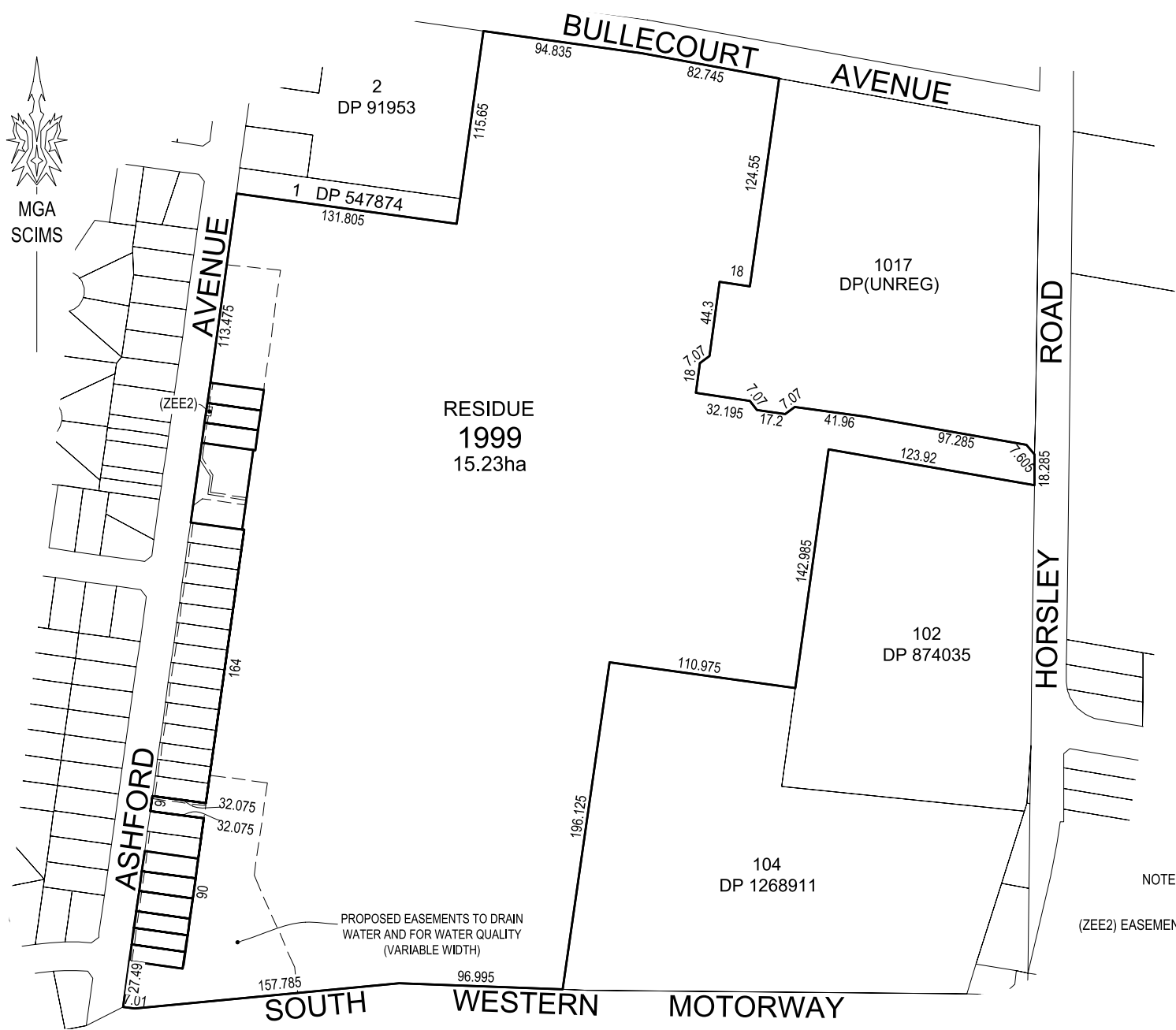


STAGE 2A



MGA  
SCIMS



NOTE: ALL DIMENSIONS AND AREAS ARE SUBJECT TO FINAL DESIGN AND SURVEY

(ZEE2) EASEMENT FOR ELECTRICITY AND OTHER PURPOSES (DP1144378) TO BE EXTINGUISHED



VER	BY	AMENDMENTS	DATE
A	BC	ORIGINAL ISSUE	28-08-2024
B	BC	AMENDMENT TO BOUNDARY	01-10-2024
C	SG	REMOVE EASEMENTS	01-11-2024

**BW** Beveridge Williams  
Development and Infrastructure Consultants

(02) 46255055 [www.beveridgewilliams.com.au](http://www.beveridgewilliams.com.au)

CLIENT:



DETAILS:

PLAN OF SURVEY OF LOT  
1000 IN DP(UNREG)  
CURRENTLY LOT 2 IN DP1291984

ORIGINAL  
SCALE  
1:2500  
  
SHEET SIZE  
A3

SURVEYOR:	BC
DRAWN:	DH
CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2A)-PS

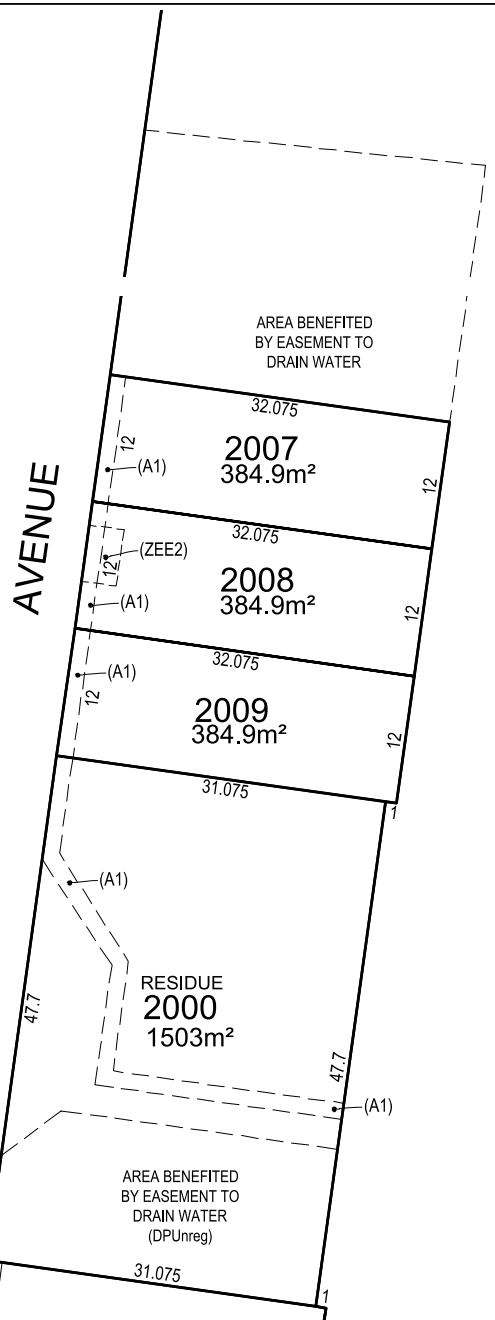
SHEET 1 OF 2

PROJECT No.  
2301879  
  
DRAWING REF.  
2301879(2)-PS  
  
VERSION  
C

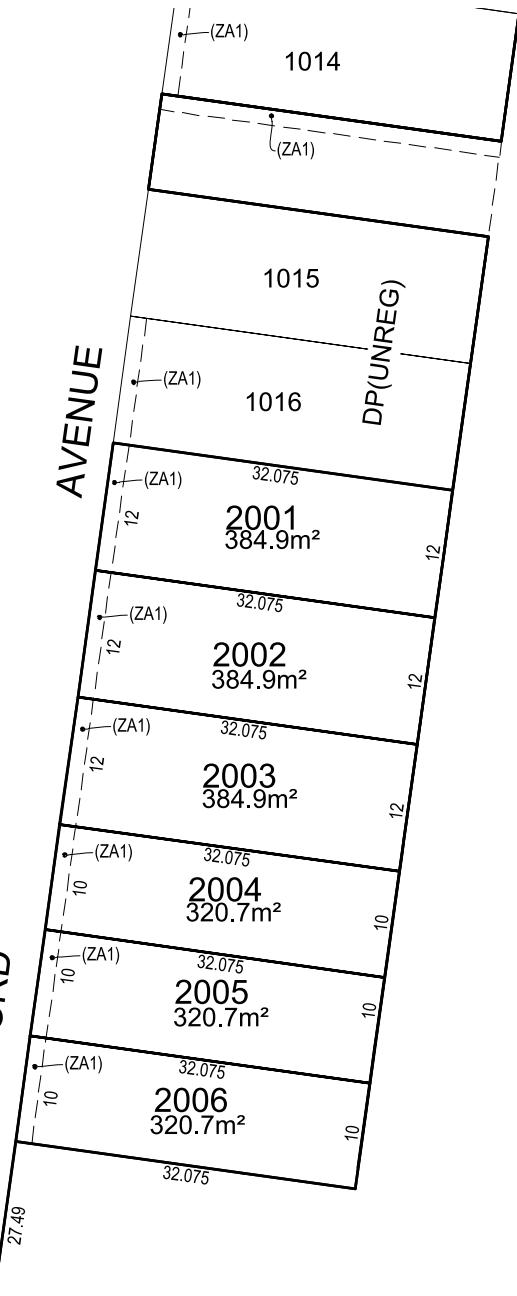
STAGE 2A



MGA  
SCIMS

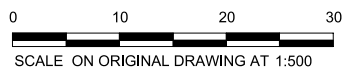


RESIDUE  
1999



RESIDUE  
1999

- (A1) PROPOSED EASEMENT TO DRAIN WATER 1.5 WIDE
- (ZA1) EASEMENT TO DRAIN WATER 1.5 WIDE (DPUNREG)
- (ZEE2) EASEMENT FOR ELECTRICITY AND OTHER PURPOSES (DP1144378) TO BE EXTINGUISHED



VER	BY	AMENDMENTS	DATE
A	BC	ORIGINAL ISSUE	28-08-2024
B	BC	AMENDMENT TO BOUNDARY	01-10-2024
C	SG	REMOVE EASEMENTS	01-11-2024

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CLIENT:

DETAILS:

PLAN OF SURVEY OF LOT  
1000 IN DP(UNREG)  
CURRENTLY LOT 2 IN DP1291984

ORIGINAL  
SCALE  
1:500-1  
  
SHEET SIZE  
A3

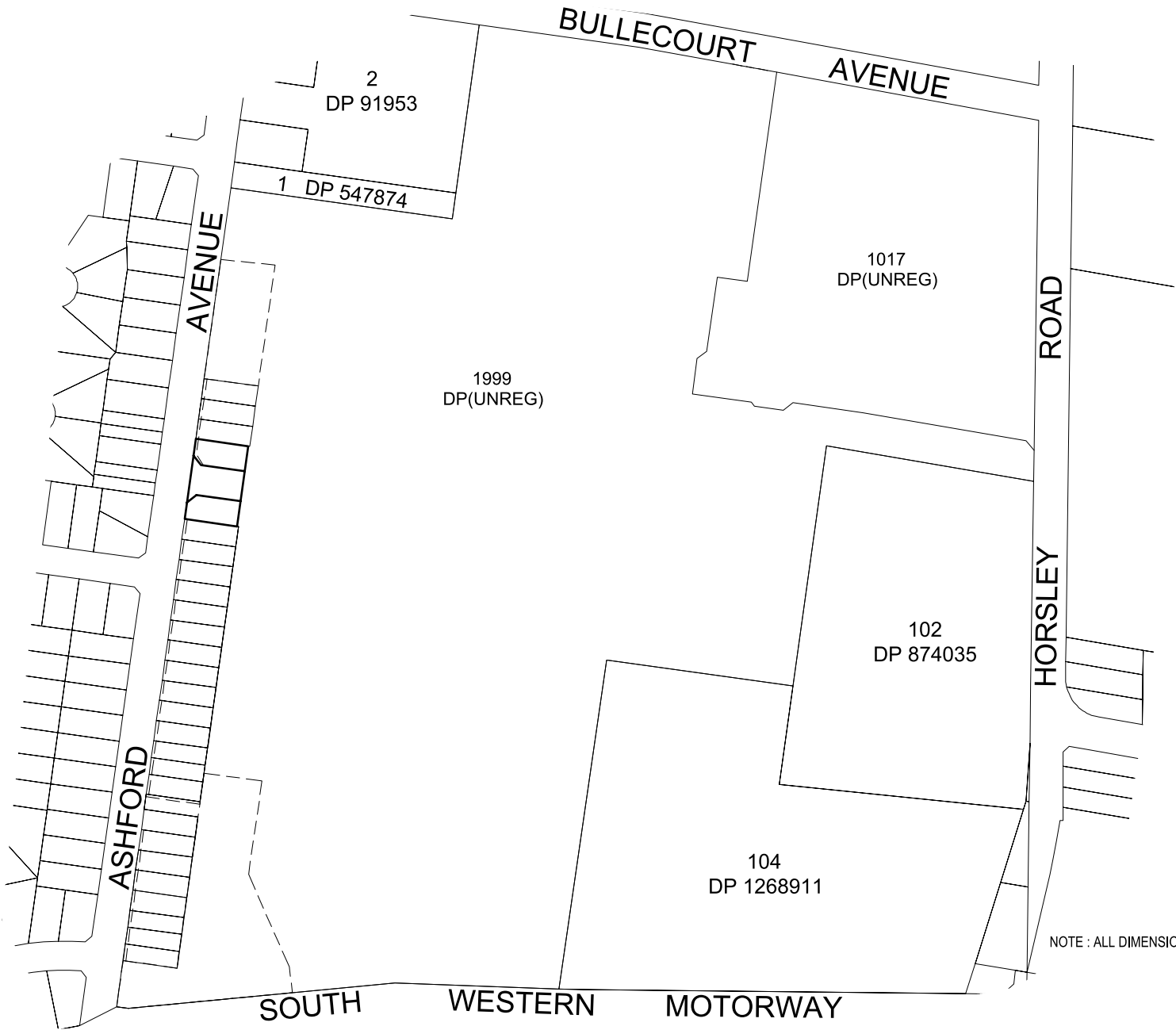
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CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2A)-PS
SHEET 2 OF 2	

PROJECT No.  
2301879  
  
DRAWING REF.  
2301879(2)-PS  
  
VERSION  
C

STAGE 2B



MGA  
SCIMS



NOTE : ALL DIMENSIONS AND AREAS ARE SUBJECT TO FINAL DESIGN AND SURVEY



VER	BY	AMENDMENTS	DATE
A	BC	ORIGINAL ISSUE	28-08-2024
B	SG	AMENDMENT TO EASEMENT	14-10-2024

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Development and Infrastructure Consultants  
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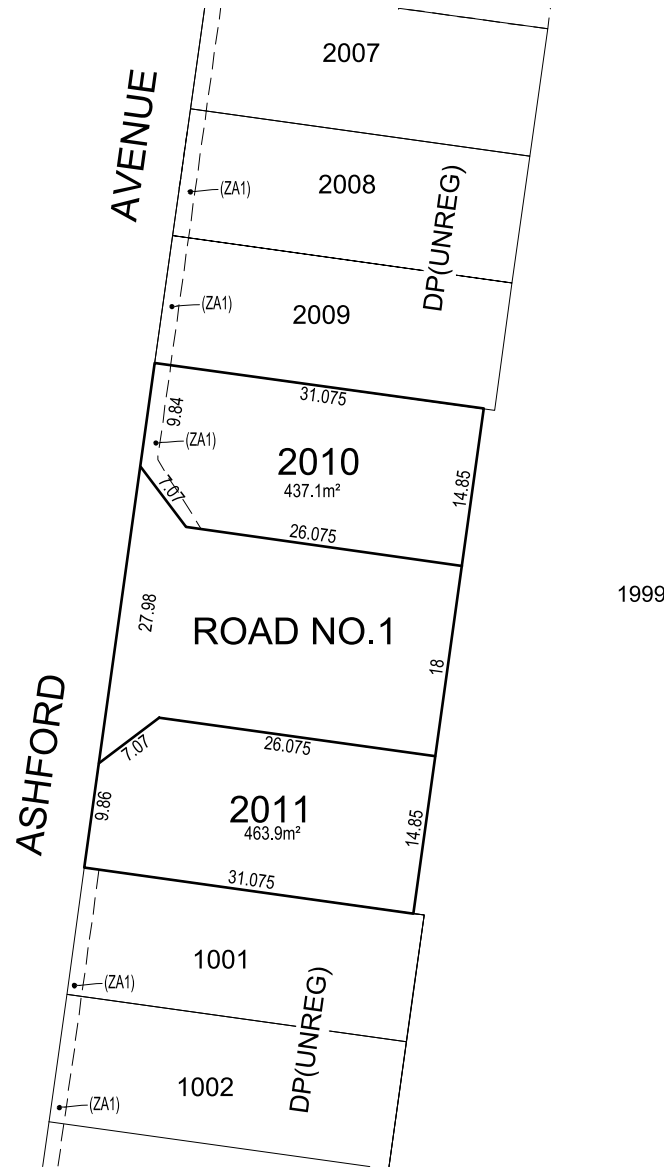
CLIENT:  


DETAILS:  
  
PLAN OF SURVEY OF LOT  
2000 IN DP(UNREG.)  
CURRENTLY LOT 2 IN DP1291984

ORIGINAL  
SCALE  
1:2500  
  
SHEET SIZE  
A3

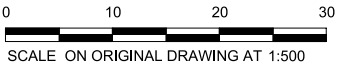
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DRAWN:	DH
CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2B)-PS
SHEET 1 OF 2	

PROJECT No.  
2301879  
  
DRAWING REF.  
2301879(2B)-PS  
  
VERSION  
B



NOTE: IT IS PROPOSED TO DEDICATE ROADS TO COUNCIL AS PUBLIC ROAD

(W) AREA BENEFITED BY EASEMENT TO DRAIN WATER DP(UNREG.)  
(ZA1) EASEMENT TO DRAIN WATER 1.5 WIDE DP(UNREG.)



VER	BY	AMENDMENTS	DATE
A	BC	ORIGINAL ISSUE	28-08-2024
B	SG	AMENDMENT TO EASEMENT	14-10-2024

**Beveridge Williams**  
Development and Infrastructure Consultants  
(02) 46255055 www.beveridgewilliams.com.au

CLIENT:

DETAILS:  
PLAN OF SURVEY OF LOT  
2000 IN DP(UNREG.)  
CURRENTLY LOT 2 IN DP1291984

ORIGINAL  
SCALE  
1:500  
  
SHEET SIZE  
A3

SURVEYOR:	BC
DRAWN:	DH
CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2B)-PS
SHEET 2 OF 2	

PROJECT No. 2301879
DRAWING REF. 2301879(2B)-PS
VERSION B



# WSU MILPERRA

## CONCEPT CIVIL ENGINEERING PLANS TO SUPPORT THE STAGE 2A & 2B SUBDIVISION OF PROPOSED LOT 1000 (UNREG.)(TO BE CREATED UNDER STAGE 1) LOT 2 IN DP1291984 - 2 BULLECOURT AVENUE, MILPERRA CANTERBURY-BANKSTOWN COUNCIL MIRVAC HOMES (NSW) PTY LTD



SITE PLAN  
NOT TO SCALE

### DRAWING INDEX

SHEET No.	DRAWING No.	TITLE	REVISION
1	2301879-307-001	COVER SHEET	D
2	2301879-307-002	DETAILS & TYPICAL CROSS SECTION	A
3	2301879-307-005	DEMOLITION PLAN	D
4	2301879-307-010	LAYOUT PLAN	D
5	2301879-307-011	LOT BENCHING PLAN	D
6	2301879-307-012	BUILT EARTHWORKS	D
7	2301879-307-100	ROAD 1 LONGITUDINAL SECTION	A
8	2301879-307-101	ASHFORD AVENUE BACK OF KERB LONGITUDINAL SECTIONS (NORTH AND SOUTH OF ROAD 1)	B
9	2301879-307-200	ROAD 1 CROSS SECTIONS	B
10	2301879-307-201	ASHFORD AVENUE (NORTH OF ROAD 1) LOT CROSS SECTIONS	A
11	2301879-307-202	ASHFORD AVENUE (SOUTH OF ROAD 1) LOT CROSS SECTIONS (SHEET 1 OF 2)	A
12	2301879-307-203	ASHFORD AVENUE (SOUTH OF ROAD 1) LOT CROSS SECTIONS (SHEET 2 OF 2)	B
13	2301879-307-400	SOIL AND WATER MANAGEMENT PLAN OVERALL PLAN	C
14	2301879-307-401	SOIL AND WATER MANAGEMENT PLAN STAGE 2 PLAN	C
15	2301879-307-402	SOIL AND WATER MANAGEMENT PLAN DETAILS AND NOTES	B
16	2301879-307-800	TURNING MOVEMENTS CAR (SHEET 1 OF 2)	A
17	2301879-307-801	TURNING MOVEMENTS SERVICE VEHICLE (SHEET 2 OF 2)	B
18	2301879-307-900	SIGNAGE & LINE MARKING PLANS	A

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FOR D.A.


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D	DRAWING INDEX AMENDED	31.10.24	S.F	S.G					
C	STAGE 2A AND 2B ANNOTATED	18.10.24	C.Y	S.G					
B	LOTS 2003-2008 SHIFTED SOUTH 2m	09.10.24	S.F	S.F					
A	ISSUED FOR INFORMATION	17.09.24	S.F	S.F					
REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP

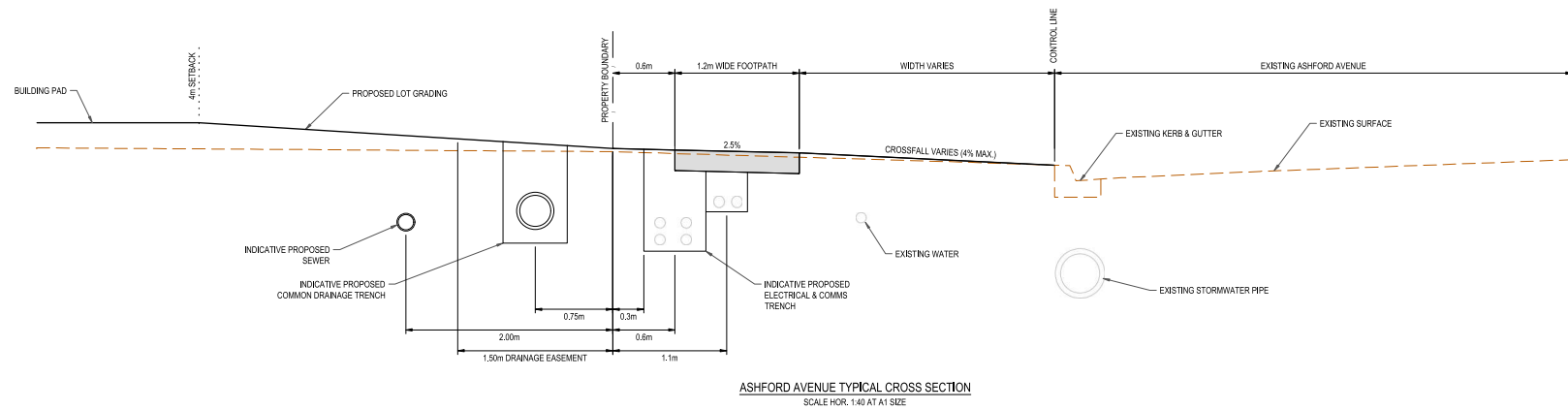
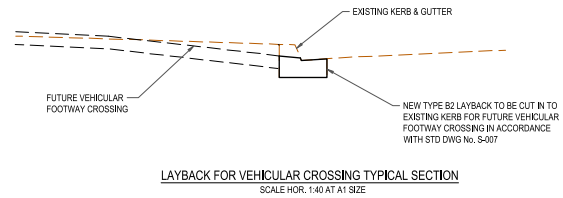
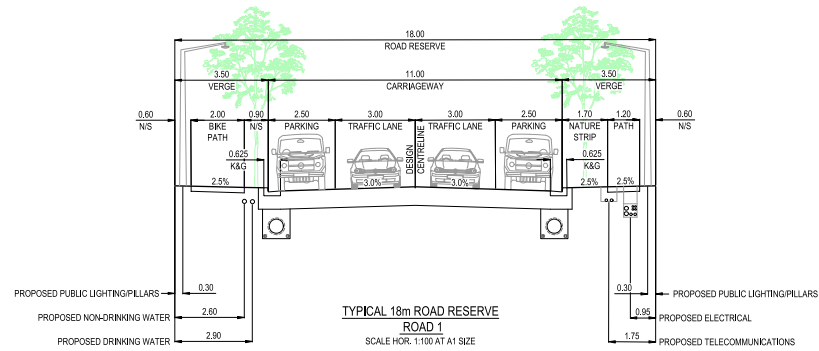


Designed	B.RAU
Date	17.09.24
Drawn	B.RAU
Approved	S.GRAY
Date	17.09.24
DA Number	

**BW** Beveridge Williams  
Development & Infrastructure Consultants  
Tuggerah Business Park Unit 4, 5 Colony Ct  
Tuggerah NSW 2259  
ph: 02 43512233  
www.beveridgewilliams.com.au

Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	COVER SHEET

Sheet 01 of 18			
Scale			
Project Number	Reference	Drawing No	Revision
2301879	307	001	D



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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
A	ISSUED FOR INFORMATION	17/08/24	B.R.	S.P.					

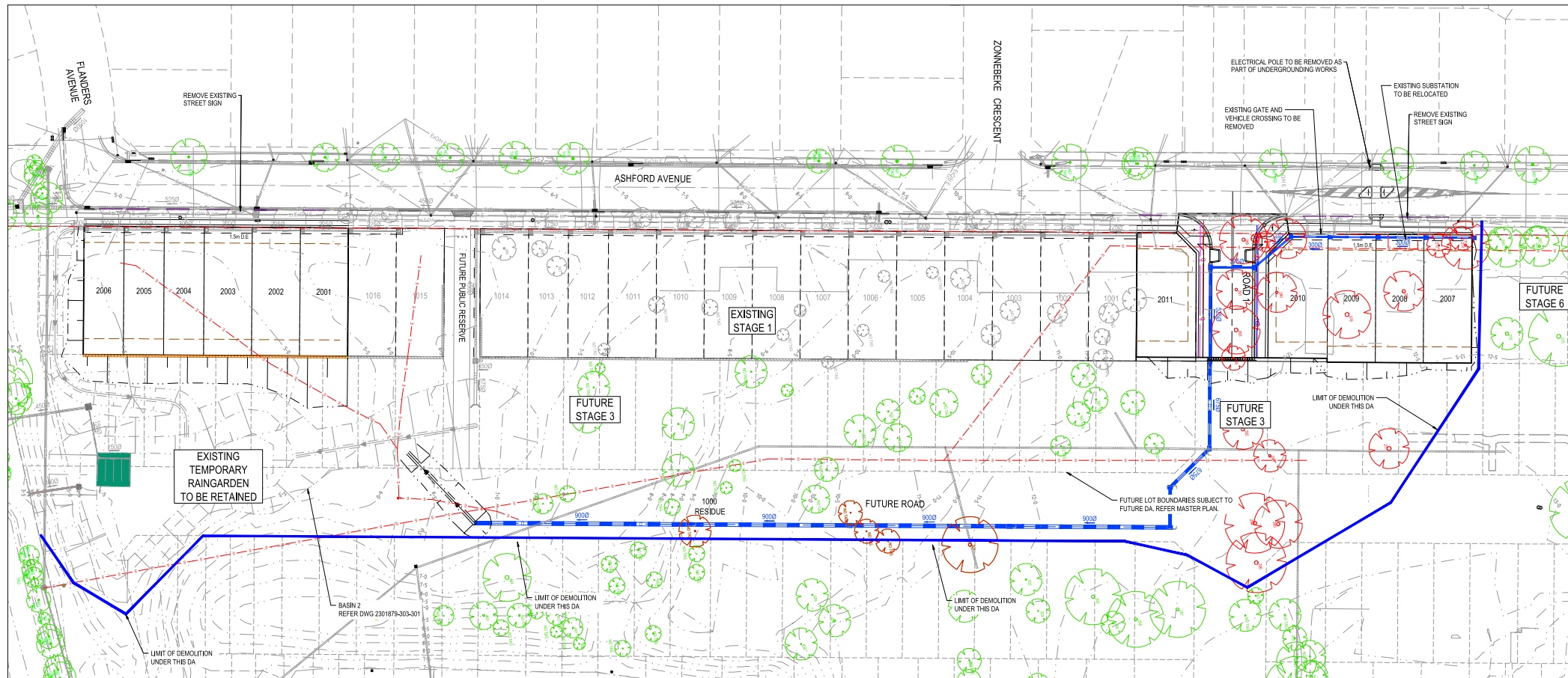


Designed	B.RAU
Date	17/08/24
Drawn	B.RAU
Approved	S.GRAY
Date	17/08/24
DA Number	








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Tuggerah Business Park Unit 4, 5 Colony Ct  
Tuggerah NSW 2259  
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www.beveridgewilliams.com.au

Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	DETAILS & TYPICAL CROSS SECTION

Sheet	02 of 18
Scale	AS SHOWN
Project Number	2301879
Reference	307
Drawing No	002
Revision	A



#### LEGEND - DEMOLITION PLAN PLAN

-  EXISTING TREE TO BE REMOVED  
REPLACEMENT STRATEGY AS PER ARBORIST REPORT
-  EXISTING TREE TO BE RETAINED
-  TREE REMOVED AS PART OF EARLIER WORKS
-  EXISTING STORMWATER PIPE/PIPE TO BE REMOVED
-  EXISTING ELECTRICITY TO BE REMOVED
-  EXISTING SEWER TO BE REMOVED
-  EXISTING FENCE TO BE REMOVED

**WARNING**  
**Beware of Underground Services**  
The locations of underground services are approximate only and their exact position should be proven on site.  
No guarantee is given that all existing services are shown.  
Locate all underground services before commencement of works.  
**DIAL 1100 BEFORE YOU DIG**  
[www.1100.com.au](http://www.1100.com.au)

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REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
D	NOTES ADDED	31.10.24	S.F.	S.O.					
C	EXISTING CONTOURS DRAFTING	18.10.24	C.V.	S.O.					
B	LOTS 2003-2008 SHIFTED SOUTH 2m	09.10.24	B.W.	S.F.					
A	ISSUED FOR INFORMATION	17.09.24	B.W.	S.F.					



Designed	B.RAU
Date	17.09.24
Drawn	B.RAU
Approved	S.GRAY
Date	17.09.24
DA Number	

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Tuggerah NSW 2259  
ph: 02 43512233  
[www.beveridgewilliams.com.au](http://www.beveridgewilliams.com.au)

Project Details  
WSU MILPERRA, LOT 2 IN DP1291984  
2 BULLECOURT AVE, MILPERRA  
STAGE 2 SUBDIVISION  
Drawing Title  
DEMOLITION PLAN

Sheet 03 of 18

Scale  
1:500 @ A1

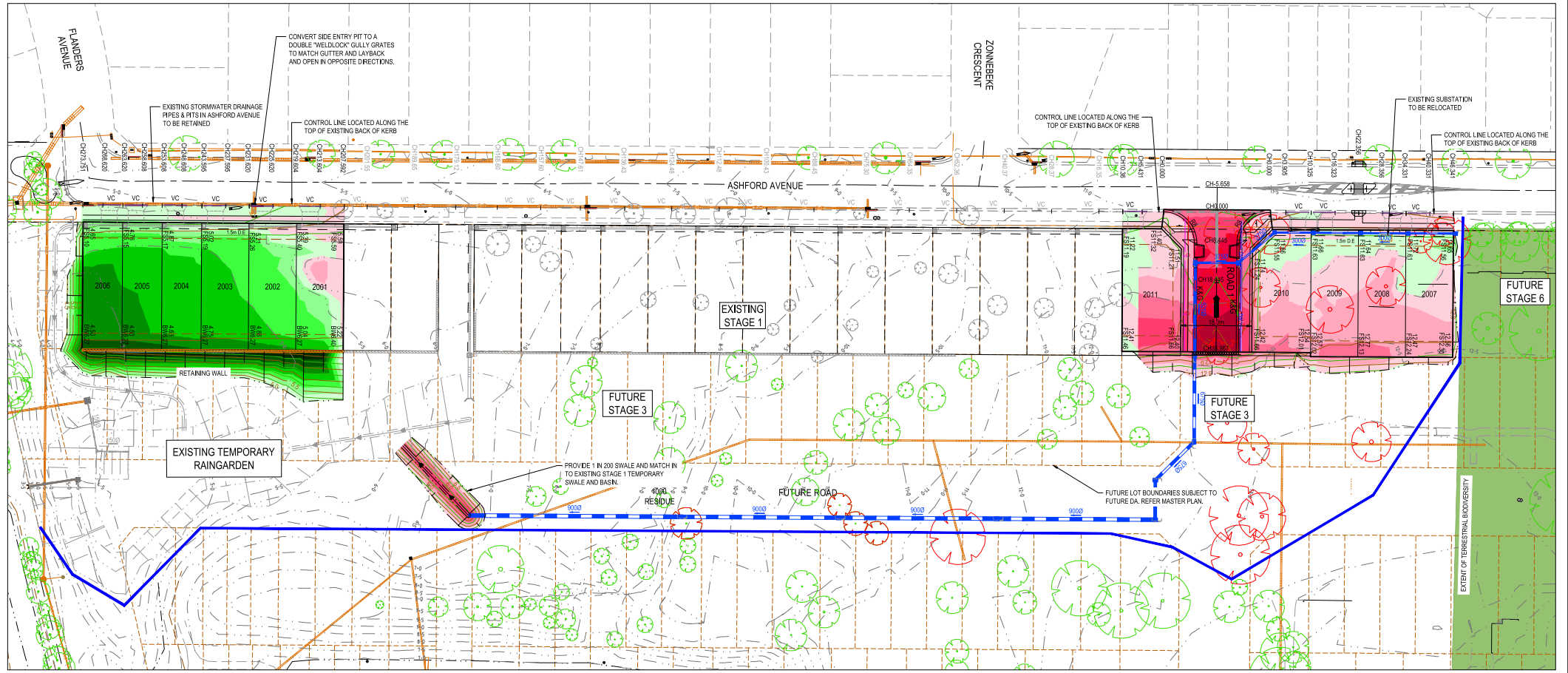
Project Number Reference Drawing No Revision  
2301879 307 003 D

Q:\wp\2301879-2 Bullecourt Avenue Milperra\_Eng001 - Stage 2 DA\Drawings\2301879-201-003-DEM.dwg









CUT AND FILL LEGEND	
DEPTH RANGE (m)	COLOUR
>1.8m CUT	
-1.8 -1.5	
-1.5 -1.2	
-1.2 -0.9	
-0.9 -0.6	
-0.6 -0.3	
-0.3 0.0	
0.0 0.3	
0.3 0.6	
0.6 0.9	
0.9 1.2	
1.2 1.5	
1.5 1.8	
1.8 2.1	
2.1 2.4	
2.4 2.7	
>2.7m FILL	

APPROXIMATE EARTHWORKS VOLUMES:  
 CUT - 1,577m³  
 FILL - 2,397m³  
 BALANCE - 820m³ OF FILL

\* THIS ESTIMATE IS BASED ON SURFACE TO SURFACE MODELLING ONLY AND IS SUBJECT TO FINAL DESIGNS

**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
 The locations of underground services are approximate only and their exact position should be proven on site.  
 No guarantee is given that all existing services are shown.  
 Locate all underground services before commencement of works.  
**DIAL 1100 BEFORE YOU DIG**  
[www.1100.com.au](http://www.1100.com.au)

ISSUED FOR D.A.

REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
D	NOTES ADDED	31.10.24	S.F.	S.G.					
C	CONTOURS AMENDED	18.10.24	C.V.	S.G.					
B	LOTS 2003-2008 SHIFTED SOUTH 2m	09.10.24	B.J.	S.F.					
A	ISSUED FOR INFORMATION	17.09.24	B.A.	S.F.					



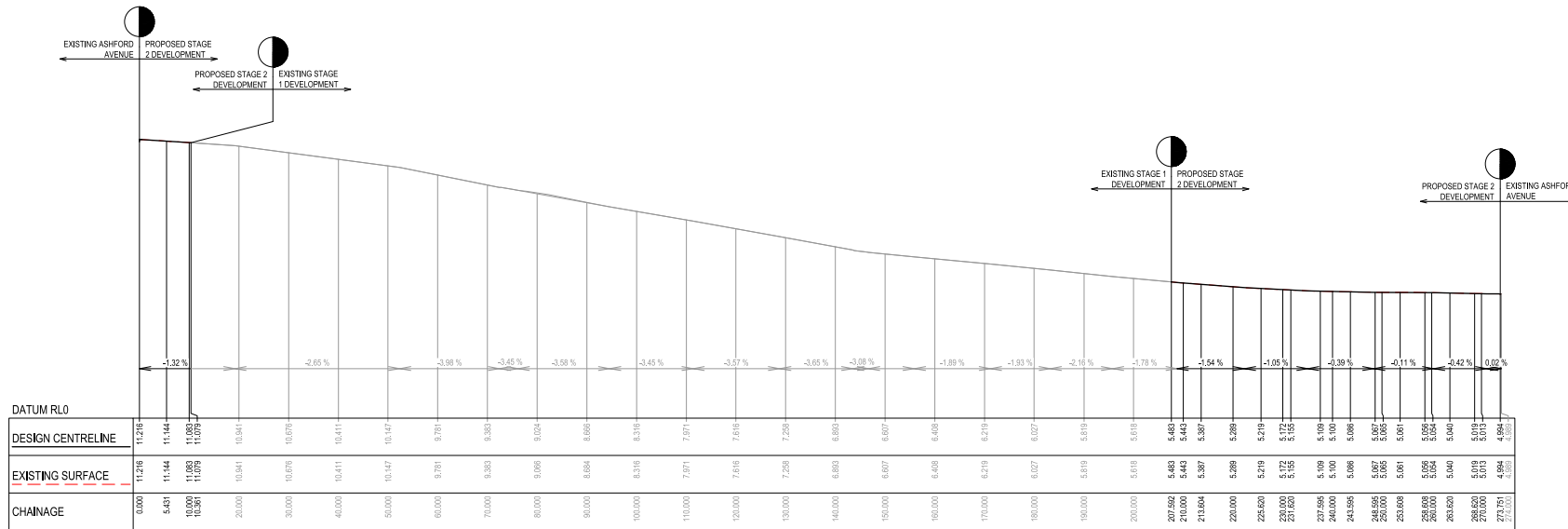
Designed	B.RAU
Date	17.09.24
Drawn	B.RAU
Approved	S.GRAY
Date	17.09.24
DA Number	

**BW** **Beveridge Williams**  
 Development & Infrastructure Consultants  
 Tuggerah Business Park Unit 4, 5 Colony Ct  
 Tuggerah NSW 2259  
 ph: 02 43512233  
[www.beveridgewilliams.com.au](http://www.beveridgewilliams.com.au)

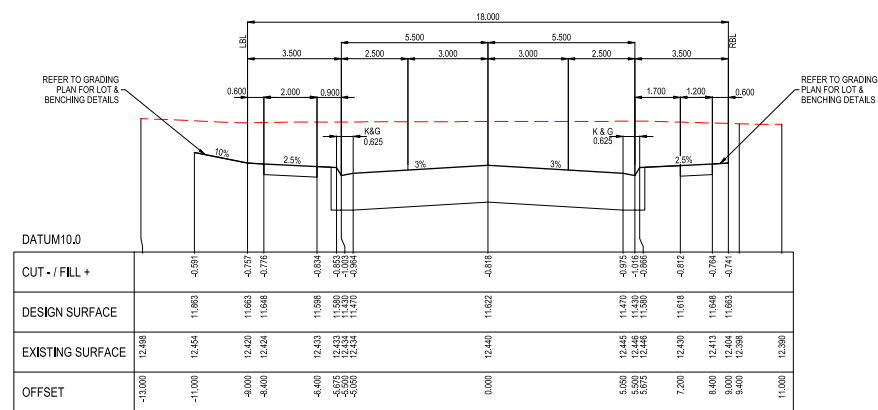
Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	BULT EARTHWORKS

Sheet	06 of 18
Scale	1:500 @ A1
Project Number	2301879
Reference	307
Drawing No	012
Revision	D

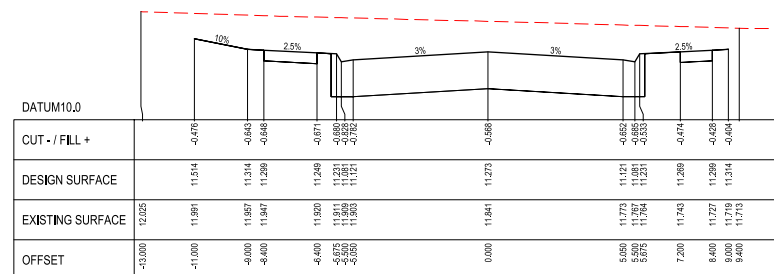








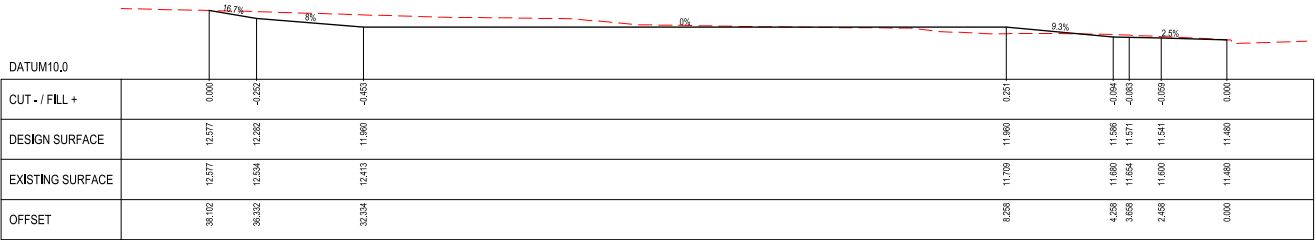
CH 35.967 - LIMIT OF WORKS



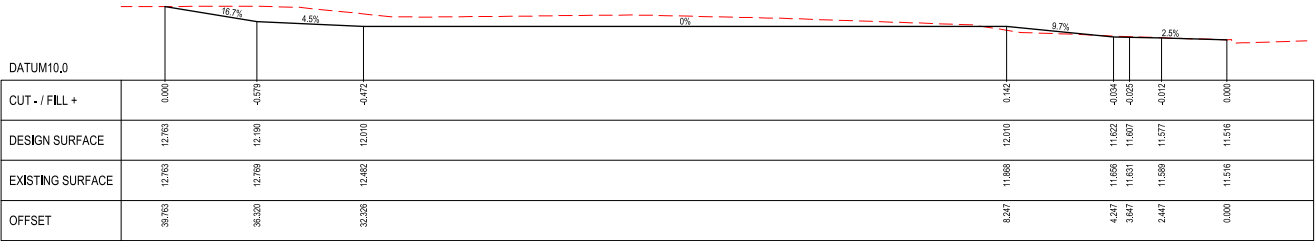
CH 18.445



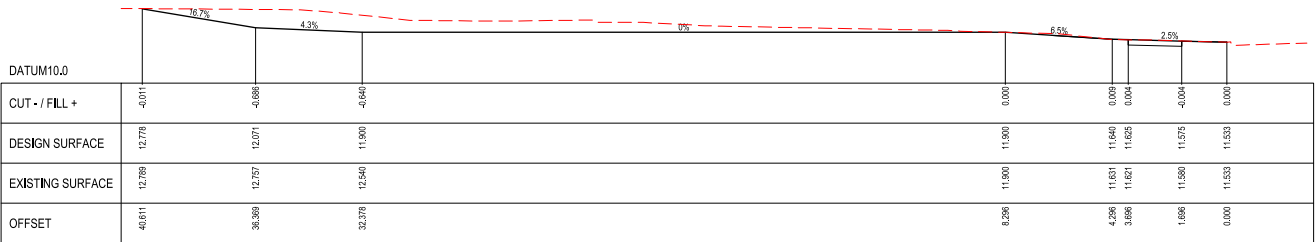
LEGEND	
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	DESIGN SURFACE



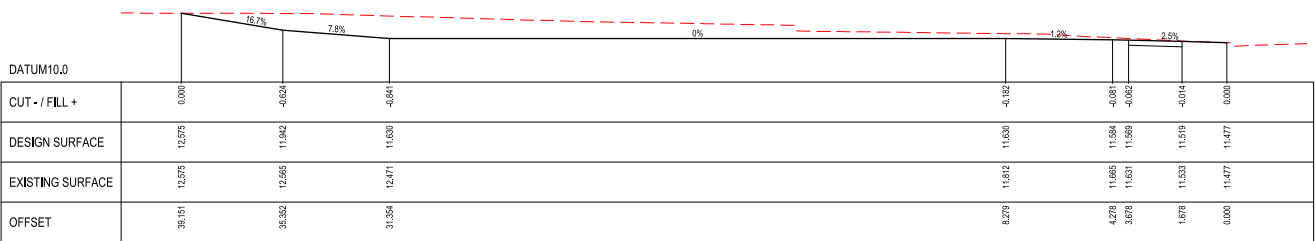
CH 40.331 - LOT 2007



CH 28.356 - LOT 2008



CH 16.323 - LOT 2009

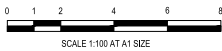


CH 3.905 - LOT 2010

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REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
A	ISSUED FOR INFORMATION	17/08/24	B.R.	S.P.					



Designed	B.RAU
Date	17/08/24
Drawn	B.RAU
Approved	S.GRAY
Date	17/08/24
DA Number	

**BW** Beveridge Williams  
Development & Infrastructure Consultants  
Tuggerah Business Park Unit 4, 5 Galaxy Ct  
Tuggerah NSW 2259  
ph: 02 43912233  
www.beveridgewilliams.com.au

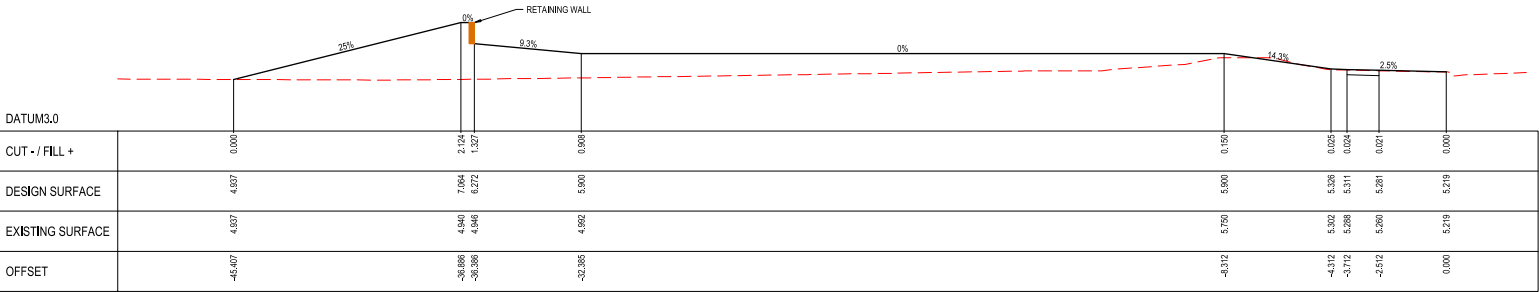
Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	ASHFORD AVENUE (NORTH OF ROAD 1) LOT CROSS SECTIONS

Sheet	10 of 18
Scale	1:100 @ A1
Project Number	2301879
Reference	307
Drawing No	201
Revision	A

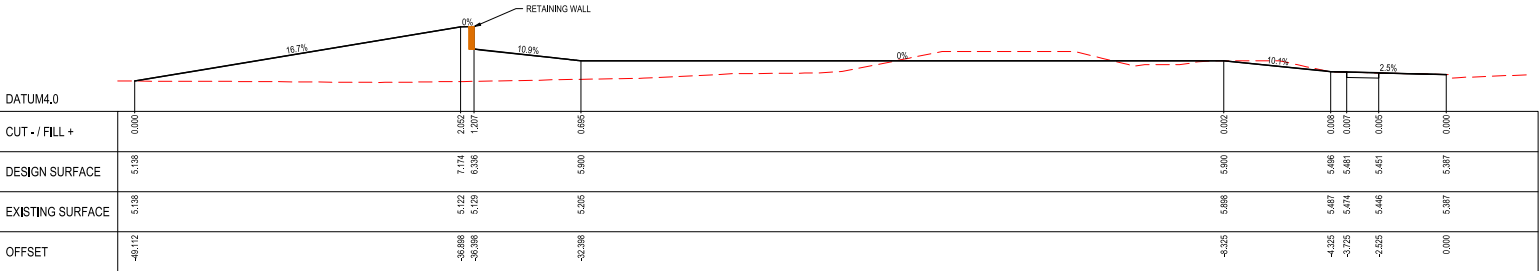
LEGEND

EXISTING SURFACE

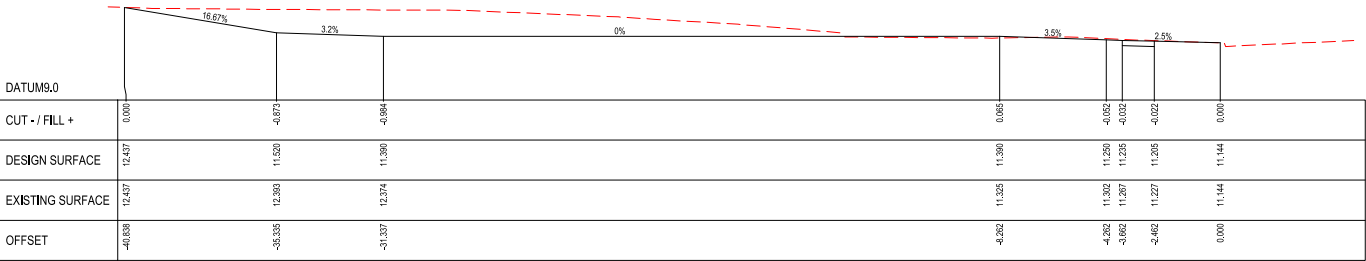
DESIGN SURFACE



CH 225.620 - LOT 2002



CH 213.604 - LOT 2001

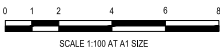


CH 5.431 - LOT 2011

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REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
A	ISSUED FOR INFORMATION	17/06/24	B.R.	S.P.					



Designed	B.RAU
Date	17/06/24
Drawn	B.RAU
Approved	S.GRAY
Date	17/06/24
DA Number	

BW

Beveridge Williams

Development & Infrastructure Consultants

Tuggerah Business Park Unit 4, 5 Galaxy Ct  
Tuggerah NSW 2259

ph 02 43912233  
www.beveridgewilliams.com.au

Project Details

WSU MILPERRA, LOT 2 IN DP1291984  
2 BULLECOURT AVE, MILPERRA  
STAGE 2 SUBDIVISION

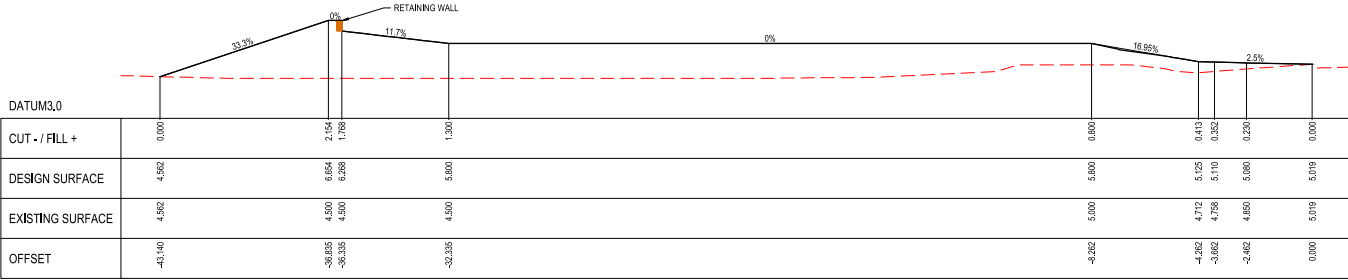
Drawing Title

ASHFORD AVENUE (SOUTH OF ROAD 1)  
LOT CROSS SECTIONS  
(SHEET 1 OF 2)

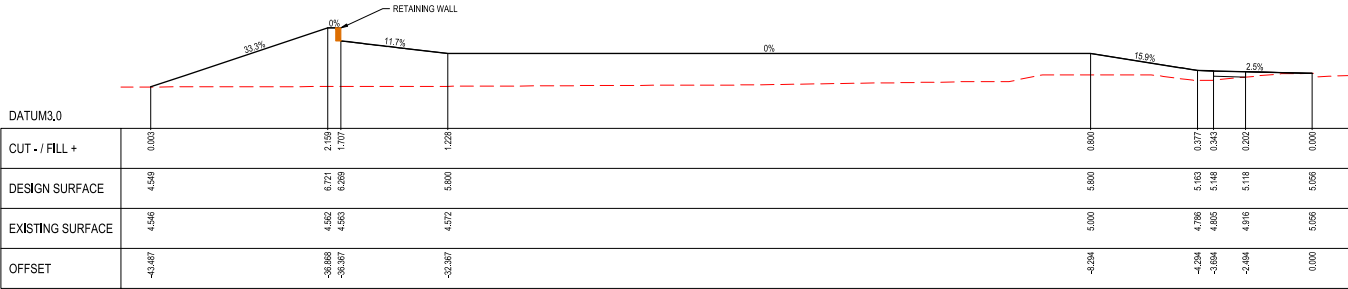
Sheet	11 of 18
Scale	1:100 @ A1
Project Number	2301879
Reference	307
Drawing No	202
Revision	A

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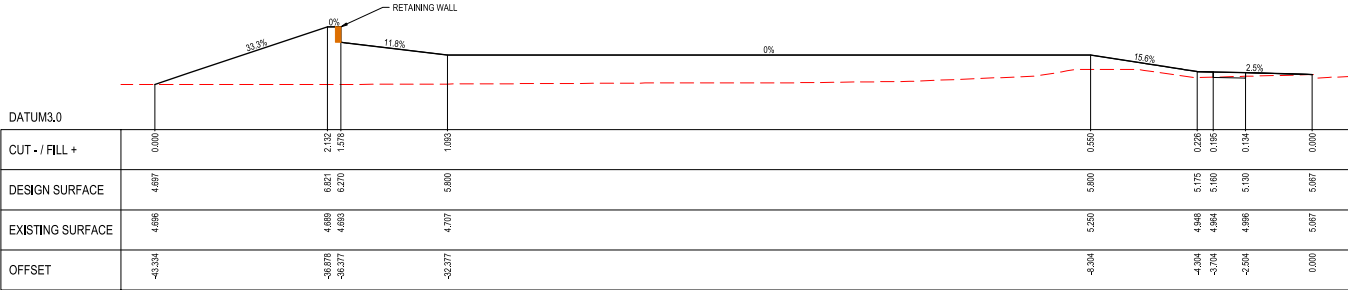
LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE



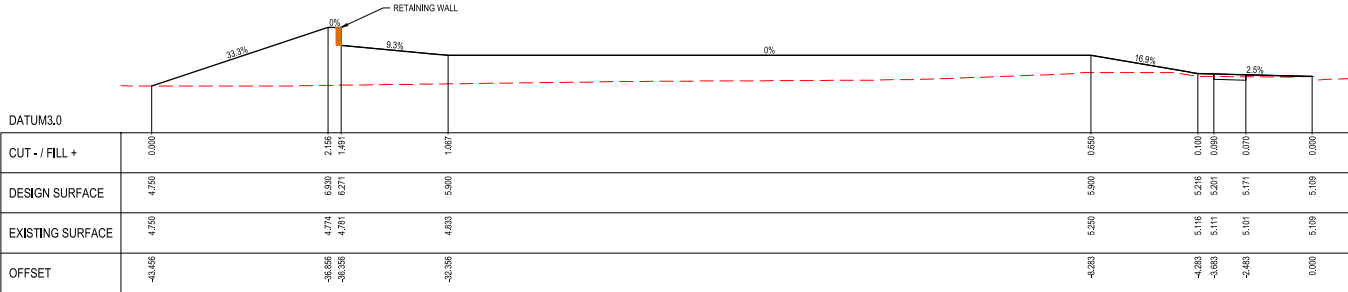
CH 268.620 - LOT 2006



CH 258.808 - LOT 2005



CH 248.808 - LOT 2004

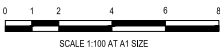


CH 237.595 - LOT 2003

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REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
B	UPDATED CROSS SECTIONS	08.10.24	B.R	S.R					
A	ISSUED FOR INFORMATION	17.09.24	B.R	S.P					

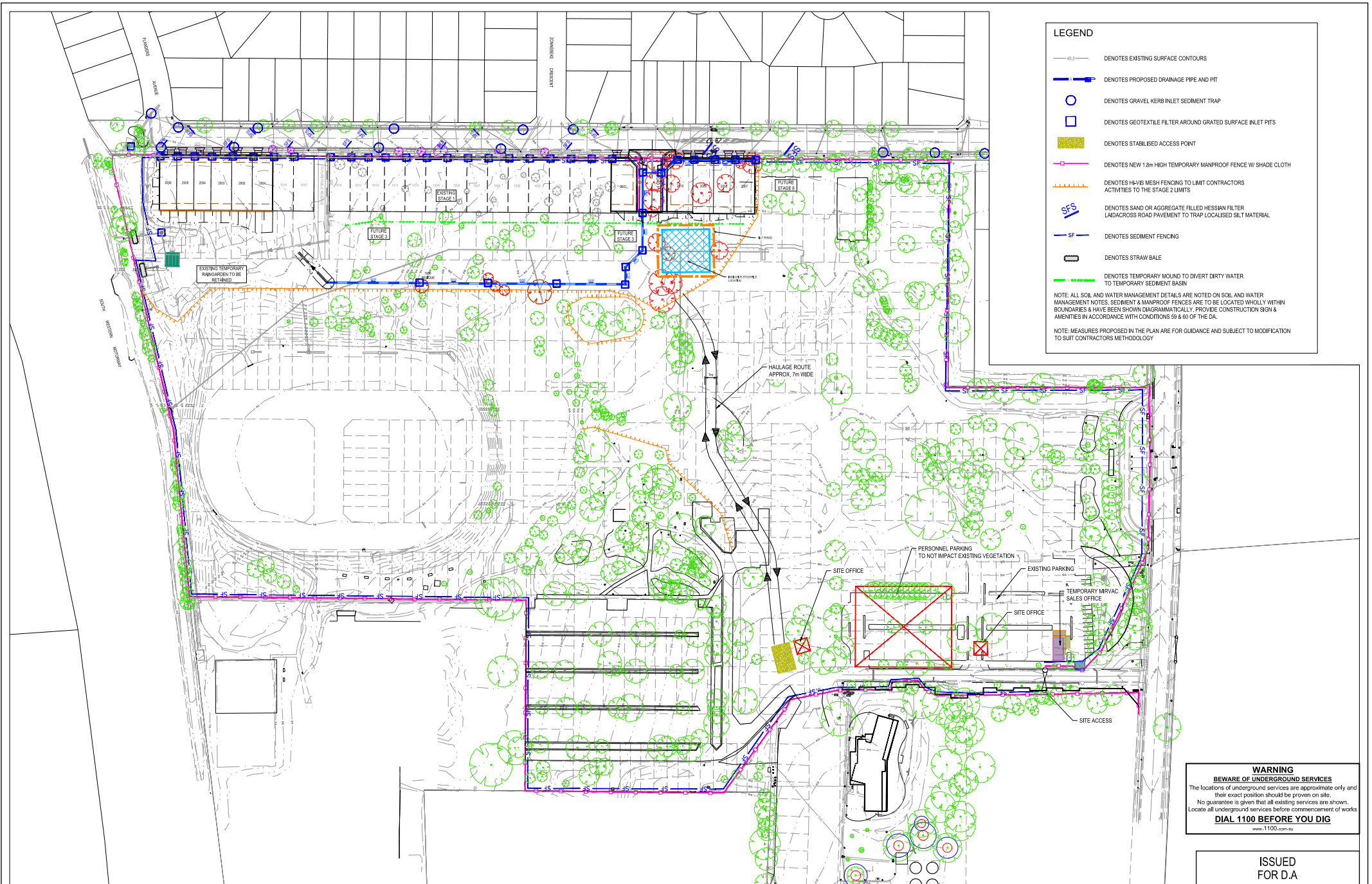


Designed	B.RAU
Date	17/09/24
Drawn	B.RAU
Approved	S.GRAY
Date	17/09/24
DA Number	

**BW** Beveridge Williams  
Development & Infrastructure Consultants  
Tuggerah Business Park Unit 4, 5 Galaxy Ct  
Tuggerah NSW 2259  
ph 02 43012233  
www.beveridgewilliams.com.au

Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	ASHFORD AVENUE (SOUTH OF ROAD 1) LOT CROSS SECTIONS (SHEET 2 OF 2)

Sheet	12 of 18
Scale	1:100 @ A1
Project Number	2301879
Reference	307
Drawing No	203
Revision	B



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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.																																																												

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Designed  
Date  
Drawn  
Approved  
Date  
DA Number

B.RAU  
17/09/24  
B.RAU  
S.GRAY  
17/09/24

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Project Details  
Drawing Title

WSU MILPERRA, LOT 2 IN DP1291984  
2 BULLECOURT AVE, MILPERRA  
STAGE 2 SUBDIVISION  
SOIL AND WATER MANAGEMENT PLAN  
OVERALL PLAN

Sheet 13 of 18  
Scale  
1:1000 @ A1

Project Number  
2301879

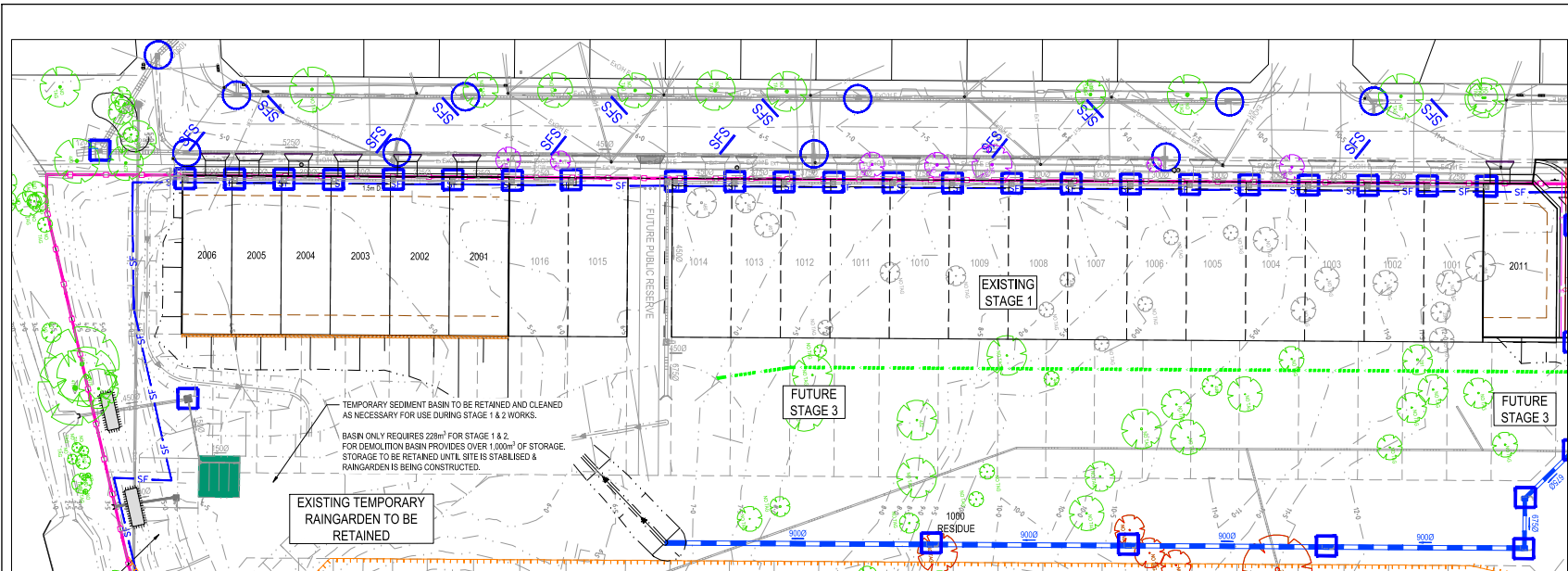
Reference  
307

Drawing No  
400

Revision  
C

ISSUED FOR D.A.

WARNING  
BEWARE OF UNDERGROUND SERVICES  
The locations of underground services are approximate only and their exact position should be proven on site.  
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**LEGEND**

- 45.5 — DENOTES EXISTING SURFACE CONTOURS
- 45.5 — DENOTES PROPOSED DRAINAGE PIPE AND PIT
- DENOTES GRAVEL KERB INLET SEDIMENT TRAP
- DENOTES GEOTEXTILE FILTER AROUND GRATED SURFACE INLET PITS
- DENOTES STABILISED ACCESS POINT
- 1.8m — DENOTES NEW 1.8m HIGH TEMPORARY MANPROOF FENCE W/ SHADE CLOTH
- 1.8m — DENOTES HI-VIS MESH FENCING TO LIMIT CONTRACTOR ACTIVITIES TO THE STAGE 1 LIMITS
- 1.8m — DENOTES SAND OR AGGREGATE FILLED HESSIAN FILTER LAID ACROSS ROAD PAVEMENT TO TRAP LOCALISED SILT MATERIAL
- 1.8m — DENOTES SEDIMENT FENCING
- 1.8m — DENOTES STRAW BALE
- 1.8m — DENOTES TEMPORARY MOUND TO DIVERT DIRTY WATER TO TEMPORARY SEDIMENT BASIN

NOTE: ALL SOIL AND WATER MANAGEMENT DETAILS ARE NOTED ON SOIL AND WATER MANAGEMENT NOTES. SEDIMENT & MANPROOF FENCES ARE TO BE LOCATED WHOLLY WITHIN BOUNDARIES & HAVE BEEN SHOWN DIAGRAMMATICALLY. PROVIDE CONSTRUCTION SIGN & AMENITIES IN ACCORDANCE WITH CONDITIONS 59 & 60 OF THE DA.

NOTE: MEASURES PROPOSED IN THE PLAN ARE FOR GUIDANCE AND SUBJECT TO MODIFICATION TO SUIT CONTRACTORS METHODOLOGY

**SEDIMENT BASIN**

1. THE CONTRACTOR IS TO ENSURE STORMWATER RUNOFF IS DIRECTED TO THE SEDIMENT BASIN WITH PLACEMENT OF TEMPORARY DIVERSION MOUNDS OR THE FORMATION OF OVERLAND FLOW PATHS.
2. DIVERSION MOUNDS & FLOW PATHS ARE TO BE ADJUSTED AS FILLING LAYERS PROGRESS & SURFACE LEVELS RISE.
3. SEDIMENT IS TO BE REMOVED SUCH THAT NOT LESS THAN 70% OF THE DESIGN CAPACITY IS AVAILABLE AT ALL TIMES MARKERS WITH DEPTH INDICATORS ARE TO BE PLACED IN EACH BASIN TO INDICATE WHEN SEDIMENT ACCUMULATION EXCEEDS 30% OF STORAGE REQUIREMENTS.
4. BASINS ARE TO BE FLOCCULATED WITH GYPSUM WHEN SUSPENDED SOLID CONCENTRATION EXCEEDS 50 milligrams per litre. SPREADING RATE TO BE DETERMINED AFTER TESTING AND ANALYSIS OF THE INITIAL STORM EVENT. FIRST APPLICATION IS TO BE 30 kilograms GYPSUM PER 100 cum. OF STORED WATER & THEREAFTER AS DETERMINED BY TESTING. PUMP OUT TO GOLF COURSE DAM WITHIN 72 hrs OF TREATMENT. REFER LANDCOM SOIL & CONSTRUCTION - "MANAGING URBAN STORMWATER" MANUAL - APPENDIX E
6. UPON ADEQUATE SITE REVEGETATION & COUNCIL APPROVAL SEDIMENT BASIN IS TO BE DECOMMISSIONED & CONVERTED INTO RAINGARDENS PER DESIGN.

**CONSTRUCTION SEQUENCE**

FOLLOWING REMEDIATION OF THE AREA:

1. ALL TOPSOIL CONTAINING VEGETATION TO BE STRIPPED FROM EXISTING SURFACE & STOCKPILED FOR RESPREADING
2. FOLLOWING COMPLETION OF EARTHWORKS, (APPROX. 75mm THICK)
3. STRIPPED SURFACE TO BE INSPECTED & CERTIFIED READY FOR FILL PLACEMENT BY GEOTECHNICAL ENGINEER.
4. COMPLETE INITIAL EARTHWORKS IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S REPORT
5. IMPORTED FILL IS TO BE CERTIFIED AS V.E.N.M. & FREE OF SLAG, HAZARDOUS, CONTAMINATED, TOXIC, PUTRESCIBLE OR RADIO-ACTIVE MATTER & INDUSTRIAL WASTE & BUILDING DEBRIS. THE ORIGIN OF FILL PROPOSED TO BE IMPORTED & THE ABOVE CERTIFICATION TO BE REVIEWED & APPROVED BY COUNCIL PRIOR TO ANY IMPORTED FILL ARRIVING ON SITE.
6. ALL FILL IS TO BE PLACED & COMPACTED IN ACCORDANCE WITH COUNCIL'S CONSTRUCTION SPECIFICATION.
7. COPIES OF ALL FILL COMPACTION TESTS TO BE PROVIDED TO PRINCIPLE.
8. COMPLETE ALL ROAD, DRAINAGE, RETAINING WALL & SERVICES WORKS
9. 300mm WIDE 150mm THICK TOPSOIL TO BE PLACED BEHIND KERBS & TURFED WITH KIKUYU TURF
10. FINAL TOPSOIL/ TURF & PATHWAYS WITHIN ASHFORD AVENUE VERGES TO BE BONDED WITH COUNCIL & COMPLETED BY BUILDERS FOLLOWING HOUSE CONSTRUCTION

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ISSUED FOR D.A.

**1. Erosion Hazard and Sediment Basins**  
Site Name: WSU Milperra  
Site Location: 2 Bullecourt Ave, Milperra  
Precinct/Stage: Stage 1 & 2 Subdivision  
Other Details:

Site area	Sub-catchment or Name of Structure	Notes
Total catchment area (ha)	2.841	
Disturbed catchment area (ha)	2.841	

Soil analysis (enter sediment type if known, or laboratory particle size data)		
Sediment Type (C, F or D) if known:	F	From Appendix C (if known)
% sand (fraction 0.02 to 2.00 mm)	33	Enter the percentage of each soil fraction. E.g. enter 10 for 10%
% silt (fraction 0.002 to 0.02 mm)	33	
% clay (fraction finer than 0.002 mm)	33	
Dispersion percentage	10.0	E.g. enter 10 for dispersion of 10%
% of whole soil dispersible	4.95	See Section 6.3.3(c). Auto-calculated
Soil Texture Group	F	Automatic calculation from above

Rainfall data		
Design rainfall depth (no of days)	5	See Section 6.3.4 and, particularly, Table 6.3.3 on pages 6-24 and 6-25.
Design rainfall depth (percentile)	75	
1-day, 1 percent rainfall event (mm)	19.4	
Rainfall R factor (if known)	2000	Only need to enter one or the other here
RFD: 2-year, 24-hour storm (if known)	1.3	

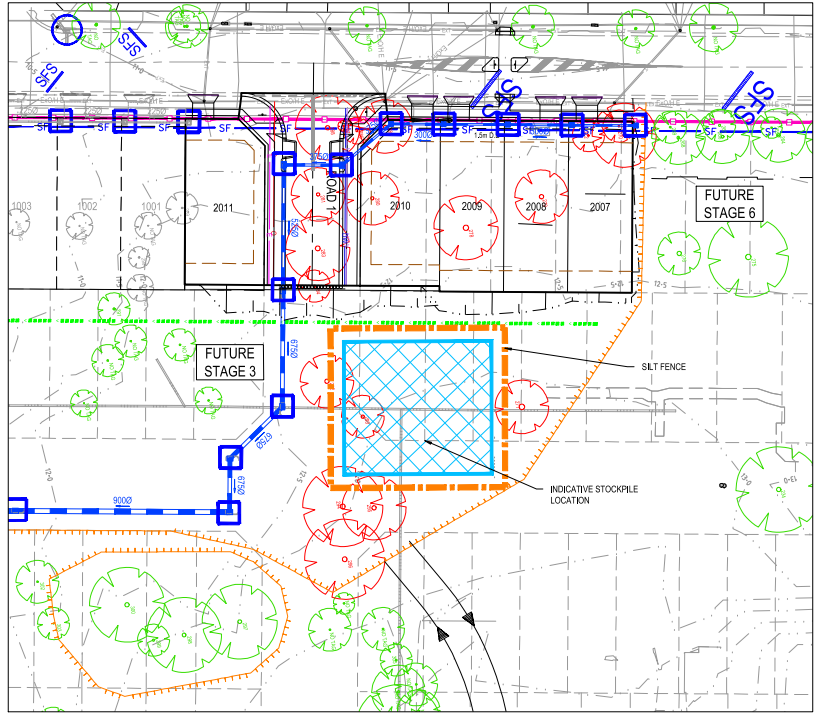
RUSLE Factors		
Rainfall erosivity (R-factor)	2000	Auto-filled from above
Soil erosivity (K-factor)	0.08	
Slope length (m)	2.0	
Slope gradient (%)	2.4	RUSLE LS factor calculated for a high rainfall rate
Length/gradient (LS-factor)	0.74	
Erosion control practice (P-factor)	1.3 1.3 1.3 1.3 1.3 1.3	
Ground cover (C-factor)	1 1 1 1 1 1	

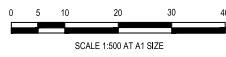
Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)		
Storage (soil) zone design (no of months)	2 2 2 2 2 2	Minimum is generally 2 months
Cv (volumetric runoff coefficient)	0.35	See Table F2, page F-4 in Appendix F

Calculations and Type D/F Sediment Basin Volumes		
Soil loss (t/ha/yr)	36	
Soil Loss Class	1	See Table 4.2, page 4-13
Soil loss (m³/ha/yr)	73	Conversion to cubic metres
Sediment basin storage (soil) volume (m³)	36	See Sections 6.3.4(d) for calculations
Sediment basin settling (water) volume (m³)	163	See Sections 6.3.4(d) for calculations
Sediment basin total volume (m³)	228	



REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
C	ADDITIONAL DETAILS	18.10.24	B.R.	S.F.					
B	LOTTES 2006-2009 SHIPPED SOUTH 2m	18.10.24	B.R.	S.F.					
A	ISSUED FOR INFORMATION	17.08.24	B.R.	S.F.					



Designed: B.RAU  
Date: 17/08/24  
Drawn: B.RAU  
Approved: S.GRAY  
Date: 17/08/24  
DA Number:

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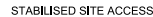
Project Details: WSU MILPERRA, LOT 2 IN DP1291984  
2 BULLECCOURT AVE, MILPERRA  
STAGE 2 SUBDIVISION

Drawing Title: SOIL AND WATER MANAGEMENT PLAN  
STAGE 2 PLAN

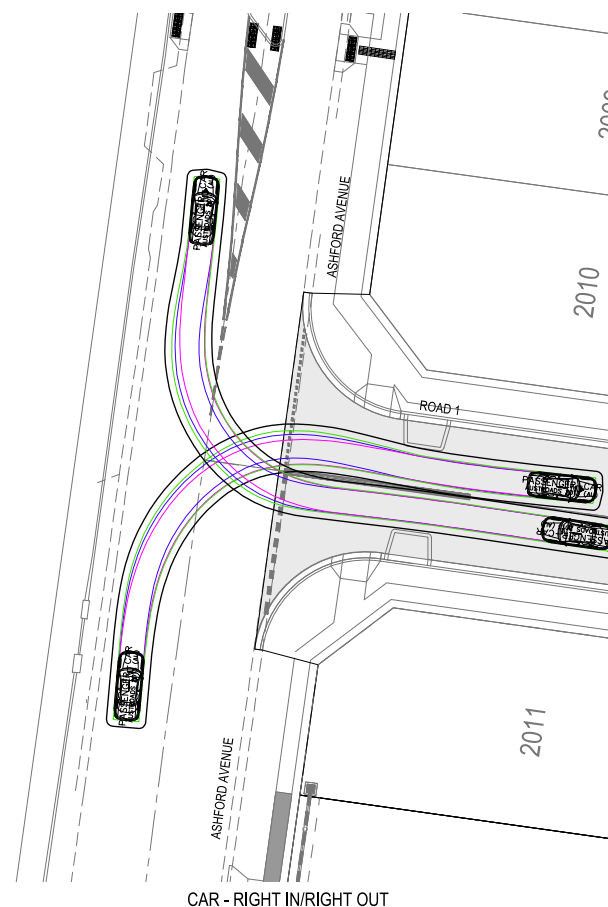
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Project Number: 2301879  
Reference: 307  
Drawing No: 401  
Revision: C

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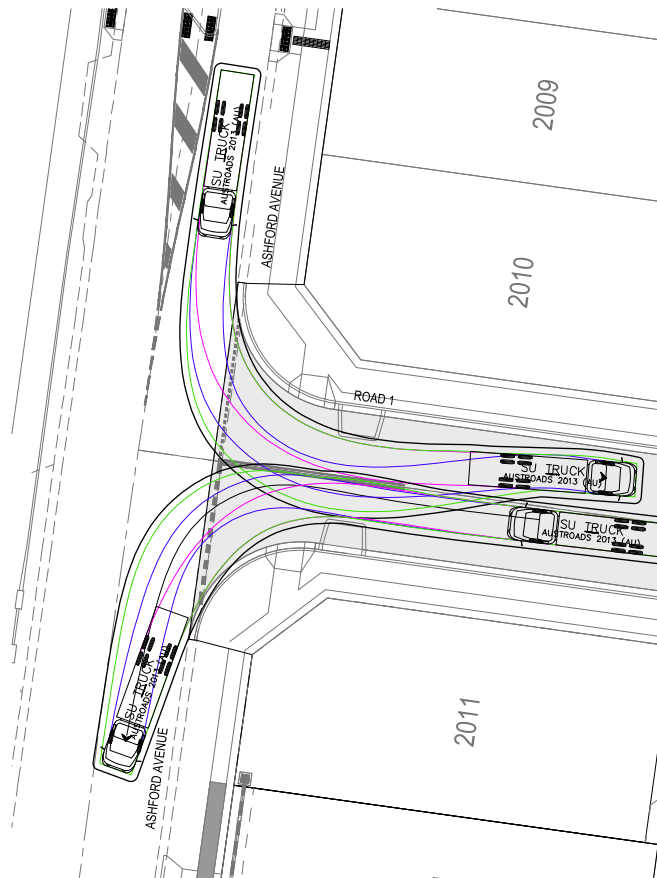




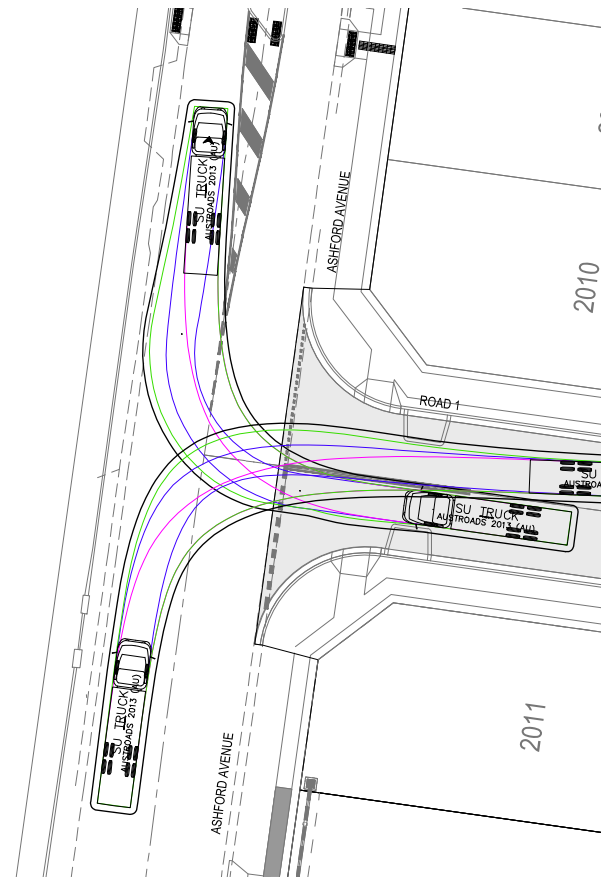
ANY IMPORTED FILL USED MUST BE VALIDATED & SUITABLE & FREE OF SALINE & CONTAMINATION



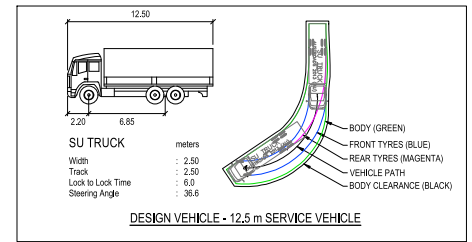




TRUCK - LEFT IN/LEFT OUT



TRUCK - RIGHT IN/RIGHT OUT



REV				DESCRIPTION				DATE				DRN				APP			
B				MINOR AMENDMENTS				09.10.24				B.R.				S.F.			
A				ISSUED FOR INFORMATION				17.09.24				B.R.				S.F.			



Designed	B.RAU
Date	17/09/24
Drawn	B.RAU
Approved	S.GRAY
Date	17/09/24
DA Number	

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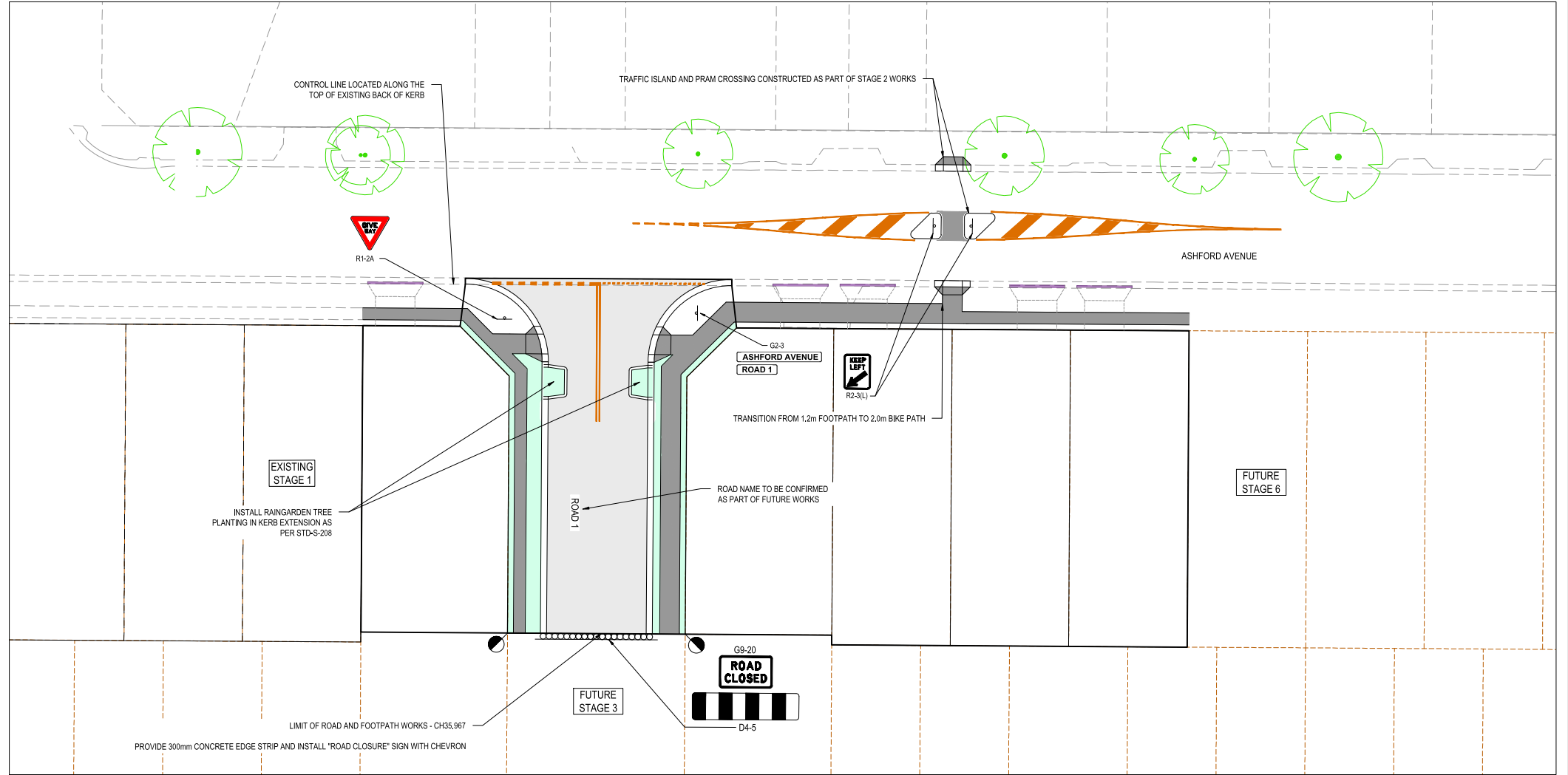
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Tuggerah NSW 2259

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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	TURNING MOVEMENTS SERVICE VEHICLE (SHEET 2 OF 2)

ISSUED FOR D.A.

Sheet	17 of 18
Scale	1:200 @ A1
Project Number	2301879
Reference	307
Drawing No	801
Revision	B



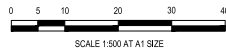
- NOTES
1. LINEMARKING TO BE EXTENDED AT LEAST 6m FROM THE TANGENT POINT
  2. LINEMARKING IN ACCORDANCE WITH AS1742.
  3. ALL STREET NAME SIGNS AT INTERSECTIONS TO INCLUDE RELEVANT STREET NUMBERING.
  4. ALL LINE MARKING PAINT SHALL BE LONG LIFE TYPE. LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGADUR PASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL.

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A	ISSUED FOR INFORMATION	06/10/24	B.R.	S.F.					



Designed	B.RAU
Date	06/10/24
Drawn	B.RAU
Approved	S.GRAY
Date	06/10/24
DA Number	

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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	SINAGE & LINE MARKING PLAN

Sheet 18 of 18

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Project Number	Reference	Drawing No	Revision
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