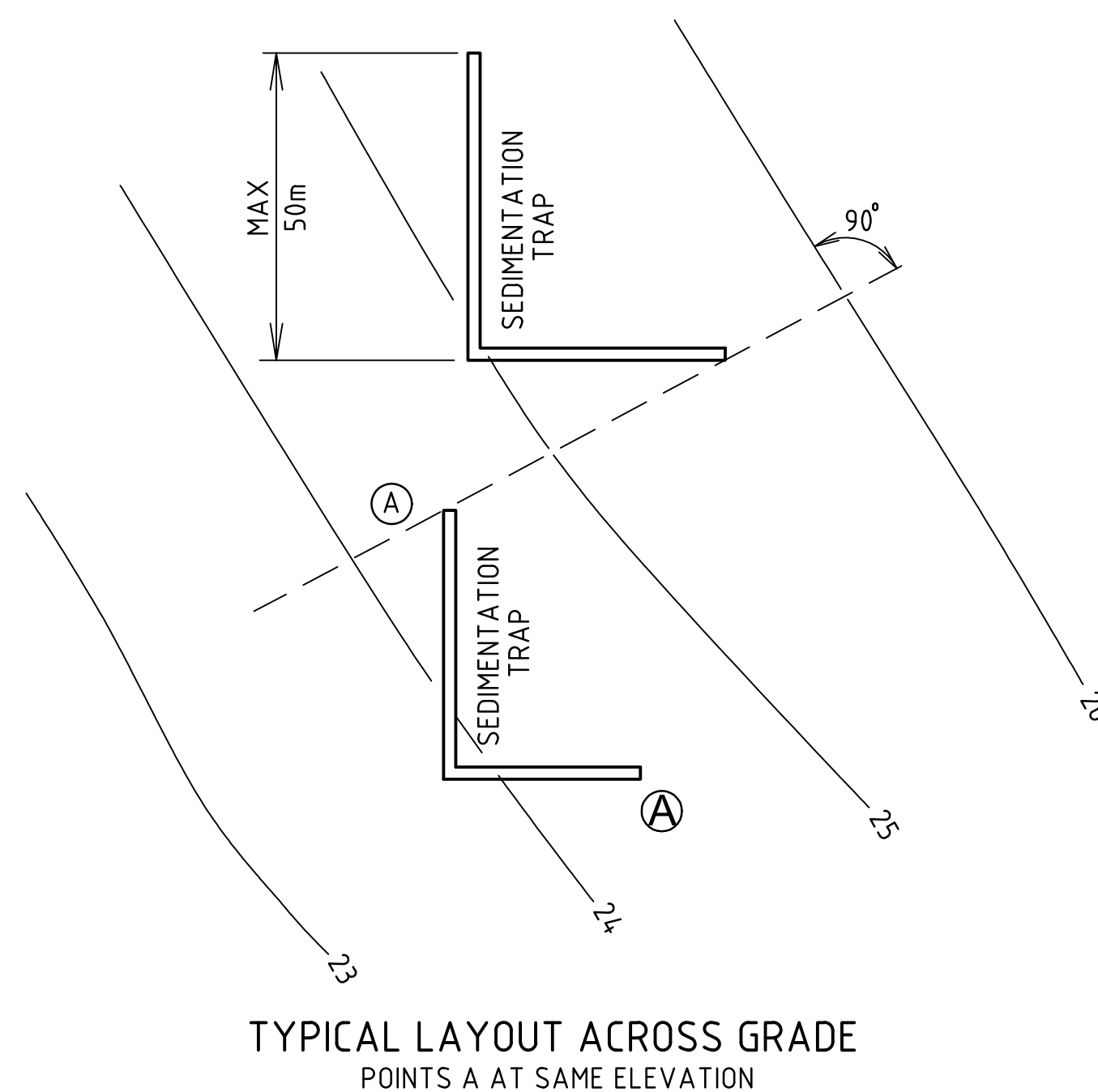
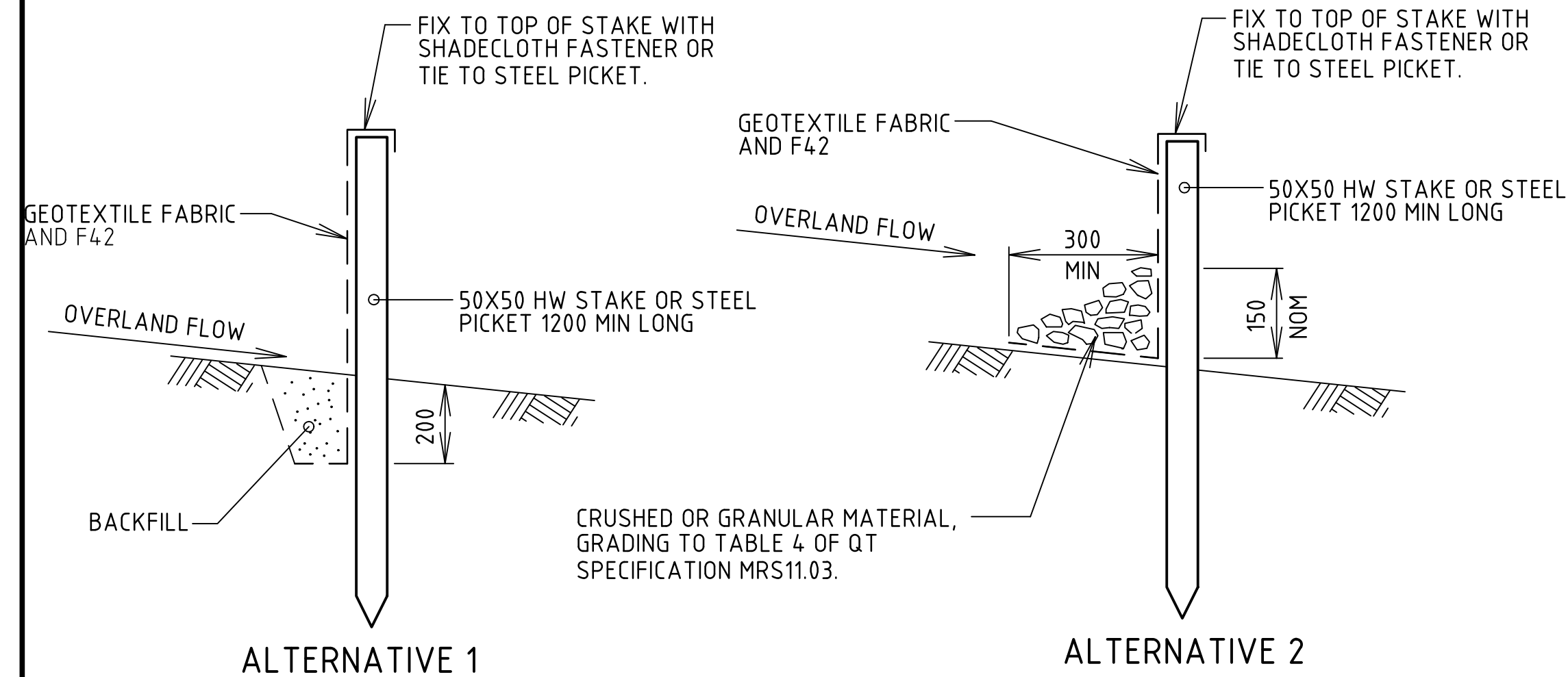
PLAN
SCALE 1:500 @ A1



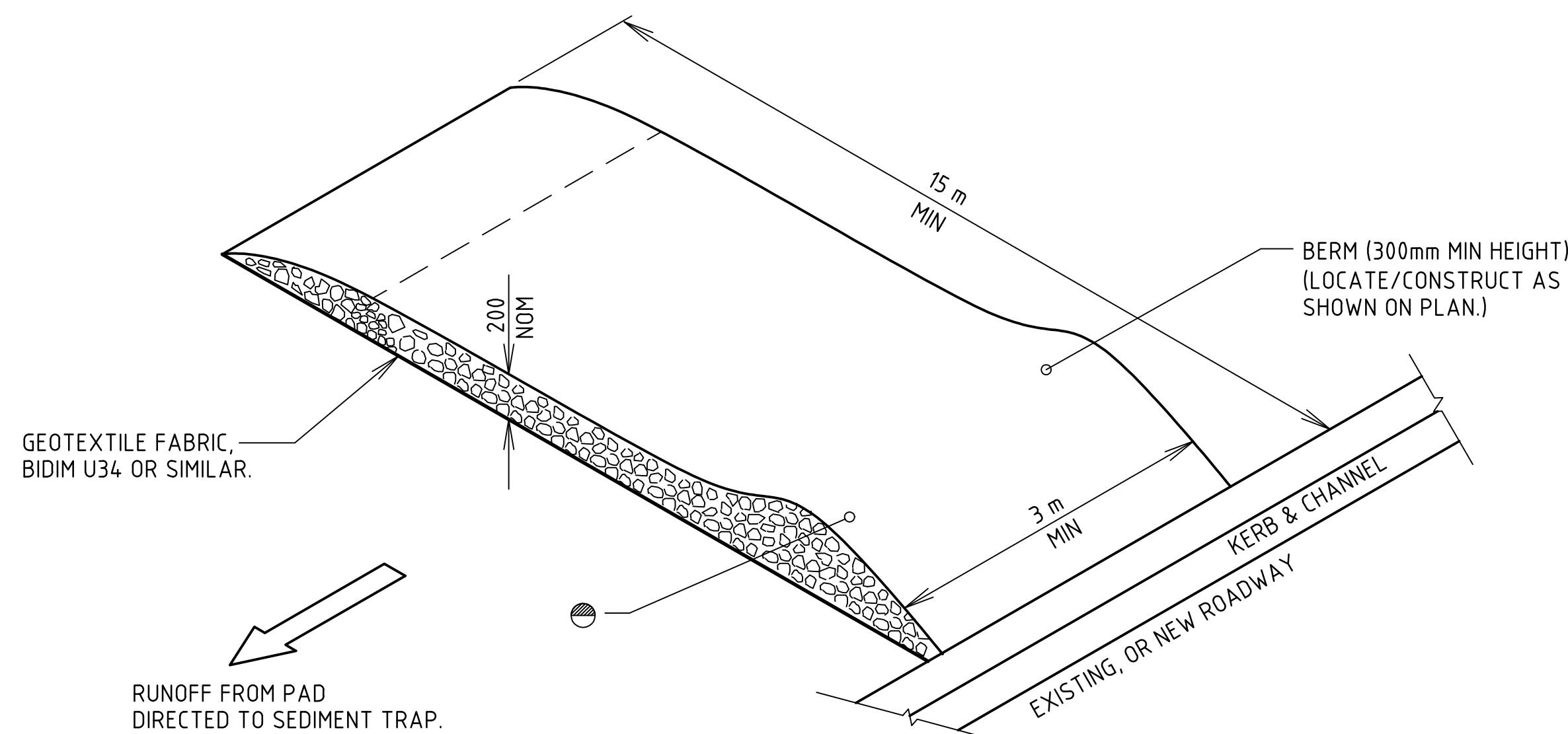
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Drawn JJ	Date 9/02/2018	Client	MOUNT MARGARET DEVELOPMENTS PTY LTD			
Checked MB	Date 9/02/2018	Project	MOUNT MARGARET, ALICE RIVER STAGE 8		Status	FOR APPROVAL
Designed JN	Date 9/02/2018	Title	NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Verified MB	Date 9/02/2018		Datum	Date 2/9/2018	Scale As Shown	Size A1
Approved	10801		Drawing Number	967192-CI-829		Revision
MR	9/02/2018	SOIL EROSION & SEDIMENT CONTROL PLAN SHEET 3 OF 3		A		



SEDIMENT FENCE



TEMPORARY CONSTRUCTION ENTRY / EXIT
SEDIMENT TRAP

LEGEND

- UNBOUND PAVEMENT MATERIAL (GRAVEL) TO GRADING B, TABLE 9 OF QT SPECIFICATION MRS11.05, EXCLUDE MATERIAL FINER THAN AS SIEVE 2.36mm.
- WITHOUT F42 FABRIC, 2000 MAX C/C

NOTES

1. GENERAL
 - (A) TEMPORARY DRAINAGE CONTROL. FLOW SHOULD BE DIVERTED AROUND THE WORK SITE WHERE POSSIBLE.
 - (B) ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND BE OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
 - (C) ALL CONTROL MEASURES TO BE INSPECTED AT LEAST WEEKLY AND AFTER SIGNIFICANT RUNOFF PRODUCING STORMS.
 - (D) CONTROL MEASURES MAY BE REMOVED WHEN ON-SITE EROSION IS CONTROLLED AND 70% PERMANENT SOIL COVERAGE IS OBTAINED OVER ALL UPSTREAM DISTURBED LAND.
 - (E) IN AREAS WHERE RUNOFF TURBIDITY IS TO BE CONTROLLED, EXPOSED SURFACES TO BE EITHER MULCHED, COVERED WITH EROSION CONTROL BLANKETS OR TURFED IF EARTHWORKS ARE EXPECTED TO BE DELAYED FOR MORE THAN 14 DAYS.
2. SEDIMENT FENCE
 - (A) NORMALLY LOCATED ALONG THE CONTOUR WITH A MAXIMUM CATCHMENT AREA 0.6 ha PER 100m LENGTH OF FENCE.
 - (B) WOVEN FABRICS ARE PREFERRED.
I.E. OPERATIONAL PERIOD LESS THAN 6 MONTHS OR ON SITES WHERE SIGNIFICANT SEDIMENT RUNOFF IS NOT EXPECTED.
 - (C) WHERE FENCES NEED TO BE LOCATED ACROSS THE CONTOUR THE LAYOUT SHALL CONFORM TO 'TYPICAL LAYOUT ACROSS GRADE'.
 - (D) FENCES ARE REQUIRED 2m MIN FROM TOE OF CUT OR FILL BATTERS, WHERE NOT PRACTICAL ONE FENCE CAN BE AT THE TOE WITH A SECOND FENCE 1m MIN AWAY. FENCE SHOULD NOT BE LOCATED PARALLEL WITH TOE IF CONCENTRATION OF FLOW WILL OCCUR BEHIND THE FENCE.
3. TEMP CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP.
 - (A) ADJACENT STORMWATER RUNOFF TO BE DIVERTED AWAY FROM ENTRY/EXIT.
 - (B) WHEEL - WASH OR SPRAY UNIT MAY BE REQUIRED DURING WET WEATHER.
4. SAFETY ISSUES MUST BE CONSIDERED AT ALL TIMES, INCORPORATE TRAFFIC CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT.
5. ALL DIMENSIONS IN MILLIMETRES UNLESS INDICATED OTHERWISE.

[illegible]

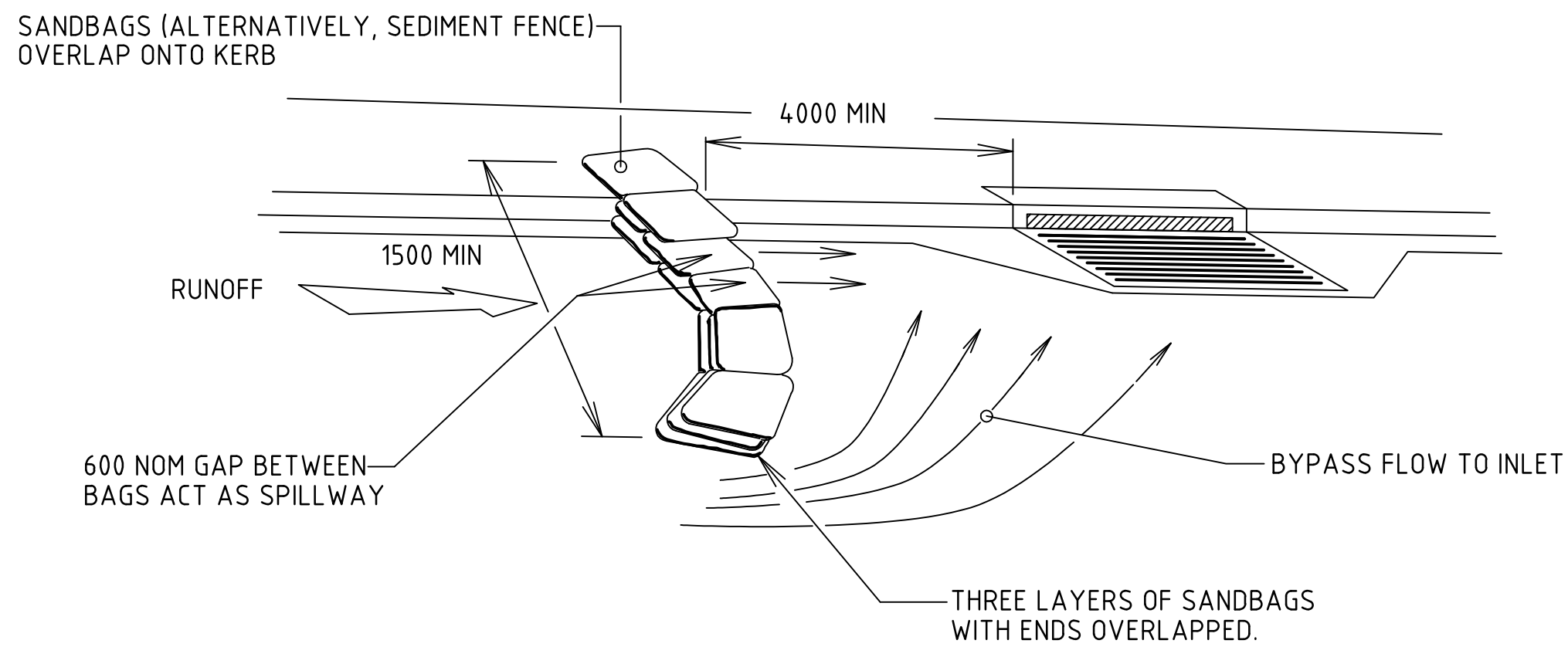
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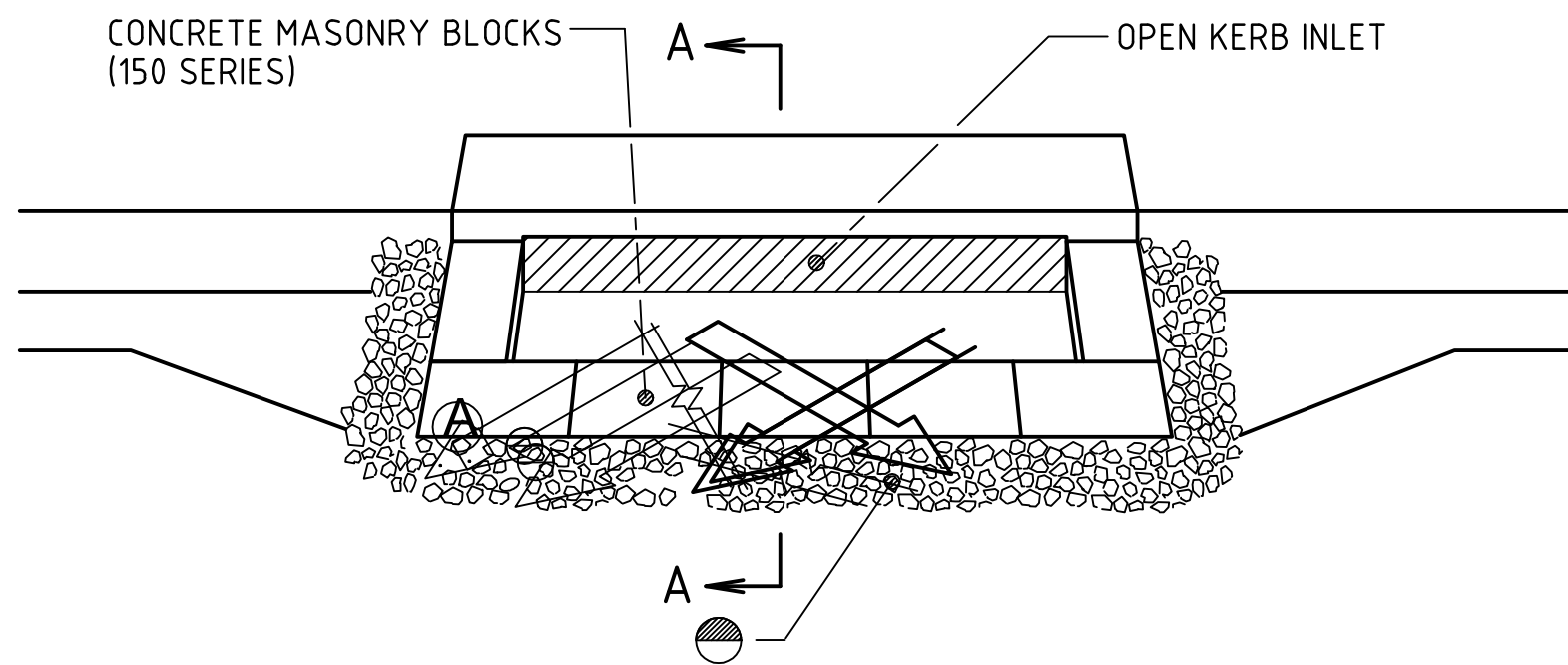
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Checked MB	Date 9/02/2018	Project	MOUNT MARGARET, ALICE RIVER STAGE 8		Status	FOR APPROVAL
Designed JN	Date 9/02/2018	Title	NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Verified MB	Date 9/02/2018		Datum	Date 2/9/2018	Scale As Shown	Size A1
Approved	10801		Drawing Number	967192-CI-830		Revision A
MR	9/02/2018	SOIL EROSION, SEDIMENT CONTROL DETAILS SHEET 1 OF 2				

DATE PLOTTED: 2 July 2020 3:00 PM BY: JAMES WONG

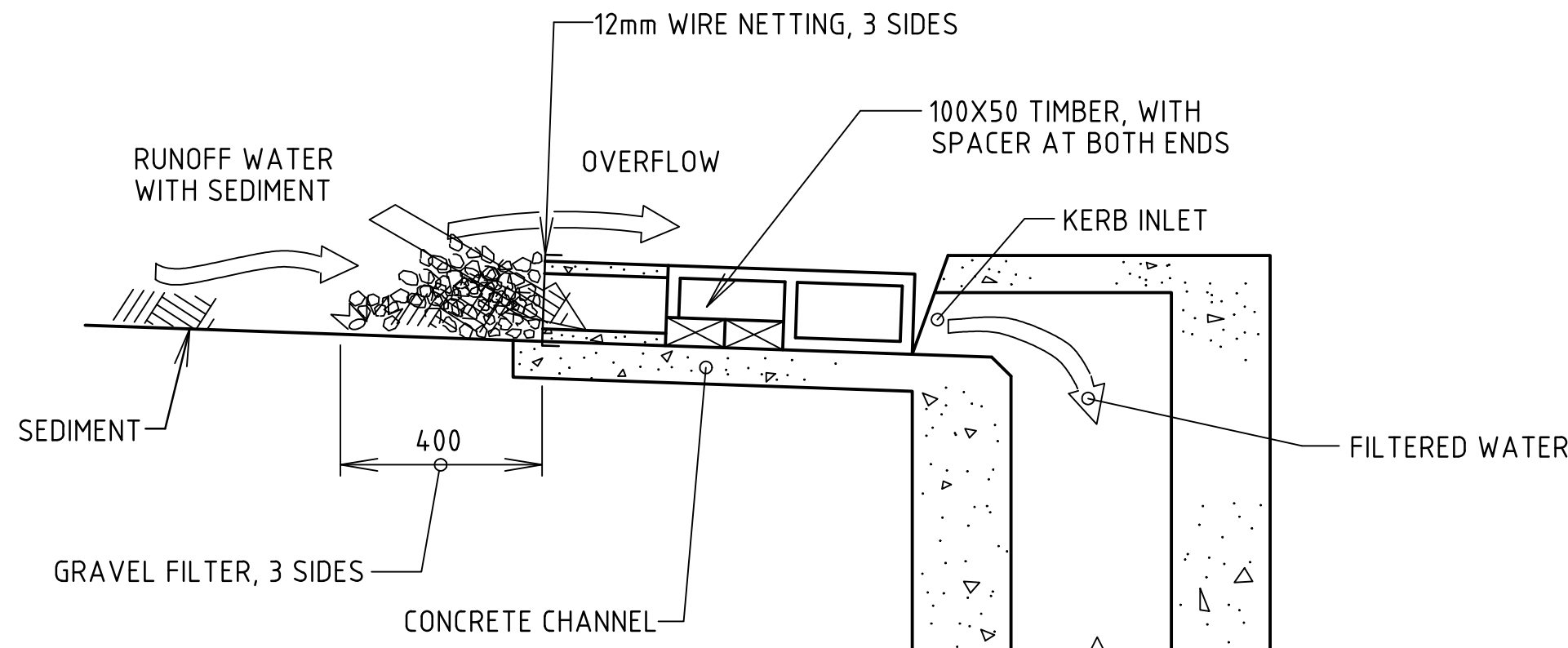
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ON GRADE KERB INLET SEDIMENT TRAP



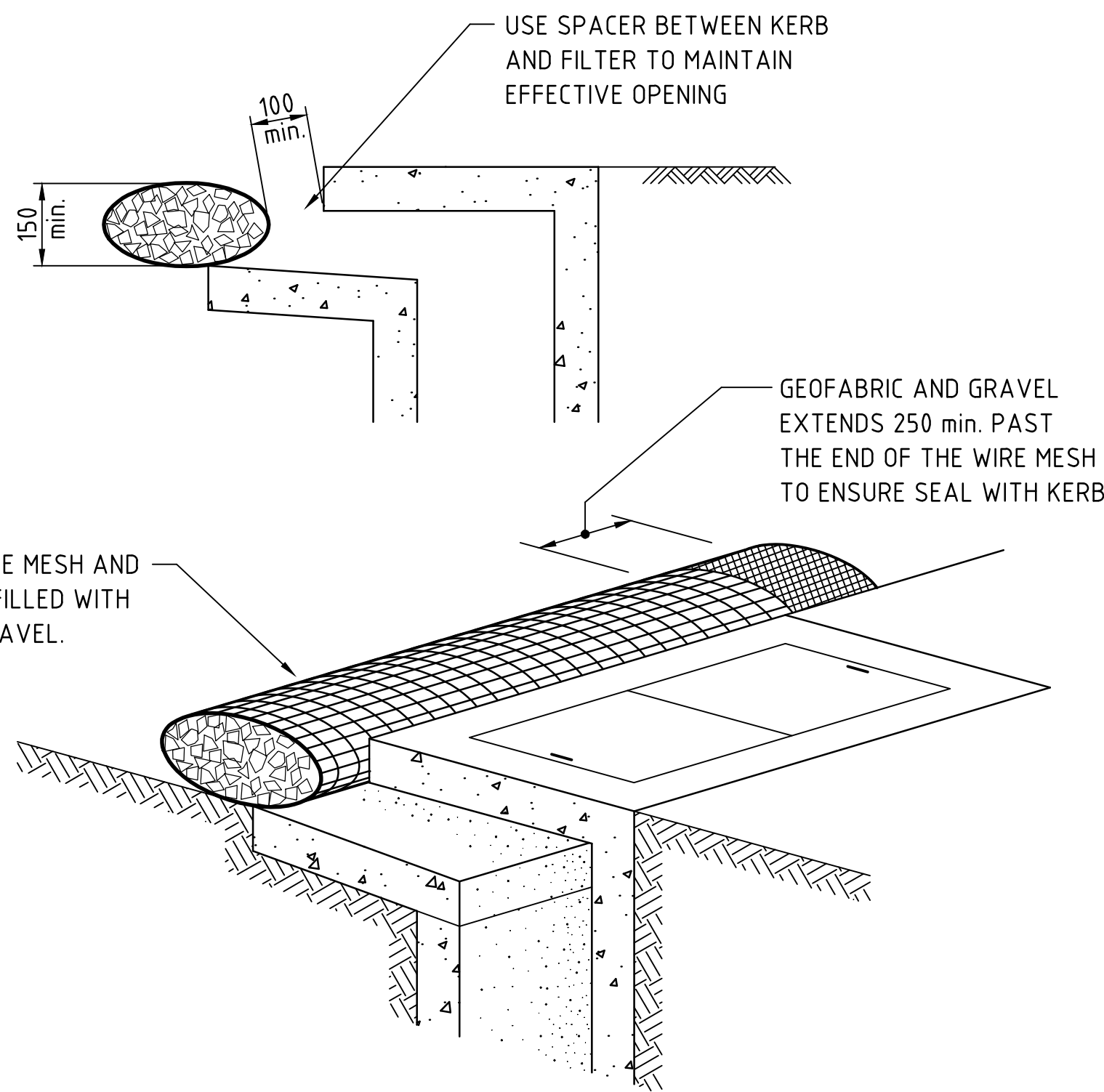
FILTER TO SIDE INLET GULLY PIT
NOT TO SCALE



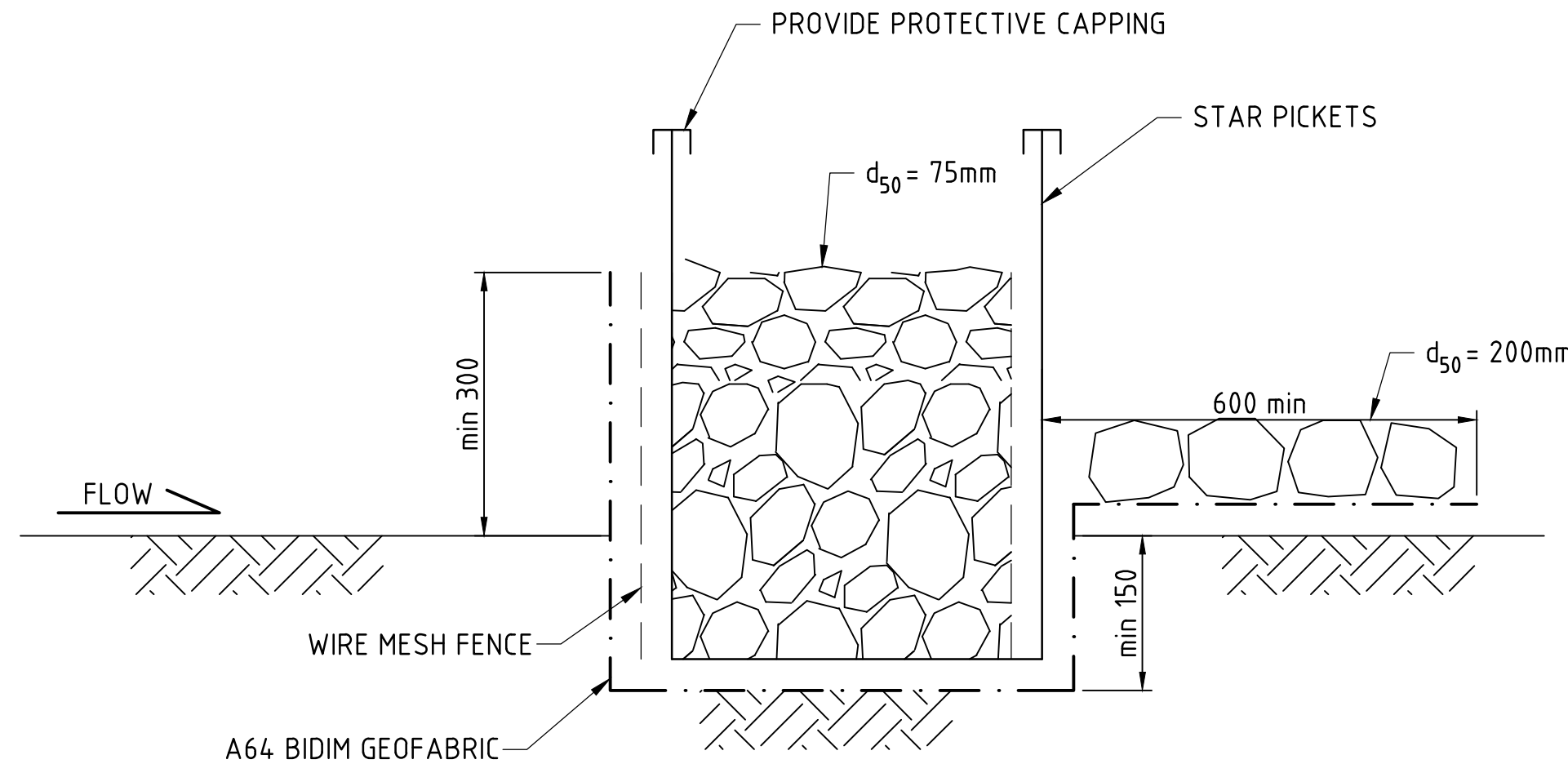
SECTION A-A
SAG INLET SEDIMENT TRAP, ST-1
A STABILISED BYPASS 'OVERLAND FLOW PATH' SHOULD EXIST ADJACENT TO INLET IN GENUINE SAGS.

LEGEND

- GRAVEL FILTER, REFER GRADING B, TABLE 9 OF QT SPECIFICATION MRS11.05, EXCLUDE MATERIAL FINER THAN AS SIEVE 2.36mm.



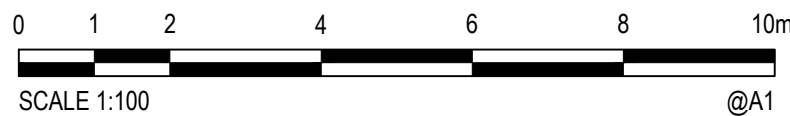
TURF STRIPS TO KERBLINE
NOT TO SCALE



CHECK DAM SECTION DETAIL
NOT TO SCALE

NOTES

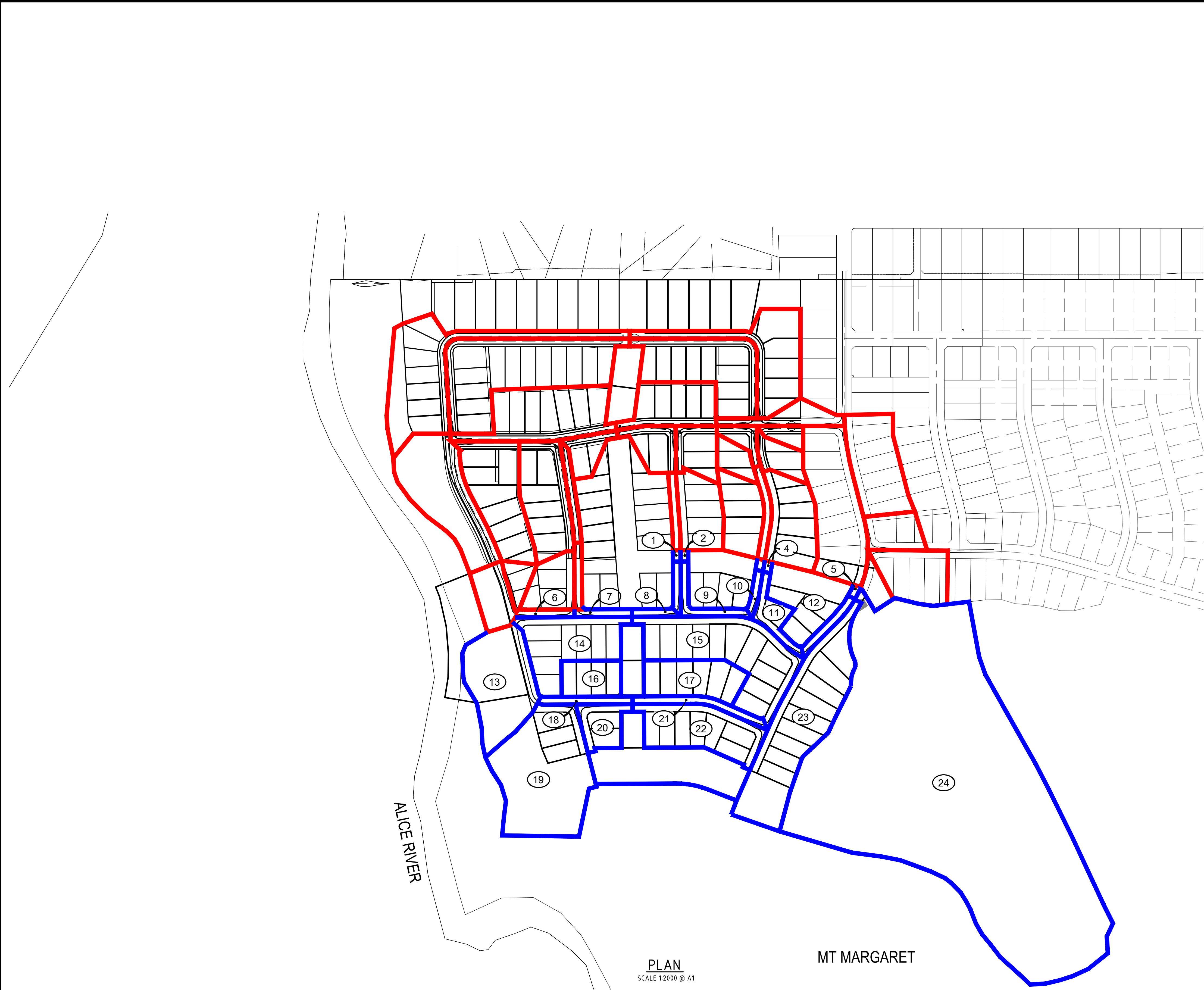
- FIELD INLET
 - A STABILISED BYPASS OVERLAND FLOW PATH SHOULD EXIST ADJACENT TO THE FIELD INLET.
 - WATER LEVEL CONTROL PERIMETER BANKS MAY BE REQUIRED.
 - BLOCKS TO BE RESTRAINED BY A HORIZONTAL TIMBER RAIL AT BLOCK JOINT HEIGHT FIXED TO TIMBER STAKES AT CORNERS.
- CHECK DAMS
 - CATCHMENT AREA LIMITED TO 4 ha
 - USE IN MINOR OPEN DRAINS ONLY, (VELOCITY CONTROL), SEDIMENT COLLECTION IS A SECONDARY PURPOSE.
- STRAW BALE BANKS
 - BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR, IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
 - EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 100mm ON THE DOWNSTREAM SIDE AND PLACED SO THE BINDINGS ARE HORIZONTAL.
 - BALES SHALL BE SECURELY ANCHORED IN PLACE WITH EITHER TWO STAKES OR STEEL PICKETS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER.
 - INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. REPLACE AT LEAST 3 monthly.
- SAFETY ISSUES MUST BE CONSIDERED AT ALL TIMES, INCORPORATE TRAFFIC CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT.
- ALL DIMENSIONS IN MILLIMETRES UNLESS INDICATED OTHERWISE.



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Drawn JJ	Date 9/02/2018	Client MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB	Date 9/02/2018	Project MOUNT MARGARET, ALICE RIVER STAGE 8
Designed JN	Date 9/02/2018	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
Verified MB	Date 9/02/2018	Datum A.H.D
Approved MB	Date 9/02/2018	Scale As Shown
		Size A1
		Drawing Number 967192-CI-831
		Revision A



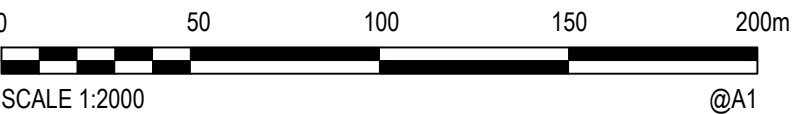
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Number	Area (Ha)
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2	0.033
3	0.032
4	0.032
5	0.038
6	0.168
7	0.165
8	0.130
9	0.342
10	0.134

11	0.519
12	0.231
13	2.471
14	2.017
15	3.313
16	0.812
17	1.389
18	0.272
19	3.981
20	0.712
21	0.400
22	1.968
23	3.962
24	24.373

LEGEND

- EXISTING CATCHMENT BOUNDARY
- CATCHMENT BOUNDARY
- CATCHMENT NUMBER
- DIRECTION OF FLOW

Rev.	Date	Description	Des.	Verif.	Appd.
A	9/02/2018	FOR OPERATIONAL WORKS APPROVAL	JN	MB	MB

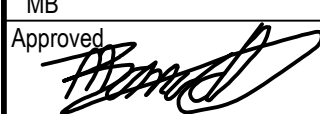


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Shaping the Future

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Drawn	JJ	Date	9/02/2018
Checked	MB	Date	9/02/2018
Designed	JN	Date	9/02/2018
Verified	MB	Date	9/02/2018
Approved		Date	10/02/2018
MB		Date	9/02/2018

Client	MOUNT MARGARET DEVELOPMENTS PTY LTD		
Project	MOUNT MARGARET, ALICE RIVER		
	STAGE 8		
Title	Q50 DRAINAGE CATCHMENT PLAN		

Status				
FOR APPROVAL				
NOT TO BE USED FOR CONSTRUCTION PURPOSES				
Datum	Date	Scale	Size	
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