Prepared by:

ORION

CONSULT AUSTRALIA
Member Firm

Prepared for:

mirvac

LGA:

camden council

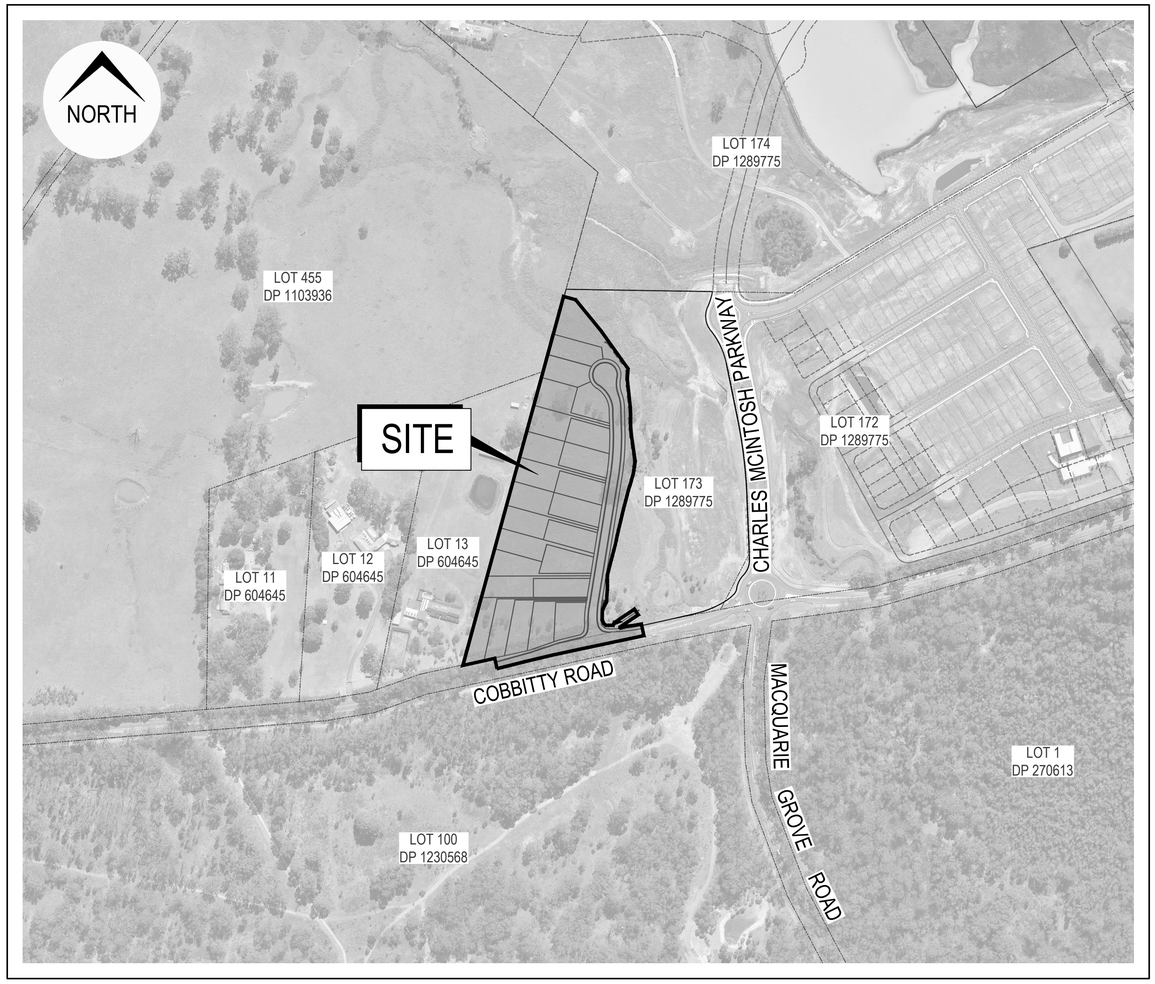
CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

DA: 2023/580/1



SITE / LOCATION (Image courtesy of Metromap 01.04.2024)

LOT 173, DP 1289775

PLAN INDEX		
No.	PLAN	REV
PRELIMINARIES		
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SWC-005	SITE REGRADING SECTIONS SHEET 2	B
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SEDIMENT & EROSION CONTROL		
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SWC-315	DRIVEWAY CROSS SECTIONS SHEET 2	B
SWC-316	DRIVEWAY CROSS SECTIONS SHEET 3	A
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SWC-321	DRIVEWAY PLAN SHEET 2	E
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PLAN INDEX		
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SWC-512	DRAINAGE LONG SECTION SHEET 3	D
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SWC-531	DRAINAGE CALCULATIONS SHEET 1	D
SWC-532	DRAINAGE CALCULATIONS SHEET 2	D
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SWC-534	DRAINAGE CALCULATIONS SHEET 4	D
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SWC-600	BASIN PLAN	D
SWC-601	BASIN PLANTING DETAILS & NOTES	B
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SWC-700	RETAINING WALL PLAN	E
SWC-701	RETAINING WALL SECTIONS SHEET 1	B
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SWC-704	RETAINING WALL DETAILS	E
SIGNAGE AND LINEMARKING		
SWC-800	COBBITTY ROAD & ROAD 10 SIGNAGE, LINEMARKING, INTERSECTION PLAN	F
SWC-801	SIGNAGE AND LINEMARKING PLAN AND ACCESS TURNPATH	C
SWC-810	TRAFFIC GUIDANCE SCHEME STAGE 1	C
SWC-811	TRAFFIC GUIDANCE SCHEME STAGE 2	D

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

A permanent easement is to be registered in place of the existing easement J.

A restriction is to be placed on lots 19 and 22 to prevent future driveway construction. Council is to be specified as the authority to release the restriction upon review and acceptance of the driveway location at a later stage.

499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Project No. 22-0277 Set No. 03 Milestone SWC Plan 000 Revision M

NORTH

WORKS AS EXECUTED

WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

UTILITIES SHOWN ARE DIAGRAMMATIC ONLY AND MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES/STANDARDS

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DA/2023/580/1 SWC.16.2023.580.2

BEFORE YOU DIG
www.byda.com.au
Zero Damage - Zero Harm

VOLUMES

CUT -	6,556m³
FILL -	28,942m³
IMPORT -	22,386m³

NOTES:
- THESE VOLUMES ARE RAW ONLY (EXISTING STRIPPED SURFACE TO BULK EARTHWORKS SURFACE).
- NO BULKING FACTOR HAS BEEN APPLIED.
- TOPSOIL STRIPPED 200mm FROM EXISTING
- TOPSOIL REPLACEMENT OF 150mm ON VERGES AND LOTS
- BOXING DEPTH ASSUMED TO BE 575mm IN ROADS
-NO ALLOWANCE HAS BEEN MADE FOR UNSUITABLE MATERIAL ASSOCIATED WITH EXISTING DAMS SUCH AS WATER, MUD, SLUDGE ETC.

LEGEND

APPROXIMATE EXTENT OF FILL	APPROXIMATE EXTENT OF CUT
0.0 - 0.05m	0.0 - 0.05m
0.05 - 0.5m	0.05 - 0.5m
0.5 - 1.0m	0.5 - 1.0m
1.0 - 1.5m	1.0 - 1.5m
1.5 - 2.0m	1.5 - 2.0m
2.0 - 2.5m	2.0 - 2.5m
2.5 - 3.0m	2.5 - 3.0m
3.0 - 3.5m	3.0 - 3.5m
3.5 - 4.0m	3.5 - 4.0m
4.0 - 4.5m	4.0 - 4.5m
> 4.5m	> 4.5m

LOT 13
DP 604645

ALL WORKS TO BE CARRIED OUT WITHIN PROPOSED DEVELOPMENT SITE

BASIN PD06

COBBITTY ROAD

DRIVEWAY 1

DRIVEWAY 2

DRIVEWAY 3

DRIVEWAY 4

DRIVEWAY 5

DRIVEWAY 6

ACCESS 1

ROAD 10

LOT 100
DP 1230568

LOT 173
DP 1289775

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
E	MG	DH	MP	MP	28/11/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	WP	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 5 10 15 20 25 30 35 40 45 50
SCALE 1:500 (A1) SCALE 1:1000 (A3)

For: mirvac

By: ORION

ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
SITE REGRADING PLAN

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	003	E

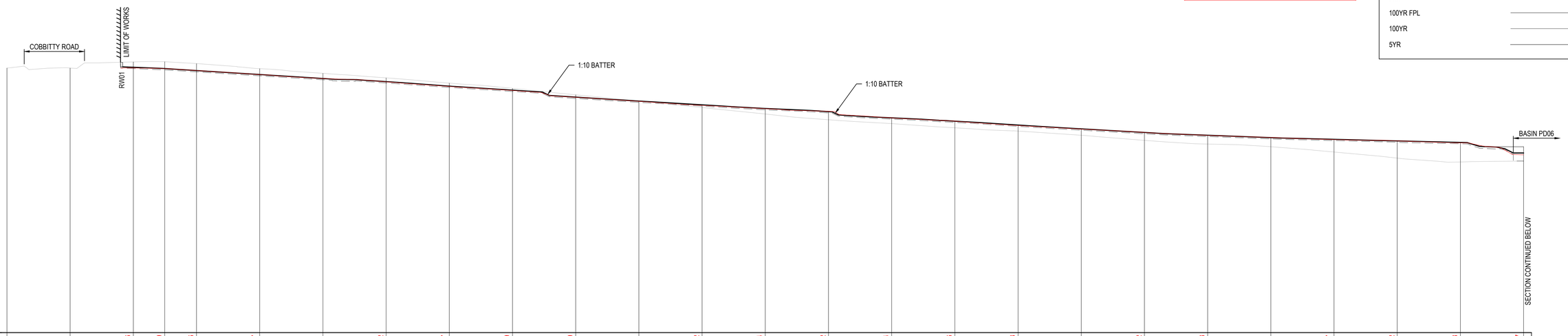
WORKS AS EXECUTED

WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

- DESIGN SURFACE LEVEL
- EXISTING SURFACE LEVEL
- BULK EARTHWORKS SURFACE
- PMF
- 100YR FPL
- 100YR
- 5YR



DATUM R.L. 50

| | | |

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04/02/2025

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DA/2023/580/1 SWC.16.2023.580.2

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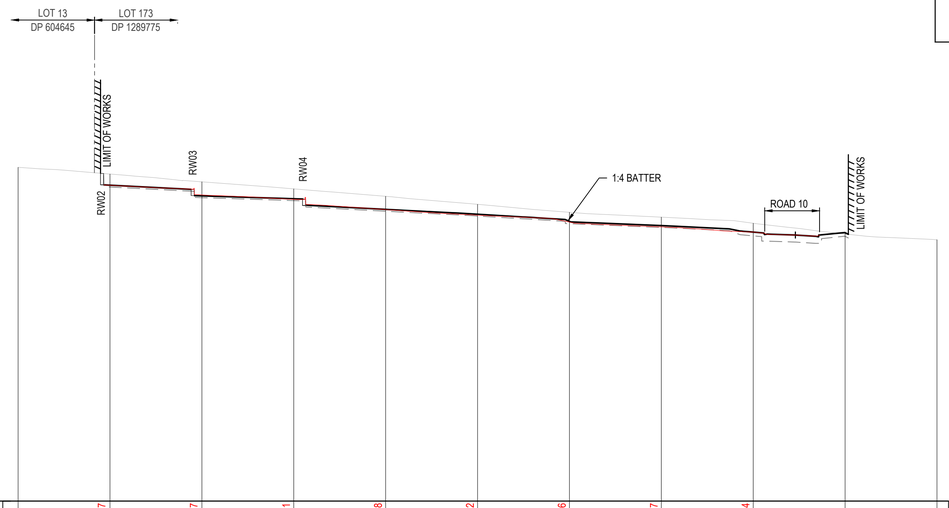
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

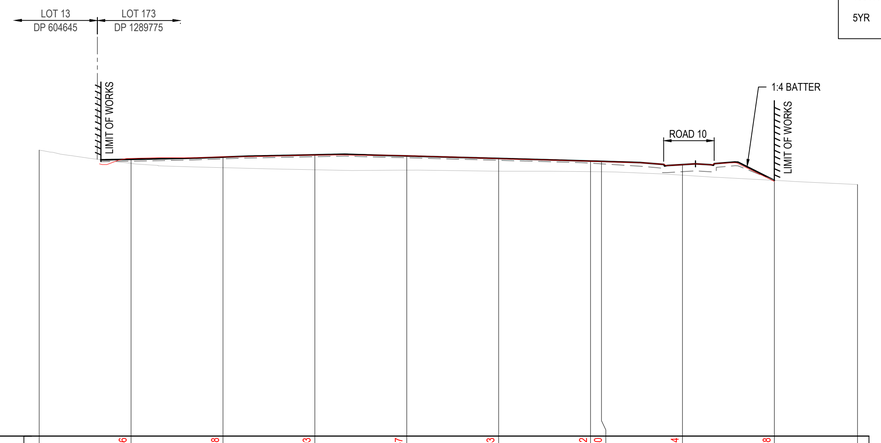
- DESIGN SURFACE LEVEL
- EXISTING SURFACE LEVEL
- BULK EARTHWORKS SURFACE
- PMF
- 100YR FPL
- 100YR
- 5YR



DATUM R.L. 55

DESIGN LEVEL		80.77	79.97	79.61	78.78	78.32	77.76	77.37	76.94	76.9	
EXISTING LEVEL	82.23	81.68	81.05	80.47	79.87	79.21	78.56	78.17	77.67	76.79	76.33
CHAINAGE	0	15	30	45	60	75	90	105	120	135	150

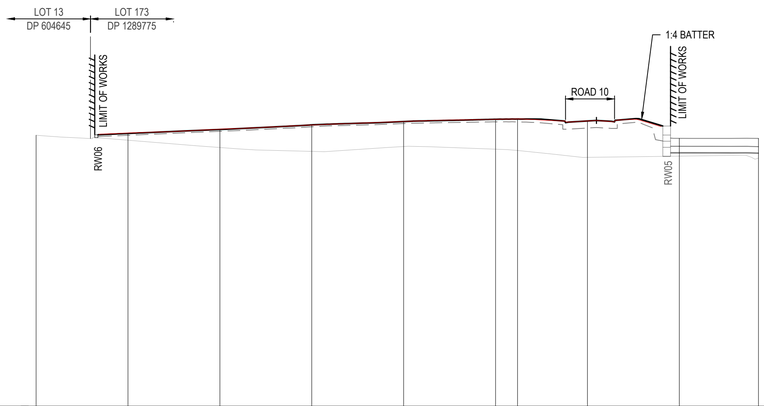
SITE SECTION C
SCALE: 1:500 (H)
SCALE: 1:250 (V)
003



DATUM R.L. 53

DESIGN LEVEL		75.66	75.78	75.93	75.87	75.63	75.42	75.40	75.14	73.78	
EXISTING LEVEL	76.33	75.25	74.9	74.73	74.7	74.61	74.57	74.57	74.29	73.87	73.53
CHAINAGE	0	15	30	45	60	75	90	91.789	105	120	133.577

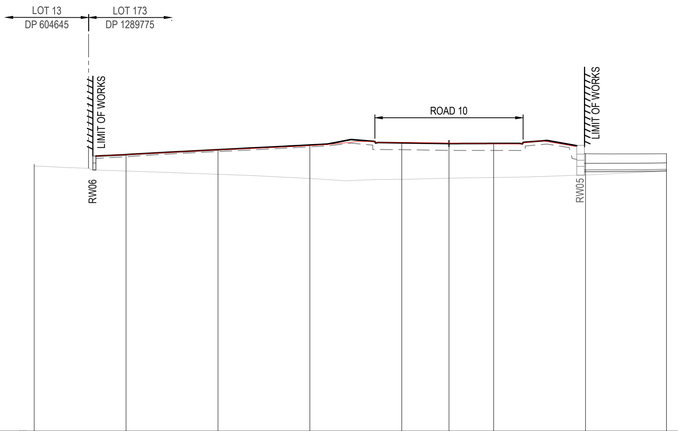
SITE SECTION D
SCALE: 1:500 (H)
SCALE: 1:250 (V)
003



DATUM R.L. 51

DESIGN LEVEL		73.31	73.62	73.97	74.25	74.43	74.45	74.29	
EXISTING LEVEL	73.13	72.73	72.13	71.81	72.21	71.99	71.89	71.33	71.42	71.26
CHAINAGE	0	15	30	45	60	75	78.586	90	105	117.922

SITE SECTION E
SCALE: 1:500 (H)
SCALE: 1:250 (V)
003



DATUM R.L. 50

DESIGN LEVEL		72.58	72.97	73.32	73.58	73.53	73.47	71.44	
EXISTING LEVEL	71.65	71.25	70.98	70.65	70.58	70.66	70.72	70.93	71.23
CHAINAGE	0	15	30	45	60	67.711	75	90	103.211

SITE SECTION F
SCALE: 1:500 (H)
SCALE: 1:250 (V)
003

B

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
B	MG	DH	MP	MP	28/11/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.5 5 7.5 10 12.5 15 17.5 20 22.5 25
SCALE 1:250 (A1) SCALE 1:500 (A3)
0 5 10 15 20 25 30 35 40 45 50
SCALE 1:500 (A1) SCALE 1:1000 (A3)

For: mirvac

By: ORION

ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
SITE REGRADING SECTIONS
SHEET 2

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	005	B

NORTH

CAMDEN COUNCIL
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DA/2023/580/1 SWC.16.2023.580.2

NOTE:
REFER SHT 320 - 323 FOR DRIVEWAY AND ACCESS DETAILS.

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

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IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES/STANDARDS

BEFORE YOU DIG www.byda.com.au
Zero Damage - Zero Harm

LEGEND

DENOTES 1.5m WIDE DRAINAGE EASEMENT	(A)
DENOTES 2.6m WIDE DRAINAGE EASEMENT	(B)
EASEMENT FOR DRAINAGE OF WATER VARIABLE WIDTH	(C)
RIGHT OF ACCESS VARIABLE WIDTH	(D)
EASEMENT FOR SUPPORT, ACCESS AND MAINTENANCE 0.9m WIDE	(E)
EASEMENT FOR DRAINAGE OF WATER VARIABLE WIDTH	(J)
EASEMENT FOR ON-SITE DETENTION AND WATER QUALITY FACILITY VARIABLE WIDTH	(J1)
EASEMENT FOR OVERHEAD POWERLINES 9 WIDE AND VARIABLE WIDTH	(Z)
PART OF EASEMENT FOR OVERHEAD POWERLINES 9 WIDE AND VARIABLE WIDTH	(Z1)
DENOTES ROOF WATER CONNECTION IN KERB TO COUNCIL STANDARD	◭
RESTRICTION TO BE PLACED TO PREVENT FUTURE DRIVEWAY CONSTRUCTION. COUNCIL WILL HAVE THE AUTHORITY TO RELEASE THE RESTRICTION UPON REVIEW AND ACCEPTANCE OF DRIVEWAY LOCATION AT A LATER STAGE	◑

LOT 13
DP 604645

LOT 100
DP 1230568

LOT 173
DP 1289775

COBBITTY ROAD

ROAD 10

ACCESS 1

DRIVEWAY 1
DRIVEWAY 2
DRIVEWAY 3
DRIVEWAY 4
DRIVEWAY 5
DRIVEWAY 6

RW01
RW02
RW03
RW04
RW05
RW06

CAPPED PIPE FOR FUTURE HOUSE CONNECTION

MAX 1:4 BATTER

PROVIDE ROCK HEADWALL AND SCOUR PROTECTION, REFER TO PLAN 535 FOR DETAILS

SWALE 01. REFER PLAN 535 FOR SECTION.

ESTATE FENCE. REFER LANDSCAPE PLANS FOR DETAILS

FUTURE LANDSCAPE ELEMENTS TO BE CONSTRUCTED UNDER SEPARATE APPLICATION

BASIN PD06 REFER TO PLAN 600 FOR DETAILS

PROVIDE SCOUR PROTECTION, REFER TO PLAN 535 FOR DETAILS

GPT REFER TO PLAN 570 FOR SETOUT DETAILS

REFER TO PLAN 704 FOR SWALE DETAILS AND LOCATION

PROVIDE SCOUR PROTECTION, REFER TO PLAN 535 FOR DETAILS

PEDESTRIAN SAFETY FENCE

ROCK SCOUR PROTECTION, D_{50}=200

MAX 1:4 BATTER

REFER TO PLAN 704 FOR SWALE DETAILS AND LOCATION

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
G	WP	DH	MP	MP	28/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
F	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
E	MG	DH	MP	MP	28/11/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	NS	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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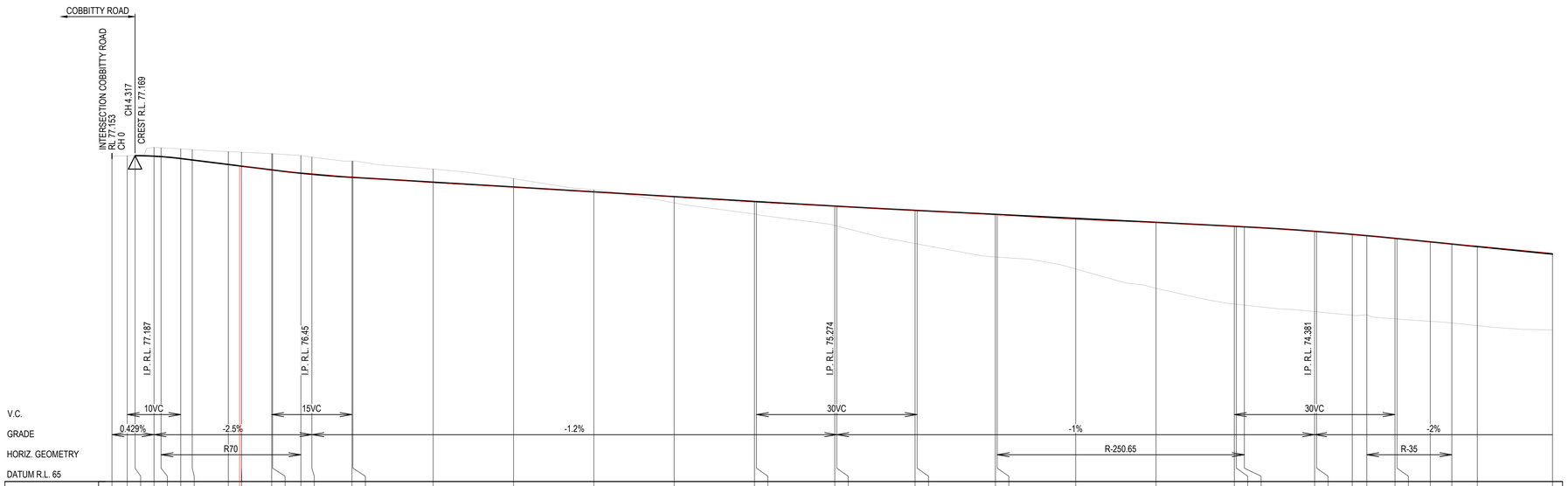
Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
ENGINEERING PLAN

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	200	G


COBBITTY ROAD
INTERSECTION COBBITTY ROAD
RL 77.153
CH 0
CH 4.317
CREST R.L. 77.169
I.P. R.L. 77.187
I.P. R.L. 76.45
I.P. R.L. 75.274
I.P. R.L. 74.381
V.C.
GRADE
HORIZ. GEOMETRY
DATUM R.L. 65
10VC
15VC
30VC
30VC
0.429%
-2.5%
-1.2%
-1%
-2%
R70
R-250.65
R-35

| | | |

WORKS AS EXECUTED

WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

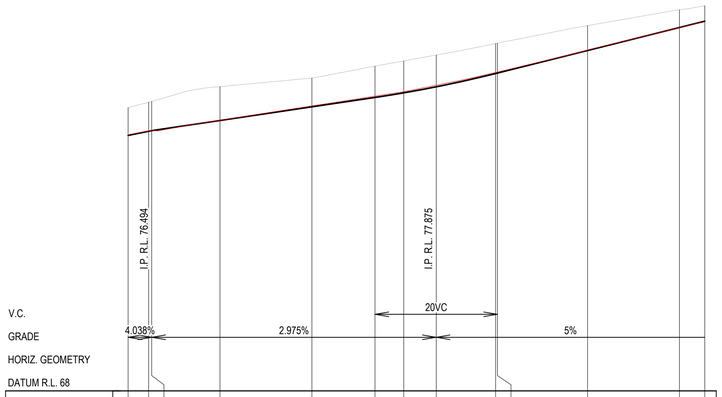
REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

DESIGN SURFACE LEVEL

EXISTING SURFACE LEVEL

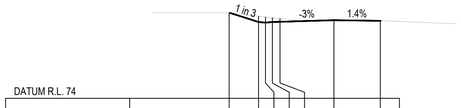
NOTE:
REFER TO PLAN 320 TO 325 FOR PLAN CHAINAGES.



| | | |

B

COBBITTY ROAD

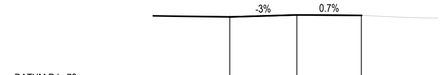


DATUM R.L. 74							
W.A.E.							
DESIGN LEVEL	79.593	78.983	78.943	78.983	78.998	79.103	79.061
EXISTING LEVEL	79.595	79.362	79.306	79.257	79.205	79.103	79.06
OFFSET	-9.867	-7.948	-7.498	-7.048	-6.548	-3.027	0

CH -225

DATUM R.L. 73				
W.A.E.				
DESIGN LEVEL	77.509	77.685	77.628	
EXISTING LEVEL	78.032	77.887	77.628	
OFFSET	-9.458	-3.616	0	

CH -183.295



DATUM R.L. 72				
W.A.E.				
DESIGN LEVEL	76.405	76.537	76.507	
EXISTING LEVEL	76.462	76.537	76.507	
OFFSET	-8.587	-4.206	0	

CH -150

DATUM R.L. 71			
W.A.E.			
DESIGN LEVEL	75.666	75.698	
EXISTING LEVEL	75.666	75.697	
OFFSET	-6.824	0	

CH -103.72

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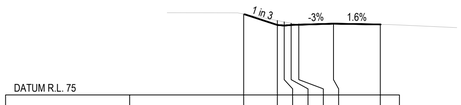


DATUM R.L. 75							
W.A.E.							
DESIGN LEVEL	80.285	79.57	79.53	79.57	79.585	79.653	79.604
EXISTING LEVEL	80.285	79.566	79.768	79.681	79.635	79.653	79.604
OFFSET	-8.919	-6.722	-6.272	-5.822	-5.322	-3.056	0

CH -240

DATUM R.L. 73				
W.A.E.				
DESIGN LEVEL	77.658	77.834	77.79	
EXISTING LEVEL	78.126	77.834	77.791	
OFFSET	-9.329	-3.468	0	

CH -187.649

DATUM R.L. 72			
W.A.E.			
DESIGN LEVEL	76.664	76.632	
EXISTING LEVEL	76.664	76.632	
OFFSET	-4.125	0	

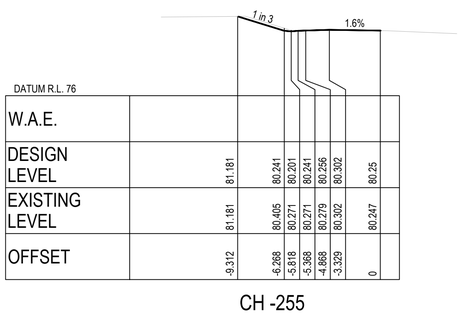
CH -154.782

DATUM R.L. 71			
W.A.E.			
DESIGN LEVEL	75.681	75.708	
EXISTING LEVEL	75.681	75.707	
OFFSET	-6.788	0	

CH -105

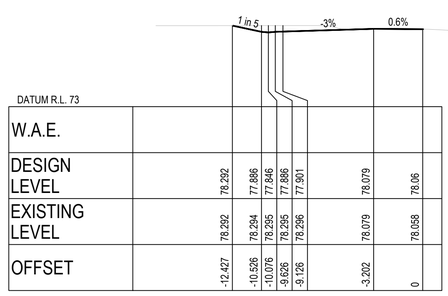
DATUM R.L. 70			
W.A.E.			
DESIGN LEVEL	75.662	75.642	
EXISTING LEVEL	75.59	75.591	
OFFSET	-7.027	0	

CH -90



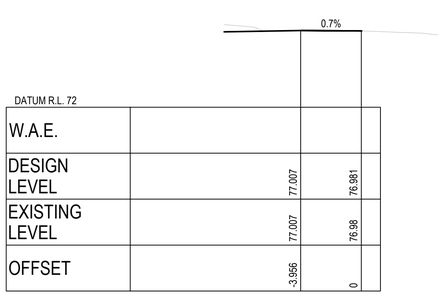
DATUM R.L. 76							
W.A.E.							
DESIGN LEVEL	81.181	80.241	80.201	80.241	80.256	80.302	80.25
EXISTING LEVEL	81.181	80.405	80.271	80.271	80.279	80.302	80.247
OFFSET	-9.312	-6.268	-5.818	-5.368	-4.868	-3.329	0

CH -255



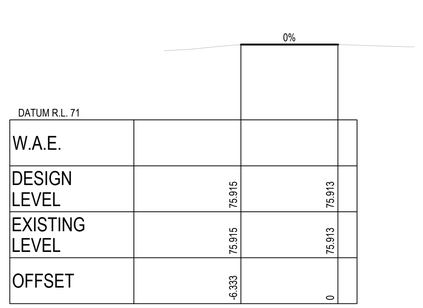
DATUM R.L. 73							
W.A.E.							
DESIGN LEVEL	78.292	77.886	77.846	77.886	77.901	78.079	78.06
EXISTING LEVEL	78.292	78.294	78.295	78.295	78.296	78.079	78.058
OFFSET	-12.427	-10.526	-10.076	-9.626	-9.126	-3.202	0

CH -195



DATUM R.L. 72			
W.A.E.			
DESIGN LEVEL	77.007	76.981	
EXISTING LEVEL	77.007	76.98	
OFFSET	-3.956	0	

CH -165



DATUM R.L. 71			
W.A.E.			
DESIGN LEVEL	75.915	75.913	
EXISTING LEVEL	75.915	75.913	
OFFSET	-6.333	0	

CH -120

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

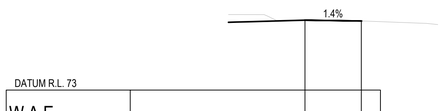
DA/2023/580/1 SWC.16.2023.580.2

DATUM R.L. 76			
W.A.E.			
DESIGN LEVEL	81.013	80.974	
EXISTING LEVEL	81.013	80.973	
OFFSET	-4.192	0	

CH -270

DATUM R.L. 74							
W.A.E.							
DESIGN LEVEL	78.945	78.434	78.394	78.434	78.449	78.597	78.573
EXISTING LEVEL	78.945	78.88	78.854	78.828	78.799	78.597	78.574
OFFSET	-11.54	-9.618	-9.168	-8.718	-8.218	-3.258	0

CH -210



DATUM R.L. 73			
W.A.E.			
DESIGN LEVEL	77.561	77.51	
EXISTING LEVEL	77.562	77.51	
OFFSET	-3.68	0	

CH -180

DATUM R.L. 72			
W.A.E.			
DESIGN LEVEL	76.088	76.127	76.165
EXISTING LEVEL	76.119	76.127	76.165
OFFSET	-6.695	-5.727	0

CH -135

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
B	WP	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

For: mirvac

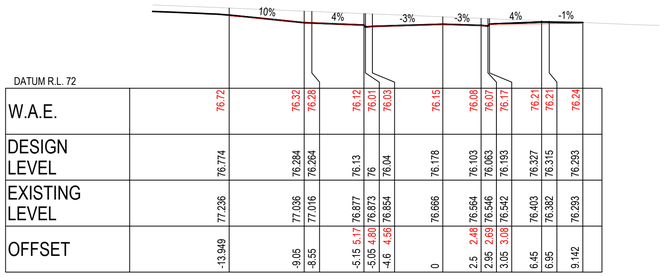
By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
ROAD CROSS SECTIONS
SHEET 1

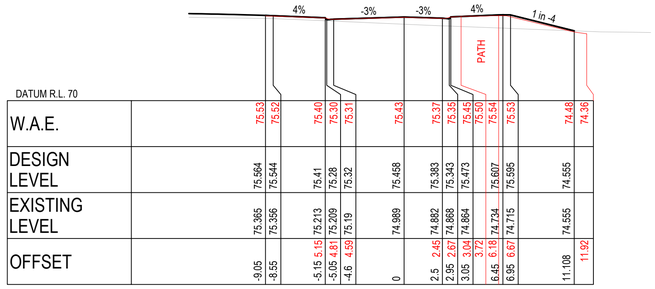
Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	310	B

ROAD 10



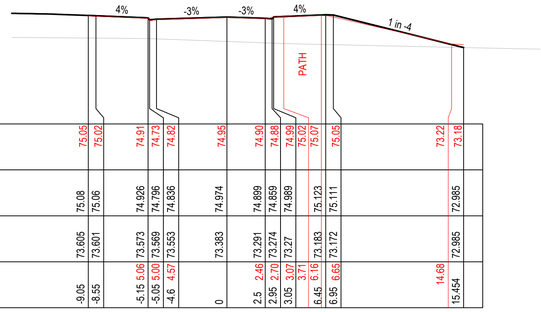
DATUM R.L. 72														
W.A.E.		76.72		76.32	76.28		76.12	76.01		76.15		76.08	76.07	76.17	76.21	76.21	76.24
DESIGN LEVEL	76.774		76.284	76.264		76.13	76	76.04	76.178		76.103	76.063	76.193	76.327	76.315	76.293	
EXISTING LEVEL	77.236		77.036	77.016		76.877	76.873	76.854	76.666		76.564	76.546	76.542	76.403	76.382	76.293	
OFFSET	-13.949		-9.05	-8.55		-5.15	-5.05	-4.6	0		2.5	2.95	3.05	6.45	6.95	9.142	
						5.17	4.80	4.56			2.46	2.60	3.08				

CH 60



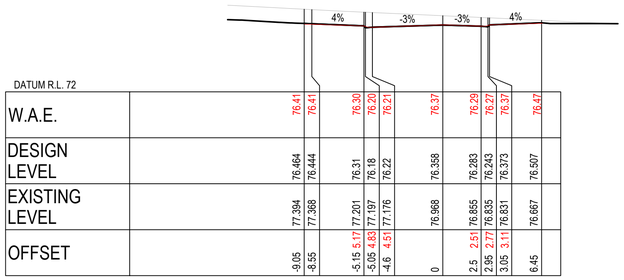
DATUM R.L. 70																	
W.A.E.		75.53	75.52		75.40	75.30	75.31		75.43		75.37	75.35	75.45	75.50	75.54	75.53		74.48	74.36
DESIGN LEVEL	75.564		75.544		75.41	75.28	75.32	75.458		75.383	75.343	75.473	75.607	75.595		74.555	
EXISTING LEVEL	75.365		75.336		75.213	75.209	75.19	74.989		74.882	74.868	74.864	74.734	74.715		74.555	
OFFSET	-9.05		-8.55		-5.15	-5.05	-4.6	0		2.5	2.95	3.05	6.45	6.95		11.108	11.92
					5.15	4.81	4.59			2.45	2.67	3.04	6.18	6.67			

CH 120



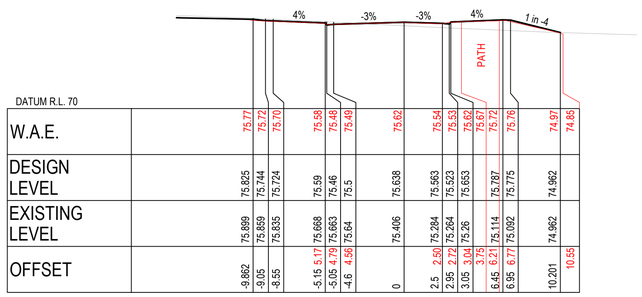
DATUM R.L. 68																	
W.A.E.		75.05	75.02		74.91	74.73	74.82		74.95		74.90	74.88	74.99	75.02	75.07	75.05		73.22	73.18
DESIGN LEVEL	75.08		75.06		74.926	74.796	74.836	74.974		74.899	74.859	74.989	75.123	75.111		72.985	
EXISTING LEVEL	73.605		73.601		73.573	73.569	73.553	73.383		73.291	73.274	73.27	73.183	73.172		72.985	
OFFSET	-9.05		-8.55		-5.15	-5.05	-4.6	0		2.5	2.95	3.05	6.45	6.95		14.68	15.454
					5.06	5.00	4.57			2.46	2.70	3.07	6.16	6.65			
												3.71					

CH 165.335



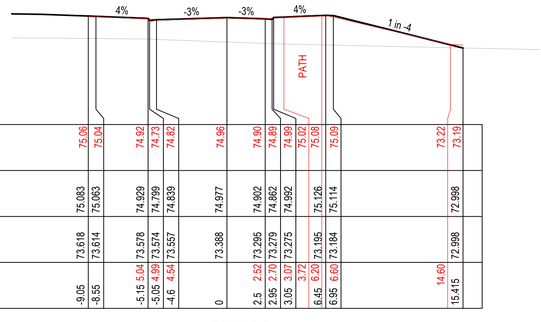
DATUM R.L. 72														
W.A.E.		76.41	76.41		76.30	76.20	76.21	76.37		76.29	76.27	76.37	76.47	
DESIGN LEVEL	76.464	76.444		76.31	76.18	76.22		76.358		76.283	76.243	76.373	76.507	
EXISTING LEVEL	77.394	77.368		77.201	77.197	77.176		76.968		76.855	76.826	76.831	76.667	
OFFSET	-9.05	-8.55		-5.15	-5.05	-4.6	0		2.5	2.95	3.05	6.45		
				5.17	4.83	4.51			2.51	2.77	3.11			

CH 45



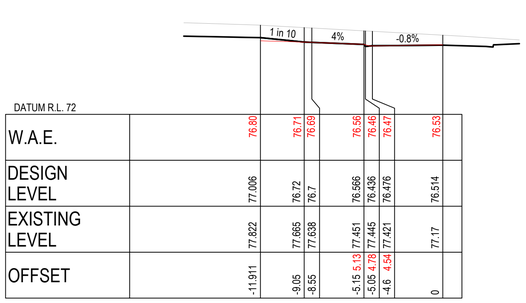
DATUM R.L. 70																	
W.A.E.		75.77	75.72	75.70		75.58	75.48	75.49		75.62		75.54	75.53	75.62	75.62	75.72	75.76		74.97	74.85
DESIGN LEVEL	75.825	75.744	75.724		75.59	75.46	75.5	75.638		75.563	75.523	75.653	75.787	75.775		74.962	
EXISTING LEVEL	75.699	75.859	75.835		75.668	75.663	75.64	75.406		75.284	75.264	75.26	75.114	75.092		74.962	
OFFSET	-9.862	-9.05	-8.55		-5.15	-5.05	-4.6	0		2.5	2.95	3.05	6.45	6.95		10.201	10.55
					5.17	4.79	4.56			2.50	2.77	3.06	6.21	6.77			
												3.75					

CH 105



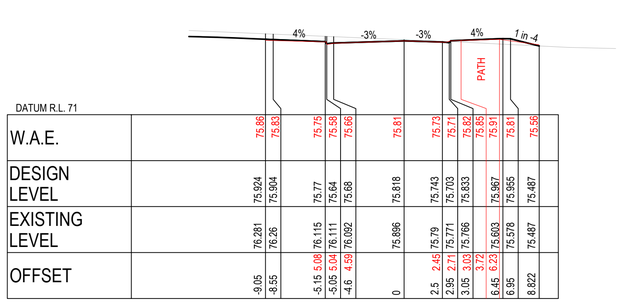
DATUM R.L. 68																	
W.A.E.		75.06	75.04		74.92	74.73	74.82		74.96		74.90	74.89	74.99	75.02	75.08	75.09		73.22	73.19
DESIGN LEVEL	75.083	75.063		74.929	74.799	74.839		74.977		74.902	74.862	74.992	75.126	75.114		72.998	
EXISTING LEVEL	73.618	73.614		73.578	73.574	73.557	73.388		73.295	73.279	73.275	73.155	75.184		72.998	
OFFSET	-9.05	-8.55		-5.15	-5.04	-4.99	-4.54	0		2.5	2.70	3.07	6.45	6.95		14.60	15.415
										2.52			6.20	6.60			
												3.72					

CH 165



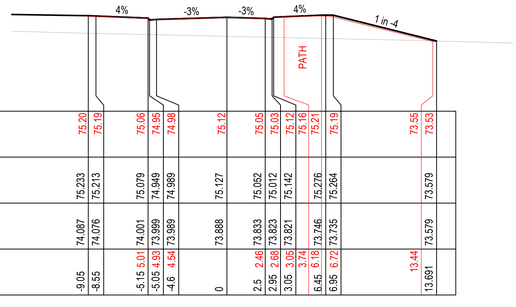
DATUM R.L. 72														
W.A.E.		76.80		76.71	76.69		76.56	76.46	76.47		76.53			
DESIGN LEVEL	77.006		76.72	76.7		76.566	76.436	76.476		76.514				
EXISTING LEVEL	77.822		77.665	77.638		77.451	77.445	77.421		77.17				
OFFSET	-11.911		-9.05	-8.55		-5.15	-5.05	-4.6	0					
						5.13	4.78	4.54						

CH 35.279



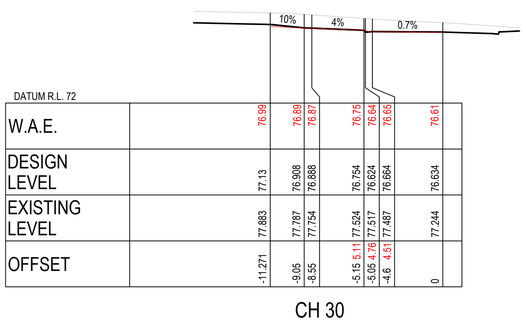
DATUM R.L. 71																	
W.A.E.		75.86	75.83		75.75	75.58	75.66		75.81		75.73	75.71	75.82	75.85	75.91	75.81		75.56	
DESIGN LEVEL	75.924	75.904		75.77	75.64	75.68		75.818		75.743	75.703	75.833	75.967	75.955		75.487	
EXISTING LEVEL	76.281	76.26		76.115	76.111	76.092		75.896		75.79	75.771	75.766	75.603	75.578		75.487	
OFFSET	-9.05	-8.55		-5.15	-5.05	-4.6	0		2.5	2.45	2.71	3.03	6.45	6.95		8.822	
				5.08	5.04	4.59						3.72	6.23				

CH 90



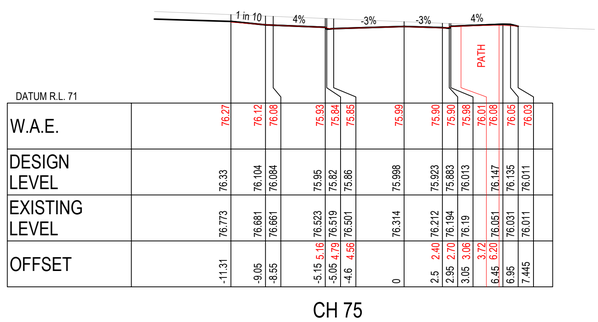
DATUM R.L. 69																	
W.A.E.		75.20	75.19		75.06	74.95	74.98		75.12		75.05	75.03	75.12	75.16	75.21	75.19		73.55	73.53
DESIGN LEVEL	75.233	75.213		75.079	74.949	74.989		75.127		75.052	75.012	75.142	75.276	75.264		73.579	
EXISTING LEVEL	74.087	74.076		74.001	73.999	73.989		73.888		73.833	73.823	73.821	73.746	73.735		73.579	
OFFSET	-9.05	-8.55		-5.15	-5.01	-4.93	-4.54	0		2.5	2.68	3.05	6.45	6.95		13.44	13.691
										2.46			6.18	6.72			
												3.74					

CH 150



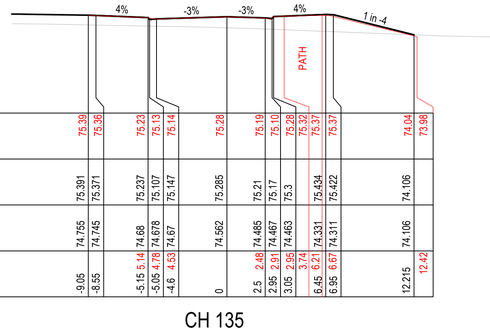
DATUM R.L. 72														
W.A.E.		76.99		76.89	76.87		76.75	76.64	76.65		76.61			
DESIGN LEVEL	77.13		76.908	76.888		76.754	76.624	76.664		76.634				
EXISTING LEVEL	77.883		77.787	77.754		77.524	77.517	77.487		77.244				
OFFSET	-11.271		-9.05	-8.55		-5.15	-5.05	-4.6	0					
						5.11	4.76	4.51						

CH 30



DATUM R.L. 71																	
W.A.E.		76.27		76.12	76.08		75.93	75.84	75.85		75.98		75.90	75.90	75.98	76.01	76.08	76.05	76.03	
DESIGN LEVEL	76.33		76.104	76.084		75.95	75.82	75.86		75.998		75.923	75.883	76.013		76.147	76.135	76.011		
EXISTING LEVEL	76.773		76.681	76.661		76.523	76.519	76.501		76.314		76.212	76.194	76.19		76.051	76.031	76.011		
OFFSET	-11.31		-9.05	-8.55		-5.15	-5.05	-4.6	0		2.5	2.40	2.95	3.05	3.72	6.45	6.95	7.445		
						5.16	4.79	4.56				2.50	2.70	3.06	6.20	6.67				

CH 75



DATUM R.L. 69																	
W.A.E.		75.39	75.36		75.23	75.13	75.14		75.28		75.19	75.10	75.28	75.32	75.37	75.37		74.04	73.98
DESIGN LEVEL	75.391	75.371		75.237	75.107	75.147		75.285		75.21	75.17	75.3	75.434	75.422		74.106	
EXISTING LEVEL	74.755	74.745		74.68	74.678	74.67		74.562		74.485	74.467	74.463	74.331	74.311		74.106	
OFFSET	-9.05	-8.55		-5.15	-5.04	-4.6	0		2.5	2.48	2.91	3.05	6.45	6.95		12.215	
				5.14	4.78	4.53			2.48	2.95			6.21	6.67			12.42
												3.74					

CH 135

WORKS AS EXECUTED

WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

For: mirvac

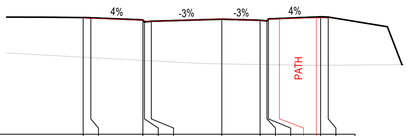
By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: ROAD CROSS SECTIONS SHEET 2

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	311	A

ROAD 10 CONTD

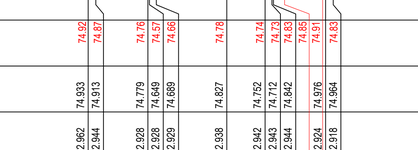


DATUM R.L. 67																							
W.A.E.			74.58	74.56			74.45	74.35	74.36		74.52		74.42	74.41	74.50	74.54	74.59	74.56					
DESIGN LEVEL		74.618	74.598			74.464	74.334	74.374		74.512		74.437	74.397	74.527			74.661	74.648					
EXISTING LEVEL		72.03	72.003			71.82	71.815	71.791		71.589		71.551	71.544	71.542			71.506	71.507					
OFFSET	-9.05	-8.55			-5.15	-5.05	-4.6		0		2.5	2.95	3.05		3.78	6.45	6.95						
					5.20	4.80	4.60				2.50	2.75	3.11		3.76	6.17							

CH 211.491

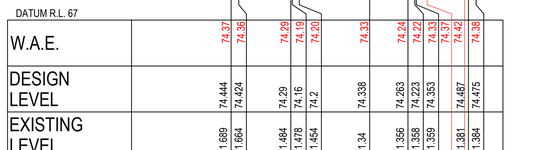
DATUM R.L. 67																							
W.A.E.											74.07		73.99		73.98	74.07	74.10	74.16	74.13				
DESIGN LEVEL											74.074		73.999		73.969	74.089		74.223	74.21				
EXISTING LEVEL											71.069		71.075		71.076	71.076		71.084	71.085				
OFFSET										0		2.5	2.45	2.70	2.95	3.05	3.06	3.72	6.19	6.45	6.95		

CH 240



DATUM R.L. 67																							
W.A.E.			74.59	74.57			74.46	74.36	74.38		74.53		74.44	74.43	74.52	74.56	74.61	74.60					
DESIGN LEVEL		74.633	74.613			74.479	74.349	74.389		74.527		74.452	74.412	74.542			74.676	74.664					
EXISTING LEVEL		72.071	72.044			71.898	71.853	71.828		71.622		71.584	71.577	71.575			71.523	71.518					
OFFSET	-9.05	-8.55			-5.15	-5.05	-4.6		0		2.5	2.95	3.05		3.74	6.45	6.95						
					5.21	4.83	4.58				2.47	2.70	3.06		3.74	6.20							

CH 210



DATUM R.L. 67																							
W.A.E.											74.19		74.10		74.09	74.18	74.22	74.29	74.20				
DESIGN LEVEL											74.162		74.107		74.067	74.197		74.331	74.318				
EXISTING LEVEL											71.225		71.276		71.286	71.288		71.357	71.367				
OFFSET										0		2.5	2.47	2.70	2.95	3.05	3.73	6.20	6.45	6.95			

CH 234.363

DATUM R.L. 67																							
W.A.E.			74.72	74.71			74.62	74.52	74.53		74.66		74.60	74.58	74.68	74.72	74.77	74.73					
DESIGN LEVEL		74.783	74.763			74.629	74.499	74.539		74.677		74.602	74.562	74.692			74.826	74.814					
EXISTING LEVEL		72.626	72.609			72.461	72.477	72.46		72.216		72.087	72.081	72.08			72.06	72.055					
OFFSET	-9.05	-8.55			-5.15	-5.05	-4.6		0		2.5	2.95	3.05		3.78	6.45	6.95						
					5.19	4.82	4.56				2.54	2.73	3.13		3.78	6.27							

CH 195

DATUM R.L. 67																							
W.A.E.			74.28	74.27			74.22	74.12	74.13		74.23		74.15	74.13	74.23	74.27	74.34	74.24					
DESIGN LEVEL		74.382	74.362			74.228	74.098	74.138		74.23		74.155	74.115	74.245			74.379	74.367					
EXISTING LEVEL		71.507	71.48			71.294	71.289	71.264		71.213		71.248	71.26	71.262			71.35	71.363					
OFFSET	-9.05	-8.55			-5.15	-5.05	-4.6		0		2.5	2.95	3.05		3.79	6.45	6.95						
					5.20	4.80	4.58				2.52	2.72	3.10		3.79	6.19							

CH 231.639

DATUM R.L. 68																							
W.A.E.			74.92	74.87			74.76	74.57	74.66		74.78		74.74	74.73	74.83	74.85	74.91	74.83				72.41	
DESIGN LEVEL		74.933	74.913			74.779	74.649	74.689		74.827		74.752	74.712	74.842			74.976	74.964				72.568	
EXISTING LEVEL		72.962	72.944			72.928	72.928	72.929		72.938		72.942	72.943	72.944			72.924	72.918				72.568	
OFFSET	-9.05	-8.55			-5.15	-5.05	-4.6		0		2.5	2.95	3.05		3.77	6.45	6.95					16.634	
					5.06	5.02	4.55				2.52	2.75	3.11		3.77	6.26	7.41						

CH 180

DATUM R.L. 67																							
W.A.E.			74.37	74.36			74.29	74.19	74.20		74.33		74.24	74.22	74.33	74.37	74.42	74.38					
DESIGN LEVEL		74.444	74.424			74.29	74.16	74.2		74.338		74.263	74.223	74.353			74.487	74.475					
EXISTING LEVEL		71.689	71.664			71.484	71.478	71.454		71.34		71.356	71.358	71.359			71.381	71.384					
OFFSET	-9.05	-8.55			-5.15	-5.05	-4.6		0		2.5	2.95	3.05		3.75	6.45	6.95						
					5.21	4.85	4.55				2.45	2.81	3.12		3.75	6.20							

CH 225

DATUM R.L. 66																							
W.A.E.											73.94		73.87		73.87	73.96	73.99	74.05	74.06				
DESIGN LEVEL											73.949		73.874		73.834	73.964		74.086	74.066				
EXISTING LEVEL											70.984		70.977		70.975	70.975		70.974	70.982				
OFFSET										0		2.5	2.45	2.70	2.95	3.05	3.73	6.18	6.45	6.95			

CH 246.218

- ROAD CROSS SECTIONS AMENDED

B

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL
04/02/2025
SUBDIVISION WORKS CERTIFICATE
DA/2023/580/1 SWC.16.2023.580.2

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
B	MG	DH	MP	MP	28/11/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

For: mirvac

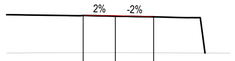
By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
ROAD CROSS SECTIONS
SHEET 3

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	312	B

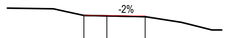
ACCESS 1



DATUM R.L. 66

W.A.E.				73.10		73.08		73.02	
DESIGN LEVEL				73.093		73.051		73.001	
EXISTING LEVEL				70.663		70.664		70.655	
OFFSET	-2.10	12.07	0		2.5	2.42			

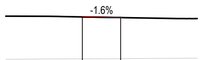
CH 30



DATUM R.L. 66

W.A.E.				72.24		72.22		72.20	
DESIGN LEVEL				72.232		72.202		72.152	
EXISTING LEVEL				70.341		70.351		70.362	
OFFSET	-1.5	1.52	0		2.5	2.52			

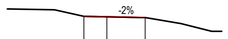
CH 55.164



DATUM R.L. 66

W.A.E.				73.45		73.38			
DESIGN LEVEL				73.426		73.386			
EXISTING LEVEL				70.691		70.701			
OFFSET	0		2.5	2.58		70.701			

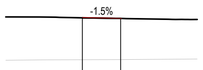
CH 17.692



DATUM R.L. 66

W.A.E.				72.27		72.24		72.22	
DESIGN LEVEL				72.261		72.231		72.181	
EXISTING LEVEL				70.351		70.36		70.371	
OFFSET	-1.5	1.55	0		2.5	2.52			

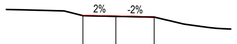
CH 54.052



DATUM R.L. 66

W.A.E.				73.45		73.38			
DESIGN LEVEL				73.426		73.388			
EXISTING LEVEL				70.691		70.701			
OFFSET	0		2.5	2.57		70.701			

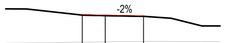
CH 17.499



DATUM R.L. 66

W.A.E.				72.54		72.50		72.46	
DESIGN LEVEL				72.519		72.476		72.426	
EXISTING LEVEL				70.459		70.471		70.465	
OFFSET	-2	1532.21	0		2.5	2.57			

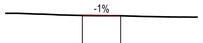
CH 45



DATUM R.L. 66

W.A.E.				72.02		71.99		71.94	
DESIGN LEVEL				71.99		71.96		71.91	
EXISTING LEVEL				70.228		70.251		70.275	
OFFSET	-1.5	1.52	0		2.5	2.46			

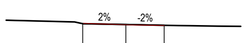
CH 72.826



DATUM R.L. 66

W.A.E.				73.43		73.38			
DESIGN LEVEL				73.419		73.394			
EXISTING LEVEL				70.691		70.701			
OFFSET	0		2.5	2.51		70.701			

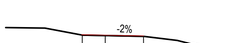
CH 16



DATUM R.L. 66

W.A.E.				72.90		72.80		72.75	
DESIGN LEVEL				72.88		72.824		72.774	
EXISTING LEVEL				70.631		70.609		70.59	
OFFSET	-2.81	72.78	0		2.5	2.52			

CH 35.627



DATUM R.L. 66

W.A.E.				72.16		72.12		72.08	
DESIGN LEVEL				72.133		72.103		72.053	
EXISTING LEVEL				70.301		70.306		70.313	
OFFSET	-1.5	1.55	0		2.5	2.51			

CH 60

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL
04/02/2025
SUBDIVISION WORKS CERTIFICATE
DA/2023/580/1 SWC.16.2023.580.2

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

For: mirvac

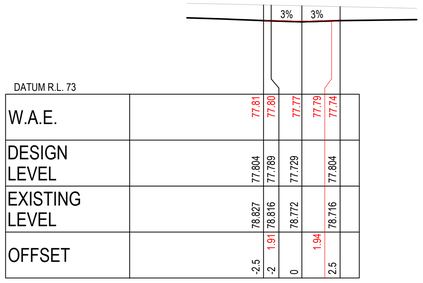
By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

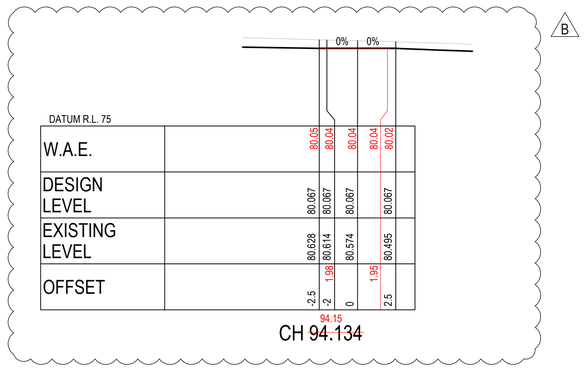
Title:
ROAD CROSS SECTIONS
SHEET 4

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	313	A

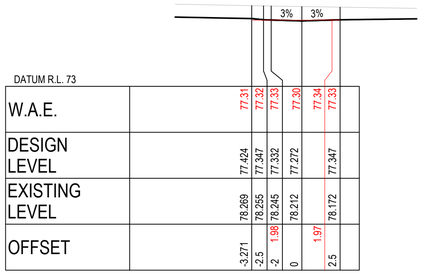
DRIVEWAY 1



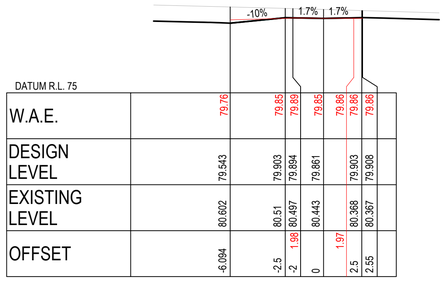
CH 45



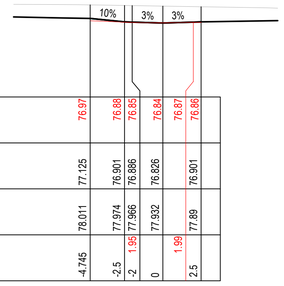
CH 94.134



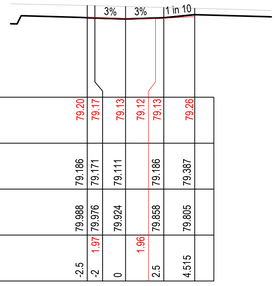
CH 30



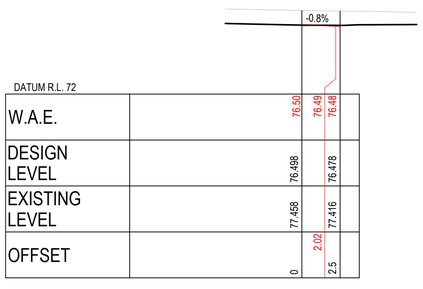
CH 90



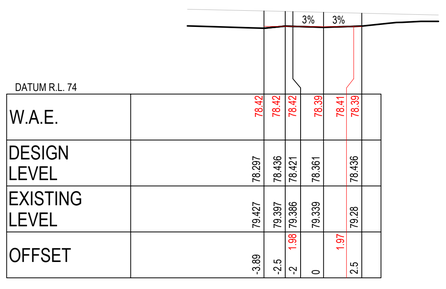
CH 15



CH 75

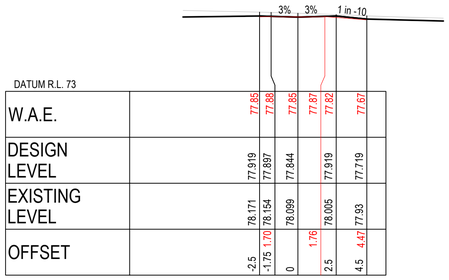


CH 4

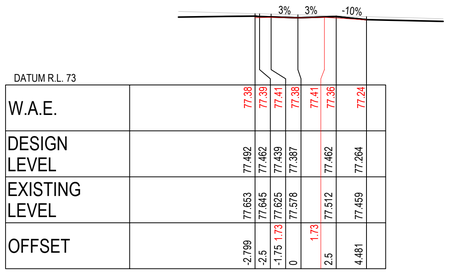


CH 60

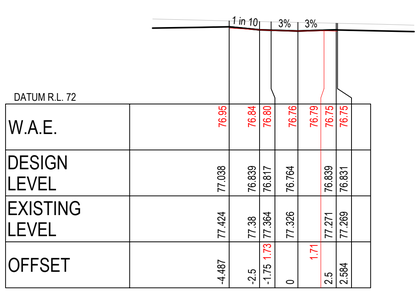
DRIVEWAY 2



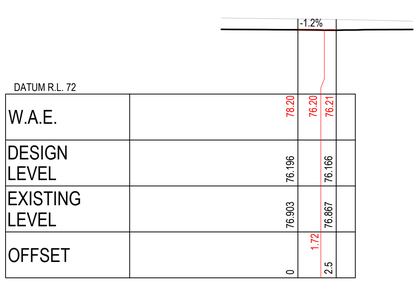
CH 45



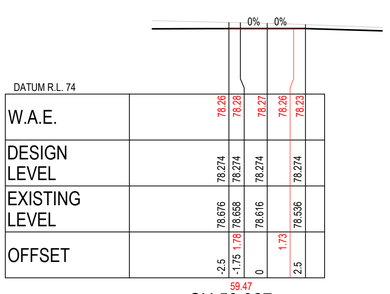
CH 30



CH 15



CH 3.648



CH 59.327

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL
04/02/2025
SUBDIVISION WORKS CERTIFICATE
DA/2023/580/1 SWC.16.2023.580.2

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
B	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

For: mirvac

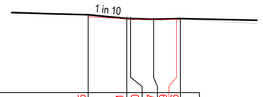
By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: DRIVEWAY CROSS SECTIONS SHEET 1

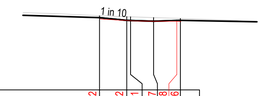
Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	314	B

DRIVEWAY 3



DATUM R.L. 72									
W.A.E.	76.95		76.81	76.80	76.77	76.75	76.76		
DESIGN LEVEL	77.088		76.836	76.828	76.763	76.836			
EXISTING LEVEL	77.058		76.935	76.922	76.865	76.798			
OFFSET	-4.27		-1.75	-1.5	1.48	0	1.49	1.75	

CH 45



DATUM R.L. 72									
W.A.E.	76.62		76.52	76.51	76.47	76.48	76.46		
DESIGN LEVEL	76.713		76.535	76.528	76.483	76.535			
EXISTING LEVEL	76.839		76.776	76.768	76.719	76.662			
OFFSET	-3.929		-1.75	-1.5	1.47	0	1.52	1.75	

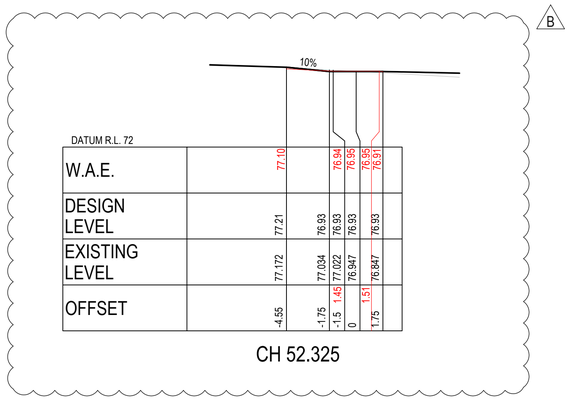
CH 30

DATUM R.L. 72									
W.A.E.	76.24		76.23	76.22	76.18	76.21	76.19		
DESIGN LEVEL	76.339		76.235	76.228	76.183	76.235			
EXISTING LEVEL	76.682		76.648	76.64	76.593	76.543			
OFFSET	-2.787		-1.75	-1.5	1.40	0	1.56	1.75	

CH 15

DATUM R.L. 71									
W.A.E.	75.91		75.96	75.93					
DESIGN LEVEL	75.977		75.974	75.966					
EXISTING LEVEL	76.367		76.361	76.329					
OFFSET	-1.75		-1.5	1.37	0				

CH 3.773



DATUM R.L. 72									
W.A.E.	77.10		76.94	76.94	76.95	76.91			
DESIGN LEVEL	77.21		76.93	76.93	76.93	76.93			
EXISTING LEVEL	77.172		77.034	77.022	76.947	76.847			
OFFSET	-4.55		-1.75	-1.5	1.45	0	1.51	1.75	

CH 52.325

CAMDEN COUNCIL
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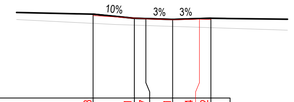
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

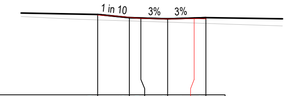
DA/2023/580/1 SWC.16.2023.580.2

DRIVEWAY 4



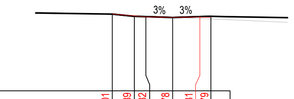
DATUM R.L. 71									
W.A.E.	76.38		76.21	76.17	76.11	76.14	76.12		
DESIGN LEVEL	76.477		76.208	76.185	76.133	76.208			
EXISTING LEVEL	75.872		75.758	75.734	75.676	75.594			
OFFSET	-5.193		-2.5	-1.75	1.73	0	1.75	2.5	

CH 45



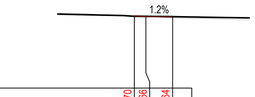
DATUM R.L. 71									
W.A.E.	76.20		76.06	75.99	75.95	75.97	75.95		
DESIGN LEVEL	76.242		76.035	76.013	75.96				
EXISTING LEVEL	75.889		75.822	75.798	75.741	75.66			
OFFSET	-4.567		-2.5	-1.75	1.73	0	1.73	2.5	

CH 30



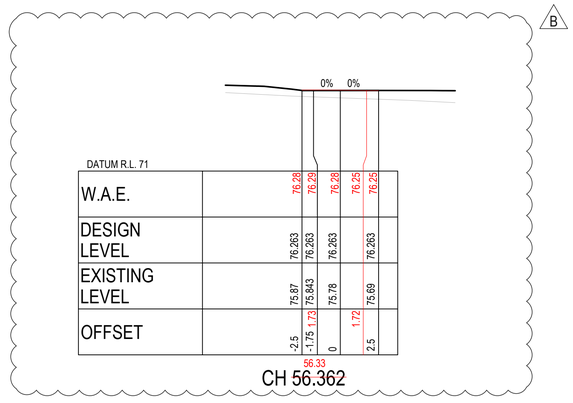
DATUM R.L. 71									
W.A.E.	76.01		75.89	75.82	75.78	75.81	75.79		
DESIGN LEVEL	76.007		75.862	75.84	75.787	75.862			
EXISTING LEVEL	75.961		75.902	75.871	75.798	75.69			
OFFSET	-3.94		-2.5	-1.75	1.74	0	1.78	2.5	

CH 15



DATUM R.L. 71									
W.A.E.	75.70		75.66	75.64					
DESIGN LEVEL	75.689		75.68	75.659					
EXISTING LEVEL	75.698		75.662	75.572					
OFFSET	-2.5		-1.75	1.73	0				

CH 3.854



DATUM R.L. 71									
W.A.E.	76.28		76.29	76.28	76.25	76.25			
DESIGN LEVEL	76.263		76.263	76.263	76.263				
EXISTING LEVEL	75.87		75.843	75.78	75.69				
OFFSET	-2.5		-1.75	1.73	0	1.72	2.5		

56.33

CH 56.362

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
B	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

For: mirvac

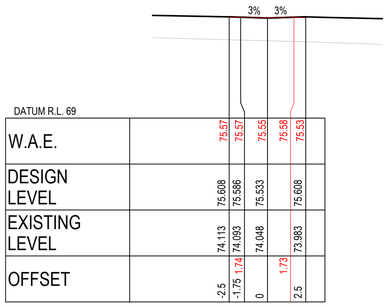
By: ORION
ABN:25 604 069 981 **PO Box:**7936, BAULKHAM HILLS NSW 2153 **T:**(02) 8660 0035 **E:**info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

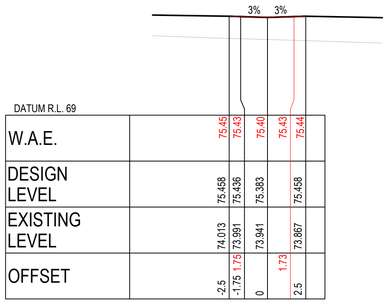
Title:
DRIVEWAY CROSS SECTIONS
SHEET 2

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	315	B

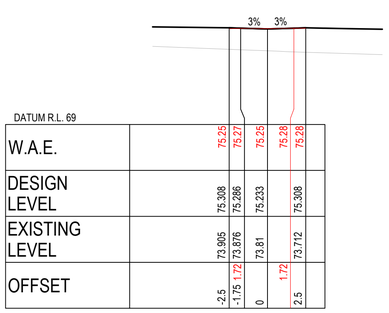
DRIVEWAY 5



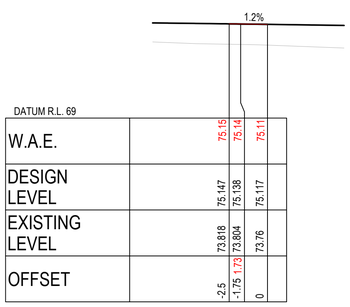
CH 45



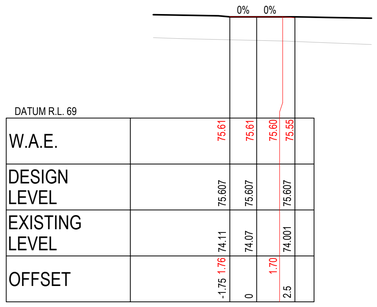
CH 30



CH 15

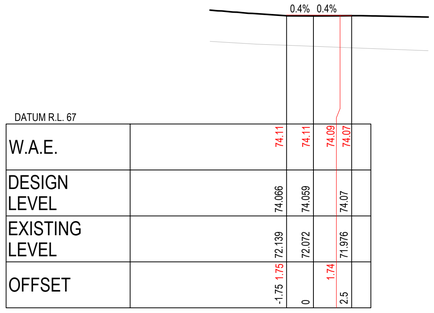


CH 3.738

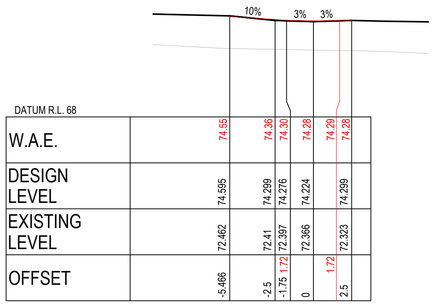


CH 52.322

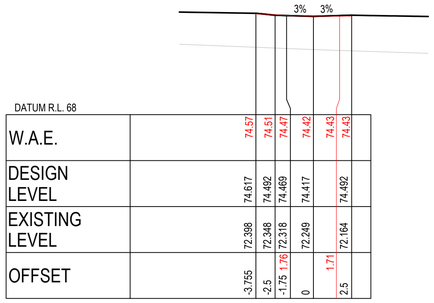
DRIVEWAY 6



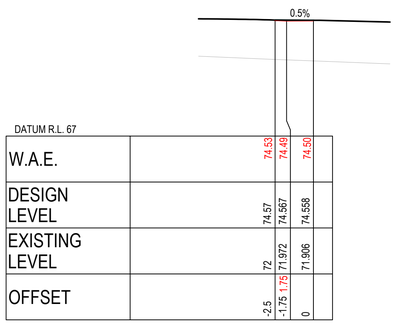
CH 42.861



CH 30



CH 15



CH 4

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL
04/02/2025
SUBDIVISION WORKS CERTIFICATE
DA/2023/580/1 SWC.16.2023.580.2

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)

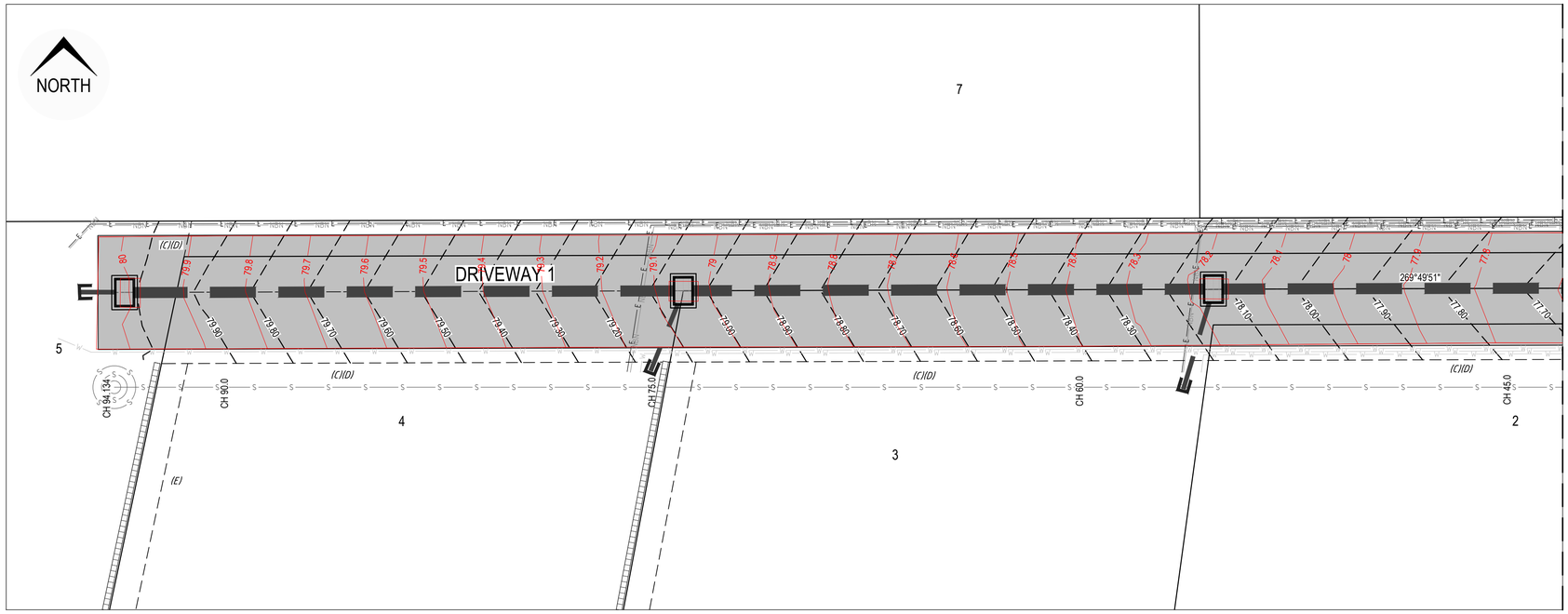
For: mirvac

By: ORION
ABN:25 604 069 981 **PO Box:**7936, BAULKHAM HILLS NSW 2153 **T:**(02) 8660 0035 **E:**info@theoriongroup.au

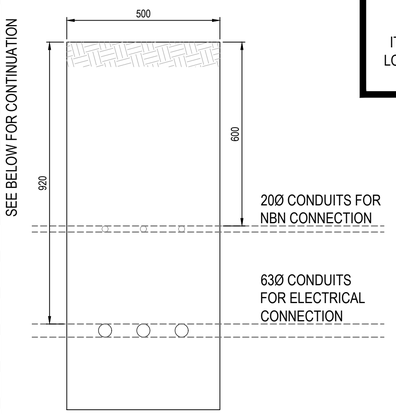
Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: DRIVEWAY CROSS SECTIONS SHEET 3

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	316	A



DRIVEWAY 1
SCALE 1:100



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 1 (NORTH SIDE)
SCALE 1:10

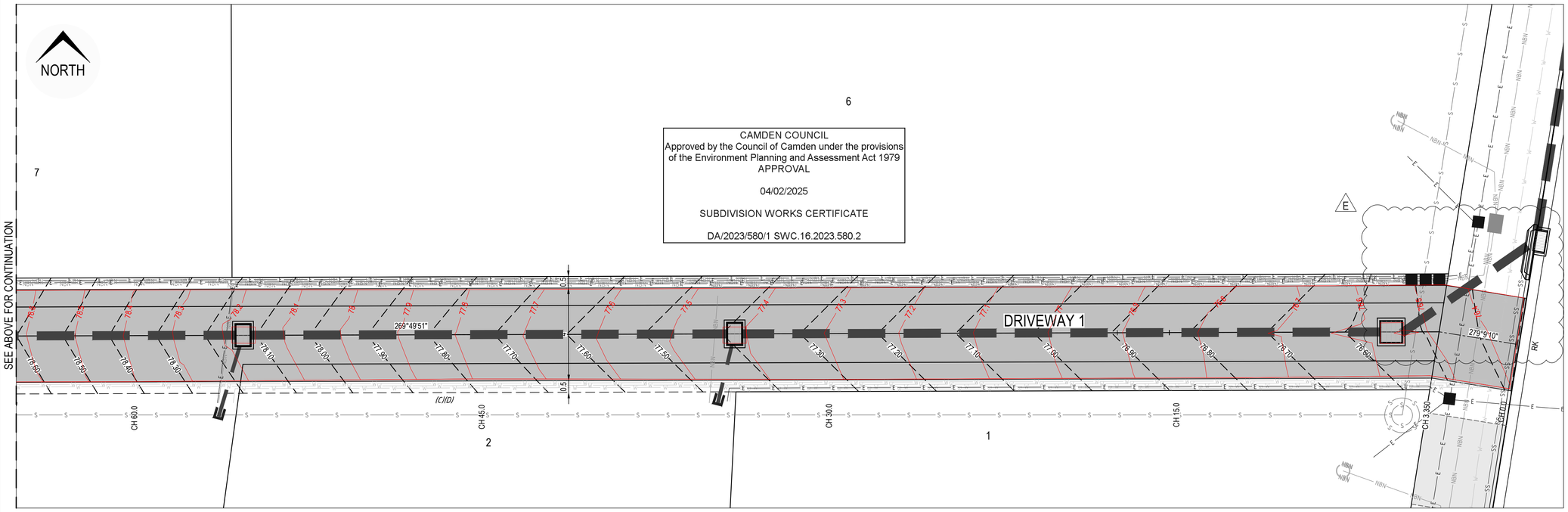
LEGEND	
CADASTRAL	
EXISTING CONTOURS	15.0
LOT BOUNDARY	

UTILITIES SHOWN ARE DIAGRAMMATIC ONLY AND MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES/STANDARDS

BEFORE YOU DIG www.byda.com.au
Zero Damage - Zero Harm

NOTE:
1. SERVICES TRENCHING INDICATIVE AND SUBJECT TO APPROPRIATE SERVICE CLEARANCES TO BE DETERMINED DURING CONSTRUCTION
2. REFER TO PLAN 323 FOR TYPICAL SERVICE CROSSING STORMWATER SECTION



DRIVEWAY 1
SCALE 1:100

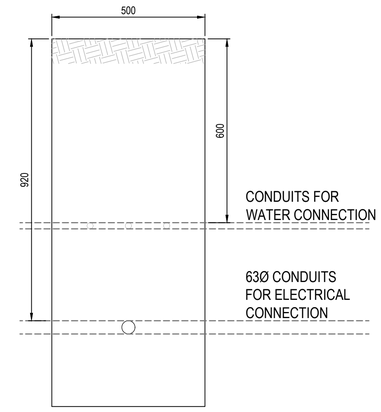
CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 1 (SOUTH SIDE)
SCALE 1:10

SETOUT TABLE DRIVEWAY 1			
CHAINAGE	EASTING	NORTHING	BEARING
0	288315.984	6233842.227	279°09'09.72"
3.35	288312.677	6233842.76	
94.134	288221.893	6233842.492	269°49'51.18"

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
E	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	19/08/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
SCALE 1:10 (A1) SCALE 1:20 (A3)

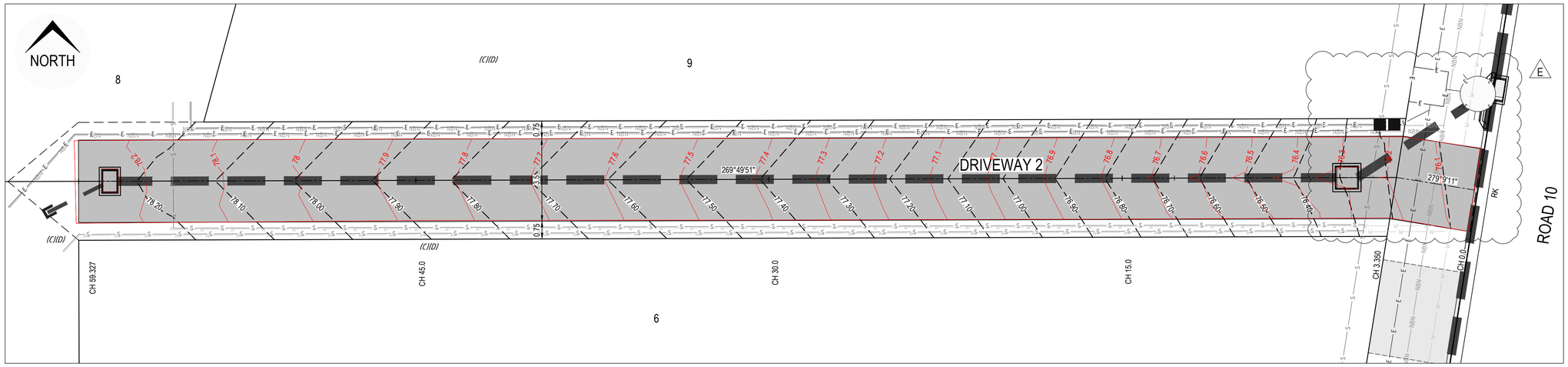
For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theorigroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: DRIVEWAY PLAN SHEET 1

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	320	E



DRIVEWAY 2

SCALE 1:100

LEGEND

CADASTRAL	
EXISTING CONTOURS	15.0
LOT BOUNDARY	

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NOTE:

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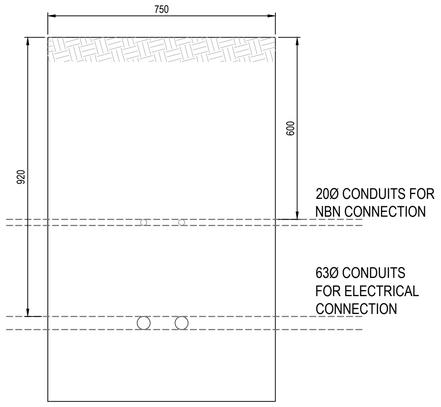
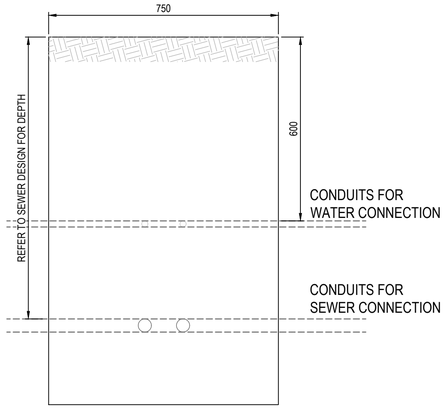
2. REFER TO PLAN 323 FOR TYPICAL SERVICE CROSSING STORMWATER SECTION



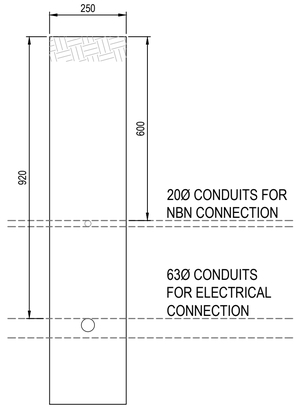
TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 2 (NORTH SIDE)

SCALE 1:10



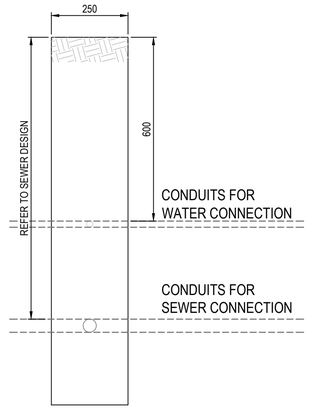
TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 2 (SOUTH SIDE)

SCALE 1:10



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 3 (NORTH SIDE)

SCALE 1:10



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 3 (SOUTH SIDE)

SCALE 1:10

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL

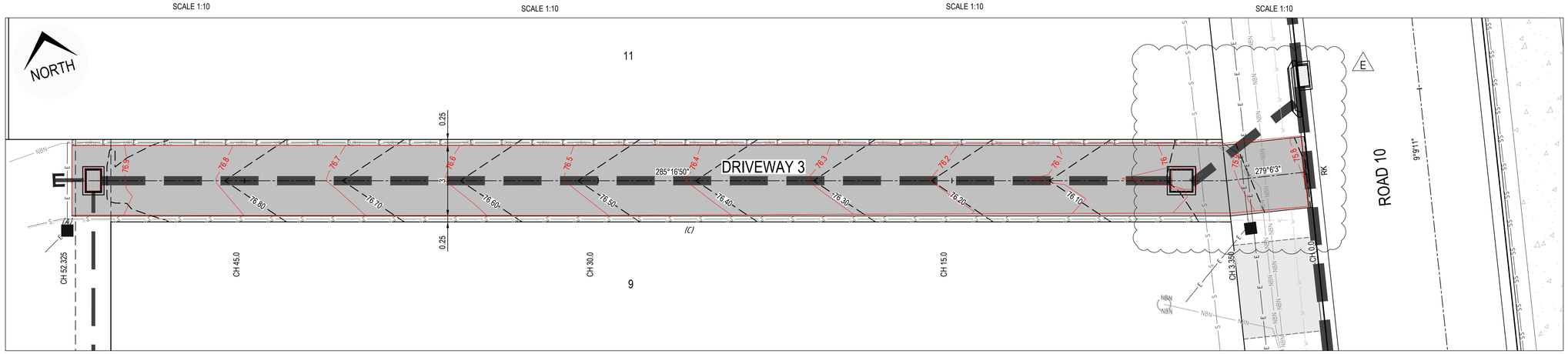
04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP



DRIVEWAY 3

SCALE 1:100

SETOUT TABLE DRIVEWAY 2

CHAINAGE	EASTING	NORTHING	BEARING
0	288319.77	6233865.74	279°09'10.74"
3.35	288316.47	6233866.27	
59.33	288260.49	6233866.11	269°49'51.12"

SETOUT TABLE DRIVEWAY 3

CHAINAGE	EASTING	NORTHING	BEARING
0	288323.001	6233885.777	279°06'03.00"
3.35	288319.693	6233886.307	
52.325	288272.449	6233899.214	285°16'50.00"

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
E	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	19/08/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
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SCALE 1:10 (A1) SCALE 1:20 (A3)
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)

For: mirvac

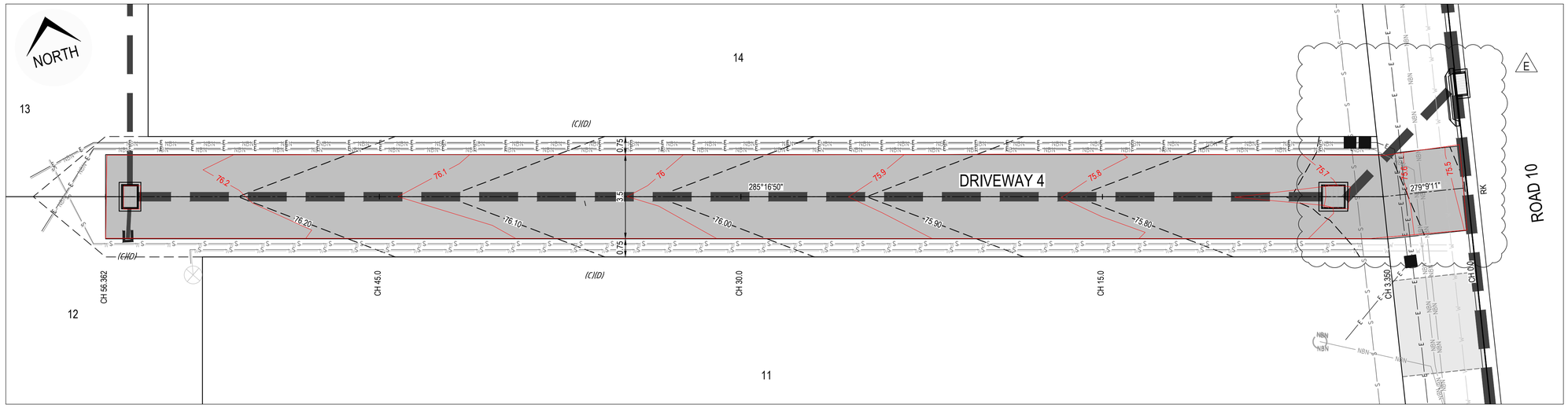
By: ORION

ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: DRIVEWAY PLAN SHEET 2

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	321	E



DRIVEWAY 4

SCALE 1:100

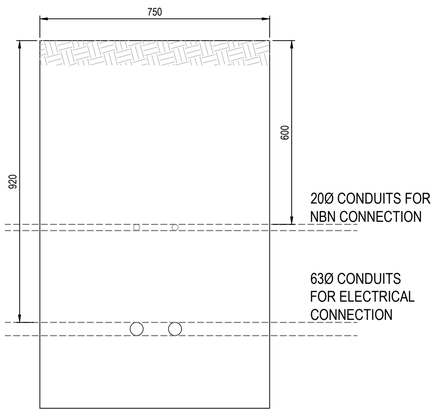
LEGEND	
CADASTRAL	
EXISTING CONTOURS	15.0
LOT BOUNDARY	

UTILITIES SHOWN ARE DIAGRAMMATIC ONLY AND MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES/STANDARDS

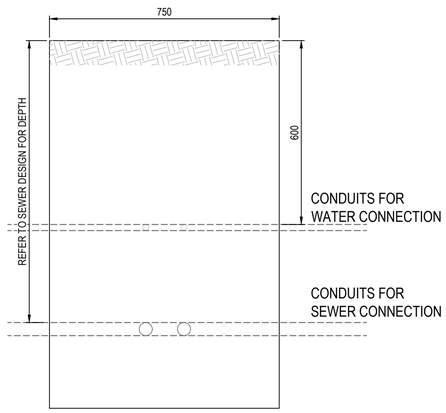
BEFORE YOU DIG www.byda.com.au
Zero Damage - Zero Harm

NOTE:
1. SERVICES TRENCHING INDICATIVE AND SUBJECT TO APPROPRIATE SERVICE CLEARANCES TO BE DETERMINED DURING CONSTRUCTION



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 4 & 5 (NORTH SIDE)

SCALE 1:10



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 4 & 5 (SOUTH SIDE)

SCALE 1:10

CAMDEN COUNCIL
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APPROVAL

04/02/2025

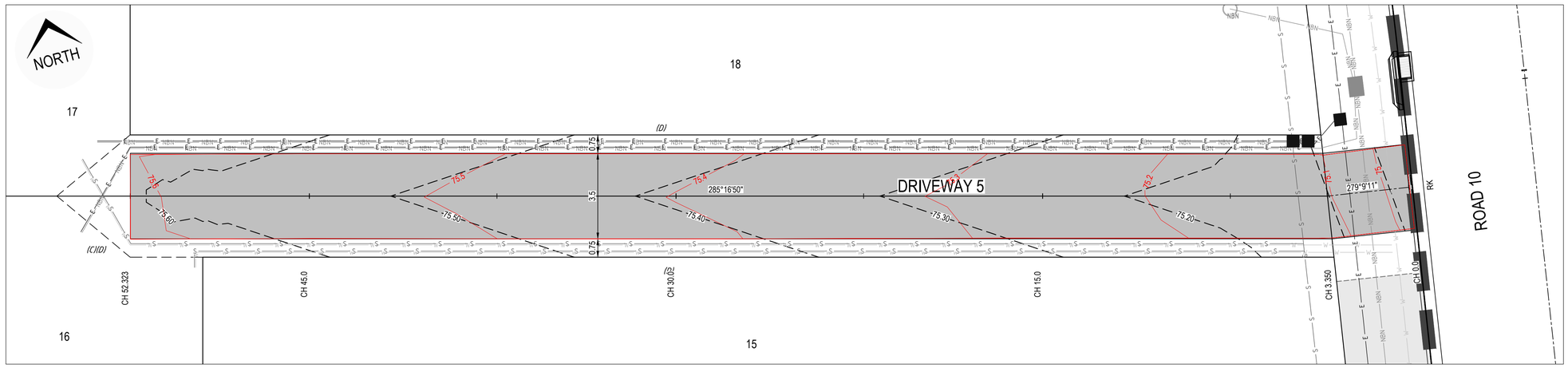
SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

SETOUT TABLE DRIVEWAY 4			
CHAINAGE	EASTING	NORTHING	BEARING
0	288326.979	6233910.468	279°09'10.74"
3.35	288323.672	6233911.001	
56.362	288272.534	6233924.972	285°16'50.00"

SETOUT TABLE DRIVEWAY 5			
CHAINAGE	EASTING	NORTHING	BEARING
0	288334.78	6233958.91	279°09'10.88"
3.35	288331.48	6233959.45	
52.32	288284.24	6233972.35	285°16'49.72"

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP



DRIVEWAY 5

SCALE 1:100

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
E	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	19/08/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
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SCALE 1:10 (A1) SCALE 1:20 (A3)
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)

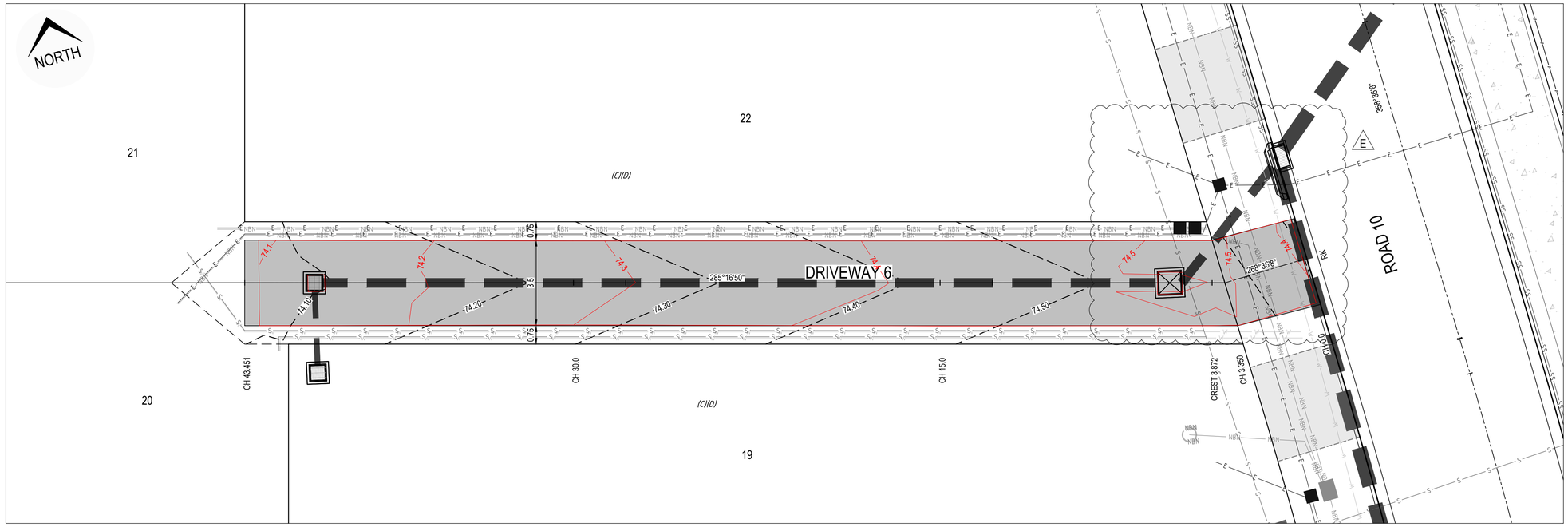
For: mirvac

By: ORION
JAS-ANZ SUSTAINABLE ASSESSMENT BY IS V1.2 WWW.JAS-ANZ.ORG/REGISTER
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: DRIVEWAY PLAN SHEET 3

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	322	E



LEGEND	
CADASTRAL	
EXISTING CONTOURS	15.0
LOT BOUNDARY	

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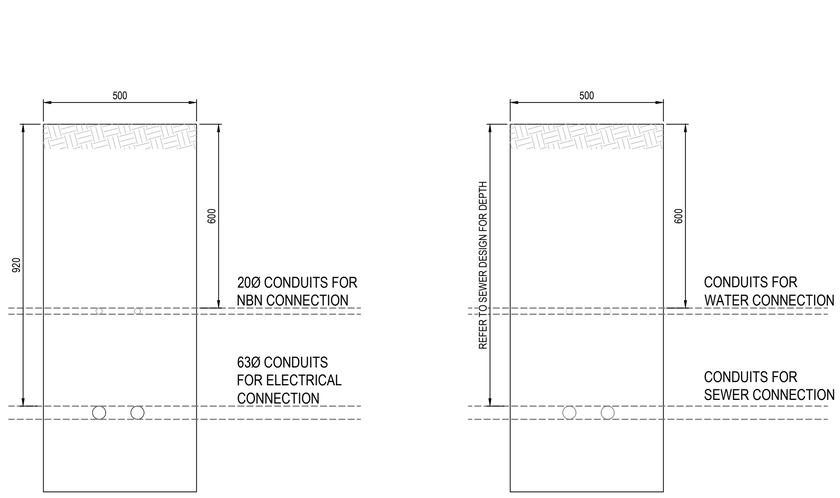
Zero Damage - Zero Harm

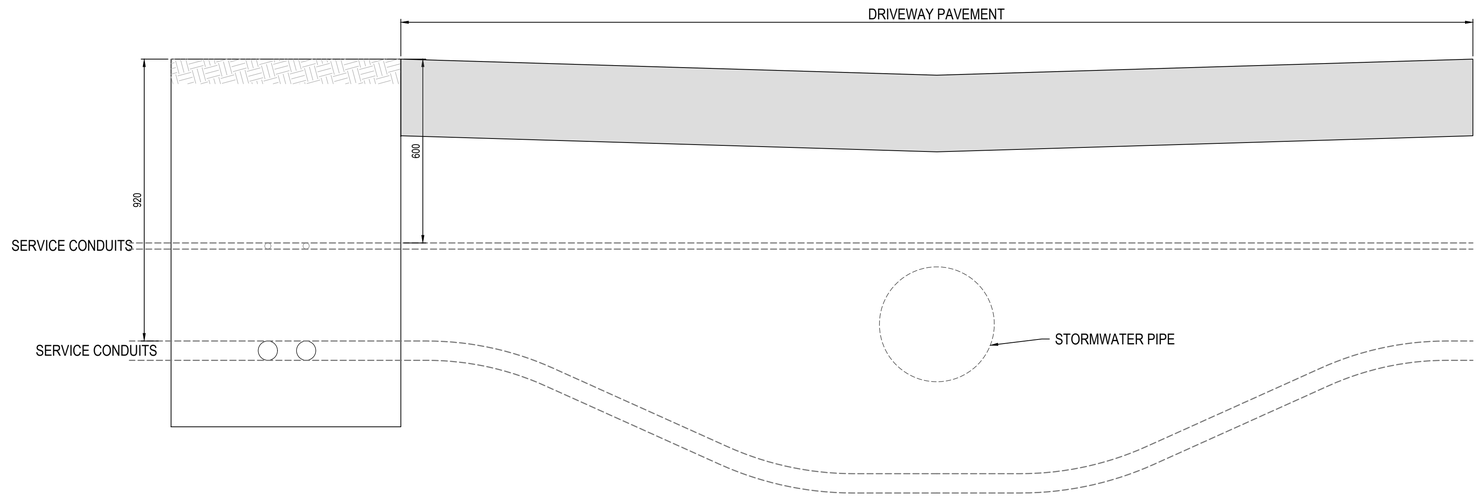
NOTE:
1. SERVICES TRENCHING INDICATIVE AND SUBJECT TO APPROPRIATE SERVICE CLEARANCES TO BE DETERMINED DURING CONSTRUCTION

SETOUT TABLE DRIVEWAY 6			
CHAINAGE	EASTING	NORTHING	BEARING
0	288338.39	6234013.08	268°36'08.19"
3.35	288335.05	6234013	
43.45	288296.36	6234023.57	285°16'50.07"



TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 6 (NORTH SIDE)
SCALE 1:10

TYPICAL SERVICE TRENCH DETAIL - DRIVEWAY 6 (SOUTH SIDE)
SCALE 1:10



TYPICAL SERVICE CONDUIT CROSSING STORMWATER SECTION
SCALE 1:10

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APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

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DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
E	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	NS	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	19/08/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
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A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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SCALE 1:10 (A1) SCALE 1:20 (A3)
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)

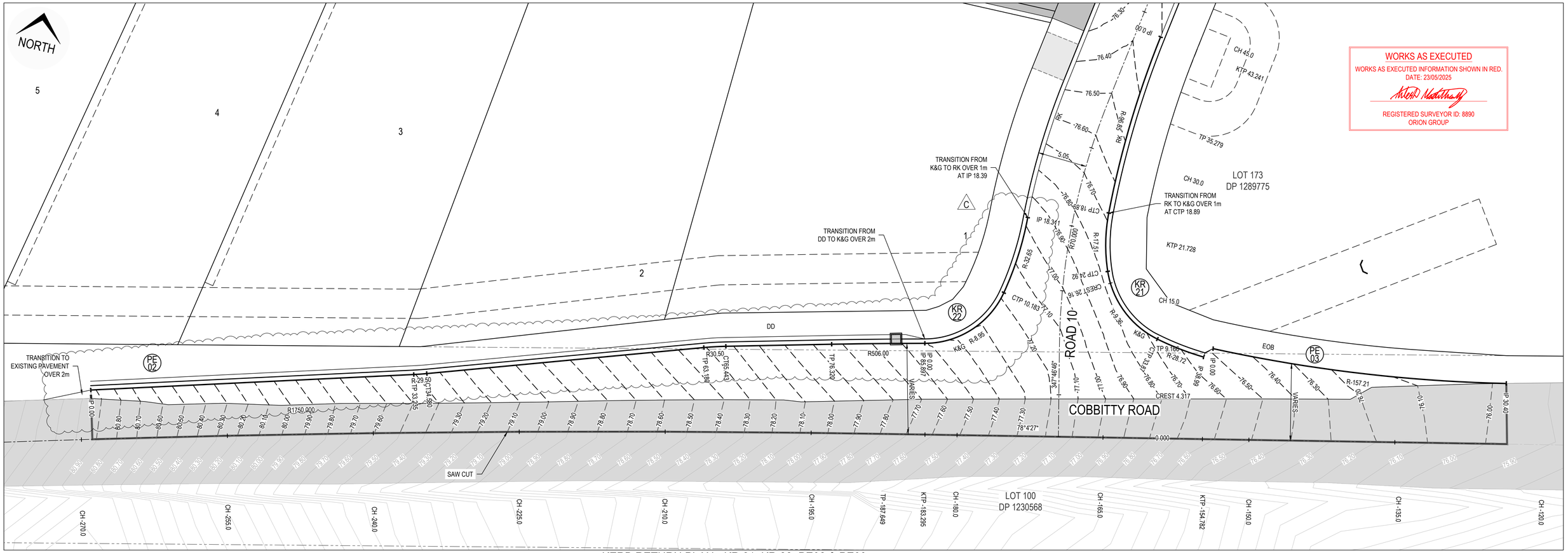
For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theorionngroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

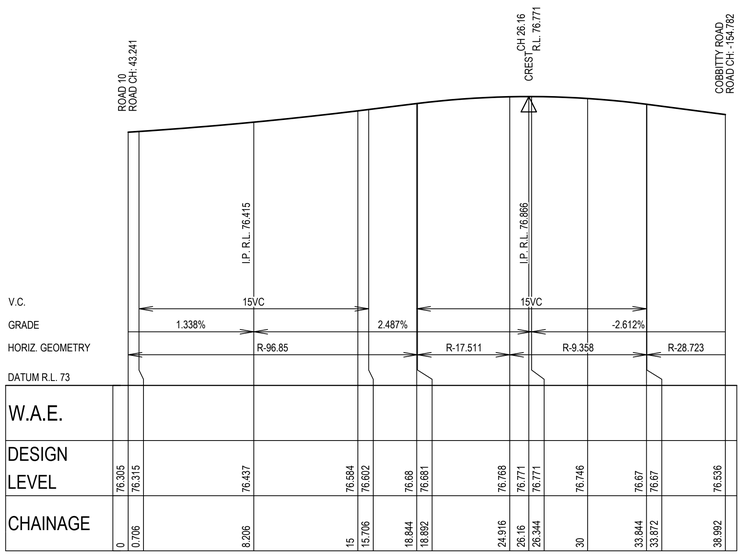
Title: DRIVEWAY PLAN SHEET 4

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	323	E



KERB RETURN PLAN - KR 21, KR 22, PE02 & PE03

SCALE 1:200



KERB RETURN KR 21

SCALE 1:200 (H)

SCALE 1:40 (V)

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APPROVAL

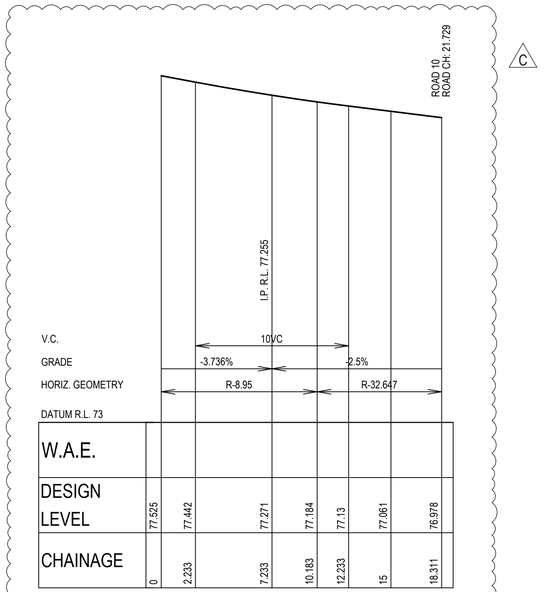
04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

SETOUT TABLE KR 21

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288323.64	6233841.35	189°09'10.74"		
9.45	288322.13	6233832		-96.85	18.892
18.89	288322.47	6233822.53	177°58'35.94"		
21.9	288322.58	6233819.49		-17.511	6.024
24.92	288323.7	6233816.66	158°15'56.08"		
29.39	288325.5	6233812.15		-9.358	8.956
33.87	288330.22	6233811.02	103°25'49.83"		
36.43	288332.72	6233810.43		-28.723	5.12
38.99	288335.28	6233810.28	93°12'59.84"		

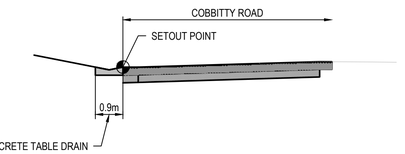


KERB RETURN KR 22

SCALE 1:200 (H)

SCALE 1:40 (V)

NOTE: KERB RETURNS ARE SETOUT TO THE LIP OF GUTTER
CONTRACTOR TO ENSURE SMOOTH TRANSITION TO EXISTING PAVEMENT
REFER TO PLAN 401 FOR PE02 AND PE03 PROFILE AND SETOUT TABLE



TYPICAL TABLE DRAIN SETOUT LOCATION

SCALE: NOT TO SCALE

SETOUT TABLE KR 22

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288307.31	6233804.97	76°22'51.89"		
4.67	288312.36	6233806.19		-8.51	9.331
9.33	288313.58	6233811.24	13°33'16.97"		
13.86	288314.65	6233815.67		-32.647	9.06
18.39	288314.46	6233820.23	357°39'16.63"		

ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
C	WP	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)
0 0.4 0.8 1.2 1.6 2 2.4 2.8 3.2 3.6 4
SCALE 1:40 (A1) SCALE 1:80 (A3)

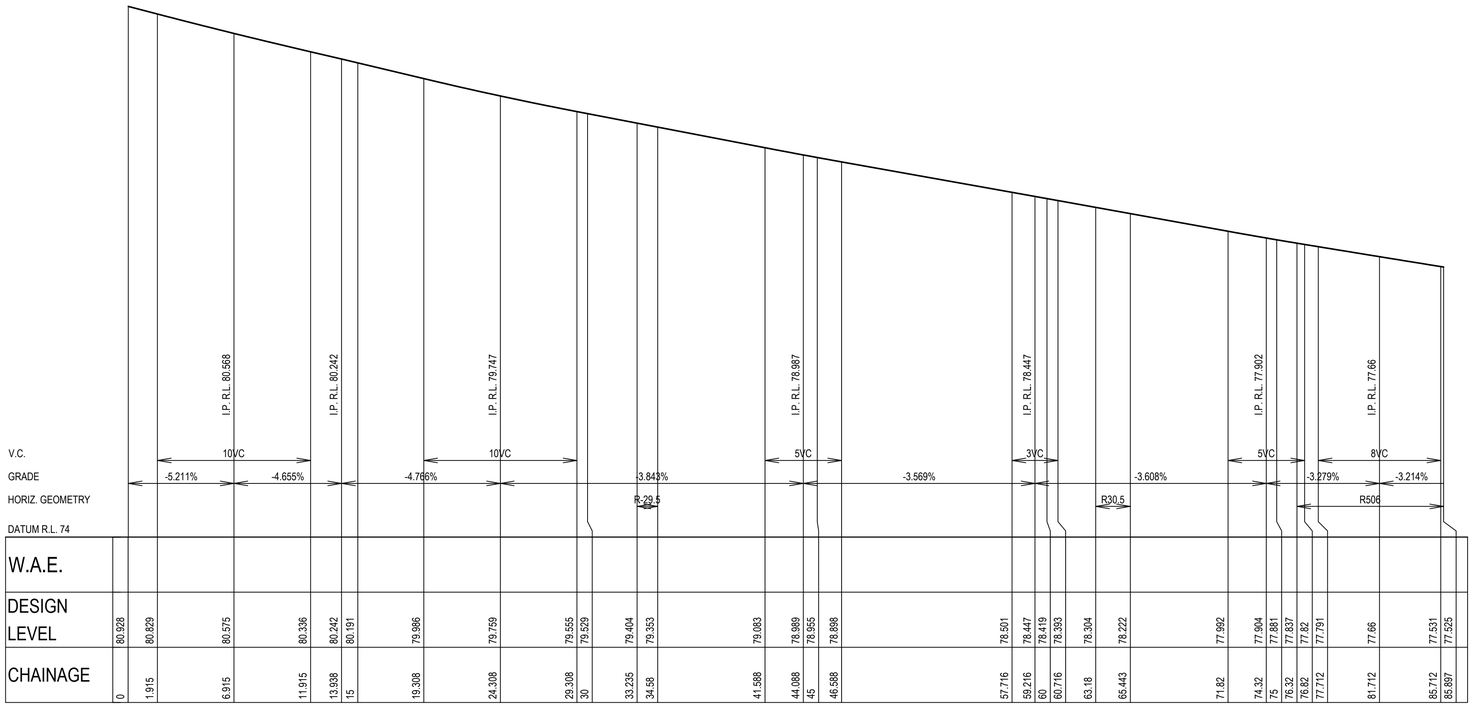
For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

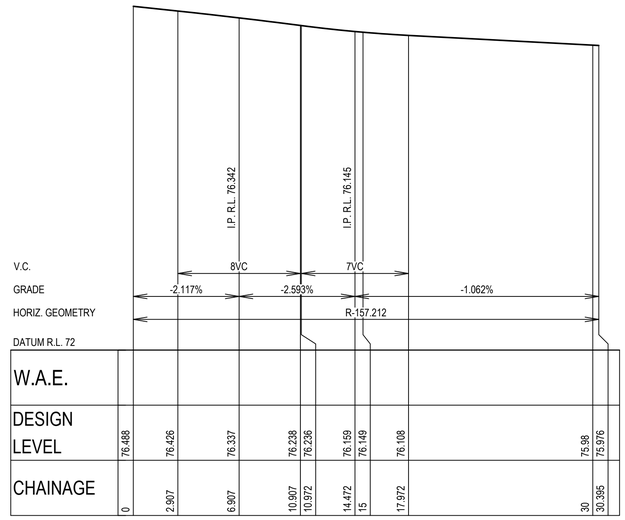
Title: KERB RETURN PLAN SHEET 1

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	400	C



KERB RETURN PE02

SCALE 1:200 (H)
SCALE 1:40 (V)



KERB RETURN PE03

SCALE 1:200 (H)
SCALE 1:40 (V)

B

SETOUT TABLE PE02

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288224.519	6233781.515	74°23'06.37"		
33.235	288256.528	6233790.461	74°23'06.37"		
33.908	288257.176	6233790.642		-29.5	1.345
34.58	288257.814	6233790.852	71°46'23.97"		
63.18	288284.979	6233799.797	71°46'23.97"		
64.312	288286.054	6233800.151		30.5	2.263
65.443	288287.153	6233800.425	76°01'29.52"		
76.32	288297.708	6233803.052	76°01'29.52"		
81.108	288302.355	6233804.208		506	9.577
85.897	288307.023	6233805.276			
85.897	288307.023	6233805.276	77°13'42.75"		

SETOUT TABLE PE03

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288336.03	6233811.34	78°21'53.88"		
0	288336.03	6233811.34			
15.2	288351.27	6233811.49		-157.212	30.395
30.4	288366.2	6233814.56	78°21'41.04"		

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

NOTE: KERB RETURNS ARE SETOUT TO THE LIP OF GUTTER CONTRACTOR TO ENSURE SMOOTH TRANSITION TO EXISTING PAVEMENT

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04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

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Rev	Drawn	Design	Check	Appd.	Date	Revision Description
B	WP	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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SCALE 1:200 (A1) SCALE 1:400 (A3)
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SCALE 1:40 (A1) SCALE 1:80 (A3)

For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: KERB RETURN PLAN SHEET 2

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	401	B

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NOTE: KERB RETURNS ARE SETOUT TO THE LIP OF GUTTER
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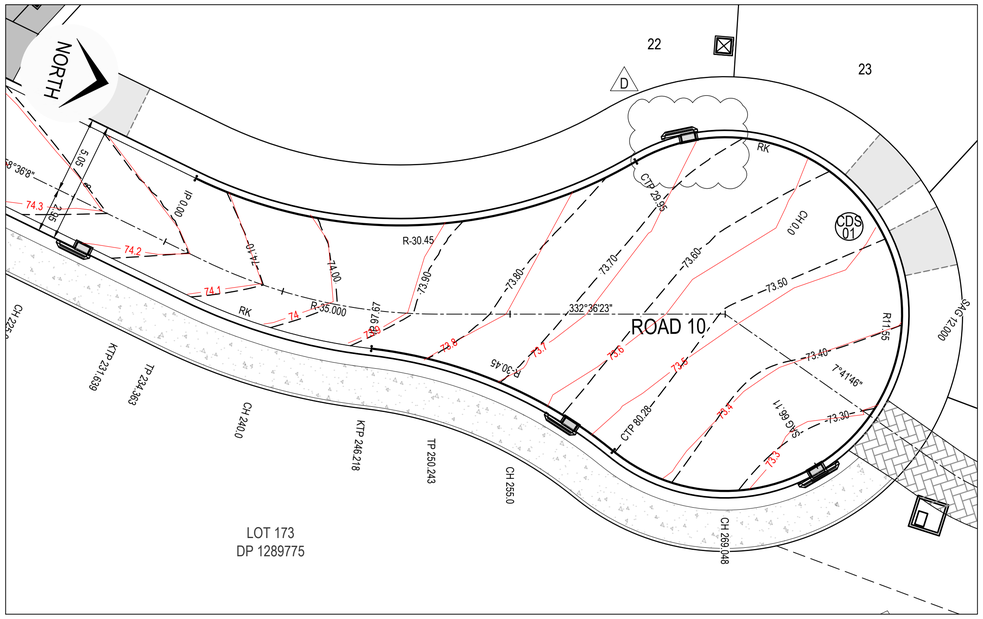
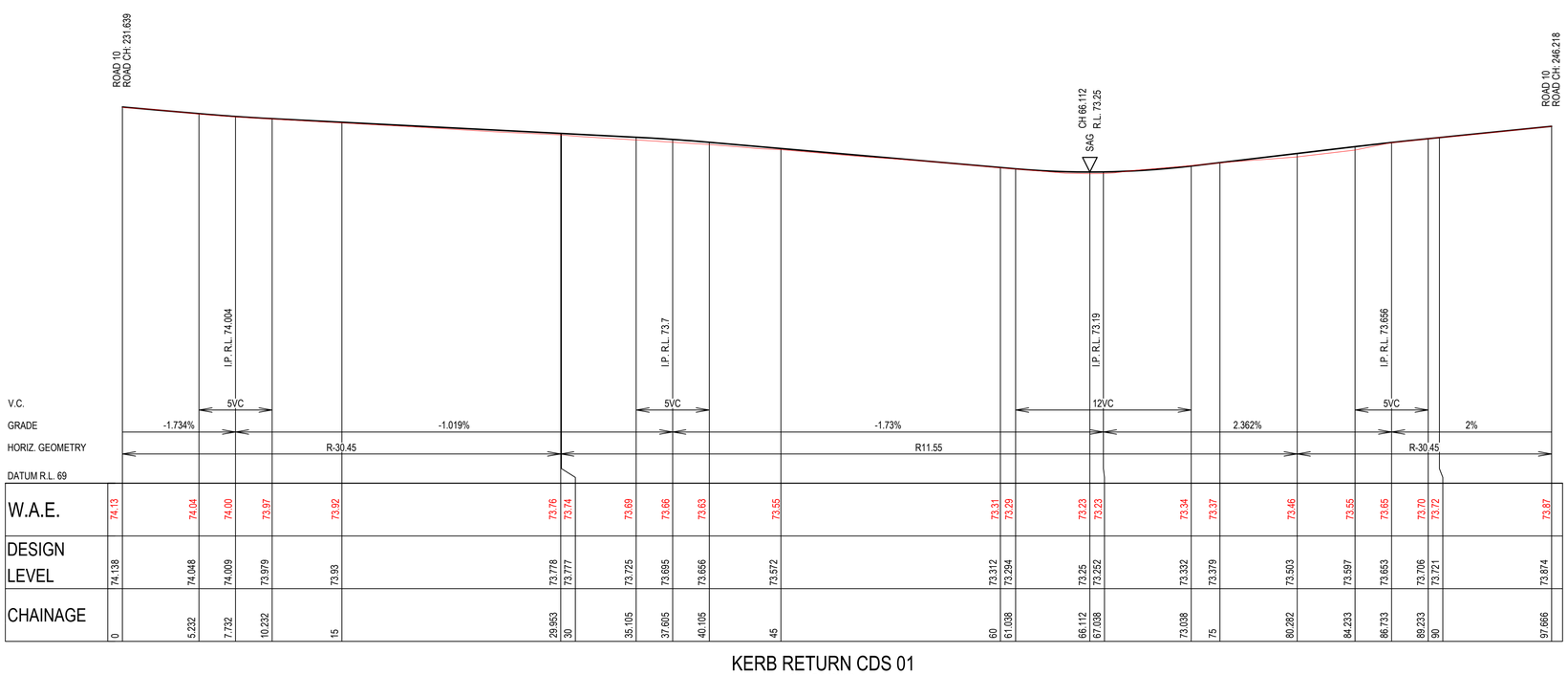
DA/2023/580/1 SWC.16.2023.580.2



KERB RETURN PLAN - CDS 01
SCALE 1:200



KERB RETURN CDS 01
SCALE 1:200 (H)
SCALE 1:40 (V)

SETOUT TABLE CDS 01					
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288338.62	6234028.3	358°36'08.19"		
14.98	288338.22	6234044.61		-30.45	29.953
29.95	288324.43	6234053.31	302°14'31.55"		
38.34	288315.75	6234058.79		11.55	16.776
46.73	288320.16	6234068.05	25°27'49.21"		
55.12	288324.57	6234077.31		11.55	16.776
63.51	288334.29	6234074.02	108°41'06.87"		
71.89	288344.01	6234070.74		11.55	16.776
80.28	288341.89	6234060.7	191°54'24.54"		
88.97	288340.05	6234051.96		-30.45	17.384
97.67	288343.22	6234043.6	159°11'45.53"		

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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D	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	NS	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
SCALE 1:200 (A1) SCALE 1:400 (A3)
0 0.4 0.8 1.2 1.6 2 2.4 2.8 3.2 3.6 4
SCALE 1:40 (A1) SCALE 1:80 (A3)

For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
KERB RETURN PLAN
SHEET 3

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	402	D

CAMDEN COUNCIL
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APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

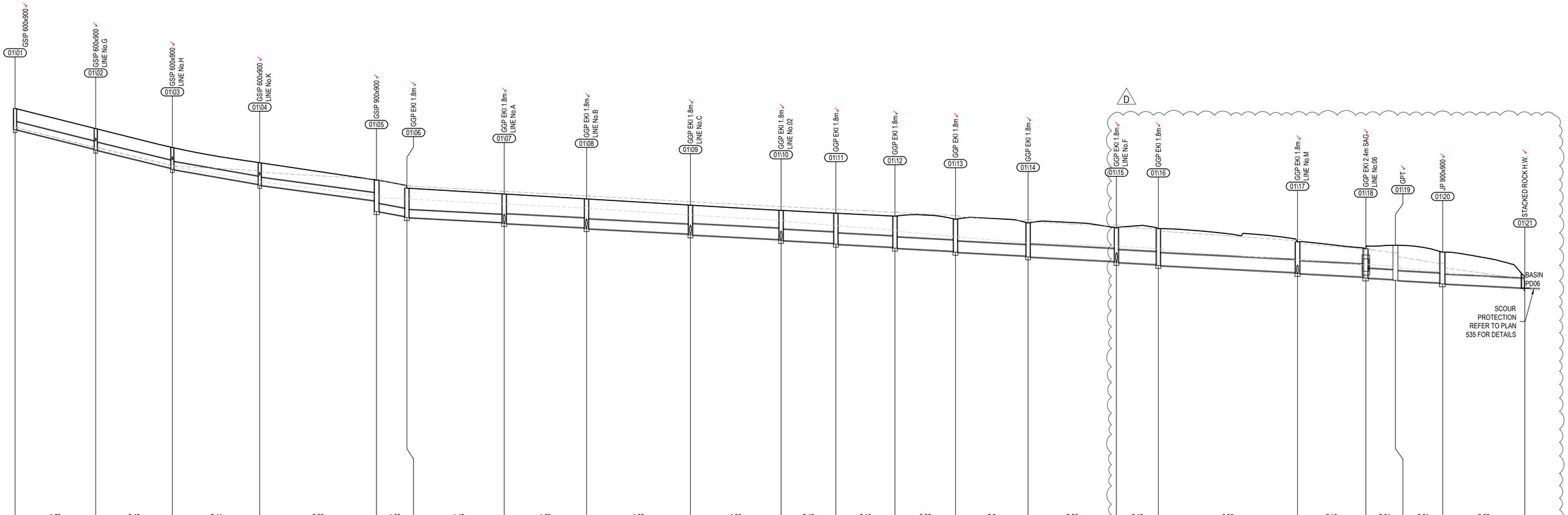
WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

5 YEAR HGL LEVEL

100YEAR HGL LEVEL



| | | |

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04/02/2025

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DA/2023/580/1 SWC.16.2023.580.2

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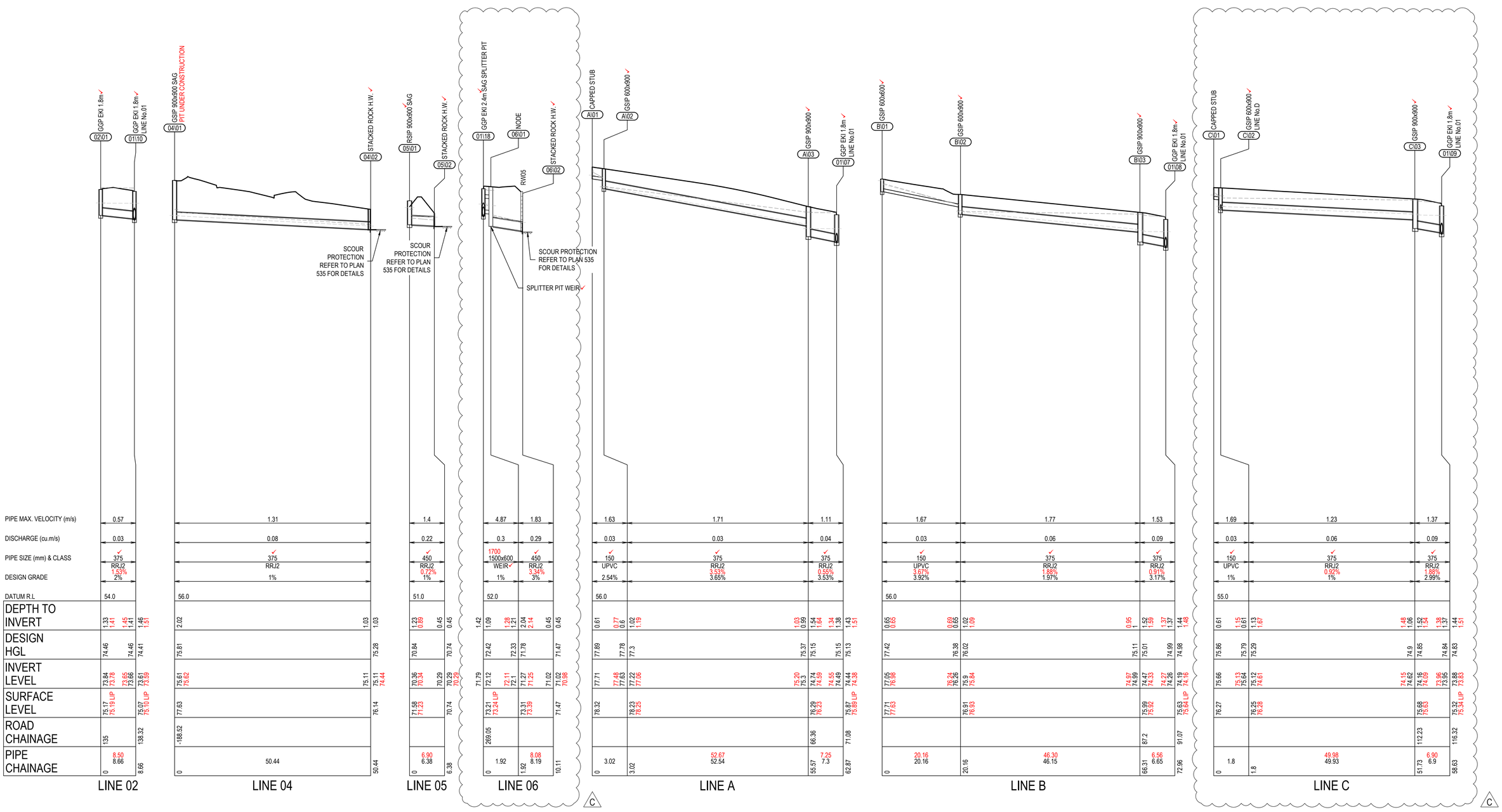
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

5 YEAR HGL LEVEL

100YEAR HGL LEVEL



ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
C	NS	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
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SCALE 1:500 (A1) SCALE 1:1000 (A3)
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)

For: mirvac

By: ORION

ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

JAS-ANZ WWW.JAS-ANZ.ORG/REGISTER

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
DRAINAGE LONG SECTION
SHEET 2

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	511	C

WORKS AS EXECUTED

WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

5 YEAR HGL LEVEL

100YEAR HGL LEVEL

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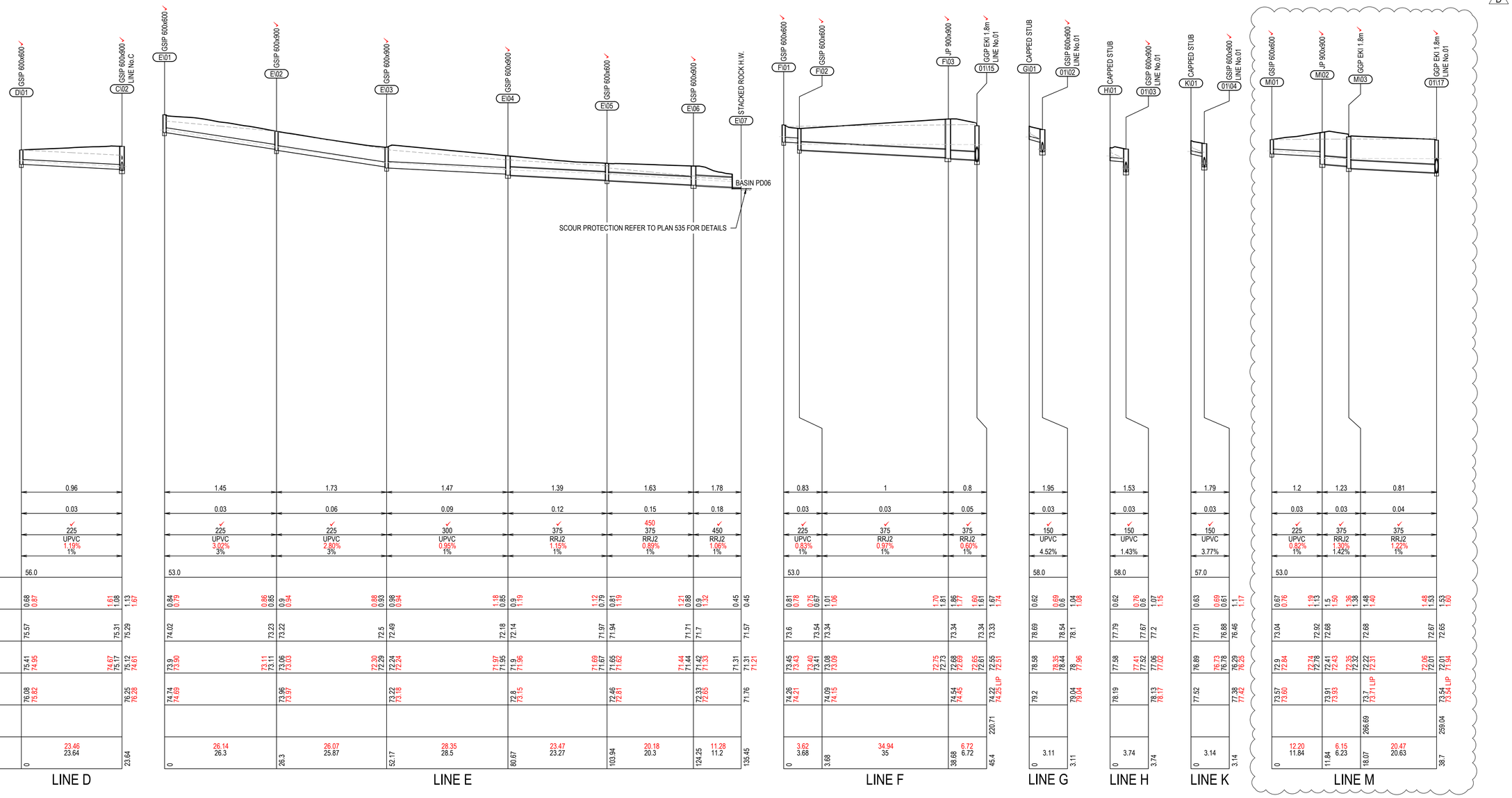
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2



ISSUED FOR **SUBDIVISION WORKS CERTIFICATE**

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
D	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	NS	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
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SCALE 1:500 (A1) SCALE 1:1000 (A3)
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)

For: mirvac

By: ORION

ABN:25 604 069 981 **PO Box:**7936, BAULKHAM HILLS NSW 2153 **T:**(02) 8660 0035 **E:**info@theorionngroup.au

Project:
499 COBBITTY ROAD, COBBITTY
(TRANCHE 3, STAGE 2a)
ROAD & DRAINAGE DESIGN

Title:
DRAINAGE LONG SECTION
SHEET 3

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	512	D

NOTES:

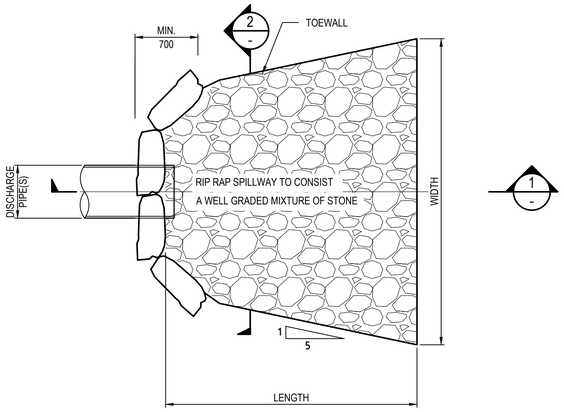
1. MODELLED USING 12D - DYNAMIC (ILSAX)
2. MANNING'S ROUGHNESS FACTOR
   RC PIPES - 0.013mm
   PVC PIPES - 0.009mm
3. RRJ2 DENOTES RUBBER RING JOINT CLASS 2 PIPE. ALL PVC PIPE TO BE CLASS SH.
4. THE PRESSURE CHANGE COEFFICIENT 'K' HAS BEEN DETERMINED DETERMINED USING MISSOURI CHARTS AND HARE'S EQUATIONS.
5. CONCRETE REINFORCED STORMWATER PITS AS REQUIRED BY COUNCIL. REFER TO CAMDEN COUNCIL ENGINEERING DESIGN SPECIFICATION AND STANDARD DRAWINGS - SD12, SD13 AND SD14.
6. PITS DEEPER THAN 2.0m ARE TO BE STRUCTURALLY DESIGNED AND CERTIFIED.
7. CONCRETE 32MPa COMPRESSIVE STRENGTH AT 28 DAYS.
8. PIT BLOCKAGE FACTORS
   PITS ON GRADE:
   0% (5YR)
   20% (100YR)
   PITS ON SAG:
   50% (5YR)
   50% (100YR)

LAND USE:

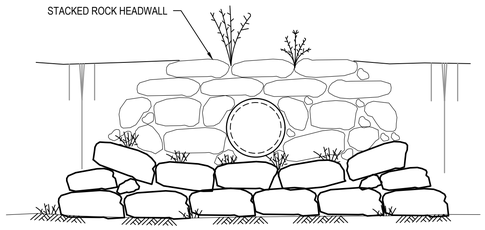
ROAD- 90% IMPERVIOUS
ROAD & LOT - VARIABLE (80-85%) IMPERVIOUS
RESIDENTIAL LOT - 75% IMPERVIOUS
UPSTREAM (UNDEVELOPED) - 50% IMPERVIOUS
UNLESS NOTED OTHERWISE

PIT TYPE:

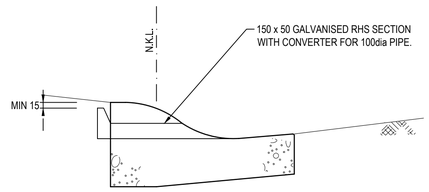
1. G.G.P. - GRATED GULLY PIT
2. G.S.I.P. - GRATED SURFACE INLET PIT
3. J.P. - JUNCTION PIT
4. H.W. - HEADWALL
5. R.S.I.P. - RAISED SURFACE INLET PIT
6. IAD - INTERALLOTMENT DRAINAGE PIT



PLAN VIEW
TYPICAL STACKED ROCK HEADWALL
SCALE-1:50



SECTION 2 -
N.T.S.



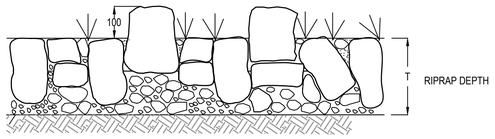
TYPICAL ROOF WATER CONNECTION WITH KERB (RK)
SCALE 1:10

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

ROCK RIPRAP NOTES:

1. ALL RIPRAP MUST CONSIST OF HARD, DURABLE ANGULAR RUN-OF-QUARRY ROCK; RESISTANT TO WEATHERING & WATER ACTION; FREE FROM OVERBURDEN, SPOIL, SHALE & ORGANIC MATERIAL; & SHALL MEET THE GRADATION REQUIREMENTS SPECIFIED.
2. ROUNDED STONES/BOULDERS WILL NOT BE ACCEPTABLE.
3. SHALE & ROCK WITH SHALE SEAMS WILL NOT BE ACCEPTABLE.
4. ROCKS ARE TO BE PLACED OVER A 200mm LAYER OF ANGULAR COBBLES D50=140mm.
5. ALL ROCK & COBBLES TO BE PACKED WITH TOPSOIL. GAPS IN RIPRAP TO BE PLANTED AS SPECIFIED IN VMP, OR WITH SUITABLE NATIVE GRASSES/SEDGES.
6. RIPRAP SHALL BE PLACED ON THE PREPARED SLOPE IN A MANNER THAT WILL PRODUCE A REASONABLY WELL GRADED MASS OF STONE WITH THE MINIMUM PRACTICAL PERCENTAGE OF VOIDS.
7. LARGER STONES SHALL BE WELL DISTRIBUTED & THE ENTIRE MASS OF STONE SHALL CONFORM TO THE GRADATION SPECIFIED BY THE ENGINEERING PLANS.
8. THE MINIMUM THICKNESS OF THE RIPRAP LAYER IS TO BE 1.5 TIMES THE d50 ROCK SIZE & NOT BE LESS THAN 300mm FOR PRACTICAL PLACEMENT.
9. THE RIPRAP THICKNESS SHOULD BE INCREASED BY 50% WHEN THE RIPRAP IS PLACED UNDERWATER - UNLESS THE CONTRACTOR CAN OVERCOME UNCERTAINTIES ASSOCIATED WITH THIS TYPE OF PLACEMENT.
10. THE MINIMUM DENSITY OF STONE USED SHALL NOT BE LESS THAN 2200 kg/cu.m.
    TYPICAL ROCK WEIGHT RANGES FOR RIPRAP ARE:
    M50 - 60kg (NOM 300MD)
    M15 - 25kg
    M100 - 120kg
11. PLACE OVERSIZED ROCKS (BAFFLE BLOCKS) EVENLY DISTRIBUTED ACROSS THE ROCK MASS.
    H=150mm MIN

SECTION 1 -
N.T.S.



RIPRAP DETAIL
N.T.S

G.G.P.

G.S.I.P.

JUNCTION PIT

PIT SETOUT POINTS
N.T.S

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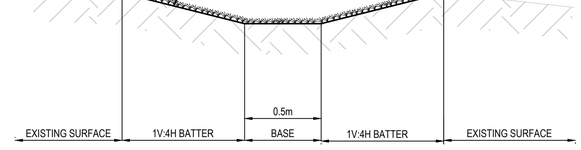
APPROVAL
04/02/2025
SUBDIVISION WORKS CERTIFICATE
DA/2023/580/1 SWC.16.2023.580.2

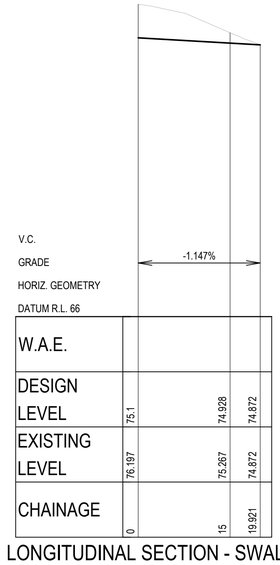
NOTES: - STACKED ROCK HEADWALLS

1. BACKFILL IS TO BE GRANULAR, FREE DRAINING AND COMPACTED TO 95% MAXIMUM DRY DENSITY.
2. FOUNDATION TO BE APPROVED FOR 200 kPa BEARING CAPACITY.
3. ROCK IS TO BE SOUND DURABLE BASALT OR OTHER MATERIAL APPROVED BY COUNCIL ENGINEER.
4. ROCKS SHALL BE PLACED IN SUCH A MANNER THAT THEY ARE STABLE AND INTERLOCKING AND LAID ROUGHLY COURSED AND BEDDED ON THEIR BROADEST BASE.
5. EACH ROCK SHALL BE:
   - ELONGATED TO ALLOW STACKING ON THE LONGEST AXIS.
   - ANGULAR IN SHAPE (PROMOTES INTERLOCKING)
   - FREE FROM OVERBURDEN, SPOIL, SHALE AND ORGANIC MATERIAL.
6. WALL CONSTRUCTION TO BE SUPERVISED BY A SUITABLY.
7. AIR VOIDS SHALL NOT EXCEED 30% VOLUME.
8. THE TOP COURSE OF ROCKS ON EMBANKMENT AND ADJACENT TO PIPE SHALL BE MORTARED INTO POSITION.
9. HEADWALL ROCK SPECIFICATION:
   BREADTH (B): 0.4 TO 0.6m
   WIDTH (W): 0.4 TO 0.6m
   LENGTH (L): 2x (B OR W) < L < 3 x (B OR W)

SCOUR PROTECTION DETAILS							
Outlet	Pipe Size (mm)	Velocity (m/s)	L (m)	W1 (m)	W2 (m)	d50	Min Thickness (T)
01/21	450	2.54	3	1.1	1.7	200	360
E/07	450	1.96	3	1.1	1.7	200	360
06/02	450	2.34	3	1.1	1.7	200	360
05/02	450	1.40	3	1.1	1.7	200	360
04/02	375	1.44	3	1.1	1.6	200	360



TYPICAL DETAIL SWALE SECTION
SCALE 1:20



LONGITUDINAL SECTION - SWALE 1
SCALE 1:500 (H)
SCALE 1:100 (V)

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SCALE 1:500 (A1) SCALE 1:1000 (A3)
0 1 2 3 4 5 6 7 8 9 10
SCALE 1:100 (A1) SCALE 1:200 (A3)

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Rev	Drawn	Design	Check	Appd.	Date	Revision Description
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
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SCALE 1:50 (A1) SCALE 1:100 (A3)
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SCALE 1:20 (A1) SCALE 1:40 (A3)
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
SCALE 1:10 (A1) SCALE 1:20 (A3)

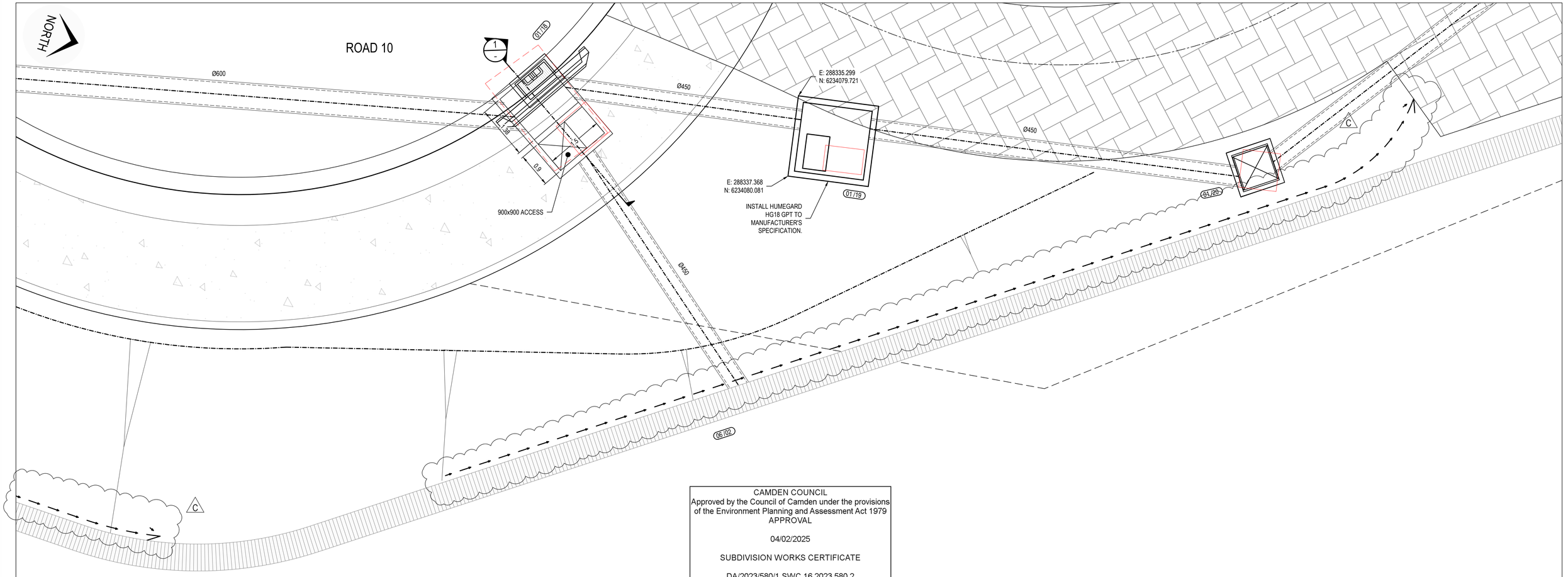
For: mirvac

By: ORION
SUSTAINABLE ADVANTAGE SUSTAINABLE PRACTICES ISO 9001 ISO 14001 ISO 45001 JAS-ANZ WWW.JAS-ANZ.ORG/REGISTER
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: DRAINAGE DETAILS

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	535	A



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APPROVAL

04/02/2025

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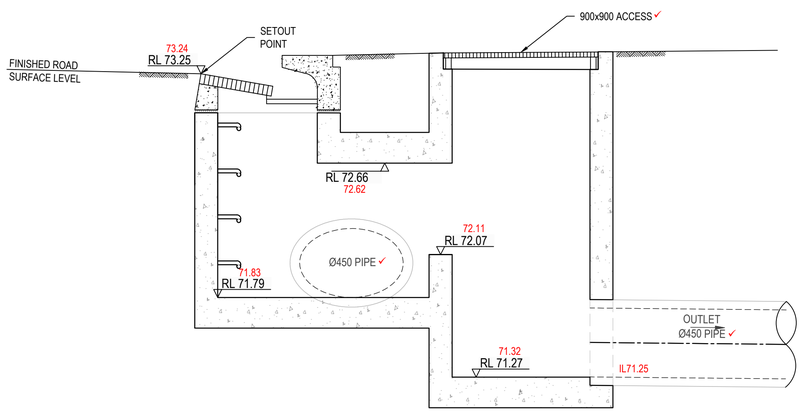
DA/2023/580/1 SWC.16.2023.580.2



SECTION 1 / -
SCALE 1:20

GPT AND SPLITTER PIT DETAIL PLAN
SCALE 1:50

NOTE:
PITS SUBJECT TO STRUCTURAL DESIGN AND CERTIFICATION

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025
REGISTERED SURVEYOR ID: 8890
ORION GROUP

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Rev	Drawn	Design	Check	Appd.	Date	Revision Description
C	WP	DH	AS	AS	16/01/2025	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	MG	DH	MP	MP	28/11/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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SCALE 1:20 (A1) SCALE 1:40 (A3)

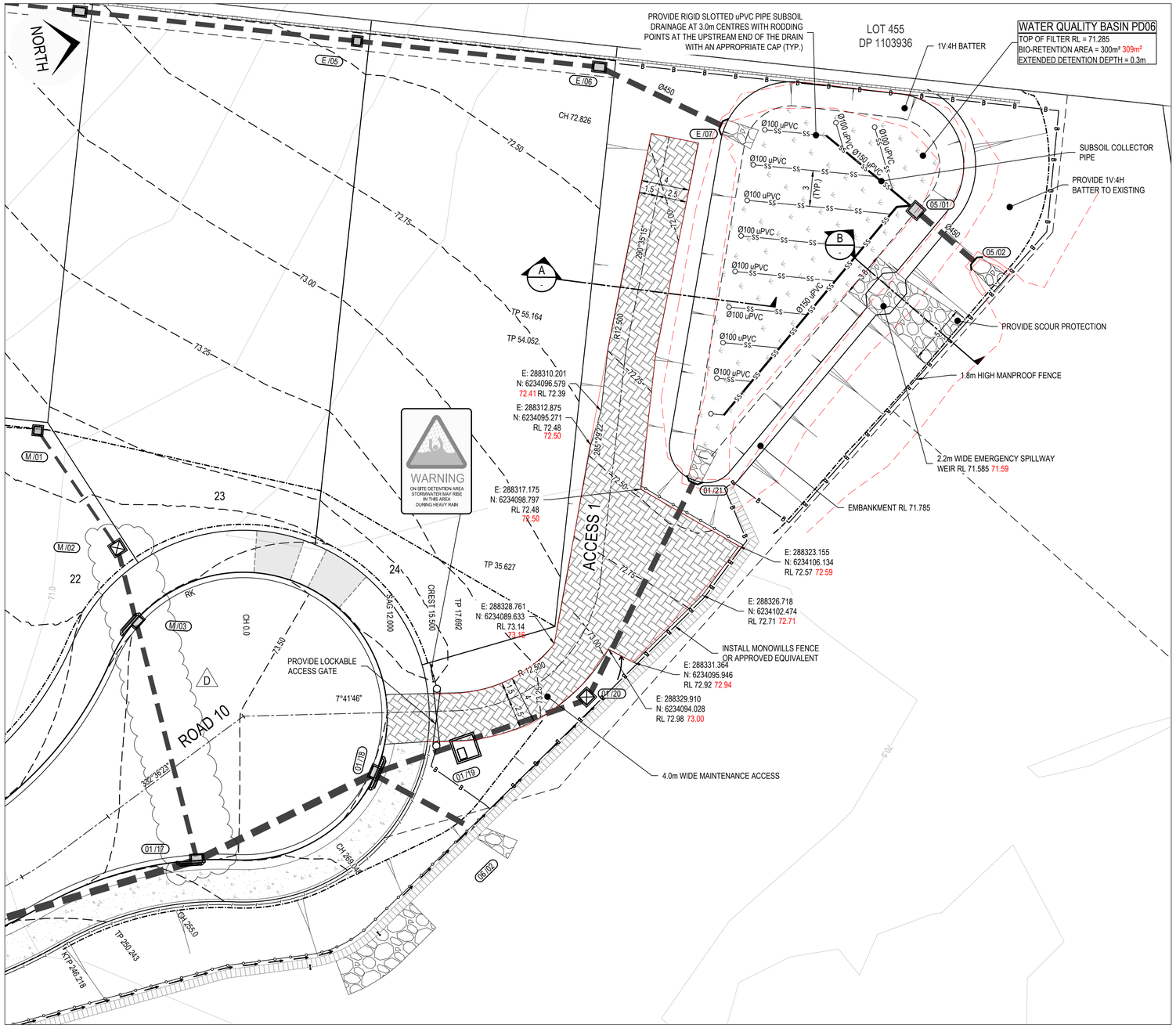
For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: GPT SETOUT AND PIT GEOMETRY PLAN

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	570	C



BASIN PLAN

SCALE 1:200

SETOUT TABLE ACCESS 1					
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288330.59	6234063.08	7°41'45.75"		
17.69	288332.96	6234080.62	7°41'45.75"		
26.66	288334.42	6234091.42		-12.5	17.935
35.63	288323.91	6234094.34	285°29'21.62"		
54.05	288306.15	6234099.26	285°29'21.62"		
54.61	288305.62	6234099.41		12.5	1.112
55.16	288305.1	6234099.6	290°35'14.68"		
72.83	288288.56	6234105.81	290°35'14.68"		

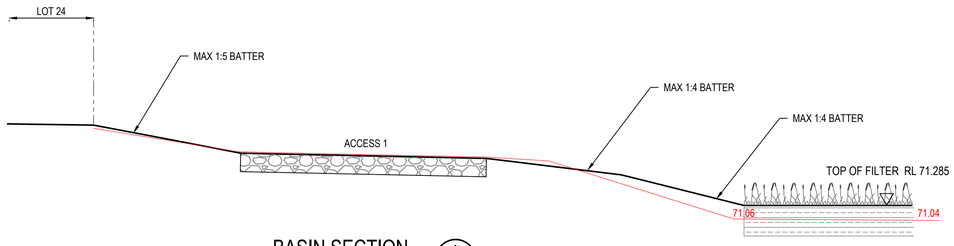
WORKS AS EXECUTED

WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

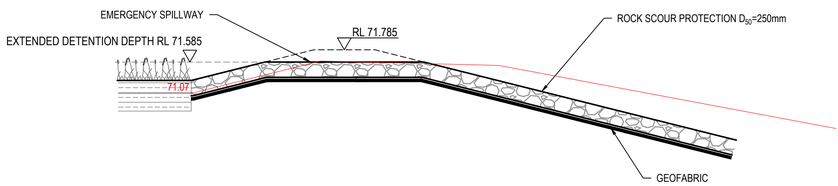
LEGEND

- PROPOSED BIO-BASIN
- PROPOSED STORMWATER PIPE
- PROPOSED 4m WIDE BASIN MAINTENANCE ACCESS. REFER TO PLAN SWC-201 FOR PAVEMENT SPECIFICATION
- STANDARD FLOODWAY WARNING SIGN AND MOUNTING BRACKET IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD28.



BASIN SECTION A

SCALE 1:50



BASIN SPILLWAY SECTION B

SCALE 1:50

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APPROVAL

04/02/2025

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DA/2023/580/1 SWC.16.2023.580.2

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For: mirvac

By: ORION
ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: BASIN PLAN

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	600	D

NORTH

CAMDEN COUNCIL
Approved by the Council of Camden under the provisions of the Environment Planning and Assessment Act 1979
APPROVAL

04/02/2025

SUBDIVISION WORKS CERTIFICATE

DA/2023/580/1 SWC.16.2023.580.2

WORKS AS EXECUTED
WORKS AS EXECUTED INFORMATION SHOWN IN RED.
DATE: 23/05/2025

REGISTERED SURVEYOR ID: 8890
ORION GROUP

LEGEND

CONCRETE SLEEPER RETAINING WALL	
SANDSTONE BLOCK WALL	
SUBSOIL DRAINAGE	SS
SUBSOIL DRAINAGE FLUSH POINT	FP

UTILITIES SHOWN ARE DIAGRAMMATIC ONLY AND MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES/STANDARDS

BEFORE YOU DIG www.byda.com.au
Zero Damage - Zero Harm

SUBSOIL TO DISCHARGE AT SURFACE LEVEL

CONNECT SUBSOIL TO PIT

CONNECT SUBSOIL TO PIT

CONNECT SUBSOIL TO PIT

CONNECT SUBSOIL TO HEADWALL

SUBSOIL TO DISCHARGE AT SURFACE LEVEL

SUBSOIL TO DISCHARGE AT SURFACE LEVEL THROUGH RETAINING WALL

RW01 RW02 RW03 RW04 RW05 RW06

COBBITTY ROAD

ROAD 10

ACCESS 1

LOT 13 DP 604645

LOT 100 DP 1230568

LOT 173 DP 1289775

ISSUED FOR SUBDIVISION WORKS CERTIFICATE

Rev	Drawn	Design	Check	Appd.	Date	Revision Description
E	MG	DH	MP	MP	28/11/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
D	NS	DH	MP	MP	31/10/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
C	MG	DH	MP	MP	10/09/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
B	DH	DH	MP	MP	17/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE
A	NS	DH	MP	MP	05/07/2024	ISSUED FOR SUBDIVISION WORKS CERTIFICATE

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Scale:
0 5 10 15 20 25 30 35 40 45 50
SCALE 1:500 (A1) SCALE 1:1000 (A3)

For: mirvac

By: ORION

ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoriongroup.au

Project: 499 COBBITTY ROAD, COBBITTY (TRANCHE 3, STAGE 2a) ROAD & DRAINAGE DESIGN

Title: RETAINING WALL PLAN

Project No.	Set No.	Milestone	Plan	Revision
22-0277	03	SWC	700	E

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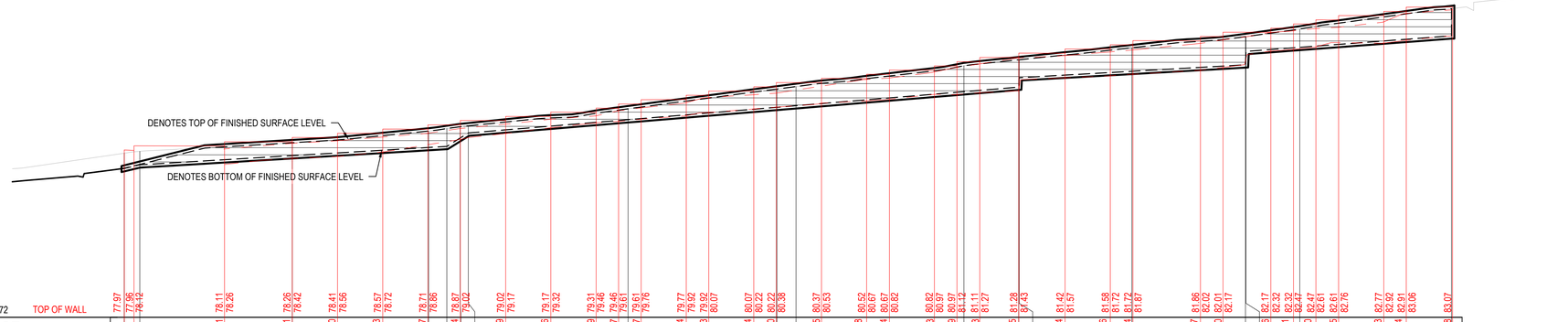
NOTE:

- **ALL** RETAINING WALLS TO BE DESIGNED AND CERTIFIED BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER. REFER TO STRUCTURAL PLANS FOR DETAILS.
- WALL DESIGN TO ENSURE NO PIERS ARE POSITIONED OVER PROPOSED STORMWATER PIPES AT CROSSINGS.
- WALLS HAVE BEEN MODELED TO SUIT BENCH LOCATIONS, WALL STEPS TO STRUCTURAL DESIGN.
- WALL TYPES TO BE IN ACCORDANCE WITH THE 'MIRVAC LOT BENCHING SPECIFICATION'.



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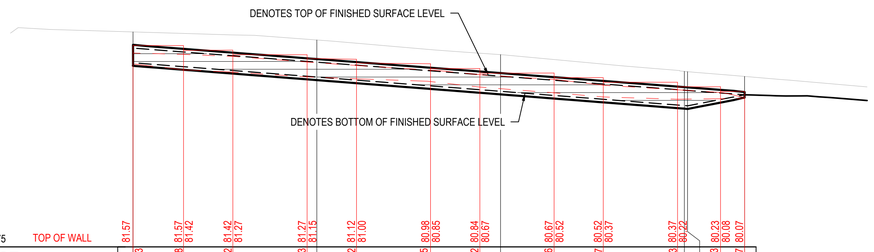

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SETOUT TABLE RW01

CHAINAGE	EASTING	NORTHING	BEARING
0	288310.43	6233816.79	256°22'51.74"
27.18	288284.02	6233810.39	
58.29	288254.64	6233800.14	
118.55	288195.78	6233787.21	257°36'30.29"

SETOUT TABLE RW02

CHAINAGE	EASTING	NORTHING	BEARING
0	288195.78	6233787.21	15°16'50.12"
130	288230.05	6233912.61	15°16'50.12"

SETOUT TABLE RW03

CHAINAGE	EASTING	NORTHING	BEARING
0	288213.76	6233791.16	11°55'09.75"
49.92	288224.07	6233840	11°55'09.75"

SETOUT TABLE RW04

CHAINAGE	EASTING	NORTHING	BEARING
0	288233.55	6233795.5	10°37'51.53"
45.32	288241.91	6233840.05	10°37'51.53"

SETOUT TABLE RW05

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	288359.68	6233977.96	351°56'10.46"		
25.74	288356.06	6234003.44	351°56'10.46"		
34.3	288354.86	6234011.94		100	17.114
42.85	288355.12	6234020.51	1°44'30.93"		
46.22	288355.22	6234023.87	1°44'30.93"		
49.71	288355.33	6234027.37		-50	6.991
53.21	288354.95	6234030.85	353°43'50.05"		
80.79	288351.94	6234058.27			
87.77	288352.14	6234065.25	1°39'20.98"		
91.01	288352.24	6234068.6		-10	6.474
94.25	288350.29	6234071.34	324°33'36.53"		
133.37	288327.6	6234103.21			
139.86	288323.08	6234107.86			
144.96	288318.18	6234106.42	253°35'44.87"		

SETOUT TABLE RW06

CHAINAGE	EASTING	NORTHING	BEARING
0	288262.28	6234032.88	15°16'49.91"
72.18	288281.3	6234102.5	
106.01	288290.22	6234135.14	15°16'50.27"

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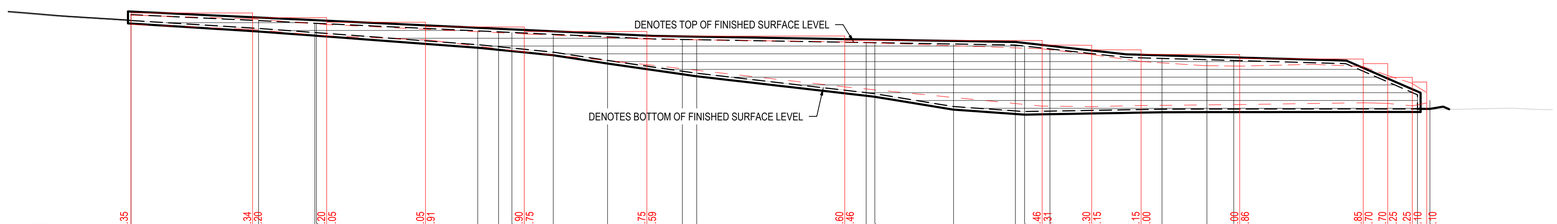

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