

PROJECT: MINTO CONCRETE RECYCLERS  
 PLANSET: SITE EARTHWORKS  
 CLIENT: CONCRETE RECYCLERS (GROUP) PTY LTD

DRAWING LIST		
DWG NO.	REV	DWG TITLE
GENERAL		
PS02-A000	S	COVER SHEET
PS02-A300	B	RIPARIAN FEATURES CONSTRAINTS PLAN
PS02-A400	K	SITE LAYOUT
PS02-A401	A	STOCKPILE LAYOUT
PS02-AZ00	G	SITE FENCING, FIRE FIGHTING AND SPRINKLERS PLAN
CONSTRUCTION MANAGEMENT WORKS		
PS02-B300	H	SEDIMENT AND EROSION CONTROL PLAN
PS02-B350	B	SEDIMENT AND EROSION CONTROL DETAILS
EARTHWORKS		
PS02-C100	H	EARTHWORKS PLAN - SHEET 01
PS02-C105	F	EARTHWORKS PLAN - SHEET 02
PS02-C600	H	EARTHWORKS CUT & FILL ANALYSIS PLAN
PS02-C700	F	EARTHWORKS SECTIONS - SHEET 01
PS02-C701	E	EARTHWORKS SECTIONS - SHEET 02
PS02-C705	A	EARTHWORKS SECTIONS - SHEET 03
ROADWORKS		
PS03-DZ10	F	SITE LOADING AND UNLOADING PLAN
DRAINAGE		
PS02-E100	P	DRAINAGE PLAN
PS02-E200	E	DRAINAGE DETAILS
PS02-E700	C	WATER QUALITY CATCHMENT PLAN
SITEWORKS		
PS02-F101	F	DRIVEWAY PLAN
PS02-F102	F	CARPARK PLAN
PS02-F103	E	DRIVEWAY CROSS SECTION
PS02-F200	I	RETAINING WALL PLAN
PS02-F201	F	RETAINING WALL DETAILS
PS02-F400	C	DRIVEWAY LONGITUDINAL AND TYPICAL CROSS SECTIONS
PAVEMENT AND SIGNAGE		
PS02-G100	G	PAVEMENT PLAN



LOCALITY PLAN  
N.T.S.

LGA: CAMPBELLTOWN

7 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE	GRID	DATUM	PROJECT MANAGER	CLIENT	DRAWING TITLE
S	MINOR AMENDMENTS	13/09/2021	NN	EZ/AW	SL	TH		---	---	TH	CONCRETE RECYCLERS (GROUP) PTY LTD	COVER SHEET
R	MINOR AMENDMENTS	01/09/2021	NN	EZ/AW	SL	TH						
Q	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH						
P	MINOR AMENDMENTS	19/02/2021	JS	JCF	TH	TH						
O	MINOR AMENDMENTS	10/02/2021	JS	AW	TH	TH						
N	STOCKPILE DETAILS ADDED	26/06/2020	RK	SA	SA	TH						
M	MINOR AMENDMENTS	16/06/20	GM/JS	SS	SL	TH						
L	MINOR AMENDMENTS	02/03/2020	LL	EZ	TH	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		PROJECT NAME/PLANSET TITLE <b>MINTO CONCRETE RECYCLERS          SITE EARTHWORKS</b> 7 MONTORE ROAD, MINTO NSW 2566 LOT 52 DP 618900		Consulting Engineers Environment Water Geotechnical Civil Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8787 Email: mail@martens.com.au Internet: www.martens.com.au		DRAWING TITLE COVER SHEET PROJECT NO. P1203464 PLANSET NO. PS02 RELEASE NO. R21 DRAWING NO. PS02-A000 REVISION S	
--	--	--	--	--	--	--	--

PRINTED: 13/09/2021 10:58:15 AM

AT 7 A3 LANDSCAPE (ATL\_C\_02.0.01)

DRAWING ID: P1203464-PS02-R21-A000



**KEY:**

- SITE BOUNDARY
- CONCRETE LINED CHANNEL
- 40 m WATERFRONT LAND BUFFER
- RIPARIAN ZONE

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF	JCF		

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

GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	m AHD	TH	CONCRETE RECYCLERS (GROUP) PTY LTD

**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

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS**  
 SITE EARTHWORKS  
 7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**martens**  
 & Associates Pty Ltd

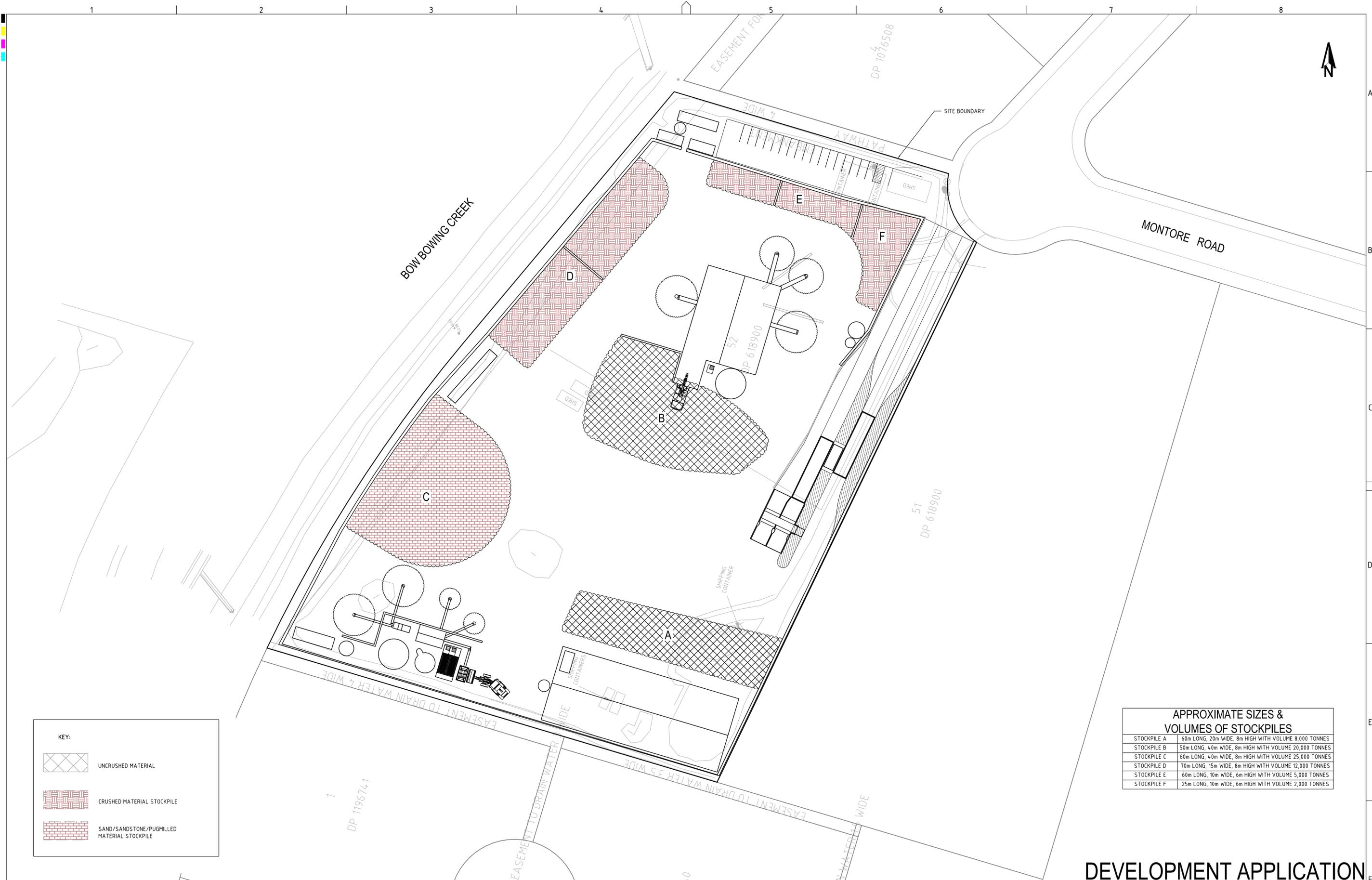
Consulting Engineers  
 Environment  
 Water  
 Geotechnical  
 Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8787  
 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
RIPARIAN FEATURES CONSTRAINTS PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-A300	B

# DEVELOPMENT APPLICATION





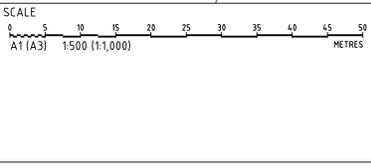
**KEY:**

	UNCRUSHED MATERIAL
	CRUSHED MATERIAL STOCKPILE
	SAND/SANDSTONE/PUGMILLED MATERIAL STOCKPILE

**APPROXIMATE SIZES & VOLUMES OF STOCKPILES**

Stockpile	Dimensions & Volume
STOCKPILE A	60m LONG, 20m WIDE, 8m HIGH WITH VOLUME 8,000 TONNES
STOCKPILE B	50m LONG, 40m WIDE, 8m HIGH WITH VOLUME 20,000 TONNES
STOCKPILE C	60m LONG, 40m WIDE, 8m HIGH WITH VOLUME 25,000 TONNES
STOCKPILE D	70m LONG, 15m WIDE, 8m HIGH WITH VOLUME 12,000 TONNES
STOCKPILE E	60m LONG, 10m WIDE, 6m HIGH WITH VOLUME 5,000 TONNES
STOCKPILE F	25m LONG, 10m WIDE, 6m HIGH WITH VOLUME 2,000 TONNES

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	13/09/2021	NN	AW/EZ	SL	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

**PROJECT NAME/PLANSET TITLE**  
 MINTO CONCRETE RECYCLERS  
 SITE EARTHWORKS  
 7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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 8787  
 Email: mail@martens.com.au Internet: www.martens.com.au

**DEVELOPMENT APPLICATION**

DRAWING TITLE: STOCKPILE LAYOUT

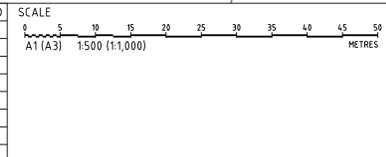
PROJECT NO. P1203464	PLANSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-A401	REVISION A
-------------------------	---------------------	--------------------	--------------------------	---------------



**KEY**

SITE BOUNDARY	
CONCRETE PANEL & HEBEL FENCE	
CHAIN WIRE FENCE	
VYR-60 SPRINKLER	
TORO TG101 OR EQUIVALENT SPRINKLER	
VYR-65 OR EQUIVALENT SPRINKLER (NOTE: ENDS OF CONVEYORS WILL ALSO HAVE MISTING SPRAYS)	

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
G	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
F	MINOR AMENDMENTS	10/02/2021	JS	AW	TH	TH
E	MINOR AMENDMENTS	02/03/2020	LL	JCF	TH	TH
D	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	JCF	TH	TH
C	AMENDMENTS AS PER CLIENT COMMENTS	20/09/2018	PB/JCF/LZ	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH



GRID DATUM PROJECT MANAGER CLIENT  
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

PROJECT NAME/PLANSET TITLE  
**CONCRETE RECYCLERS (GROUP) PTY LTD**  
**MINTO CONCRETE RECYCLERS**  
**SITE EARTHWORKS**  
7 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

**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 8787  
Email: mail@martens.com.au Internet: www.martens.com.au

**DEVELOPMENT APPLICATION**

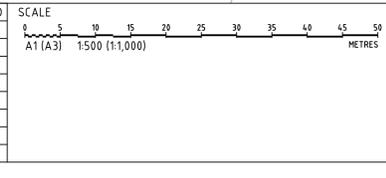
DRAWING TITLE <b>SITE FENCING, FIRE FIGHTING AND SPRINKLERS PLAN</b>				
PROJECT NO. <b>P1203464</b>	PLANSET NO. <b>PS02</b>	RELEASE NO. <b>R21</b>	DRAWING NO. <b>PS02-AZ00</b>	REVISION <b>G</b>



**KEY:**

INDICATIVE STOCKPILE	
GEOTEXTILE INLET FILTER	
SEDIMENT FENCE	
STABILISED SITE ACCESS	

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
H	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
G	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	CG/JCF	TH	TH
F	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
E	CLIENT REQUESTED AMENDMENTS	03/08/2018	PB	JCF	TH	TH
D	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
C	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	TH
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	TH



GRID: MGA  
 DATUM: mAHD  
 PROJECT MANAGER: TH  
 CLIENT: CONCRETE RECYCLERS (GROUP) PTY LTD

**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

PROJECT NAME/PLANSSET TITLE  
**MINTO CONCRETE RECYCLERS  
 SITE EARTHWORKS**  
 7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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

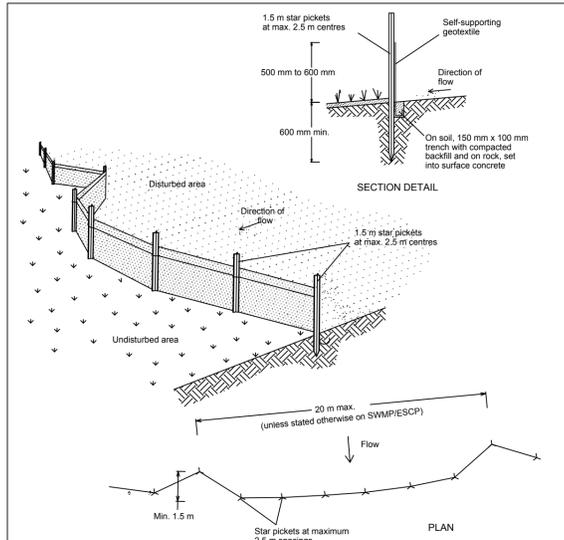
**DEVELOPMENT APPLICATION**

DRAWING TITLE SEDIMENT AND EROSION CONTROL PLAN				
PROJECT NO. P1203464	PLANSSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-B300	REVISION H

PRINTED: 15/08/2021 10:52:41 AM

A17 A3 LANDSCAPE (A1LC\_02.0.01)

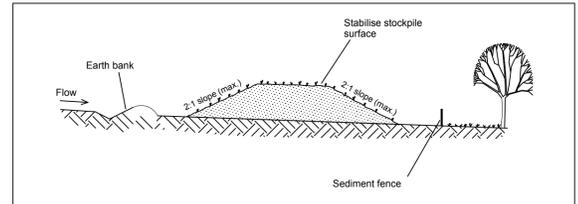
DRAWING ID: P1203464-PS02-R21-B300



**Construction Notes**

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

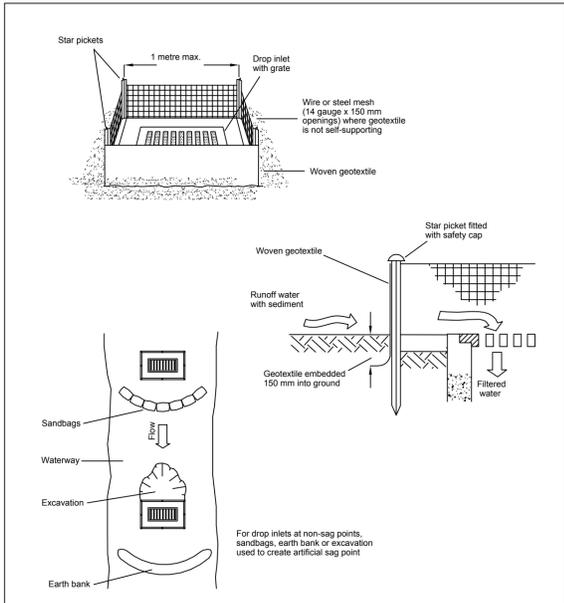
**SEDIMENT FENCE** **SD 6-8**



**Construction Notes**

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

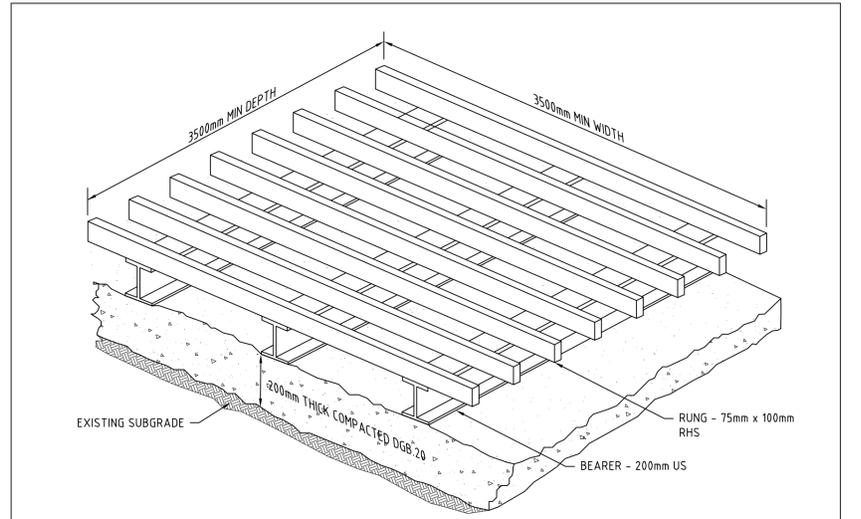
**STOCKPILES** **SD 4-1**



**Construction Notes**

1. 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**

A correctly designed and installed shaker pad will assist in preventing sediment transfer from a site. Any stabilised access point (SAP) can be designed with a shaker pad (compulsory in Type II SAP's)

Shaker pads can be designed and constructed to enable re-use on future projects.

The shaker pad:

1. Must be designed and certified by a practicing structural engineer. The certified design should be submitted with the relevant application.
2. Can be constructed from any suitable material.
3. Must be located on a suitably prepared and compacted sub-grade/base material.
4. Must be situated such that the rungs of the shaker pad are level with the adjoining natural surface.
5. Must be a minimum of 3.5 m in length.
6. Must be a minimum of 3.5 m in width.
7. Must have clear spacing between rungs of 200 - 250 mm.
8. Rungs must have a maximum width (bearing area) of 75 mm.
9. Must have a minimum clear depth of 300 mm ie. from the top of the rung to the finished sub-grade/base level.
10. Must be provided with suitable barriers at the sides to ensure that all tyres of vehicles leaving the site traverse the device.

**SHAKER PAD (CATTLE GRID)** **SD 6-12**

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE
B	CLIENT REQUESTED AMENDMENTS	03/08/2018	PB	JCF	TH	TH	
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	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**  
**CONCRETE RECYCLERS (GROUP) PTY LTD**

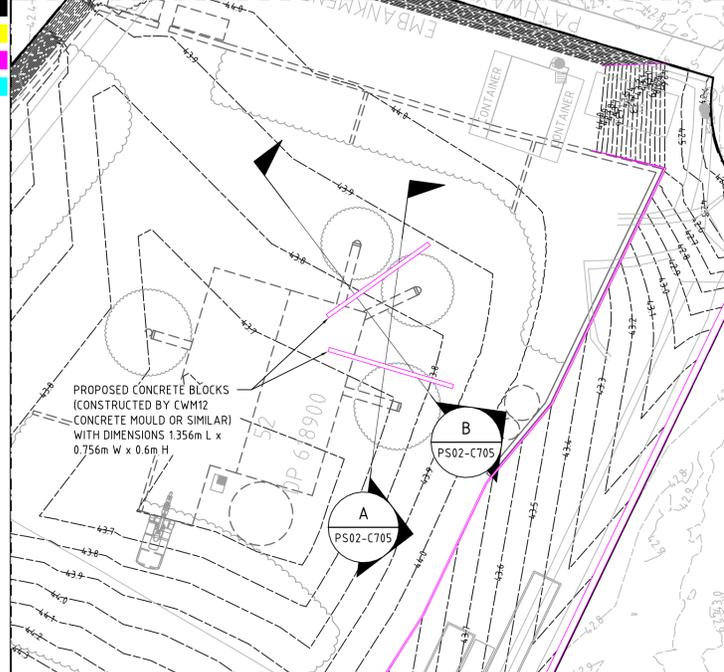
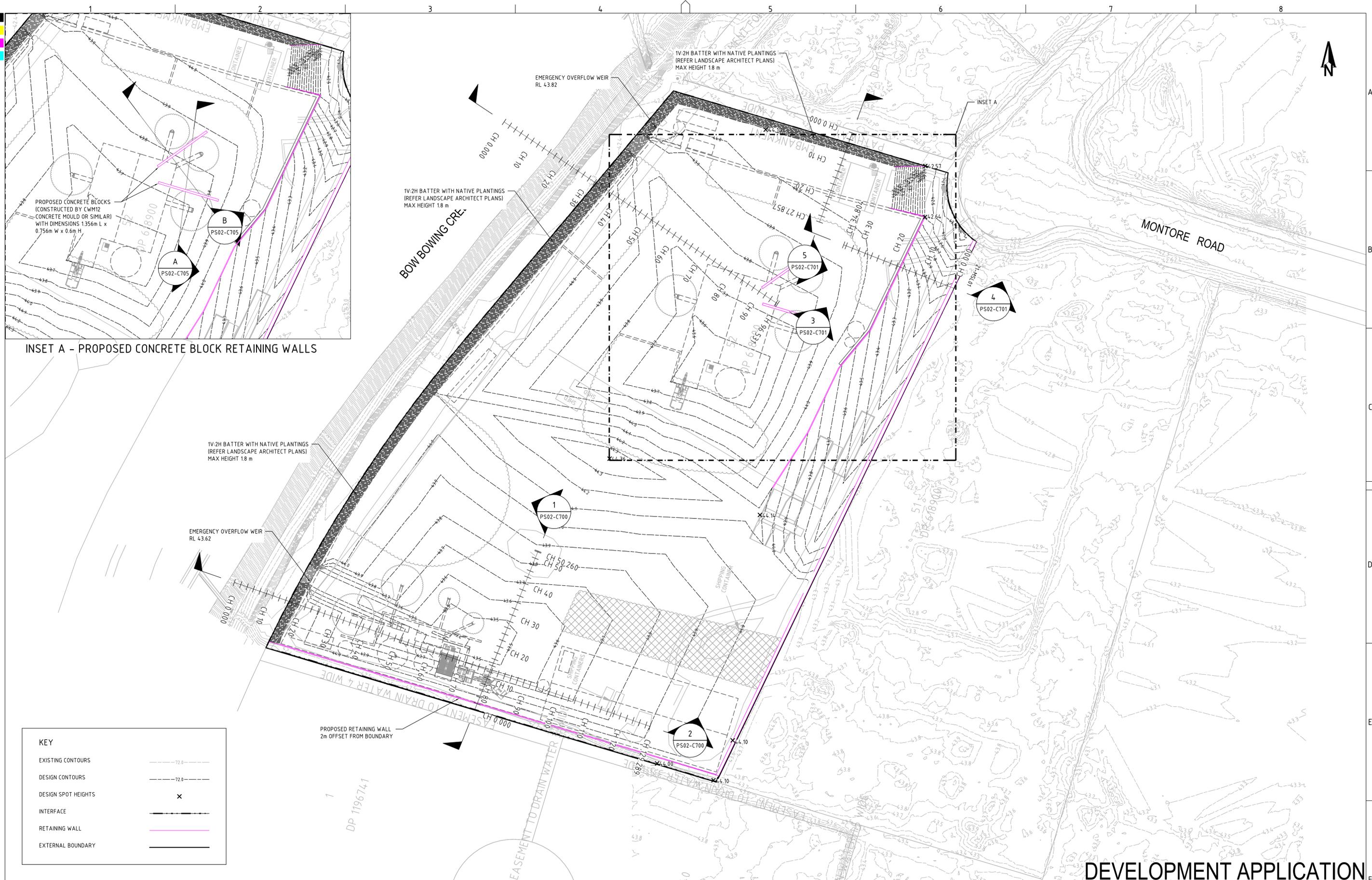
**PROJECT NAME/PLANSET TITLE**  
**MINTO CONCRETE RECYCLERS**  
**SITE EARTHWORKS**  
 7 MONTMORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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 AND EROSION CONTROL DETAILS				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-B350	B

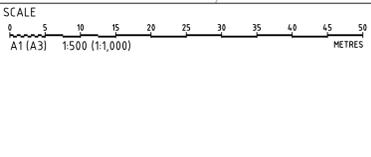
**DEVELOPMENT APPLICATION**



INSET A - PROPOSED CONCRETE BLOCK RETAINING WALLS

KEY	
EXISTING CONTOURS	--- 72.0 ---
DESIGN CONTOURS	--- 72.0 ---
DESIGN SPOT HEIGHTS	x
INTERFACE	---
RETAINING WALL	---
EXTERNAL BOUNDARY	---

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
F	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
E	MINOR AMENDMENTS	10/02/2021	JS	AW	TH	TH
D	STOCKPILE DETAILS ADDED	26/06/2020	RK	SA	SA	TH
C	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	CG/JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
A	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH



GRID DATUM PROJECT MANAGER CLIENT  
 TH TH  
 CONCRETE RECYCLERS (GROUP) PTY LTD

PROJECT NAME/PLANSSET TITLE  
 MINTO CONCRETE RECYCLERS  
 SITE EARTHWORKS  
 7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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 8787  
 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
EARTHWORKS PLAN SHEET 02				
PROJECT NO.	PLANSSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-C105	F

DEVELOPMENT APPLICATION



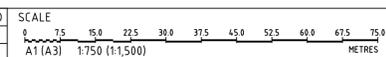
EXISTING SITE CONTOURS



PROPOSED SITE CONTOURS

KEY	
EXISTING CONTOURS	--- 72.0 ---
DESIGN CONTOURS	--- 72.0 ---
INTERFACE	— — — — —
RETAINING WALL	— — — — —
EXTERNAL BOUNDARY	— — — — —
OVERLAND FLOW	→

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
H	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
G	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	CG/JCF	TH	TH
F	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
E	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
D	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
C	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	TH
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	TH



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.  
 (C) Copyright Martens & Associates Pty Ltd

CLIENT
CONCRETE RECYCLERS (GROUP) PTY LTD

PROJECT NAME/PLANSET TITLE
MINTO CONCRETE RECYCLERS SITE EARTHWORKS

7 MONTROE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900



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

# DEVELOPMENT APPLICATION

DRAWING TITLE				
EARTHWORKS PLAN SHEET 01				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-C100	H

DRAWING ID: P1203464-PS02-R21-C100



**CUT FILL ANALYSIS**

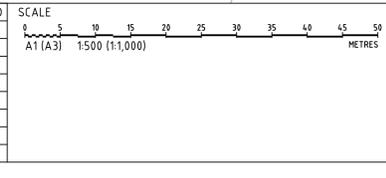
LESS THAN -3.000m		
-3.000 to -2.250 m	Red	
-2.250 to -1.500 m	Orange	
-1.500 to -0.750 m	Yellow	
-0.750 to -0.150 m	Light Green	
-0.150 to 0.150 m	White	
0.150 to 0.750 m	Light Green	
0.750 to 1.500 m	Dark Green	
1.500 to 2.250 m	Blue	
2.250 to 3.000 m	Dark Blue	
GREATER THAN 3.000m		

**EARTHWORKS SUMMARY**

	CUT	FILL
EARTHWORKS VOLUME (m <sup>3</sup> )	-1298	7810
EARTHWORKS BALANCE (m <sup>3</sup> )	-	6512
IMPORTED PAVEMENT (m <sup>2</sup> )	-	6432
TOTAL BALANCE (m <sup>3</sup> )	-	80

**NOTES:**  
 - EARTHWORKS VOLUMES MEASURED FROM EXISTING LEVELS TO DESIGN SURFACE LEVELS.  
 - APPROX. 6432 M<sup>3</sup> OF HARDSTAND PAVEMENT AT 0.3 M DEPTH REQUIRED (214.40 X 0.3).

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
H	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
G	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	CG/JCF	TH	TH
F	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
E	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
D	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
C	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	TH
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	TH



GRID ---  
 DATUM mAHD  
 PROJECT MANAGER TH  
 CLIENT CONCRETE RECYCLERS (GROUP) PTY LTD

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

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
 SITE EARTHWORKS**  
 7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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

**DEVELOPMENT APPLICATION**

DRAWING TITLE  
**EARTHWORKS CUT & FILL ANALYSIS PLAN**

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-C600	H

DRAWING ID: P1203464-PS02-R21-C600

PRINTED: EARTHWORKS

PROPOSED RETAINING WALL  
2m OFFSET FROM BOUNDARY

DATUM RL 28.000

DESIGN SURFACE LEVELS	EXISTING SURFACE LEVELS	CUT / FILL DEPTH	CHAINAGE
42.834	42.834	0.000	0.000
42.707	42.707	0.000	2.000
44.015	43.192	0.823	4.000
43.92	43.338	0.582	6.000
43.895	43.395	0.430	8.000
43.73	43.411	0.319	10.000
43.635	43.402	0.234	12.000
43.54	43.392	0.148	14.000
43.481	43.383	0.098	16.000
43.48	43.373	0.107	18.000
43.478	43.365	0.113	20.000
43.476	43.378	0.098	22.000
43.475	43.395	0.080	24.000
43.491	43.472	0.079	26.000
43.506	43.429	0.077	28.000
43.528	43.446	0.082	30.000
43.562	43.464	0.098	32.000
43.595	43.471	0.124	34.000
43.629	43.469	0.159	36.000
43.662	43.470	0.192	38.000
43.695	43.471	0.224	40.000
43.729	43.473	0.256	42.000
43.762	44.298	-0.535	44.000
43.796	45.847	-2.051	46.000
43.829	47.348	-3.519	48.000
43.863	47.080	-3.217	50.000
43.867	46.921	-3.053	50.260

SECTION 1

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

DATUM RL 26.000

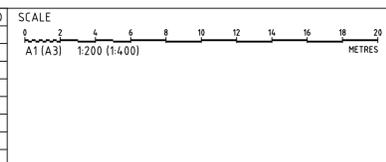
DESIGN SURFACE LEVELS	EXISTING SURFACE LEVELS	CUT / FILL DEPTH	CHAINAGE
40.224	40.224	0.000	0.000
40.668	40.668	0.000	2.000
41.170	41.170	0.000	4.000
41.522	41.522	0.000	6.000
41.713	41.713	0.000	8.000
42.119	42.119	0.000	10.000
42.609	42.609	0.000	12.000
42.629	42.629	0.000	14.000
42.680	42.680	0.000	16.000
43.17	42.713	0.457	18.000
44.098	42.653	1.445	20.000
44.066	42.822	1.245	22.000
44.035	43.369	0.666	24.000
44.004	43.348	0.656	26.000
43.073	43.342	0.631	28.000
43.941	43.336	0.605	30.000
43.91	43.330	0.580	32.000
43.878	43.325	0.553	34.000
43.847	43.329	0.518	36.000
43.815	43.332	0.483	38.000
43.783	43.336	0.447	40.000
43.752	43.347	0.405	42.000
43.72	43.335	0.385	44.000
43.689	43.323	0.366	46.000
43.657	43.311	0.346	48.000
43.626	43.301	0.325	50.000
43.594	43.301	0.293	52.000
43.567	43.303	0.263	54.000
43.571	43.311	0.260	56.000
43.575	43.319	0.256	58.000
43.579	43.327	0.252	60.000
43.583	43.335	0.249	62.000
43.587	43.344	0.243	64.000
43.591	43.355	0.236	66.000
43.596	43.367	0.229	68.000
43.6	43.379	0.221	70.000
43.604	43.391	0.213	72.000
43.608	43.403	0.205	74.000
43.612	43.403	0.209	76.000
43.616	43.400	0.216	78.000
43.62	43.400	0.220	80.000
43.624	43.400	0.225	82.000
43.628	43.399	0.229	84.000
43.632	43.399	0.234	86.000
43.636	43.399	0.238	88.000
43.64	43.400	0.240	90.000
43.645	43.402	0.243	92.000
43.649	43.417	0.232	94.000
43.653	43.435	0.218	96.000
43.657	43.453	0.204	98.000
43.661	43.473	0.188	100.000
43.671	43.492	0.179	102.000
43.688	43.512	0.176	104.000
43.705	43.532	0.173	106.000
43.721	43.552	0.170	108.000
43.728	43.540	0.198	110.000
43.755	43.527	0.228	112.000
43.772	43.532	0.240	114.000
43.789	43.533	0.256	116.000
43.806	43.566	0.239	118.000
43.823	43.552	0.271	120.000
43.839	43.511	0.328	122.000
43.856	43.491	0.365	124.000
43.873	44.308	-0.435	126.000
43.89	43.776	0.164	128.000
43.901	43.336	0.565	129.289

SECTION 2

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

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
F	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
E	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	CG/JCF	TH	TH
D	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
C	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	



GRID: MGA  
DATUM: mAHD  
PROJECT MANAGER: TH  
CLIENT: CONCRETE RECYCLERS (GROUP) PTY LTD  
PROJECT NAME/PLANSSET TITLE: MINTO CONCRETE RECYCLERS SITE EARTHWORKS  
7 MONTROE ROAD, MINTO NSW 2566  
LOT 52 DP 618900  
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

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



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 SECTIONS SHEET 01				
PROJECT NO.	PLANSSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-C700	F

BOW BOWING CHANNEL  
(APPROX. LOCATION)

ASSUMED GROUNDWATER  
TABLE

DATUM RL 25.000

DESIGN SURFACE LEVELS	EXISTING SURFACE LEVELS	CUT / FILL DEPTH	CHAINAGE
	39.764	0.000	0.000
	39.771	0.000	2.000
	39.572	0.000	4.000
	39.008	0.000	6.000
	39.594	0.000	8.000
	39.719	0.000	10.000
	39.674	0.000	12.000
	39.615	0.000	14.000
	39.715	0.000	16.000
	39.984	0.000	18.000
	40.545	0.000	20.000
	41.000	0.000	22.000
	41.310	0.000	24.000
	42.034	0.000	26.000
	42.228	0.000	28.000
	42.272	0.000	30.000
	42.319	0.000	32.000
	42.372	0.727	34.000
	42.579	1514	36.000
	43.196	0.843	38.000
	43.797	0.208	40.000
	44.031	-0.060	42.000
	44.039	-0.102	44.000
	44.047	-0.144	46.000
	44.057	-0.188	48.000
	44.061	-0.226	50.000
	44.059	-0.258	52.000
	44.067	-0.301	54.000
	44.079	-0.346	56.000
	44.090	-0.372	58.000
	44.101	-0.392	60.000
	44.113	-0.402	62.000
	44.107	-0.392	64.000
	44.096	-0.378	66.000
	44.084	-0.363	68.000
	44.064	-0.339	70.000
	44.038	-0.310	72.000
	44.012	-0.282	74.000
	43.987	-0.253	76.000
	43.961	-0.224	78.000
	43.926	-0.186	80.000
	43.909	-0.171	82.000
	43.903	-0.167	84.000
	43.888	-0.154	86.000
	43.873	-0.141	88.000
	43.858	-0.128	90.000
	43.843	-0.115	92.000
	43.833	-0.107	94.000
	43.834	-0.111	96.000
	43.835	-0.112	96.531

SECTION 3 - CONCEPTUAL GROUNDWATER MODEL

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

DATUM RL 28.000

DESIGN SURFACE LEVELS	EXISTING SURFACE LEVELS	CUT / FILL DEPTH	CHAINAGE
	42.706	0.000	0.000
	42.741	0.171	2.000
	42.799	0.071	4.000
	42.794	0.113	6.000
	42.810	0.161	8.000
	42.819	0.216	10.000
	42.835	0.264	12.000
	42.890	0.272	14.000
	42.959	0.267	16.000
	43.049	1.041	18.000
	43.176	0.894	20.000
	43.292	0.757	22.000
	43.370	0.657	24.000
	43.448	0.556	26.000
	43.525	0.454	28.000
	43.588	0.365	30.000
	43.612	0.315	32.000
	43.634	0.265	34.000
	43.639	0.248	34.804

SECTION 4

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

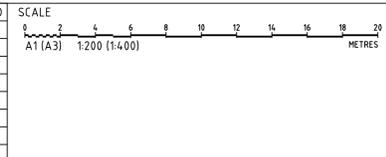
DATUM RL 28.000

DESIGN SURFACE LEVELS	EXISTING SURFACE LEVELS	CUT / FILL DEPTH	CHAINAGE
	42.587	0.000	0.000
	42.582	0.000	2.000
	42.572	0.427	4.000
	43.482	0.515	6.000
	43.552	0.534	8.000
	43.625	0.444	10.000
	43.693	0.359	12.000
	43.760	0.272	14.000
	43.785	0.227	16.000
	43.790	0.200	18.000
	43.795	0.173	20.000
	43.791	0.153	22.000
	43.784	0.137	24.000
	43.776	0.122	26.000
	43.767	0.113	27.857

SECTION 5

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

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
E	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	CG/JCF	TH	TH
D	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF	TH	TH
C	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	TH
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	TH



GRID --- DATUM MAHD PROJECT MANAGER TH CLIENT CONCRETE RECYCLERS (GROUP) PTY LTD  
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

PROJECT NAME/PLANSET TITLE  
MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS  
7 MONTGOMERY ROAD, MINTO NSW 2566  
LOT 52 DP 618900

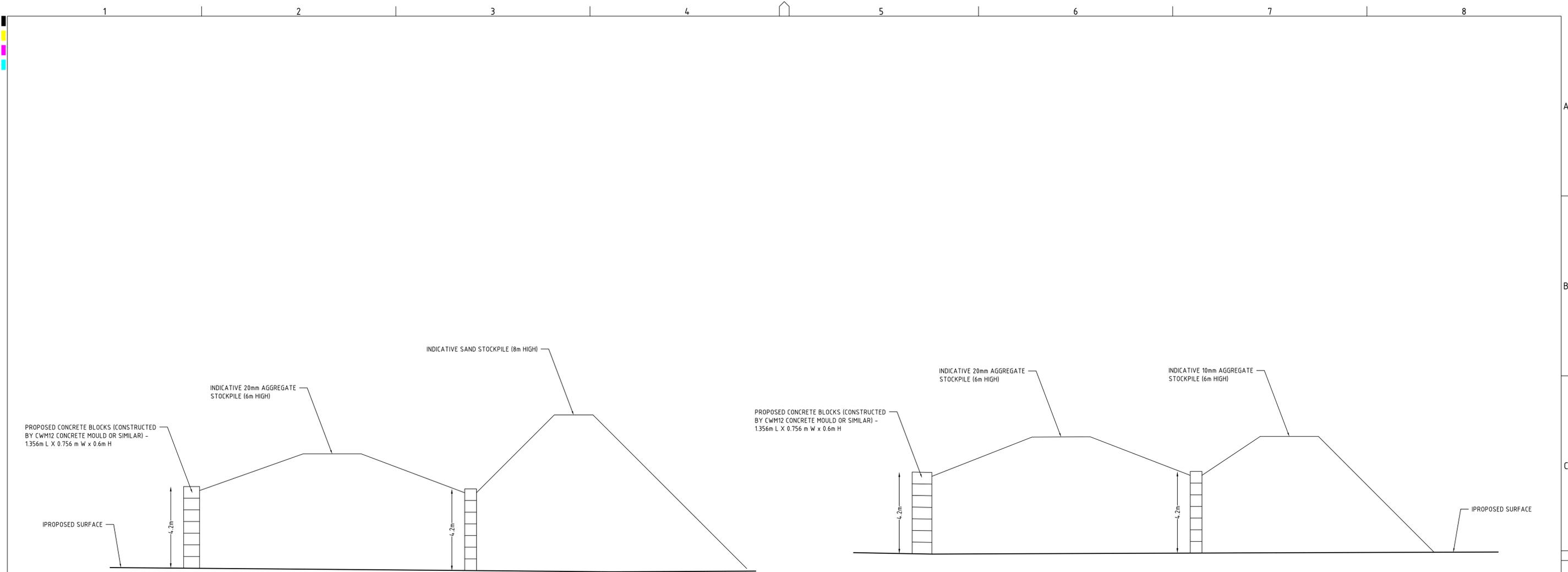
Consulting Engineers  
**martens & Associates Pty Ltd**  
Environment Water Geotechnical Civil  
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767  
Email: mail@martens.com.au Internet: www.martens.com.au

**DEVELOPMENT APPLICATION**

DRAWING TITLE  
EARTHWORKS SECTIONS  
SHEET 02

PROJECT NO. P1203464	PLANSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-C701	REVISION E
-------------------------	---------------------	--------------------	--------------------------	---------------

DRAWING ID: P1203464-PS02-R21-C701



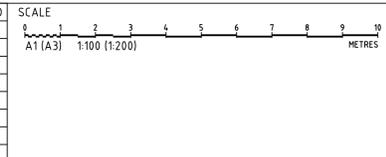
**SECTION A**  
SCALE: HORIZONTAL - 1:100  
VERTICAL - 1:100

**SECTION B**  
SCALE: HORIZONTAL - 1:100  
VERTICAL - 1:100

**NOTES:**  
CONCRETE BLOCK RETAINING WALLS SHALL BE DESIGNED AND CERTIFIED BY STRUCTURAL ENGINEER.

**DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	STOCKPILE DETAILS ADDED	26/06/2020	RK	SA	SA	TH



GRID ---  
DATUM mAHD  
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  
**CONCRETE RECYCLERS (GROUP) PTY LTD**

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS**

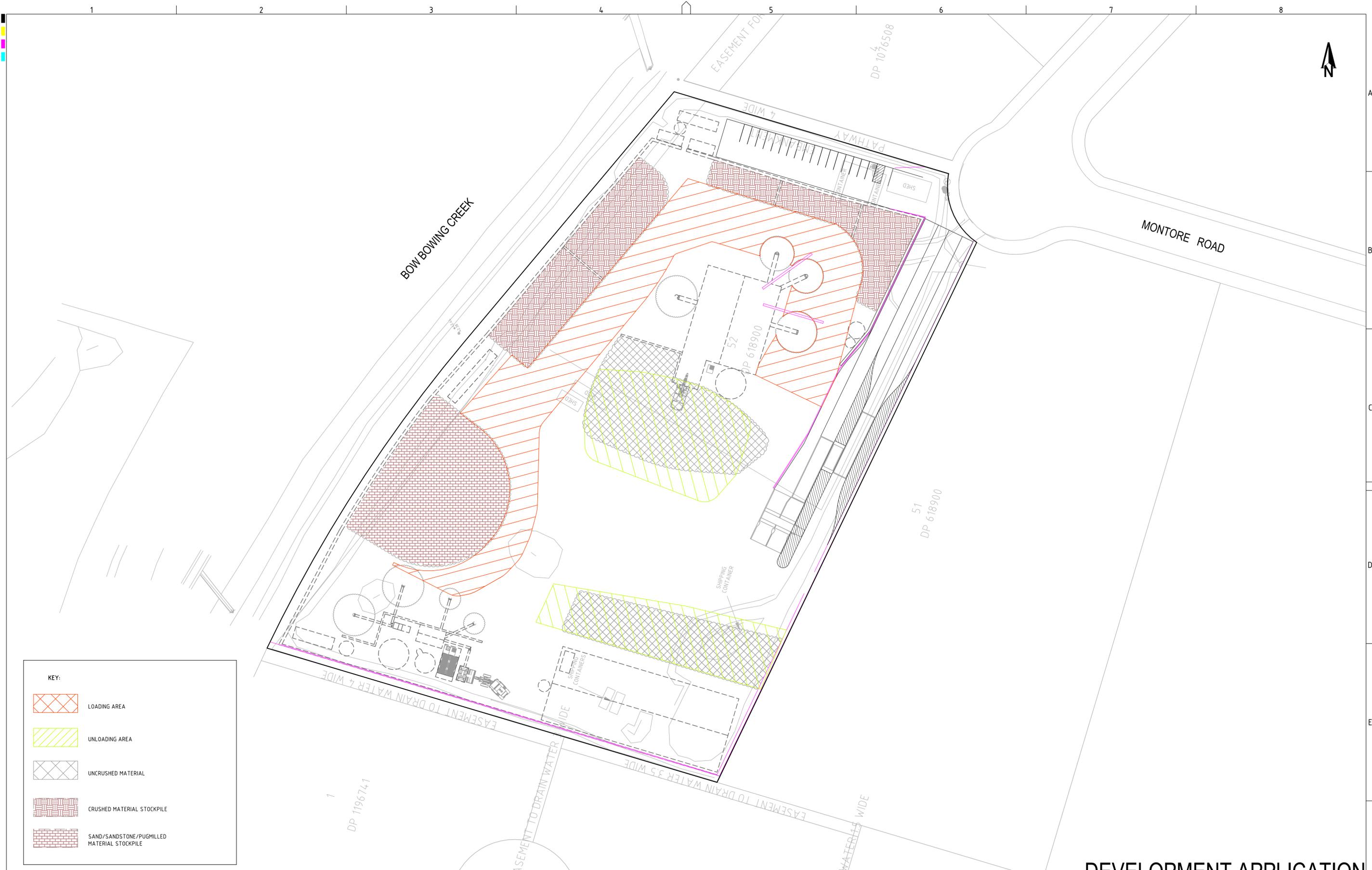
7 MONTMORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

**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

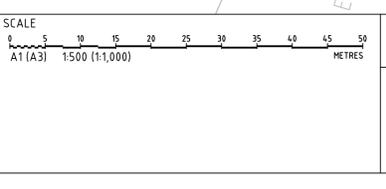
DRAWING TITLE <b>EARTHWORKS SECTIONS SHEET 03</b>				
PROJECT NO. <b>P1203464</b>	PLANSET NO. <b>PS02</b>	RELEASE NO. <b>R21</b>	DRAWING NO. <b>PS02-C705</b>	REVISION <b>A</b>



**KEY:**

	LOADING AREA
	UNLOADING AREA
	UNCRUSHED MATERIAL
	CRUSHED MATERIAL STOCKPILE
	SAND/SANDSTONE/PUGMILLED MATERIAL STOCKPILE

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
F	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
E	MINOR AMENDMENTS	02/03/2020	LL	JCF	TH	TH
D	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	JCF	TH	TH
C	AMENDMENTS AS PER CLIENT COMMENTS	20/09/2018	PB/JCF/LZ	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
A	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH



GRID MGA DATUM mAHD PROJECT MANAGER TH CLIENT CONCRETE RECYCLERS (GROUP) PTY LTD

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

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS**

7 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

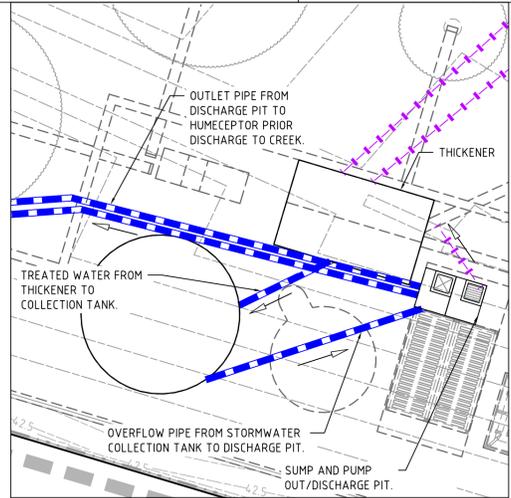
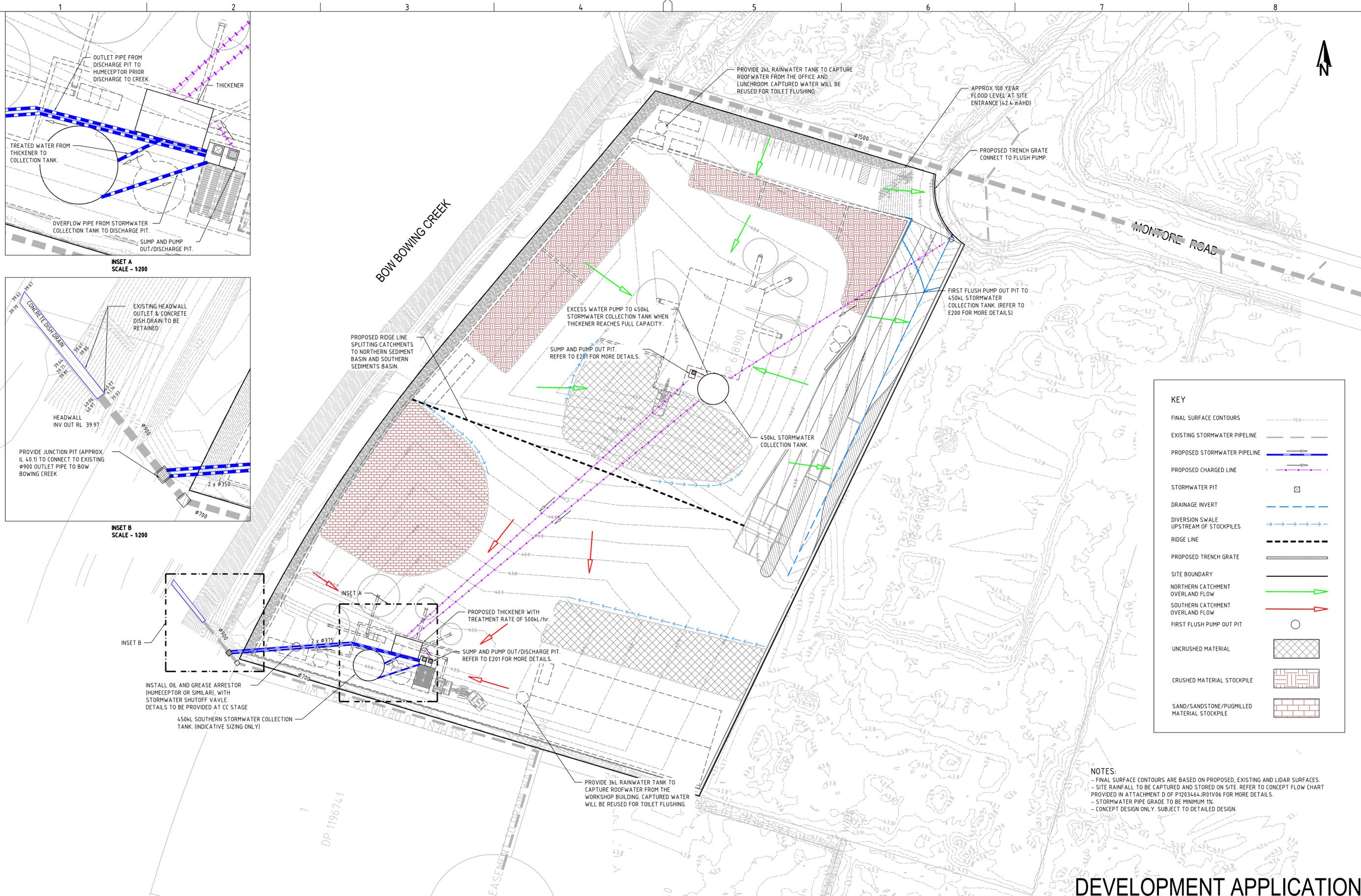
**martens**  
& Associates Pty Ltd

Consulting Engineers  
Environment  
Water  
Geotechnical  
Civil

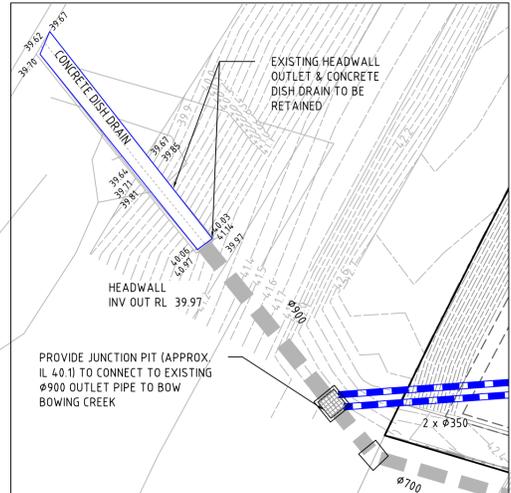
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8787  
Email: mail@martens.com.au Internet: www.martens.com.au

**DEVELOPMENT APPLICATION**

DRAWING TITLE SITE LOADING & UNLOADING PLAN				
PROJECT NO. P1203464	PLANSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-DZ10	REVISION F



INSET A  
SCALE - 1:200



INSET B  
SCALE - 1:200

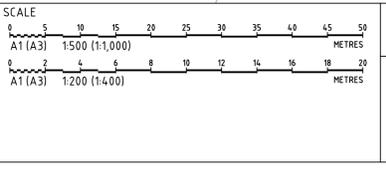
**KEY**

FINAL SURFACE CONTOURS	--- 72.4 ---
EXISTING STORMWATER PIPELINE	---
PROPOSED STORMWATER PIPELINE	---
PROPOSED CHARGED LINE	---
STORMWATER PIT	□
DRAINAGE INVERT	---
DIVERSION SWALE UPSTREAM OF STOCKPILES	---
RIDGE LINE	---
PROPOSED TRENCH GRATE	---
SITE BOUNDARY	---
NORTHERN CATCHMENT OVERLAND FLOW	---
SOUTHERN CATCHMENT OVERLAND FLOW	---
FIRST FLUSH PUMP OUT PIT	○
UNCRUSHED MATERIAL	▨
CRUSHED MATERIAL STOCKPILE	▩
SAND/SANDSTONE/PUGMILLED MATERIAL STOCKPILE	▧

**NOTES:**  
 - FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.  
 - SITE RAINFALL TO BE CAPTURED AND STORED ON SITE. REFER TO CONCEPT FLOW CHART PROVIDED IN ATTACHMENT D OF P1203464-R01V06 FOR MORE DETAILS.  
 - STORMWATER PIPE GRADE TO BE MINIMUM 1%.  
 - CONCEPT DESIGN ONLY. SUBJECT TO DETAILED DESIGN.

# DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
P	MINOR AMENDMENTS	01/09/2021	NN	EZ	SL	TH
O	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
N	MINOR AMENDMENTS	20/05/2021	LL	EZ	SL	TH
M	MINOR AMENDMENTS	19/02/2021	JS	JCF	TH	TH
L	MINOR AMENDMENTS	10/02/2021	LL	AW	TH	TH
K	MINOR AMENDMENTS	16/06/20	GM/JS	SS	SL	TH
J	MINOR AMENDMENTS	02/03/2020	LL	EZ	TH	TH
I	MINOR AMENDMENTS	12/10/2018	RK	EZ	TH	TH

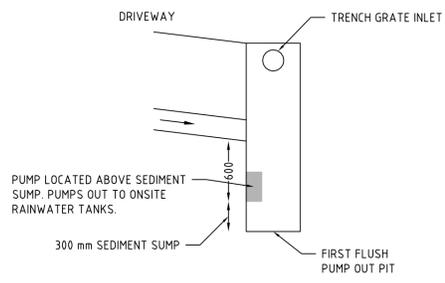


GRID  
MGA  
DATUM  
mAHD  
PROJECT MANAGER  
TH  
CLIENT  
CONCRETE RECYCLERS (GROUP) PTY LTD  
PROJECT NAME/PLANSET TITLE  
MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS  
7 MONTFORD ROAD, MINTO NSW 2566  
LOT 52 DP 618900

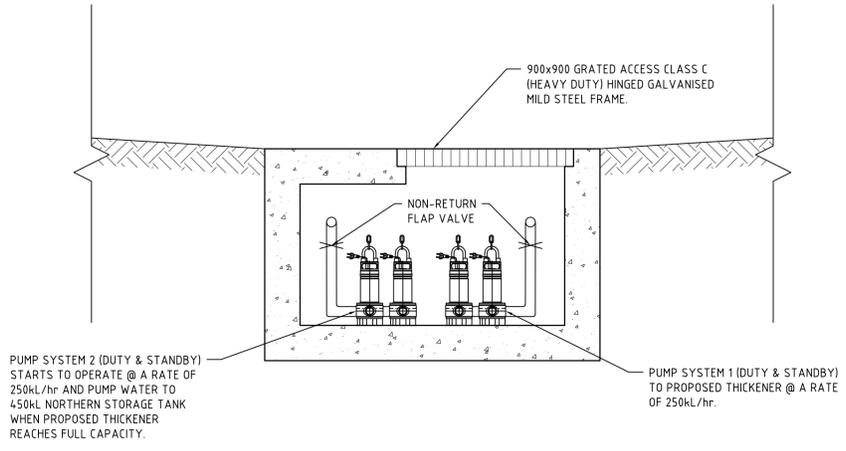
DISCLAIMER & COPYRIGHT  
 This plan must not be used for construction unless signed as approved by principal certifying authority.  
 All measurements in millimetres unless otherwise specified.  
 This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates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

**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

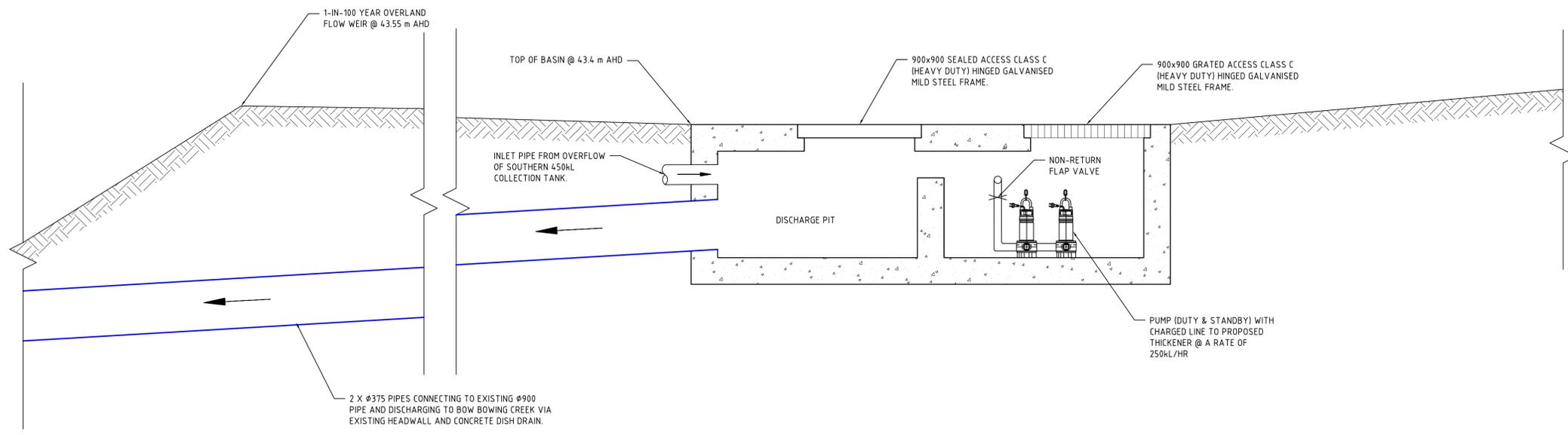
DRAWING TITLE DRAINAGE PLAN				
PROJECT NO. P1203464	PLANSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-E100	REVISION P



**DETAIL: DRIVEWAY FIRST FLUSH PUMP OUT PIT**  
NOT TO SCALE



**SECTION 01 - NORTHERN SUMP AND PUMP OUT PIT CONCEPT DESIGN**  
NOT TO SCALE



**SECTION 02 - SOUTHERN SUMP AND PUMP OUT/DISCHARGE PIT CONCEPT DESIGN**  
NOT TO SCALE

**NOTES:**  
- CONCEPT DESIGN ONLY. SUBJECT TO DETAILED DESIGN.  
- PUMP TO BE INSTALLED & SPECIFIED TO MANUFACTURERS DETAILS DESIGNED BY OTHERS.

**DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE
E	MINOR AMENDMENTS	20/05/2021	LL	EZ/JCF	TH	TH	
D	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	EZ/JCF	TH	TH	
C	AMENDMENTS AS PER CLIENT COMMENTS	20/09/2018	PB/JCF/LZ	JCF	TH		
B	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	EZ/JCF			
A	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH	

GRID DATUM PROJECT MANAGER CLIENT  
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  
**CONCRETE RECYCLERS (GROUP) PTY LTD**

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS**

7 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

**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 DETAILS				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-E200	E

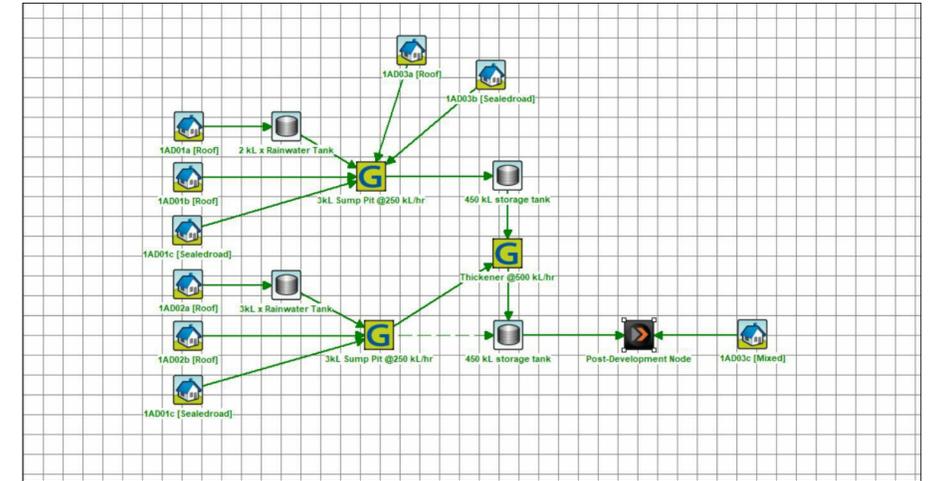


MUSIC CATCHMENT PLAN

SCALE: NOT TO SCALE

MUSIC CATCHMENTS (P12034641MUS02V03)

KEY	DESCRIPTION	MUSIC NODE ID	AREA (ha)	IMPERVIOUS %	MUSIC NODE REFERENCE
<b>NORTHERN CATCHMENT</b>					
	ROOF TO 2kL RWT	1AD01a	0.008	100	NSW MUSIC MODELLING GUIDELINES 2015
	ROOF BYPASS 2kL RWT	1AD01b	0.073	100	NSW MUSIC MODELLING GUIDELINES 2015
	SEALED ROAD TO SEDIMENT BASIN	1AD01c	0.887	100	NSW MUSIC MODELLING GUIDELINES 2015
<b>SOUTHERN CATCHMENT</b>					
	ROOF TO 3kL RWT	1AD02a	0.122	100	NSW MUSIC MODELLING GUIDELINES 2015
	ROOF BYPASS 3kL RWT	1AD02b	0.008	100	NSW MUSIC MODELLING GUIDELINES 2015
	SEALED ROAD TO SEDIMENT BASIN	1AD02c	0.888	100	NSW MUSIC MODELLING GUIDELINES 2015
	ROOF	1AD03a	0.002	100	NSW MUSIC MODELLING GUIDELINES 2015
	SEALED ROAD	1AD03b	0.215	100	NSW MUSIC MODELLING GUIDELINES 2015
	BUFFER	1AD03c	0.147	0	NSW MUSIC MODELLING GUIDELINES 2015
<b>TOTAL SITE</b>					
		TOTAL - OVERALL	2.350		= 100 % OF OVERALL AREA
		TOTAL - IMPERVIOUS	2.203		= 94 % OF OVERALL AREA
		TOTAL - PERVIOUS	0.147		= 6 % OF OVERALL AREA
<b>NOTES:</b>					
1. INTERNAL REUSE FOR TOILET FLUSHING IS 20 L/PERSON/DAY.					
2. INTERNAL REUSE FOR DUST SUPPRESSION AND SAND WASHING SYSTEM IS 163.5 KL/DAY FOR THE 450 KL STORAGE TANK LOCATED IN THE SITE'S SOUTH.					



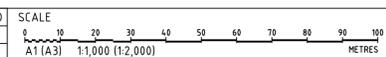
MUSIC MODELLING LAYOUT (P1203464MUS02V03)

	Sources	Residual Load	% Reduction
Flow (ML/yr)	13.3	4.32	67.4
Total Suspended Solids (kg/yr)	4170	278	93.3
Total Phosphorus (kg/yr)	7.16	1.74	75.7
Total Nitrogen (kg/yr)	31.6	9.61	69.6
Gross Pollutants (kg/yr)	355	0	100

MUSIC MODELLING RESULTS (P1203464MUS02V03)

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	MINOR AMENDMENTS	01/09/2021	NN	EZ	SL	TH
B	MINOR AMENDMENTS	16/06/20	GM/JS	SS	SL	TH
A	INITIAL RELEASE	15/11/2019	LL	EZ	TH	TH



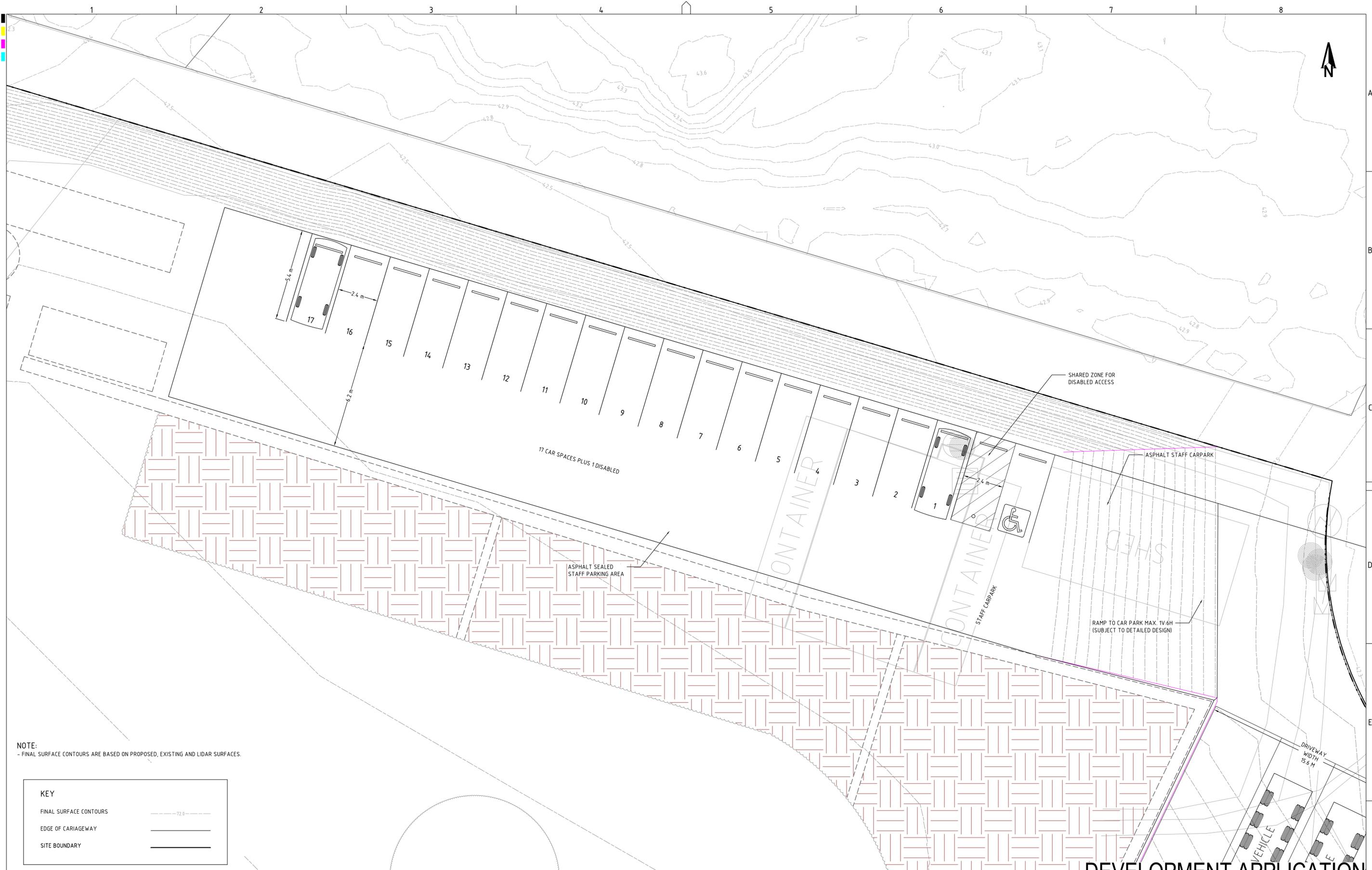
GRID DATUM PROJECT MANAGER CLIENT  
TH  
DISCLAIMER & COPYRIGHT  
This plan must not be used for construction unless signed as approved by principal certifying authority.  
All measurements in millimetres unless otherwise specified.  
This drawing must not be reproduced in whole or part without prior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

PROJECT NAME/PLANSSET TITLE  
MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS  
7 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900



Consulting Engineers  
Environment  
Water  
Geotechnical  
Civil

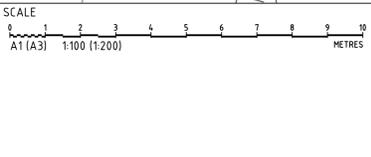
DRAWING TITLE				
WATER QUALITY CATCHMENT PLAN				
PROJECT NO.	PLANSSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-E700	C



**NOTE:**  
 - FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY	
FINAL SURFACE CONTOURS	---72.0---
EDGE OF CARRIAGEWAY	=====
SITE BOUNDARY	—————

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
F	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	JCF	TH	TH
E	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF	TH	TH
D	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
C	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	JCF	TH	TH



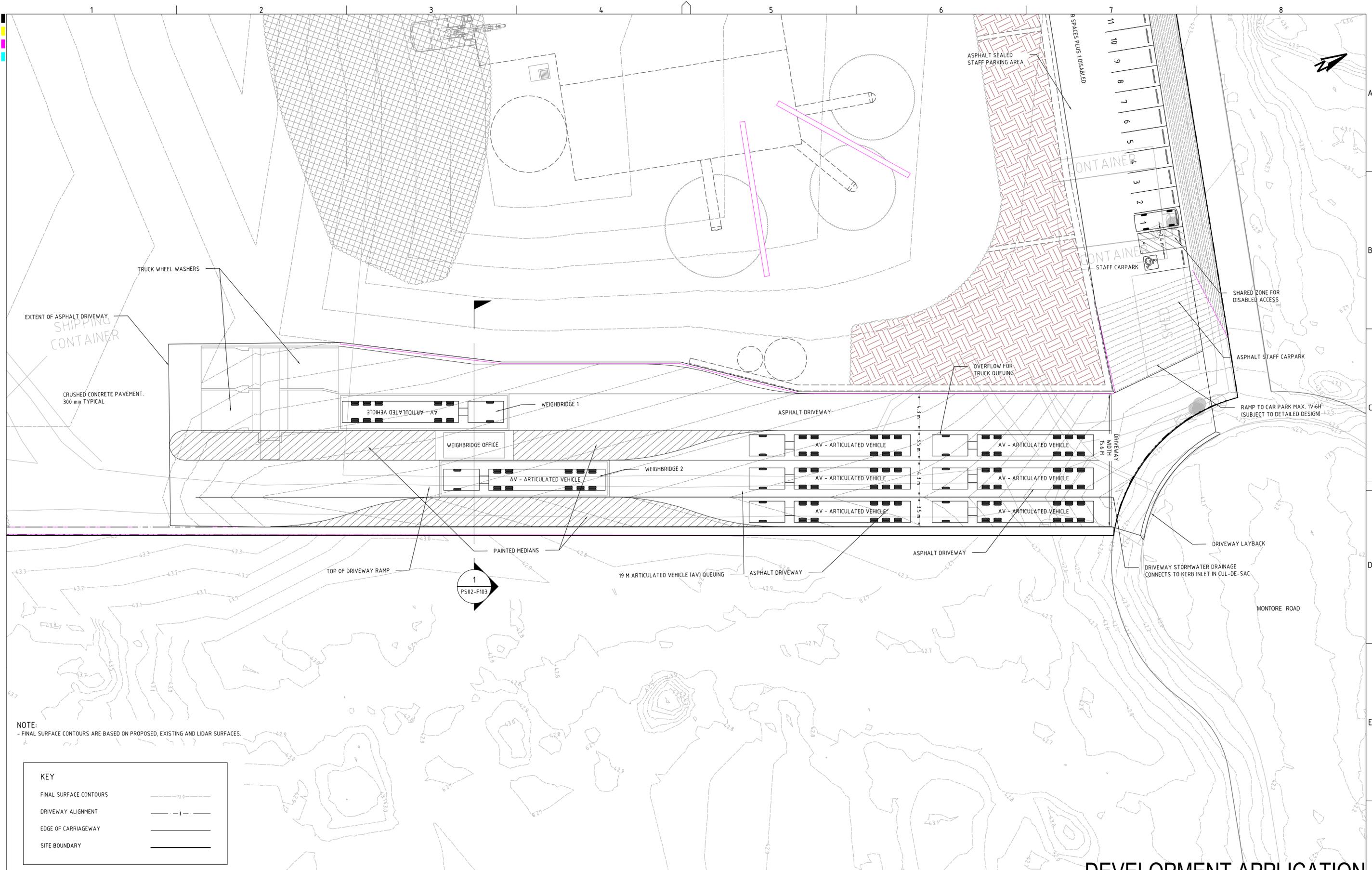
GRID  
 MGA  
 DATUM  
 m AHD  
 PROJECT MANAGER  
 TH

CLIENT  
**CONCRETE RECYCLERS (GROUP) PTY LTD**  
 PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
 SITE EARTHWORKS**  
 7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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 8787  
 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
CARPARK PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-F102	F

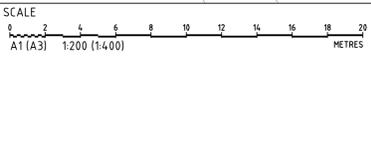
# DEVELOPMENT APPLICATION



**NOTE:**  
 - FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY	
FINAL SURFACE CONTOURS	--- 72.0 ---
DRIVEWAY ALIGNMENT	—+—+—+—
EDGE OF CARRIAGEWAY	=====
SITE BOUNDARY	=====

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
F	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	JCF	TH	TH
E	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF	TH	TH
D	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
C	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	JCF	TH	TH



GRID  
MGA

DATUM  
m AHD

PROJECT MANAGER  
TH

CLIENT  
CONCRETE RECYCLERS (GROUP) PTY LTD

PROJECT NAME/PLANSSET TITLE  
MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS

57 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

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

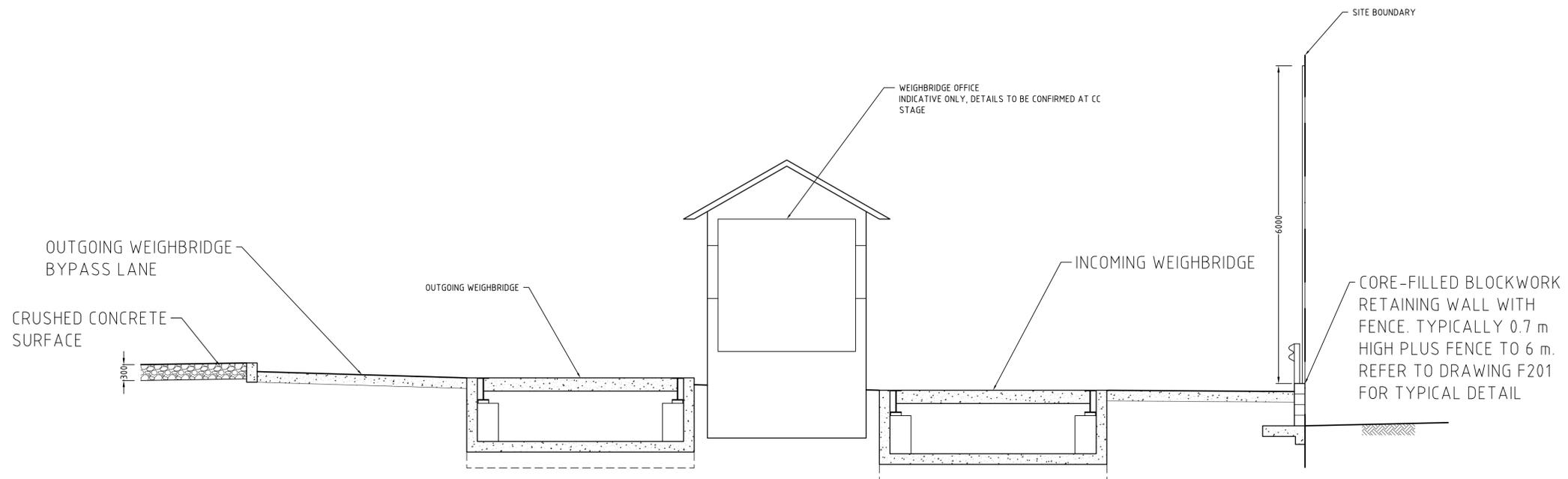
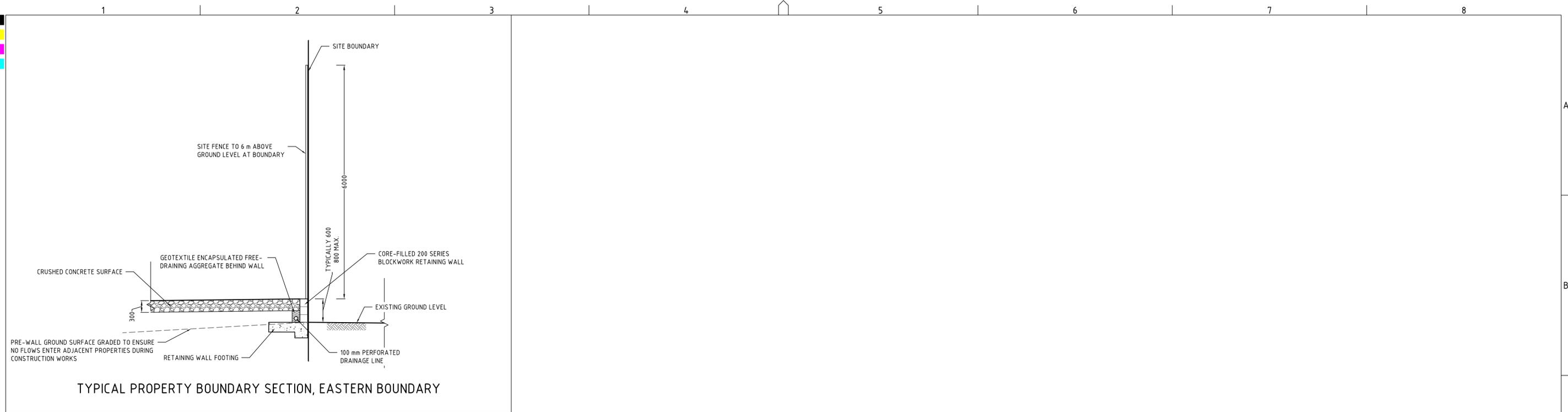
**martens**  
 & Associates Pty Ltd

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

# DEVELOPMENT APPLICATION

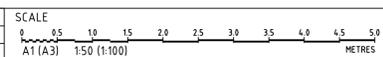
DRAWING TITLE				
DRIVEWAY PLAN				
PROJECT NO.	PLANSSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-F101	F



NOTES:  
- RETAINING WALL & FENCE SUBJECT TO DETAILED DESIGN.

**DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
E	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	JCF	TH	TH
D	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF	TH	TH
C	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
B	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	JCF	TH	TH



GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	m AHD	TH	CONCRETE RECYCLERS (GROUP) PTY LTD

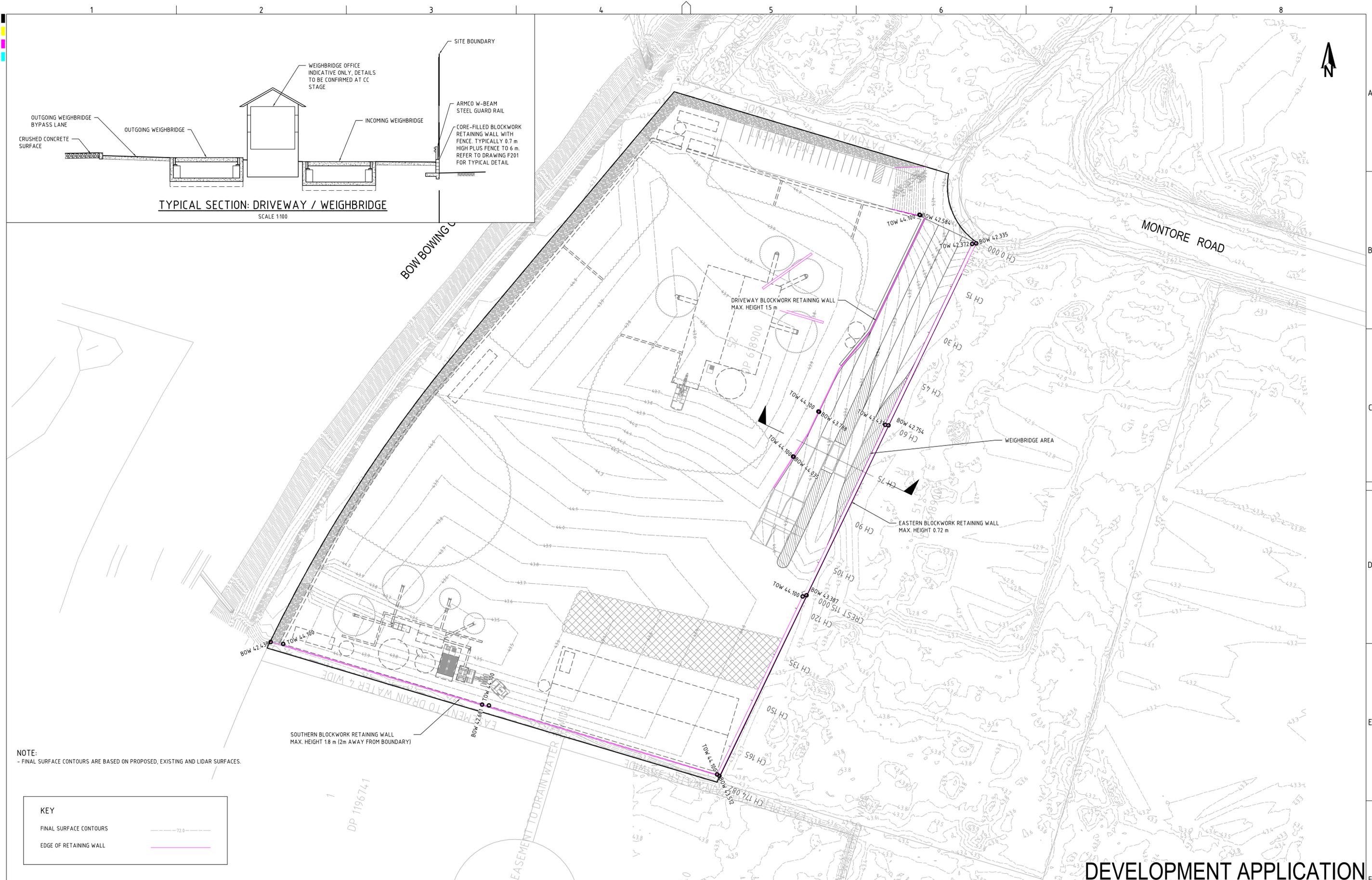
DISCLAIMER & COPYRIGHT  
This plan must not be used for construction unless signed as approved by principal certifying authority.  
All measurements in millimetres unless otherwise specified.  
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates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

PROJECT NAME/PLANSET TITLE
MINTO CONCRETE RECYCLERS SITE EARTHWORKS
7 MONTORE ROAD, MINTO NSW 2566 LOT 52 DP 618900



Consulting Engineers  
Environment  
Water  
Geotechnical  
Civil

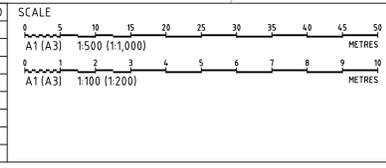
DRAWING TITLE				
DRIVEWAY CROSS SECTION				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-F103	E



**NOTE:**  
 - FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY	
FINAL SURFACE CONTOURS	---72.0---
EDGE OF RETAINING WALL	—

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
I	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
H	MINOR AMENDMENTS	10/02/2021	JS	AW	TH	TH
G	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	CG/JCF	TH	TH
F	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF	TH	TH
E	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
D	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
C	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	TH



GRID MGA DATUM mAHD PROJECT MANAGER TH CLIENT CONCRETE RECYCLERS (GROUP) PTY LTD PROJECT NAME/PLANSSET TITLE MINTO CONCRETE RECYCLERS SITE EARTHWORKS 7 MONTORE ROAD, MINTO NSW 2566 LOT 52 DP 618900

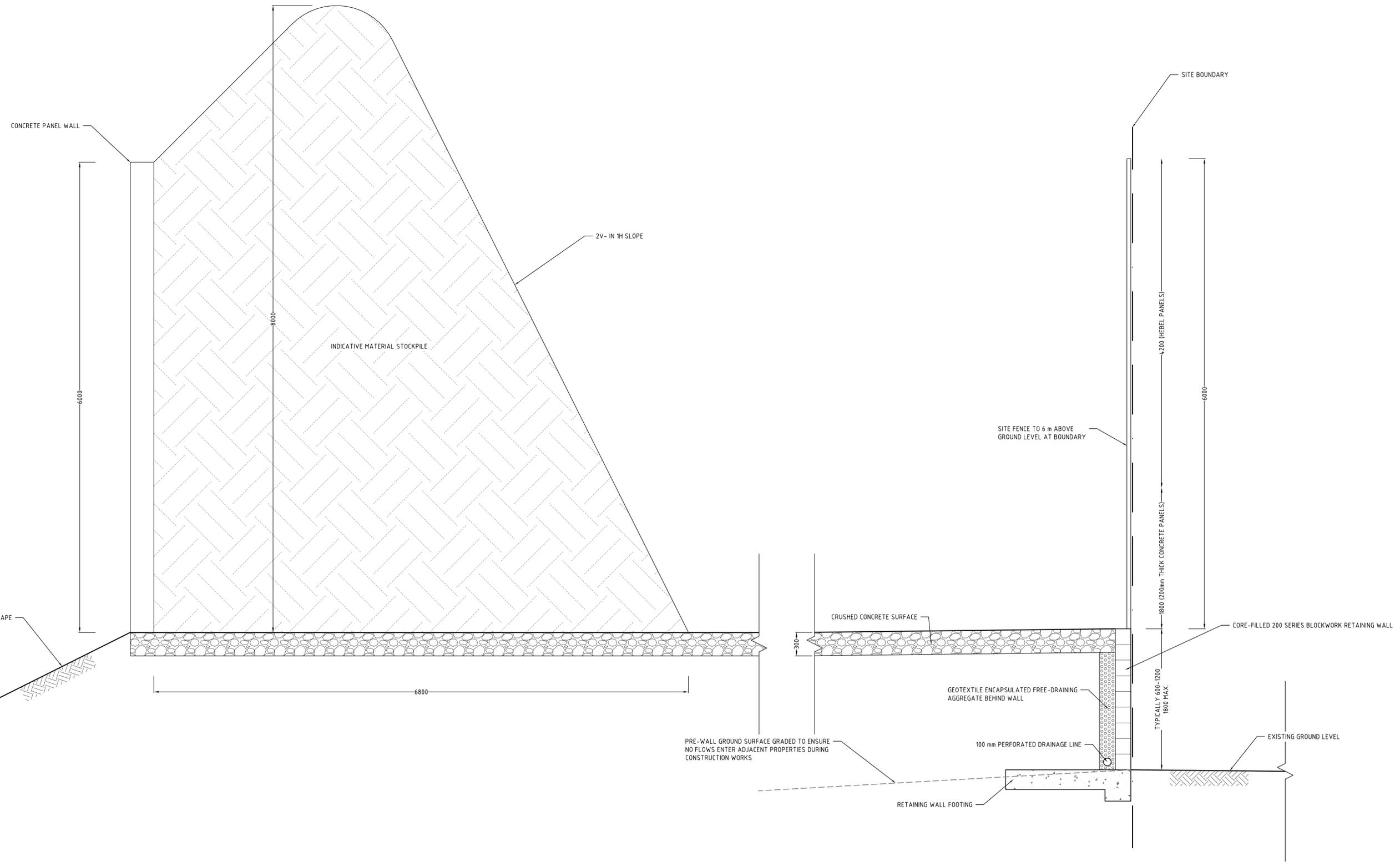
DISCLAIMER & COPYRIGHT  
 This plan must not be used for construction unless signed as approved by principal certifying authority.  
 All measurements in millimetres unless otherwise specified.  
 This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates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

Consulting Engineers  
**martens** & Associates Pty Ltd  
 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  
**RETAINING WALL PLAN**

PROJECT NO. P1203464	PLANSSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-F200	REVISION I
-------------------------	----------------------	--------------------	--------------------------	---------------

**DEVELOPMENT APPLICATION**



TYPICAL PROPERTY BOUNDARY SECTIONS: EASTERN, SOUTHERN AND WESTERN BOUNDARIES

DEVELOPMENT APPLICATION

NOTE:  
- CONCEPT DESIGN ONLY. SUBJECT TO DETAILED DESIGN.

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
F	MINOR AMENDMENTS	10/02/2021	JS	AW	TH	TH
E	MINOR AMENDMENTS	28/09/2018	JCF/LZ/PB	JCF	TH	TH
D	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
C	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
B	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	JCF	TH	TH

SCALE	0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 METRES
GRID	MGA
DATUM	m AHD
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  
**CONCRETE RECYCLERS (GROUP) PTY LTD**

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS**

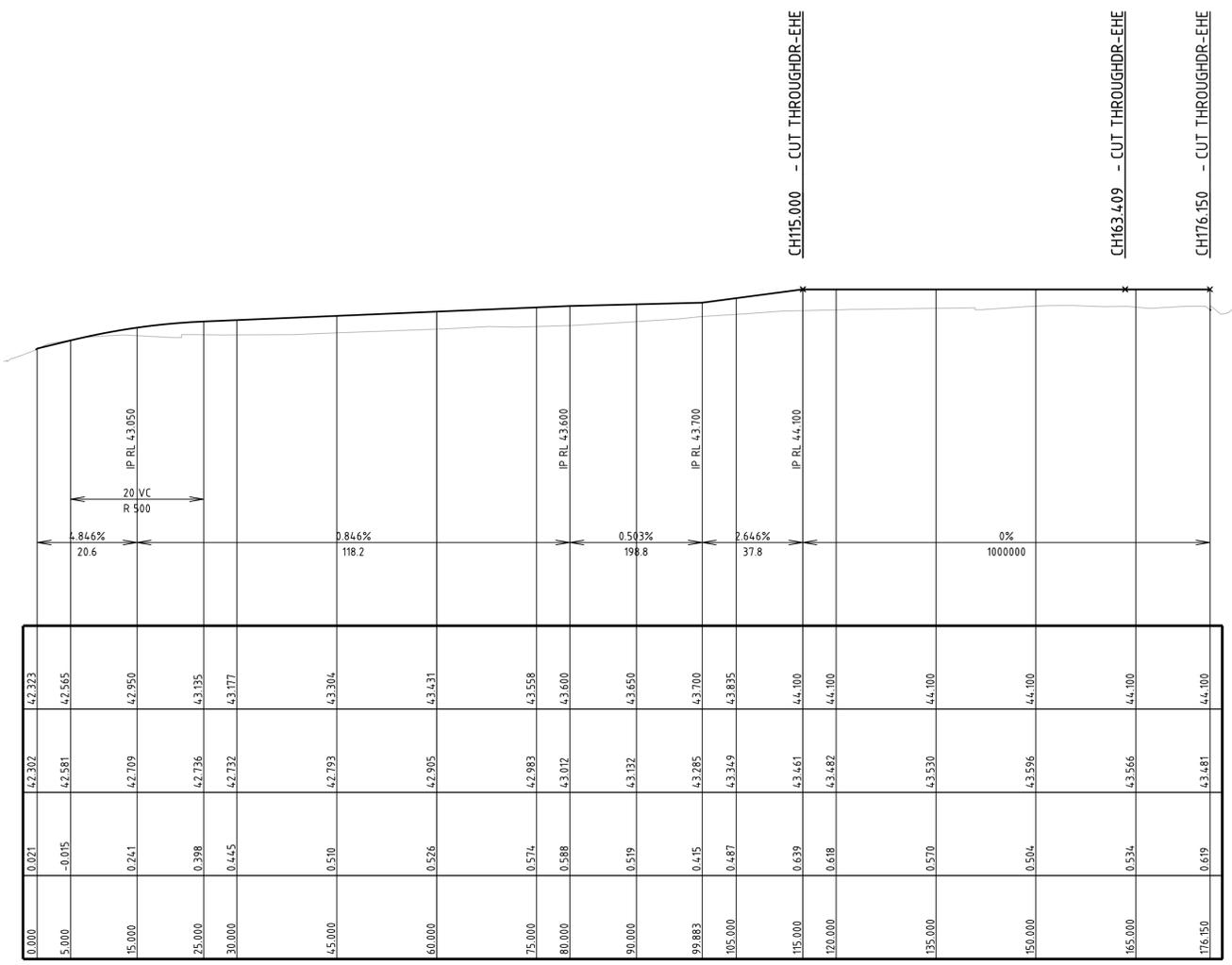
7 MONTMORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900



Consulting Engineers  
Environment  
Water  
Geotechnical  
Civil

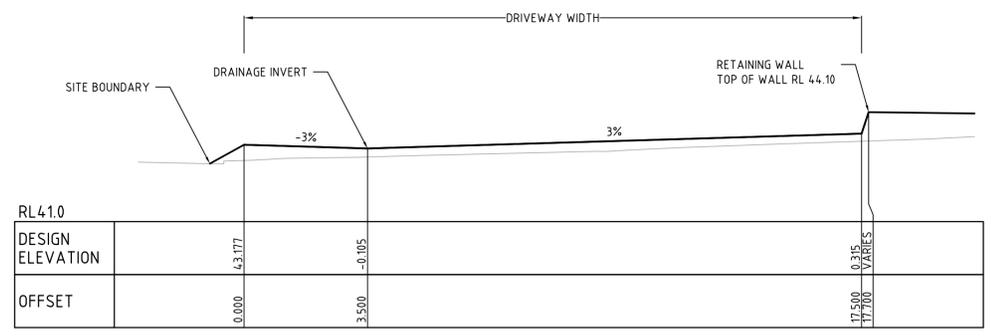
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767  
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE RETAINING WALL DETAILS				
PROJECT NO. P1203464	PLANSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-F201	REVISION F



21-MSL01 LONG. SECTION (ON ROAD ALIGNMENT)

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



DRIVEWAY (21-MSL01) TYPICAL SECTION

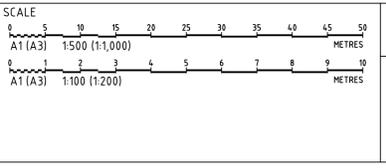
SCALE: 1:100

VERTICAL CURVE LENGTH (m)  
VERTICAL CURVE RADIUS (m)  
VERTICAL GRADE (%)  
VERTICAL GRADE (1 IN ...)  
HORIZONTAL CURVE RADIUS (m)  
DATUM RL 34.000

DESIGN SURFACE LEVELS	42.283	42.565	42.950	43.195	43.177	43.204	43.431	43.558	43.600	43.650	43.700	43.835	44.100	44.100	44.100	44.100	44.100	44.100
EXISTING SURFACE LEVELS	42.302	42.581	42.709	42.736	42.732	42.793	42.905	42.983	43.012	43.132	43.285	43.349	43.461	43.482	43.530	43.596	43.566	43.481
CUT / FILL DEPTH	0.021	-0.015	0.241	0.398	0.445	0.510	0.526	0.574	0.588	0.519	0.415	0.487	0.639	0.618	0.570	0.504	0.534	0.619
CHAINAGE	0.000	5.000	15.000	25.000	30.000	45.000	60.000	75.000	80.000	90.000	99.883	105.000	115.000	120.000	135.000	150.000	165.000	176.150

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	CG/JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	CG/JCF	TH	TH
A	BALANCE SITE EARTHWORKS	07/11/2017	CG	CG	TH	TH



GRID ---  
DATUM MAHD  
PROJECT MANAGER TH  
CLIENT CONCRETE RECYCLERS (GROUP) PTY LTD  
PROJECT NAME/PLANSET TITLE  
MINTO CONCRETE RECYCLERS  
SITE EARTHWORKS  
7 MONTORE ROAD, MINTO NSW 2566  
LOT 52 DP 618900

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

**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

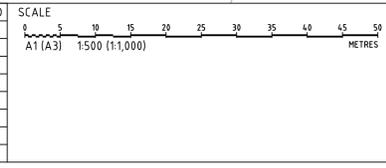
DRAWING TITLE DRIVEWAY LONGITUDINAL AND TYPICAL CROSS SECTIONS				
PROJECT NO. P1203464	PLANSET NO. PS02	RELEASE NO. R21	DRAWING NO. PS02-F400	REVISION C



**KEY:**

	ASPHALT DRIVEWAY
	ASPHALT CARPARKING AREA
	CONCRETE PAVEMENT
	CRUSHED CONCRETE PAVEMENT TYPICALLY 300 mm THICK
	VEGETATED BATTERS TO LANDSCAPE ARCHITECT DETAIL

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
G	MINOR AMENDMENTS	06/08/2021	NN	AW/EZ	SL	TH
F	MINOR AMENDMENTS	28/09/2018	CF/LZ/PB	JCF	TH	TH
E	CLIENT REQUESTED AMENDMENTS	12/09/2018	JCF/LZ	JCF		
D	CLIENT REQUESTED AMENDMENTS	03/08/2018	LZ	JCF	TH	TH
C	UPDATED AS PER CLIENT REQUEST	06/06/2018	RK/JCF	JCF	TH	TH
B	CLIENT REQUESTED AMENDMENTS	21/03/2018	KW/JCF	JCF	TH	TH
A	CLIENT REQUESTED AMENDMENTS	09/03/2018	KW	JCF	TH	TH



GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	mAHD	TH	CONCRETE RECYCLERS (GROUP) PTY LTD

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

PROJECT NAME/PLANSET TITLE  
**MINTO CONCRETE RECYCLERS  
 SITE EARTHWORKS**

7 MONTORE ROAD, MINTO NSW 2566  
 LOT 52 DP 618900

**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 8787  
 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
PAVEMENT PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1203464	PS02	R21	PS02-G100	G

# DEVELOPMENT APPLICATION