PROJECT: MINARAH COLLEGE - CATHERINE FIELD

PLANSET: ROADWORKS DESIGN

CLIENT: MINARAH COLLEGE

LOCALITY PLAN
NOT TO SCALE

DRAWING LIST		
DWG NO.	REV	DWG TITLE
GENERAL		
PS01-A000	B	COVER SHEET
PS01-A050	B	DEVELOPMENT OVERVIEW PLAN
CONSTRUCTION MANAGEMENT WORKS		
PS01-B300	B	SEDIMENT & EROSION CONTROL PLAN
PS01-B310	B	SEDIMENT & EROSION CONTROL DETAILS
EARTHWORKS		
PS01-C100	B	EARTHWORKS GRADING PLAN
PS01-C500	B	EARTHWORKS CUT& FILL PLAN
ROADWORK		
PS01-D100	B	ROADWORKS PLAN - ULTIMATE STAGE
PS01-D110	B	ROADWORKS PLAN - STAGE 1
PS01-D200	B	CATHERINE FIELDS ROAD LONGITUDINAL, TYPICAL SECTION AND DETAILS
PS01-D300	B	BUS BAY INTERSECTION PLAN AND SETOUT TABLE (22-MRK01)
PS01-D301	B	SITE ENTRY INTERSECTION PLAN AND SECTIONS (22-MRK01 & 22-MRK02)
PS01-D302	B	SITE EXIT INTERSECTION PLAN, SECTIONS & SETOUT TABLE (22-MRK01, 22-MRK05 & 22-MRK08)
PS01-D500	B	CATHERINE FIELDS ROAD CROSS SECTIONS - SHEET 1
PS01-D501	B	CATHERINE FIELDS ROAD CROSS SECTIONS - SHEET 2
PS01-D502	B	CATHERINE FIELDS ROAD CROSS SECTIONS - SHEET 3
PS01-D503	B	CATHERINE FIELDS ROAD CROSS SECTIONS - SHEET 3
DRAINAGE WORKS		
PS01-E100	B	DRAINAGE PLAN
FINAL CIVIL WORKS		
PS01-G400	B	CONCEPT SIGNAGE & LINEMARKING PLAN - ULTIMATE STAGE
PS01-G401	B	CONCEPT SIGNAGE & LINEMARKING PLAN - STAGE 1
PS01-G450	B	CONCEPT PAVEMENT DESIGN - ULTIMATE STAGE
PS01-G451	B	CONCEPT PAVEMENT DESIGN - STAGE 1

CAMDEN COUNCIL

268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW
LOT 11 DP833983 & LOT 12 DP833798

GENERAL NOTES:
1. THIS PLAN IS FOR DEVELOPMENT APPLICATION PURPOSE AND NOT FOR CONSTRUCTION. DESIGN TO BE REVIEWED AND UPDATED FOR CONSTRUCTION CERTIFICATE.
2. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH, AND THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE RELEVANT AUSTRALIAN STANDARDS, COUNCIL SPECIFICATIONS, AND ALL PROJECT CONSULTANT'S PLANS AND REPORTS.
3. SURVEY INFORMATION AND EXTERNAL SITE BOUNDARY SHOWN BASED ON SURVEY INFORMATION PROVIDED BY C.M.S SURVEYORS 17/03/2021.
4. LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
5. FINAL SURFACE CONTOURS ARE BASED ON DESIGN AND EXISTING SURVEY AND LIDAR SURFACES.

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE

GRID	DATUM	PROJECT MANAGER
---	---	TH

DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.
(C) Copyright Martens & Associates Pty Ltd

CLIENT: MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE: MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: COVER SHEET

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-A000	B

DRAWING ID: P2108320-PS01-R02-A000

PRINTED: ---- - USER: AVOLANDOZINA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE 0 10 20 30 40 50 60 70 80 90 100 METRES
A1 (A3) 1:1,000 (1:2,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

DISCLAIMER & COPYRIGHT

This plan must not be used for construction unless signed as approved by principal certifying authority.

All measurements in millimetres unless otherwise specified.

This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.

CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
DEVELOPMENT OVERVIEW PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-A050	B

DRAWING ID: P2108320-PS01-R02-A050

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

PRINTED: ---- - USER: RKOLAHDOOZHA

A1 / A3 LANDSCAPE (A1LC__v02.0.01)

SCALE: 0 5 10 15 20 25 30 35 40 45 50 METRES — A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT

MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE

MINARAH COLLEGE - CATHERINE FIELD

ROADWORKS DESIGN

268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd

Consulting Engineers

Environment
Water
Geotechnical
Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE

SEDIMENT & EROSION CONTROL PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-B300	B

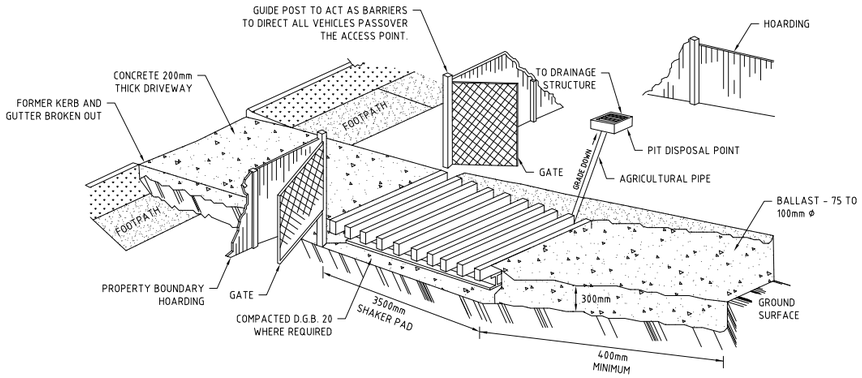
DRAWING ID: P2108320-PS01-R02-B300

STABILISED ACCESS POINT

TYPE II SAP

THE TYPE II SAP DESIGN IS MORE DEFINED IN THAT IT REQUIRES AN AREA OF BALLAST WITHIN THE SITE COMBINED WITH A SHAKER PAD; ADJACENT THE SHAKER PAD AND IN THE PUBLIC WAY IS A TEMPORARY (CONCRETE) VEHICULAR CROSSING. (SEE DIAGRAM)

STABILISED ACCESS POINT - TYPE 2



IN BOTH TYPE I AND TYPE II SAP'S, THE TEMPORARY VEHICULAR CROSSING MUST:

- CONNECT TO AN EXISTING GUTTER LAYBACK (WHERE THE KERB AND GUTTER EXIST) . IF A GUTTER LAYBACK DOES NOT EXIST THEN THE CONNECTION MUST BE MADE TO THE GUTTER BY REMOVING THE ADJCENT KERB SECTION ONLY.
- CONNECT TO A DISH CROSSING (WHERE KERB AND GUTTER DOES NOT EXIST). IF A DISH CROSSING DOES NOT EXIST, THEN IT MUST BE CONSTRUCTED IN ACCORDANCE WITH DETAILS CONTAINED IN COUNCIL'S ISSUED FOOTPATH CROSSING LEVELS.

IT SHOULD BE NOTED THAT THESE TYPES OF SAPS ARE CONSIDERED TO BE APPLICABLE FOR THE MAJORITY OF ACTIVITIES HOWEVER SOME SITES MAY REQUIRE SPECIAL CONSIDERATION.

SHAKER PAD (CATTLE GRID)

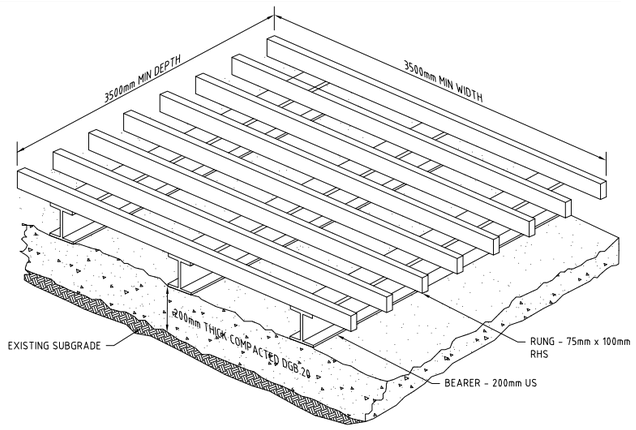
A CORRECTLY DESIGNED AND INSTALLED SHAKER PAD WILL ASSIST IN PREVENTING SEDIMENT TRANSFERE FROM A SITE. ANY STABILISED ACCESS POINT (SAP) CAN BE DESIGNED WITH A SHAKER PAD (COMPULSOPRY IN TYPE II SAP'S)

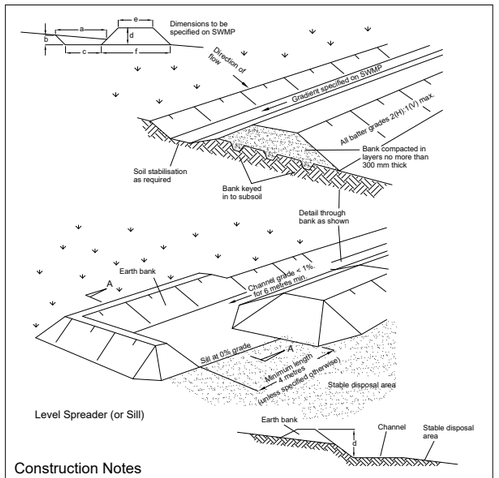
SHAKER PADS CAN BE DESIGNED AND CONSTRUCTED TO ENABLE RE-USE ON FUTURE PROJECTS.

THE SHAKER PAD:

- MUST BE DESIGNED AND CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER. THE CERTIFIED DESIGN SHOULD BE SUBMITTED WITH THE RELEVENT APPLICATION.
- CAN BE CONSTRUCTED FROM ANY SUITABLE MATERIAL.
- MUST BE LOCATED ON A SUITABLY PREPARED AND COMPACTED SUB-GRADE/BASE MATERIAL.
- MUST BE SITUATED SUCH THAT THE RUNGS OF THE SHAKER PAD ARE LEVEL WITH THE ADJOINING NATURAL SURFACE.
- MUST BE A MINIMUM OF 3.5m IN LENGTH.
- MUST BE A MINIMUN OF 3.5m IN WIDTH.
- MUST HAVE CLEAR SPACING BETWEEN RUNGS OF 200 - 250mm.
- RUNGS MUST HAVE A MAXIMUM WIDTH (BEARING AREA) OF 75mm.
- MUST HAVE A MINIMUM CLEAR DEPTH OF 300mm IE FORM THE ROP OF THE RUNG TO THE FINISHED SUB-GRADE/BASE LEVEL.

THE SHAKER PAD MUST BE PROVIDED WITH SUITABLE BARRIERS AT THE SIDES TO ENSURE THAT ALL TYERS OF VEHICLES LEAVING THE SITE TRAVERSE THE DEVICE.

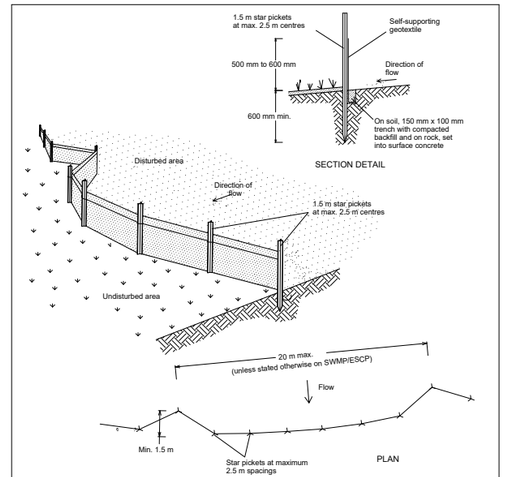




Construction Notes

1. Construct at the gradient specified on the ESCP or SWMP, normally between 1 and 5 percent
2. Avoid removing trees and shrubs if possible - work around them.
3. Ensure the structures are free of projections or other irregularities that could impede water flow.
4. Build the drains with circular, parabolic or trapezoidal cross sections, not V-shaped, at the dimensions shown on the SWMP.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction following Table 5.2 in Landcom (2004).
7. Where discharging to erodible lands, ensure they outlet through a properly constructed level spreader.
8. Construct the level spreader at the gradient specified on the ESCP or SWMP, normally less than 1 percent or level.
9. 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.

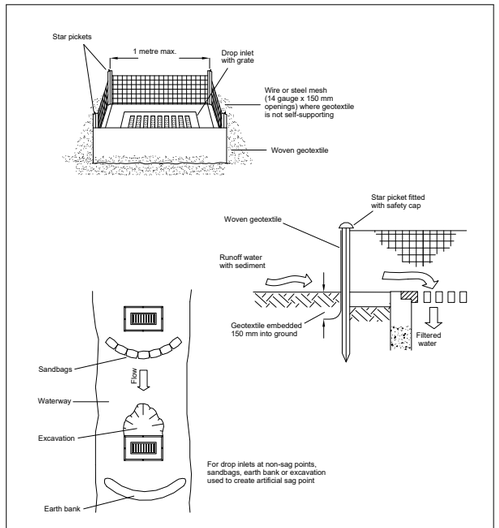
EARTH BANK (HIGH FLOWS) SD 5-6



Construction Notes

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metre long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

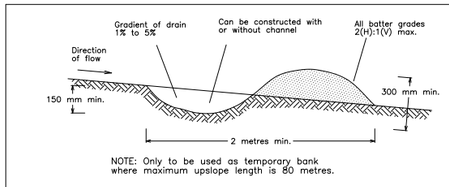
SEDIMENT FENCE SD 6-8



Construction Notes

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

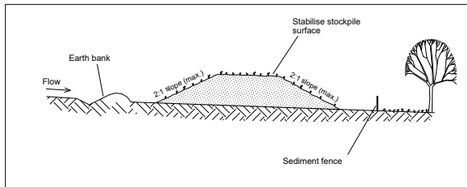
GEOTEXTILE INLET FILTER SD 6-12



Construction Notes

1. Build with gradients between 1 percent and 5 percent.
2. Avoid removing trees and shrubs if possible - work around them.
3. Ensure the structures are free of projections or other irregularities that could impede water flow.
4. Build the drains with circular, parabolic or trapezoidal cross sections, not V shaped.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction.

EARTH BANK (LOW FLOW) SD 5-5



Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILES SD 4-1

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE

GRID	DATUM	PROJECT MANAGER
---	---	TH

CLIENT: MINARAH COLLEGE

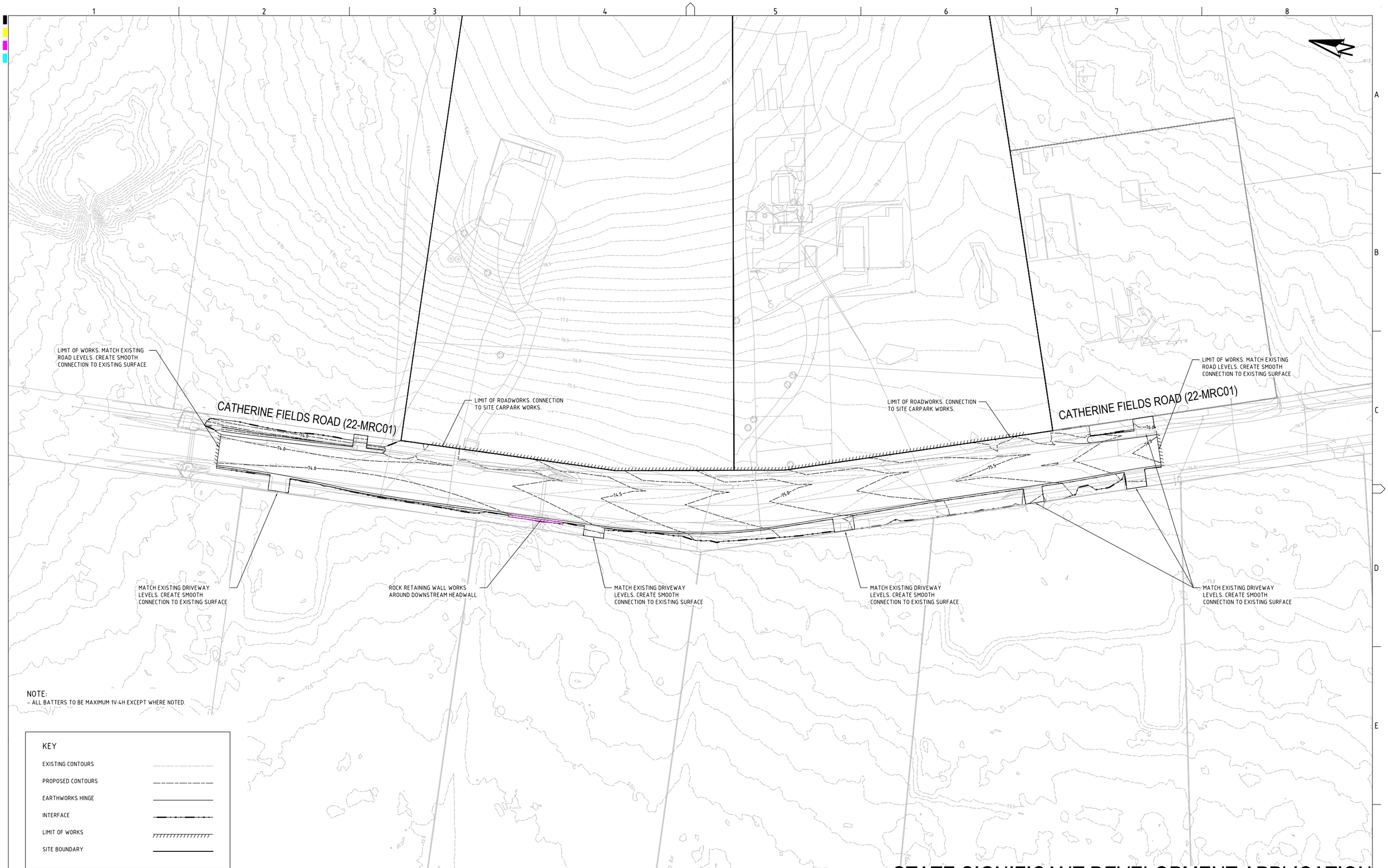
PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
SEDIMENT & EROSION CONTROL DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-B310	B

DRAWING ID: P2108320-PS01-R02-B310



NOTE:
- ALL BATTERS TO BE MAXIMUM 1V:4H EXCEPT WHERE NOTED.

KEY

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EARTHWORKS HINGE
- INTERFACE
- LIMIT OF WORKS
- SITE BOUNDARY

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.

CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
EARTHWORKS GRADING PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-C100	B

DRAWING ID: P2108320-PS01-R02-C100

PRINTED ---- USER: RKOLANDOZHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)

CUT-FILL DEPTH DESIGN TO EXISTING

LOWER THAN		-1.000	m
-1.000	to	-0.750	m
-0.750	to	-0.500	m
-0.500	to	-0.250	m
-0.250	to	-0.050	m
-0.050	to	0.050	m
0.050	to	0.250	m
0.250	to	0.500	m
0.500	to	0.750	m
0.750	to	1.000	m
HIGHER THAN		99999	m

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE 0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
MINAROH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

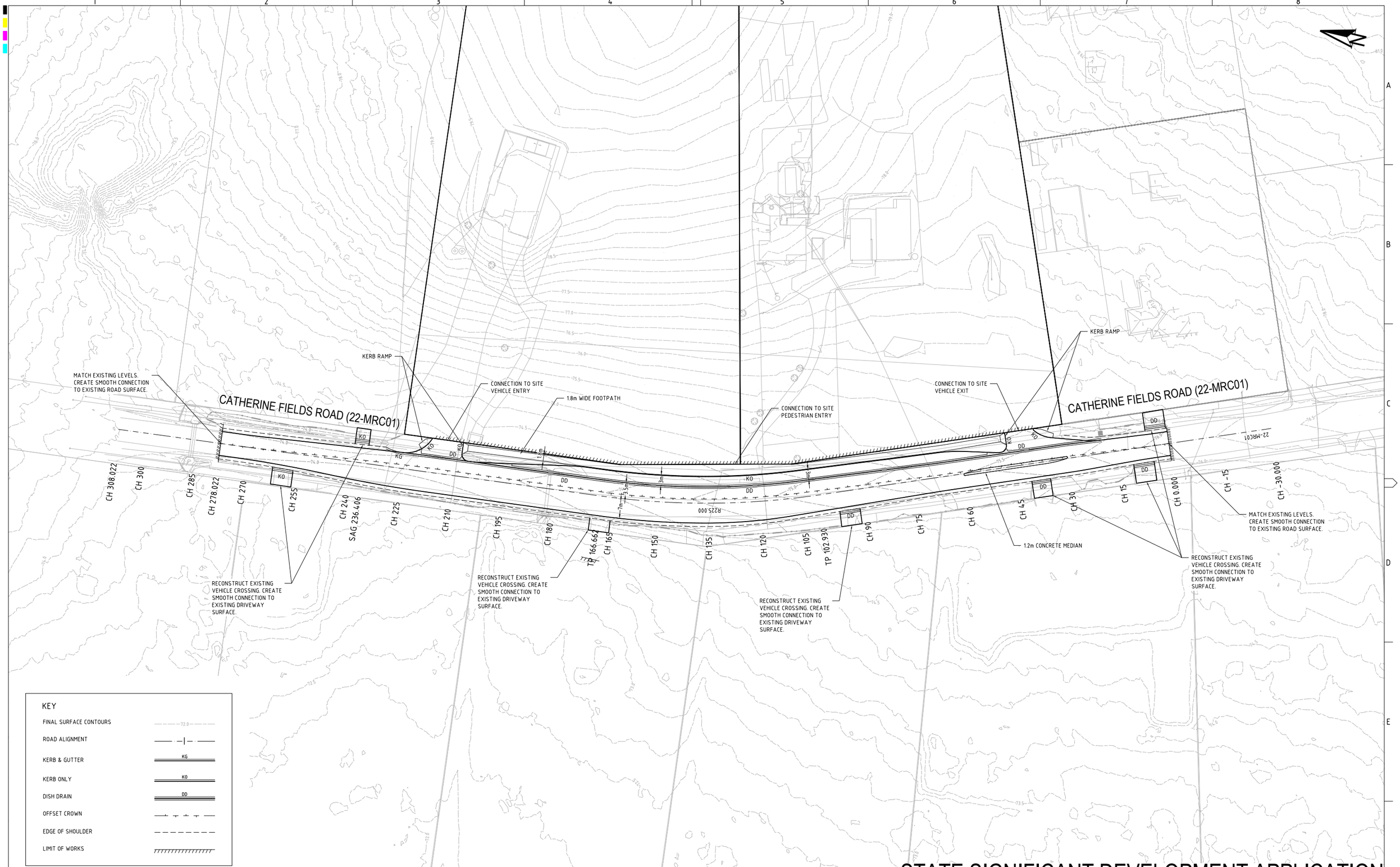
DRAWING TITLE
EARTHWORKS CUT & FILL PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-C500	B

DRAWING ID: P2108320-PS01-R02-C500

PRINTED: ---- - USER: RKOLAHDOOZHA

A1 / A3 LANDSCAPE (A1LC_v02.0.01)



KEY

- FINAL SURFACE CONTOURS
- ROAD ALIGNMENT
- KERB & GUTTER (KG)
- KERB ONLY (KO)
- DISH DRAIN (DD)
- OFFSET CROWN
- EDGE OF SHOULDER
- LIMIT OF WORKS

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE: 0 5 10 15 20 25 30 35 40 45 50 METRES — A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT: MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE: MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

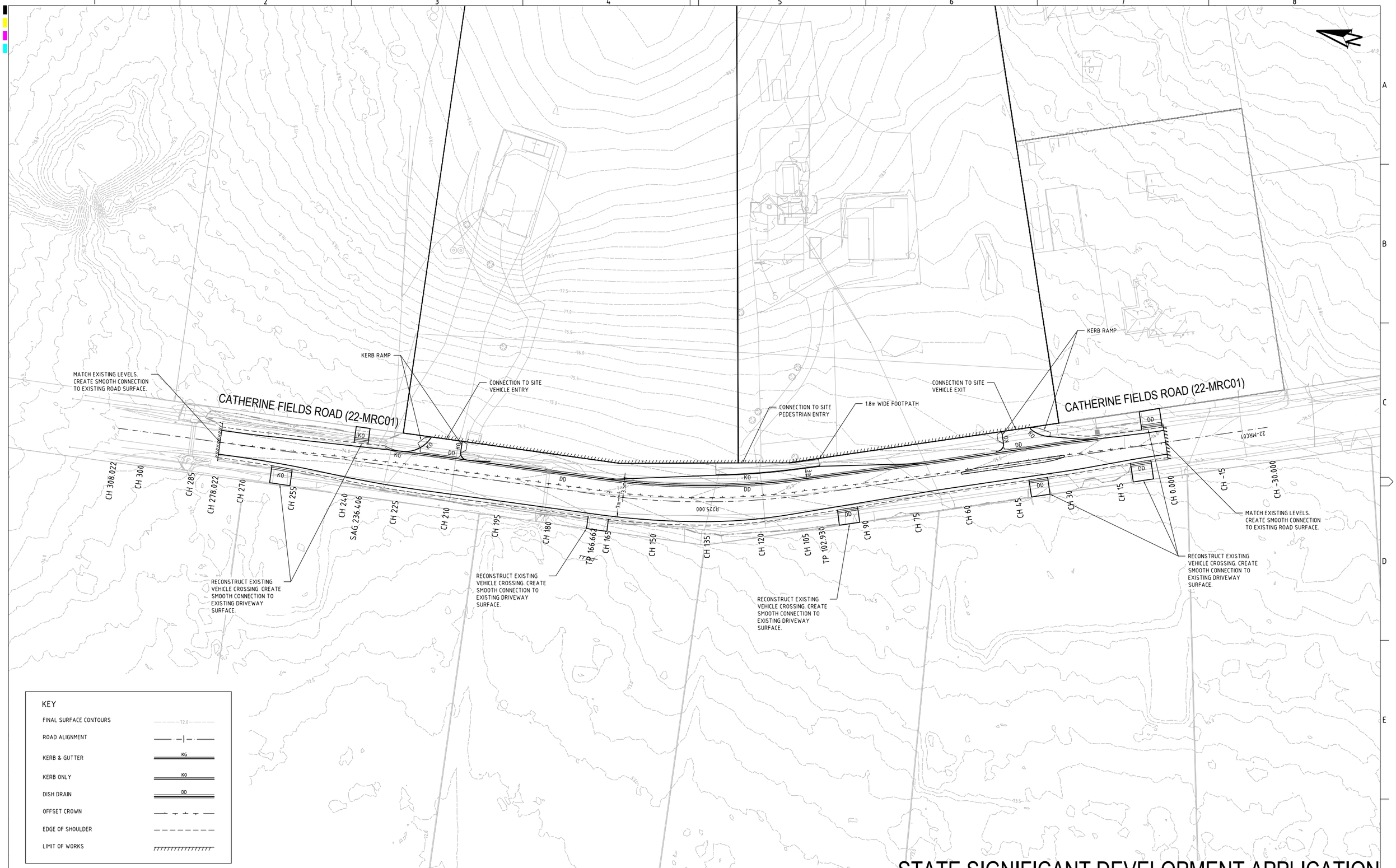
DRAWING TITLE: ROADWORKS PLAN ULTIMATE STAGE

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D100	B

DRAWING ID: P2108320-PS01-R02-D100

PRINTED: --- USER: RYAN.MOSCRIPA

A1 / A3 LANDSCAPE (A1LC_v02.0.01)



STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

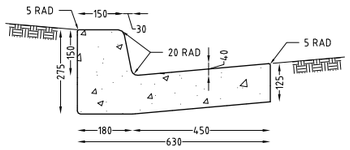
martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
ROADWORKS PLAN
STAGE 1

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D110	B

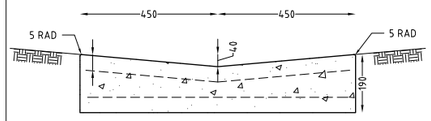
DRAWING ID: P2108320-PS01-R02-D110

PRINTED: --- USER: RVOLLMOSOTHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



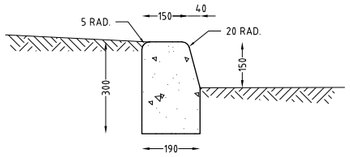
KERB & GUTTER (KG)

SCALE 1:10



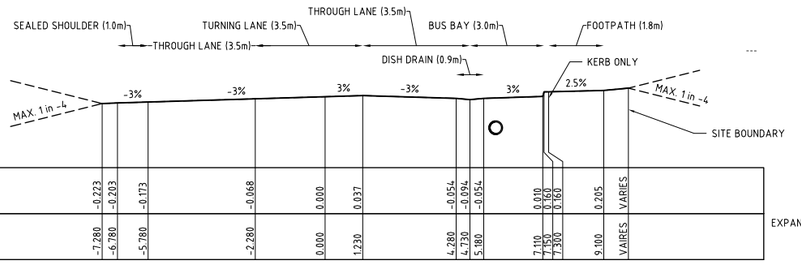
DISH DRAIN (DD)

SCALE 1:10



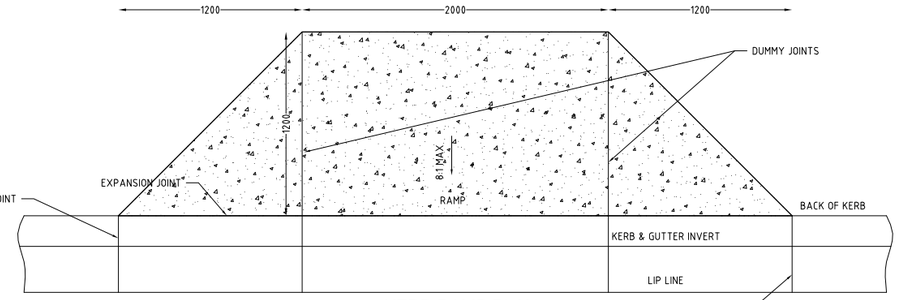
KERB ONLY (KO)

SCALE 1:10



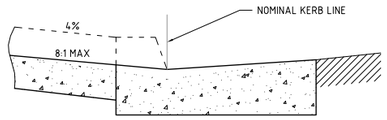
CATHERINE FIELDS ROAD (22-MRC01) TYPICAL CROSS SECTION THROUGH BUS BAY

SCALE 1:100



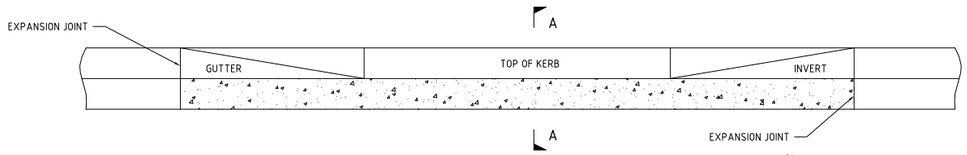
KERB RAMP PLAN

SCALE 1:20



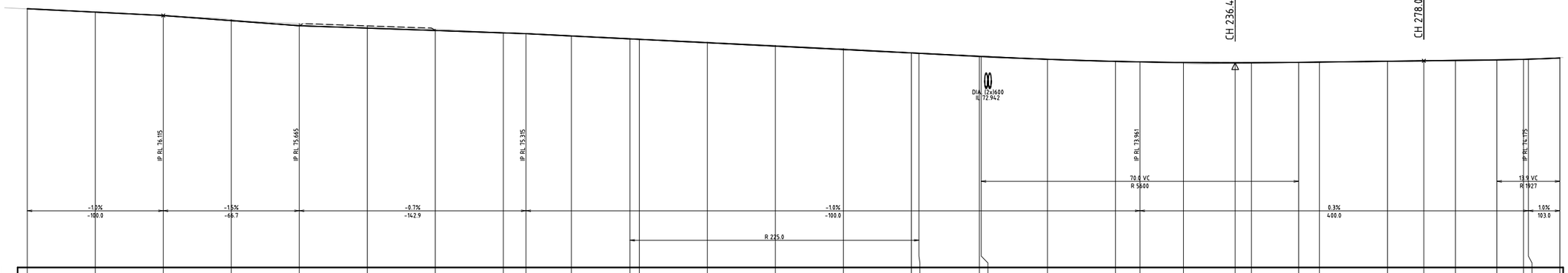
SECTION A-A

(KERB & GUTTER)
SCALE 1:20



KERB RAMP ELEVATION

SCALE 1:20



CATHERINE FIELDS ROAD (22-MRC01) LONG. SECTION

SCALE: HORIZONTAL - 1:500
VERTICAL - 1:100

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
A1 (A3) 1:500 (1:1,000) METRES
A1 (A3) 1:100 (1:200) METRES
A1 (A3) 1:20 (1:40) METRES
A1 (A3) 1:10 (1:20) METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

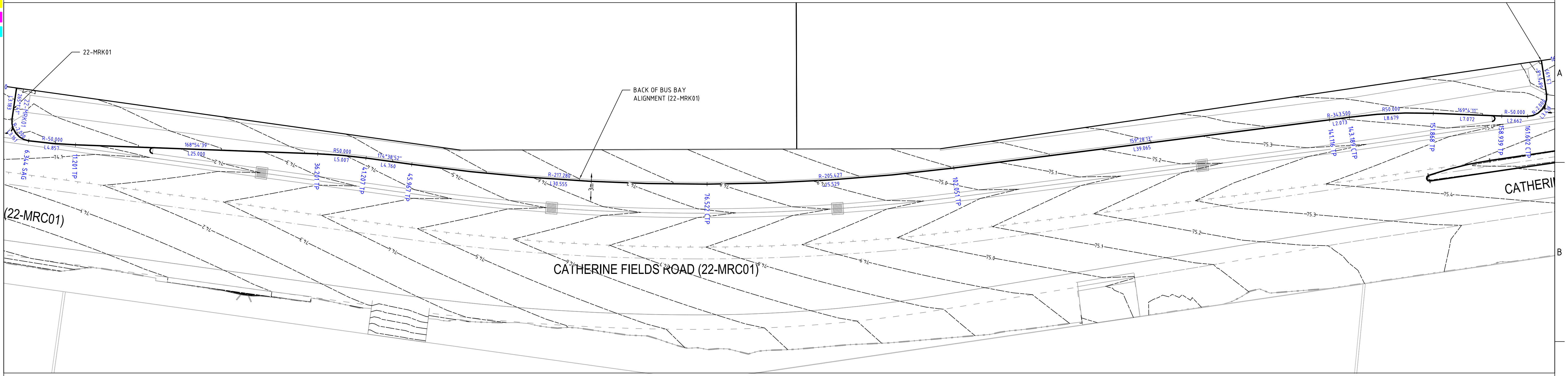
martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CATHERINE FIELDS ROAD LONGITUDINAL, TYPICAL SECTION & DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D200	B

DRAWING ID: P2108320-PS01-R02-D200

PRINTED: ---- - USER: RKOLAHDOOZHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



BUS BAY INTERSECTION PLAN
SCALE: 1:200

NOTES:
1. FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY

FINAL SURFACE CONTOURS	———72.0———
KERB ALIGNMENT	

22-MRK01 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	292992.346	6237277.128	74.262	265°01'41.03"			
TC	3.183	292989.175	6237276.853	74.105	265°01'41.03"			
IP 2	4.764	292987.163	6237276.678	74.051		R = -2.000	3.161	90°33'07.04"
CC	6.344	292987.357	6237274.668	74.018	174°28'33.99"			
IP 3	8.772	292987.591	6237272.249	74.046		R = -50.000	4.857	5°33'55.24"
CT	11.201	292988.059	6237269.864	74.074	168°54'38.75"			
TC	36.201	292992.867	6237245.330	74.366	168°54'38.75"			
IP 4	38.704	292993.349	6237242.872	74.395		R = 50.000	5.007	5°44'13.58"
CT	41.207	292993.583	6237240.377	74.422	174°38'52.33"			
TC	45.967	292994.027	6237235.638	74.470	174°38'52.33"			
IP 5	61.245	292995.454	6237220.402	74.628		R = -217.280	30.555	8°03'26.05"
CC	76.522	292999.003	6237205.517	74.786	166°35'26.28"			
IP 6	89.286	293001.967	6237193.084	74.919		R = -205.427	25.529	7°07'12.83"
CT	102.051	293006.449	6237181.115	75.054	159°28'13.45"			
TC	141.116	293020.149	6237144.531	75.394	159°28'13.45"			
IP 7	142.153	293020.512	6237143.560	75.401		R = -343.500	2.073	0°20'44.67"
CC	143.189	293020.882	6237142.592	75.408	159°07'28.78"			
IP 8	147.528	293022.432	6237138.527	75.431		R = 50.000	8.679	9°56'41.73"
CT	151.868	293023.257	6237134.256	75.441	169°04'10.51"			
TC	158.939	293024.597	6237127.313	75.453	169°04'10.51"			
IP 9	160.270	293024.850	6237126.005	75.456		R = -50.000	2.662	3°03'02.80"
CC	161.602	293025.172	6237124.713	75.458	166°01'07.71"			
IP 10	163.310	293025.727	6237122.484	75.499		R = -2.000	3.418	97°54'20.03"
CT	165.019	293027.858	6237123.341	75.605	68°06'47.68"			
IP 11	168.516	293031.103	6237124.644	75.864	68°06'47.68"			

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
A1 (A3) 1:200 (1:400) METRES
A1 (A3) 1:100 (1:200) METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

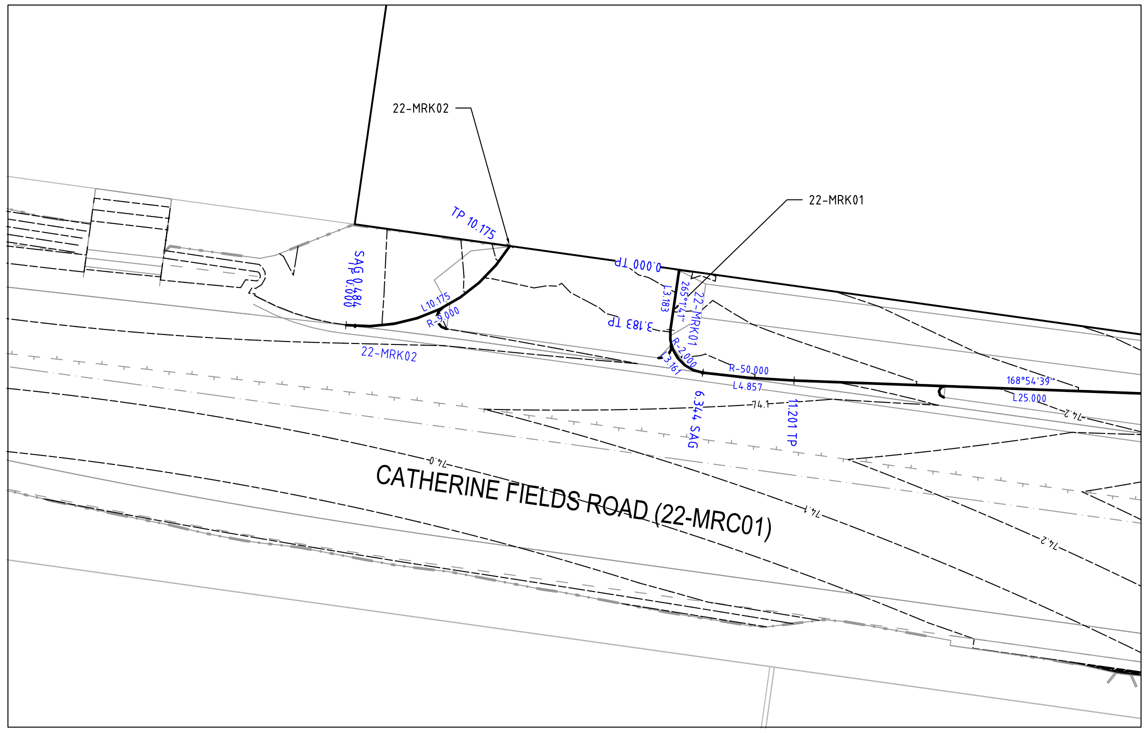
CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
BUS BAY INTERSECTION PLAN
AND SETOUT TABLE (22-MRK01)

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D300	B



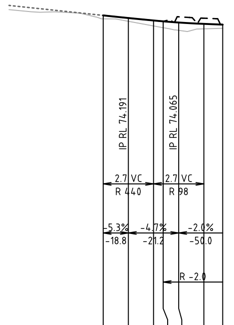
SITE ENTRY INTERSECTION PLAN

SCALE: 1:200

NOTES:

1. FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY	
FINAL SURFACE CONTOURS	——72.0——
KERB ALIGNMENT	—+—



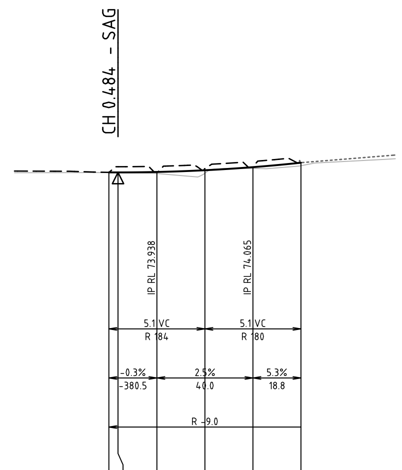
VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GRADE (%)
VERTICAL GRADE (1 IN ...)
HORIZONTAL CURVE RADIUS (m)

DATUM RL 66.000

DESIGN SURFACE LEVELS	74.262	74.193	74.128	74.105	74.074	74.038	74.018
EXISTING SURFACE LEVELS	74.171	74.106	73.983	73.936	73.862	73.909	73.919
CUT / FILL DEPTH	0.091	0.087	0.145	0.169	0.212	0.128	0.099
CHAINAGE	0.000	1.336	2.672	3.183	4.008	5.344	6.344

KERB RETURN (22-MRK01) LONG. SECTION (ON LIP)

SCALE: HORIZONTAL - 1:200
VERTICAL - 1:100



VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GRADE (%)
VERTICAL GRADE (1 IN ...)
HORIZONTAL CURVE RADIUS (m)

DATUM RL 66.000

DESIGN SURFACE LEVELS	73.945	73.944	73.956	74.002	74.083	74.201
EXISTING SURFACE LEVELS	73.940	73.941	73.915	73.918	74.050	74.121
CUT / FILL DEPTH	0.004	0.003	0.041	0.084	0.033	0.080
CHAINAGE	0.000	0.484	2.544	5.087	7.631	10.175

KERB RETURN (22-MRK02) LONG. SECTION (ON LIP)

SCALE: HORIZONTAL - 1:200
VERTICAL - 1:100

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
A1 (A3) 1:200 (1:400) METRES
A1 (A3) 1:100 (1:200) METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

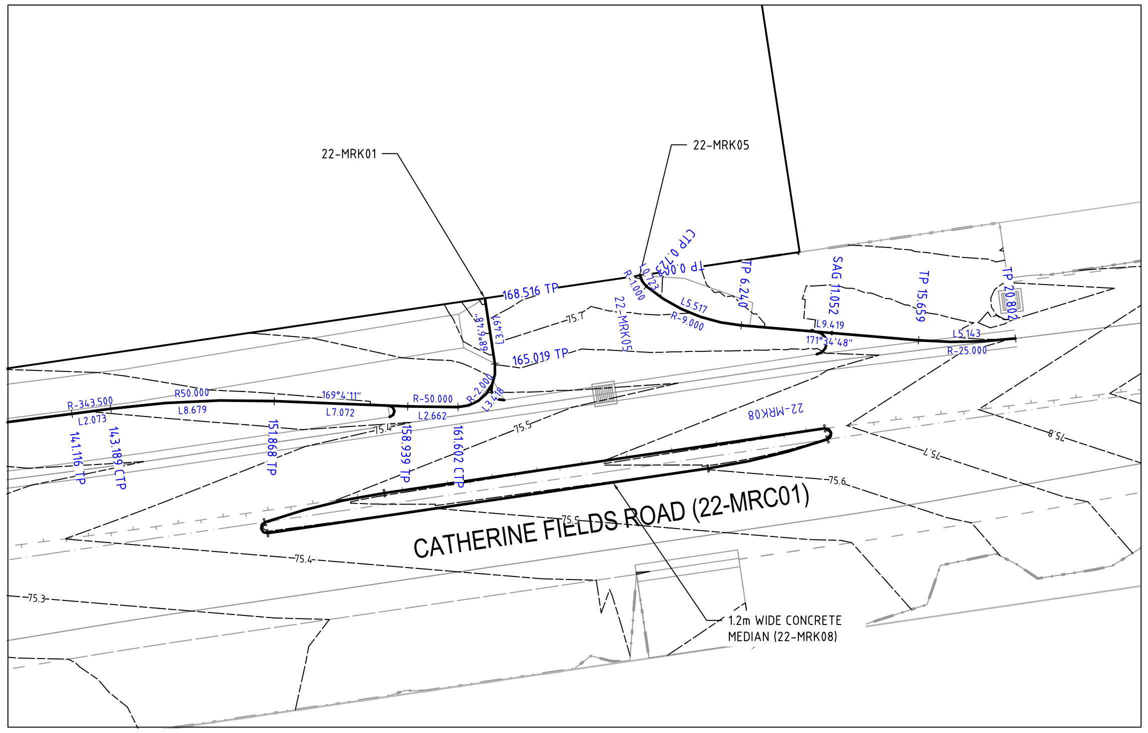
CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
SITE ENTRY INTERSECTION PLAN
AND SECTIONS (22-MRK01 & 22-MRK02)

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D301	B



SITE EXIT INTERSECTION

SCALE: 1:200

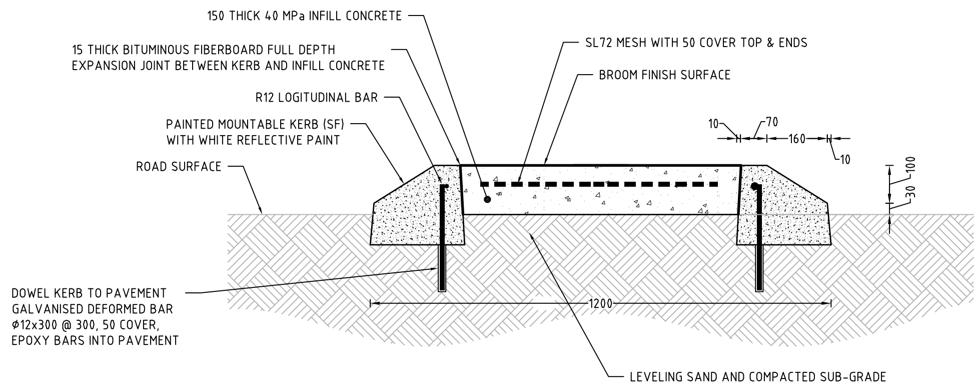
NOTES:
1. FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY

FINAL SURFACE CONTOURS	————72.0————
KERB ALIGNMENT	——+——

22-MRK08 HORIZONTAL POINTS (CLOSED)

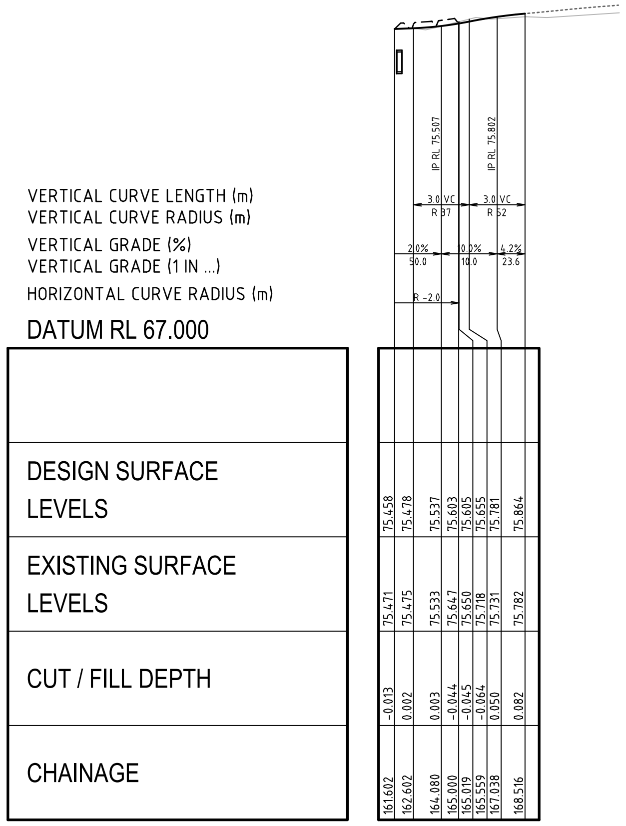
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	293028.516	6237105.549	75.683				
TC	23.575	293019.845	6237127.471	75.518	338°25'07.01"			
IP 2	26.834	293018.642	6237130.510	75.486		R = -35.000	6.518	10°40'13.05"
CC	30.093	293016.898	6237133.275	75.454	327°44'53.96			
IP 3	30.315	293016.752	6237133.506	75.450	"	R = -0.300	0.443	84°39'53.48"
CT	30.536	293016.509	6237133.382	75.446	243°05'00.49			
IP 4	30.758	293016.265	6237133.258	75.441	"	R = -0.300	0.443	84°39'53.48"
CT	30.980	293016.365	6237133.004	75.437	158°25'07.01"			
TC	54.555	293025.037	6237111.082	75.602	158°25'07.01"			
IP 5	57.814	293026.239	6237108.042	75.634		R = -35.000	6.518	10°40'13.05"
CC	61.073	293027.983	6237105.278	75.666	147°44'53.96			
IP 6	61.295	293028.129	6237105.047	75.670	"	R = -0.300	0.443	84°39'53.48"
CT	61.516	293028.373	6237105.171	75.674	63°05'00.49"			
IP 7	61.738	293028.617	6237105.294	75.679		R = -0.300	0.443	84°39'53.48"
CT	61.960	293028.516	6237105.549	75.683	338°25'07.01"			



NOTE:
- FULL DEPTH EXPANSION JOINT ACCROSS SECTION AT 4m SPACING ALONG LENGTH OF MEDIAN ISLAND.

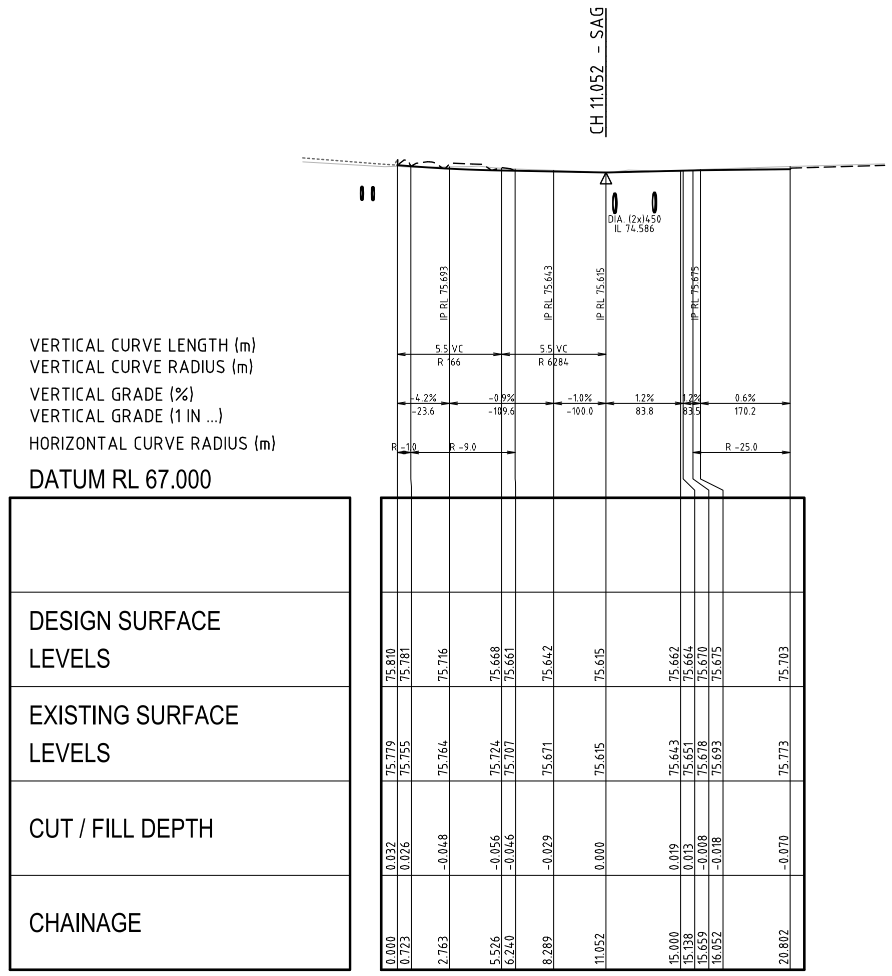
CONCRETE MEDIAN TYPICAL CROSS SECTION

SCALE 1:10



KERB RETURN (22-MRK01) LONG. SECTION (ON LIP)

SCALE: HORIZONTAL - 1:200
VERTICAL - 1:100



KERB RETURN (22-MRK05) LONG. SECTION (ON LIP)

SCALE: HORIZONTAL - 1:200
VERTICAL - 1:100

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
A1 (A3) 1:200 (1:400) METRES
A1 (A3) 1:100 (1:200) METRES
A1 (A3) 1:10 (1:20) METRES

GRID: MGA | DATUM: mAHD | PROJECT MANAGER: TH

CLIENT: MINARAH COLLEGE

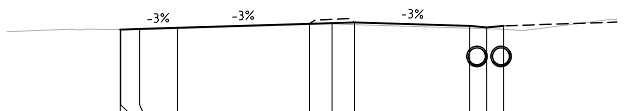
PROJECT NAME/PLANSET TITLE: MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: SITE EXIT INTERSECTION PLAN, SECTIONS AND SETOUT TABLE (22-MRK01, 22-MRK05 & 22-MRK08)

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D302	B

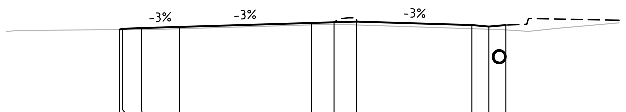
RL73.0



DESIGN LEVELS	75.496	75.492	75.512	75.542	75.647	75.665	75.683	75.592	75.552	75.592
CUT / FILL DEPTH	0.000	0.003	-0.022	-0.024	-0.021	-0.022	-0.058	-0.061	-0.035	-0.089
EXISTING LEVELS	75.496	75.495	75.490	75.518	75.626	75.643	75.625	75.531	75.517	75.503
OFFSET	-5.614	-5.600	-5.100	-4.100	-0.600	0.000	0.600	3.650	4.100	4.550

CH 45.000

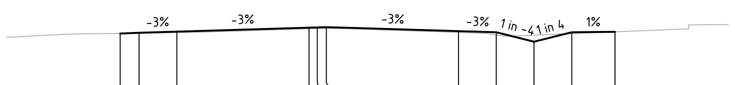
RL73.0



DESIGN LEVELS	75.622	75.642	75.662	75.692	75.797	75.815	75.833	75.742	75.702	75.742
CUT / FILL DEPTH	0.000	-0.019	-0.045	-0.049	-0.051	-0.052	-0.089	-0.096	-0.070	-0.128
EXISTING LEVELS	75.622	75.623	75.617	75.643	75.746	75.763	75.744	75.645	75.631	75.613
OFFSET	-5.680	-5.600	-5.100	-4.100	-0.600	0.000	0.600	3.650	4.100	4.550

CH 30.000

RL74.0



DESIGN LEVELS	75.803	75.823	75.853	75.958	75.965	75.972	75.867	75.837	75.587	75.837	75.849
CUT / FILL DEPTH	-0.001	-0.014	-0.024	-0.027	-0.028	-0.036	-0.035	-0.077	0.174	-0.035	0.000
EXISTING LEVELS	75.802	75.809	75.830	75.932	75.937	75.936	75.832	75.760	75.761	75.802	75.849
OFFSET	-5.221	-4.721	-3.721	-0.219	0.000	0.240	3.740	4.740	5.740	6.740	7.884

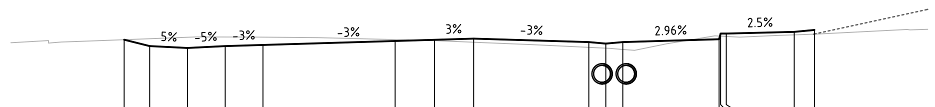
CH 15.000

RL75.0

DESIGN LEVELS	75.963	75.960	75.980	76.010	76.115	76.010	75.980	75.868	76.003
CUT / FILL DEPTH	0.000	0.004	0.001	0.007	0.000	0.001	0.003	0.115	0.000
EXISTING LEVELS	75.963	75.964	75.981	76.017	76.115	76.011	75.983	75.983	76.003
OFFSET	-5.013	-5.000	-4.500	-3.500	0.000	3.500	4.500	4.950	5.491

CH 0.000

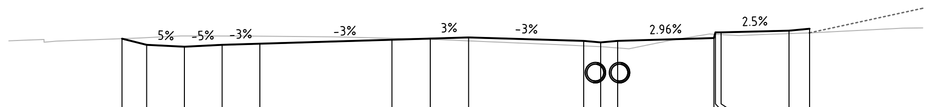
RL73.0



DESIGN LEVELS	75.218	75.049	74.999	75.049	75.079	75.184	75.215	75.246	75.155	75.115	75.155	75.230	75.380	75.380	75.425	75.476
CUT / FILL DEPTH	0.000	0.195	0.283	0.241	0.206	0.037	-0.021	-0.095	-0.140	-0.121	-0.195	0.084	-0.068	-0.076	-0.079	-0.111
EXISTING LEVELS	75.218	75.244	75.282	75.289	75.285	75.220	75.194	75.151	75.015	74.993	74.959	75.314	75.312	75.304	75.346	75.365
OFFSET	-8.220	-7.544	-6.544	-5.544	-4.544	-1.043	0.000	1.037	4.087	4.537	4.987	7.538	7.578	7.728	9.528	10.063

CH 90.000

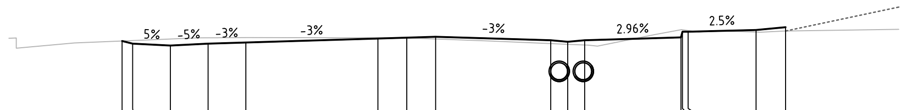
RL73.0



DESIGN LEVELS	75.226	75.063	75.013	75.063	75.093	75.198	75.228	75.259	75.167	75.127	75.167	75.243	75.393	75.393	75.438	75.489
CUT / FILL DEPTH	0.000	0.191	0.285	0.233	0.199	0.038	-0.018	-0.091	-0.132	-0.114	-0.187	0.101	-0.051	-0.059	-0.077	-0.110
EXISTING LEVELS	75.226	75.253	75.298	75.296	75.292	75.236	75.210	75.167	75.035	75.013	74.980	75.343	75.341	75.333	75.360	75.379
OFFSET	-8.169	-7.516	-6.516	-5.516	-4.516	-1.015	0.000	1.015	4.066	4.516	4.966	7.517	7.557	7.707	9.507	10.052

CH 88.672

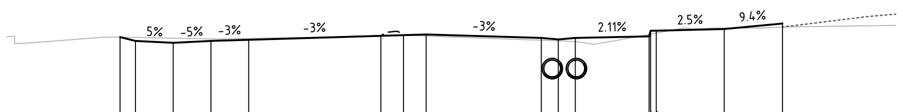
RL73.0



DESIGN LEVELS	75.277	75.207	75.157	75.207	75.237	75.342	75.365	75.388	75.296	75.256	75.296	75.372	75.522	75.522	75.567	75.640
CUT / FILL DEPTH	0.000	0.081	0.172	0.154	0.130	0.018	-0.008	-0.058	-0.088	-0.067	-0.125	0.202	0.052	0.031	-0.055	-0.100
EXISTING LEVELS	75.277	75.288	75.329	75.361	75.367	75.360	75.357	75.330	75.208	75.189	75.171	75.574	75.573	75.552	75.512	75.540
OFFSET	-7.545	-7.265	-6.265	-5.265	-4.265	-0.764	0.000	0.764	3.815	4.265	4.715	7.266	7.306	7.456	9.256	10.039

CH 75.000

RL73.0



DESIGN LEVELS	75.464	75.362	75.312	75.362	75.392	75.497	75.515	75.533	75.442	75.402	75.442	75.483	75.633	75.633	75.678	75.823
CUT / FILL DEPTH	0.000	0.094	0.124	0.054	0.036	0.005	0.002	-0.040	-0.061	-0.037	-0.093	0.052	-0.091	-0.063	0.024	-0.092
EXISTING LEVELS	75.464	75.456	75.436	75.416	75.428	75.502	75.517	75.493	75.380	75.364	75.348	75.535	75.542	75.570	75.702	75.731
OFFSET	-7.507	-7.100	-6.100	-5.100	-4.100	-0.600	0.000	0.600	3.650	4.100	4.550	6.505	6.545	6.695	8.495	10.038

CH 60.000

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE

GRID: MGA | DATUM: mAHD | PROJECT MANAGER: TH

CLIENT: MINARAH COLLEGE

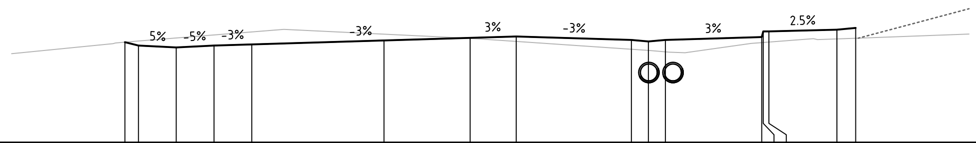
PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CATHERINE FIELDS ROAD CROSS SECTIONS
SHEET 1

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D500	B

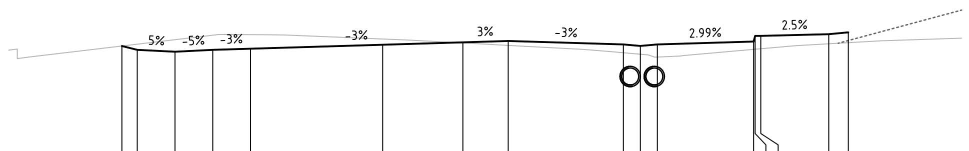
DRAWING ID: P2108320-PS01-R02-D500



RL72.0

DESIGN LEVELS	74.651	74.562	74.512	74.562	74.592	74.697	74.765	74.802	74.710	74.670	74.710	74.787	74.937	74.937	74.982	75.028
CUT / FILL DEPTH	0.000	0.120	0.251	0.281	0.331	0.166	-0.012	-0.131	-0.247	-0.237	-0.315	-0.147	-0.294	-0.283	-0.244	-0.274
EXISTING LEVELS	74.651	74.682	74.762	74.842	74.922	74.863	74.753	74.671	74.463	74.433	74.395	74.640	74.643	74.654	74.737	74.755
OFFSET	-9.139	-8.780	-7.780	-6.780	-5.780	-2.280	0.000	1.220	4.270	4.720	5.170	7.720	7.760	7.910	9.710	10.207

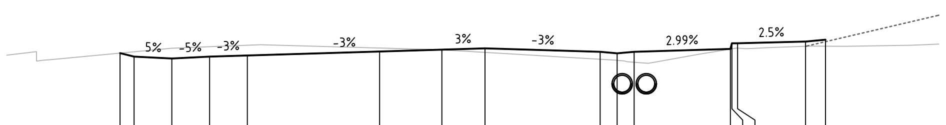
CH 135.000



RL72.0

DESIGN LEVELS	74.818	74.716	74.666	74.716	74.746	74.851	74.915	74.951	74.860	74.820	74.860	74.936	75.086	75.086	75.131	75.180
CUT / FILL DEPTH	0.000	0.150	0.319	0.388	0.372	0.152	-0.015	-0.117	-0.220	-0.219	-0.334	-0.207	-0.353	-0.340	-0.254	-0.273
EXISTING LEVELS	74.818	74.866	74.985	75.104	75.119	75.003	74.900	74.834	74.640	74.600	74.526	74.729	74.732	74.746	74.877	74.906
OFFSET	-9.031	-8.625	-7.625	-6.625	-5.625	-2.124	0.000	1.201	4.251	4.701	5.151	7.701	7.741	7.891	9.691	10.209

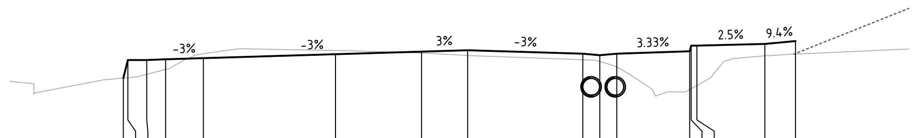
CH 120.000



RL73.0

DESIGN LEVELS	74.973	74.880	74.830	74.880	74.910	75.016	75.065	75.099	75.008	74.968	75.008	75.084	75.234	75.234	75.279	75.329
CUT / FILL DEPTH	0.000	0.128	0.271	0.263	0.271	0.092	-0.005	-0.107	-0.198	-0.186	-0.277	-0.004	-0.148	-0.129	-0.124	-0.172
EXISTING LEVELS	74.973	75.009	75.102	75.143	75.182	75.108	75.060	74.993	74.810	74.782	74.731	75.080	75.086	75.105	75.155	75.157
OFFSET	-8.524	-8.152	-7.152	-6.152	-5.152	-1.649	0.000	1.142	4.192	4.642	5.092	7.642	7.682	7.832	9.632	10.161

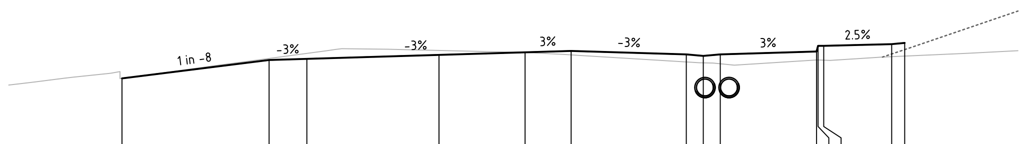
CH 105.000



RL72.0

DESIGN LEVELS	73.612	74.092	74.092	74.112	74.142	74.247	74.315	74.352	74.260	74.220	74.260	74.324	74.474	74.474	74.519	74.596
CUT / FILL DEPTH	0.000	-0.469	-0.382	-0.269	0.117	0.100	-0.038	-0.139	-0.161	-0.168	-0.350	-1.018	-1.146	-1.061	-0.316	-0.345
EXISTING LEVELS	73.612	73.623	73.710	73.843	74.258	74.346	74.277	74.213	74.099	74.052	73.910	73.306	73.329	73.414	74.204	74.251
OFFSET	-7.900	-7.780	-7.280	-6.780	-5.780	-2.280	0.000	1.220	4.270	4.720	5.170	7.101	7.141	7.291	9.091	9.904

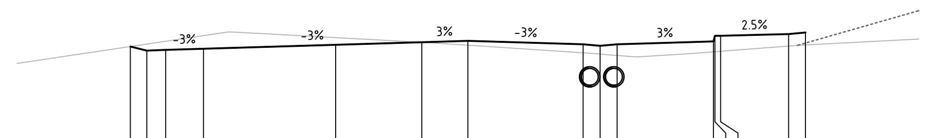
CH 180.000



RL72.0

DESIGN LEVELS	73.774	74.262	74.292	74.397	74.465	74.502	74.410	74.370	74.410	74.487	74.637	74.637	74.682	74.714
CUT / FILL DEPTH	0.000	0.041	0.145	0.118	-0.005	-0.105	-0.200	-0.184	-0.248	-0.224	-0.374	-0.380	-0.332	-0.349
EXISTING LEVELS	73.774	74.303	74.437	74.514	74.460	74.397	74.210	74.186	74.162	74.262	74.262	74.257	74.350	74.365
OFFSET	-10.677	-6.780	-5.780	-2.280	0.000	1.220	4.270	4.720	5.170	7.720	7.760	7.910	9.710	10.055

CH 165.000



RL72.0

DESIGN LEVELS	74.501	74.392	74.412	74.442	74.547	74.615	74.652	74.560	74.520	74.560	74.637	74.787	74.787	74.832	74.873
CUT / FILL DEPTH	0.000	0.174	0.229	0.349	0.191	-0.002	-0.116	-0.227	-0.219	-0.298	-0.277	-0.424	-0.413	-0.318	-0.331
EXISTING LEVELS	74.501	74.566	74.641	74.790	74.737	74.613	74.536	74.333	74.301	74.263	74.359	74.362	74.374	74.513	74.542
OFFSET	-7.716	-7.280	-6.780	-5.780	-2.280	0.000	1.220	4.270	4.720	5.170	7.720	7.760	7.910	9.710	10.156

CH 150.000

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT: MINARAH COLLEGE

DISCLAIMER & COPYRIGHT

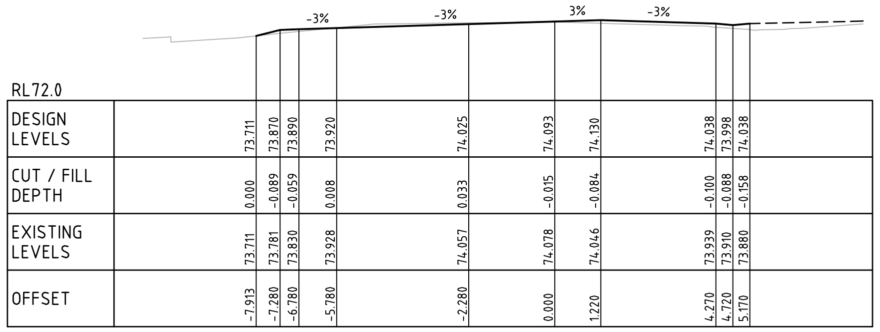
PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

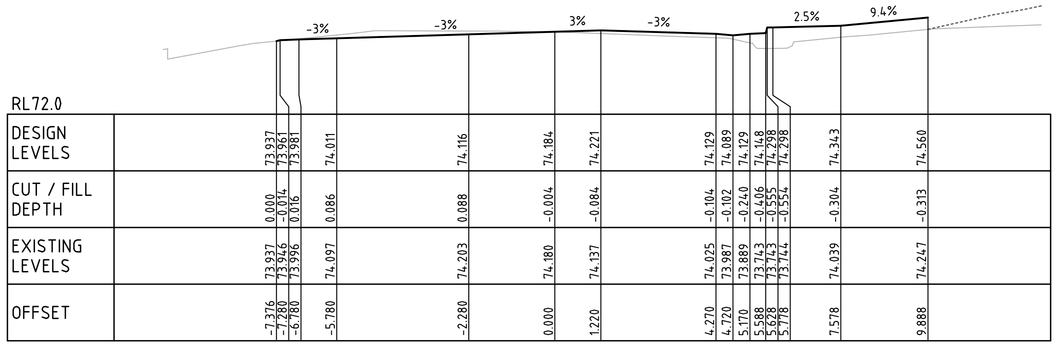
DRAWING TITLE
CATHERINE FIELDS ROAD CROSS SECTIONS
SHEET 2

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D501	B

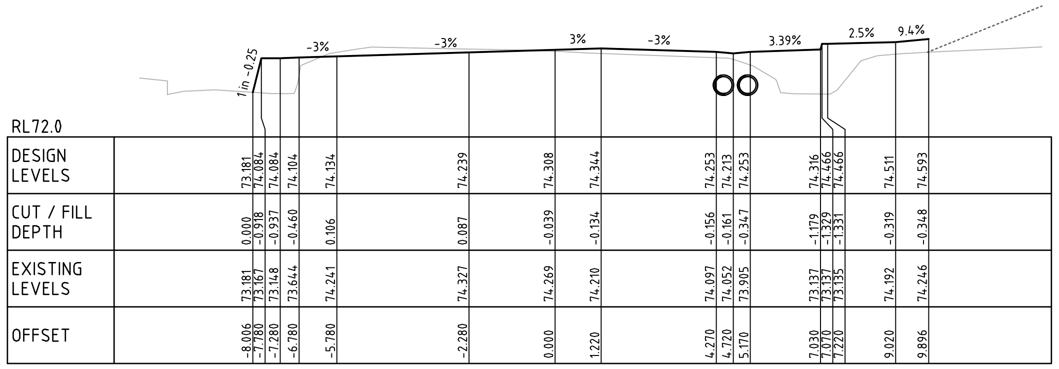
DRAWING ID: P2108320-PS01-R02-D501
PRINTED: ---- - USER: RKOLAHDOOZHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



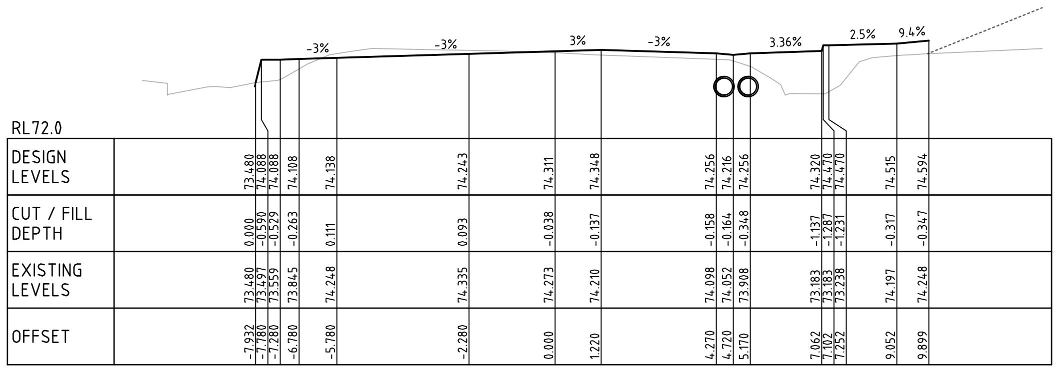
CH 210.000



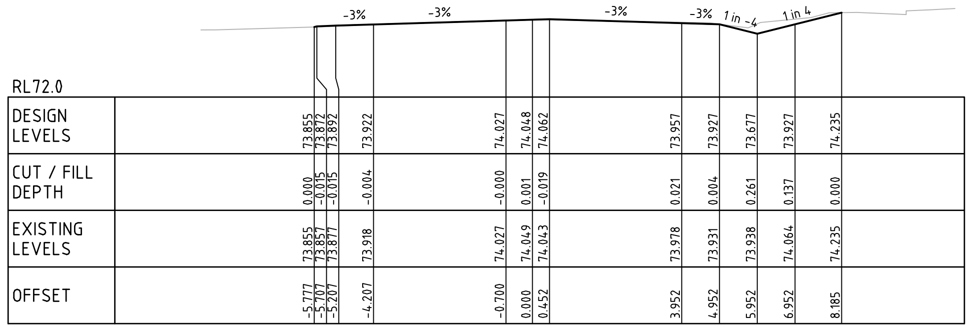
CH 195.000



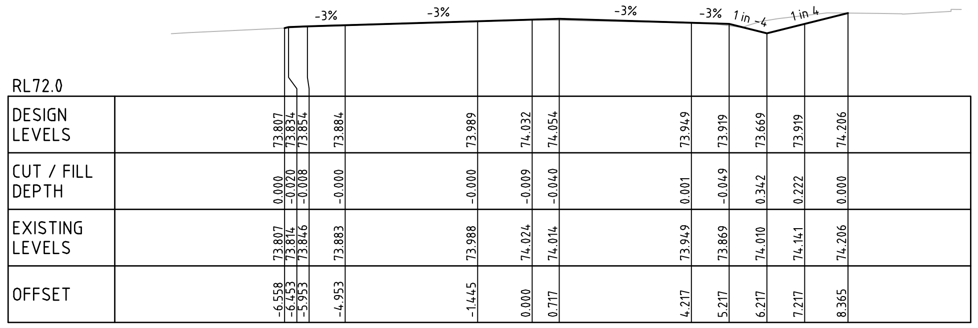
CH 180.730



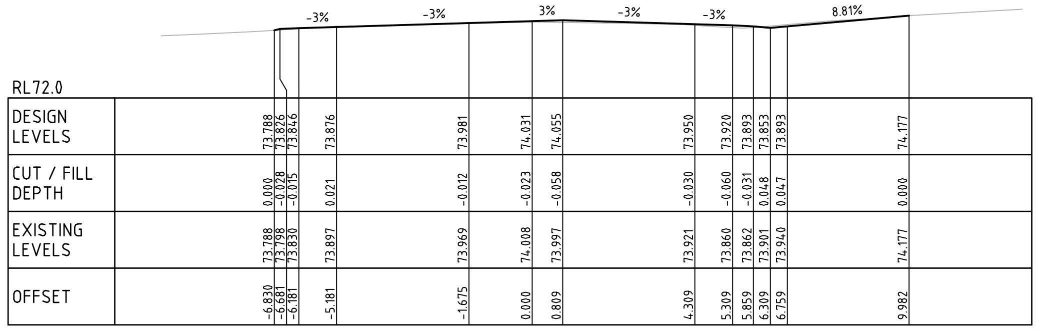
CH 180.406



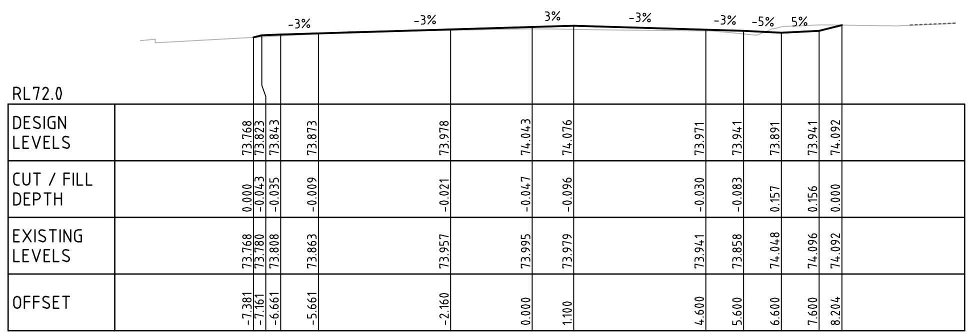
CH 250.406



CH 240.000



CH 236.406



CH 225.000

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE

GRID: MGA
DATUM: mAHD
PROJECT MANAGER: TH

CLIENT: MINARAH COLLEGE

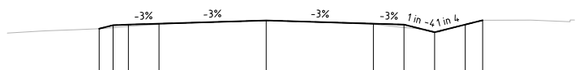
DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CATHERINE FIELDS ROAD CROSS SECTIONS
SHEET 3

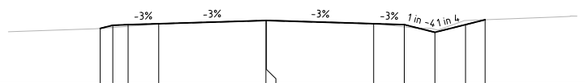
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D502	B



RL72.0

DESIGN LEVELS	73.848	73.962	73.982	74.012	74.117	74.012	73.982	73.732	73.982	74.123
CUT / FILL DEPTH	0.000	-0.079	-0.055	-0.020	0.000	-0.019	-0.094	0.025	0.003	0.000
EXISTING LEVELS	73.848	73.883	73.927	73.992	74.117	73.993	73.888	73.757	73.985	74.123
OFFSET	-5.455	-5.000	-4.500	-3.500	0.000	3.500	4.500	5.500	6.500	7.069

CH 277.831



RL72.0

DESIGN LEVELS	73.839	73.942	73.962	73.992	74.097	74.098	73.993	73.963	73.713	73.963	74.123
CUT / FILL DEPTH	0.000	-0.072	-0.055	-0.010	0.011	0.011	0.007	-0.073	0.095	0.135	0.000
EXISTING LEVELS	73.839	73.870	73.907	73.982	74.108	74.109	74.000	73.890	73.808	74.097	74.123
OFFSET	-5.420	-5.009	-4.509	-3.509	-0.009	0.009	3.509	4.509	5.509	6.509	7.149

CH 270.000

RL72.0

DESIGN LEVELS	73.849	73.892	73.912	73.942	74.047	74.060	74.070	73.965	73.935	73.685	73.935	74.130
CUT / FILL DEPTH	0.000	-0.026	-0.023	-0.013	-0.002	-0.001	-0.015	0.027	0.026	0.180	0.121	0.000
EXISTING LEVELS	73.849	73.857	73.888	73.929	74.045	74.058	74.055	73.992	73.961	73.865	74.056	74.130
OFFSET	-5.613	-5.444	-4.944	-3.944	-0.440	0.000	0.334	3.834	4.834	5.834	6.834	7.616

CH 255.000

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE

PRINTED ----- USER: RKOLANKOOZHA

A1 / A3 LANDSCAPE (ATLC_v02.0.01)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
MINARAH COLLEGE

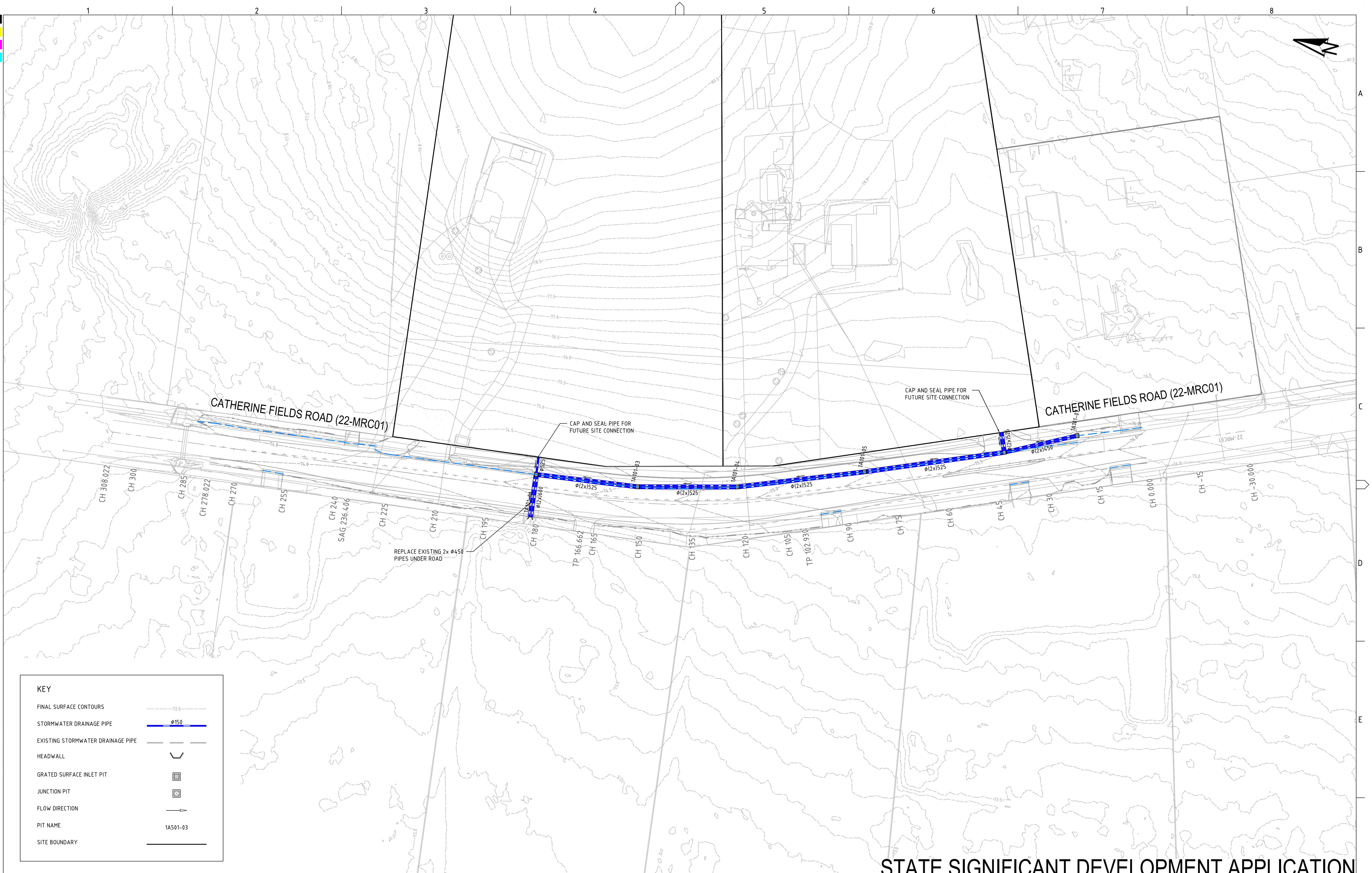
PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CATHERINE FIELDS ROAD CROSS SECTIONS
SHEET 4

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-D503	B

DRAWING ID: P2108320-PS01-R02-D503



STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE: 0 5 10 15 20 25 30 35 40 45 50 METRES — A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

DISCLAIMER & COPYRIGHT

This plan must not be used for construction unless signed as approved by principal certifying authority.

All measurements in millimetres unless otherwise specified.

CLIENT: MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE: MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: DRAINAGE PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-E100	B

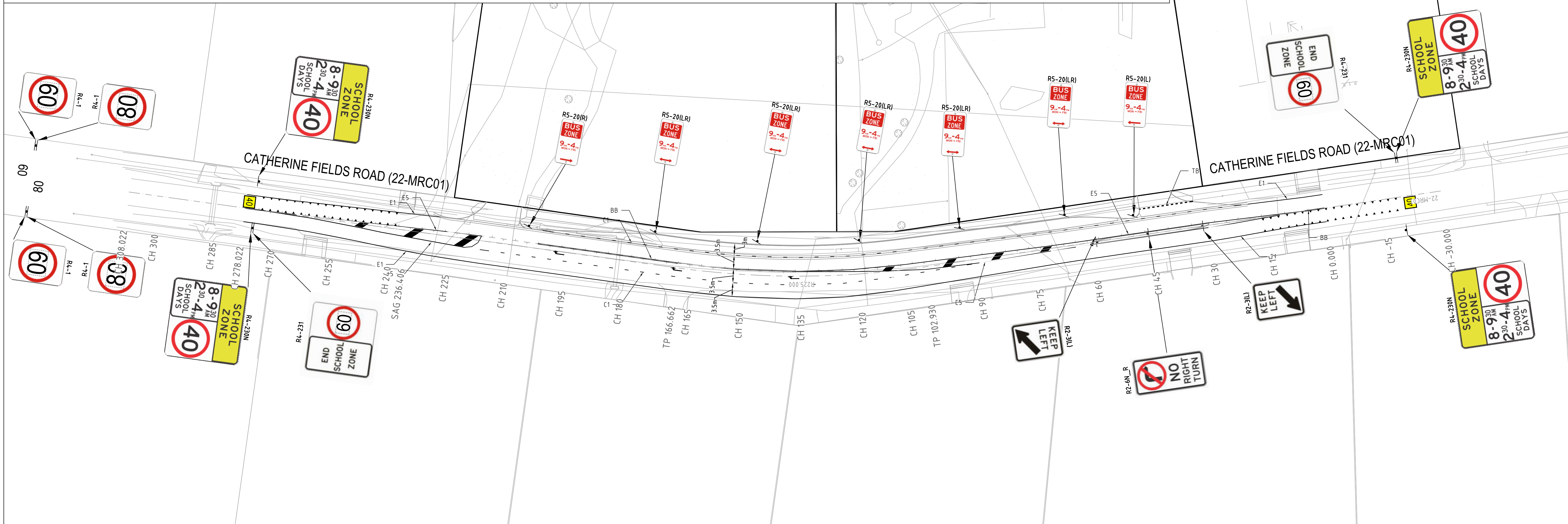
DRAWING ID: P2108320-PS01-R02-E100

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

PRINTED: ---- - USER: RKOLAHDOOZHA

LINE TYPE	USE	DIMENSIONS (m) (FOR DIMENSIONS SHOWN × SEE MARKER SPACING COLUMN.)	COLOUR	RAISED MARKER TYPE	MARKER SPACING ( ) (m) × NORMAL SPACING (A)	ALTERNATIVE SPACING (B)
BB	1. REPLACES DIVIDING (SEPARATION) LINE IF RESTRICTED SIGHT DISTANCE FOR BOTH DIRECTIONS OR 2. APPROACH TO MEDIAN ISLAND OR 3. APPROACHES TO A PEDESTRIAN CROSSING	0.10; 0.10 0.10; 0.025 MIN 0.05 MAX	WHITE	YY	12	12
C1	DEFINES EDGE OF THROUGH CARRIAGEWAY ADJACENT TO TURNING LANE, FREEWAY RAMP, BUS BAY AND START OR FINISH OF AUXILIARY LANE	1 3 1 3 1 3 1 3 1; 0.15	WHITE	W	8	8

LINE TYPE	USE	DIMENSIONS (m) (FOR DIMENSIONS SHOWN × SEE MARKER SPACING COLUMN.)	COLOUR	RAISED MARKER TYPE	MARKER SPACING ( ) (m) × NORMAL SPACING (A)	ALTERNATIVE SPACING (B)
E1	LEFT HAND EDGE LINE ON GENERAL PURPOSE ROAD	0.025 MIN 0.05 MAX; 0.15	WHITE	R	24	12
E5	OUTLINE OF PAINTED MEDIAN	0.025 MIN 0.05 MAX; 0.15	WHITE	YY	12	12
TB	GIVE WAY LINE (USED WITH SIGNS)	0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6; 0.30	WHITE	NOT REQUIRED	-	-



NOTES:
- CONCEPT SIGNAGE AND LINEMAKRING ONLY. SIGNAGE AND LINEMARKING TO BE CONFIMED AT DETAILED DESIGN STAGE.
- EXISTING SPEED LIMIT SIGNAGE ON CATHERINE FIELDS ROAD 150M SOUTH OF THE SITE (ADJACENT TO LOT 1 DP776947) TO BE RELOCATED ALONG CATHERINE FIELDS ROAD 100M NORTH OF THE SITE (AS SHOWN ON THIS PAGE). EXISTING SPEED LIMIT LINE MARKING ANNOTATION ASSOCIATED WITH RELOCATED SIGNAGE TO BE REMOVED (BY COUNCIL APPROVED METHODS).
- ALL OTHER EXISTING SIGNAGE AND LINEMARKING TO BE RETAINED OUTSIDE OF WORK AREA (EXCEPT WHERE NOTED).
- GUIDE POSTS TO BE PROVIDED ALONG ALL PUBLIC ROADS WITHIN WORK AREA TO TFNSW STANDARDS.
- ALL PAVEMENT MARKINGS, CHEVRONS AND REFLECTORS TO BE IN ACCORDANCE WITH CAMDEN COUNCIL SPECIFICATIONS, TFNSW SPECIFICATION R141 AND R142, CURRENT TFNSW GUIDELINES, AUSTRALIAN STANDARDS AND TFNSW SUPPLEMENTS.
- SIGNPOSTING TO BE IN ACCORDANCE WITH TFNSW SPECIATION R143.
- CONTRACTOR SHALL CONFIRM EXISTING UTILITY AND SERVICE LOCATIONS PRIOR TO EXCAVATION OF SIGN POST SUPPORTS.
- ALL PAVEMENT MARKINGS ARE BE INSTALLED IN WHITE REFLECTIVE, THERMOPLASTIC PAINT.

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE 0 5 10 15 20 25 30 35 40 45 50 METRES — A1 (A3) 1:500 (1:1,000)

GRID: MGA | DATUM: mAHD | PROJECT MANAGER: TH

CLIENT: MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE: MINARAH COLLEGE - CATHERINE FIELD ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

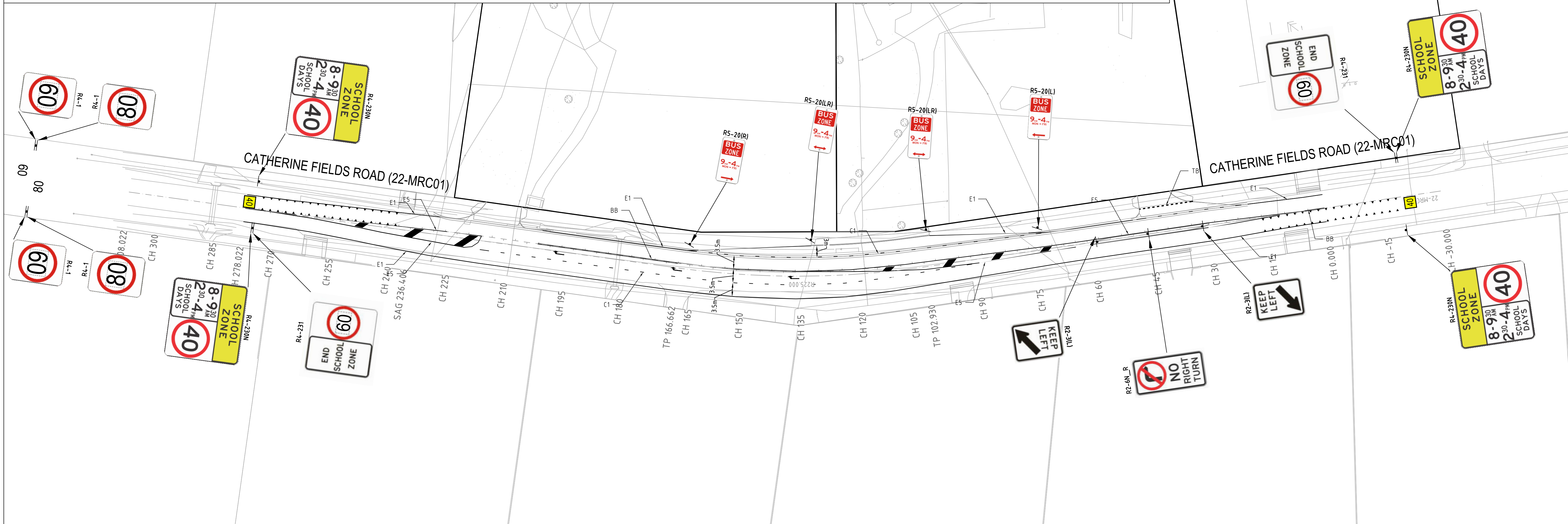
martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: CONCEPT SIGNAGE & LINEMARKING PLAN ULTIMATE STAGE

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-G400	B

LINE TYPE	USE	DIMENSIONS (m) (FOR DIMENSIONS SHOWN × SEE MARKER SPACING COLUMN.)	COLOUR	RAISED MARKER TYPE	MARKER SPACING ( ) (m) ×	
					NORMAL SPACING (A)	ALTERNATIVE SPACING (B)
BB	1. REPLACES DIVIDING (SEPARATION) LINE IF RESTRICTED SIGHT DISTANCE FOR BOTH DIRECTIONS OR 2. APPROACH TO MEDIAN ISLAND OR 3. APPROACHES TO A PEDESTRIAN CROSSING	0.10; 0.10 0.10; 0.025 MIN 0.05 MAX; 0.025 MIN 0.05 MAX; ×	WHITE	YY / YY	12	12
C1	DEFINES EDGE OF THROUGH CARRIAGEWAY ADJACENT TO TURNING LANE, FREEWAY RAMP, BUS BAY AND START OR FINISH OF AUXILIARY LANE	1-3-1-3-1-3-1-3-1; 0.15; ×	WHITE	W	8	8

LINE TYPE	USE	DIMENSIONS (m) (FOR DIMENSIONS SHOWN × SEE MARKER SPACING COLUMN.)	COLOUR	RAISED MARKER TYPE	MARKER SPACING ( ) (m) ×	
					NORMAL SPACING (A)	ALTERNATIVE SPACING (B)
E1	LEFT HAND EDGE LINE ON GENERAL PURPOSE ROAD	× × ×; 0.025 MIN 0.05 MAX; 0.15	WHITE	R	24	12
E5	OUTLINE OF PAINTED MEDIAN	0.025 MIN 0.05 MAX; 0.15; 0.025 MIN 0.05 MAX	WHITE	YY / YY	12	12
TB	GIVE WAY LINE (USED WITH SIGNS)	0.6-0.6-0.6-0.6-0.6-0.6-0.6-0.6-0.6; 0.30	WHITE	NOT REQUIRED	-	-



NOTES:
- CONCEPT SIGNAGE AND LINEMAKRING ONLY. SIGNAGE AND LINEMARKING TO BE CONFIMED AT DETAILED DESIGN STAGE.
- EXISTING SPEED LIMIT SIGNAGE ON CATHERINE FIELDS ROAD 150M SOUTH OF THE SITE (ADJACENT TO LOT 1 DP776947) TO BE RELOCATED ALONG CATHERINE FIELDS ROAD 100M NORTH OF THE SITE (AS SHOWN ON THIS PAGE). EXISTING SPEED LIMIT LINE MARKING ANNOTATION ASSOCIATED WITH RELOCATED SIGNAGE TO BE REMOVED (BY COUNCIL APPROVED METHODS).
- ALL OTHER EXISTING SIGNAGE AND LINEMARKING TO BE RETAINED OUTSIDE OF WORK AREA (EXCEPT WHERE NOTED).
- GUIDE POSTS TO BE PROVIDED ALONG ALL PUBLIC ROADS WITHIN WORK AREA TO TFNSW STANDARDS.
- ALL PAVEMENT MARKINGS, CHEVRONS AND REFLECTORS TO BE IN ACCORDANCE WITH CAMDEN COUNCIL SPECIFICATIONS, TFNSW SPECIFICATION R141 AND R142, CURRENT TFNSW GUIDELINES, AUSTRALIAN STANDARDS AND TFNSW SUPPLEMENTS.
- SIGNPOSTING TO BE IN ACCORDANCE WITH TFNSW SPECIATION R143.
- CONTRACTOR SHALL CONFIRM EXISTING UTILITY AND SERVICE LOCATIONS PRIOR TO EXCAVATION OF SIGN POST SUPPORTS.
- ALL PAVEMENT MARKINGS ARE BE INSTALLED IN WHITE REFLECTIVE, THERMOPLASTIC PAINT.

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/04/2022**	**NN**	**CG/AVG**	**CG/AVG**	**TH**
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE 0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

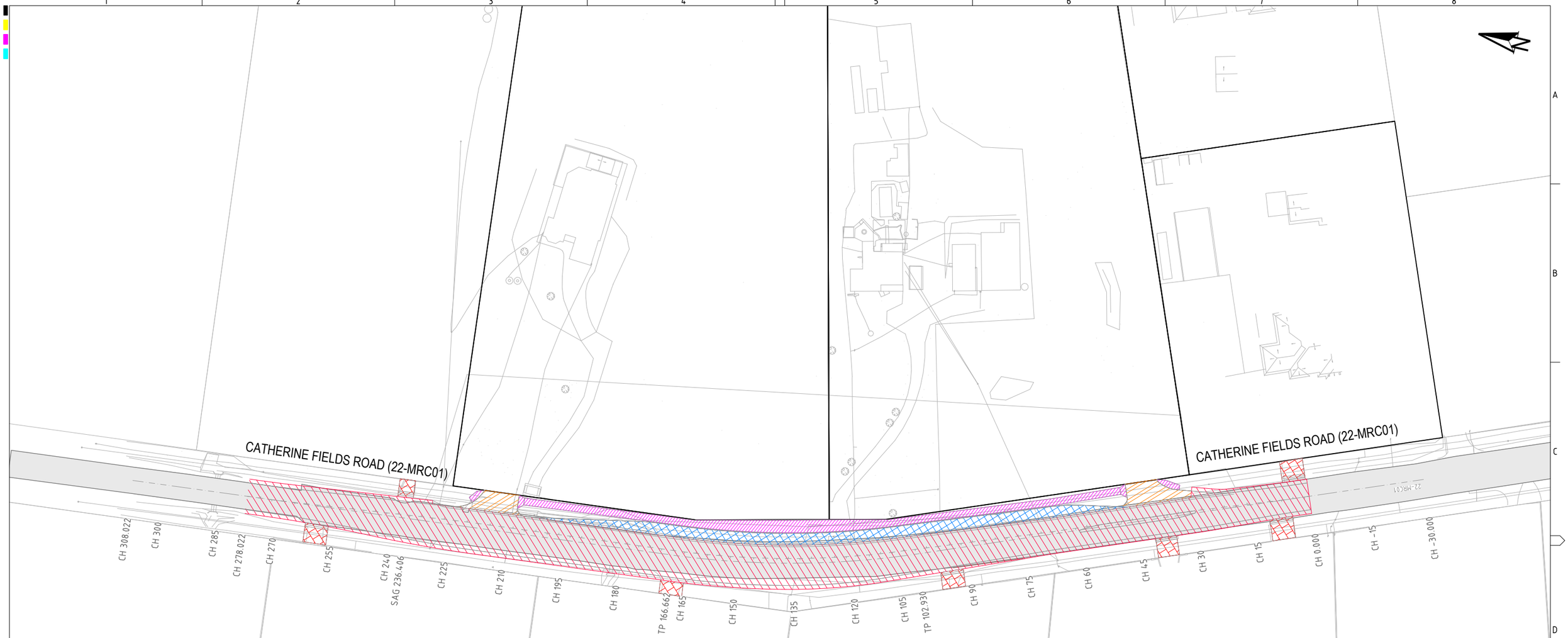
martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CONCEPT SIGNAGE & LINEMARKING PLAN
STAGE 1

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-G401	B

DRAWING ID: P2108320-PS01-R02-G401

PRINTED: ---- - USER: RKOLAHDOOZHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



PAVEMENT DETAILS

KEY	TYPE
	TYPE A - BUS BAY CONCRETE PAVEMENT
	TYPE B - SCHOOL ACCESSWAY DRIVEWAY PAVEMENT
	TYPE C - CATHERINE FIELDS ROAD PAVEMENT
	TYPE D - SEALED VEHICLE CROSSING
	TYPE E - CONCRETE FOOTPATH PAVEMENT

NOTES:
- CONCPET PAVEMENT LAYOUT. PAVEMENT DESIGN TO BE PROVIDED AT DETAILED DESIGN STAGE.
- ROAD SHOULDERS ARE TO BE SEALED.
- EXISTING PAVEMENT TO BE REMOVED WITHIN WORK AREA WHERE REQUIRED.

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT: MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE: MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

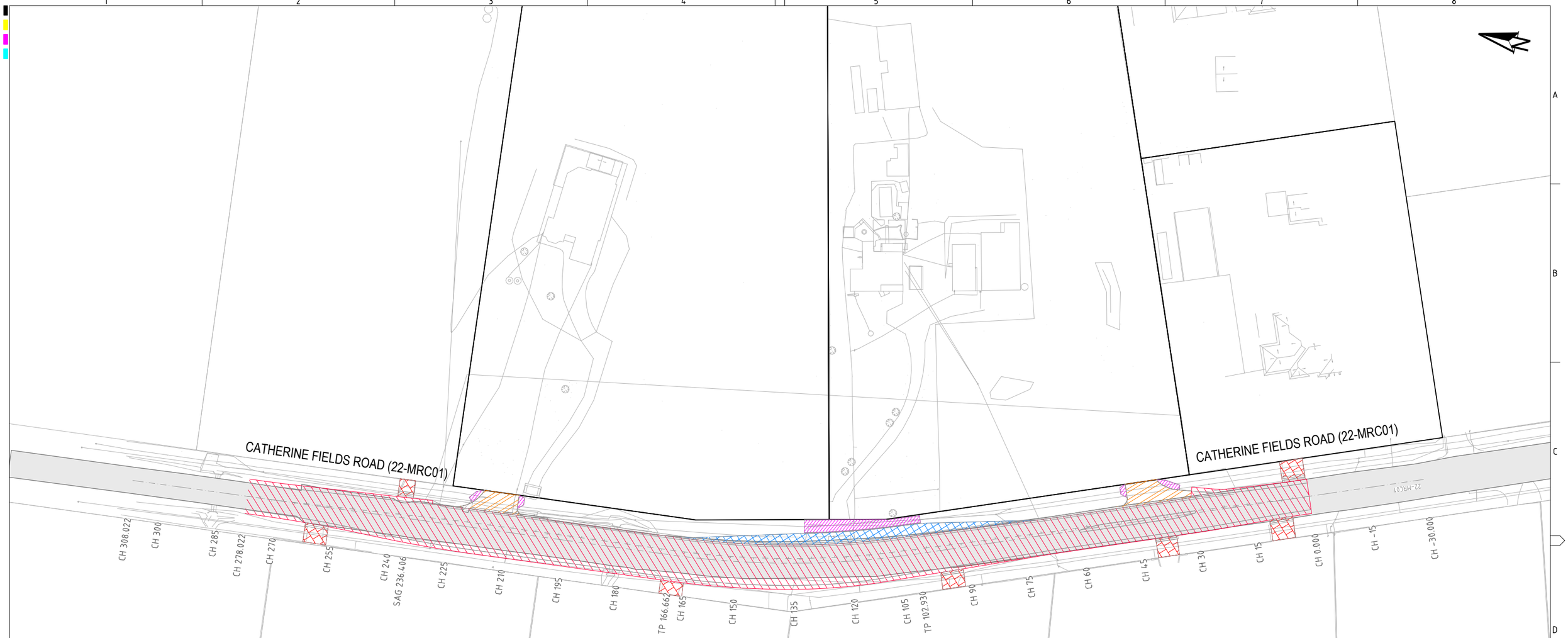
martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CONCEPT PAVEMENT DESIGN
ULTIMATE STAGE

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-G450	B

DRAWING ID: P2108320-PS01-R02-G450

PRINTED ---- - USER: RKOLAROVIZHA
A1 / A3 LANDSCAPE (ATLC_v02.0.01)



PAVEMENT DETAILS

KEY	TYPE
	TYPE A - BUS BAY CONCRETE PAVEMENT
	TYPE B - SCHOOL ACCESSWAY DRIVEWAY PAVEMENT
	TYPE C - CATHERINE FIELDS ROAD PAVEMENT
	TYPE D - SEALED VEHICLE CROSSING
	TYPE E - CONCRETE FOOTPATH PAVEMENT

NOTES:
- CONCPET PAVEMENT LAYOUT. PAVEMENT DESIGN TO BE PROVIDED AT DETAILED DESIGN STAGE.
- ROAD SHOULDERS ARE TO BE SEALED.
- EXISTING PAVEMENT TO BE REMOVED WITHIN WORK AREA WHERE REQUIRED.

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/04/2022	NN	CG/AVG	CG/AVG	TH
A	INITIAL RELEASE	17/03/2022	JS/NN	CG/AVG	CG/AVG	TH

SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT: MINARAH COLLEGE

PROJECT NAME/PLANSET TITLE
MINARAH COLLEGE - CATHERINE FIELD
ROADWORKS DESIGN
268 & 278 CATHERINE FIELDS ROAD, CATHERINE FIELDS, NSW

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
CONCEPT PAVEMENT DESIGN
STAGE 1

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108320	PS01	R02	PS01-G451	B

DRAWING ID: P2108320-PS01-R02-G451

PRINTED ---- - USER: RKOLAROVIZHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)