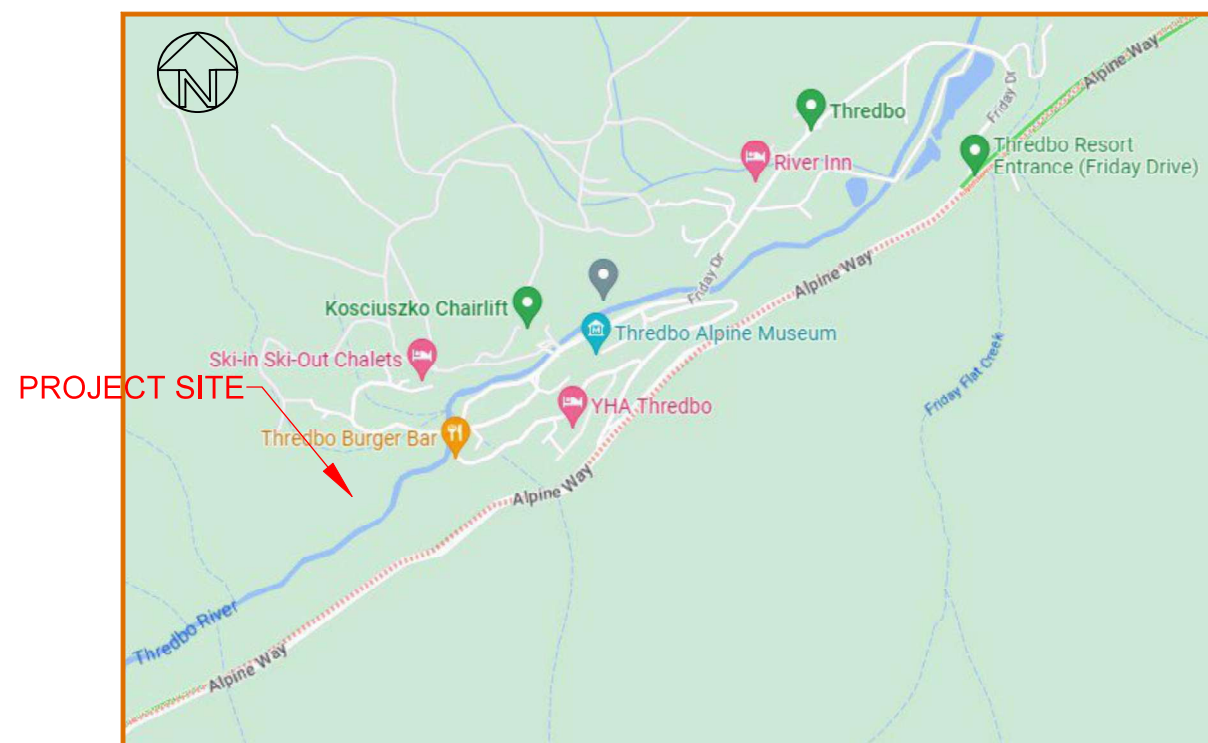




KOSCIUSZKO THREDBO PTY LTD THREDBO GOLF COURSE SUBDIVISION

Thredbo Village NSW
CLM CiViL Project No. U-183



Locality Plan - Not to Scale

DRAWING LIST

Sheet No:	Description
1	Cover Sheet, Drawing List and Locality Plan
2	Overview Plan
3-4	Typical Details
5	Carpark and Golf Course Plan
6	Subdivision Plan
7-8	Road 1 Longsection
9-21	Road 1 Cross Sections
22	Road 1 Culdesac
23	Driveway 1 Longsection
24	Driveway 2 Longsection
25	Accessible Path of Travel to Community Centre
26	1st Tee Path
27	9th Green to 2nd Tee Path
28	Path Realignment at 2nd Green
29	Carpark Dimensions
30-33	Swept Path Assessments
34-35	Signs and Lines Plan
36-39	Sewer Long Sections
40-41	Stormwater Management General Arrangement
42-43	Stormwater Typical Details
44	Stormwater Catchment Plan
45	Bulk Earthworks Plan

NOT FOR CONSTRUCTION



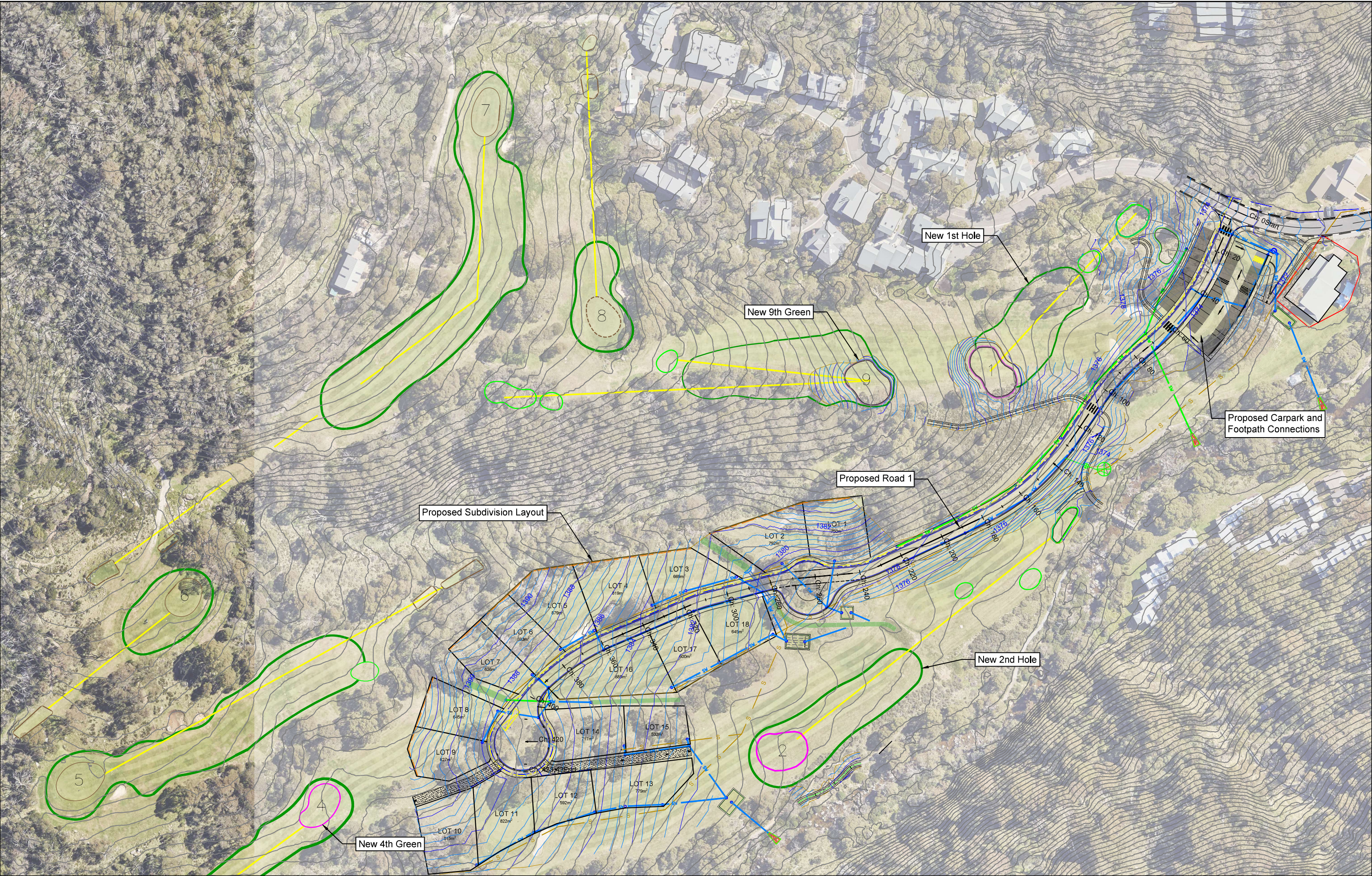
Rev	Date	Description
K	8/9/25	Revised Lot Layout
J	7/02/25	Amended as per Kosciuszko Thredbo Comments 31/1/25
I	22/01/25	Amended as per Kosciuszko Thredbo Comments
H	28/08/24	Amended as per DPE Requirements (100% Issue)
G	30/07/24	Amended as per DPE Requirements (80% Issue)
F	04/07/24	Amended as per DPE Requirements (50% Issue)

Thredbo Golf Course Subdivision
Thredbo Village NSW



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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Cover Sheet, Drawing List and Locality Plan	Datum: GDA94 / AHD	Scale: AS SHOWN	Size: A3
	Drawing Number: U-183	Sheet: 1 of 45	Revision: K



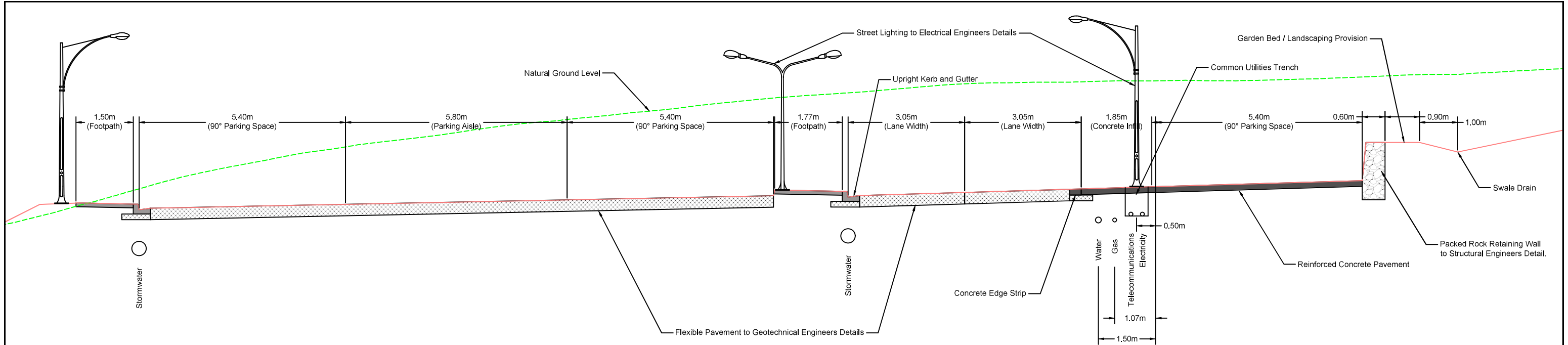
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Thredbo Village NSW

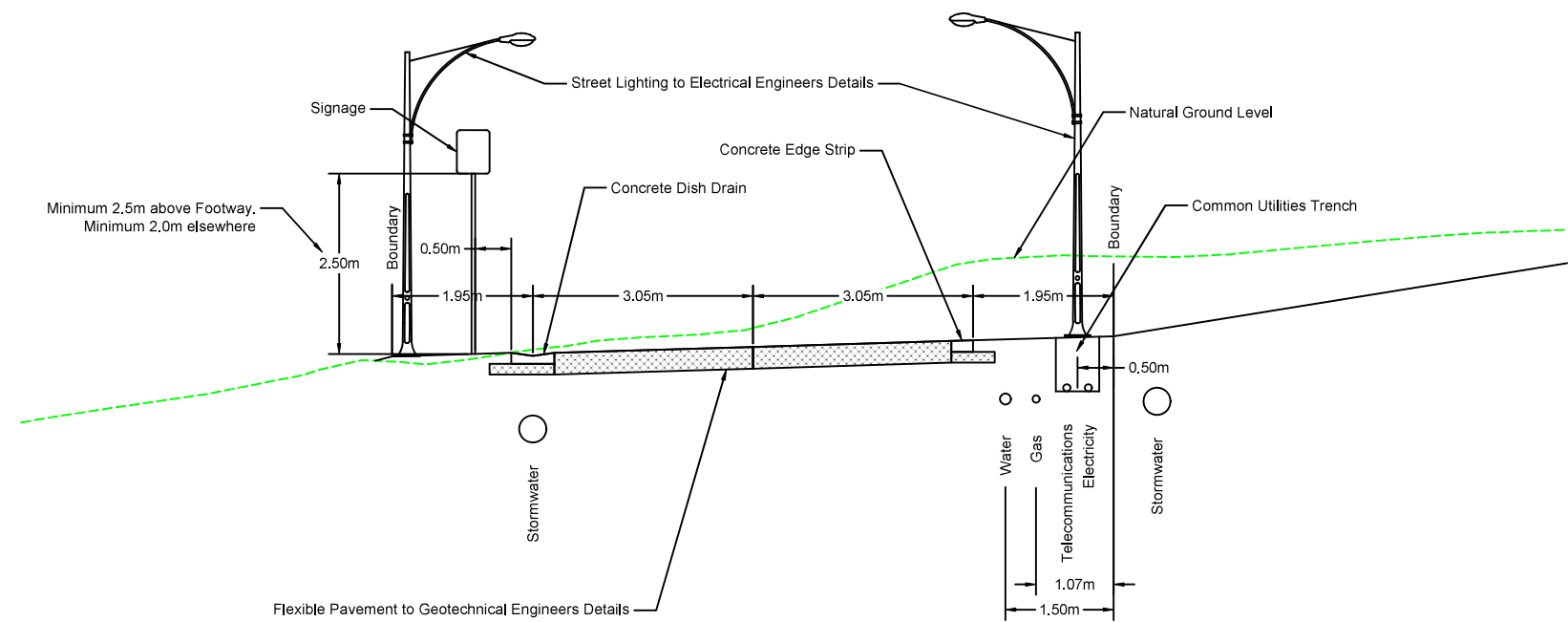


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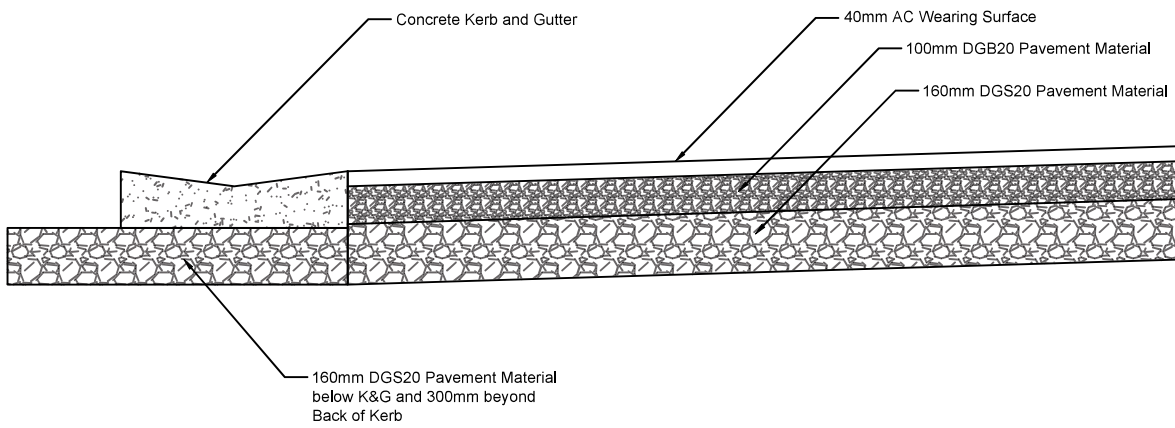
Client: Kosciuszko Thredbo Pty Ltd				
Overview Plan	Status For Development Approval			
	Datum GDA94 / AHD		Scale AS SHOWN	Size A3
	Drawing Number U-183		Sheet 2 of 45	Revision K



Road 1 Typical Section CH10-60



Road 1 Typical Section CH60-400



Preliminary Pavement Design
Subject to Geotechnical Engineers Details
Scale 1:10

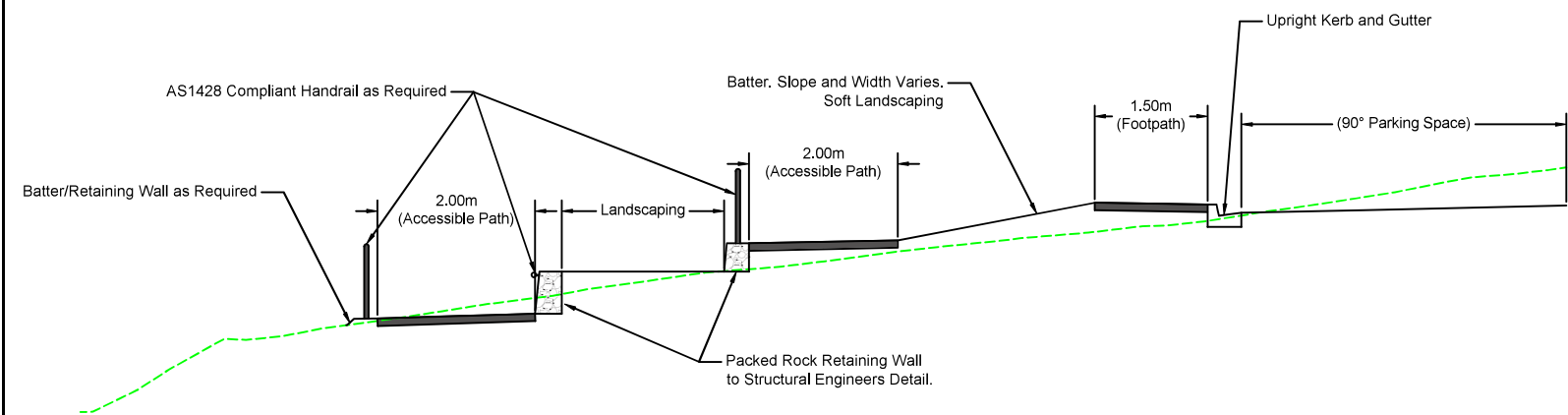
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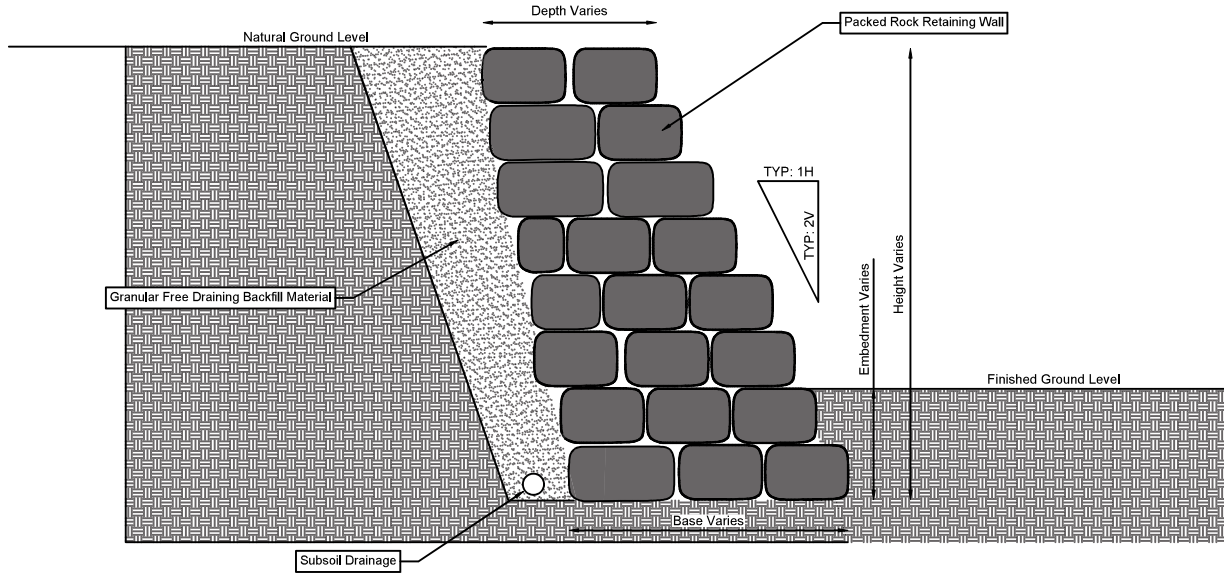
CLM
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www.clmcivil.com.au

Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Typical Details 1	Datum: GDA94 / AHD	Scale: 1:100	Size: A3
	Drawing Number: U-183	Sheet: 3 of 45	Revision: K

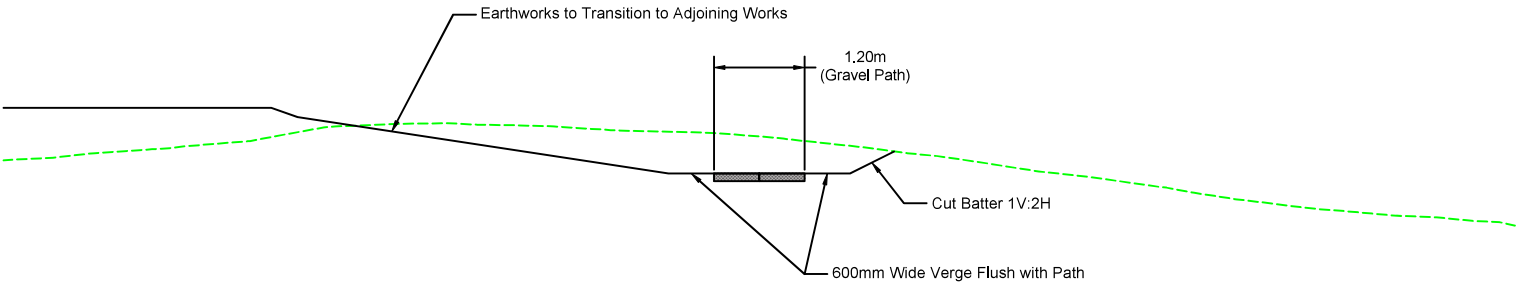


Accessible Path Typical Section

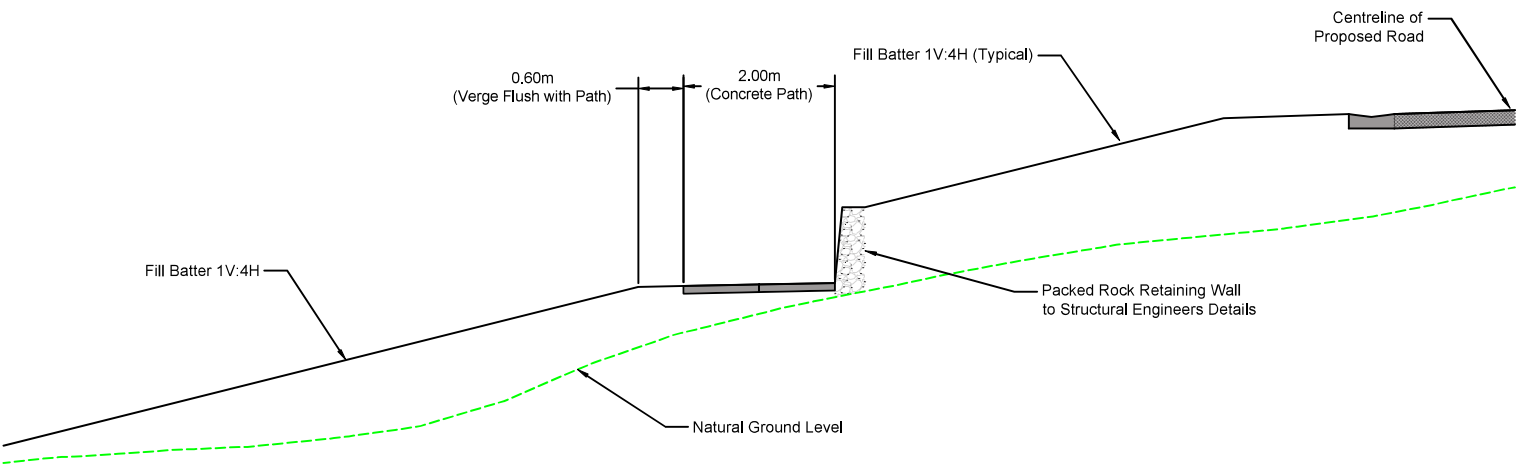


Packed Rock Retaining Wall Typical Section

NOT TO SCALE
SUBJECT TO FUTURE GEOTECHNICAL INVESTIGATION AND STRUCTURAL ENGINEERS DETAILS



Golf Path Typical Section



Path and Retaining Wall Typical Section
(Pathway from Road 1 to 2nd TEE / Thredbo River Bridge)

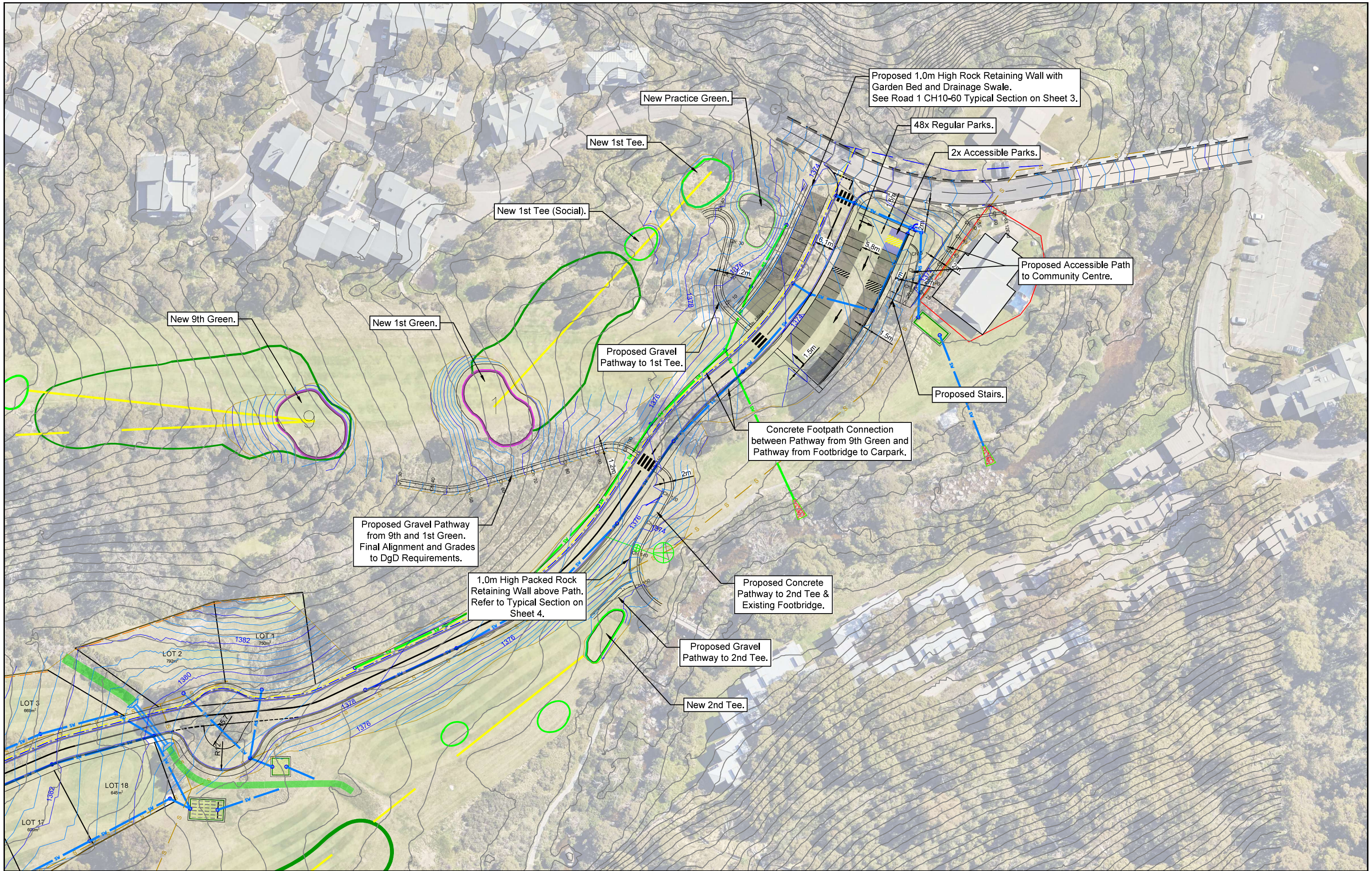
Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Thredbo Village NSW



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Client: Kosciuszko Thredbo Pty Ltd			
Typical Details 2		Status: For Development Approval	
		Datum: GDA94 / AHD	Scale: 1:100
		Sheet: 4 of 45	Size: A3
Drawing Number: U-183		Revision: K	



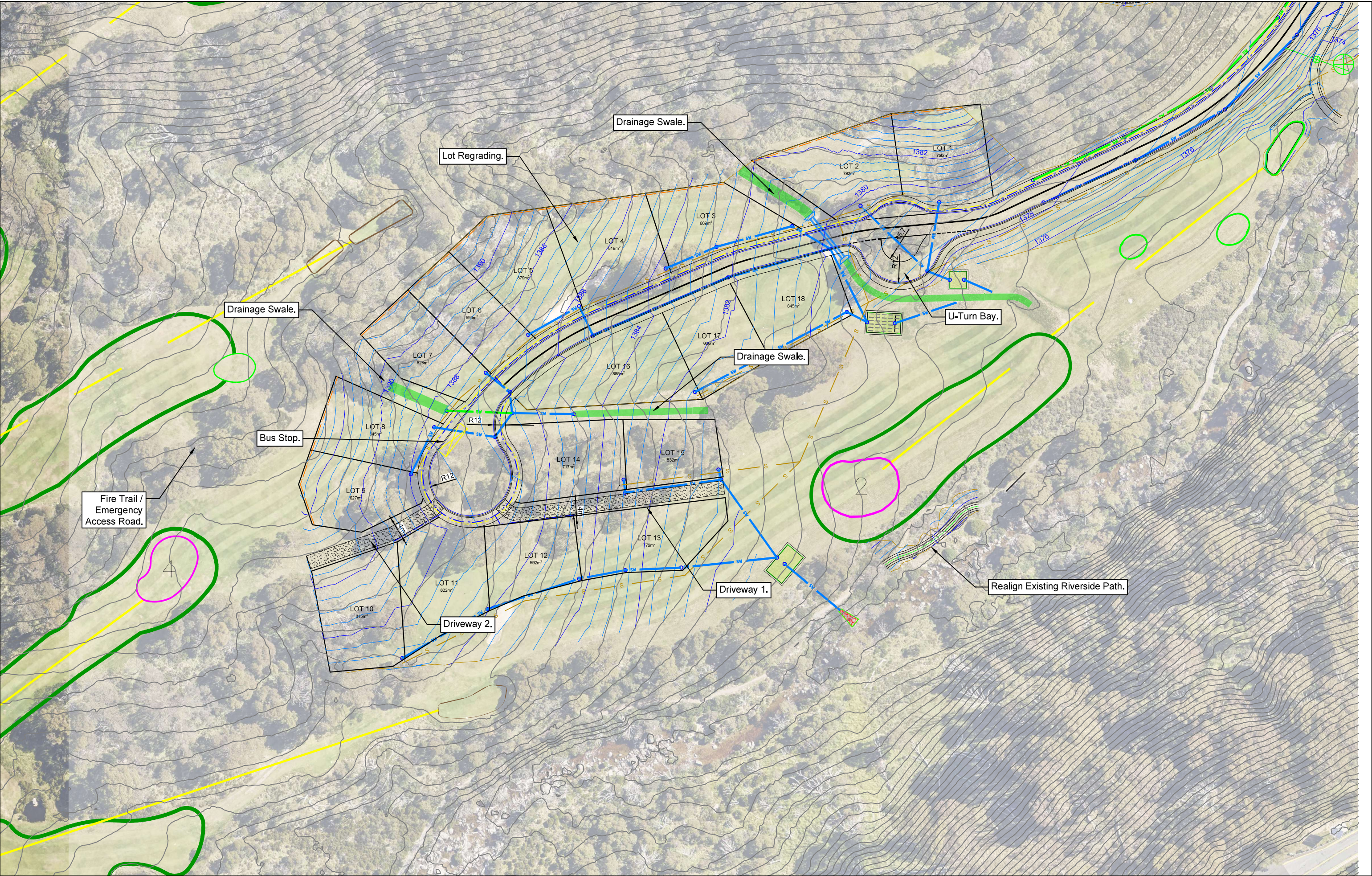
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Drawing Number: U-183		Scale: 1:1000	Size: A3
Sheet: 5 of 45		Revision: K	



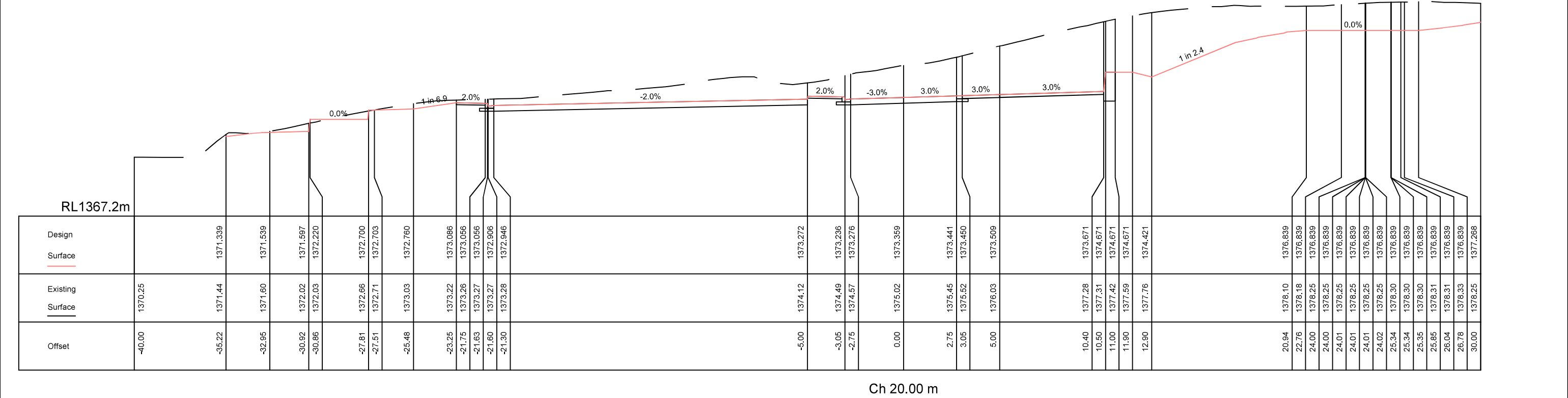
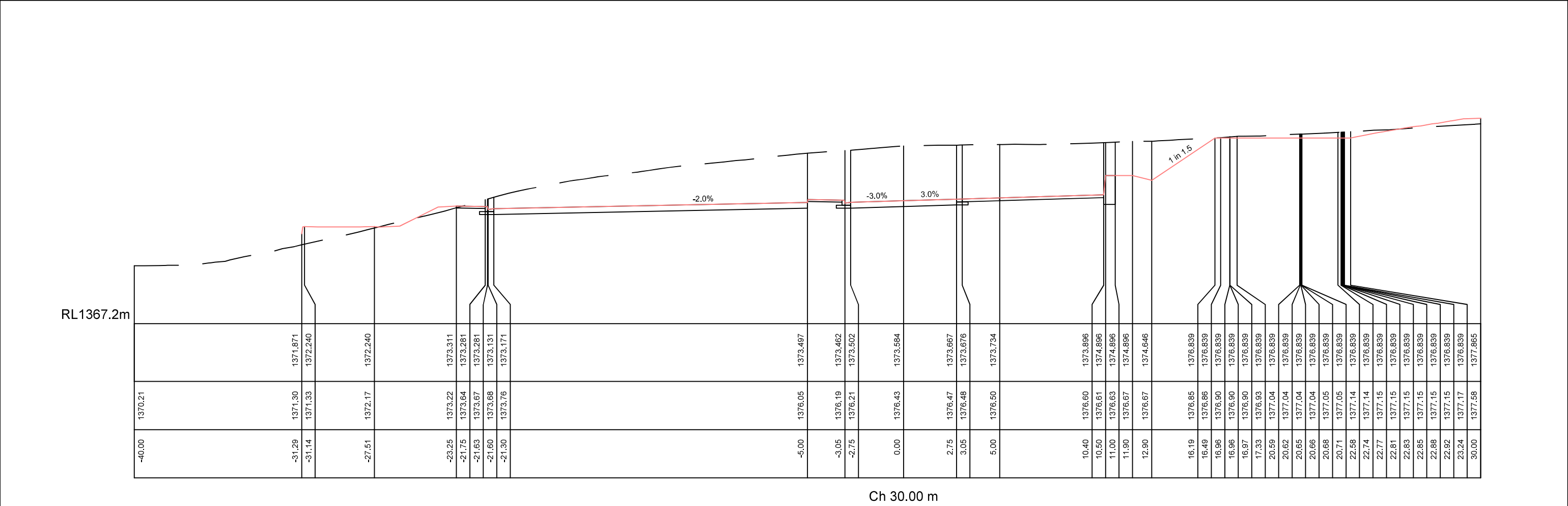
Rev	Date	Description
K	8/9/25	Revised Lot Layout
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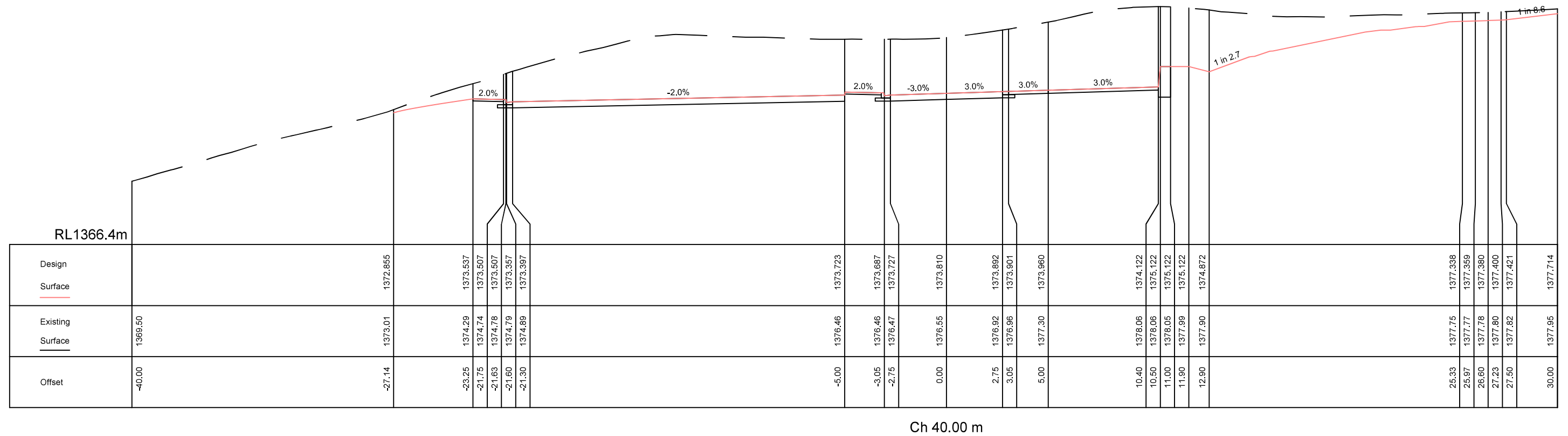
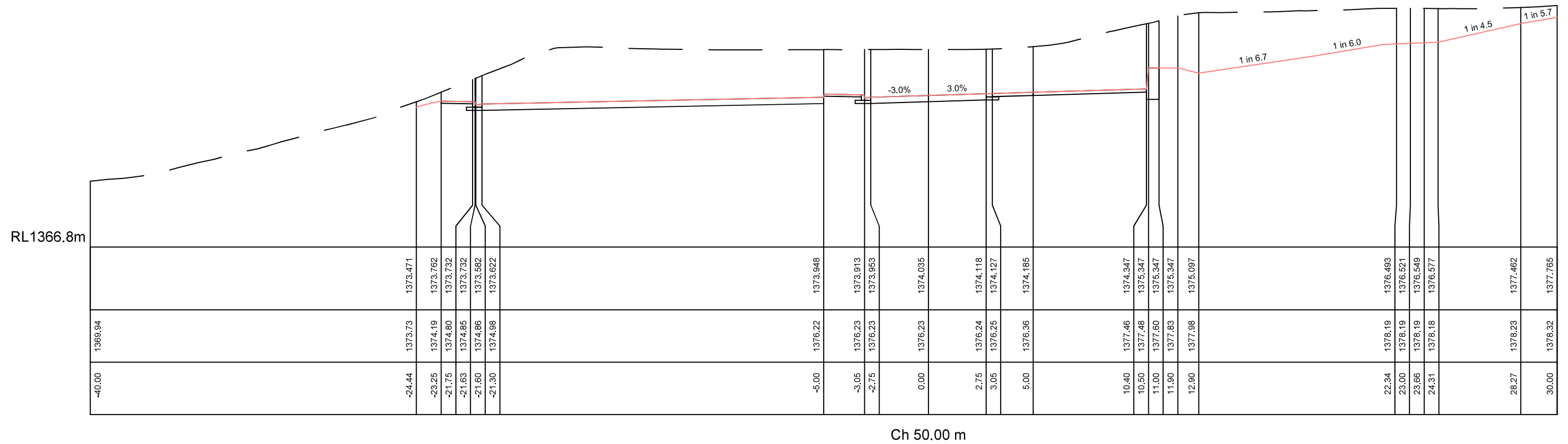
Thredbo Golf Course Subdivision
Thredbo Village NSW



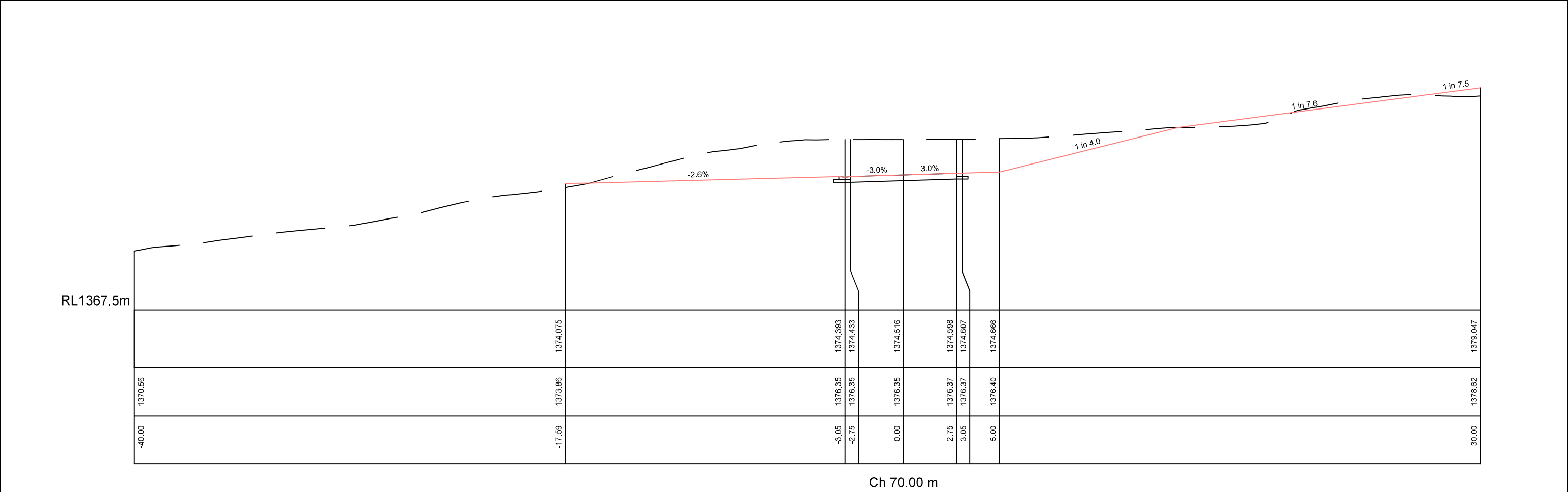
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Subdivision Plan	Datum: GDA94 / AHD	Scale: 1:1000	Size: A3
	Drawing Number: U-183	Sheet: 6 of 45	Revision: K

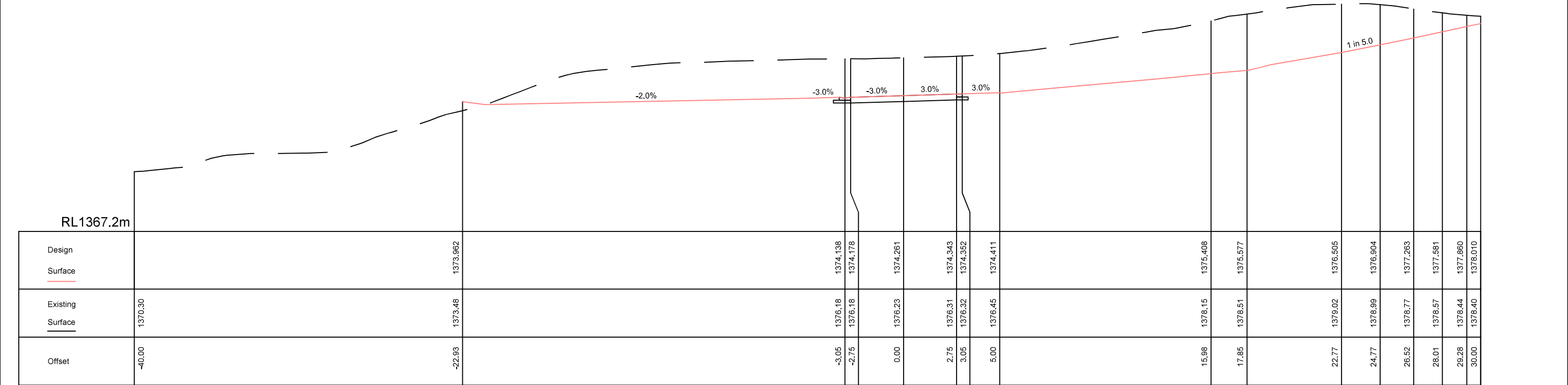




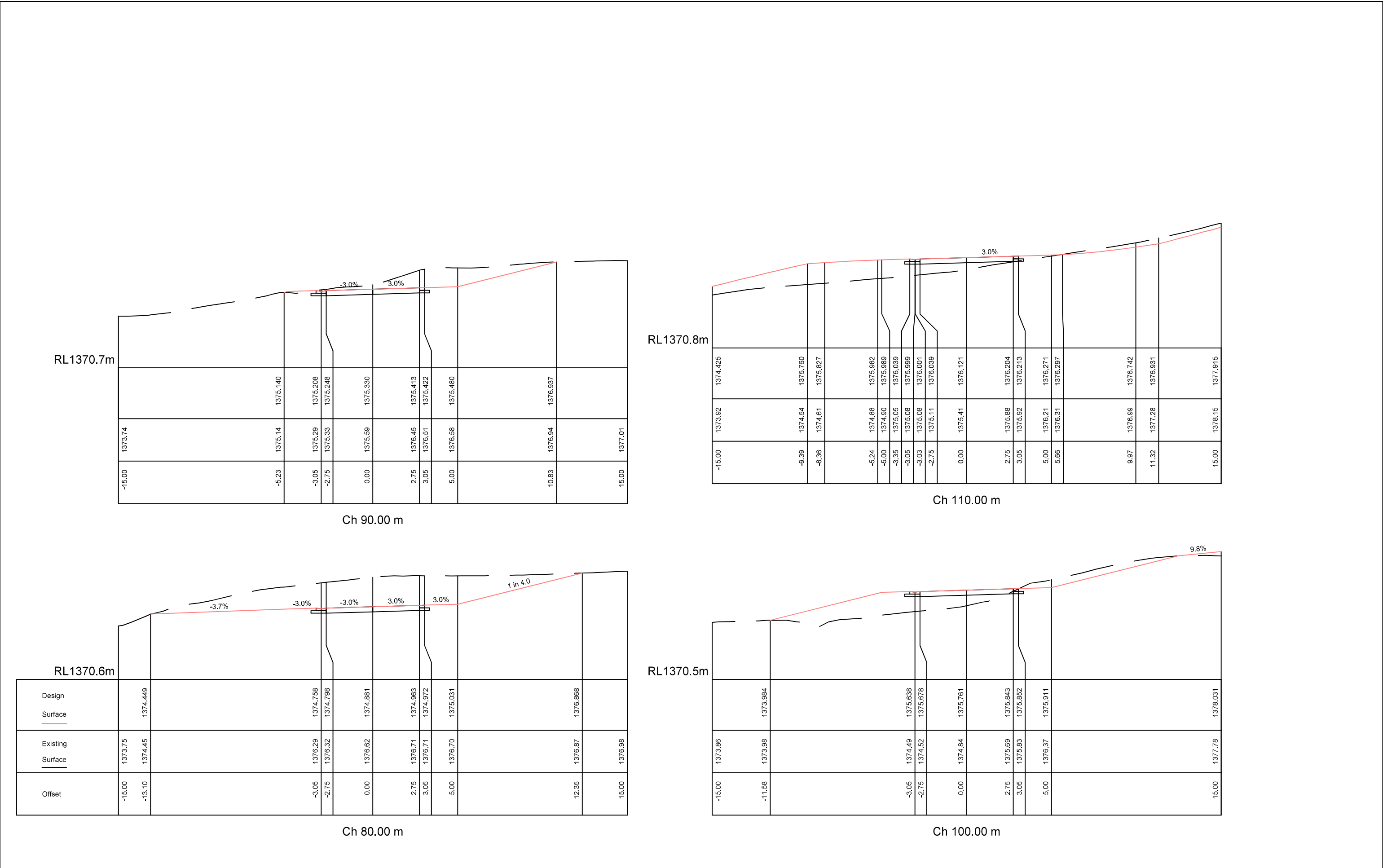
Rev	Date	Description	Thredbo Golf Course Subdivision Thredbo Village NSW		CLM CIVIL Engineering 205 Bobundara Road BERRILLAND NSW 2628 PH: 0427 886 623 www.clmcivil.com.au	Client: Kosciuszko Thredbo Pty Ltd							
K	8/9/25	Revised Lot Layout				Status For Development Approval		Datum GDA94 / AHD	Scale 1:200	Size A3	Drawing Number U-183	Sheet 11 of 45	Revision K
J	7/02/25	Amended as per Kosciuszko Thredbo Comments 31/1/25											
I	22/01/25	Amended as per Kosciuszko Thredbo Comments											
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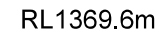
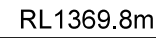
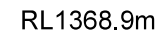
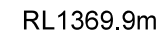


Ch 70.00 m



Ch 60.00 m



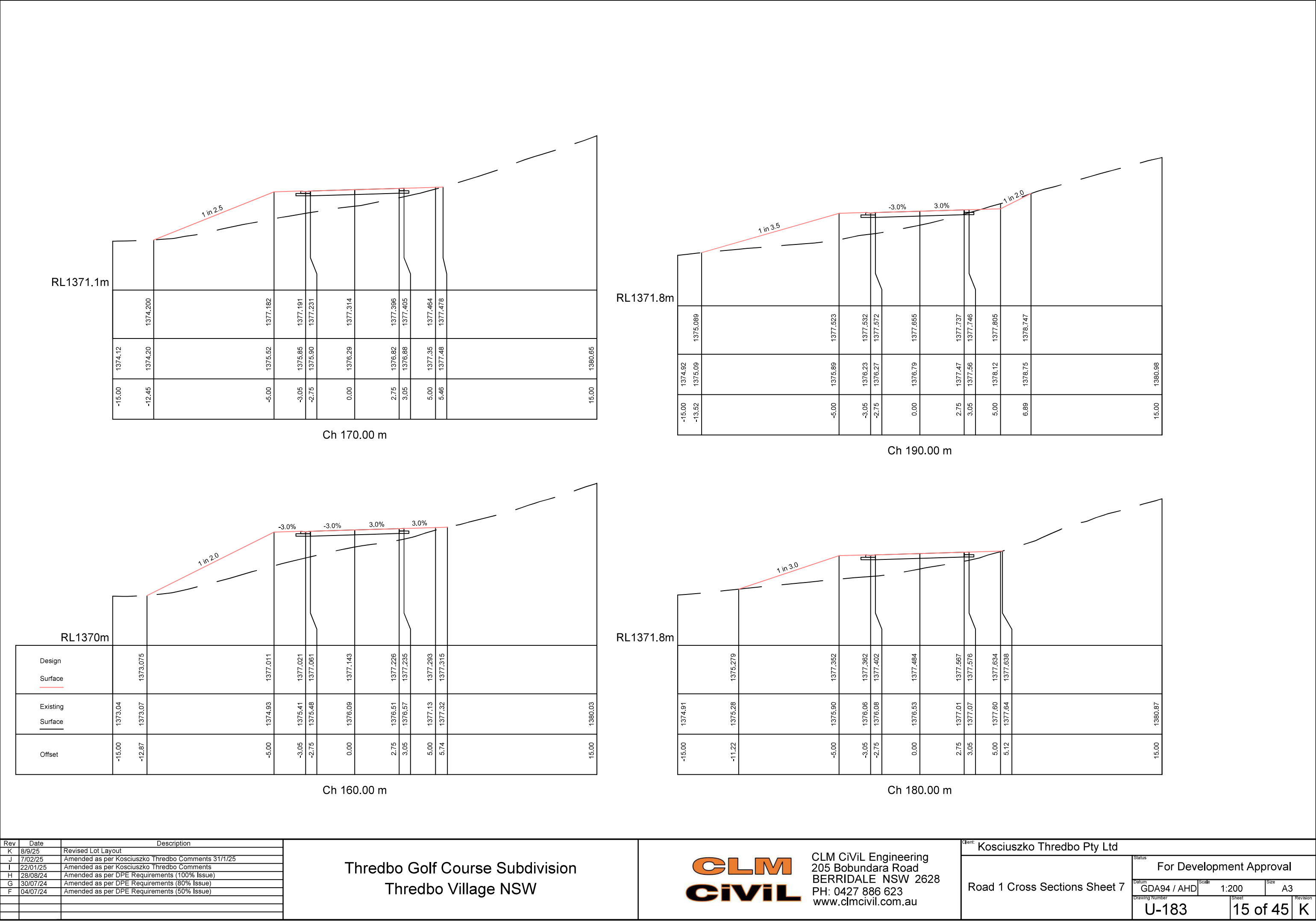


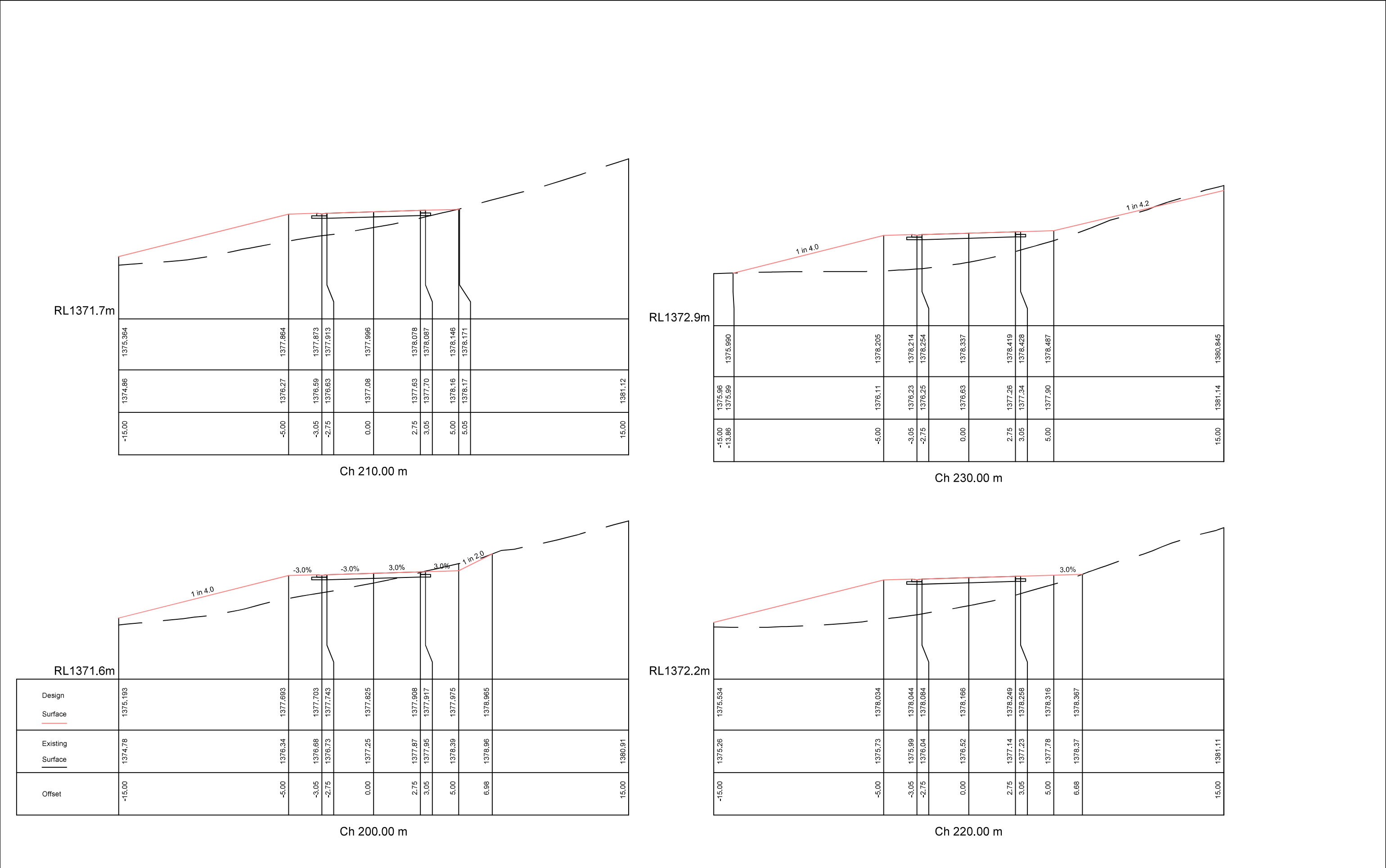
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K	9/9/25	Revised Lot Layout
J	7/02/25	Amended as per Kosciuszko Thredbo Comments 31/1/25
I	22/01/25	Amended as per Kosciuszko Thredbo Comments
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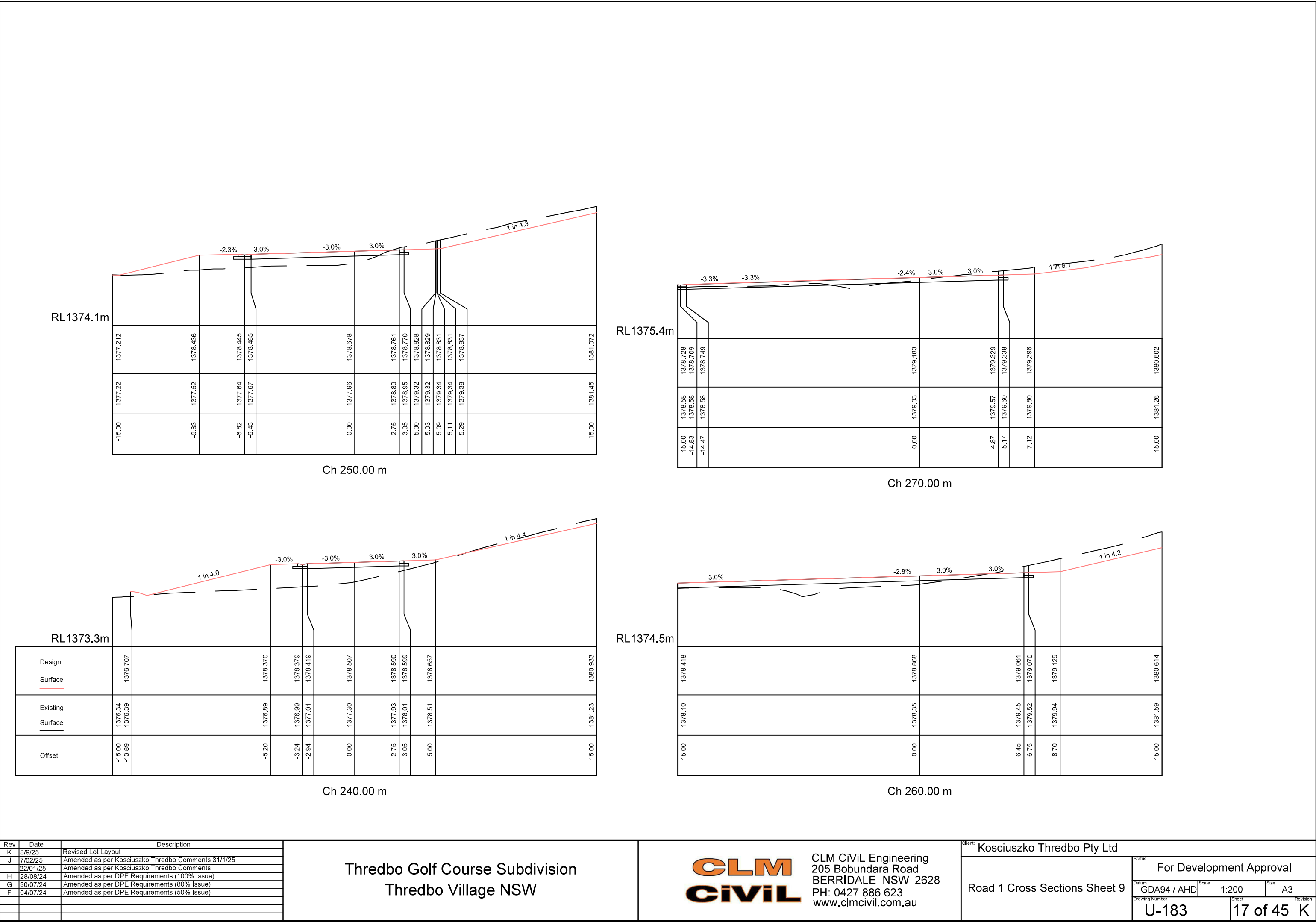
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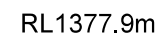
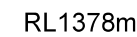
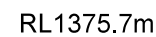
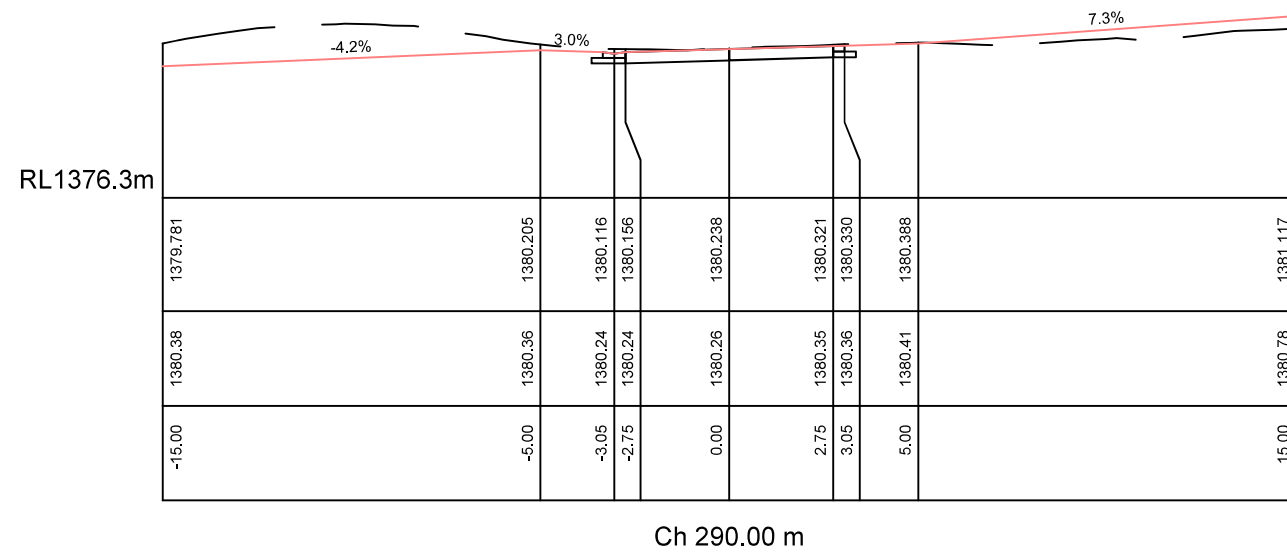
Client: Kosciuszko Thredbo Pty Ltd

Status			
For Development Approval			
Datum		Scale	Size
GDA94 / AHD		1:200	A3
Drawing Number		Sheet	Revision
U-183		14 of 45	K









Thredbo Golf Course Subdivision

Thredbo Village NSW



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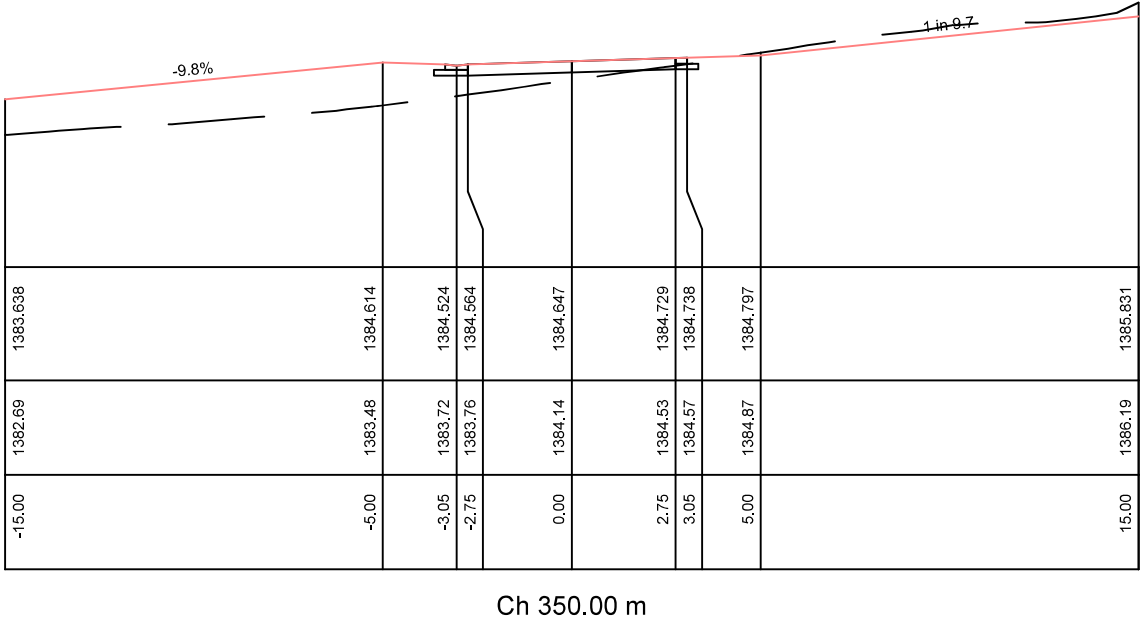
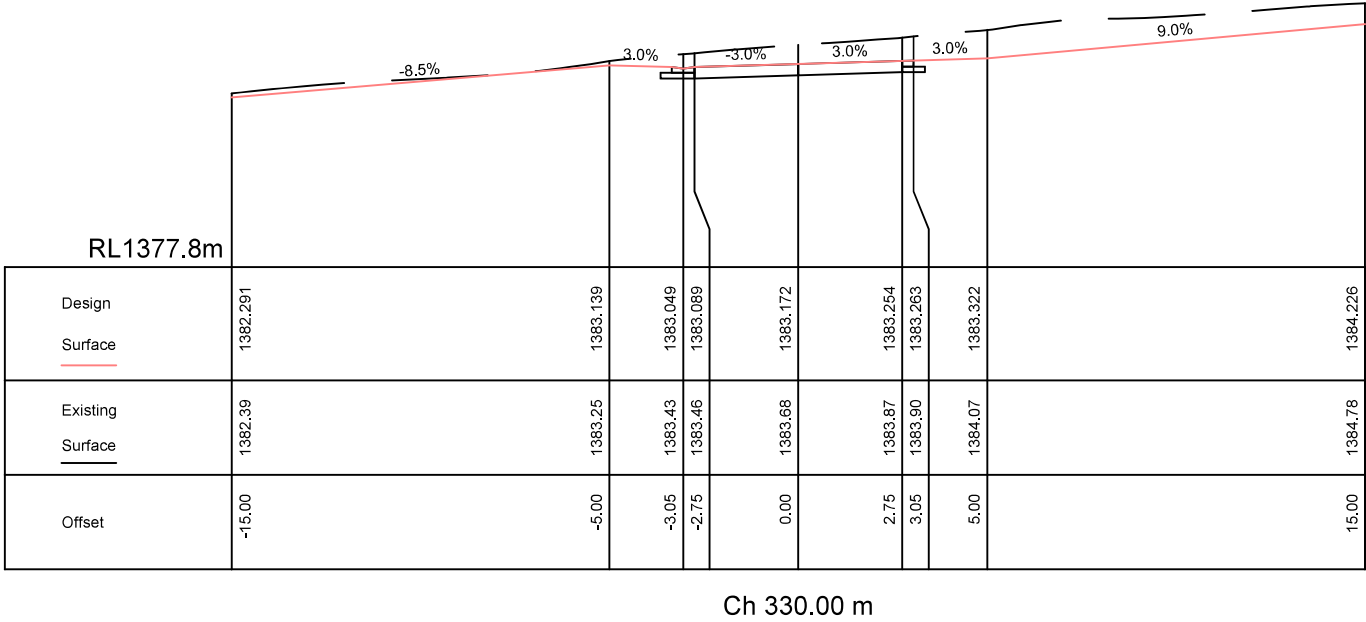
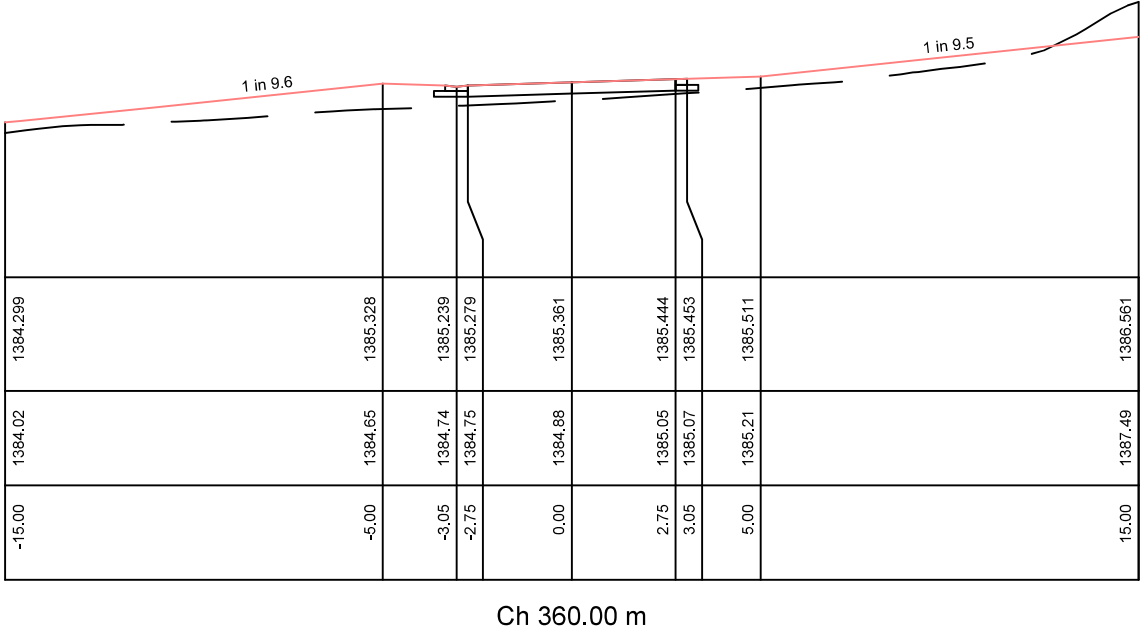
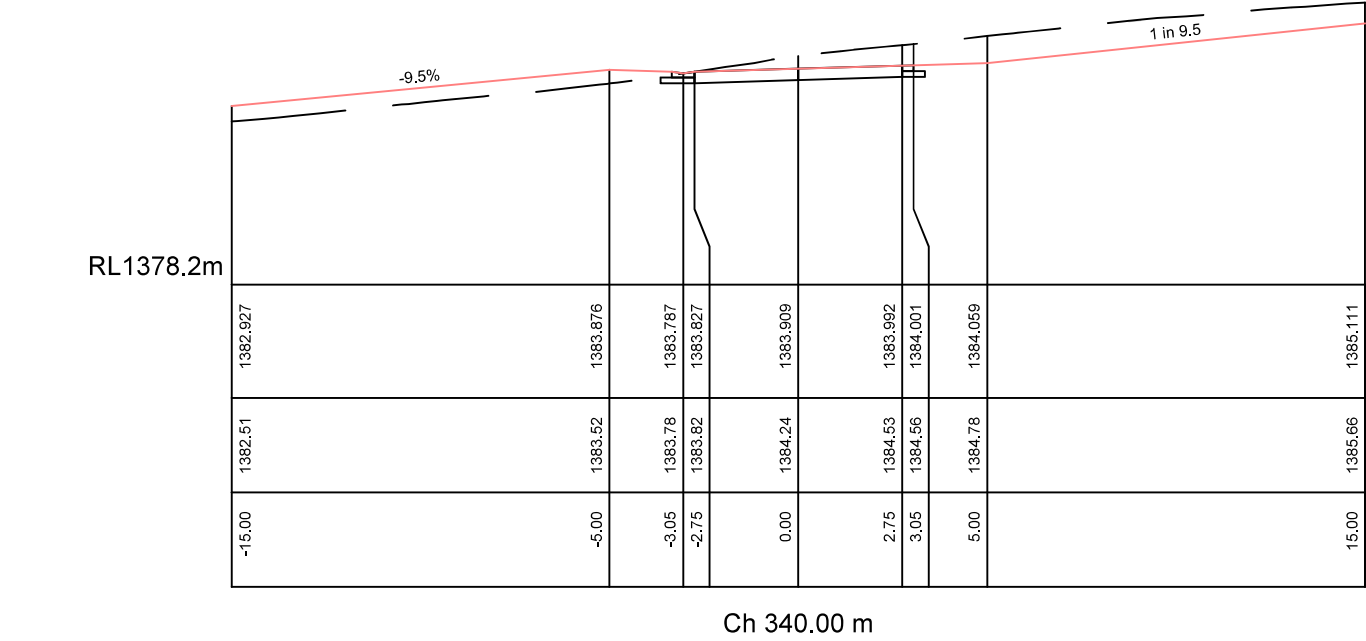
Client: Kosciuszko Thredbo Pty Ltd

Status	For Development Approval
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Road 1 Cross Sections Sheet 10

Datum	Scale	Size
GDA94 / AHD	1:200	A3

Drawing Number	Sheet	Revision
U-183	18 of 45	K



Rev	Date	Description
K	8/9/25	Revised Lot Layout
J	7/02/25	Amended as per Kosciuszko Thredbo Comments 31/1/25
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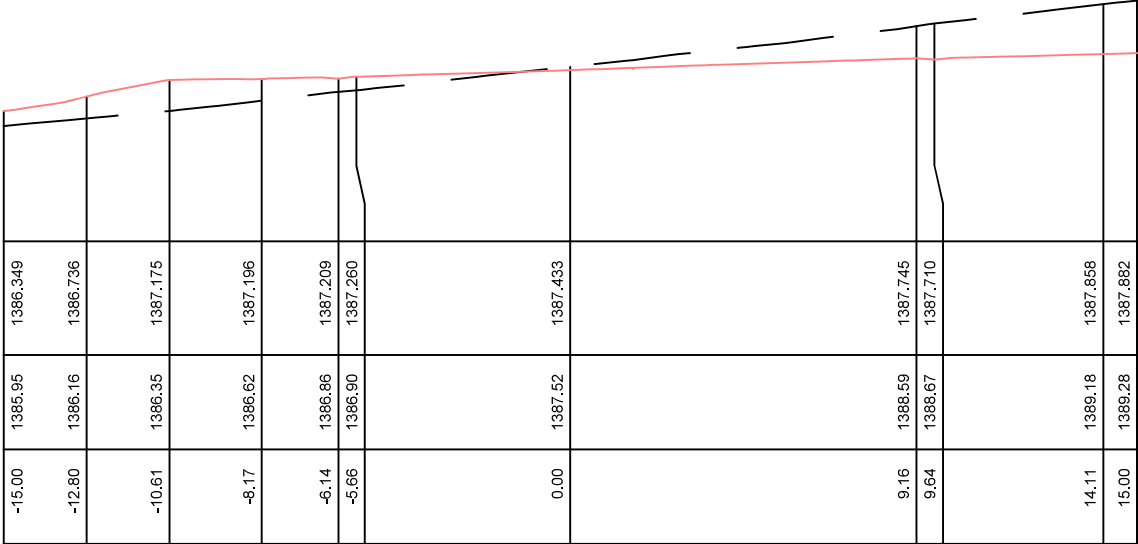
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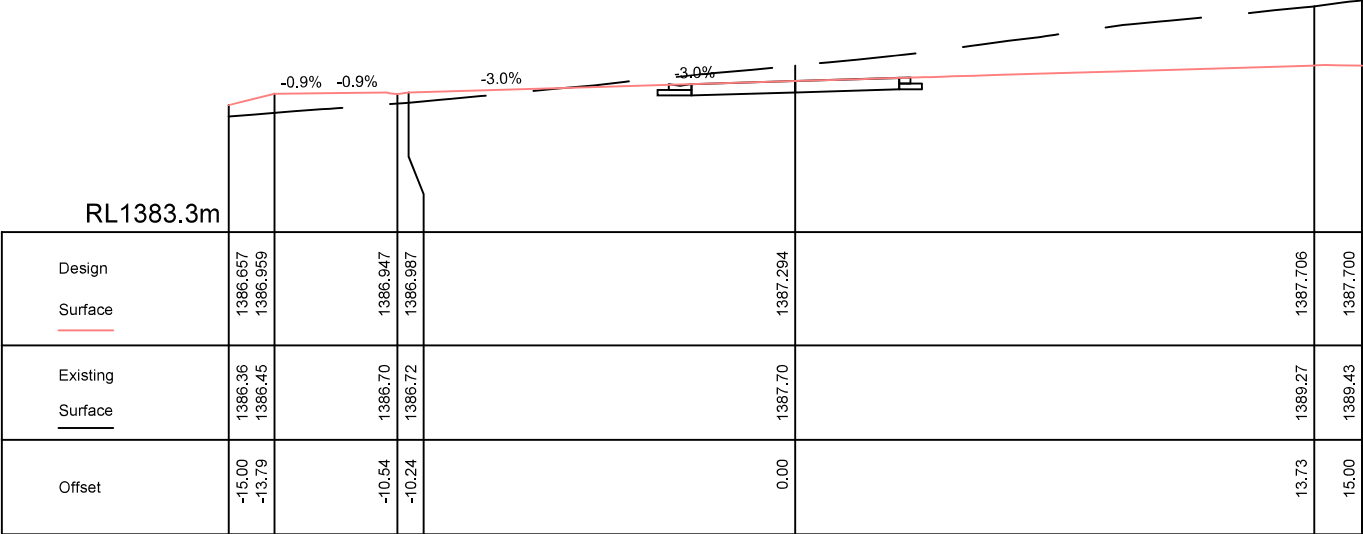
Client: Kosciuszko Thredbo Pty Ltd			
Road 1 Cross Sections Sheet 11		Status For Development Approval	
		Datum GDA94 / AHD	Scale 1:200
		Sheet U-183	Size A3
		Revision 19 of 45	K

RL1382.9m



Ch 430.00 m

RL1383.3m



Ch 420.00 m

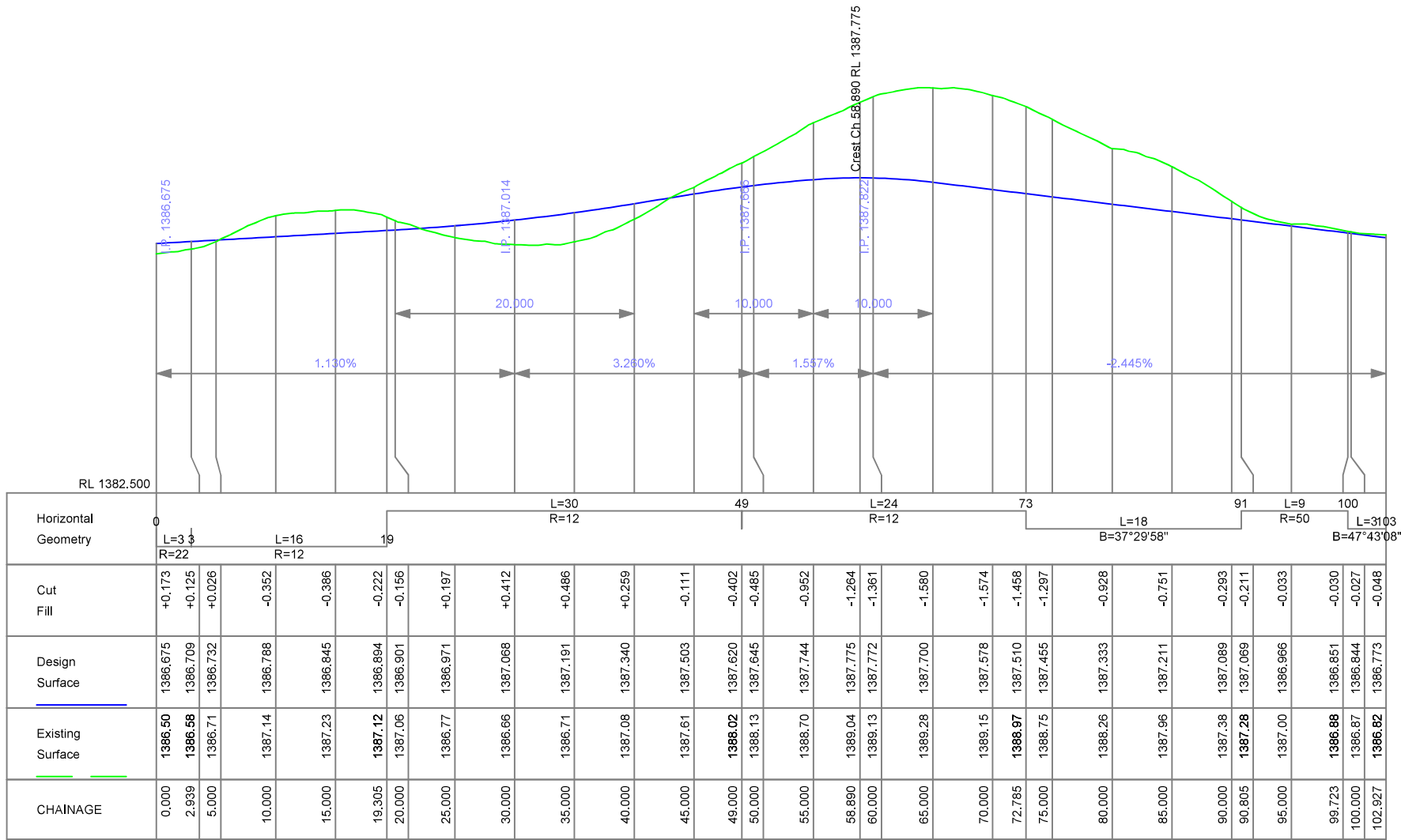
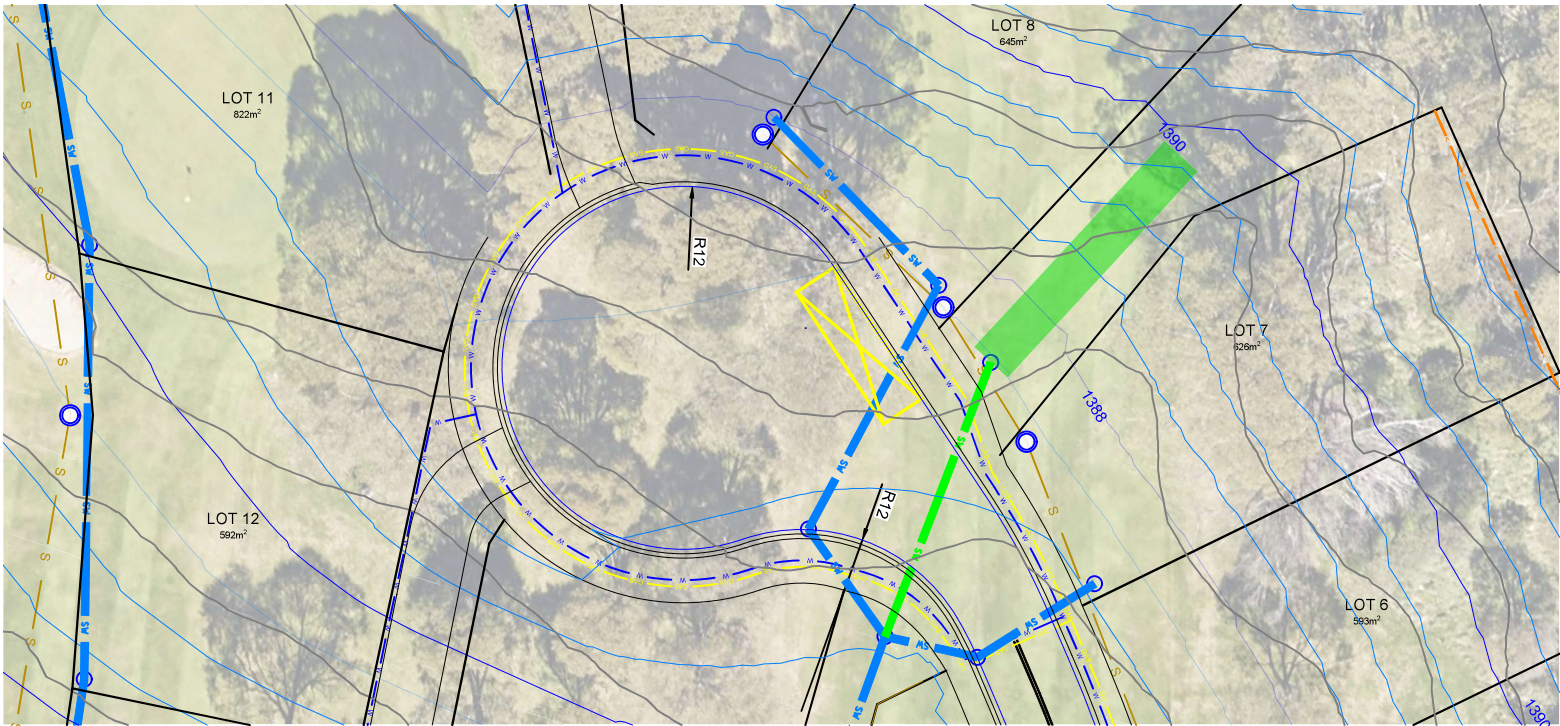
Rev	Date	Description
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Client: Kosciuszko Thredbo Pty Ltd			
Road 1 Cross Section Sheet 13		Status For Development Approval	
		Datum GDA94 / AHD	Scale 1:200
		Sheet 21 of 45	Size A3
Drawing Number U-183		Revision K	



LONGITUDINAL SECTION
GR-CDS Ch 0.000 to Ch 102.927
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Thredbo Golf Course Subdivision
Thredbo Village NSW

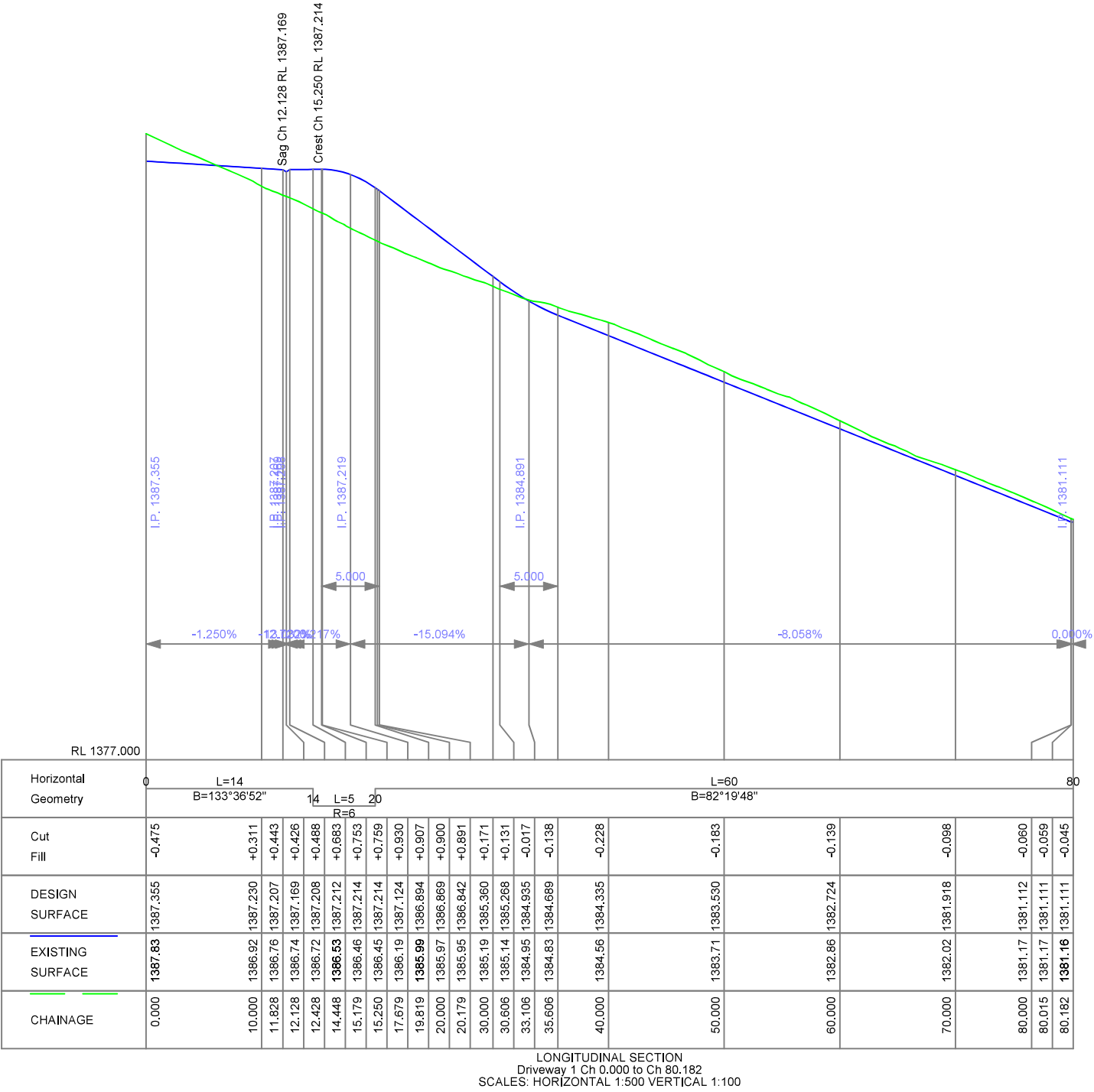
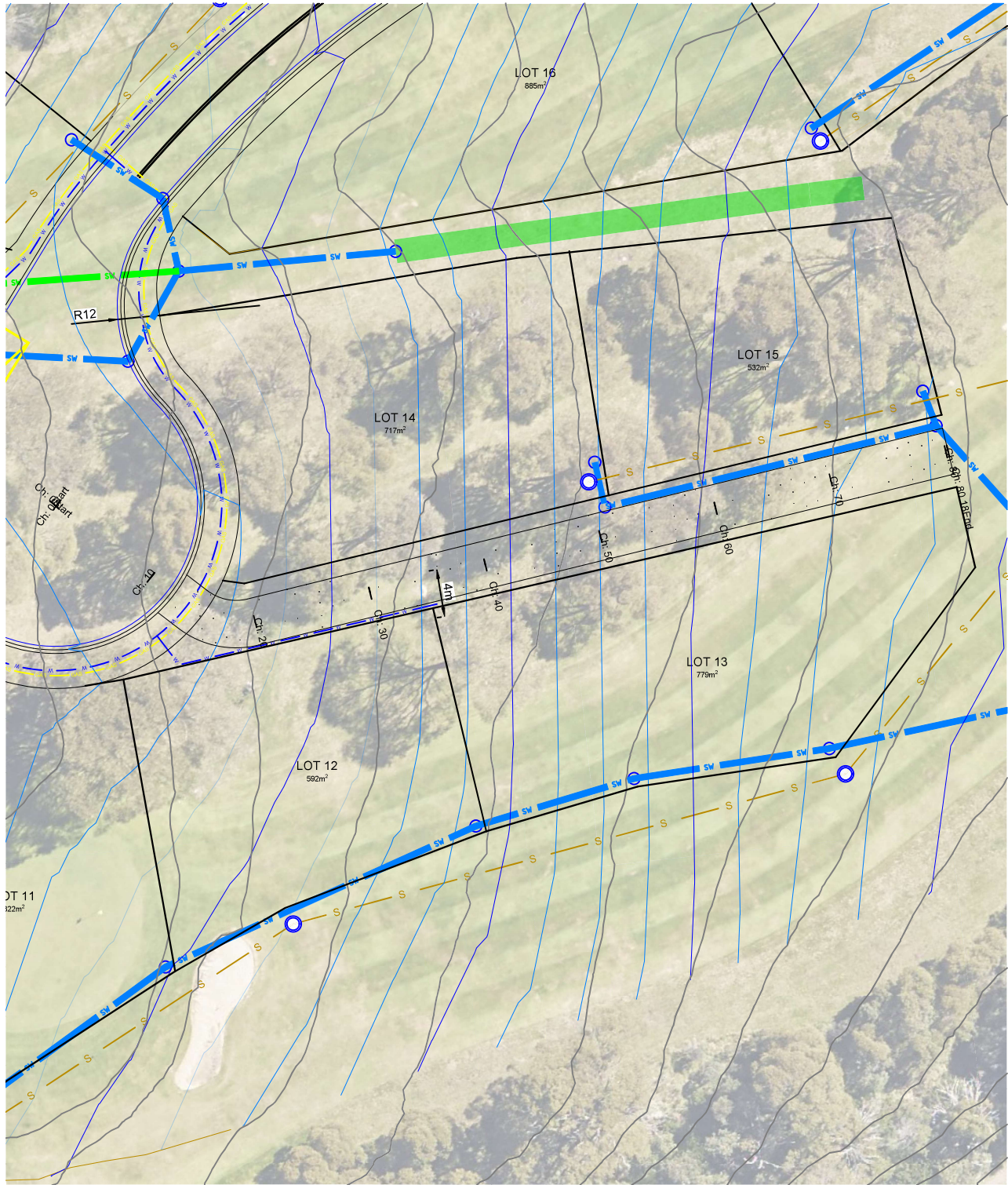


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Culdesac Kerb Return Details

Status			
For Development Approval			
Datum	Scale	Size	Revision
GDA94 / AHD	1:500	A3	
Drawing Number		Sheet	Revision
U-183		22 of 45	K



Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Thredbo Golf Course Subdivision
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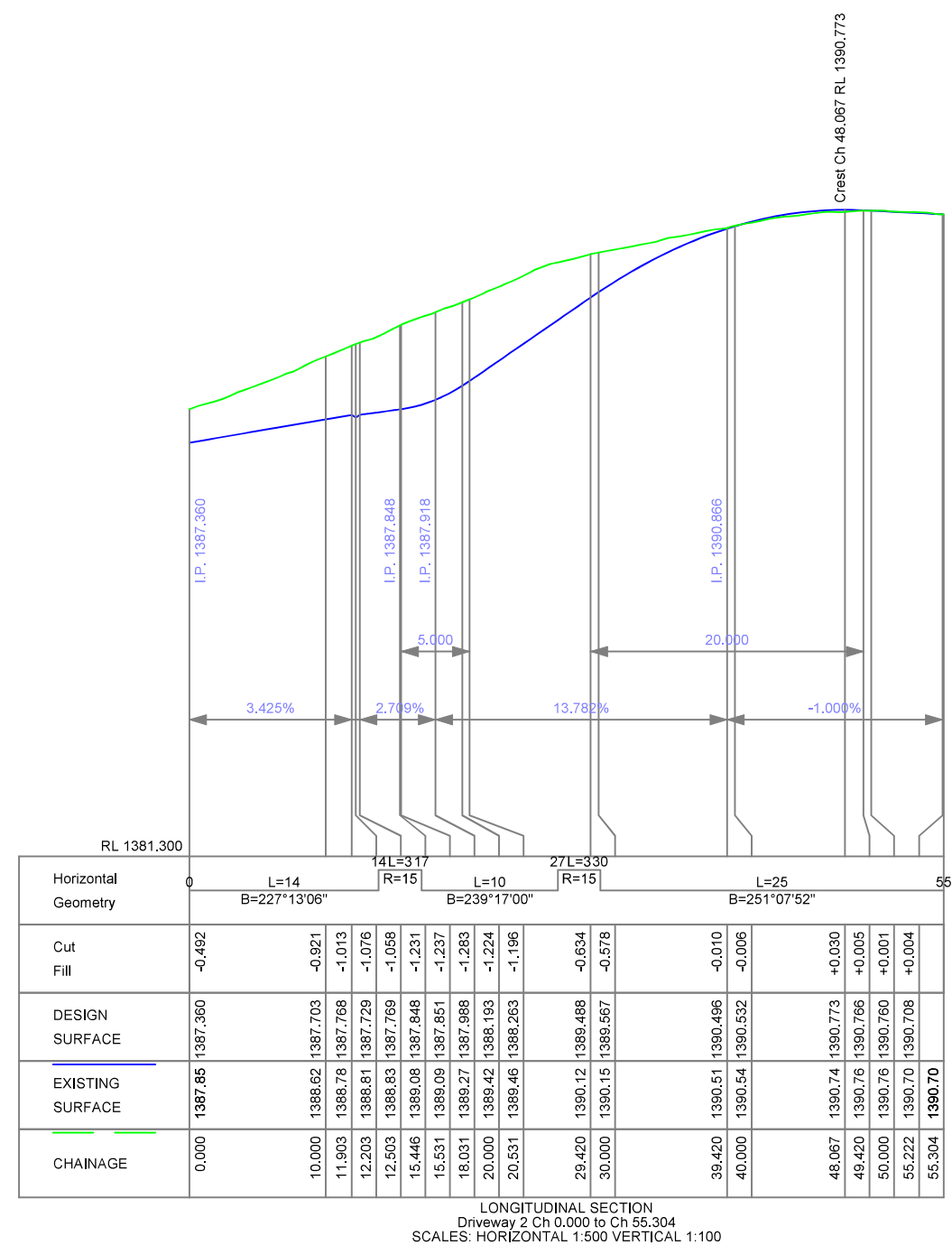
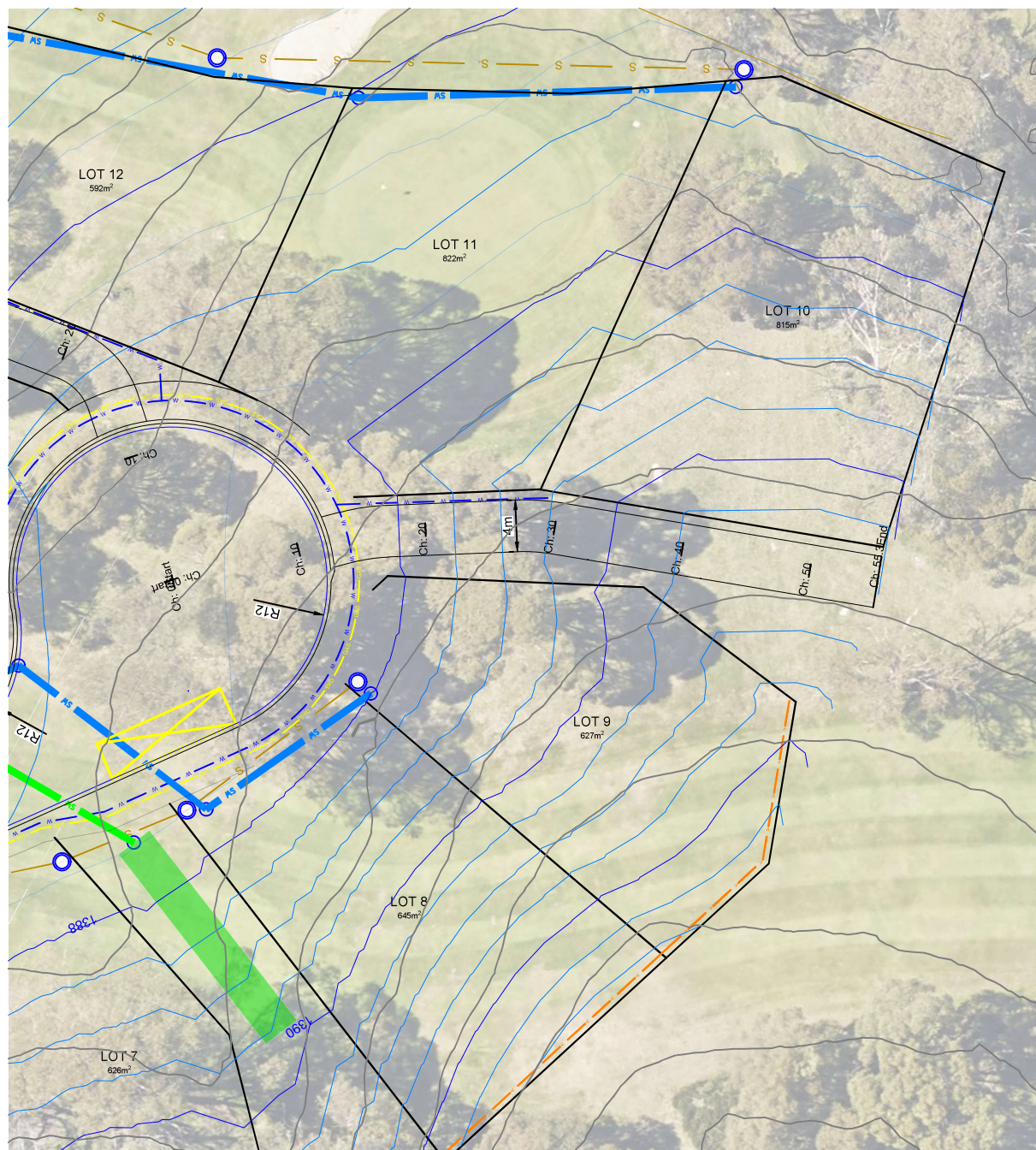
Client: Kosciuszko Thredbo Pty Ltd

Driveway 1 Longitudinal Section

Status: For Development Approval

Datum: GDA94 / AHD Scale: 1:500 Size: A3

Drawing Number: U-183 Sheet: 23 of 45 Revision: K



Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Thredbo Golf Course Subdivision

Thredbo Village NSW

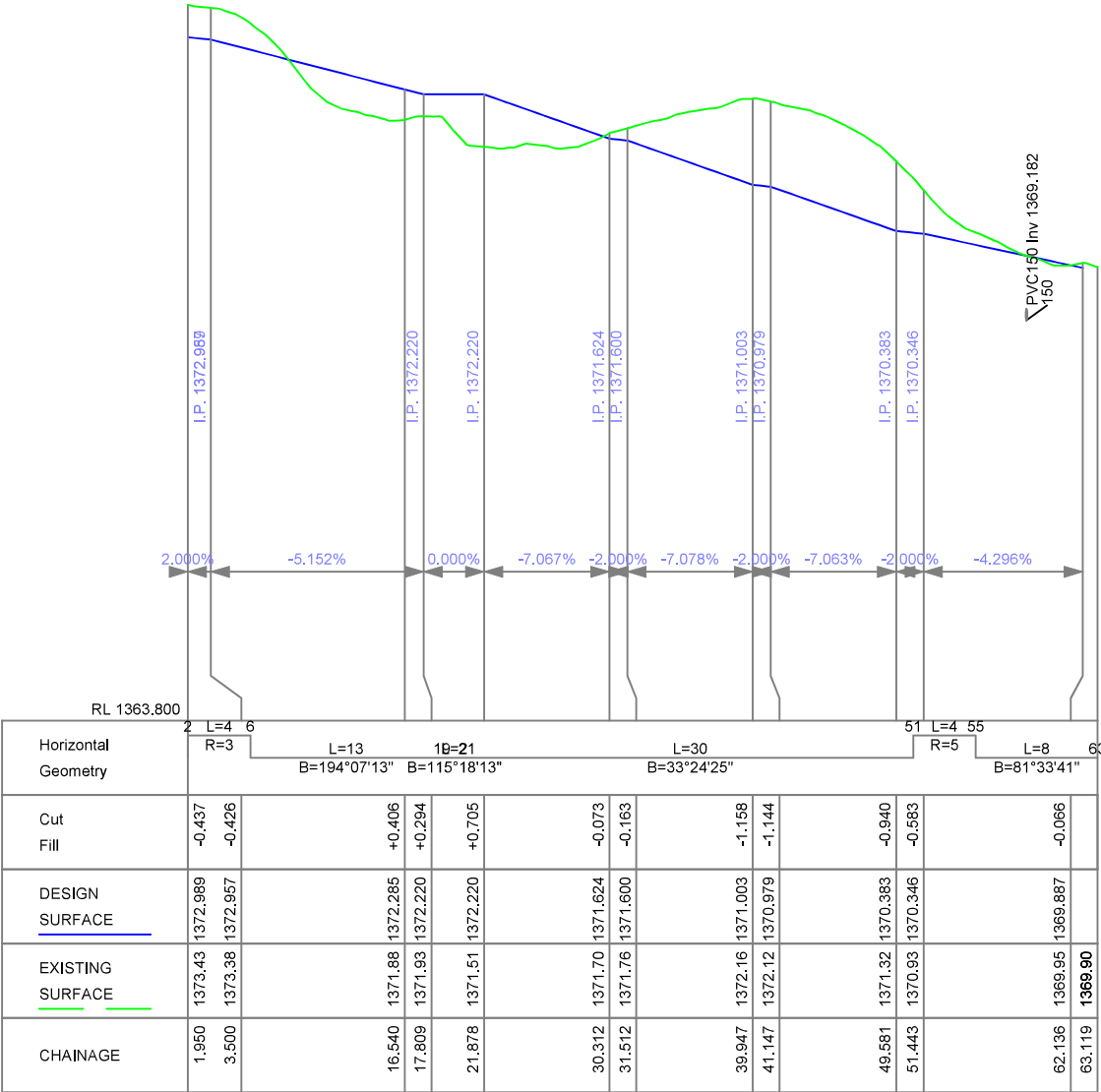
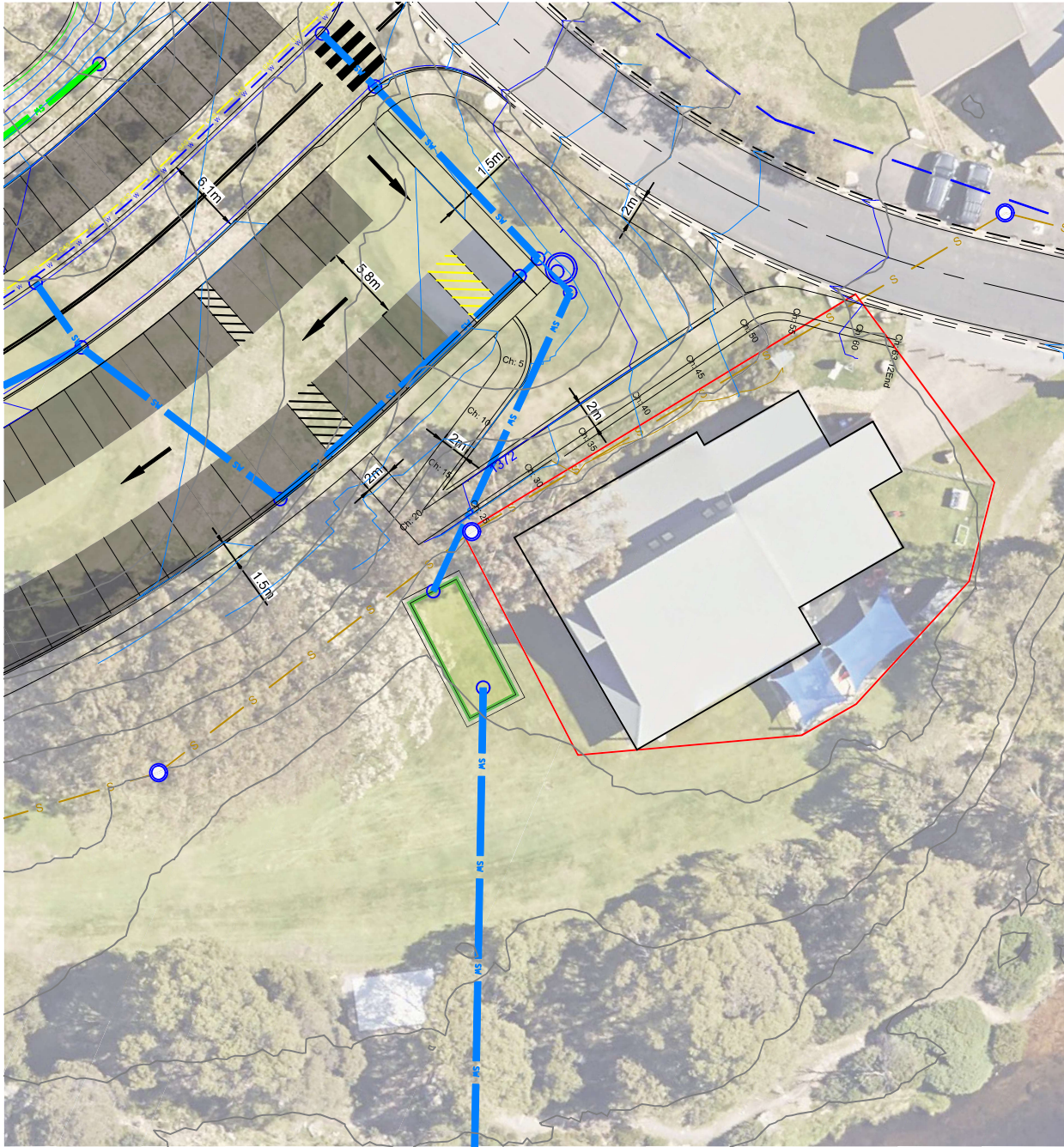


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Client: Kosciuszko Thredbo Pty Ltd

Driveway 2 Longitudinal Section

Status	For Development Approval		
Date	GDA94 / AHD	Scale	1:500
		Size	A3
Drawing Number	U-183	Sheet	24 of 45
		Revision	K



Horizontal Geometry	2	L=4	6		L=13	10=21	L=30	51	L=4	55	L=8	63
	R=3				B=194°07'13"	B=115°18'13"	B=33°24'25"				B=81°33'41"	
Cut	-0.437			+0.406								
Fill	-0.426			+0.294								-0.066
DESIGN SURFACE	1373.43	1372.989	1372.957	1372.285	1372.220	1372.220	1371.624	1371.600	1371.003	1370.979	1370.383	1370.346
EXISTING SURFACE	1373.43	1373.38	1373.38	1371.88	1371.93	1371.51	1371.70	1371.76	1372.16	1372.12	1371.32	1370.93
CHAINAGE	1.950	3.500		16.540	17.809	21.878	30.312	31.512	39.947	41.147	49.581	51.443

LONGITUDINAL SECTION
GR-NEW Accessible Path Ch 1.950 to Ch 63.119
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

Rev	Date	Description
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F	04/07/24	Amended as per DPE Requirements (50% Issue)

Thredbo Golf Course Subdivision
Thredbo Village NSW



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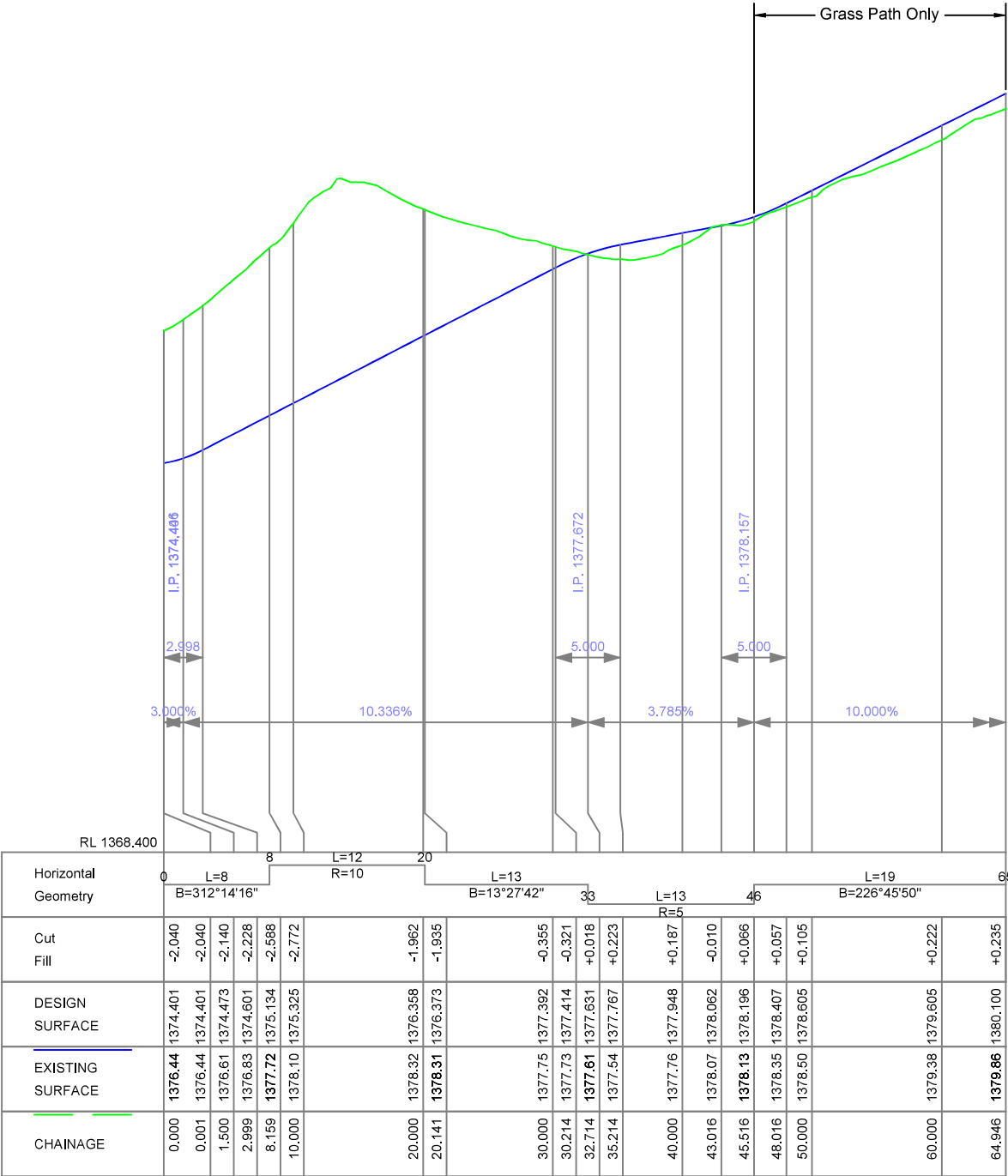
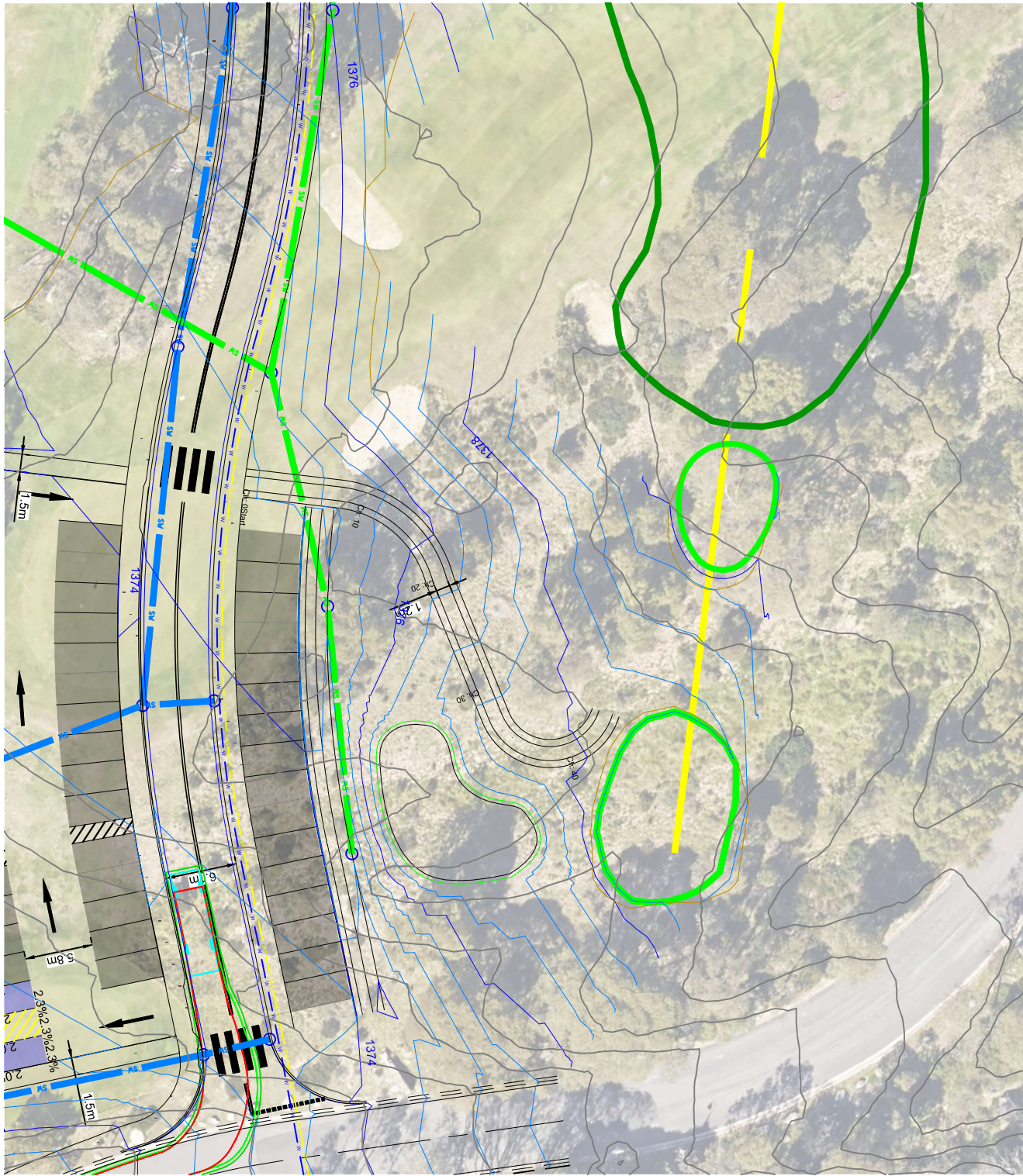
Client: Kosciuszko Thredbo Pty Ltd

Accessible Path to Community
Centre

Status: For Development Approval

Datum: GDA94 / AHD Scale: 1:500 Size: A3

Drawing Number: U-183 Sheet: 25 of 45 Revision: K



LONGITUDINAL SECTION
GR-1st Tee Path Ch 0.000 to Ch 64.946
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

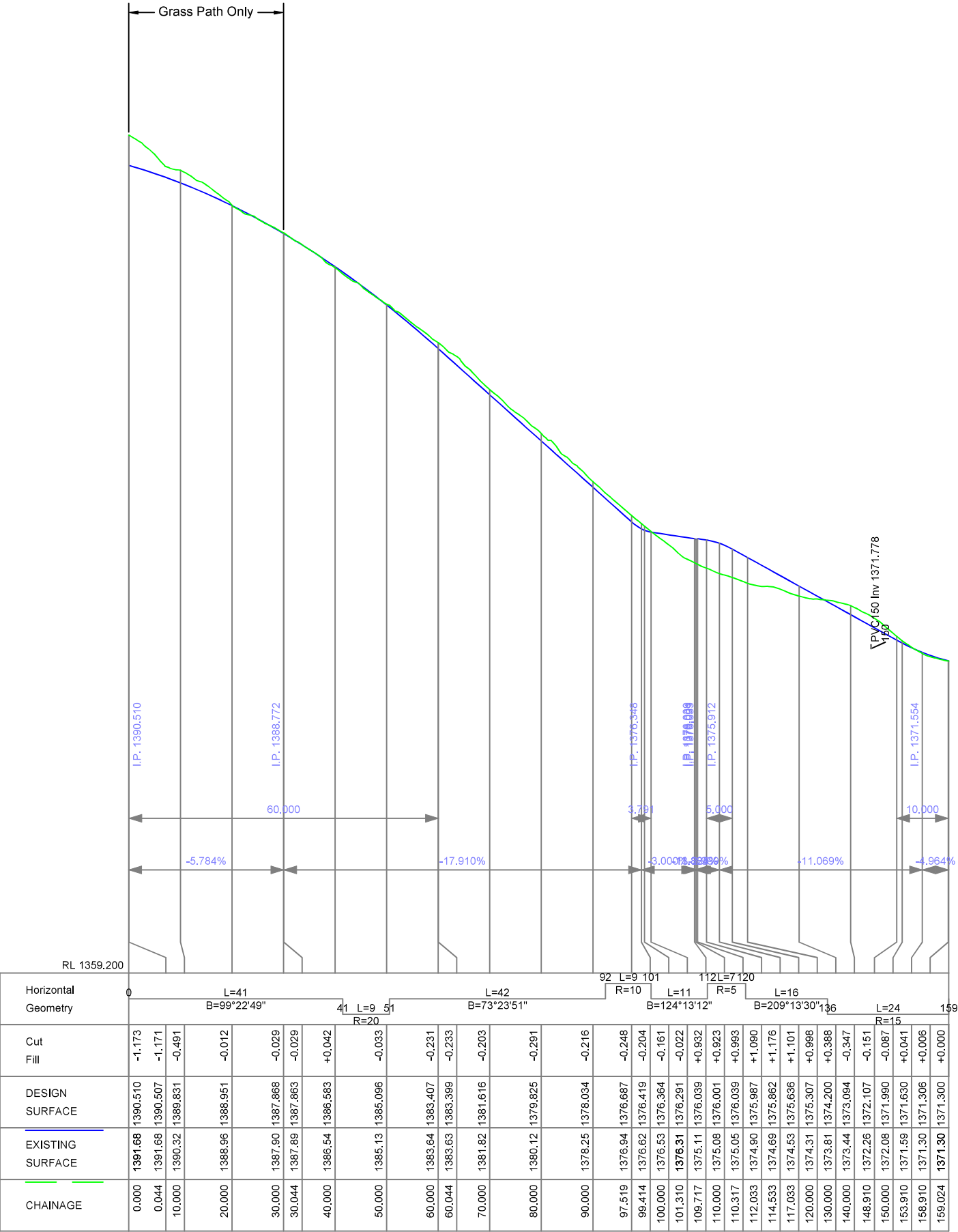
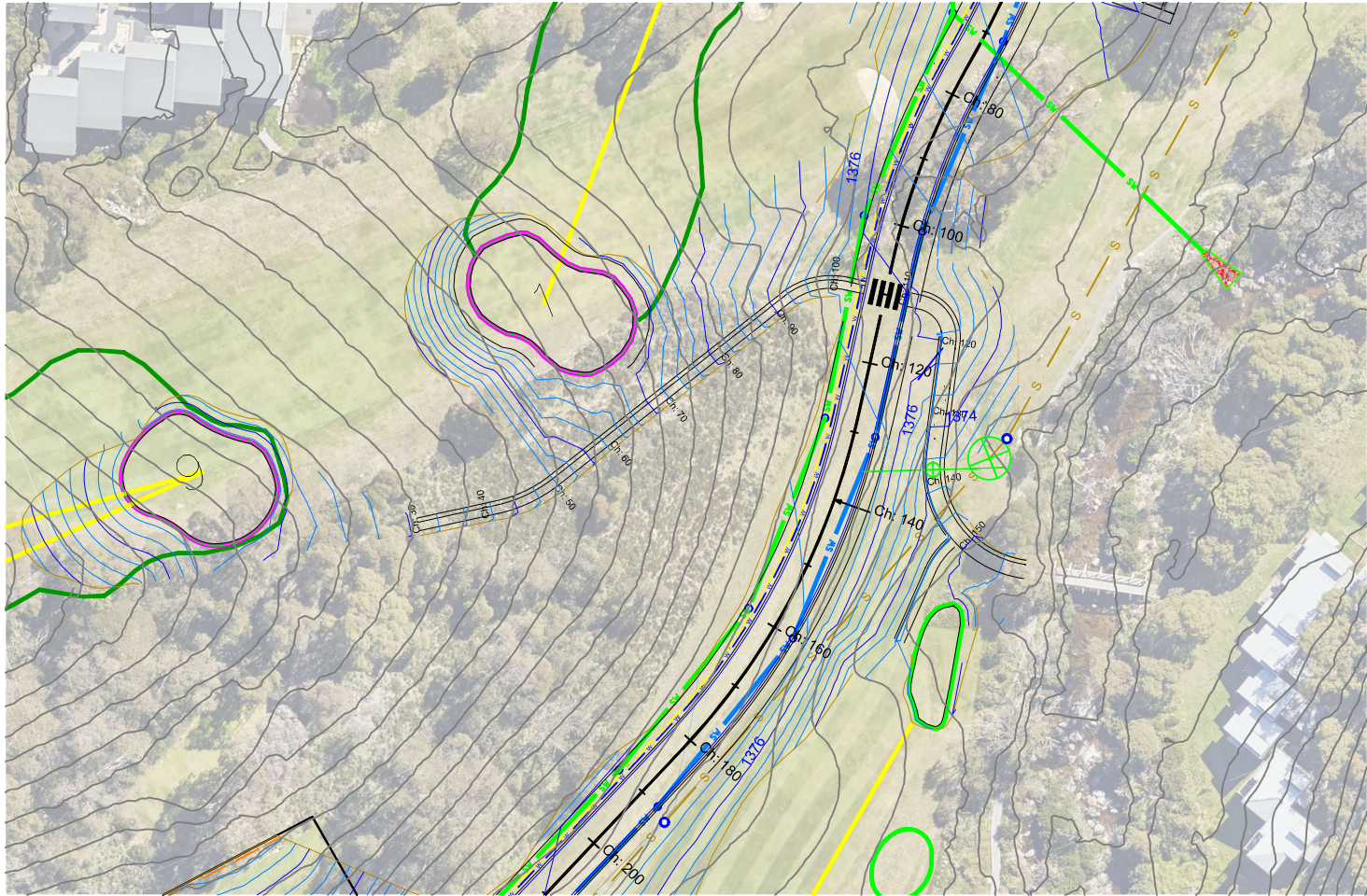
Rev	Date	Description
K	8/9/25	Revised Lot Layout
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I	22/01/25	Amended as per Kosciuszko Thredbo Comments
H	28/08/24	Amended as per DPE Requirements (100% Issue)
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Client: Kosciuszko Thredbo Pty Ltd			
1st Tee Path		Status: For Development Approval	
		Datum: GDA94 / AHD	Scale: 1:500
		Sheet: U-183	Size: A3
		26 of 45	Revision: K



LONGITUDINAL SECTION
GR-9th Green to 2nd Tee Ch 0,000 to Ch 159,024
SCALES: HORIZONTAL 1:1000 VERTICAL 1:200

Rev	Date	Description
K	8/9/25	Revised Lot Layout
J	7/02/25	Amended as per Kosciuszko Thredbo Comments 31/1/25
I	22/01/25	Amended as per Kosciuszko Thredbo Comments
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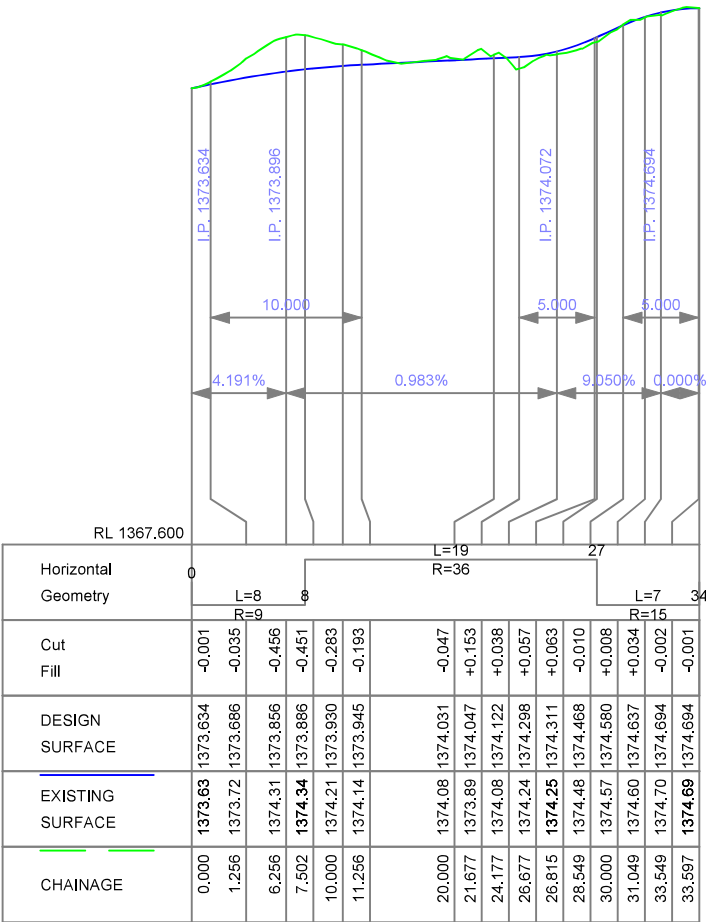
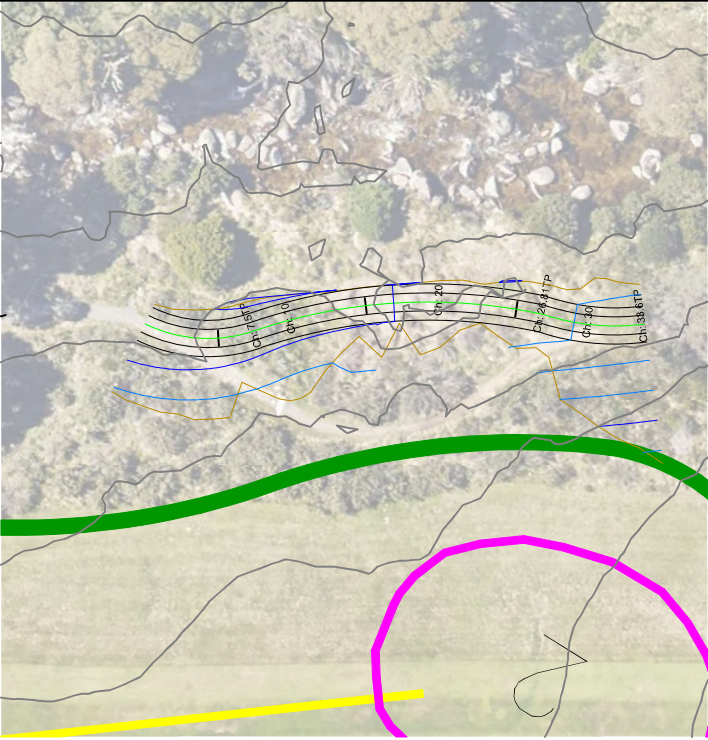
Client: Kosciuszko Thredbo Pty Ltd

9th Green to 2nd Tee Path

Status: For Development Approval

Datum: GDA94 / AHD Scale: 1:1000 Size: A3

Drawing Number: U-183 Sheet: 27 of 45 Revision: K



LONGITUDINAL SECTION
Path 2nd Green Ch 0.000 to Ch 33.597
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

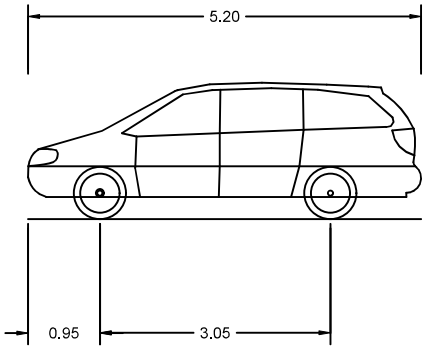
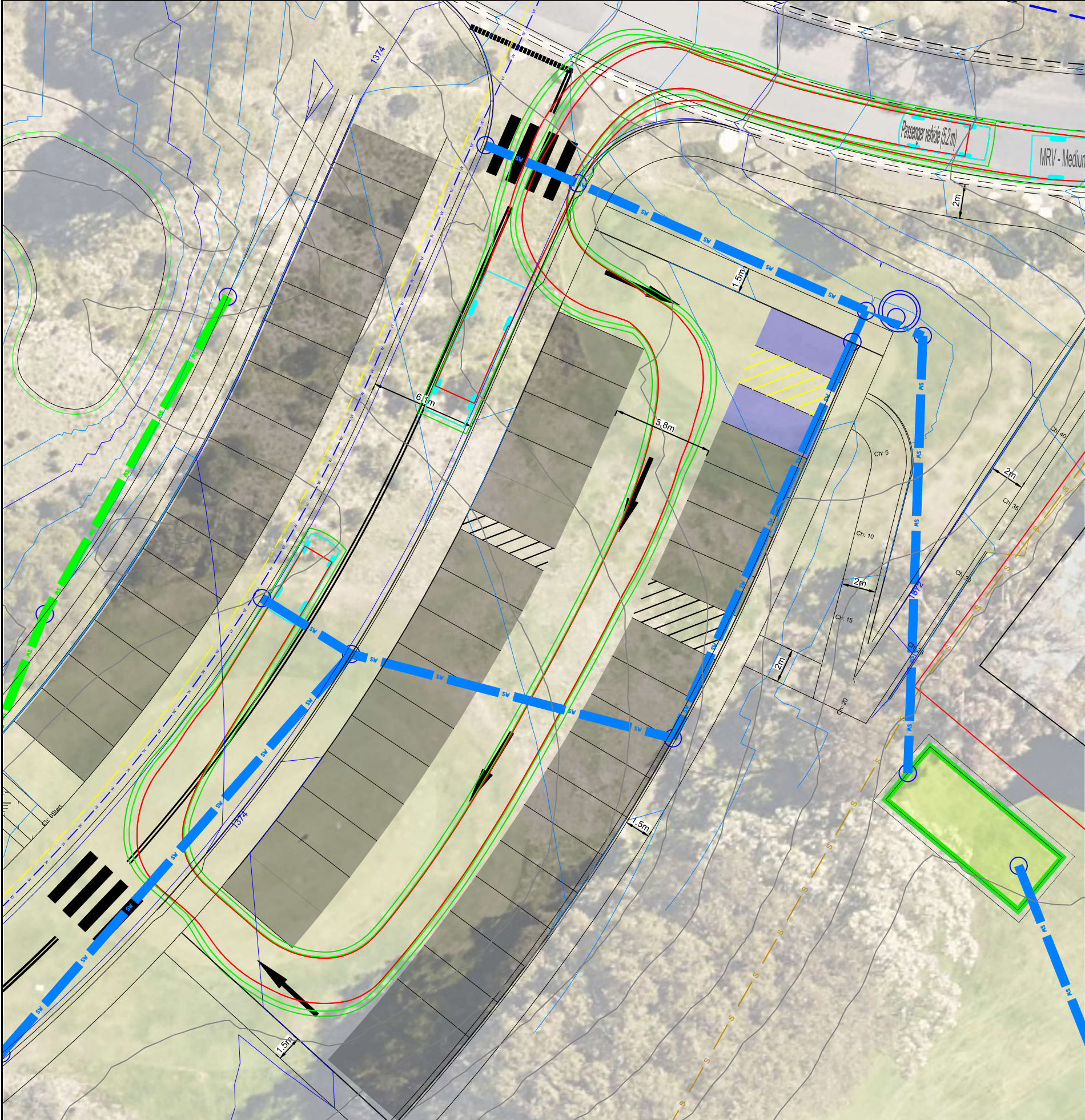
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Client: Kosciuszko Thredbo Pty Ltd			
Path Realignment at New 2nd Green		Status: For Development Approval	
		Datum: GDA94 / AHD	Scale: AS SHOWN
		Sheet: U-183	Revision: K



Passenger vehicle (5.2 m)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.804m
Min Body Ground Clearance	0.295m
Track Width	1.840m
Lock-to-lock time	4.00s
Kerb to Kerb Turning Radius	6.300m

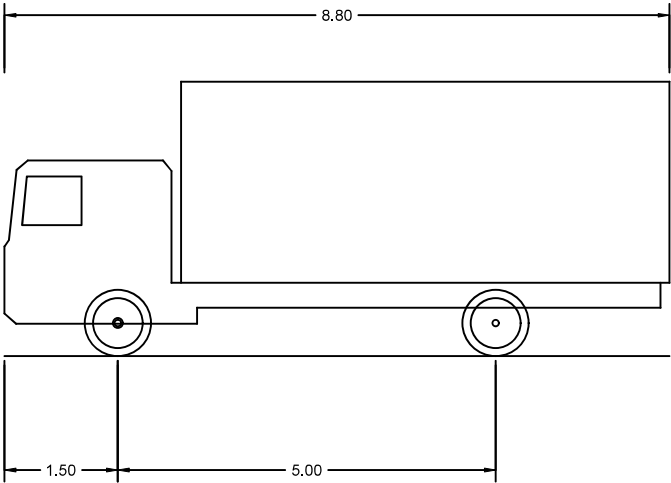
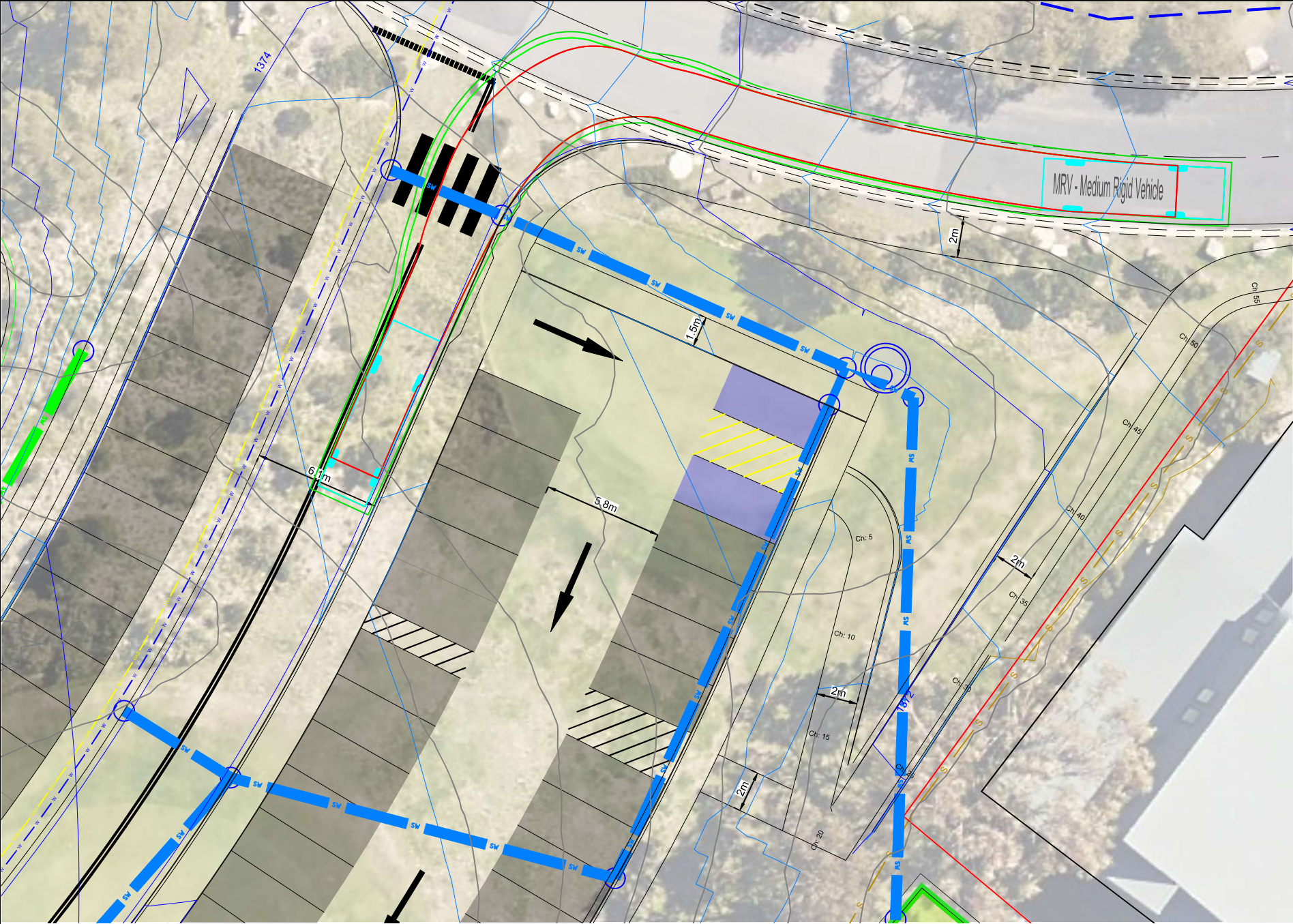
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Client: Kosciuszko Thredbo Pty Ltd			
Status: For Development Approval			
Drawing Number: GDA94 / AHD		Scale: 1:250	Size: A3
U-183		Sheet: 30 of 45	Revision: K



MRV - Medium Rigid Vehicle	
Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Kerb to Kerb Turning Radius	9.000m

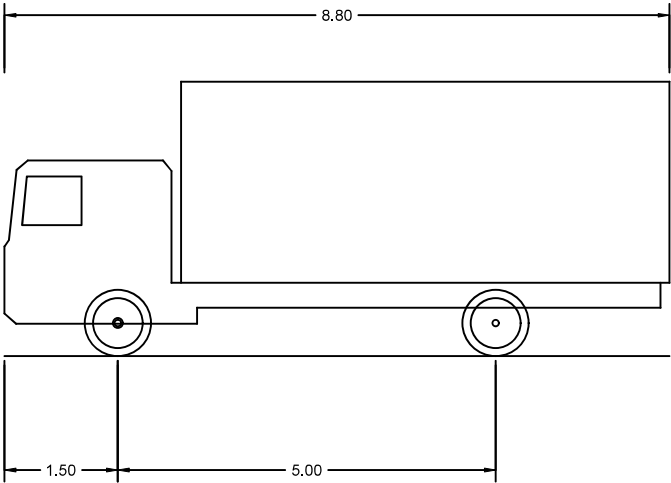
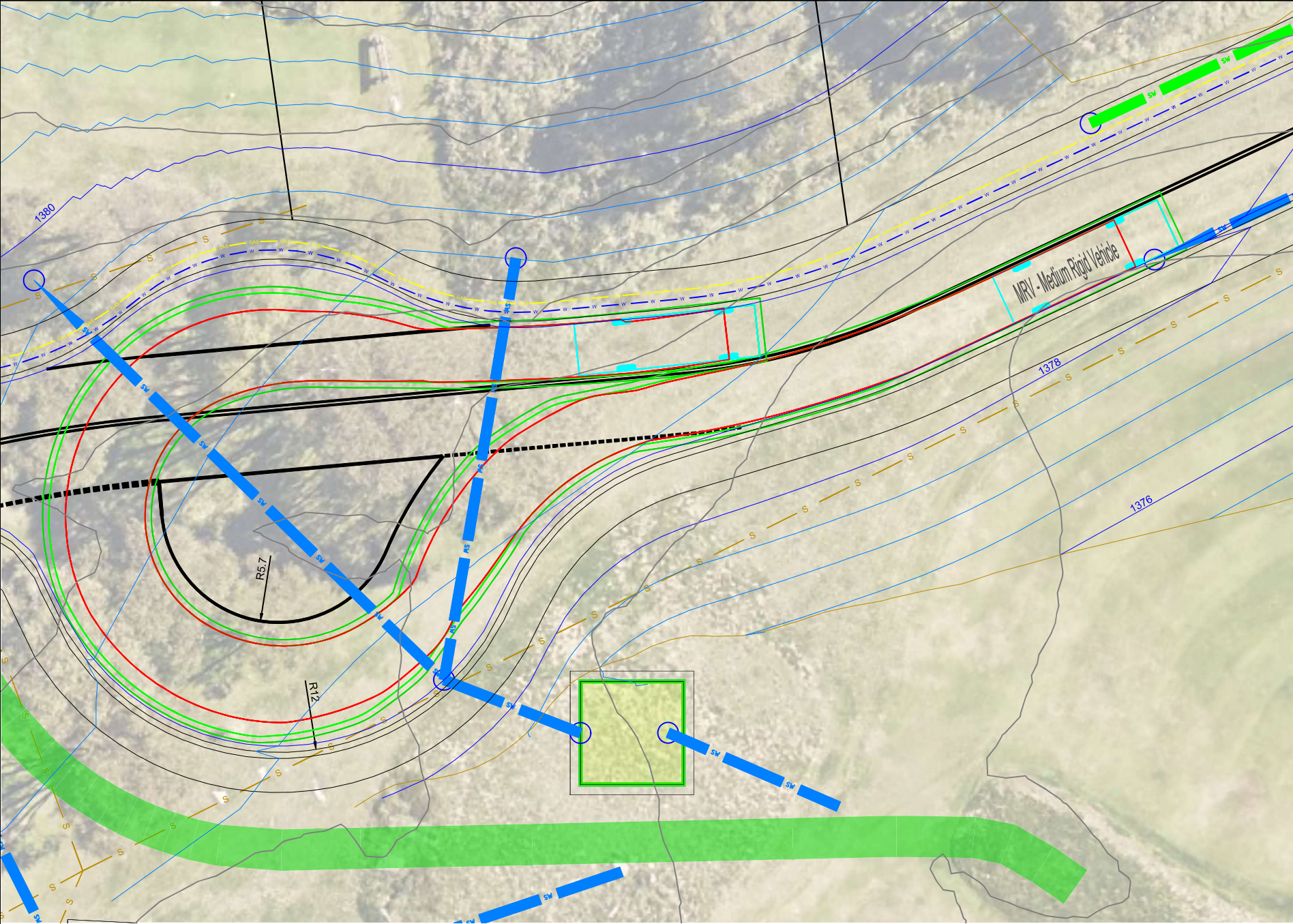
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
8.8m Service Vehicle / Medium Rigid Vehicle Swept Path Entry onto Road 1		Datum: GDA94 / AHD	Scale: 1:250
Drawing Number: U-183		Sheet: 31 of 45	Revision: K



MRV - Medium Rigid Vehicle
Overall Length 8.800m
Overall Width 2.500m
Overall Body Height 3.633m
Min Body Ground Clearance 0.428m
Track Width 2.500m
Lock-to-lock time 4.00s
Kerb to Kerb Turning Radius 9.000m

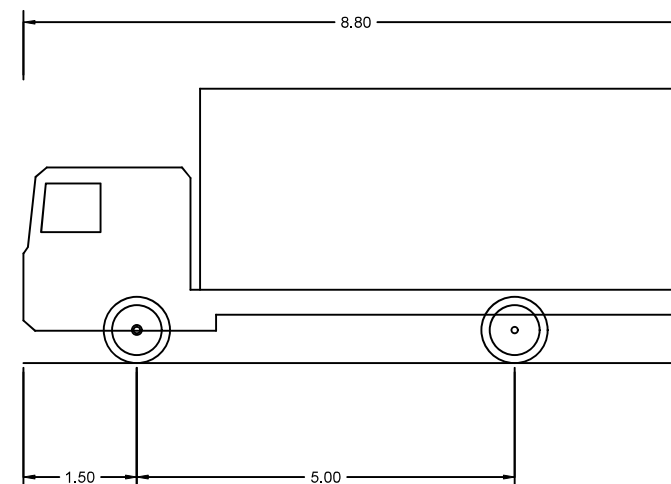
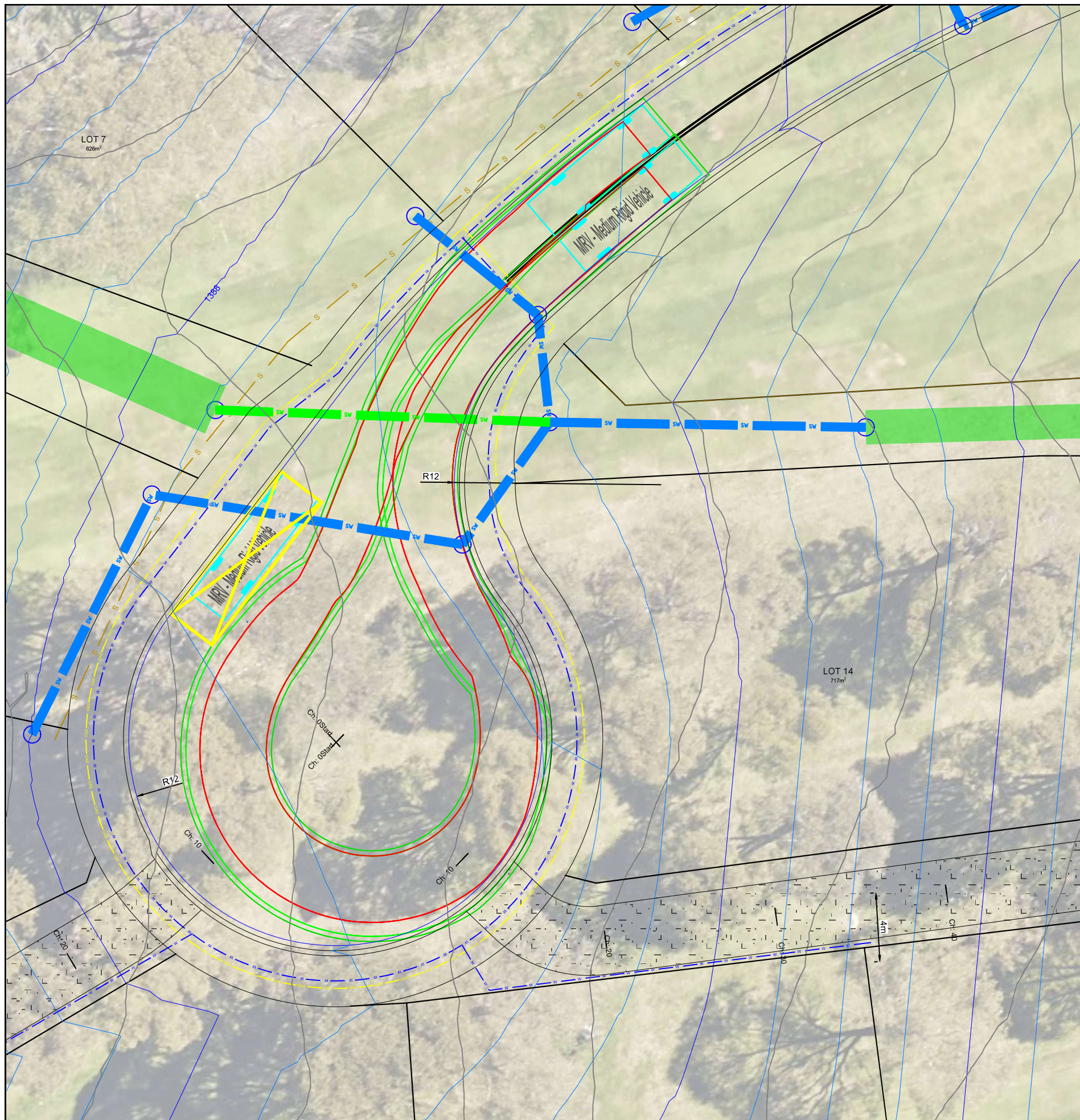
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
8.8m Service Vehicle / Medium Rigid Vehicle Swept Path through U-Turn Bay		Datum: GDA94 / AHD	Scale: 1:250
		Sheet: 32 of 45	Size: A3
Drawing Number: U-183		Revision: K	



MRV - Medium Rigid Vehicle	
Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Kerb to Kerb Turning Radius	9.000m

[illegible]

Thredbo Golf Course Subdivision

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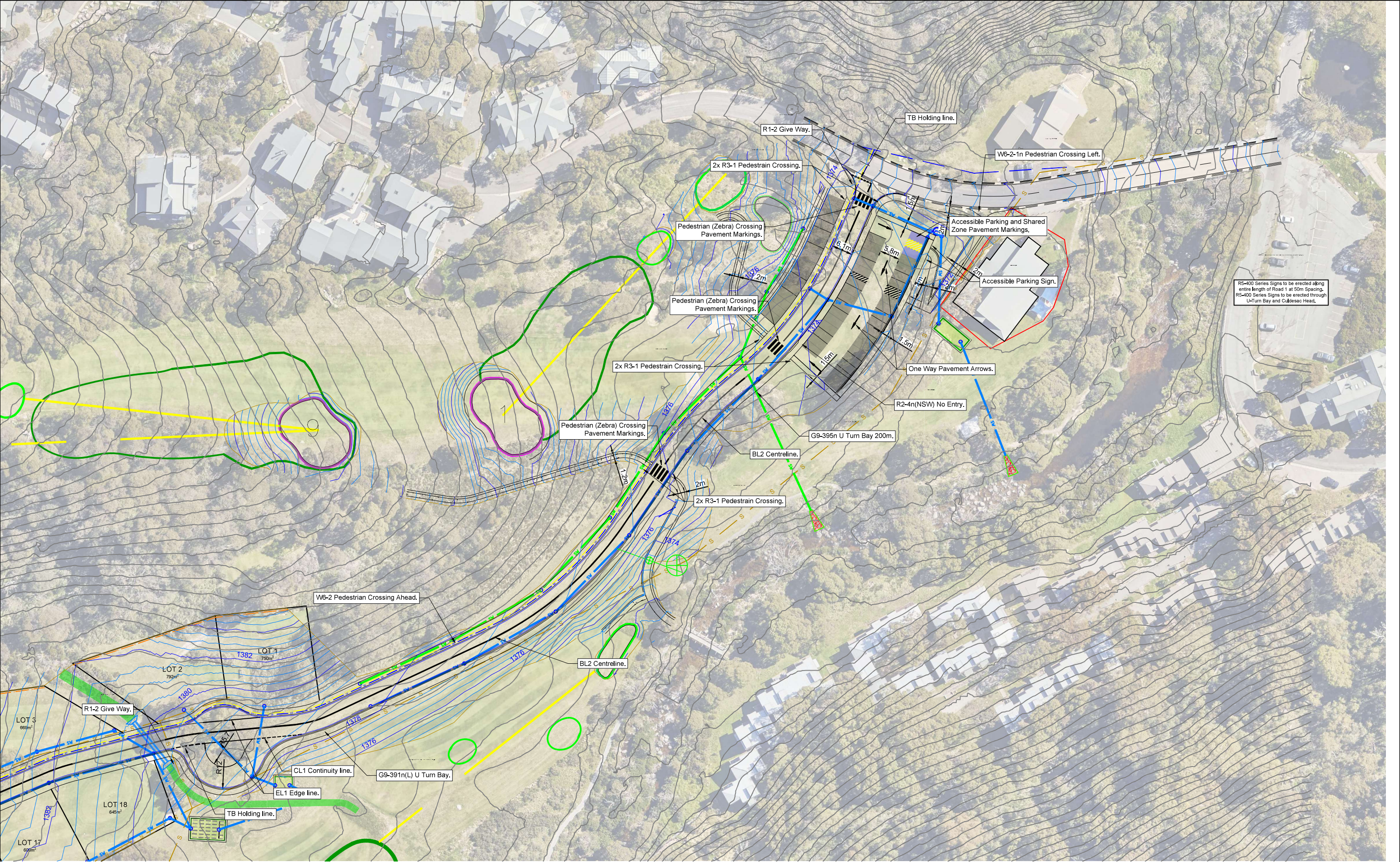
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Client: Kosciuszko Thredbo Pty Ltd

8.8m Service Vehicle / Medium
Rigid Vehicle Swept Path through
Culdesac

Status	For Development Approval
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Datum	Scale	Size
GDA94 / AHD	1:250	A3
Drawing Number	Sheet	Revision
U-183	33 of 45	K



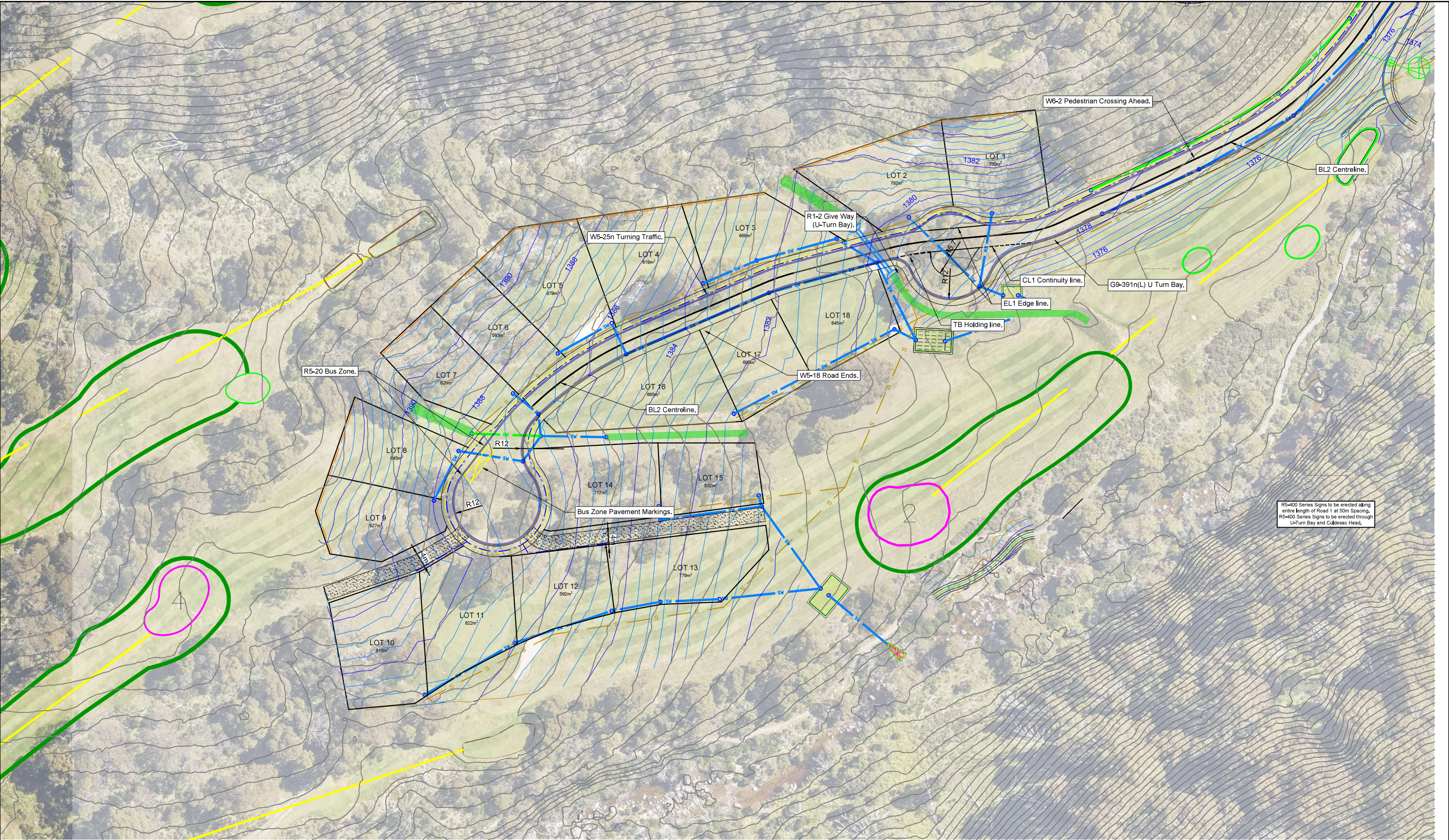
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Signs and Lines Plan 1		Datum: GDA94 / AHD	Scale: 1:1000
U-183		Sheet: 34 of 45	Revision: K



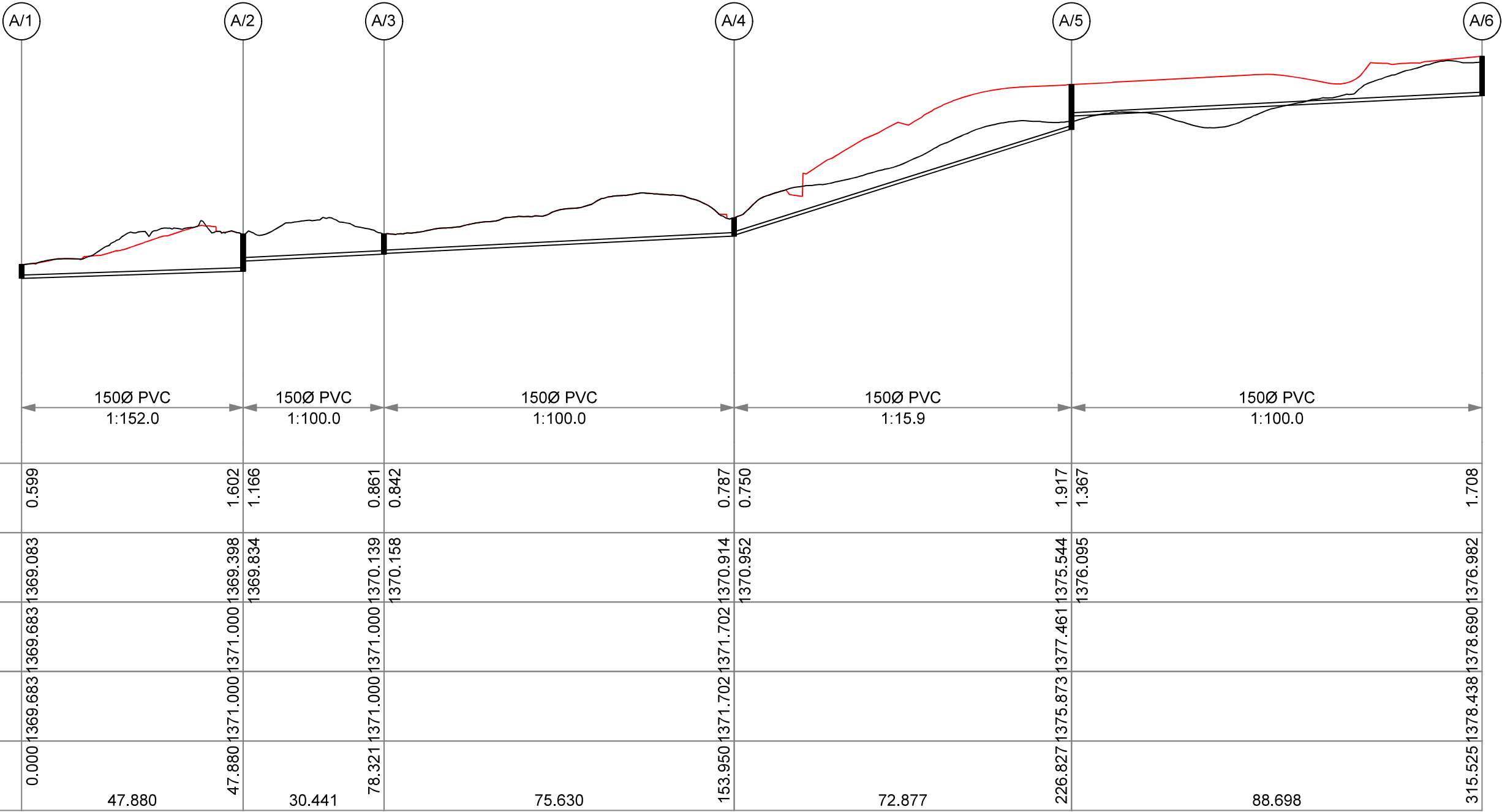
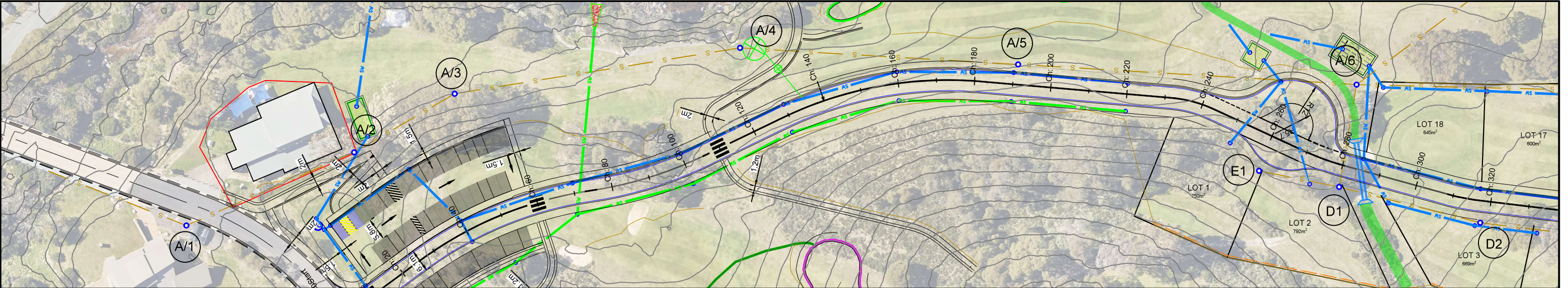
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Drawing Number: U-183		Scale: 1:1000	Size: A3
Sheet: 35 of 45		Revision: K	



SEWER LONGITUNDINAL SECTION FOR LINE 1

Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Client: Kosciuszko Thredbo Pty Ltd

Sewer Long Section - Sheet 1

Status: For Development Approval

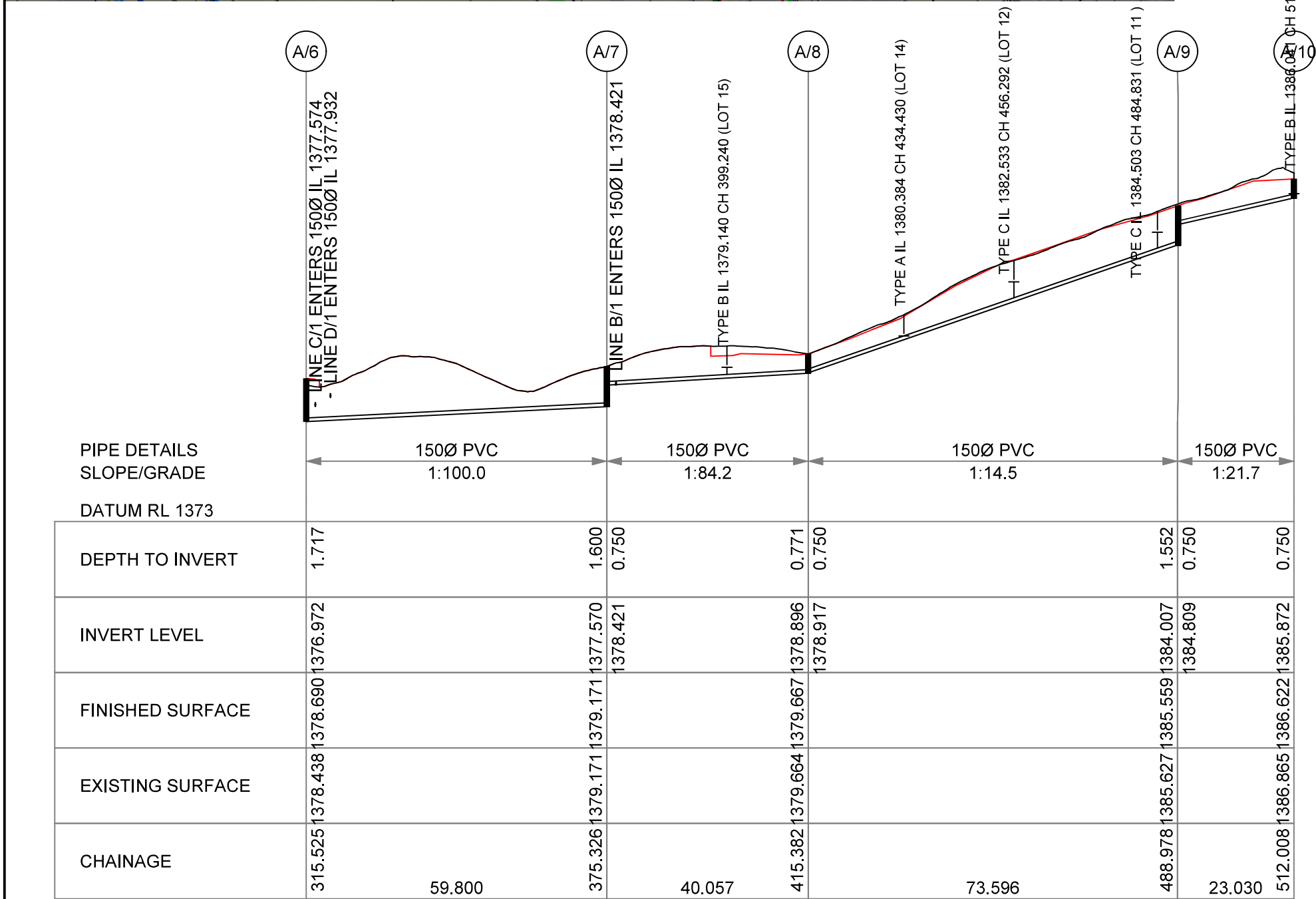
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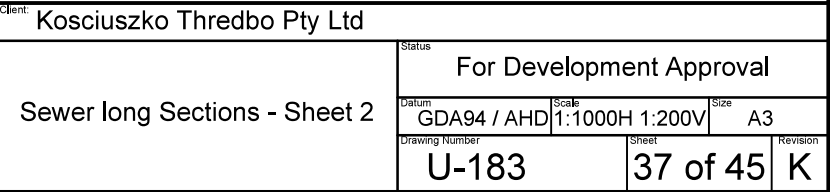
Size: A3

Sheet: 36 of 45

Revision: K



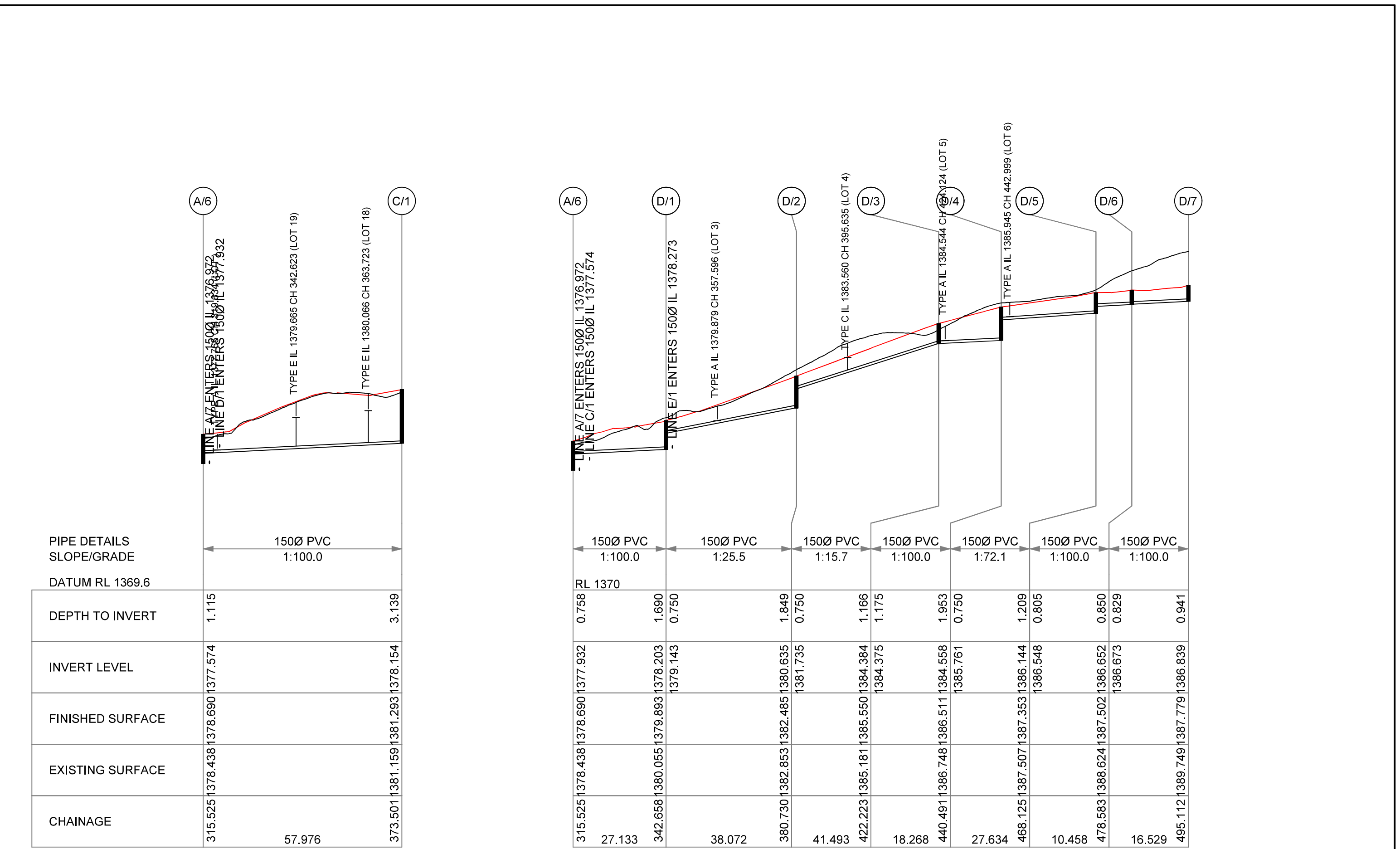
SEWER LONGITUNDINAL SECTION FOR LINE 2



Thredbo Golf Course Subdivision
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SEWER LONGITUNDINAL SECTION FOR LINE 3

SEWER LONGITUNDINAL SECTION FOR LINE 4

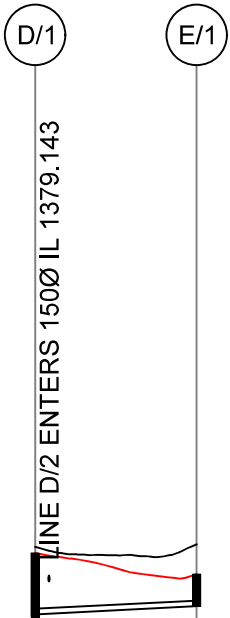
Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Client: Kosciuszko Thredbo Pty Ltd		Status: For Development Approval	
Sewer long Sections - Sheet 3	Datum: GDA94 / AHD		Scale: 1:1000H 1:200V
	Drawing Number: U-183		Sheet: 38 of 45
		Revision: K	



PIPE DETAILS
SLOPE/GRADE

150Ø PVC
1:100.0

DATUM RL 1370.3

DEPTH TO INVERT	1.620	0.848
INVERT LEVEL	1378.273	1378.486
FINISHED SURFACE	1379.893	1379.335
EXISTING SURFACE	1380.055	1380.125
CHAINAGE	342.658 21.374	364.032

SEWER LONGITUNDINAL SECTION FOR LINE 5

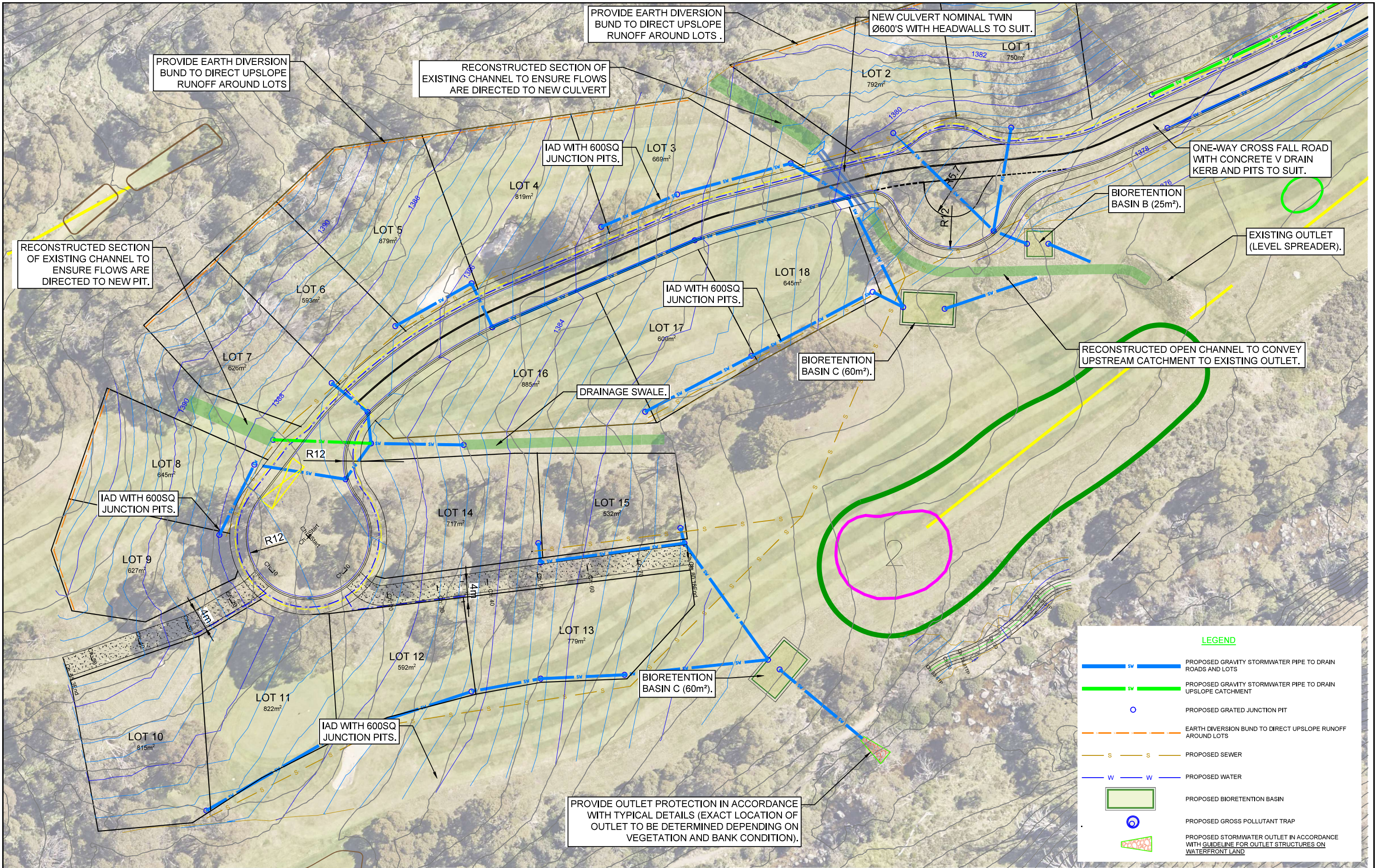
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Sewer Long Sections - Sheet 4	Datum: GDA94 / AHD	Scale: 1:1000H 1:200V	Size: A3
	Drawing Number: U-183	Sheet: 39 of 45	Revision: K



Rev	Date	Description
K	8/9/25	Revised Lot Layout
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Thredbo Golf Course Subdivision
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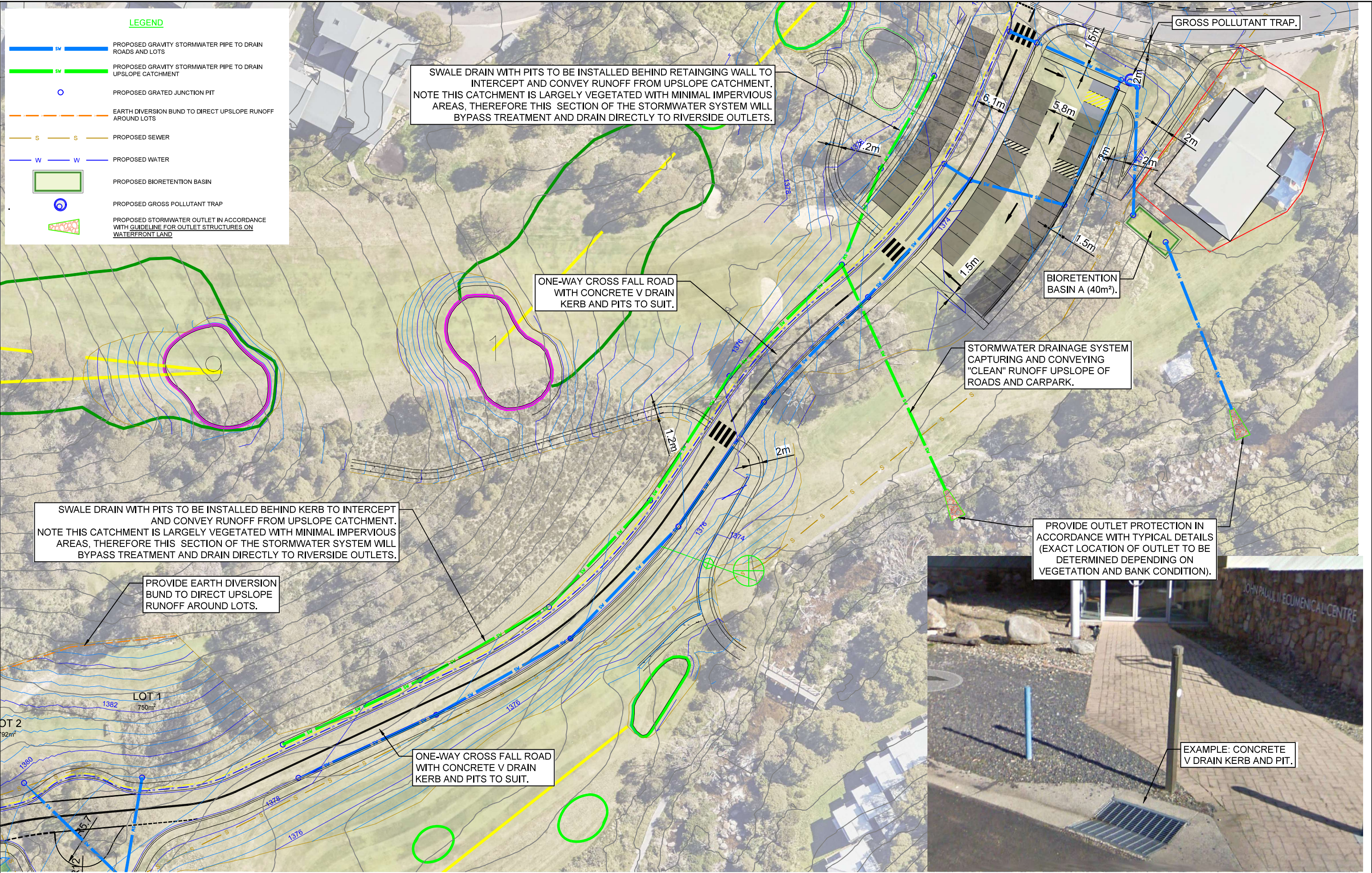
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southeast
engineering + environmental
SOUTHEAST ENGINEERING + ENVIRONMENTAL
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MORUYA NSW 2537
PH: 0427 886 623

Client: Kosciuszko Thredbo Pty Ltd

Stormwater Management
General Arrangement (1 of 2)

For Development Approval			
Status	Datum	Scale	Size
	GDA94 / AHD	1:1000	A3
Drawing Number	Sheet	Revision	
U-183	40 of 45	K	



Rev	Date	Description
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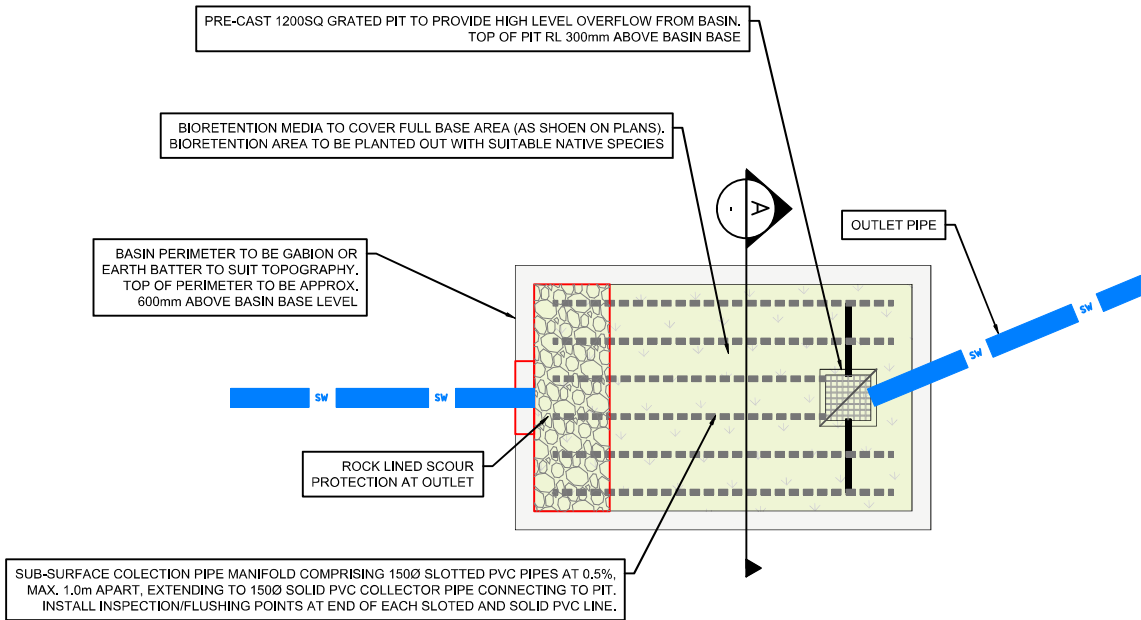
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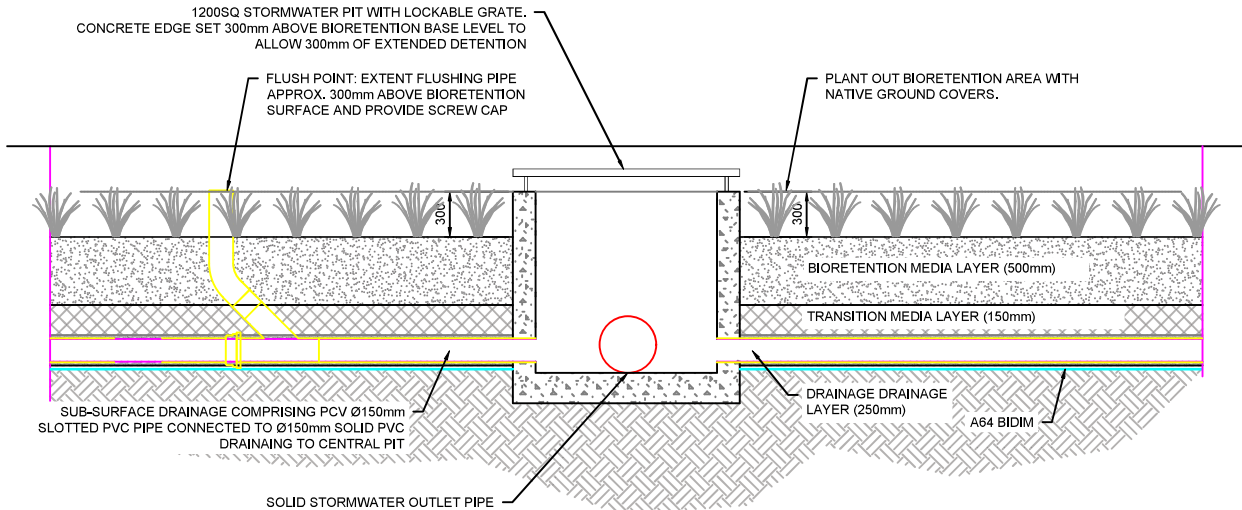
SOUTHEAST ENGINEERING + ENVIRONMENTAL
PO Box 96
MORUYA NSW 2537
PH: 0427 886 623

Client: Kosciuszko Thredbo Pty Ltd	Status: For Development Approval
Stormwater Management General Arrangement (1 of 2)	Datum: GDA94 / AHD Scale: 1:1000 Size: A3
	Sheet: 41 of 45 Revision: K
	U-183



BIORETENTION BASIN (TYP.)

NOT TO SCALE



BIORETENTION BASIN (TYPICAL CROSS SECTION.)

NOT TO SCALE

CONSTRUCTION SEQUENCING

- CONSTRUCTION SEQUENCING INCLUDES THE FOLLOWING:
- DIVERT EXTERNAL CATCHMENT RUNOFF AROUND THE STAGE BEING CONSTRUCTED THROUGH THE PROVISION OF STABLE FLOW PATHS;
 - CONSTRUCT SEDIMENT BASIN/S AT LOW POINTS OF SITE (THIS MAY INCLUDE THE BIORETENTION BASIN FOOTPRINTS IN THE BULKED OUT PHASE);
 - CONSTRUCT TRUNK DRAINAGE;
 - ONCE TRUNK DRAINAGE IS COMPLETE DIVERT FLOWS FROM UPSTREAM INTO NEW TRUNK DRAINAGE;
 - COMMENCE ACCESS ROAD CONSTRUCTION AND BULK EARTHWORKS;
 - FOLLOWING 80% COMPLETION OF CONSTRUCTION (INCLUDING BULK EARTHWORKS, ROADS AND LOT SHAPING) BIORETENTION SYSTEM CAN BE FORMALISED WITH FILTER MEDIA AND VEGETATION AS REQUIRED;
 - FINALISE ROAD CONSTRUCTION AND BULK EARTHWORKS AND MAKE GOOD.

BIORETENTION SYSTEM

THE PROPOSED BIORETENTION SYSTEM FORMS A FUNDAMENTAL PART OF THE TREATMENT TRAIN THAT IMPROVES THE WATER QUALITY OF STORMWATER RUNOFF FROM THE SITE. THE BIORETENTION SYSTEM – CONSISTS OF VEGETATION, A SOIL FILTRATION MEDIA AND SUB-SURFACE DRAINAGE SYSTEM . THERE WILL BE A SMALL DEPTH OF PONDING AT THE SURFACE FOR A NUMBER OF HOURS FOLLOWING RAINFALL HOWEVER THE BIORETENTION SYSTEM WILL APPEAR DRY MOST OF THE TIME.

THE DESIGN OF THE BIORETENTION SYSTEM INCLUDES THE FOLLOWING:

- MINIMUM SURFACE AREA AS SHOWN
- EXTENDED DETENTION = 300mm
- FILTER MEDIUM DEPTH = 0.5m
- TRANSITION LAYER DEPTH = 0.15m
- DRAINAGE LAYER DEPTH = 0.25m

BIORETENTION-DRAINAGE PIPE SPECIFICATION

SLOTTED DRAINAGE PIPES (NO FILTER SOCK AND NOT AG LINE) ARE TO BE Ø150mm SLOTTED PVC-U PIPES WITH MINIMUM INLET AREA TO LENGTH RATIO OF 1000sqmm/m OF PIPE

SLOTTED DRAINAGE PIPES ARE TO HAVE A MAXIMUM SPACING OF 1.5 METRE, SLOTTED DRAINAGE PIPES ARE TO BE FITTED WITH STANDARD UNDER-DRAINAGE INSPECTION/CLEANOUT FITTINGS (REFER FLUSHING POINTS BELOW) AT THE END OF PIPES AND AT JUNCTIONS TO ALLOW FOR THE REMOVAL OF ACCUMULATED FINES WITHIN THE SYSTEM.

CONNECT SLOTTED DRAINAGE PIPES TO THE APPROPRIATE Ø150mm SOLID PVC-U COLLECTION LINE AND DRAIN TO PIT AS SHOWN.

JOINTING: PROVIDE TEES, COUPLINGS OR ADAPTORS AT JUNCTIONS TO AS 2439.1. ALL SLOTTED DRAINAGE PIPES ARE TO BE EMBEDDED IN THE MEDIA AS SHOWN ON DRAWINGS. ALL JUNCTIONS AND CONNECTIONS ARE TO BE SEALED TO PREVENT SOIL MATERIAL ENTERING THE PIPE NETWORK.

FLUSHING POINTS: FLUSHING POINTS ARE TO BE PROVIDED AS SHOWN ON THE DRAWNGS, THE FLUSHING POINTS ARE TO BE CONSTRUCTED OF SOLID Ø100mm PVC-U PIPE, THE 90 DEGREE BEND IS TO BE CONSTRUCTED OF TWO 45 DEGREE BENDS SEPARATED BY A MINIMUM OF 300MM OF SOLID PVC-U.

PROVIDE PVC-U SCREW CAP FOR EACH FLUSH POINT. TOP OF FLUSH POINT TO FINISH MIN. 300mm ABOVE BIORETENTION FINISHED SURFACE LEVEL

BIORETENTION-PLANTING SPECIFICATION

PLANT OUT BIORETENTION AREA WITH NATIVE GROUND COVERS.

BIORETENTION-FILTER MATERIAL SPECIFICATION

FILTER MEDIA HYDRAULIC PROPERTIES
THE FILTER MATERIAL SHALL PREFERABLY BE A "WASHED SAND" OF SILICEOUS OR CALCAREOUS ORIGIN, ONE THAT HAS BEEN MINED AND PROCESSED. NATURAL SOILS OR TOPSOILS ARE NOT USUALLY SUITABLE. SOILS SHALL HAVE THE FOLLOWING MECHANICAL AND PHYSICAL PROPERTIES:

- SATURATED HYDRAULIC CONDUCTIVITY IN THE RANGE OF 100 - 200mm/h. THIS CRITICAL ELEMENT IS TO BE DEMONSTRATED THROUGH LAB TESTING (ASTM-F1815-06).
- PARTICLE SIZE DISTRIBUTION/COMPOSITION REQUIREMENTS:

DESCRIPTION	PROPORTION	GRADING
CLAY AND SILT	<3%	<0.05mm
VERY FINE SAND	5-30%	0.05-0.15mm
FINE SAND	10-30%	0.15-0.25mm
MEDIUM TO COARSE SAND	40-60%	0.25-1.0mm
COARSE SAND	7-10%	1.0-2.0mm
FINE GRAVEL	<3%	2.0-3.4mm

- PH - 6.2-6.8 BEFORE DELIVERY - ADD DOLOMITE AS REQUIRED
- ELECTRICAL CONDUCTIVITY (EC) < 12ds/m

NOTE: FILTER MEDIA SHALL ALSO CONTAIN A SMALL AMOUNT OF ORGANIC MATERIAL (NOT EXCEEDING 5%) TO SUPPORT VEGETATION GROWTH. THE SOURCE OF THE ORGANIC MATERIAL SHALL BE PROVIDED TO COUNCIL FOT APPROVAL AND MUST BE FROM A CLEAN SOURCE, NOT COMPOST.

TRANSITION LAYER
A TRANSITION LAYER IS REQUIRED WHEN THE DRAINAGE LAYER IS FINE GRAVEL. IT IS RECOMMENDED WHEN THE DRAINAGE LAYER IS COARSE SAND. THE TRANSITION LAYER SHOULD BE A SAND/COARSE SAND MATERIAL CONFORMING TO THE GRADING BELOW AND IS GENERALLY APPLIED IN A 100-200mm LAYER.

SIEVE SIZE AS (mm)	% PASSING
0.075	0-3
0.15	0-4
0.3	0-16
0.6	12-40
1.18	40-65
2.36	70-100
4.75	90-100
9.5	100

DRAINAGE LAYER
THE DRAINAGE LAYER IS NORMALLY BETWEEN 200-250mm THICK. SUITABLE MATERIALS INCLUDE A HARD DURABLE AGGREGATE, EG. BASALT, MAY BE IMPORTED WITH MAXIMUM DIAMETER OF 10MM OR FINE GRAVEL IN THE RANGE 4mm - 7mm.

SIEVE SIZE	% RETAINED
>10mm	0
6,0-10,0mm	>70%
2,0-6,0mm	<20%
<2,0mm	0

Rev	Date	Description
K	8/9/25	Revised Lot Layout
J	7/02/25	Amended as per Kosciuszko Thredbo Comments 31/1/25
I	22/01/25	Amended as per Kosciuszko Thredbo Comments
H	28/08/24	Amended as per DPE Requirements (100% Issue)
G	30/07/24	Amended as per DPE Requirements (80% Issue)
F	04/07/24	Amended as per DPE Requirements (50% Issue)

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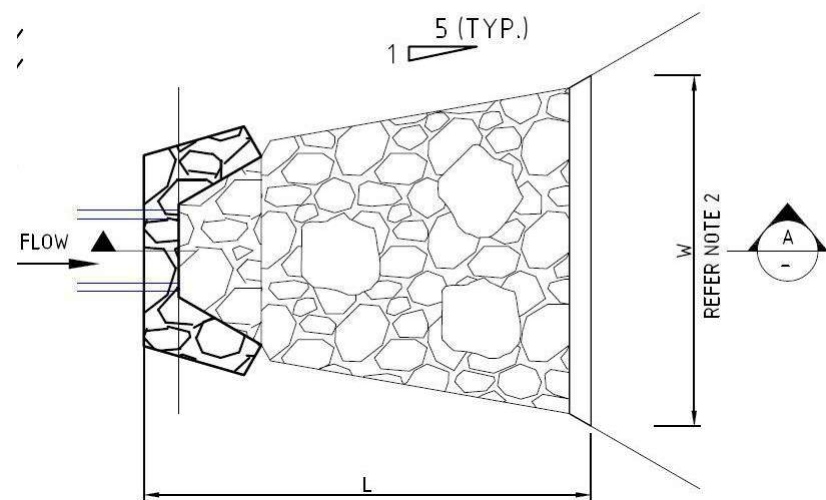
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Client: Kosciuszko Thredbo Pty Ltd			
Stormwater - Typical Details (1 of 2)	Status: For Development Approval		
	Datum: GDA94 / AHD	Scale: 1:1000	Size: A3
	Drawing Number: U-183	Sheet: 42 of 45	Revision: K

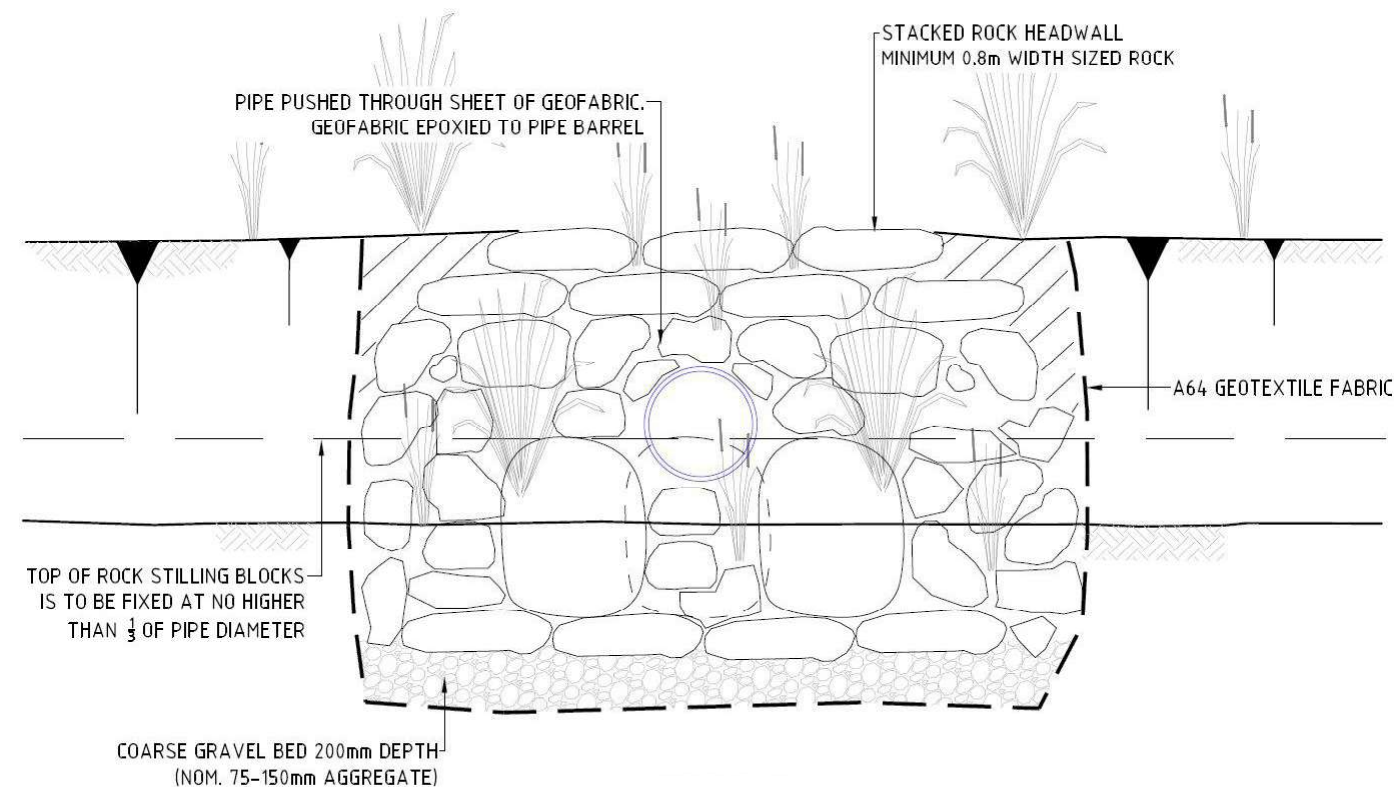


NOTES:

1. READ 'L' FROM CHART 1. LEFT.
2. $W = 3$ TIMES PIPE DIAMETER 'D'.
3. THE MEDIAN ROCK SIZE D_{50} AND LENGTH (L) OF ROCK SCOUR PROTECTION DOWNSTREAM OF STORMWATER OUTLETS IS TO BE DETERMINED USING CHART 1. MIN. $D_{50} = 200\text{mm}$
4. ROCK IS TO BE GRADED IN ACCORDANCE WITH THE ROCK SIZE DISTRIBUTION TABLE AS SHOWN BELOW
5. IN THE EVENT THE WIDTH OF THE OUTLET CHANNEL IS LESS THAN THE DESIGN WIDTH OF THE ROCK APRON, THE ROCK SCOUR PROTECTION SHALL EXTEND UP TO THE BANK TO EITHER THE HEIGHT OF THE OBVERT OF PIPE OR CULVERT OR TO THE DESIGN TAILWATER LEVEL.

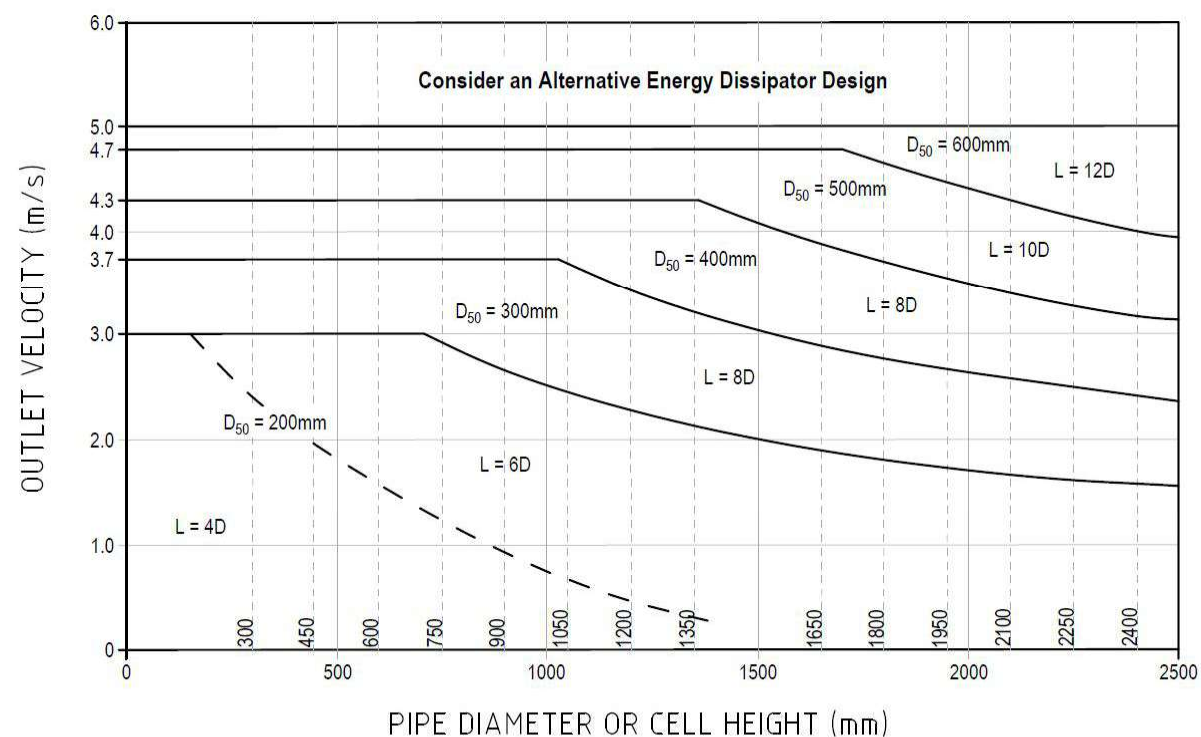
TYPICAL STORMWATER OUTLET LAYOUT IN ACCORDANCE WITH GUIDELINE FOR OUTLET STRUCTURES ON WATERFRONT LAND

NOT TO SCALE



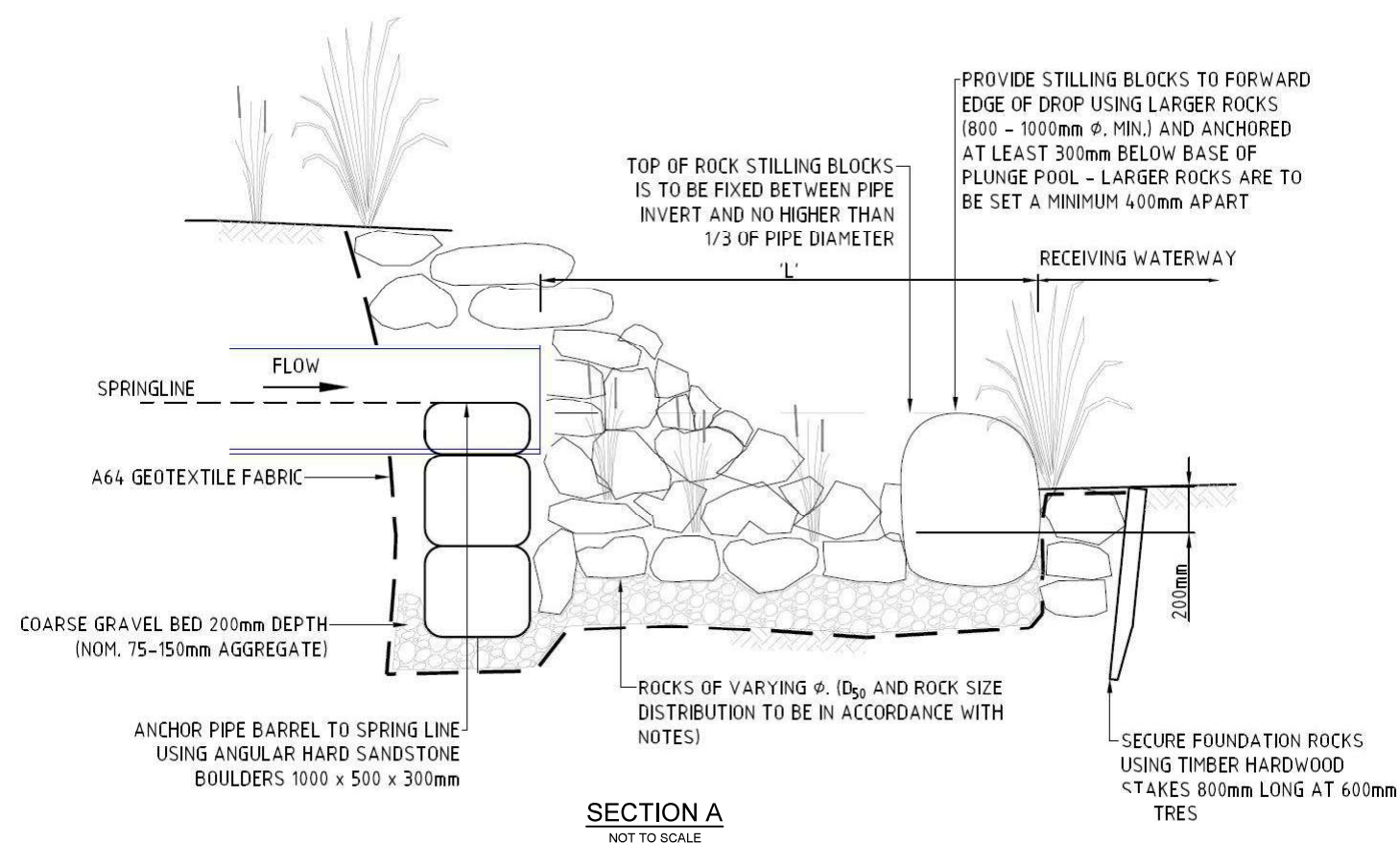
TYPICAL ROCK STACK HEADWALL AROUND STORMWATER OUTLET PIPE

NOT TO SCALE



SIZING OF STORMWATER OUTLET SCOUR PROTECTION

NOT TO SCALE



SECTION A

NOT TO SCALE

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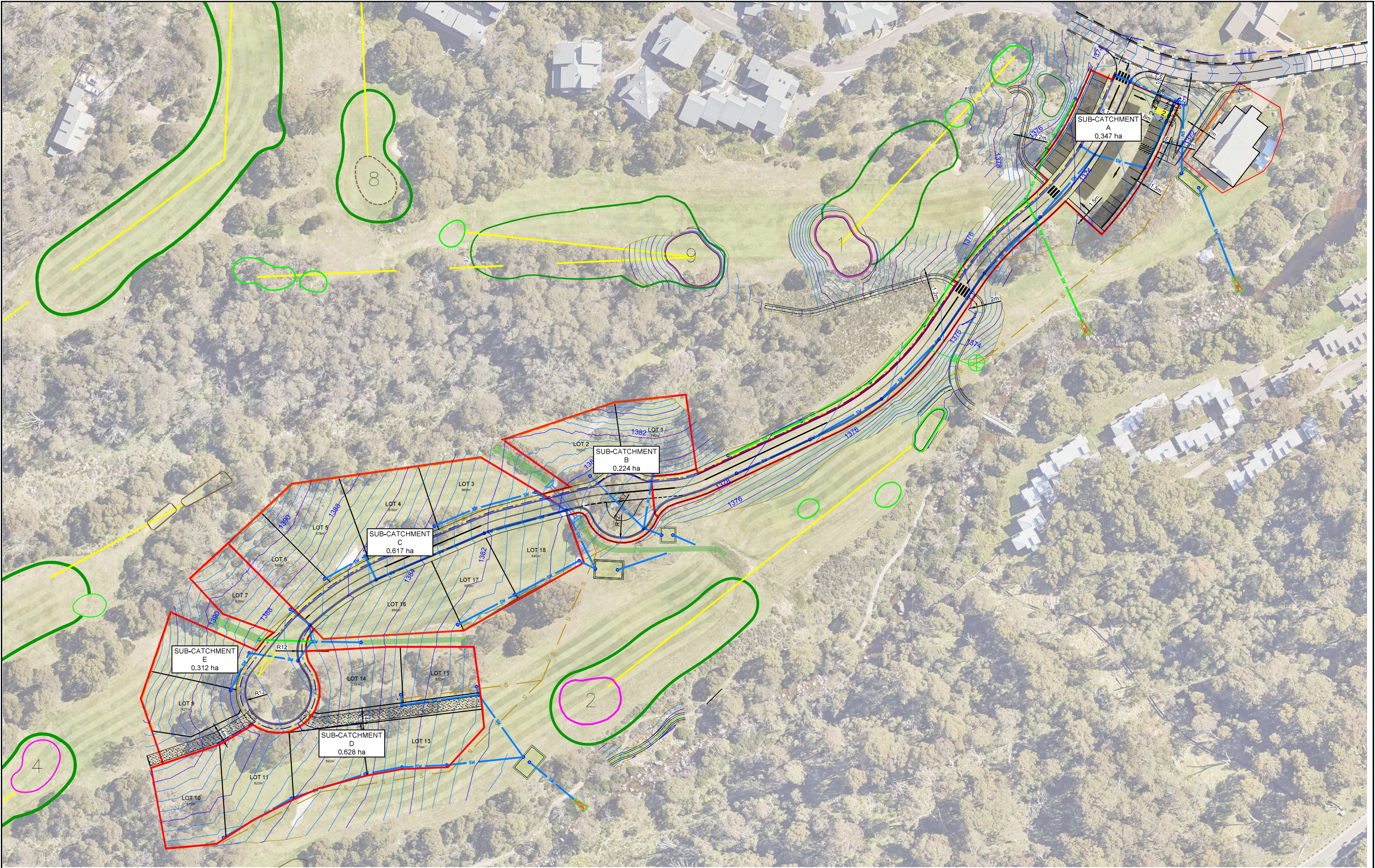
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Stormwater - Typical Details
(2 of 2)

Status: For Development Approval

Datum: GDA94 / AHD Scale: 1:1000 Size: A3

Drawing Number: U-183 Sheet: 43 of 45 Revision: K



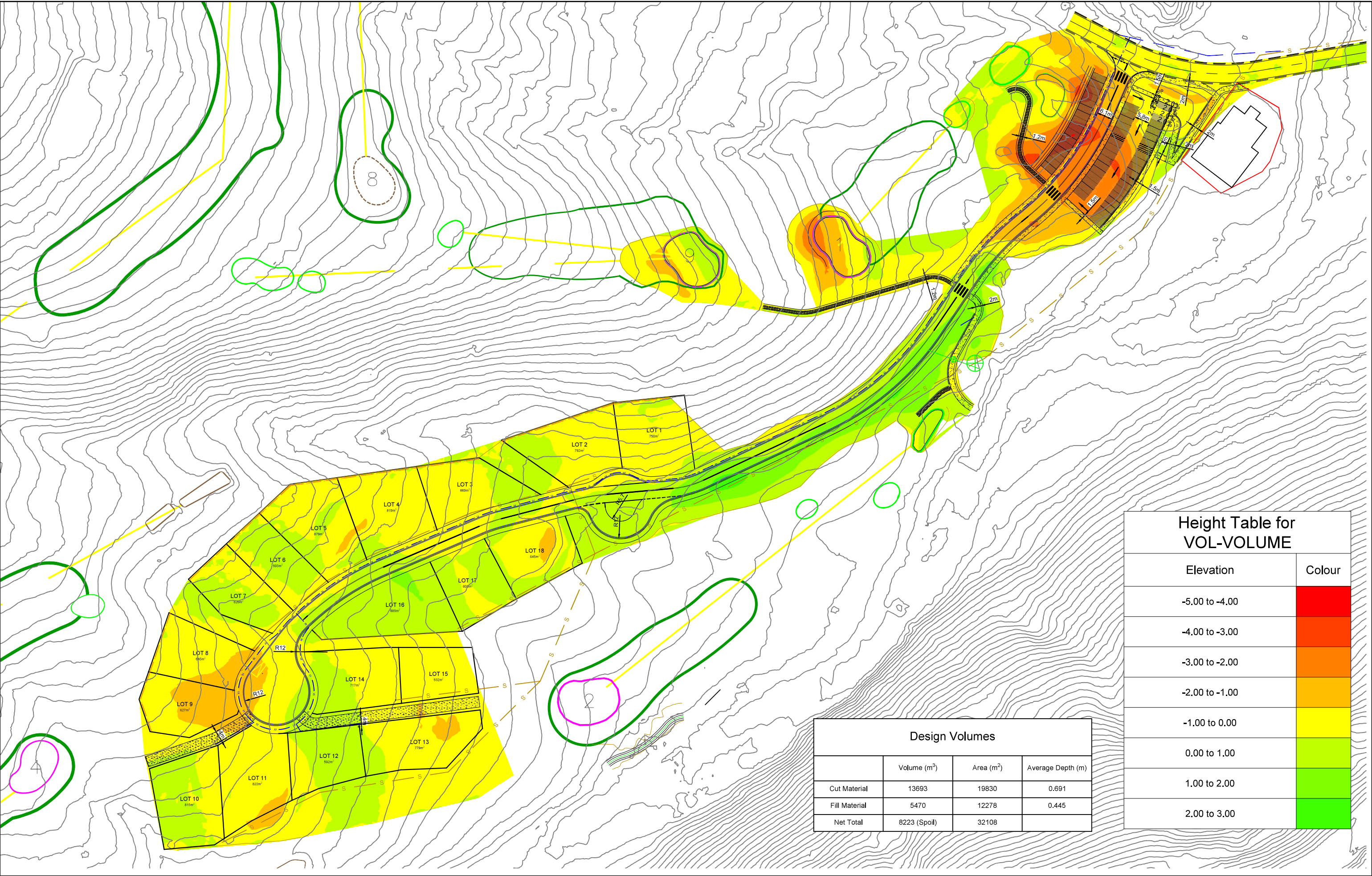
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Stormwater Management Catchment Plan		Datum: GDA94 / AHD	Scale: 1:1000
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Height Table for VOL-VOLUME	
Elevation	Colour
-5.00 to -4.00	
-4.00 to -3.00	
-3.00 to -2.00	
-2.00 to -1.00	
-1.00 to 0.00	
0.00 to 1.00	
1.00 to 2.00	
2.00 to 3.00	

Design Volumes			
	Volume (m³)	Area (m²)	Average Depth (m)
Cut Material	13693	19830	0.691
Fill Material	5470	12278	0.445
Net Total	8223 (Spoil)	32108	

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Bulk Earthworks Plan

Status: For Development Approval

Datum: GDA94 / AHD

Scale: 1:1000

Size: A3

Drawing Number: U-183

Sheet: 45 of 45

Revision: K