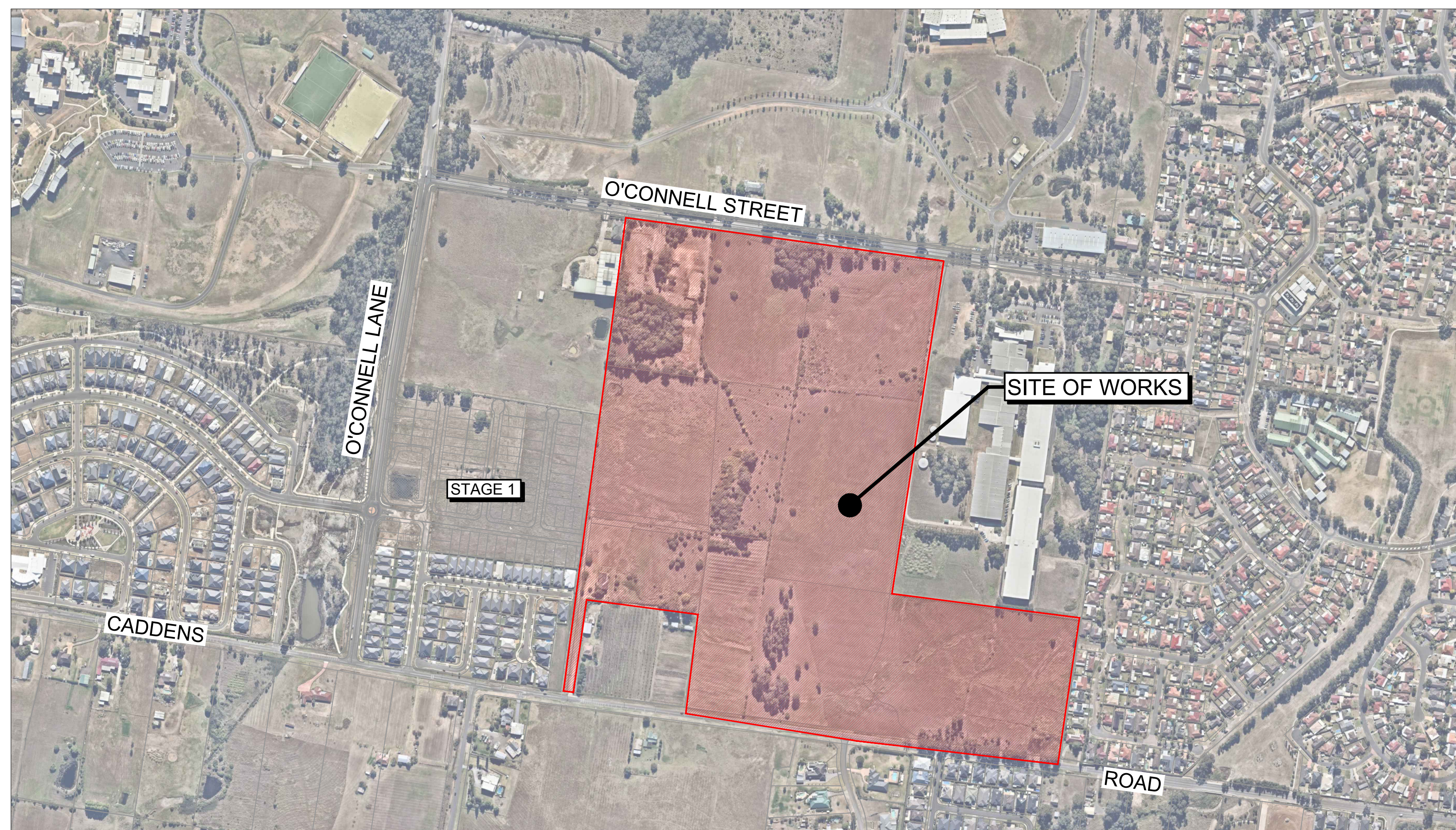




LEGACYPROPERTY

CADDENS HILL STAGES 2 - 4 PROPOSED SUBDIVISION & BULK EARTHWORKS DA16/1166



LOCALITY SKETCH

Prepared By:

J. WYNDHAM PRINCE

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110358/DA230	SWEPT PATH PLAN 3	A
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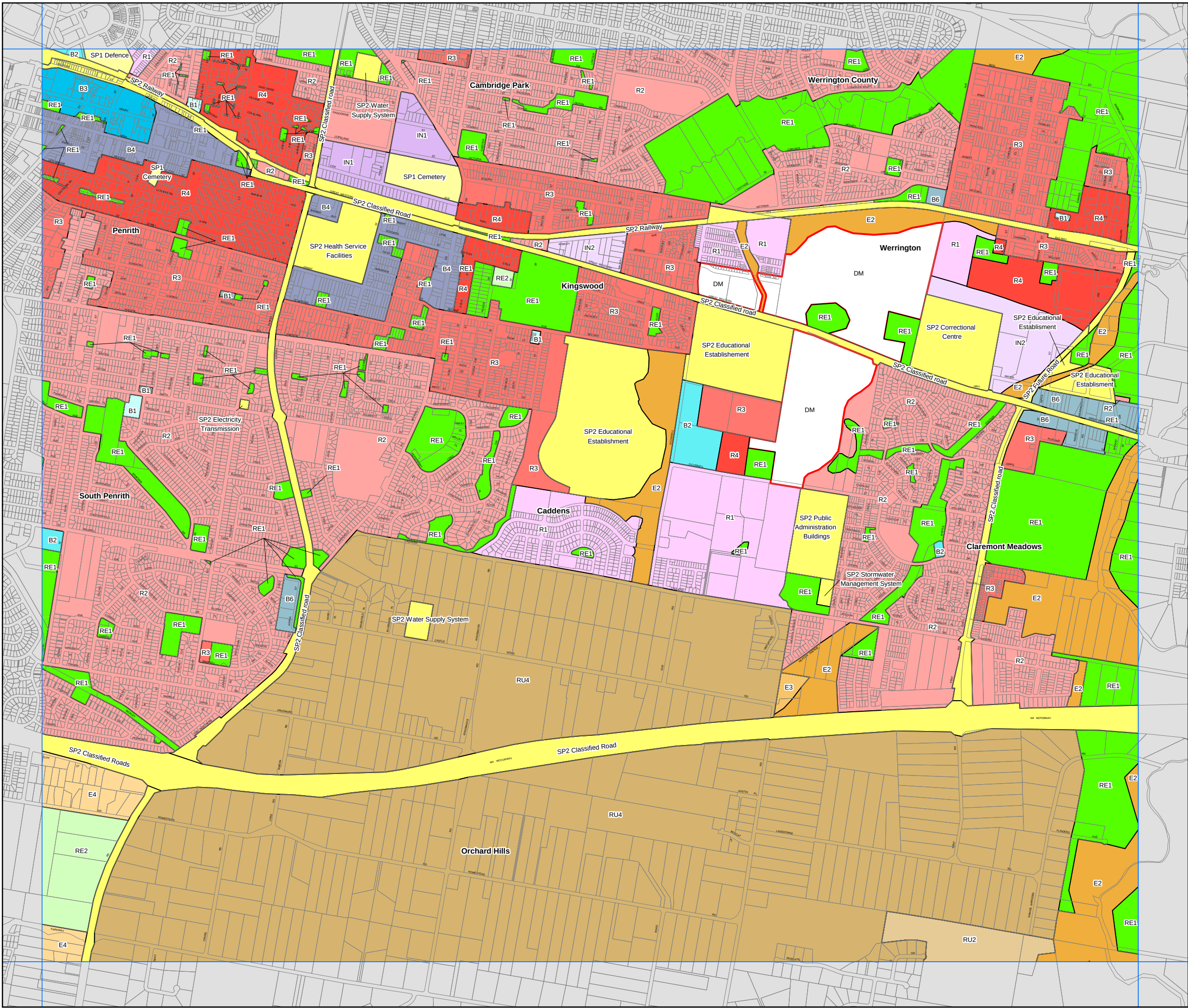
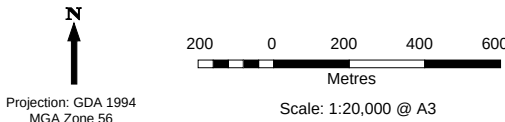
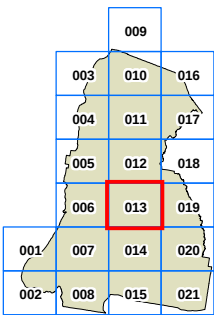
PLAN No.
110358/DA200 B
FILE No. 110358DA200

Penrith Local Environmental Plan 2010

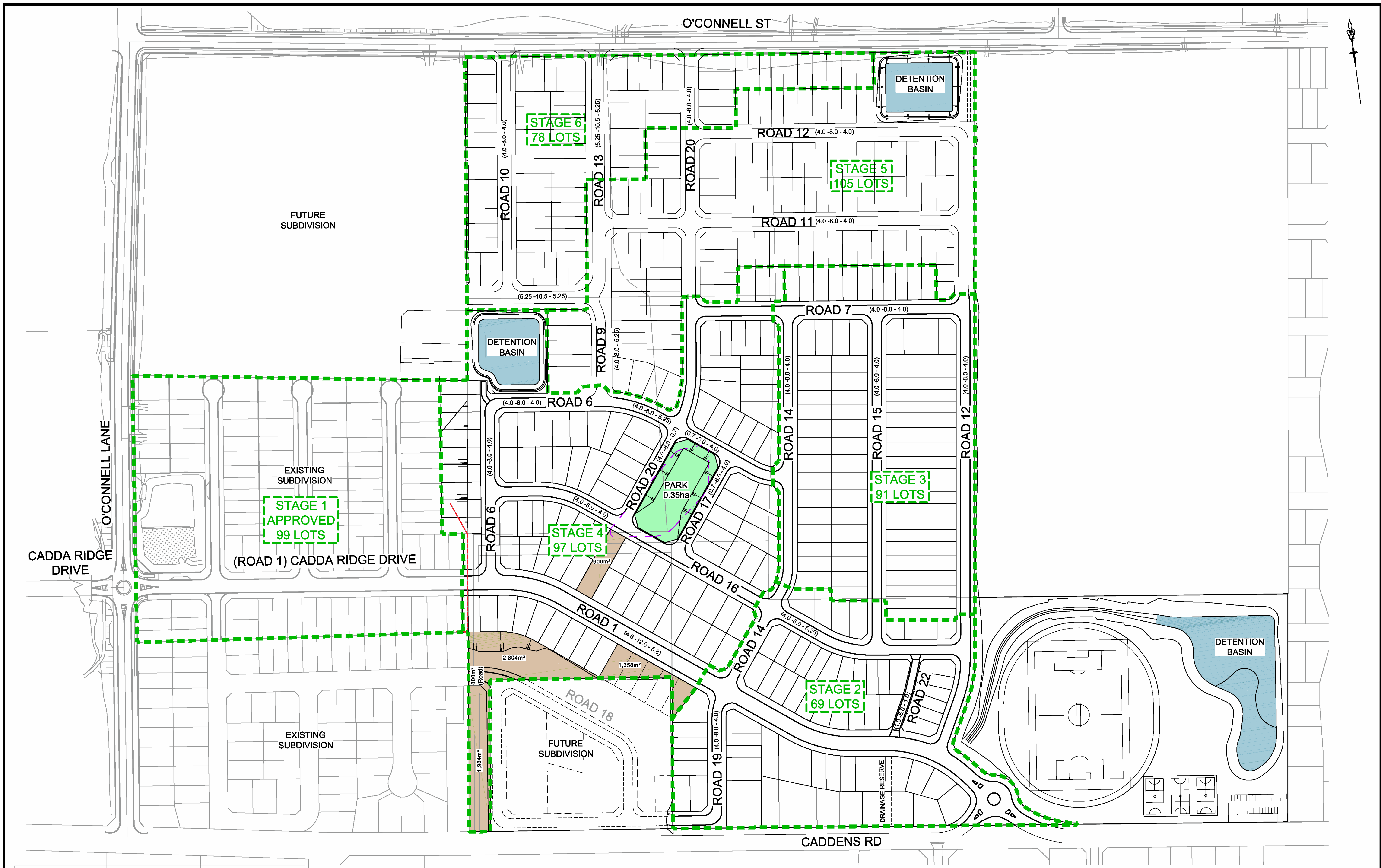
Land Zoning Map - Sheet LZN_013

- Zone**
- B1 Neighbourhood Centre
 - B2 Local Centre
 - B3 Commercial Core
 - B4 Mixed Use
 - B5 Business development
 - B6 Enterprise Corridor
 - E1 National Parks and Nature Reserves
 - E2 Environmental Conservation
 - E3 Environmental Management
 - E4 Environmental Living
 - IN1 General Industrial
 - IN2 Light Industrial
 - R1 General Residential
 - R2 Low Density Residential
 - R3 Medium Density Residential
 - R4 High Density Residential
 - R5 Large Lot Residential
 - RE1 Public Recreation
 - RE2 Private Recreation
 - RU1 Primary Production
 - RU2 Rural Landscape
 - RU4 Primary Production Small Lots
 - RU5 Village
 - SP1 Special Activities
 - SP2 Infrastructure
 - SP3 Tourist
 - W1 Natural Waterways
 - W2 Recreational Waterways
 - DM Deferred Matter
 - WSEA SEPP (Western Sydney Employment Area) 2009
 - SM SREP No. 30 - St Marys

Cadastre
Cadastre 08/09/2016 © Penrith City Council



Plotfile: 16 December, 2016 8:59:27 AM File Name: J:\110358 - O'Connell Lane, Caddens\03 - Stage 2\CDISK\110358SK008.dwg



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PRELIMINARY DESIGNS SUBJECT TO CHANGE



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CADDENS HILL

SITE LAYOUT PLAN
ALTERNATIVE STAGE 5 & 6 BOUNDARY

PLAN No:
110358/K008

A

FILE No: 110358SK008

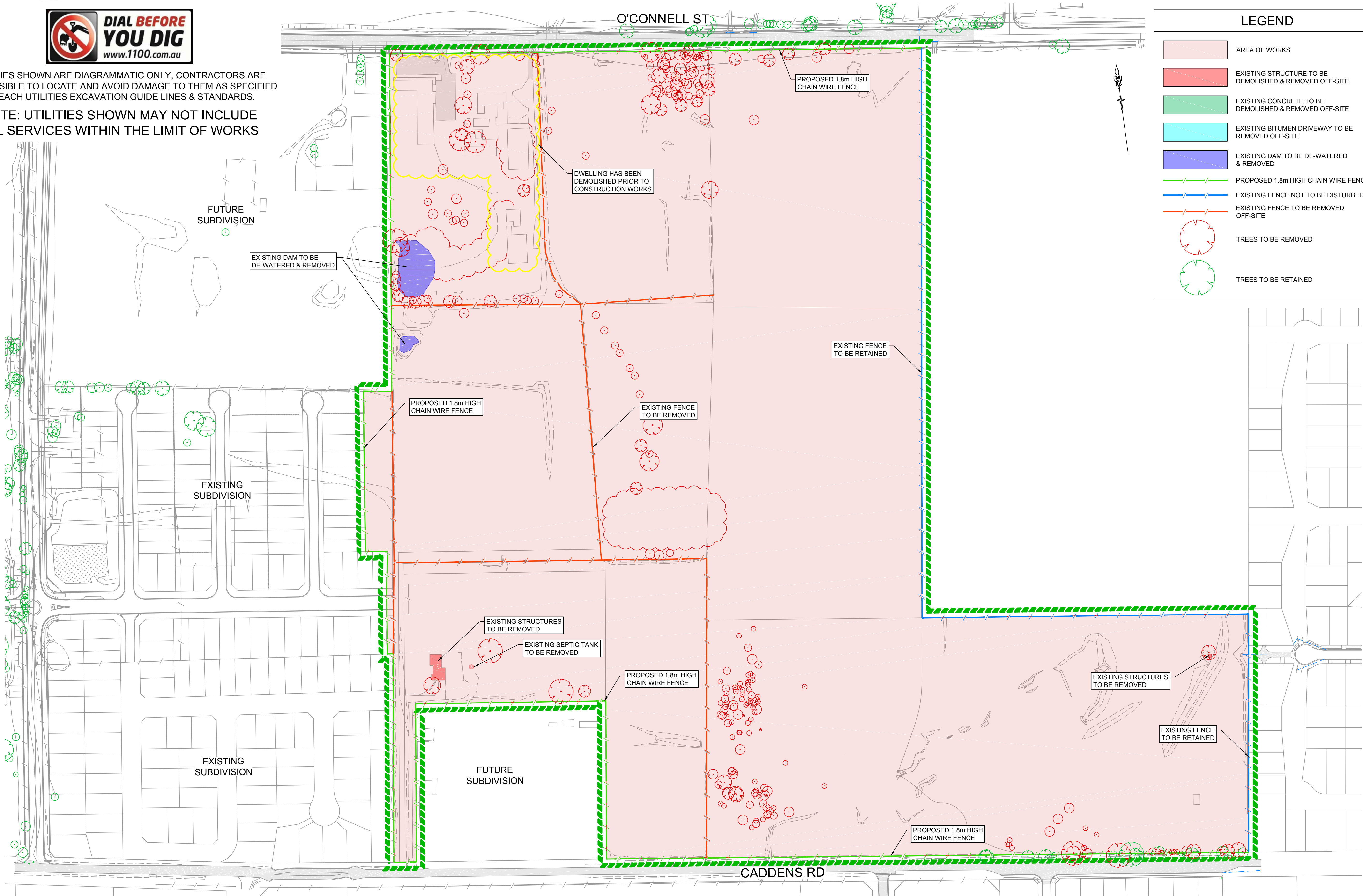
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ISSUED FOR INFORMATION		RT	RT		18/12/16
AMENDMENT	DES	DRN	CKD	APR	DATE
A					



UTILITIES SHOWN ARE DIAGRAMMATIC ONLY, CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES & STANDARDS.

NOTE: UTILITIES SHOWN MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS



LEGEND

AREA OF WORKS

EXISTING STRUCTURE TO BE DEMOLISHED & REMOVED OFF-SITE

EXISTING CONCRETE TO BE DEMOLISHED & REMOVED OFF-SITE

EXISTING BITUMEN DRIVEWAY TO BE REMOVED OFF-SITE

EXISTING DAM TO BE DE-WATERED & REMOVED

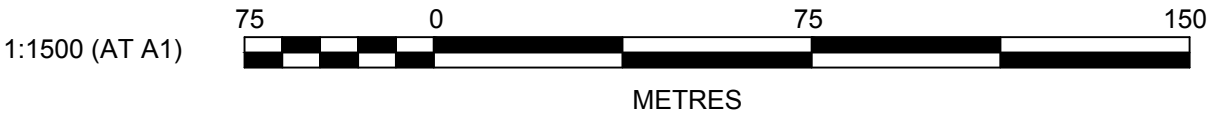
PROPOSED 1.8m HIGH CHAIN WIRE FENCE

EXISTING FENCE NOT TO BE DISTURBED

EXISTING FENCE TO BE REMOVED OFF-SITE

TREES TO BE REMOVED

TREES TO BE RETAINED



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16	
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16	
	AMENDMENT	DES	DRN	CKD	APR	DATE	

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CADDENS HILL
STAGES 2 - 4

TREE MANAGEMENT & DEMOLITION PLAN

PLAN No:
110358/DA227

FILE No: 110358DA227

SHEET SIZE: A1 ORIGINAL

B

M G A North

ROAD

CADDENS

GARNET DRIVE

DRIVE

GARNET DRIVE

RIDGE

CADDA

PYRUS

LANE

ARCHIVES WAY

DELAWARE

HAMLIN STREET

FUTURE
STAGE
SUBDIVISION
FOUR

FUTURE
STAGE
SUBDIVISION
THREE

'A' BENEFITED BY EASEMENT TO DRAIN WATER 2 WIDE (E1)
'B' BENEFITED BY EASEMENT TO DRAIN WATER 2 WIDE (E1)
(E1) EASEMENT TO DRAIN WATER 2 WIDE
(E4) EASEMENT FOR PADMOUNT SUBSTATION 2.75 WIDE
(E5) EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE
(E6) EASEMENT FOR ACCESS AND MAINTENANCE 2 WIDE
(E8) EASEMENT TO DRAIN WATER 5 WIDE

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ORIGIN:
SOURCE:
DRAWN: M.Perkins

DATE: 11.10.16
SCALE: 1:1000@A3
CONTOUR
INTERVAL:
CHECKED:

CLIENT:
**LEGACY
PROPERTY**

LOT(S):
STREET ADDRESS: CADDENS ROAD
LOCATION: CADDENS
LOCAL GOVT: PENRITH

DRAWING TITLE:
LOT CALCULATION
STAGE TWO
CADDENS HILL ESTATE

PLAN No.
20467-2L(c)
ISSUE:
SHEET: 1
OF: 1

M G A North

FUTURE SUBDIVISION
STAGE FOUR

GARNET DRIVE (16 WIDE)

AVENUE

HORTYARD DRIVE (16 WIDE)

HAMLIN STREET (16 WIDE)

ARCHIVES WAY (16 WIDE)

STATE ARCHIVES

FUTURE SUBDIVISION
STAGE FIVE

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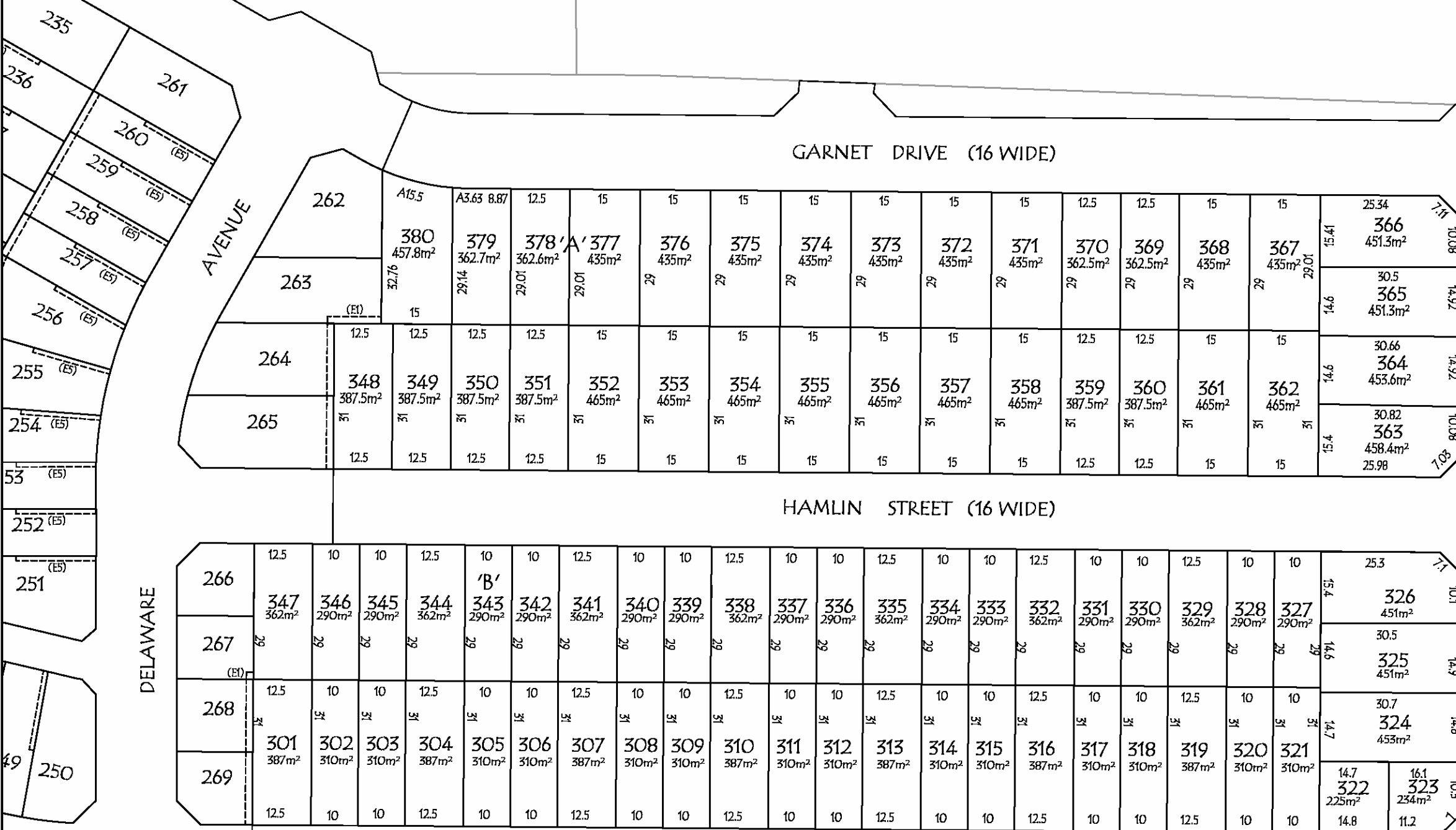
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DRAWN: M.Perkins CHECKED:

CLIENT:
**LEGACY
PROPERTY**

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STREET ADDRESS: CADDENS ROAD
LOCATION: CADDENS
LOCAL GOVT: PENRITH

DRAWING TITLE:
LOT CALCULATION
STAGE THREE
CADDENS HILL ESTATE

PLAN No.
20467-3L(A)
ISSUE:
SHEET: 1
OF: 1



M G A North

DP1166546

DP1201629

37
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ABN 52 065 080 808

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SOURCE:
DRAWN: M. Perkins
DATE: 11.10.16
SCALE: 1:1250 @ A3
CONTOUR
INTERVAL:
CHECKED:

CLIENT:
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PROPERTY

LOT(S):
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LOCATION: CADDENS
LOCAL GOVT: PENRITH

DRAWING TITLE:
LOT CALCULATION
STAGE FOUR
CADDENS HILL ESTATE

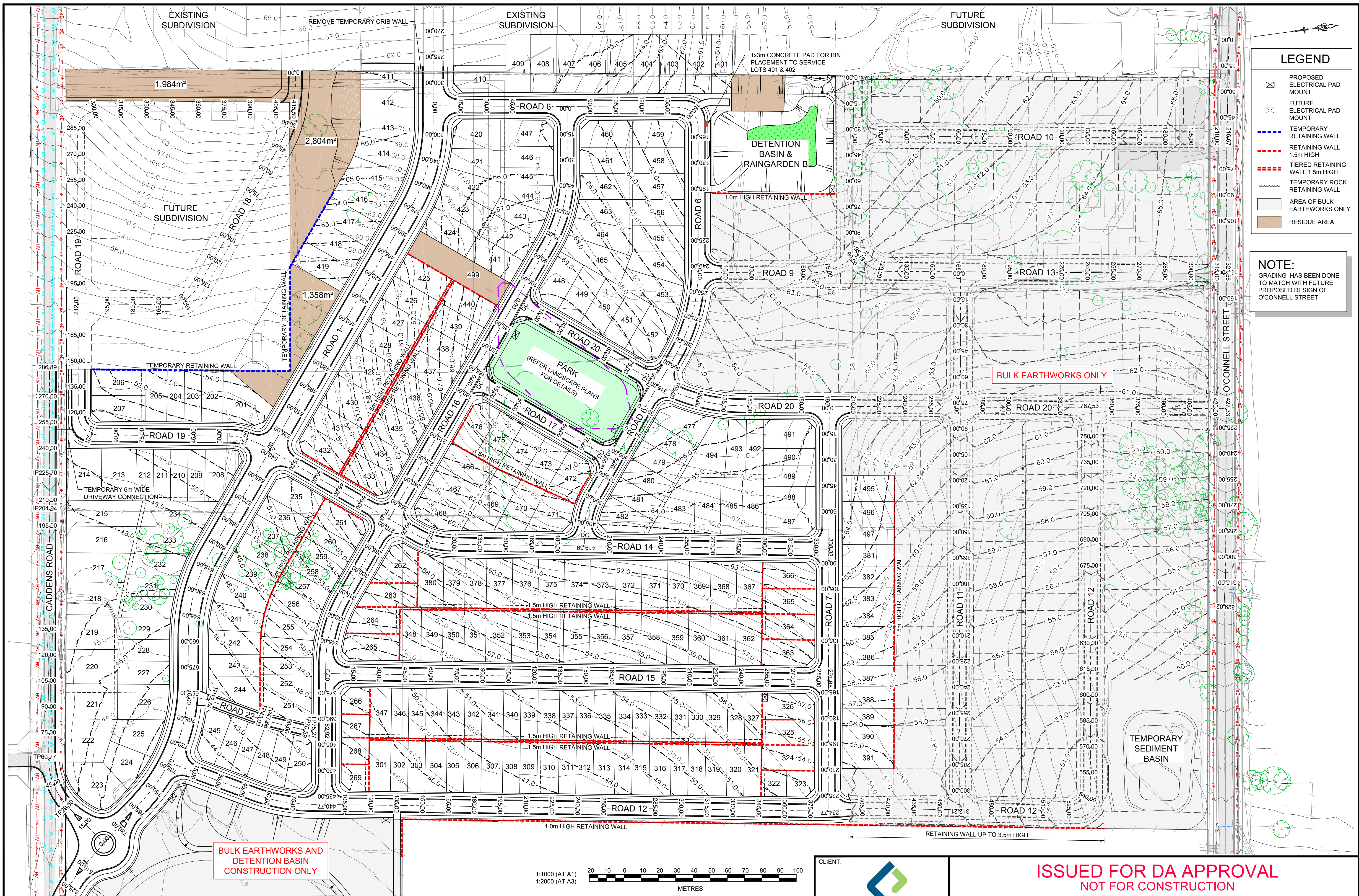
PLAN No.
20467-4L
ISSUE: A
SHEET: 1
OF: 1

A LOT 399 ADDED: DETENTION BASIN ALTERED
AMENDMENT
DATE: 27.10.16

PRECINCT MASTER PLAN



Plotted: 21 December, 2016 2:39:45 PM. File Name: J:\110358 - O'Connell Lane, Caddens\03 - Stage 2\CD\DA110358DA202.dwg



LEGEND

- PROPOSED ELECTRICAL PAD MOUNT
- FUTURE ELECTRICAL PAD MOUNT
- TEMPORARY RETAINING WALL
- RETAINING WALL 1.5m HIGH
- TIERED RETAINING WALL 1.5m HIGH
- TEMPORARY ROCK RETAINING WALL
- AREA OF BULK EARTHWORKS ONLY
- RESIDUE AREA

NOTE:

GRADING HAS BEEN DONE TO MATCH WITH FUTURE PROPOSED DESIGN OF O'CONNELL STREET

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CADDENS HILL
STAGES 2 - 4

ENGINEERING PLAN

PLAN No:
110358/DA202
FILE No: 110358DA202
SHEET SIZE: A1 ORIGINAL

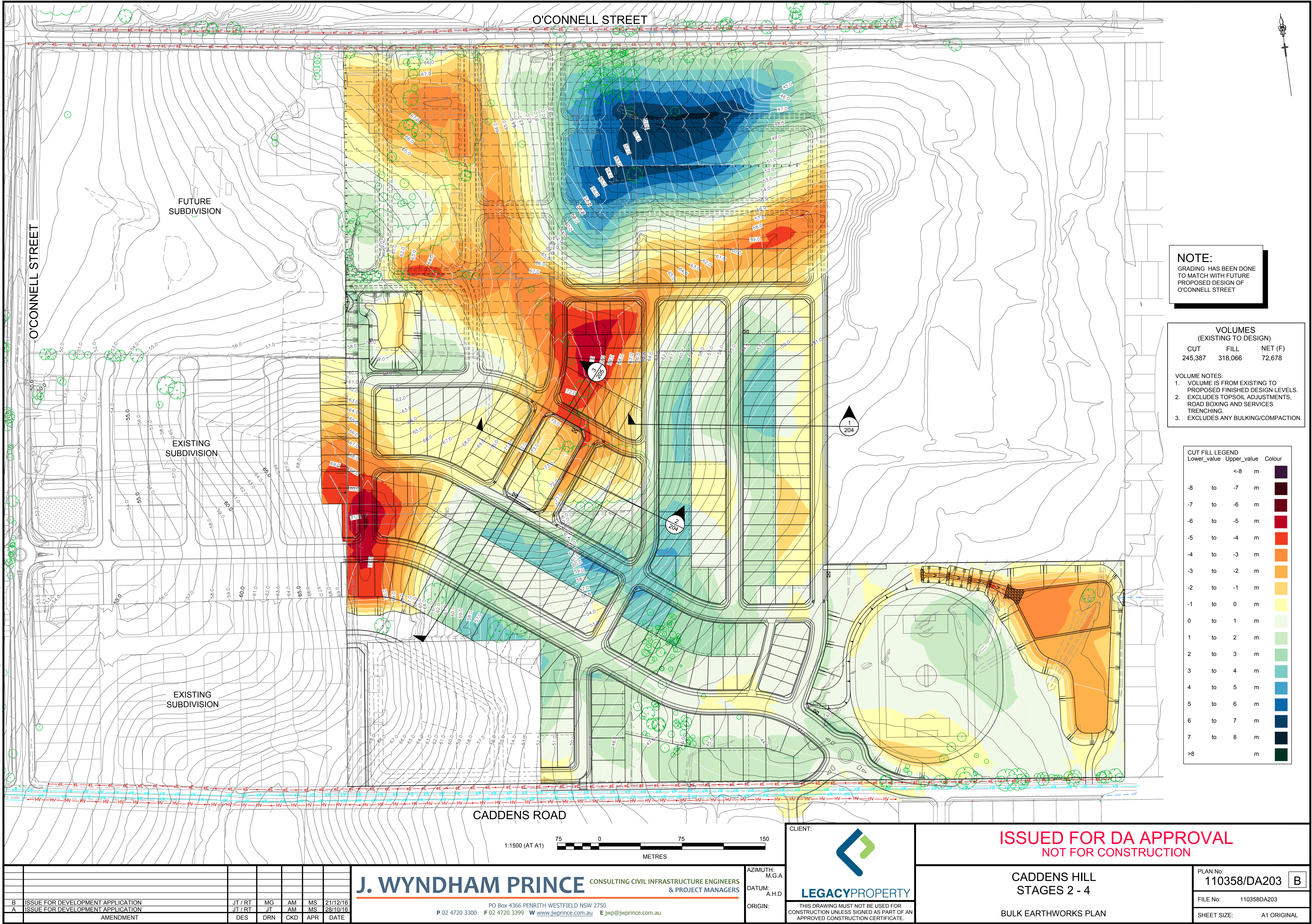
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DATUM: A.H.D
ORIGIN:

B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE



NOTE:
GRADING HAS BEEN DONE
TO MATCH WITH FUTURE
PROPOSED DESIGN OF
O'CONNELL STREET

VOLUMES (EXISTING TO DESIGN)		
CUT	FILL	NET (F)
245,387	318,066	72,678

VOLUME NOTES:
1. VOLUME IS FROM EXISTING TO PROPOSED FINISHED DESIGN LEVELS.
2. EXCLUDES TOPSOIL ADJUSTMENTS, ROAD BOXING AND SERVICES TRENCHING
3. EXCLUDES ANY BULKING/COMPACTION.

CUT FILL LEGEND		
Lower_value	Upper_value	Colour
<-8	m	
-8	to -7	m
-7	to -6	m
-6	to -5	m
-5	to -4	m
-4	to -3	m
-3	to -2	m
-2	to -1	m
-1	to 0	m
0	to 1	m
1	to 2	m
2	to 3	m
3	to 4	m
4	to 5	m
5	to 6	m
6	to 7	m
7	to 8	m
>8	m	

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A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

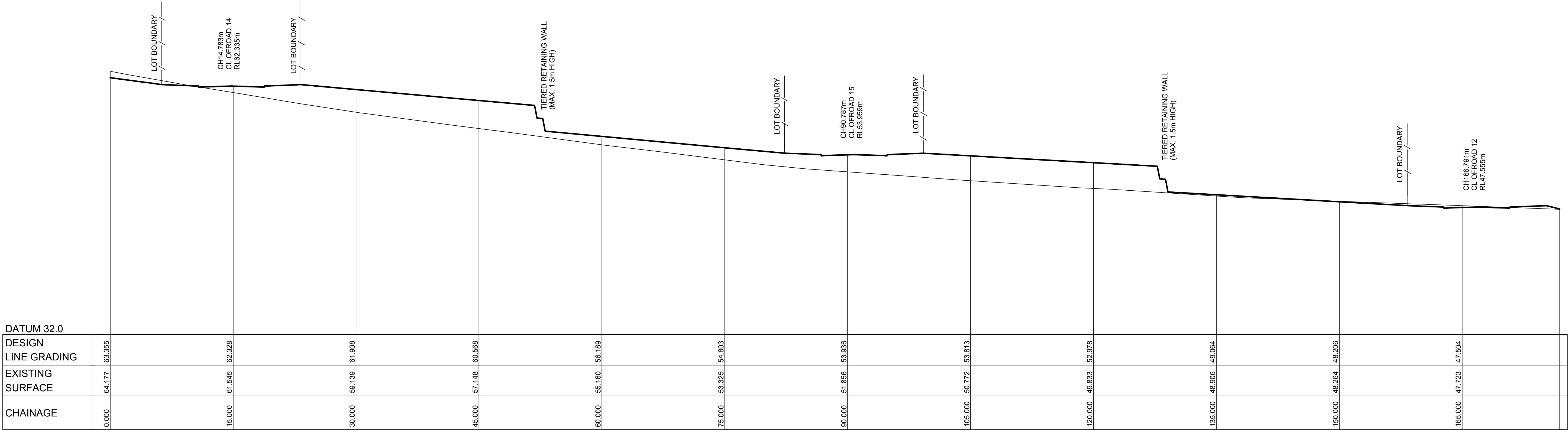
BULK EARTHWORKS PLAN

PLAN No: 110358/DA203 B

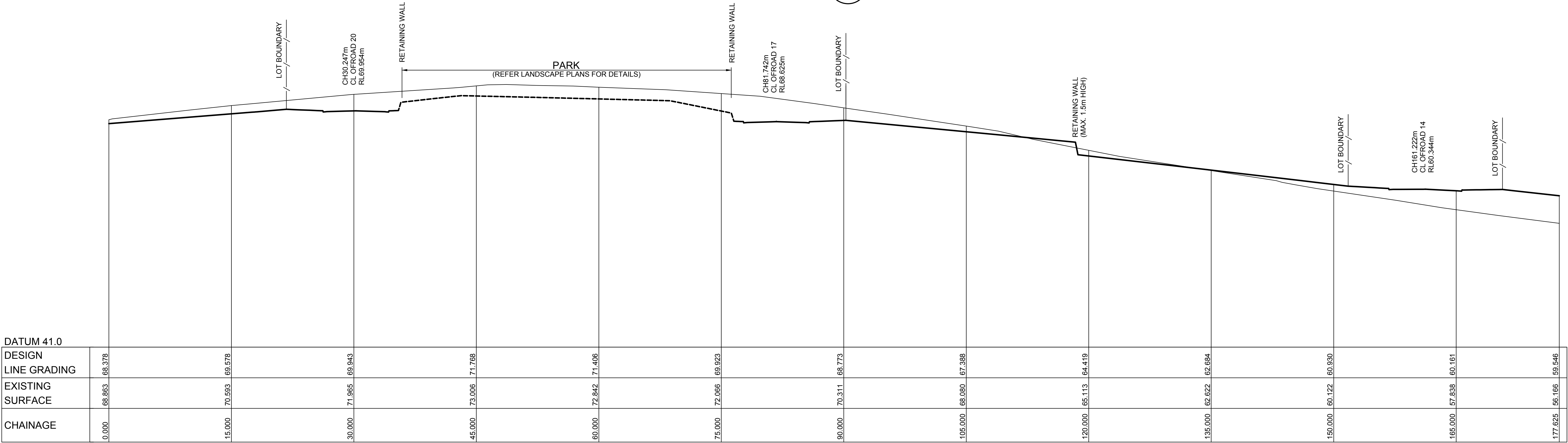
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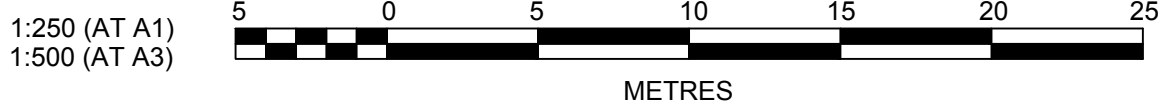
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SECTION 1
SCALE 1:250
203



SECTION 2
SCALE 1:250
203



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

SITE SECTIONS - SHEET 1

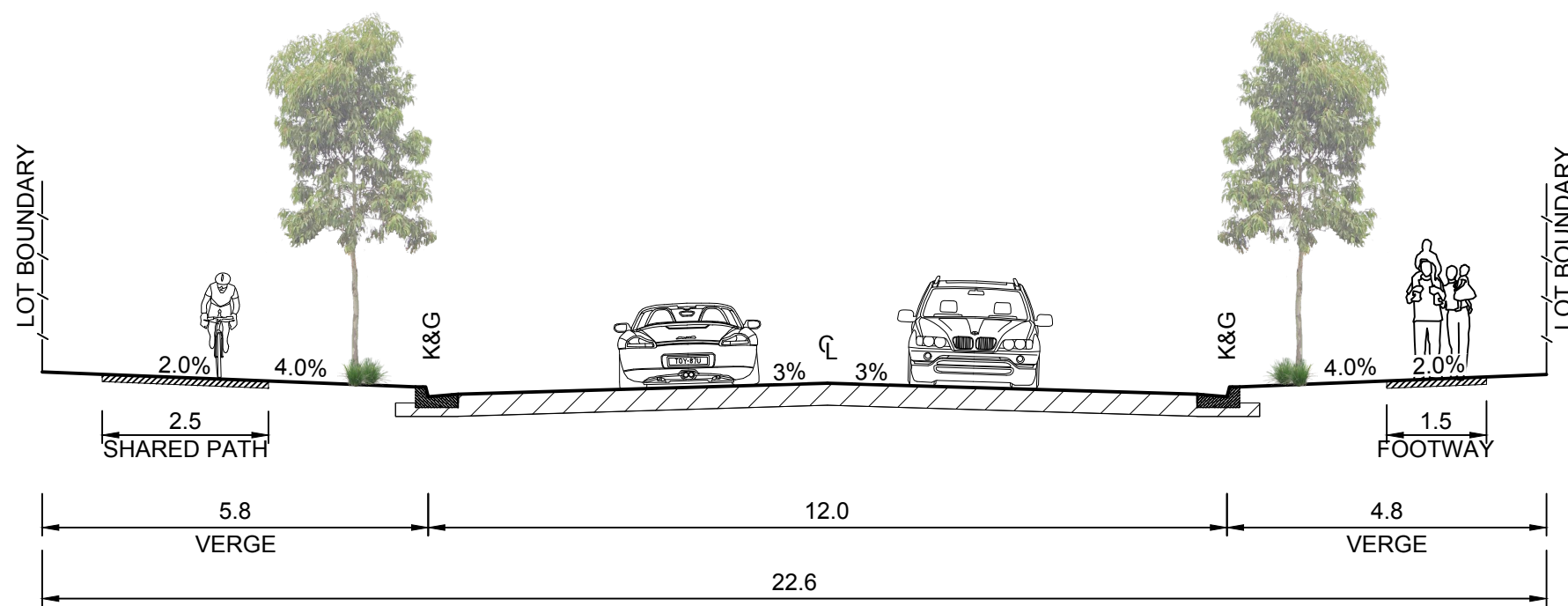
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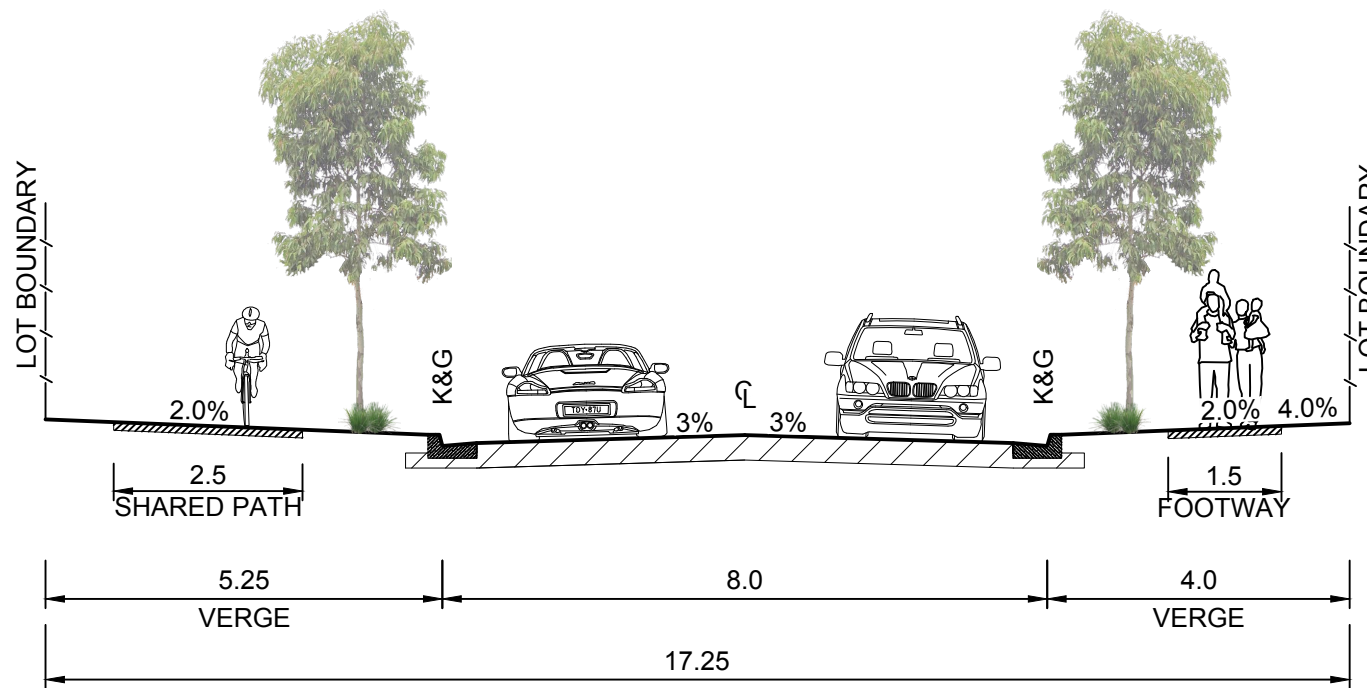
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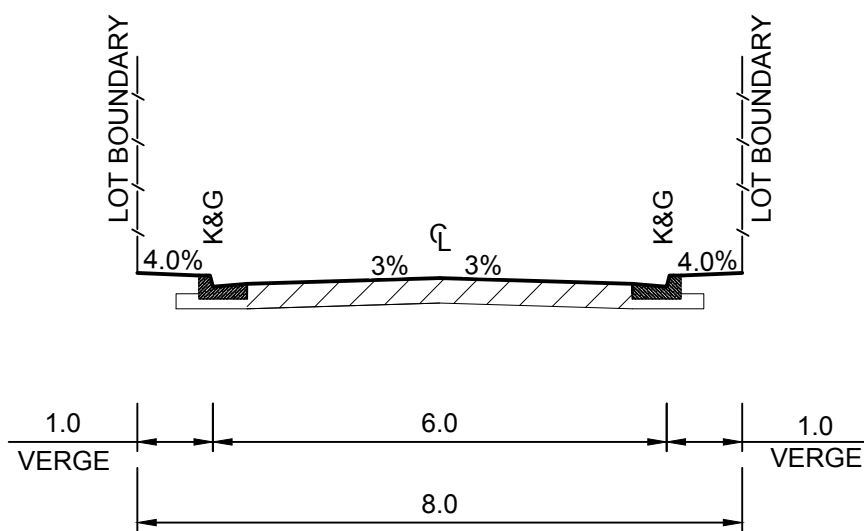
NOTE:
ALL VERGE TO HAVE 4% FALL WITH CONCRETE FOOTPATH &
SHARED PATH AT 2%



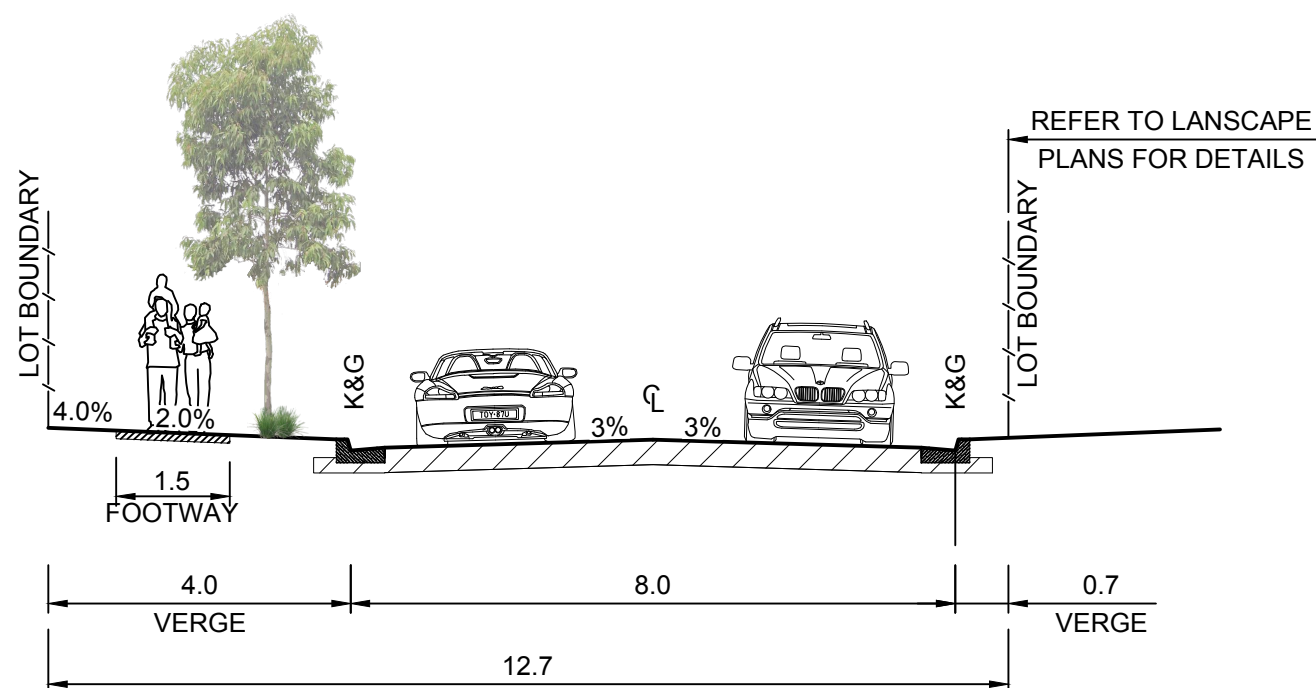
TYPICAL CROSS SECTION
ROAD 1
SCALE 1:100



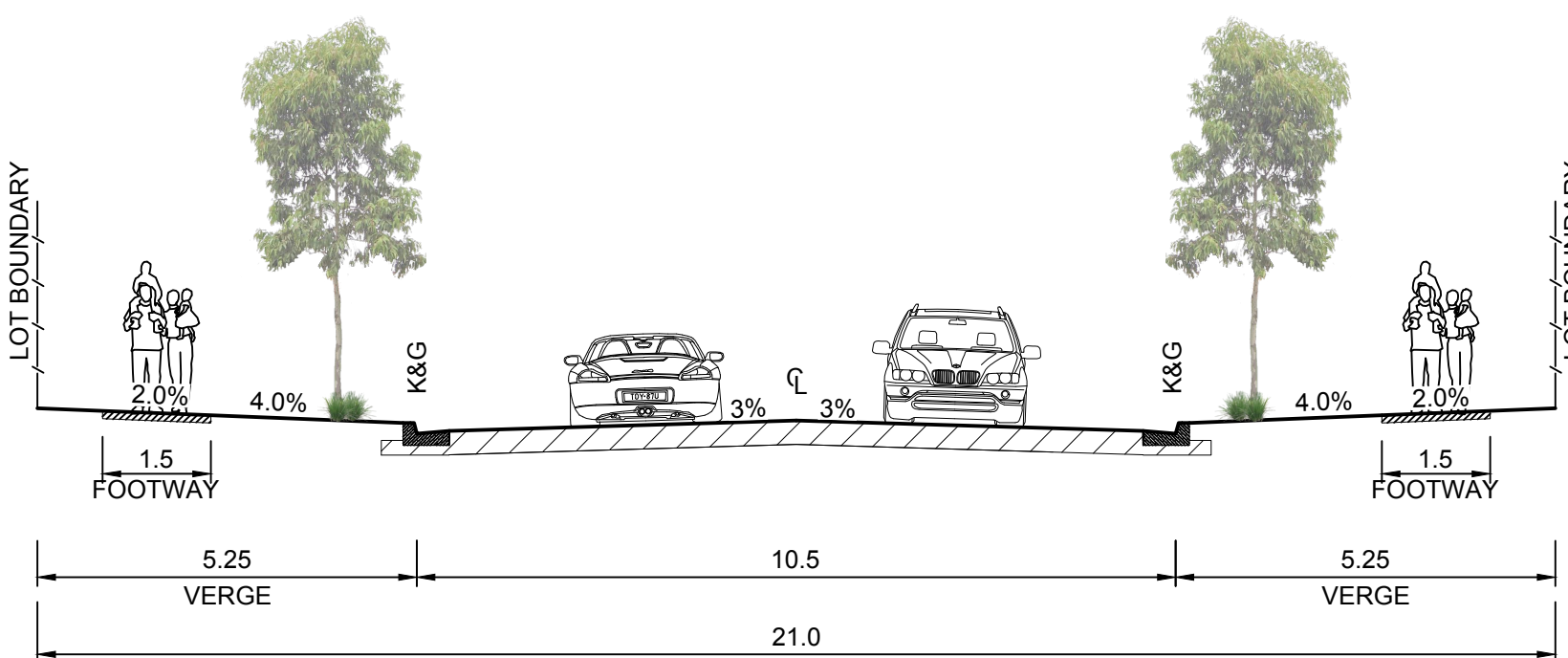
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ROAD 6 (CH 240 - CH 300)
ROAD 16 (CH 165 - END)
SCALE 1:100



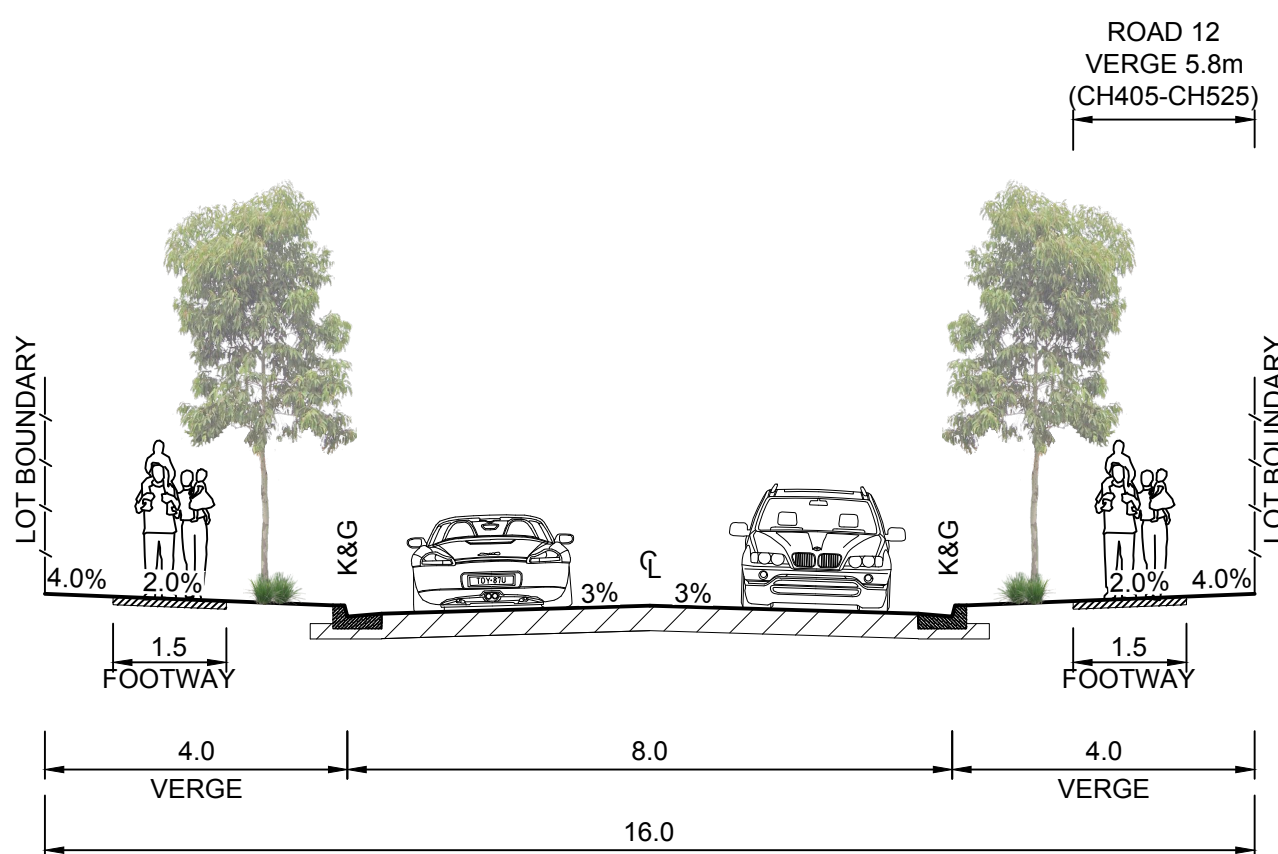
TYPICAL CROSS SECTION
ROAD 22
SCALE 1:100



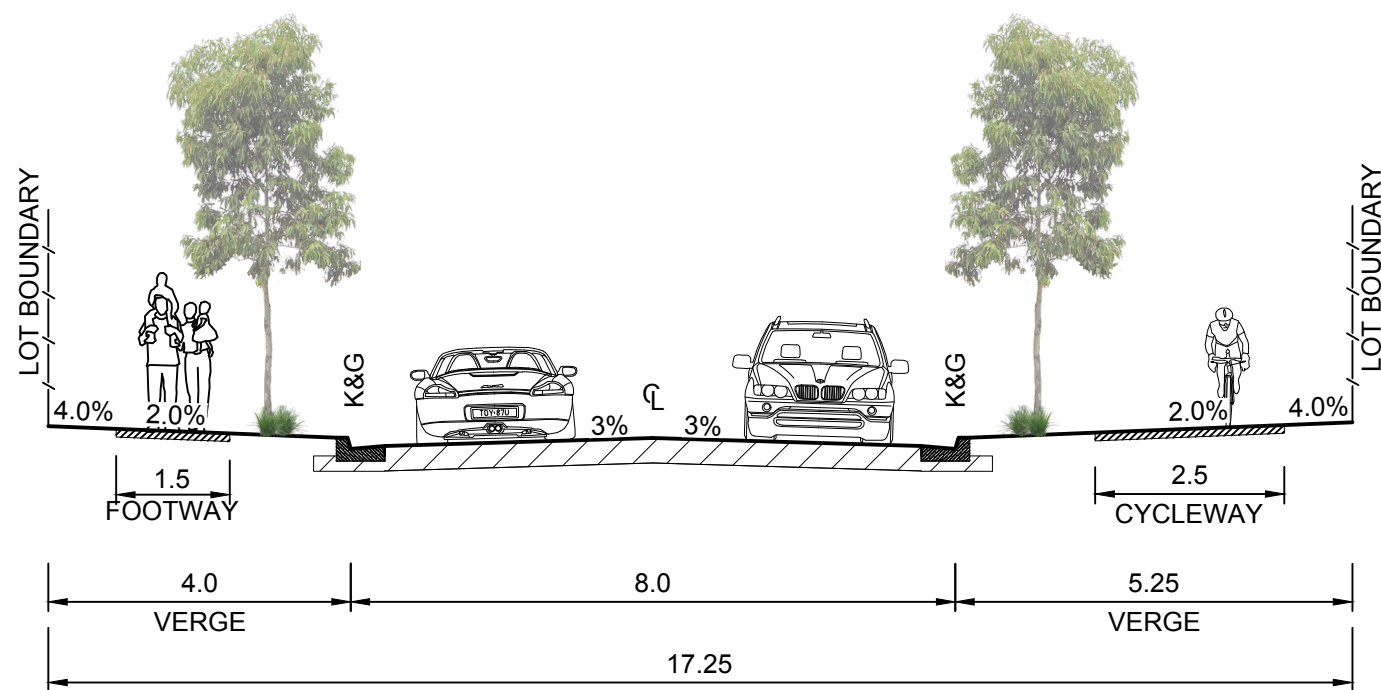
TYPICAL CROSS SECTION
ROAD 6 (CH 320 - CH 360)
ROAD 20 (CH 0 - CH 90)
SCALE 1:100



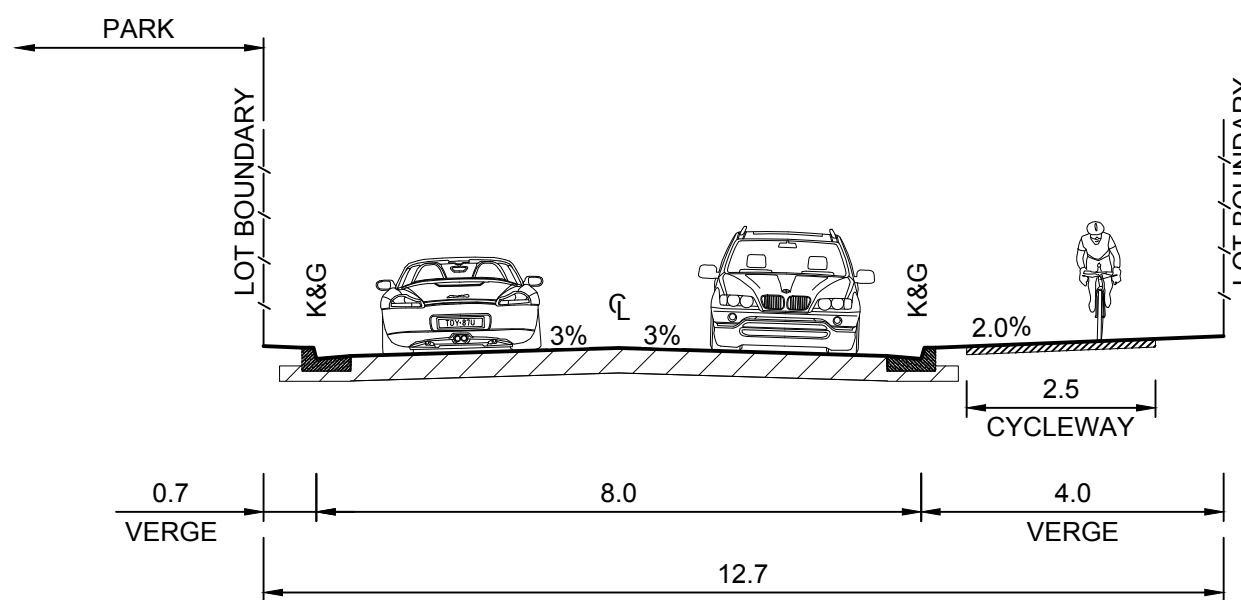
TYPICAL CROSS SECTION
ROAD 13
SCALE 1:100



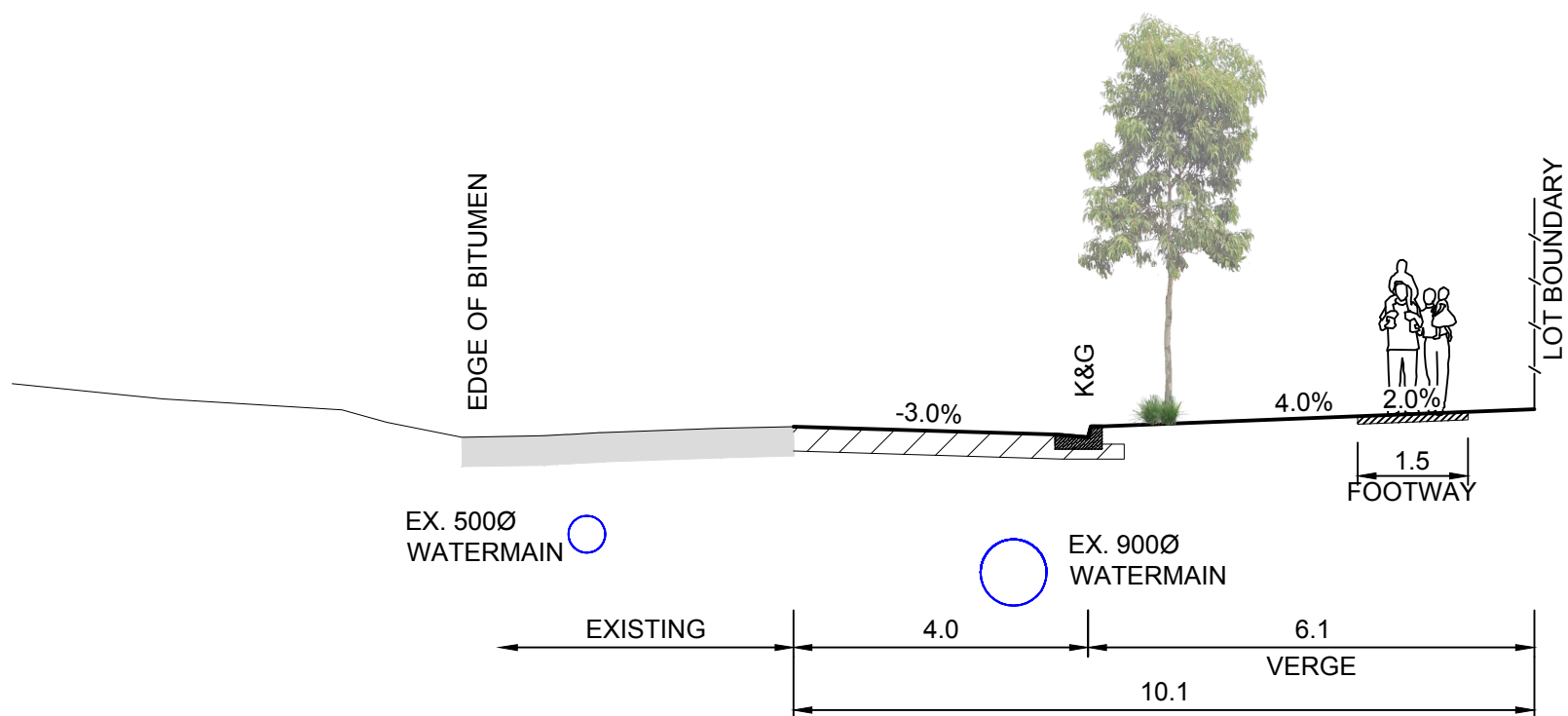
TYPICAL CROSS SECTION
ROADS 7, 10, 11, 12, 14, 15, 18 & 19
ROAD 6 (START - CH 240) & (CH 370 - END)
ROAD 16 (START - CH 120)
ROAD 20 (CH 90 - END)
SCALE 1:100



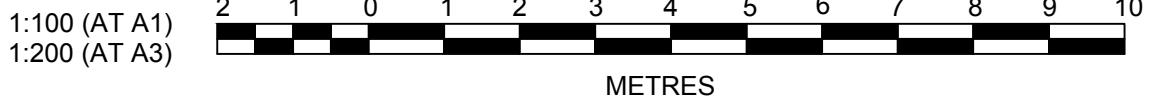
TYPICAL CROSS SECTION
ROAD 9
SCALE 1:100



TYPICAL CROSS SECTION
ROAD 16 (CH 120 - CH 165)
ROAD 17
SCALE 1:100



TYPICAL CROSS SECTION
CADDENS ROAD
SCALE 1:100



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CADDENS HILL
STAGES 2 - 4

TYPICAL ROAD CROSS SECTIONS

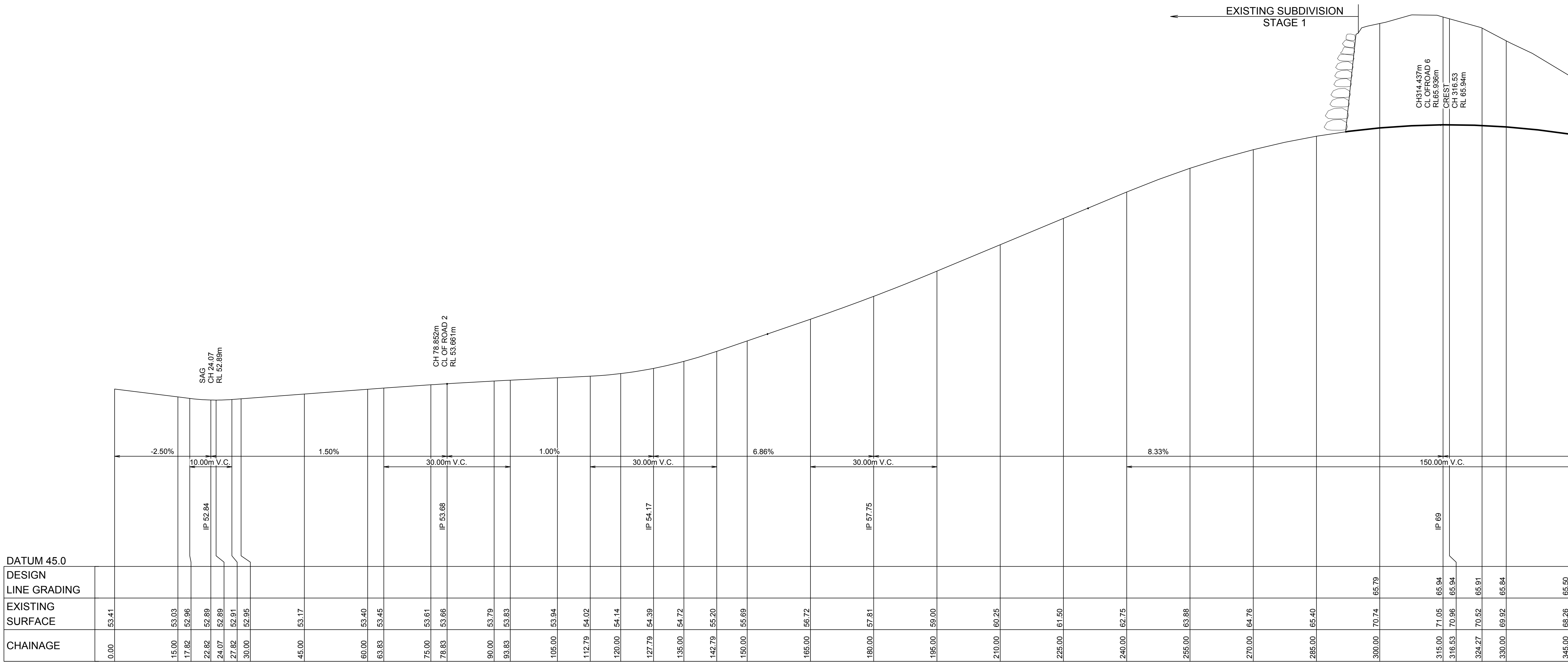
PLAN No:
110358/DA206

B

FILE No: 110358DA206

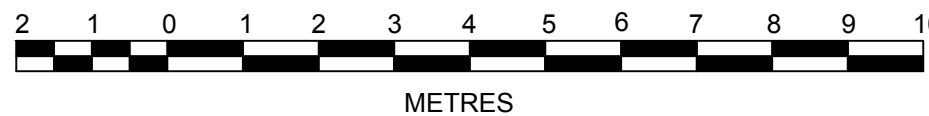
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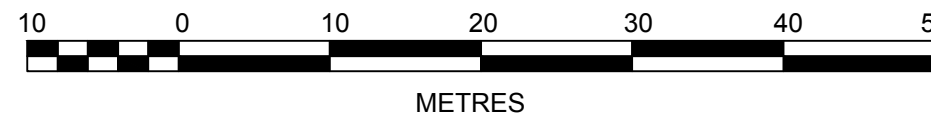


LONGITUDINAL SECTION ROAD 1
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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M.G.A
DATUM:
A.H.D
ORIGIN:

CLIENT:



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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 1

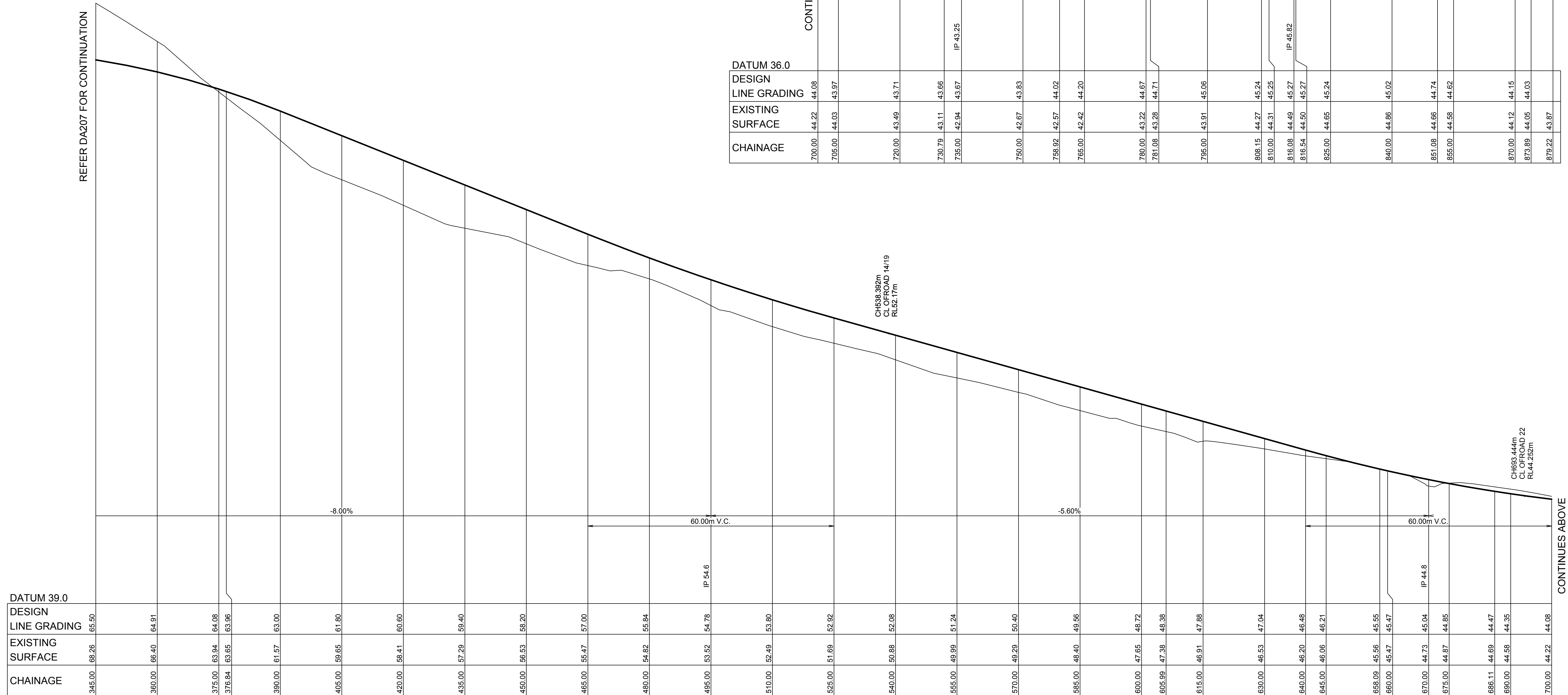
PLAN No:
110358/DA207

B

FILE No: 110358DA207

SHEET SIZE: A1 ORIGINAL

REFER DA208 FOR CONTINUATION



LONGITUDINAL SECTION ROAD 1
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

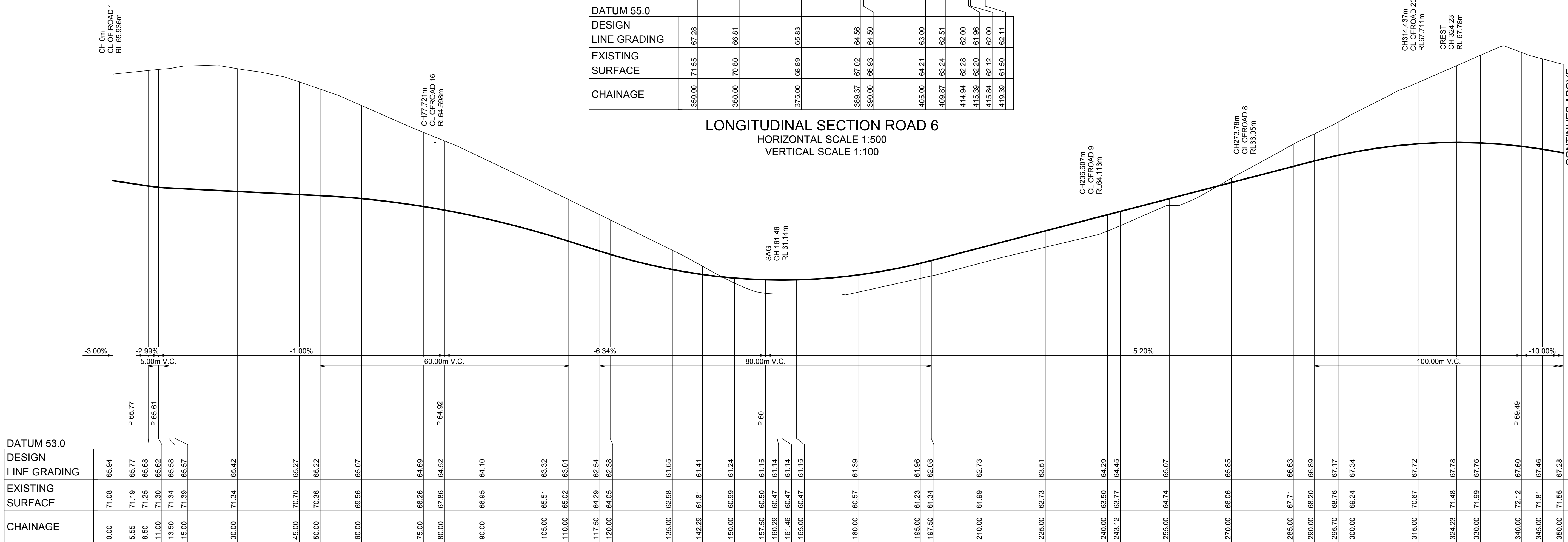
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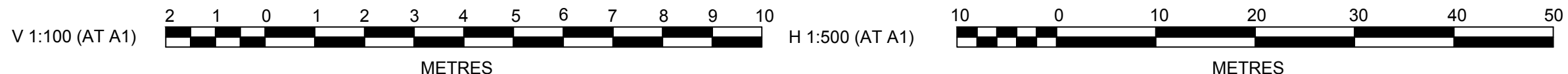
ROAD LONGITUDINAL SECTIONS - SHEET 2

Plotted: 21 December , 2016 1:52:01 PM File Name: J:\110358 - O'Connell Lane, Caddens\03 - Stage 2\CD\DA\110358DA209.dwg



LONGITUDINAL SECTION ROAD 6
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

LONGITUDINAL SECTION ROAD 6
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16	
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16	
	AMENDMENT	DES	DRN	CKD	APR	DATE	

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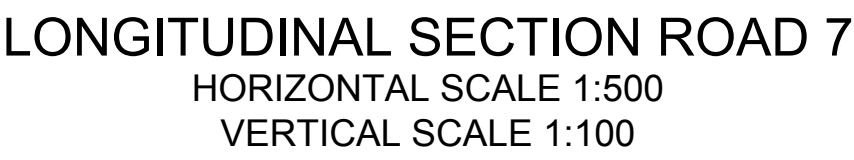
CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 3

PLAN No: 110358/DA209 B

FILE No: 110358DA209

SHEET SIZE: A1 ORIGINAL



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CADDENS HILL STAGES 2 - 4

PLAN No:
110358/DA210

FILE No: 110358DA210

SHEET SIZE: A1 ORIGINAL

ROAD LONGITUDINAL SECTIONS - SHEET 4

B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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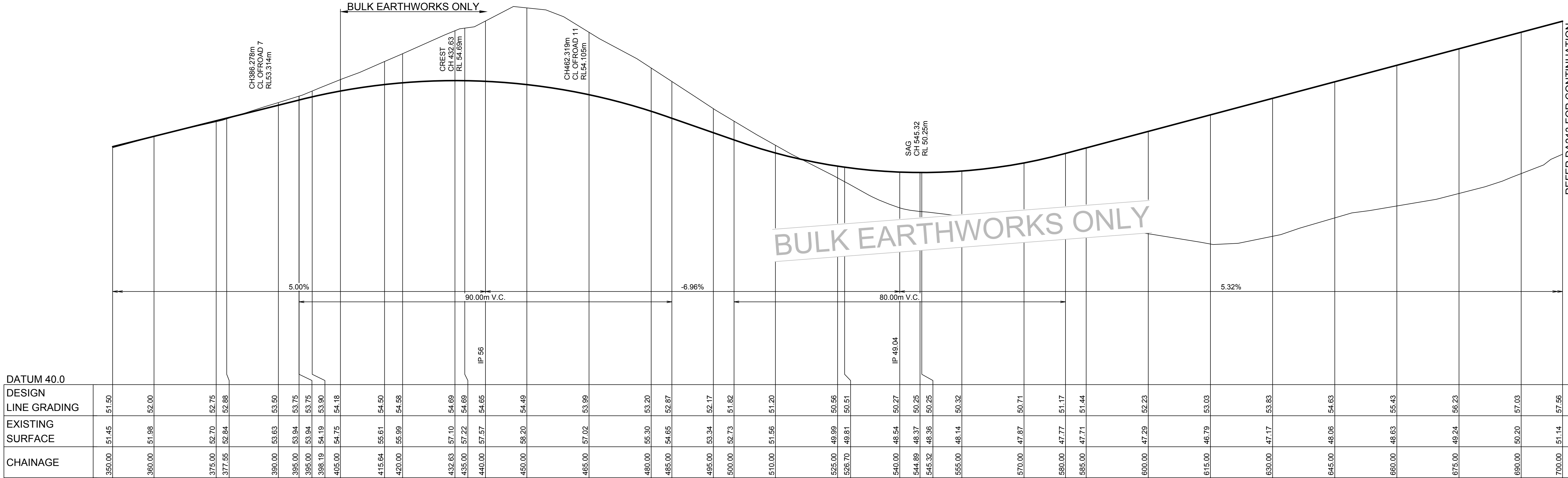
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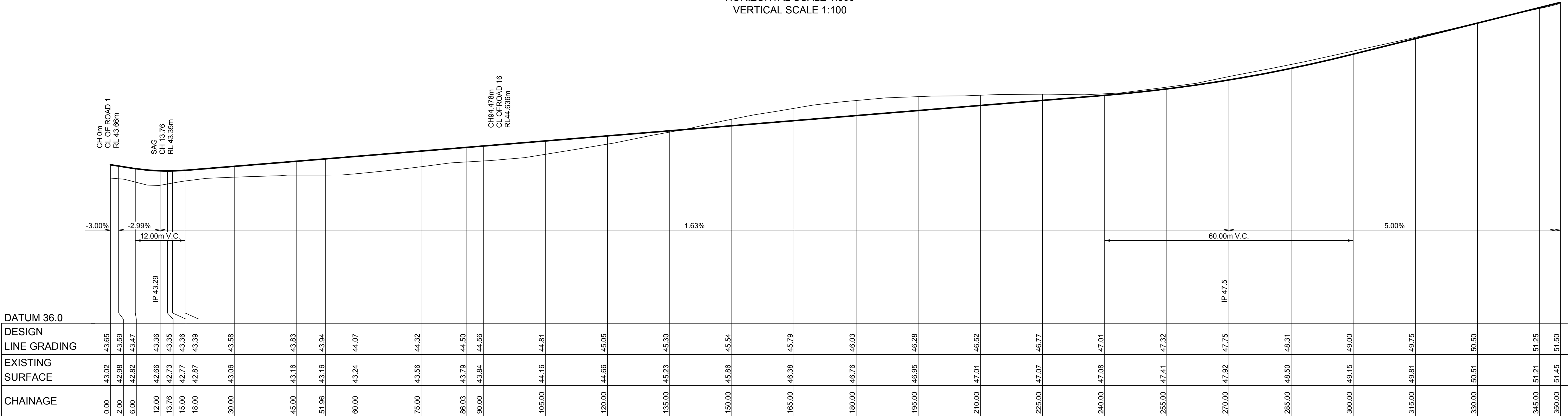
DATUM:
A.H.D

ORIGIN:

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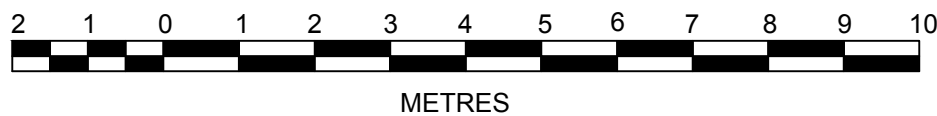


LONGITUDINAL SECTION ROAD 12
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

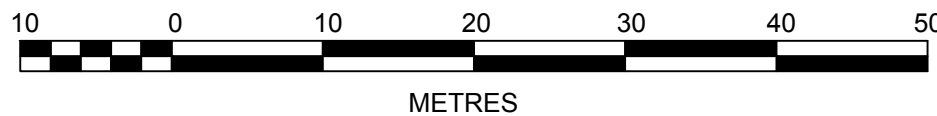


LONGITUDINAL SECTION ROAD 12
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16	
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16	
	AMENDMENT	DES	DRN	CKD	APR	DATE	

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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 6

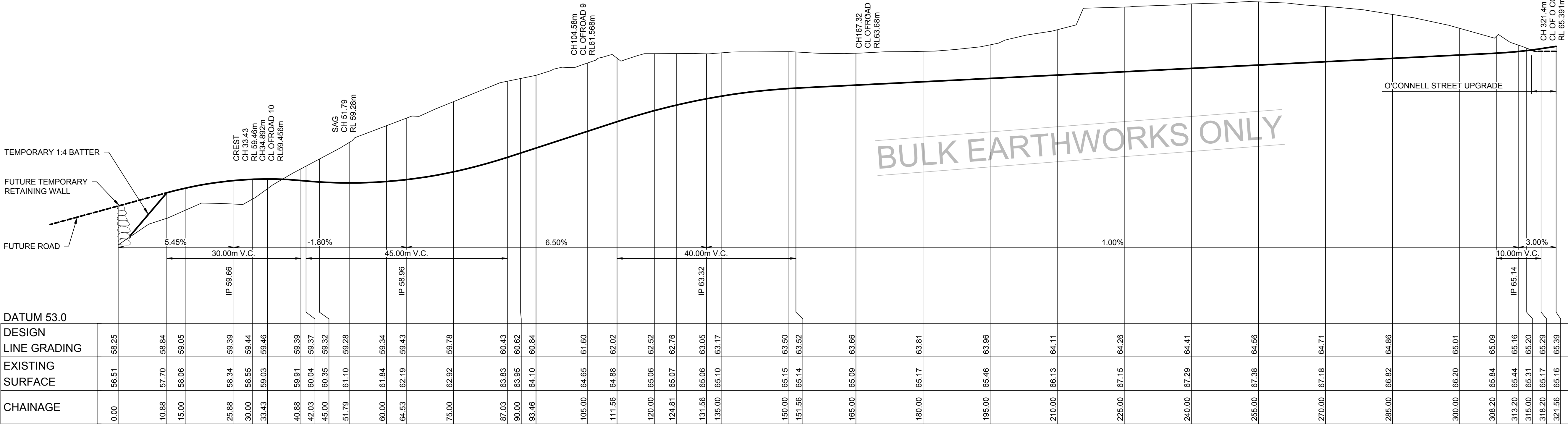
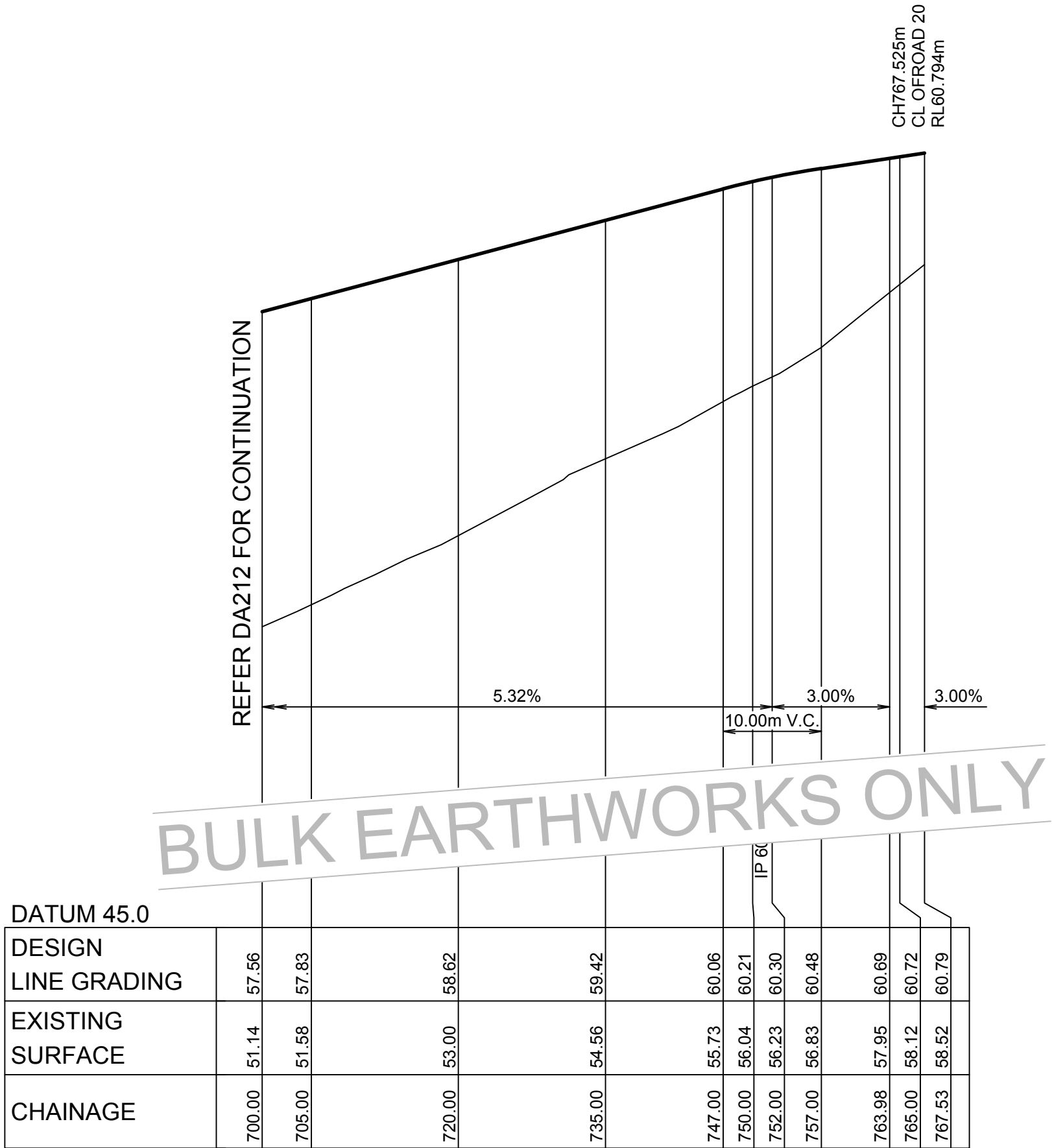
PLAN No:
110358/DA212

B

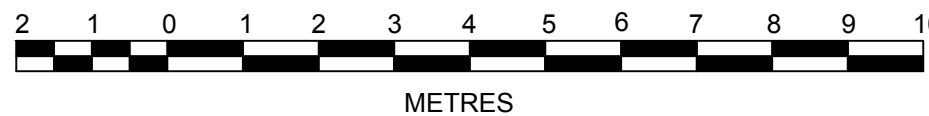
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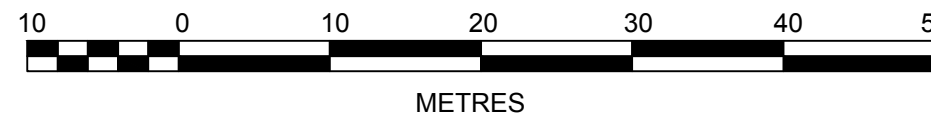
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V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16	
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16	
	AMENDMENT	DES	DRN	CKD	APR	DATE	

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STAGES 2 - 4

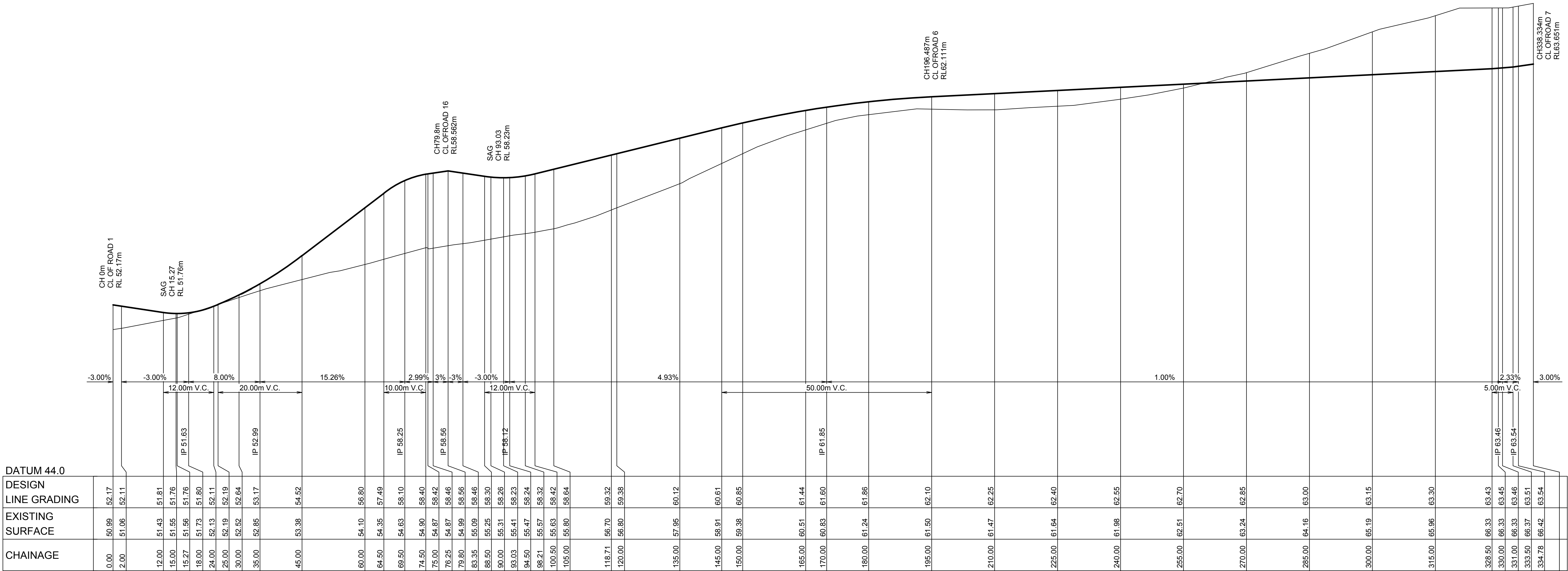
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PLAN No:
110358/DA213

FILE No: 110358DA213

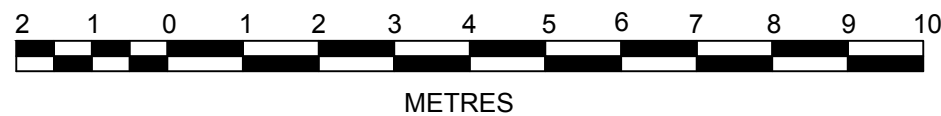
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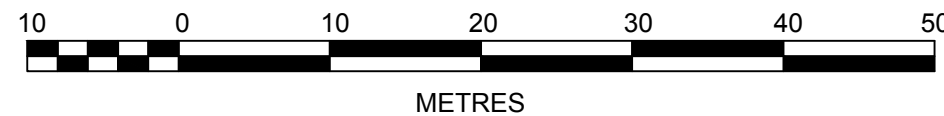


LONGITUDINAL SECTION ROAD 14
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 8

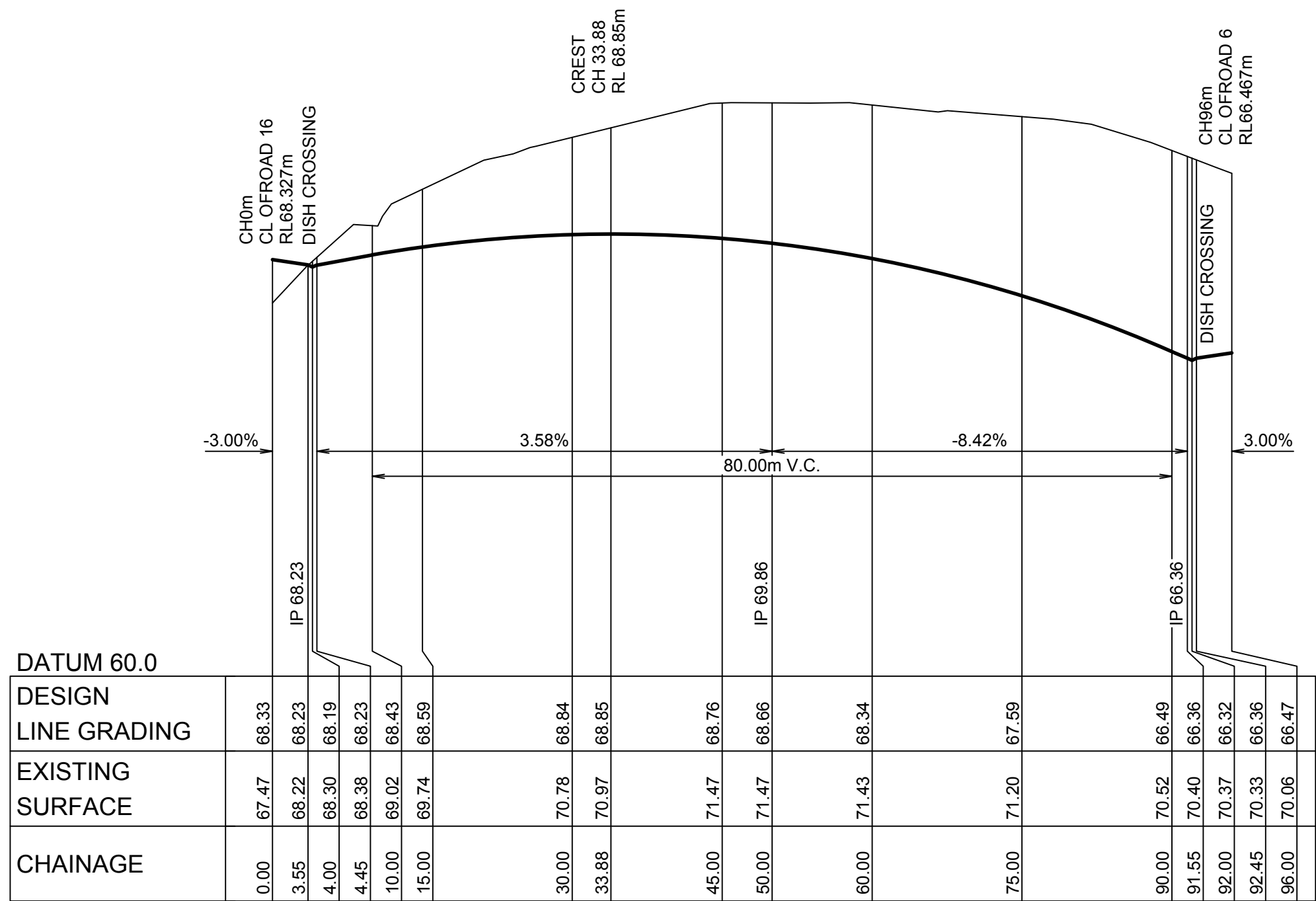
PLAN No:
110358/DA214

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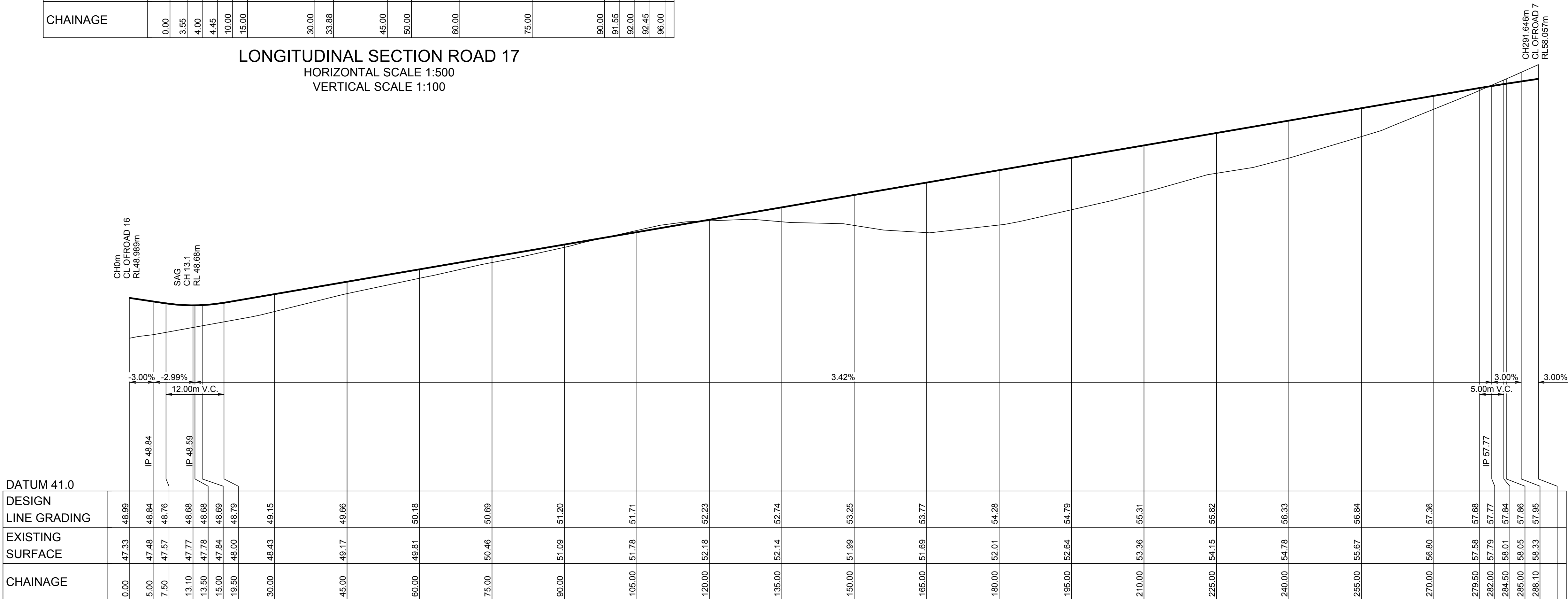
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SHEET SIZE: A1 ORIGINAL

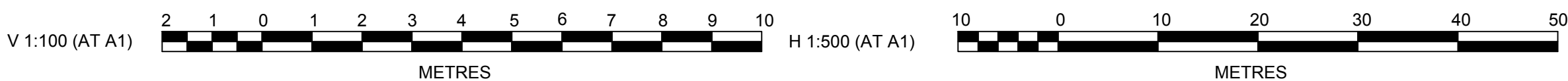
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LONGITUDINAL SECTION ROAD 17
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



LONGITUDINAL SECTION ROAD 15
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 9

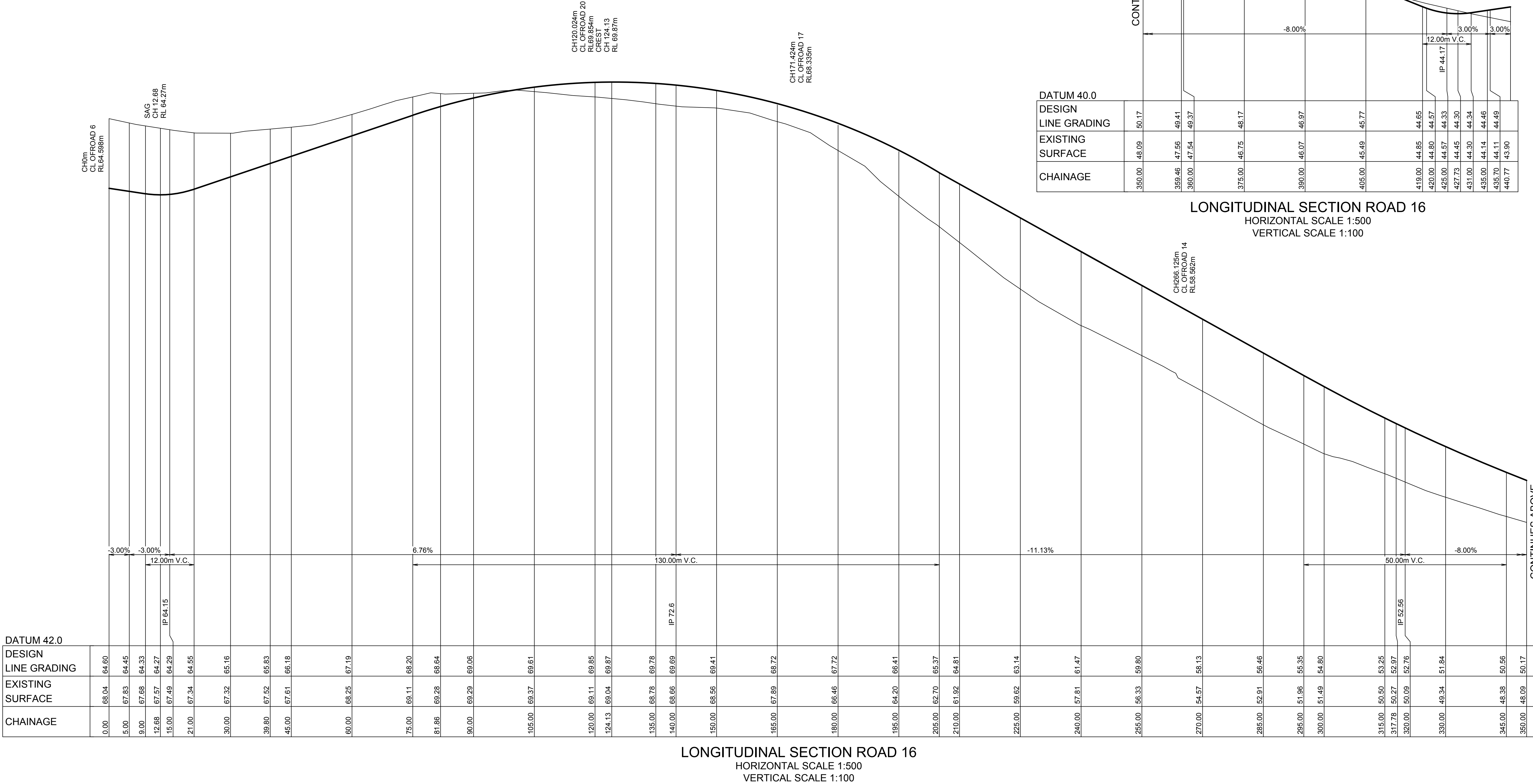
PLAN No:
110358/DA215

FILE No: 110358DA215

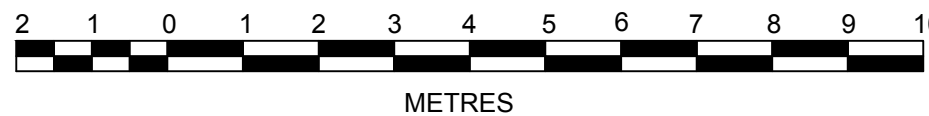
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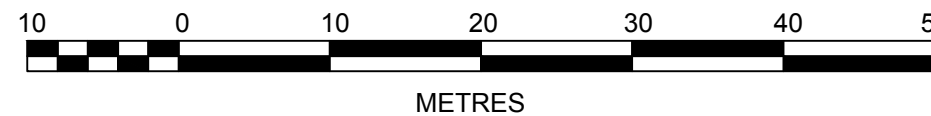
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V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 10

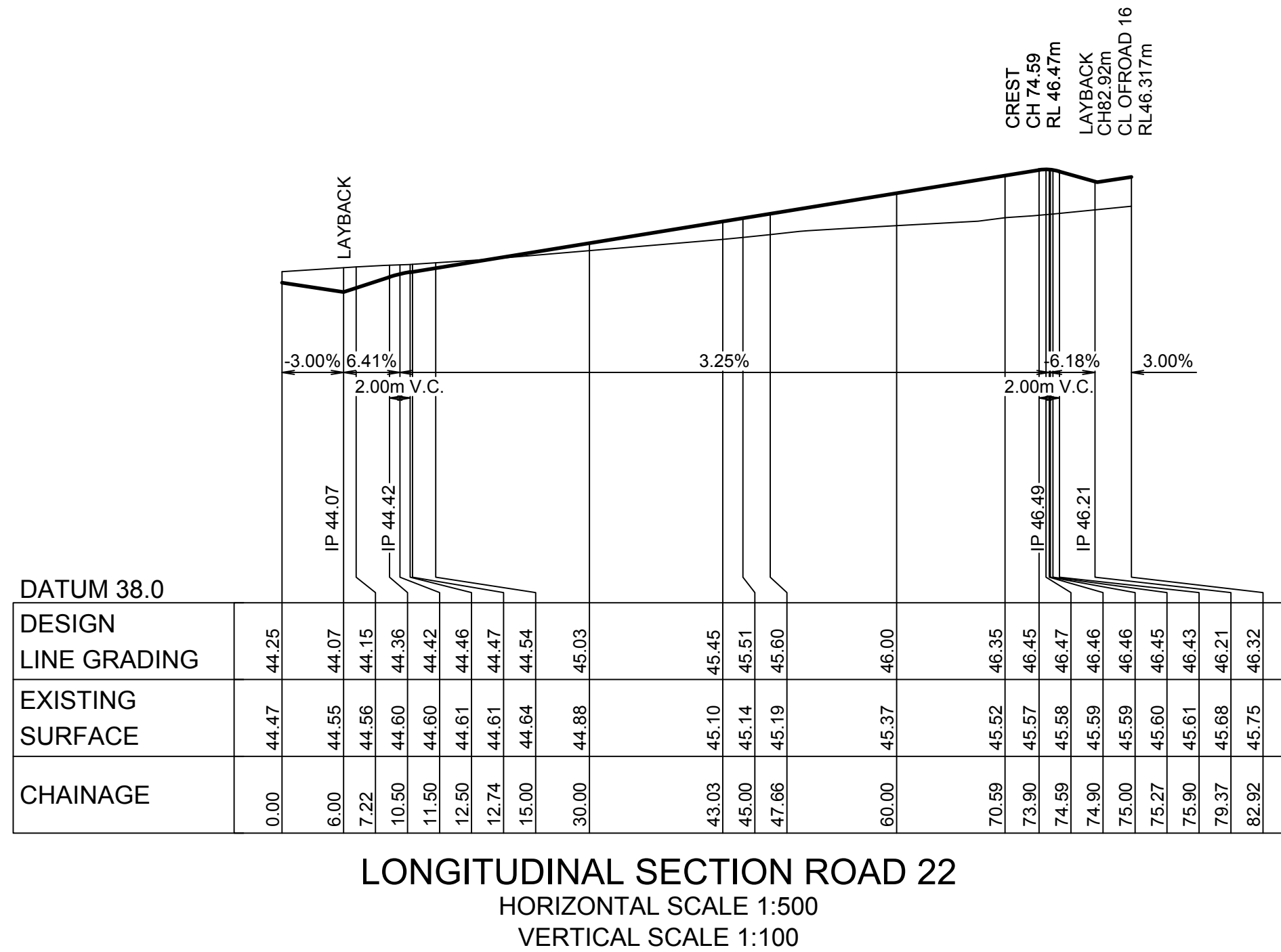
PLAN No:
110358/DA216

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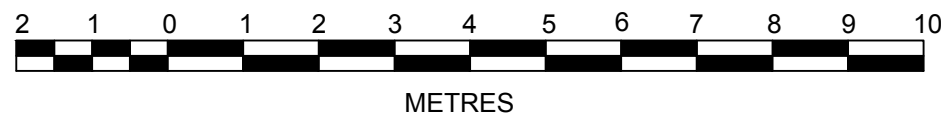
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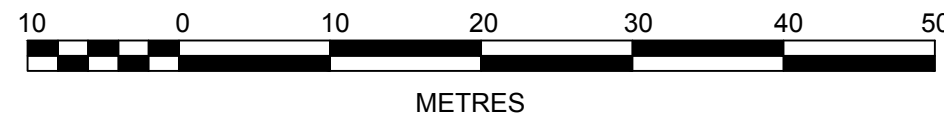
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V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 11

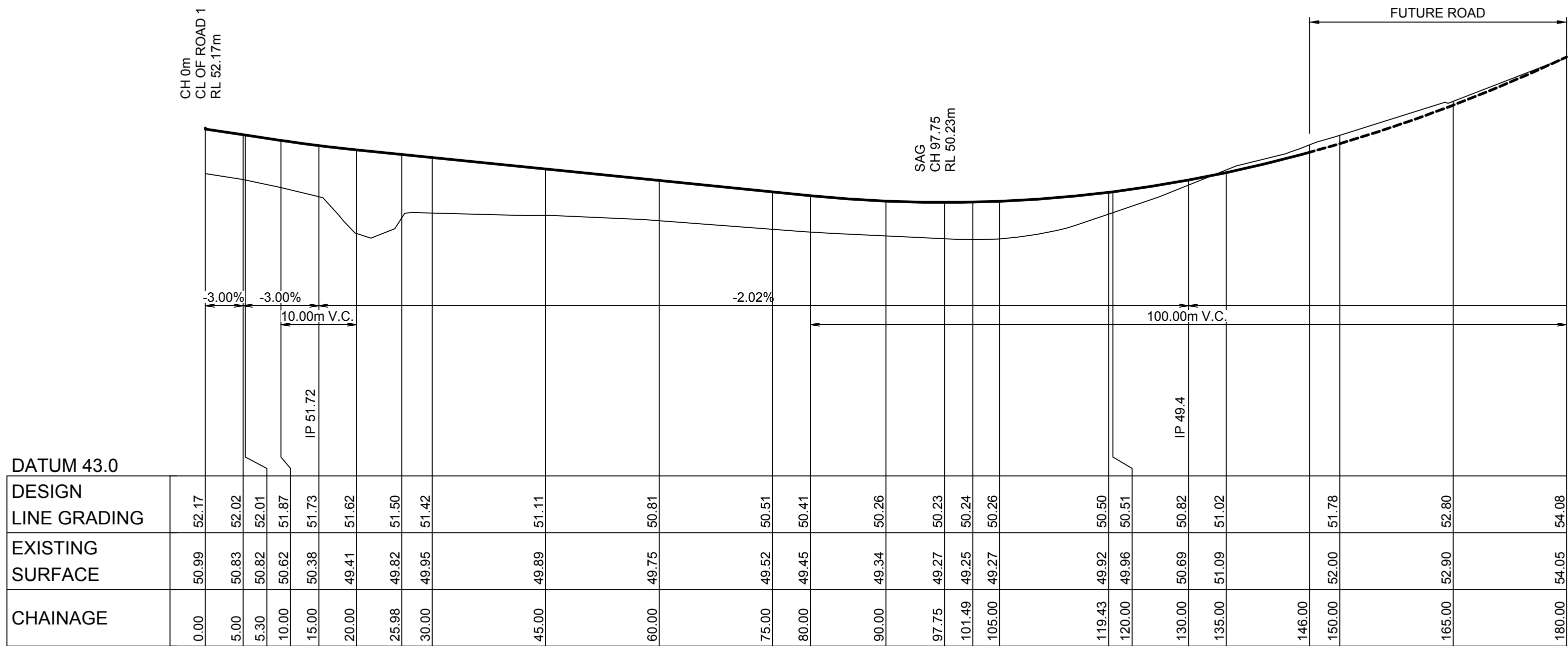
PLAN No:
110358/DA217

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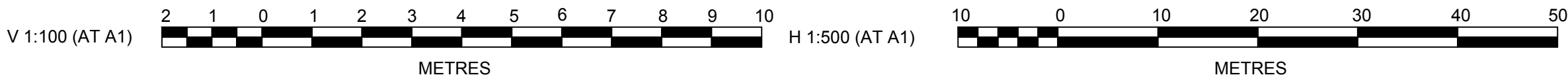
FILE No: 110358DA217

SHEET SIZE: A1 ORIGINAL

Plotted: 21 December, 2016 1:54:50 PM File Name: J:\110358 - OConnell Lane, Caddens\03 - Stage 2\CD\DA\110358DA218.dwg



LONGITUDINAL SECTION ROAD 19
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CADDENS HILL
STAGES 2 - 4

ROAD LONGITUDINAL SECTIONS - SHEET 12

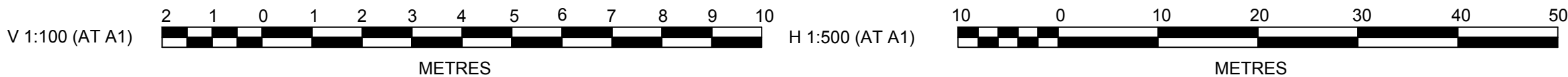
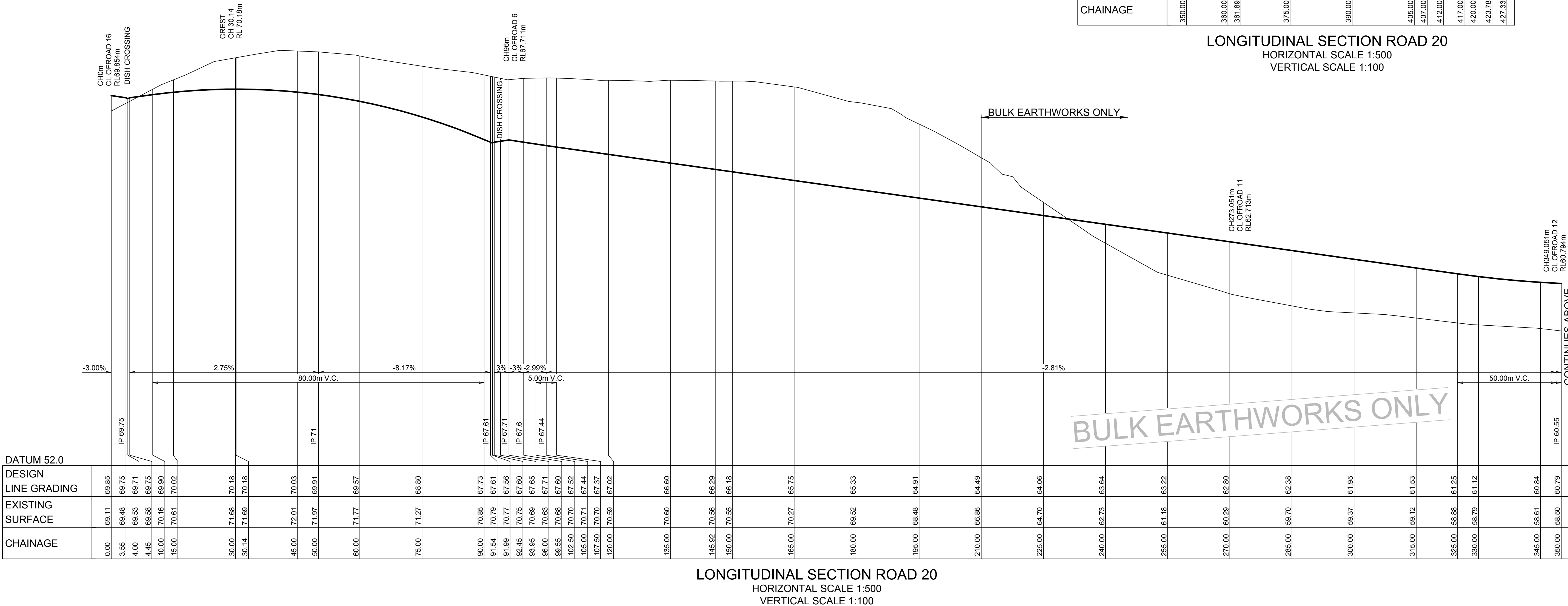
PLAN No:
110358/DA218

B

FILE No: 110358DA218

SHEET SIZE: A1 ORIGINAL

Plotted: 21 December, 2016 1:55:09 PM File Name: J:\110358 - O'Connell Lane, Caddens\03 - Stage 2\CD\DA110358DA219.dwg



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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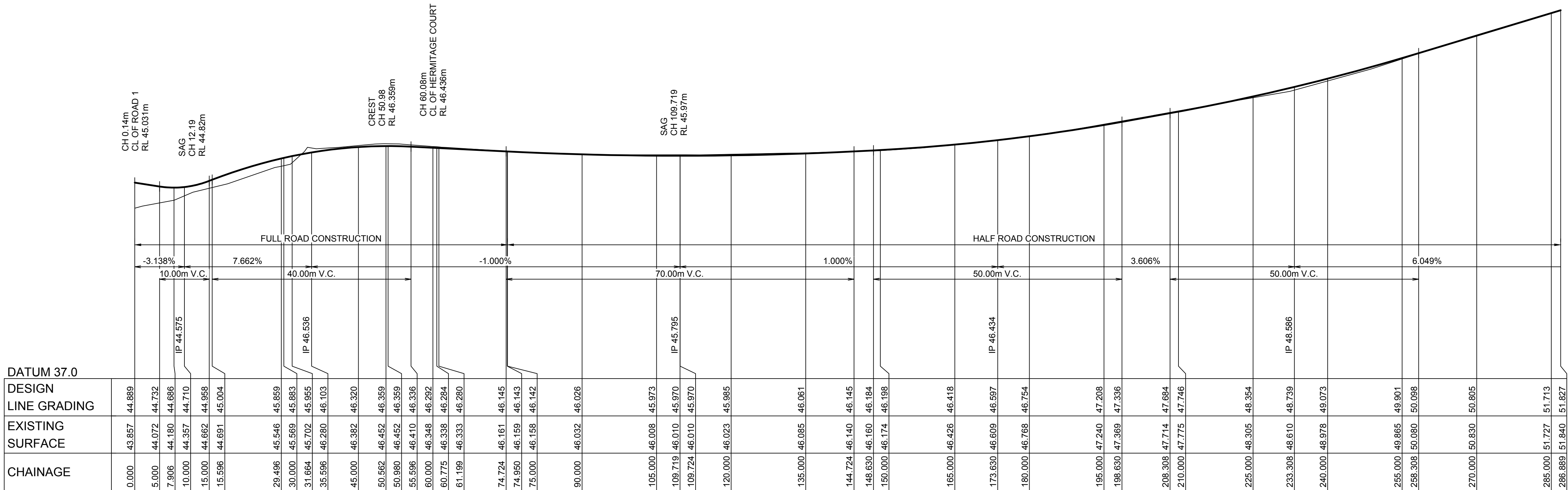
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STAGES 2 - 4
ROAD LONGITUDINAL SECTIONS - SHEET 13

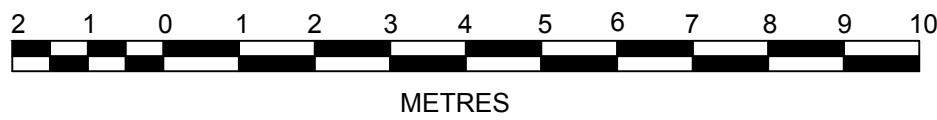
PLAN No:
110358/DA219 **B**
FILE No: 110358DA219
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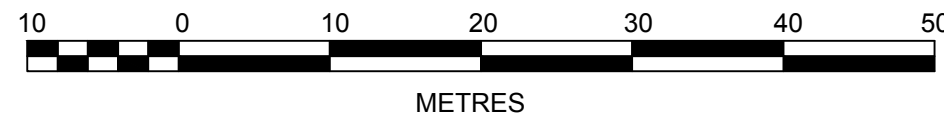


LONGITUDINAL SECTION CADDENS ROAD
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

V 1:100 (AT A1)



H 1:500 (AT A1)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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STAGES 2 - 4

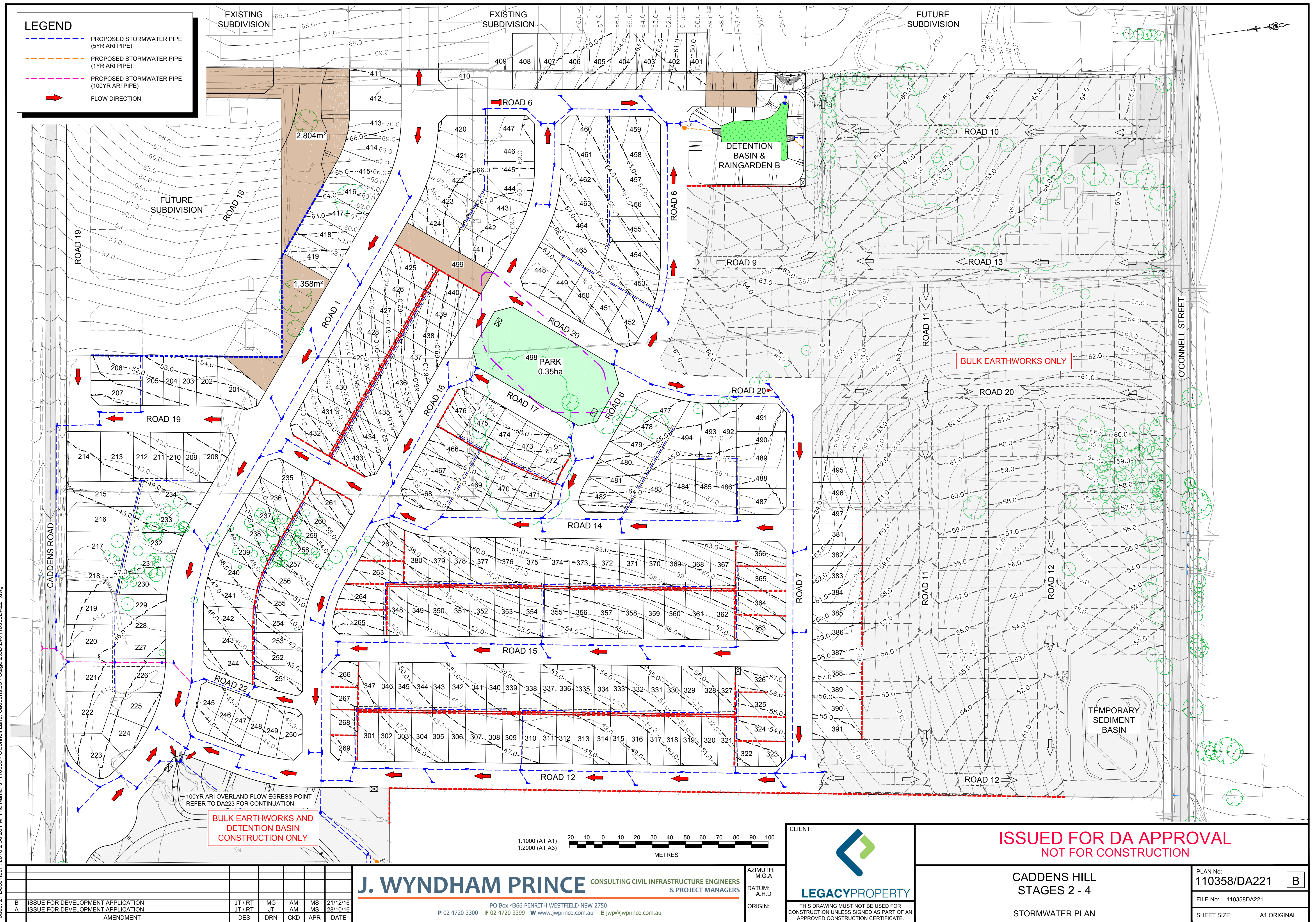
ROAD LONGITUDINAL SECTIONS - SHEET 14

PLAN No:
110358/DA220

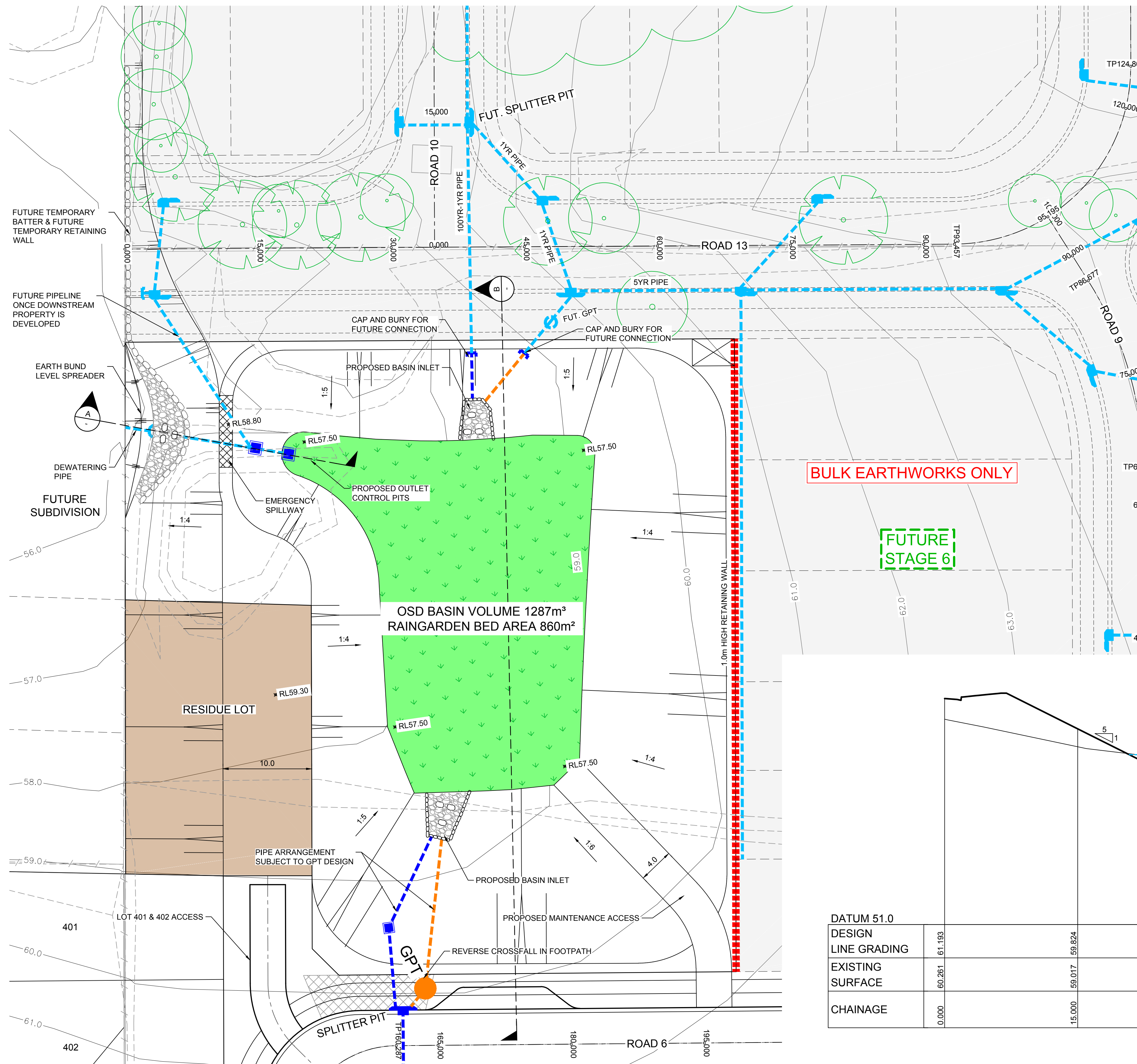
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FILE No: 110358DA220

SHEET SIZE: A1 ORIGINAL

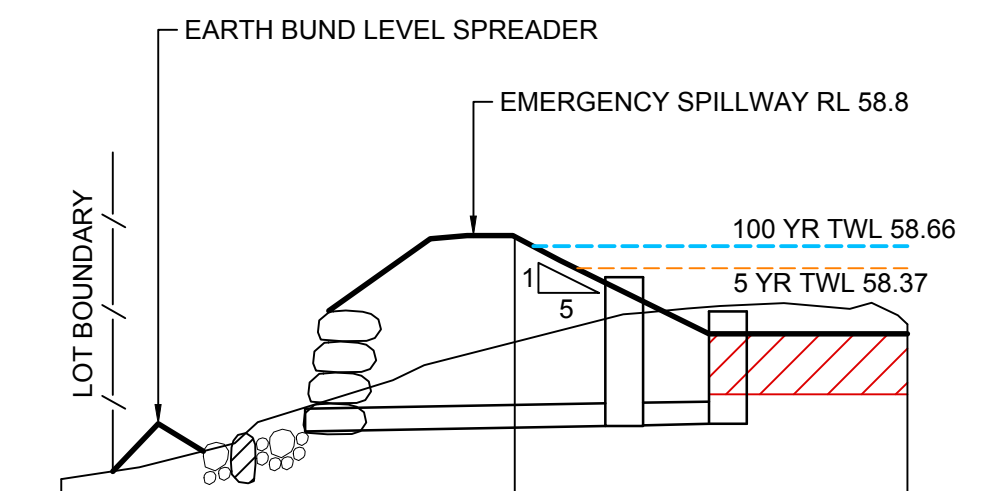


Plotted: 21 December, 2016 1:57:21 PM File Name: J:\110358 - OConnell Lane, Caddens\03 - Stage 2\CD\DA110358DA222.dwg



LEGEND

- PROPOSED STORMWATER PIPE (5YR ARI PIPE)
- PROPOSED STORMWATER PIPE (1YR ARI PIPE)
- FUTURE STORMWATER PIPE (INDICATIVE ONLY)



DATUM 49.0			
DESIGN			
LINE GRADING		58.787	57.500
EXISTING	55.579	57.394	57.631
SURFACE			
CHAINAGE	0.000	15.000	27.987

SECTION A

SCALE H 1:250
V 1:100

DATUM 51.0									
DESIGN									
LINE GRADING	61.193	59.824	57.500	57.500	57.500	59.250	59.198		
EXISTING	60.261	59.017	58.461	58.302	58.385	58.520	58.711		
SURFACE									
CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	84.465		

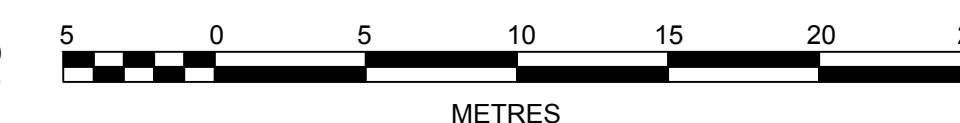
SECTION B

SCALE H 1:250
V 1:100

H 1:100 (AT A1)



1:250 (AT A1)
1:500 (AT A3)



B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
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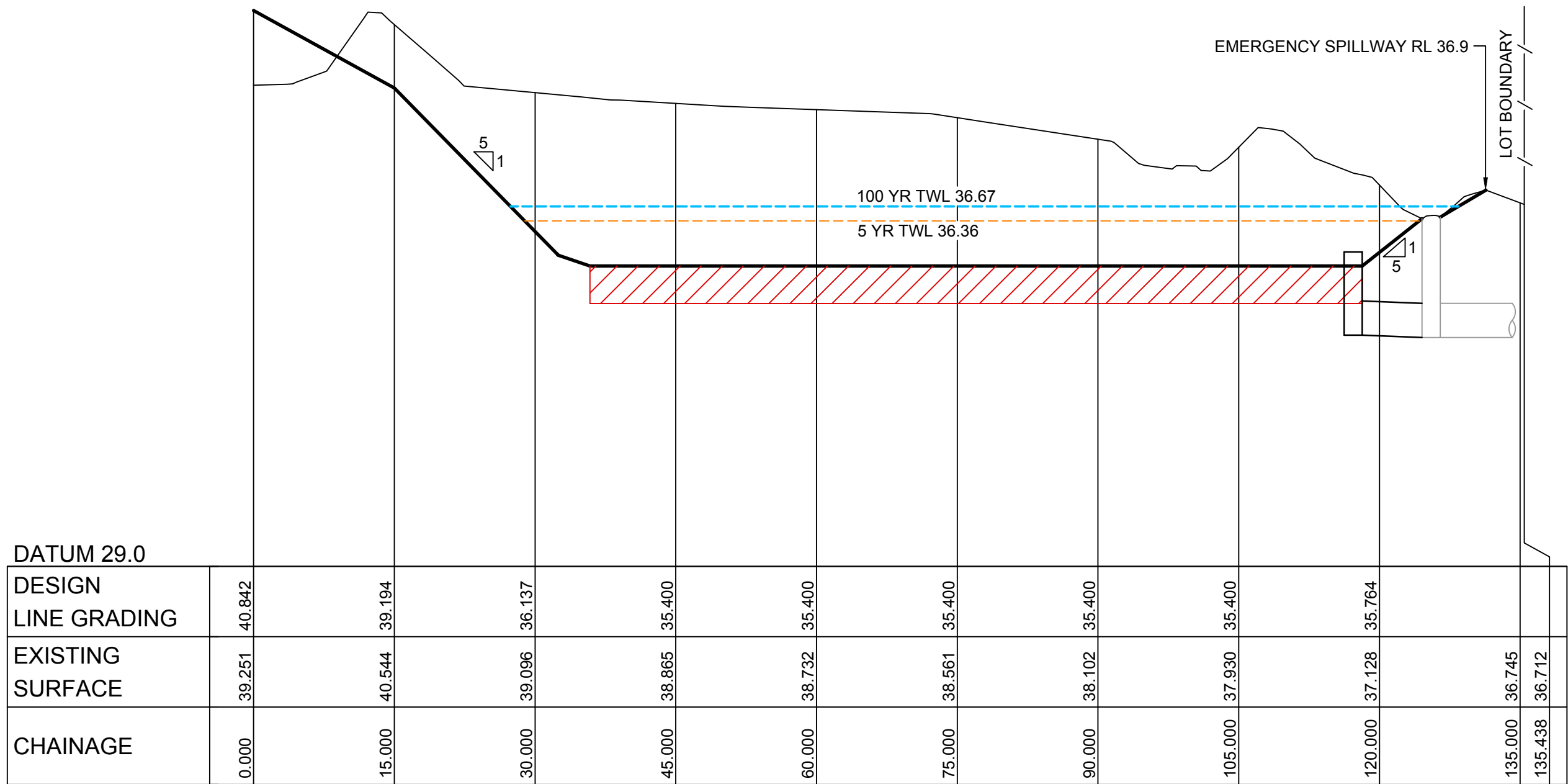
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CADDENS HILL
STAGES 2 - 4

BASIN & RAINGARDEN B - PLAN & SECTIONS

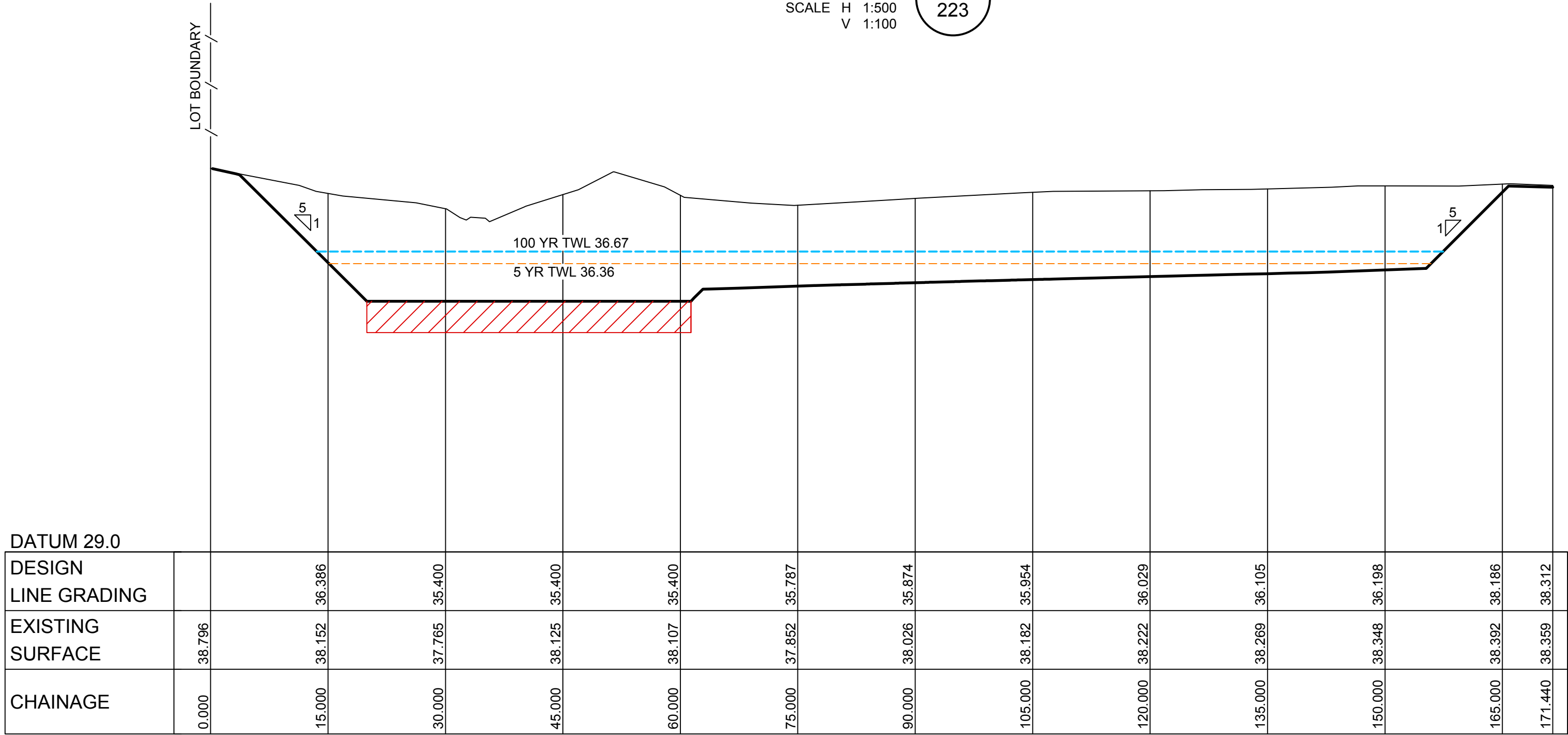
PLAN No:
110358/DA222 B
FILE No: 110358DA222
SHEET SIZE: A1 ORIGINAL

Plotted: 21 December, 2016 1:58:40 PM File Name: J:\110358 - OConnell Lane, Caddens\03 - Stage 2\CD\DA110358\DA224.dwg



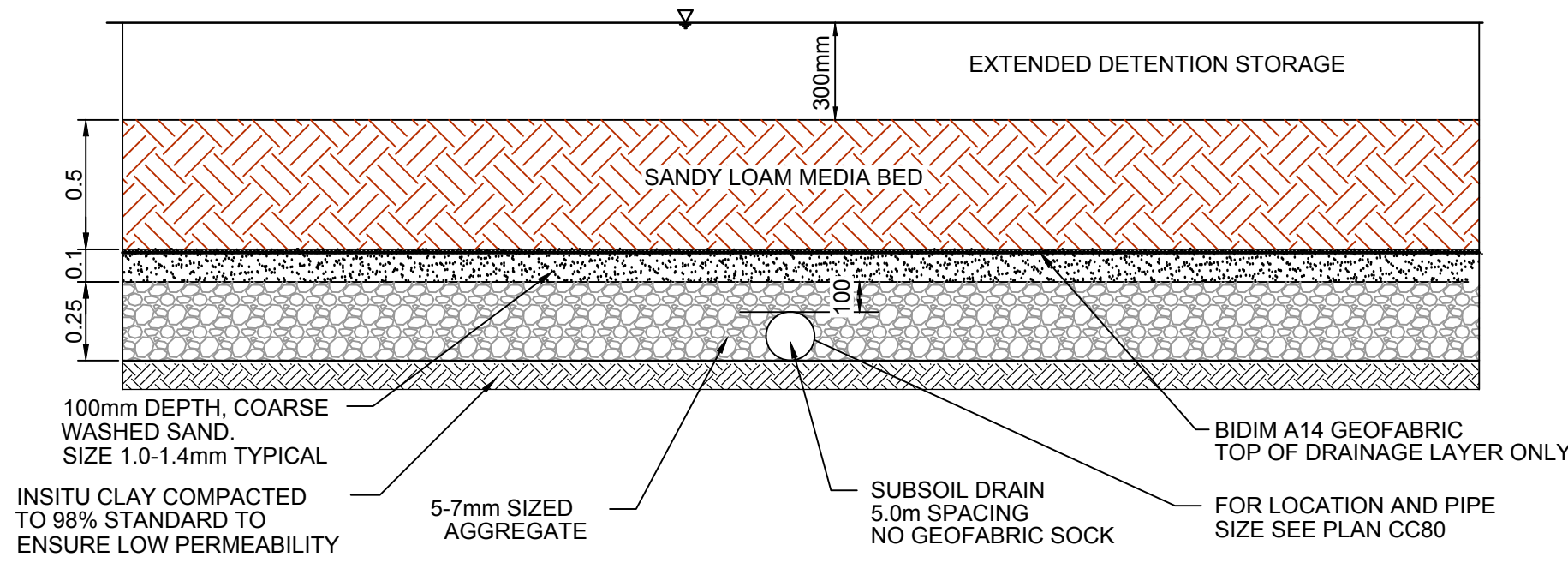
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DESIGN LINE GRADING	40.842	39.194	36.137	35.400	35.400	35.400	35.400	35.400	35.764
EXISTING SURFACE	39.251	40.544	39.096	38.865	38.732	38.561	38.102	37.930	36.745
CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	90.000	105.000	120.000

SECTION C
SCALE H 1:500
V 1:100

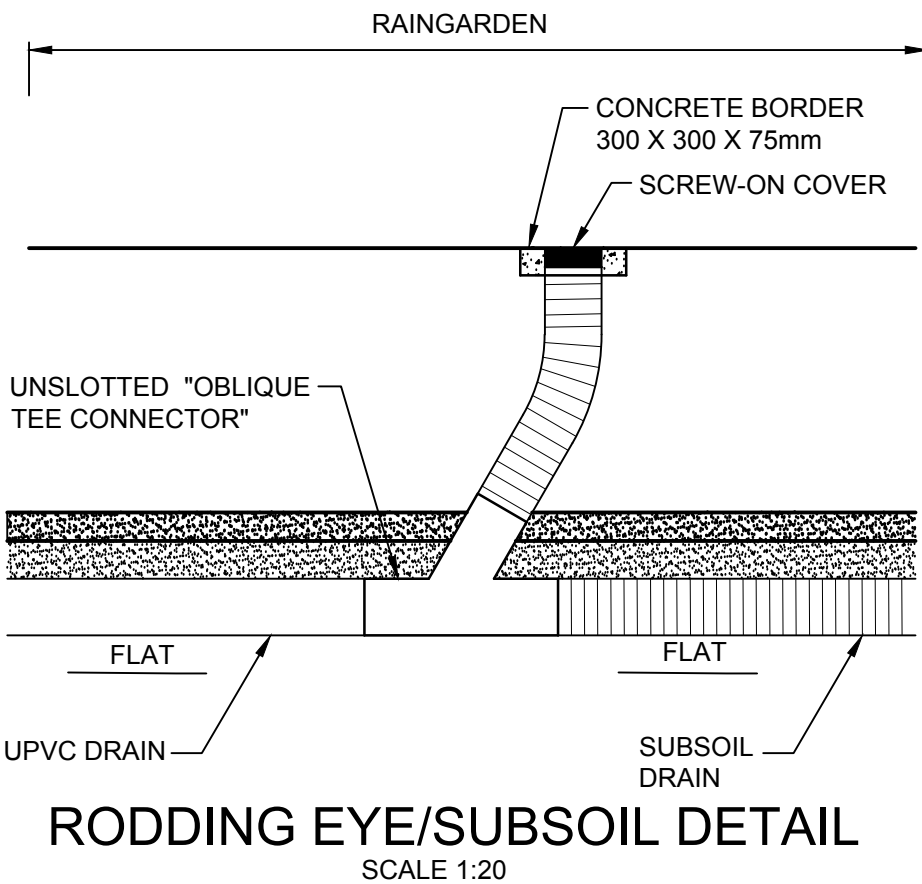
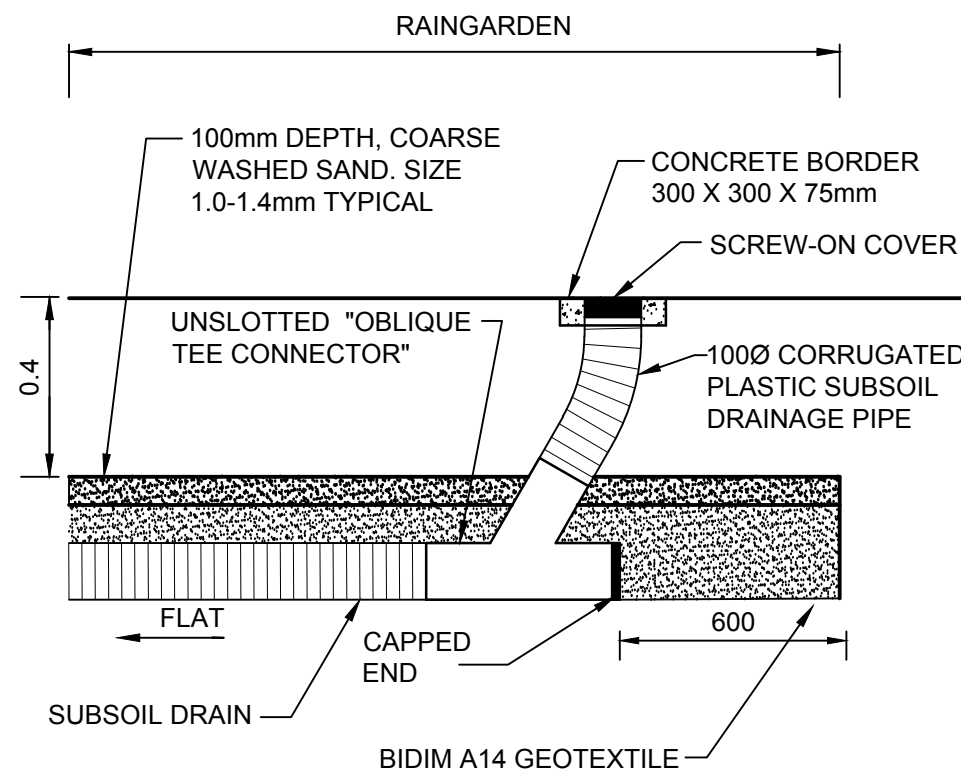


DATUM 29.0									
DESIGN LINE GRADING		36.386	35.400	35.400	35.787	35.874	35.954	36.029	36.186
EXISTING SURFACE	38.796	38.152	37.765	38.125	38.107	37.852	38.026	38.162	38.392
CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	90.000	105.000	120.000

SECTION D
SCALE H 1:500
V 1:100



RAINGARDEN MEDIA BED DETAIL 'C'
SCALE 1:20



RODDING EYE/SUBSOIL DETAIL
SCALE 1:20

MEDIA MATERIAL IN BIO FILTRATION

DEFINITIONS - AS1726-1993

SEDIMENT	SIZE(mm)
BOULDERS	>200
COBBLES	63-200
GRAVELS	COURSE
	MEDIUM
	FINE
SANDS	COURSE
	MEDIUM
	FINE
SILTS	COURSE
	MEDIUM
	FINE
CLAYS	COLLOIDAL

EC dS/m

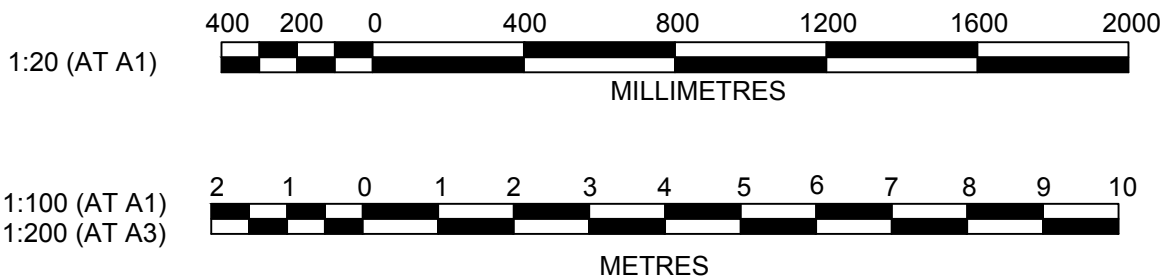
TOLERANCE	RATING	dS/m
Sensitive	Very Low	<0.95
Moderately Sensitive	Low	0.95-1.9
Moderately Tolerant	Medium	1.9-4.5
Tolerant	High	4.5-7.7
Very Tolerant	Very High	7.7-12.2
Too Saline	Extreme	>12.2

Preferred Mix
Percentage of Mix

Fine Gravel	<3%
Course Sand	7-10%
Medium Sand	40-60%
Fine Sand	10-30%
Very Fine Sand	5-30%
Clay and Silt	<3%
Organic Matter	<5%

IN REFERENCE TO ABOVE MIX TABLE, THE FOLLOWING PERFORMANCE PARAMETERS SHALL BE APPLIED.

- HYDRAULIC CONDUCTIVITY $\geq 80\text{mm/hr}$
 - DETERMINED BY THE MCINTYRE AND JAKOBSEN TEST METHOD (1993) AND CARRIED OUT BY AN INDEPENDENT NATA REGISTERED SOIL LABORATORY &/OR THE PREDICTED AND ACTUAL VALUES USING USGA OR ASTM F1815-06 STANDARD TESTING PROCEDURES
 - ELECTRICAL CONDUCTIVITY $< 1.2\text{dS/m}$
 - PHOSPHORUS CONCENTRATION $< 20\text{mg/kg}$ FOR P SENSITIVE PLANTS (FOR VERY P SENSITIVE PLANTS USED: $P < 5\text{mg/kg}$)
 - NITROGEN DRAWDOWN > 0.5
 - CIRCUMNEUTRAL pH
 - SANDY LOAM TO LOAMY SAND TEXTURE
 - GYPSUM APPLIED AT 2kg/cu.m
 - BULK DENSITY TO BE BETWEEN 1.1 g/cum & 1.8 g/cum
 - FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 25mm DIAMETER
 - FREE OF BRUSH OR SEED FROM WEEDS
- Benedict Sand & Gravel Bio-Retention Filter Media M165 generally complies with above specification and is considered "fit for purpose" as a suitable filter media for use within a Bio-Filtration stormwater treatment practice.
- PLACEMENT:
THE MEDIA SHALL BE PLACED IN 300mm LIFTS AND LOOSELY COMPACTED.



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CADDENS HILL
STAGES 2 - 4

PLAN No:
110358/DA224

FILE No: 110358DA224

SHEET SIZE: A1 ORIGINAL

BASIN D - SECTIONS & RAINGARDEN DETAILS

REFER TO DRAWING DA226 FOR CONTINUATION

LEGEND

- STABILISED SITE ACCESS
- SEDIMENT FENCE
- MESH AND GRAVEL INLET FILTER
- GEOTEXTILE INLET FILTER

DETENTION BASIN & RAINGARDEN B

ROAD 9

ROAD 6

ROAD 7

ROAD 20

ROAD 14

ROAD 15

ROAD 12

ROAD 16

ROAD 17

PARK

ROAD 1

ROAD 18

ROAD 19

ROAD 21

EXISTING SUBDIVISION

FUTURE SUBDIVISION

2,804m²

1,358m²

1,984m²

DETENTION BASIN & RAINGARDEN D

BULK EARTHWORKS AND DETENTION BASIN CONSTRUCTION ONLY

CADDENS ROAD

STABILISED SITE ACCESS

SEDIMENT FENCE

MESH AND GRAVEL INLET FILTER

GEOTEXTILE INLET FILTER

DETENTION BASIN & RAINGARDEN D

CADDENS HILL STAGES 2 - 4

SOIL & WATER MANAGEMENT PLAN - SHEET 1



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	AMENDMENT	DES	DRN	CKD	APR	DATE

Plotted: 21 December, 2016 2:00:08 PM File Name: J:\110358 - O'Connell Lane, Caddens\03 - Stage 2\CD\DA\110358DA226.dwg



LEGEND

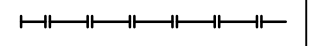
STABILISED SITE ACCESS

SEDIMENT FENCE

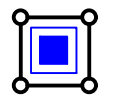
MESH AND GRAVEL INLET FILTER

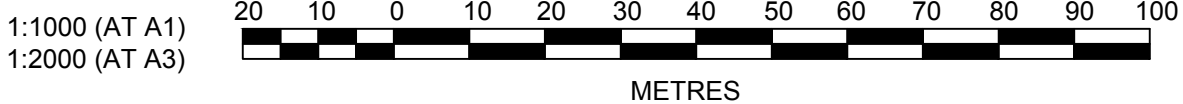
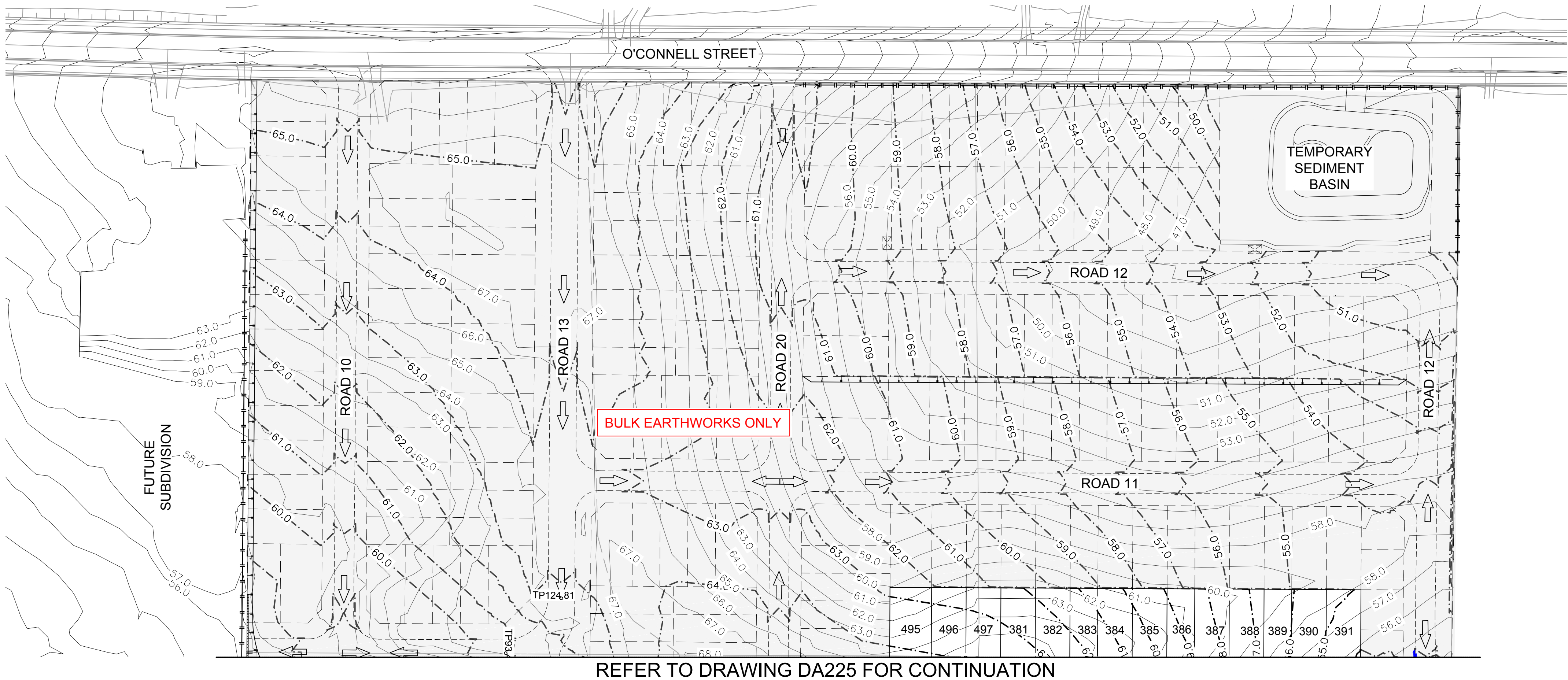
GEOTEXTILE INLET FILTER











B	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	MG	AM	MS	21/12/16
A	ISSUE FOR DEVELOPMENT APPLICATION	JT / RT	JT	AM	MS	28/10/16
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CADDENS HILL
STAGES 2 - 4

SOIL & WATER MANAGEMENT PLAN - SHEET 2

PLAN No:	110358/DA226	B
FILE No:	110358DA226	
SHEET SIZE:	A1 ORIGINAL	

7.17	Dwelling houses on certain land in Castlereagh, Cranebrook, Llandilo, Londonderry, Kemps Creek and Mulgoa	N/A
7.18	Mulgoa Valley	N/A
7.19	Villages of Mulgoa and Wallacia	N/A
7.20	Orchard Hills	N/A
7.21	Twin Creeks	N/A
7.22	Waterside Corporate	N/A
7.23	Location of sex services premises and restricted premises	N/A

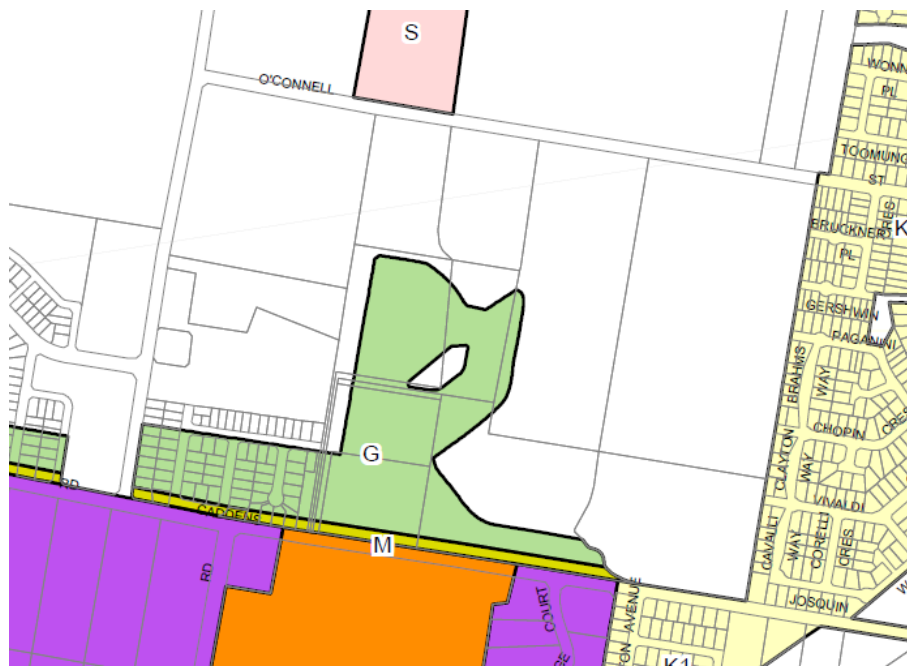


Figure 12 Minimum lot size overlay extract from LEP

4.5.1 Clause 4.6 – Exceptions to Development Standards

The proposed development seeks a variation to the minimum lot size control under the LEP. Clause 4.6 allows flexibility in applying development controls in some cases to particular developments. The relevant sub clauses include:

- (3) *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
- (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*

(b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

- (4) *Development consent must not be granted for development that contravenes a development standard unless:*
- (a) *the consent authority is satisfied that:*
- (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
- (ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
- (b) *the concurrence of the Director-General has been obtained*

This section of the Statement of Environmental Effects can be considered as the formal request to vary the cited development standards and is based on the document “*Varying Development Standards: A Guide (August 2011)*” (*Guide*)

1. What is the name of the environmental planning instrument that applies to the land?

Penrith Local Environmental Plan 2010

2. What is the zoning of that land?

The subject site is zoned *R1 General Residential*

3. What are the objectives of the zone?

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To ensure that a high level of residential amenity is achieved and maintained.*
- *To ensure that new development reflects the desired future character and dwelling densities of the area.*

The proposed development is consistent with the objectives in that:

- It will result in additional housing stock in the LGA.
- A variety of housing types will be constructed.
- The infrastructure and recreational needs of the wider area will be provided for.

- A high level of amenity will be provided through the proposed estate landscaping and urban design works.
- The objectives of the DCP as they relate to desired future character and dwelling densities have been achieved.

4. What is the development standard being varied? e.g. FSR, height, lot size

Minimum Lot Size – 450sqm

5. Under what clause is the development standard listed in the environmental planning instrument?

Clause 4.1 Minimum Subdivision Lot Size

6 What are the objectives of the development standard?

Clause 4.1 Minimum Subdivision Lot Size objectives include:

4.1 Minimum subdivision lot size

(1) *The objectives of this clause are as follows:*

- (a) *to ensure that lot sizes are compatible with the environmental capabilities of the land being subdivided,*
- (b) *to minimise any likely impact of subdivision and development on the amenity of neighbouring properties,*
- (c) *to ensure that lot sizes and dimensions allow developments to be sited to protect natural or cultural features including heritage items and retain special features such as trees and views,*
- (d) *to regulate the density of development and ensure that there is not an unreasonable increase in the demand for public services or public facilities,*
- (e) *to ensure that lot sizes and dimensions are able to accommodate development consistent with relevant development controls.*

7. What is the numeric value of the development standard in the environmental planning instrument?

The minimum subdivision lot size is 450sqm.

8. What is the proposed numeric value of the development standard in your development application?

A total of 28 lots out of 257 residential lots, representing 11%, do not comply with the 450sqm minimum lot size.

9. What is the percentage variation (between your proposal and the environmental planning instrument)?

A total of 28 lots out of 257 residential lots, representing 11%, do not comply with the 450sqm minimum lot size.

These are lots 202, 203, 204, 205, 209, 210, 211, 212, 227, 228, 229, 230, 232, 232, 443, 444, 445, 446, 478, 479, 480, 481, 482, 485, 486, 488, 492 and 493.

10. How is strict compliance with the development standard unreasonable or unnecessary in this particular case

The proposal meets the general intent of *Clause 4.1 Minimum Subdivision Lot Size* and complies with the objectives of this development standard as follows:

- In analysing the site, the intention is to capitalise on limited opportunities to incorporate smaller lots where the topography is flatter as part of providing an appropriate level of diversity and housing mix. This approach ensures the lot sizes are compatible with the environmental capabilities of those areas of the land.
- The placement of the proposed smaller lots will not result in any unacceptable impacts on the amenity, or potential amenity, of neighbouring properties.
- The location of the proposed smaller lots are such that they will not impact on any potential natural or cultural features of the land. Further, some of the lots will be appropriately located near the proposed Hilltop Park.
- There would be no unreasonable increase in densities on the site as a result of supporting the variation. The proposal will contribute an appropriate dwelling yield to the dwelling yield targets for the precinct.
- The documentation submitted with this application demonstrates that development consistent with the relevant development controls can be accommodated on those sites.

Conversely, it is noted that lots 348 – 380 are outside the minimum lot size and theoretically could incorporate a higher proportion of smaller lots. However, this area of the site is a relatively steep so the approach has been to retain generally larger lots.

In summary, the detailed design process undertaken by Legacy would see the appropriate lot types proposed in the appropriate locations.

11. How would strict compliance hinder the attainment of the objects specified in Section 5(a)(i) and (ii) of the Act.

Section 5(a)(i) and (ii) of the *Environmental Planning and Assessment Act 1979* provide:

The objects of this Act are:

(a) to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (iii) the protection, provision and co-ordination of communication and utility services,*

- (iv) the provision of land for public purposes,*
- (v) the provision and co-ordination of community services and facilities, and*
- (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) ecologically sustainable development, and*
- (viii) the provision and maintenance of affordable housing, and*
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

It is submitted that the variation to the minimum lot size would still achieve an appropriate lot configuration while maintaining the objectives of the relevant clause within the LEP. The objects of the Act are not hindered through the proposed variation being supported.

Complying strictly with the control will not result in any superior outcome, however it will allow more dense lots to be located in areas that are most appropriate.

The resultant lot layout represents the most orderly development of the land.

12. Is the development standard a performance based control? Give details.

No it is prescriptive.

13. Would strict compliance with the standard, in your particular case, would be unreasonable or unnecessary? Why?

Strict compliance with the standard in this particular case is unreasonable and unnecessary as dwelling types would need to be constructed on sloping land that would require excessive cutting and retaining. The proposed layout reduces the need for such works and in turn, maximizes the general amenity and visual presentation of dwellings when viewed in the streetscape.

The proposed development meets the objectives of the zone, it meets the relevant development standard clauses and it is considered that the objectives of the Act would not be undermined by supporting the variation.

14. Are there sufficient environmental planning grounds to justify contravening the development standard? Give details.

The following environmental grounds are submitted in support of the variation:

- The resultant built outcome will be more responsive to the topography of the land.
- Excessive cut and retaining will be minimised through the appropriate location of more dense housing lots.

- As a result of the above, potential future conflicts between dwellings ie overshadowing, overlooking, solar access, will be minimised.
- The proposed development will continue to achieve an appropriate response to section 1.2.2 of the Caddens section of the DCP in that it will respond to the topographical constraints of the site, and the amenity (both current and future) will be maintained or enhanced as a result.
- No precedence would be created given this variation relates to the specific site characteristics that are unique to this development proposal.

Specific to the circumstances of this development there is sufficient grounds to support the variations in height for this proposal for the following reasons:

- The breaches in development standards are considered minor in the context of the overall site development and will not result in a negative impact on nearby or adjoining properties.
- The bulk and scale of future dwellings will be minimised and still achieve the anticipated development outcomes in the locality.

15. Conclusion

It is considered that the proposed variation to support lots that are smaller than the minimum lot size is warranted as the proposed design and development provides a better planning outcome as outlined in this Clause 4.6 variation request. Compliance with the development standard in relation to the minimum lot size is unnecessary and unreasonable in the circumstances of this development and there are sufficient planning grounds to justify the variations.