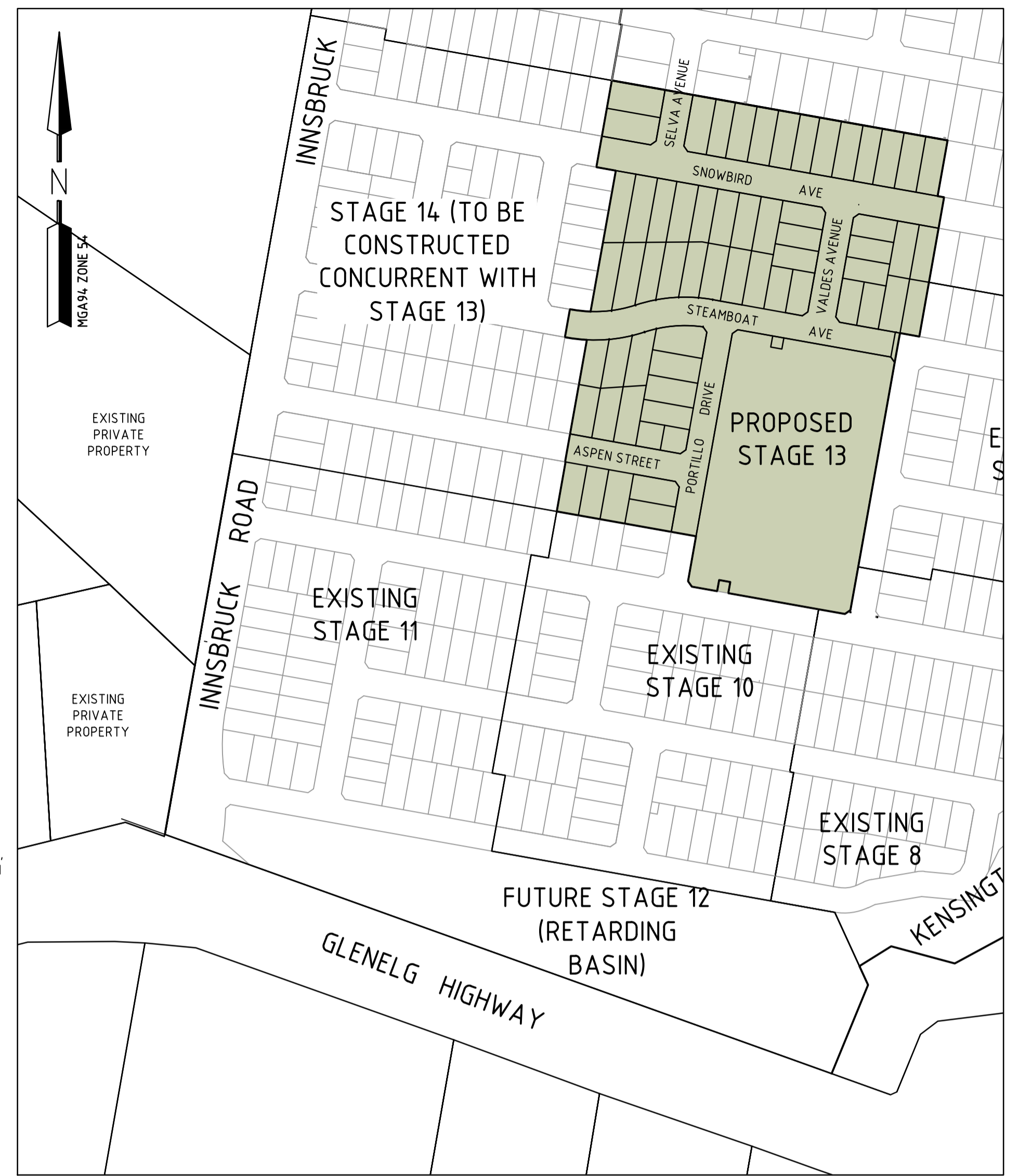
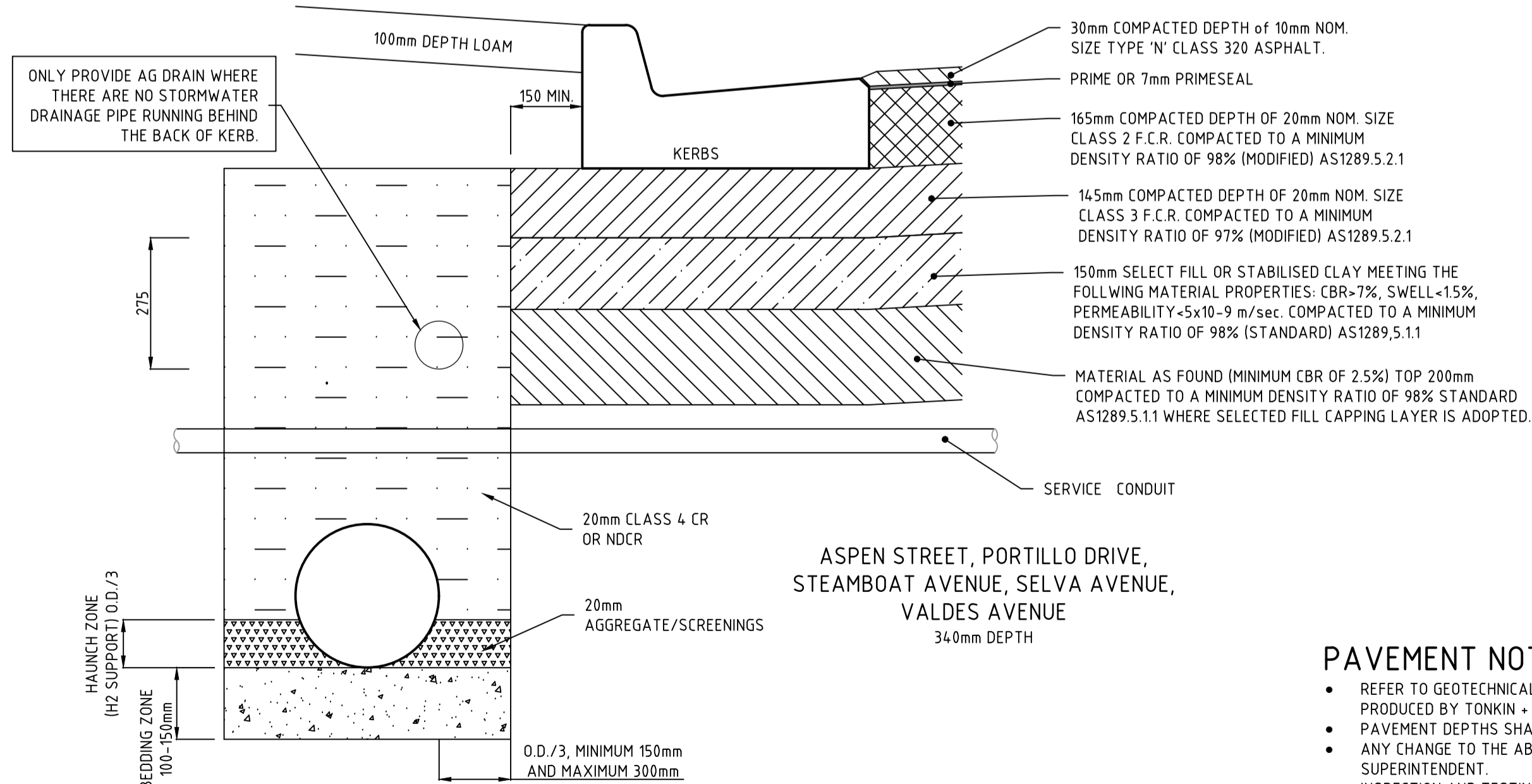
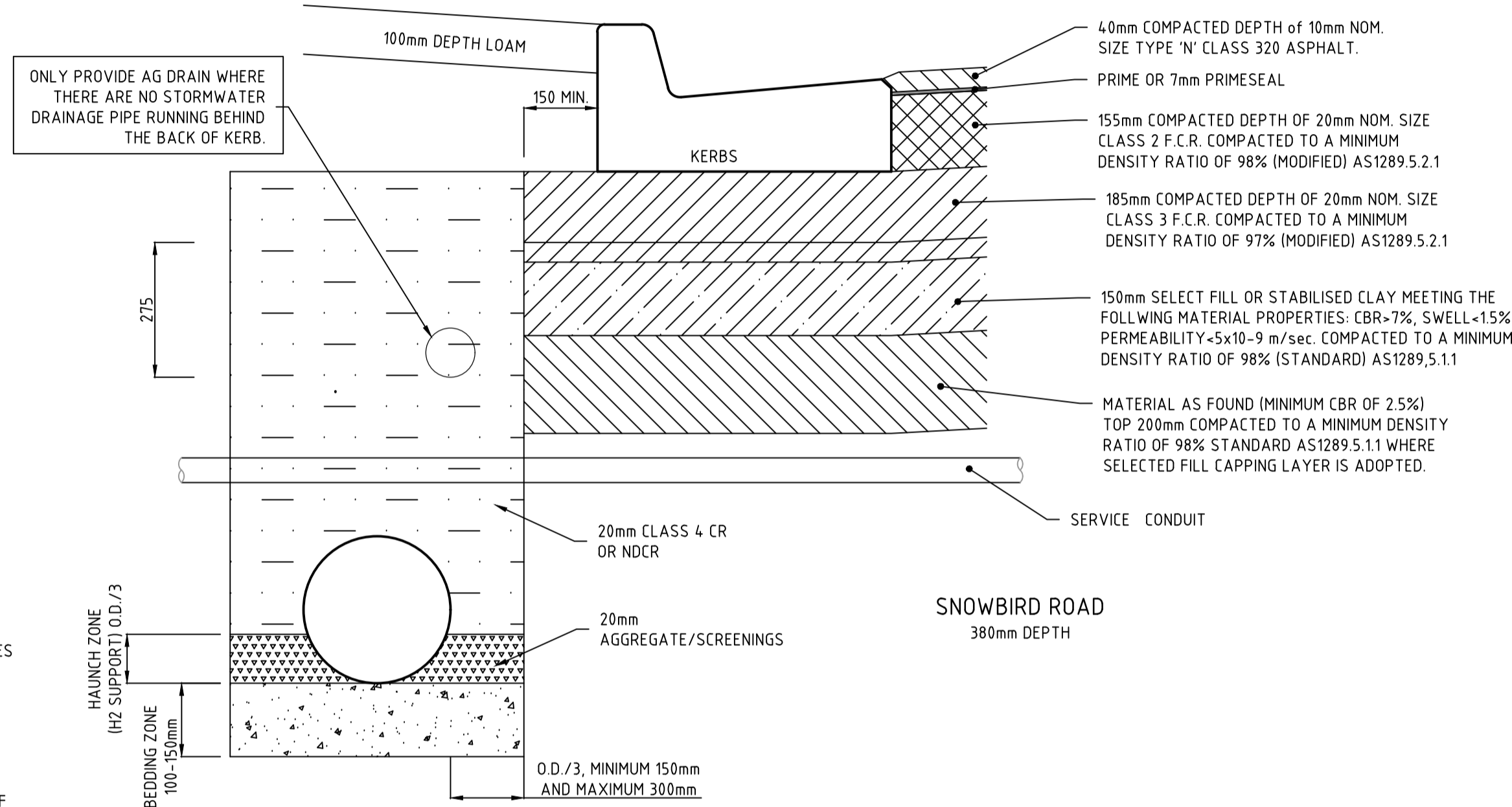
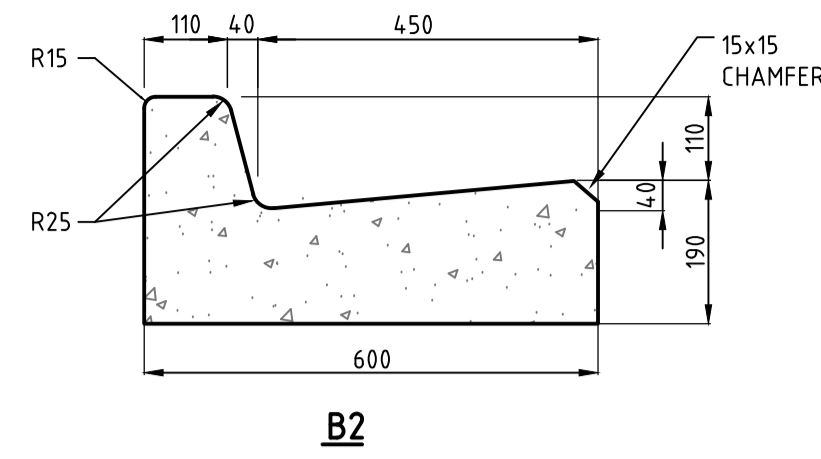


**NOTES:**

- THE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS. WORKS TO BE CARRIED OUT TO THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
- THE CONTRACTOR IS RESPONSIBLE FOR SAFETY OF WORK ON SITE IN ACCORDANCE WITH APPROPRIATE LEGISLATION. THEY SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC. NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION, AND TO PROTECT THE PUBLIC FROM HAZARDS ASSOCIATED WITH THE WORKS.
- THE CONTRACTOR SHALL:
  - COMPLY WITH THE SAFETY REQUIREMENTS OF THE MINES ACT, GENERAL REGULATIONS AND STATUTORY RULES, AND THE MINES (TRENCHES) REGULATIONS 1982
  - NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY OF HIS INTENTION TO COMMENCE TRENCHING OPERATIONS WHERE TRENCHES ARE 15 METRES OR DEEPER.
  - ENSURE THAT THE MINE MANAGER OR HIS DEPUTY AS REQUIRED BY THE REGULATIONS IS IN ATTENDANCE WHEN TRENCHING OPERATIONS ARE IN PROGRESS.
- THE CONTRACTOR IS TO NOTIFY COUNCIL AND ALL SERVICE AUTHORITIES SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL RELEVANT SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
- TREES MARKED ON THE APPROVED PLANS FOR REMOVAL MUST BE REMOVED FROM THE SITE PRIOR TO THE COMMENCEMENT OF WORKS. NO EXCAVATION SHALL BE CARRIED OUT WITHIN 5.0m OF ANY EXISTING TREE UNTIL APPROVAL HAS BEEN GIVEN BY COUNCIL'S SUPERVISING OFFICER. THE REMOVAL OR RETENTION OF EXISTING TREES MUST BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLANS. OTHERWISE, APPROVAL WILL BE REQUIRED FROM THE LANDSCAPE APPROVAL OFFICER.
- ALL ROAD CHAINAGES ARE MEASURED ALONG THE ROAD CENTRELINE EXCEPT KERB RETURNS AND COURTHEADS, WHERE LIP OF KERB CHAINAGES ARE SPECIFIED. ALL DIMENSIONS AND RADII ARE GIVEN TO THE LIP OF KERB. DO NOT SCALE OFF THESE DRAWINGS. WRITTEN DIMENSIONS ONLY SHALL BE USED.
- CONDUIT LOCATIONS ARE SUBJECT TO AMENDMENT AND CONDUITS SHALL NOT BE LAID UNTIL WRITTEN APPROVAL IS GIVEN BY THE SUPERINTENDENT. CONDUITS TO BE PLACED A MINIMUM OF 5m FROM BOUNDARIES/EASEMENTS AND TO THE SATISFACTION OF THE SUPERINTENDENT. BOTH KERBS ARE TO BE MARKED WITH THE LETTERS G, W, E AND T ABOVE CONDUIT LOCATIONS AS SPECIFIED. TELSTRA CONDUITS WILL BE SUPPLIED BY TELSTRA AT TELSTRA'S EXPENSE, IN TRENCHES EXCAVATED AND BACKFILLED BY THE CONTRACTOR. TELSTRA SIZE VARIES - WHITE P.V.C. TELSTRA TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS. GAS AND WATER CONDUITS TO BE 50mm DIA. HEAVY DUTY P.V.C. LAID AT A MINIMUM DEPTH OF 600mm BELOW ROAD FINISHED SURFACE LEVELS.
- SUBSOIL DRAINS SHALL BE INSTALLED BEHIND ALL KERB AND CHANNEL AS PER COUNCIL SPECIFICATION AND STANDARD DRAWINGS.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
- THE CONTRACTOR SHALL CO-OPERATE WITH OTHER AUTHORITIES AND SHALL ENSURE THAT ALL SERVICES ARE INSTALLED PRIOR TO THE FINAL PAVEMENT COURSE. THE CONTRACTOR SHALL CHECK WITH THE SUPERINTENDENT THE EXACT LOCATION OF ALL SERVICES PRIOR TO THE INSTALLATION OF CONDUITS.
- ANY EXISTING PAVEMENT OR DRAINAGE WORKS DAMAGED DURING CONSTRUCTION OR THE MAINTENANCE PERIOD TO BE REINSTATED TO THE SATISFACTION OF THE COUNCIL REPRESENTATIVE.
- FILLING IN PROPERTIES AND ROAD RESERVE IS TO BE CARRIED OUT USING APPROVED CLAY FILL. TOPSOIL AND ALL VEGETABLE MATTER TO BE STRIPPED FROM FILL SITE PRIOR TO FILLING. ALL FILLING TO BE CARRIED OUT IN 150mm LAYERS AND COMPACTED TO 95% OF MAX. DRY DENSITY UNDER THE STANDARD AASHTO TEST. ALL FILLING TO COMPLY WITH AS 3798/1996, APPENDIX B, LEVEL 1. INDIVIDUAL LOT CERTIFICATES ARE TO BE PROVIDED TO THE SUPERINTENDENT. IF ANY EXISTING SUBSTANDARD FILLING IS ENCOUNTERED ON THE SITE, IT MUST BE REMOVED AND REPLACED WITH APPROVED FILL MATERIAL COMPACTED TO COUNCIL REQUIREMENTS. A GEOTECHNICAL REPORT MUST BE SUBMITTED SHOWING DETAILS OF DEPTH, TYPE OF MATERIAL AND DENSITY OF THE FILL AREAS CONCERNED.
- THE NATURE STRIPS AND CUT OR FILLED AREAS ARE TO BE TOPSOILED WITH 75mm OF APPROVED MATERIAL. IF THE LOCAL SOIL IS NOT SUITABLE, APPROVED SOIL SHALL BE IMPORTED AT THE CONTRACTOR'S EXPENSE.
- UNLESS OTHERWISE SHOWN, BATTERS INTO ALLOTMENTS SHALL NOT BE STEEPER THAN 1 IN 3 CUT AND 1 IN 6 FILL. CUT BATTERS ARE TO BE GRASSED AND MULCHED WITH A MIXTURE OF CHOPPED GRASS, STRAW AND BITUMEN EMULSION
- LOTS SHALL BE GRADED TO ENSURE A MINIMUM GRADE OF 1 IN 150 ON THE LOWEST SIDE BOUNDARY TO THE POINT OF DRAINAGE.
- ALL 150Ø PIPES TO BE PVC (S110), 225Ø TO BE PVC (S110), RRJ R.C. STORMPRO OR BLACKMAX, 300Ø TO 600Ø INCLUSIVE TO BE RRJ R.C. ALL R.C. PIPES TO BE RUBBER RING JOINTED CLASS 2 UNLESS NOTED OTHERWISE.  
ALL PIPES UNDER ROAD PAVEMENT ARE TO BE CLASS 3 RRJ R.C.
- STORMWATER DRAINS UNDER PAVEMENTS, FOOTPATHS AND DRIVEWAYS TO BE BACKFILLED WITH CLASS 3 CRUSHED ROCK.
- STORMWATER DRAINS BEHIND KERB TO BE BACKFILLED WITH CLASS 4 CRUSHED ROCK WHERE SIDE OF TRENCH COMES WITHIN 150mm OF THE BACK OF KERB, UNLESS SHOWN OTHERWISE.
- TERRA FIRMA OR FIBREGLASS TYPE LIDS ARE REQUIRED FOR ALL DRAINAGE PITS AND ALL GRATES ARE TO BE CLASS D TO COMPLY WITH AS3996.
- HOUSE DRAINS ARE TO BE CONNECTED DIRECTLY TO AN UNDERGROUND DRAIN OR PIT, IN COMPLIANCE WITH IDM STANDARD DRAWINGS SD515 OR SD516.  
ALL HOUSE DRAIN STORMWATER POINTS DISCHARGING TO THE FRONT OF THE ALLOTMENTS ARE TO BE LOCATED IN THE LOWEST CORNER OF THE ALLOTMENT AT AN OFFSET OF 0.6m FROM THE SIDE TITLE BOUNDARY.
- PROPERTY INLET PITS ARE TO BE LOCATED 1.0m FROM LOW SIDE BOUNDARY UNLESS OTHERWISE SHOWN. INVERT LEVEL OF PROPERTY INLET IS TO BE A MINIMUM OF 500mm BELOW FINISHED/EXISTING SURFACE LEVEL. A PROPERTY INLET GULLY BASIN IS NOT REQUIRED AT PROPERTY INLET POINTS.
- COUNCIL'S INFRASTRUCTURE WORKS SUPERVISION TO BE NOTIFIED TWO (2) CLEAR DAYS PRIOR TO COMMENCEMENT OF WORKS.
- A CCTV INSPECTION OF ALL DRAINAGE LINES IS TO BE UNDERTAKEN BY THE CONTRACTOR TO THE SATISFACTION OF COUNCIL'S WORK SUPERVISOR.
- DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH COUNCILS STANDARDS. DRIVEWAYS TO BE LOCATED 1.2m FROM BUILDING LINE, BE CLEAR OF DRAINAGE PITS, SEWER MAINTENANCE HOLES AND EXISTING TREES.
- ALL FOOTPATHS AND SHARED PEDESTRIAN/BICYCLE PATHS ARE TO BE 125mm THICK CONCRETE AS PER IDM SD 205. TACTILE GROUND SURFACE INDICATORS (TGSIs) ARE TO BE INSTALLED AT ALL PRAM CROSSINGS AND PEDESTRIAN CROSS POINTS IN ACCORDANCE WITH AS1428.
- ALL STREET SIGNS ARE TO BE CURRENT CITY OF BALLARAT COUNCIL STANDARDS, INCLUDING PROVISION OF LOGO. NAME BLADES ARE TO COMPLY WITH CITY OF BALLARAT STANDARD DRAWING SD-501.
- SIGNS, PAVEMENT MARKINGS AND DELINEATORS ARE TO BE INSTALLED AS APPLICABLE IN ACCORDANCE WITH AS1742.2. ALL PAVEMENT MARKINGS TO BE LONG LIFE ROAD MARKING WITH LONGITUDINAL LINES IN THERMOPLASTIC AND TRANSVERSE MARKINGS IN COLD APPLIED.
- NO SURPLUS TREES, VEGETATION OR OTHER MATERIALS IS TO BE BURNT ON SITE.
- ANY SOFT ROCK USED IS TO CONFORM TO THE CITY OF BALLARAT COUNCIL SPECIFICATION FOR RIPPED ROCK.
- APPROPRIATE SILTATION CONTROL IS TO BE CARRIED OUT DURING THE CONSTRUCTION AND MAINTENANCE PERIODS.
- CONCRETE TO BE PLACED AROUND ELECTRICAL DISTRIBUTION PITS TO A MINIMUM DEPTH OF 200mm. DISTRIBUTION PITS TO BE A MINIMUM OF 300mm FROM EDGE OF FOOTPATHS.
- UPON COMPLETION OF CONSTRUCTION, THE WHOLE SITE SHALL BE CLEANED UP AND GRADED OVER. ALL RUBBISH IS TO BE REMOVED AND THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
- APPROVAL WILL BE REQUIRED FROM COUNCIL'S CONSERVATION OFFICER FOR ALTERATION, REMOVAL OR EXCAVATION OF ANY SIGNIFICANT EXISTING FEATURES, BUILDINGS, STRUCTURES OR VEGETATION.

SHEET NO.	DRAWING TITLE
13R1	LOCALITY PLAN, NOTES & DRAWING INDEX
13R2	LAYOUT PLAN - 1
13R3	LAYOUT PLAN - 2
13R4	ASPEN STREET: LONGITUDINAL & CROSS SECTION
13R5	PORTILLO DRIVE: LONGITUDINAL SECTION
13R6	PORTILLO DRIVE: CROSS SECTIONS
13R7	SELVA AVENUE: LONGITUDINAL & CROSS SECTIONS
13R8	SNOWBIRD ROAD: LONGITUDINAL & CROSS SECTIONS - 1
13R9	SNOWBIRD ROAD: CROSS SECTIONS - 2
13R10	SNOWBIRD ROAD: CROSS SECTIONS - 3
13R11	STEAMBOAT AVENUE: LONGITUDINAL & CROSS SECTIONS - 1
13R12	STEAMBOAT AVENUE: CROSS SECTIONS - 2
13R13	VALDES AVENUE: LONGITUDINAL & CROSS SECTIONS
13R14	INTERSECTION DETAILS & LIP PROFILES - 1
13R15	INTERSECTION DETAILS & LIP PROFILES - 2
13R16	INTERSECTION DETAILS & LIP PROFILES - 3
13R17	DRAINAGE LONG SECTIONS - 1
13R18	DRAINAGE LONG SECTIONS - 2
13R19	DRAINAGE LONG SECTIONS - 3
13R20	DRAINAGE LONG SECTIONS - 4
13R21	PIT SCHEDULE
13R22	SIGNS & LINEMARKING PLAN - 1
13R23	SIGNS & LINEMARKING PLAN - 2



**LOCALITY PLAN**

0 25 50 100  
Scale 1:2500 @ A1

**LEVELS ARE TO AHD**  
Co-ordinates are plane co-ordinates computed from the following:  
MGA94 Zone 54: This survey connected to MGA v the MelbPos Network.  
Origin of Co-ordinates: Station 11 has been fixed as the MGA origin for calculation of plane co-ordinates.  
MelbPos observations are verified by comparison with SMES values at PSM45. The observations are validated by repeat measurement.  
AHD levels derived from PM45 with RL424.568 confirmed by PM17 with RL424.109 D Height 0.017

**WARNING**  
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**PAVEMENT NOTES**

- REFER TO GEOTECHNICAL REPORT (JOB NUMBER 5263.000.R1.v2) DATED SEPTEMBER 2016 PRODUCED BY TONKIN + TAYLOR FOR COMPLETE PAVEMENTS DESIGN.
- PAVEMENT DEPTHS SHALL BE MODIFIED IF DIRECTED BY THE SUPERINTENDENT.
- ANY CHANGE TO THE ABOVE PAVEMENTS SHALL BE APPROVED IN WRITING BY COUNCIL'S SUPERINTENDENT.
- INSPECTION AND TESTING OF PAVEMENTS SHALL BE CARRIED OUT TO COUNCIL SPECIFICATIONS
- DEPTHS SHOWN ARE CONSOLIDATED THICKNESSES IN MILLIMETRES.

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A	ISSUE TO COUNCIL	22.07.21 LP

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MELWAY	571 02	CHECKED BY	L. PHAN
DATUM	AHD	AUTHORISED BY	P.MILLER



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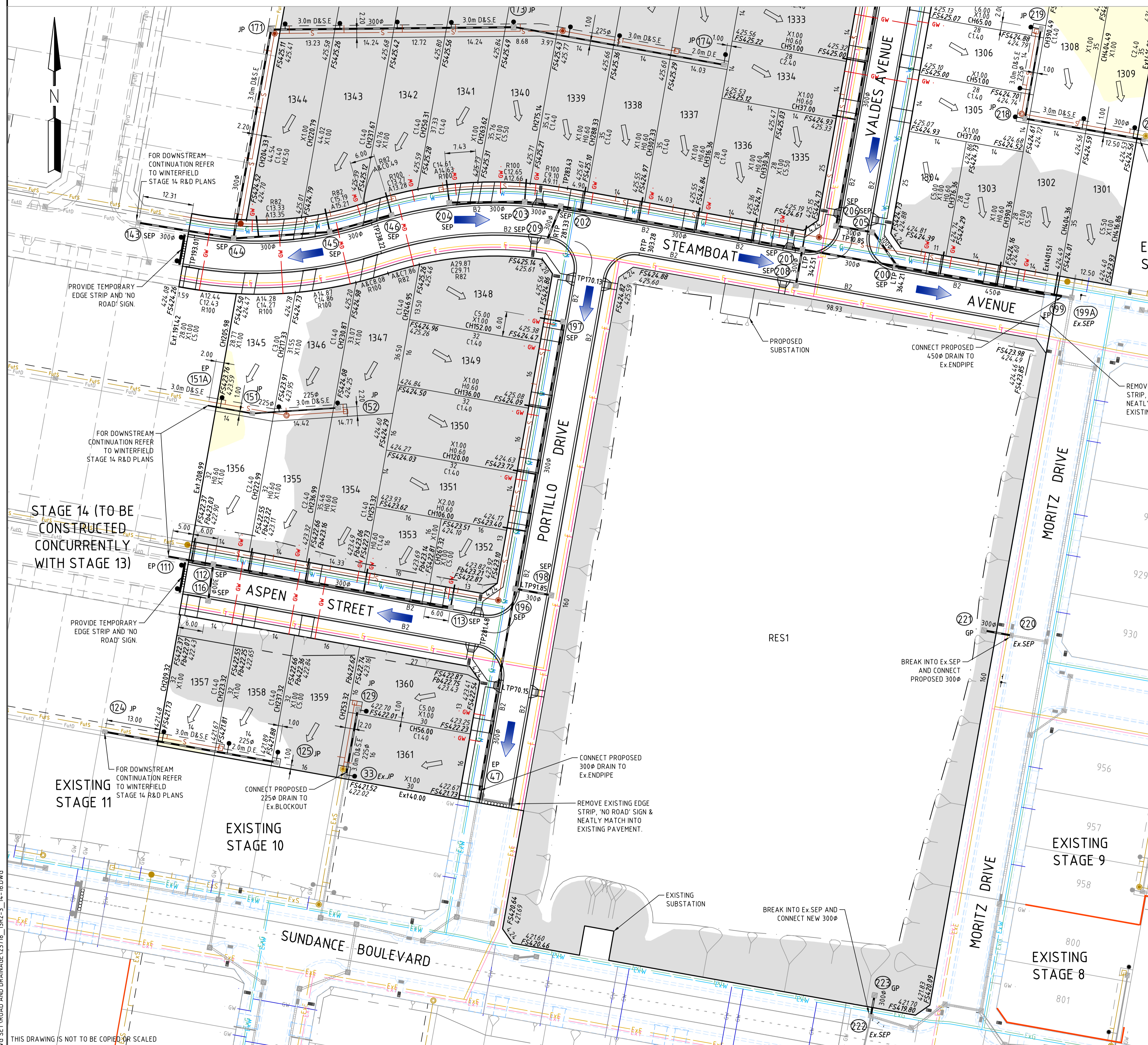
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
LOCALITY PLAN, NOTES & DRAWING INDEX

DRAWING No.	13R1	VERSION	A
REFERENCE	23718E/13		
SHEET	1 OF 23		

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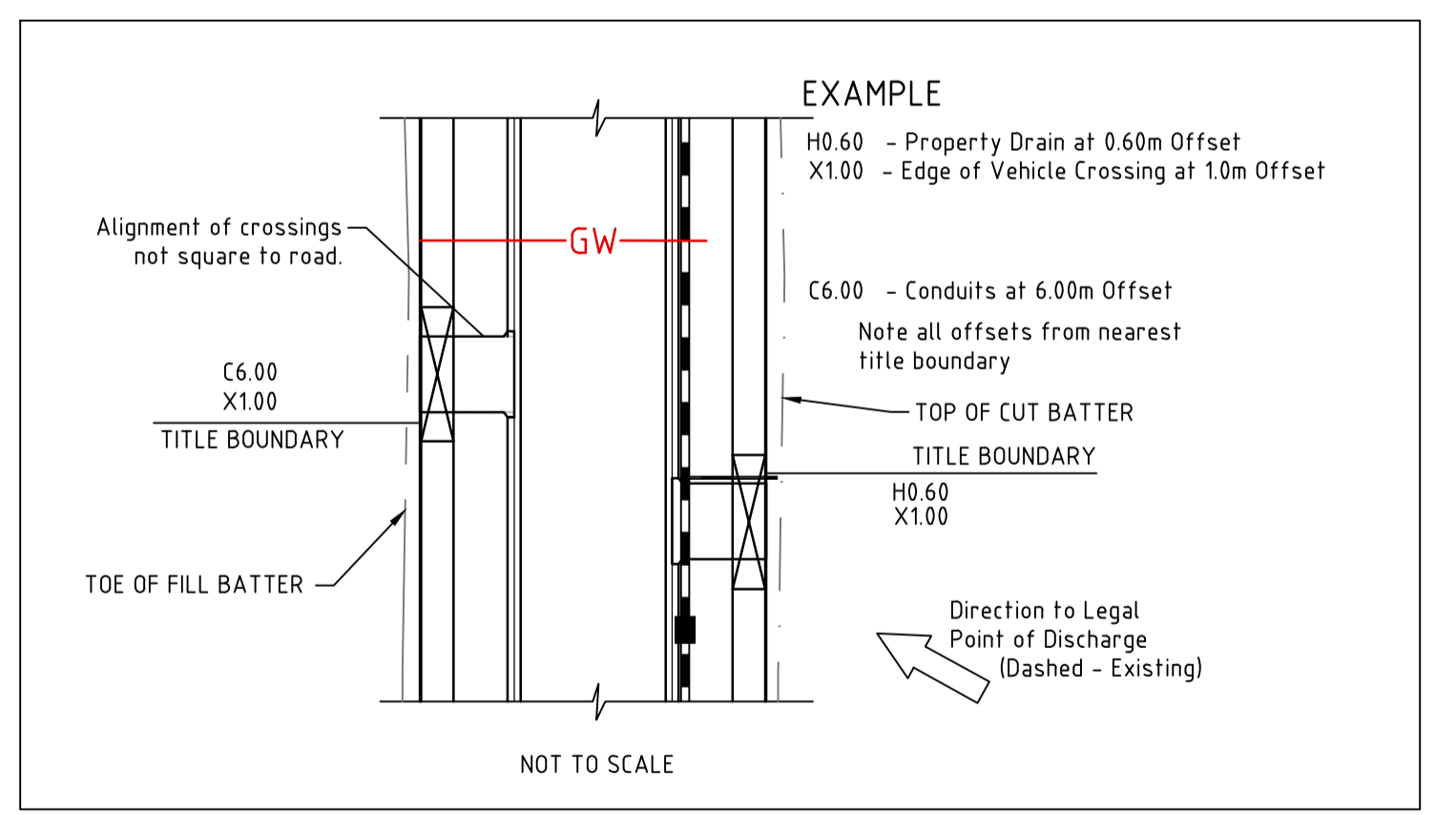
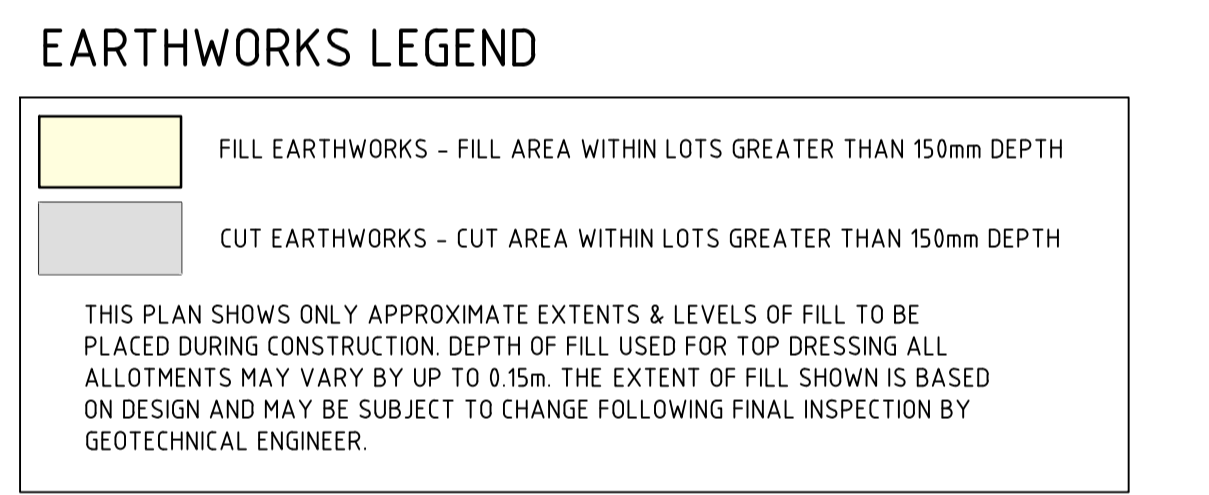
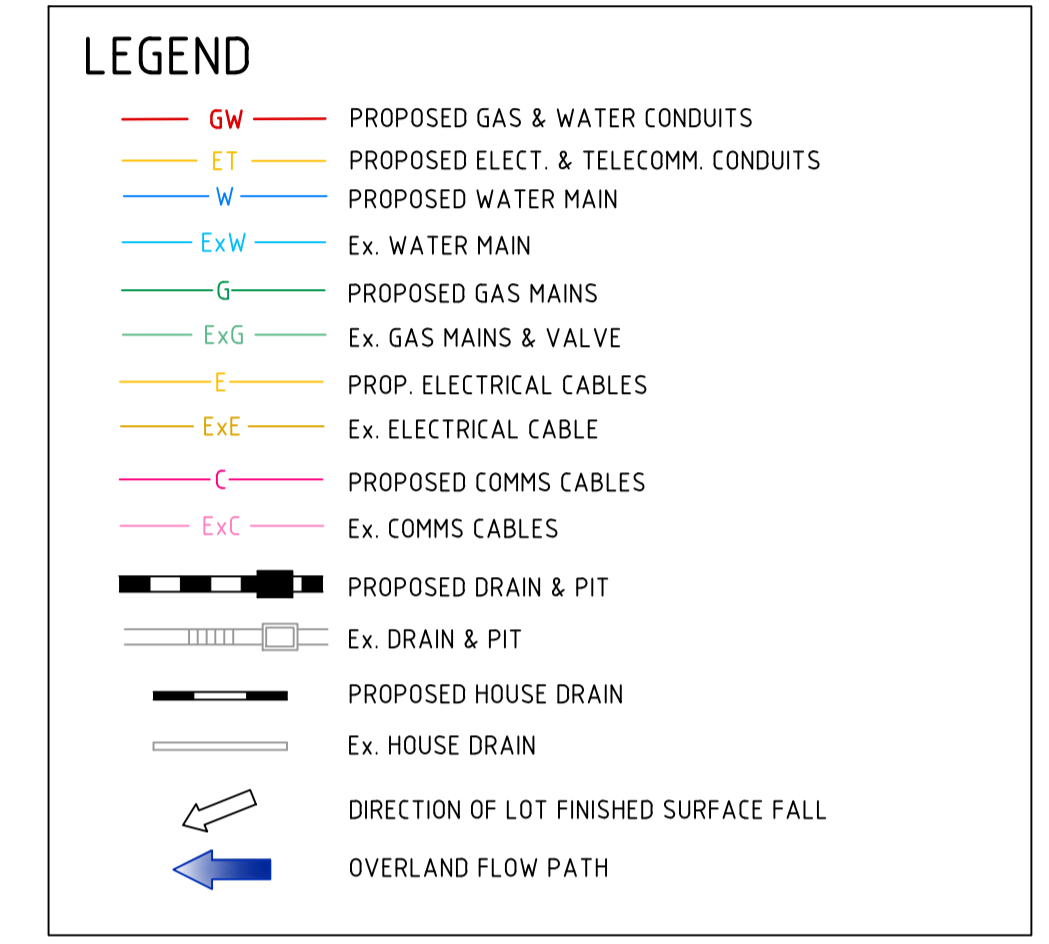
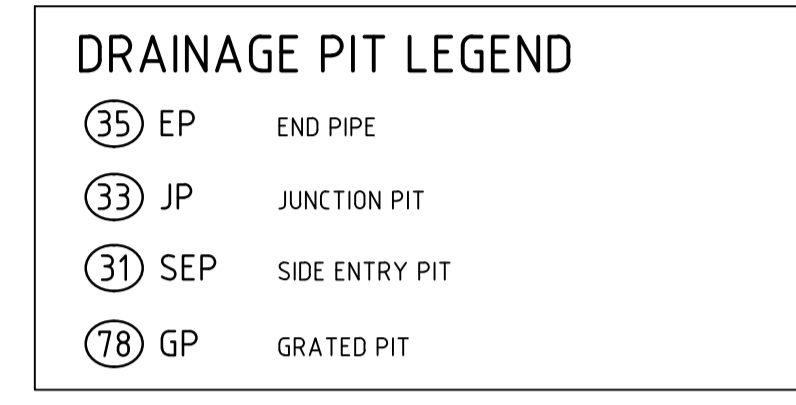
REFER SHEET 13R3 FOR CONTINUATION



### SERVICES SCHEDULE

STREET NAME	GAS	WATER	TELSTRA	ELECT.	SEWER	TREES BOTH SIDES	ROAD RESERVE
ASPEN STREET	2.30 N	2.75 N	2.20 S	2.80 S	1.00 N	1.00 B.O.K.	18.00
PORTILLO DRIVE	2.30 W	2.75 W	0.60 E	1.30 E	1.00 W	1.00 B.O.K. WEST ONLY	16.00
STEAMBOAT AVENUE (RESERVE)	2.30 N	2.75 N	0.70 S	1.30 S	1.00 N	1.00 B.O.K. NORTH ONLY	16.00
STEAMBOAT AVENUE (LOT 1345-1348)	2.30 N	2.75 N	2.20 S	2.80 S	1.00 N	1.00 B.O.K.	18.00
SELVA AVENUE	2.10 E	2.60 E	2.20 W	2.80 W	1.00 W	1.00 B.O.K.	18.00
SNOWBIRD ROAD	2.10 N	2.80 N	2.20 S	2.80 S	1.00 N	1.00 B.O.K.	20.00
VALDES AVENUE	2.30 E	2.75 E	2.20 W	2.80 W	1.00 W	1.00 B.O.K.	18.00

\* DENOTES EXISTING SERVICE EXACT LOCATION TO BE PROVEN ON SITE BY CONTRACTOR.  
ALL OFFSETS ARE REFERENCED TO NEAREST BL.



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VERSION	ISSUE	DATE	BY	REMARKS
B	ISSUE TO COUNCIL	22.07.21	LP	
A	PRELIMINARY ISSUE	XXXXXX	LP	

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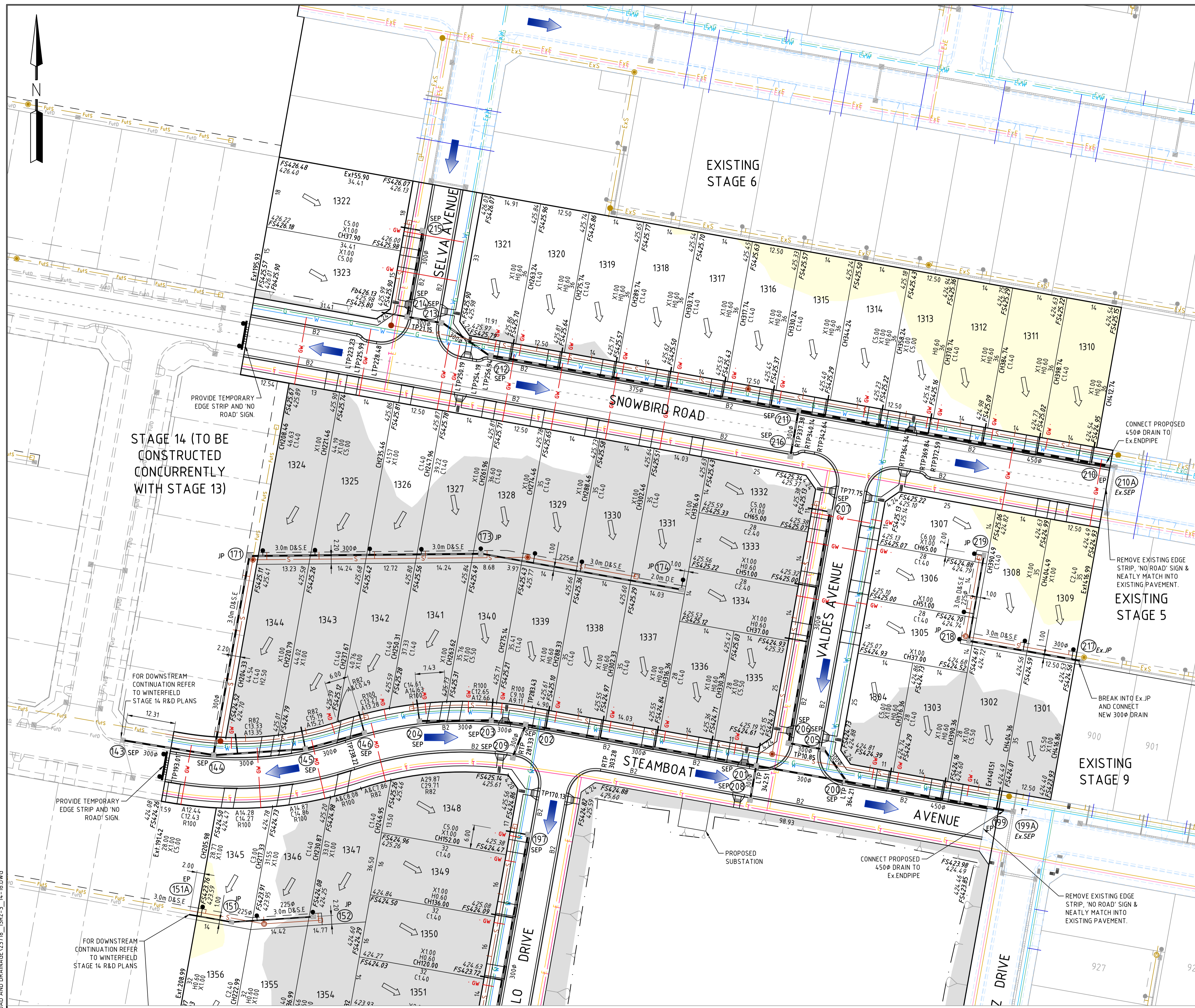
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
LAYOUT PLAN - 1

DRAWING No.	13R2	VERSION	B
REFERENCE	23718E/13		
SHEET	2 OF 23		

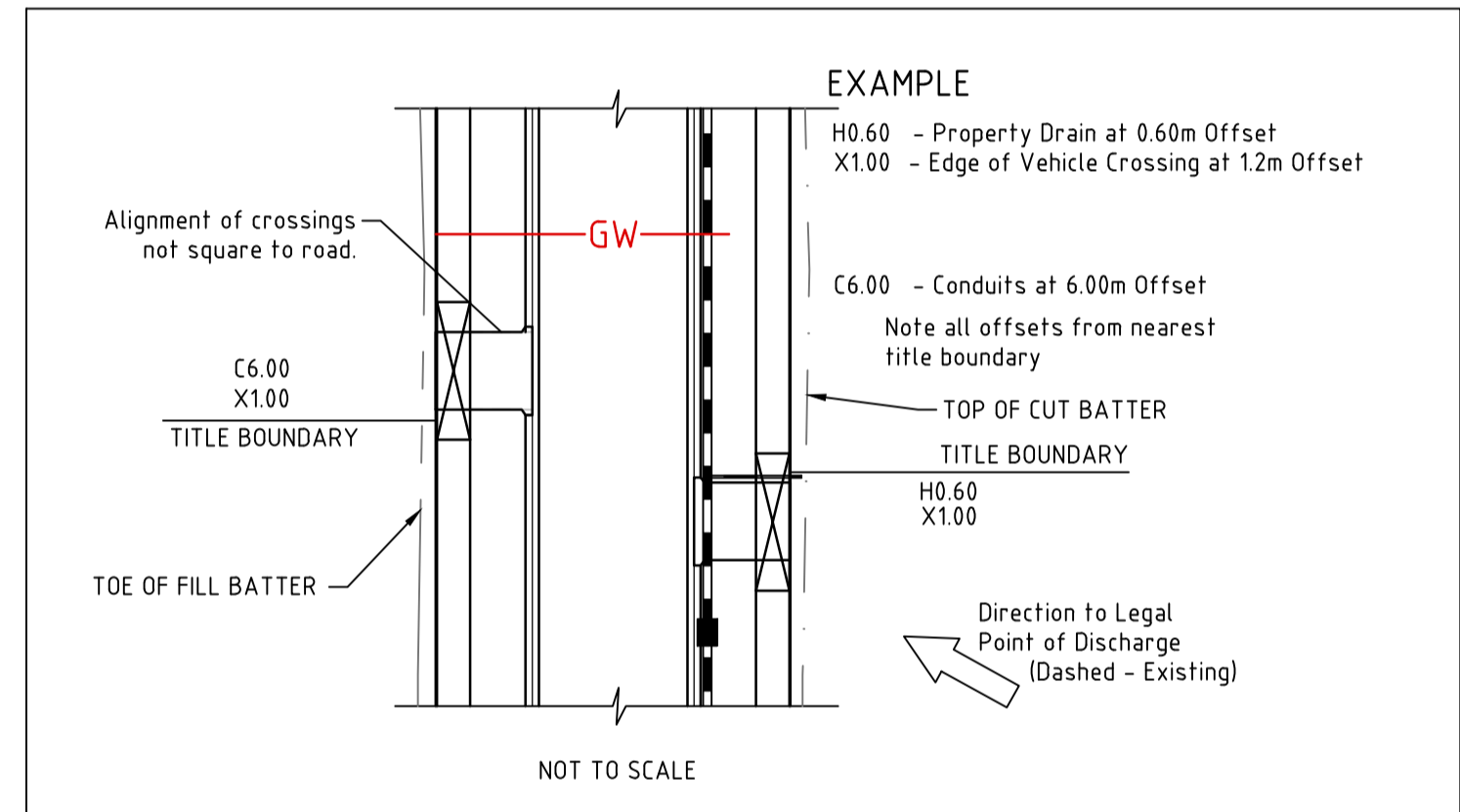


### LEGEND

- GW PROPOSED GAS & WATER CONDUITS
- ET PROPOSED ELECT. & TELECOMM. CONDUITS
- W PROPOSED WATER MAIN
- ExW Ex. WATER MAIN
- G PROPOSED GAS MAINS
- ExG Ex. GAS MAINS & VALVE
- E PROP. ELECTRICAL CABLES
- ExE Ex. ELECTRICAL CABLE
- C PROPOSED COMMS CABLES
- ExC Ex. COMMS CABLES
- PROPOSED DRAIN & PIT
- Ex. DRAIN & PIT
- PROPOSED HOUSE DRAIN
- Ex. HOUSE DRAIN
- DESIGN FINISHED SURFACE CONTOURS (0.25m INT.)
- DIRECTION OF LOT FINISHED SURFACE FALL
- OVERLAND FLOW PATH

### DRAINAGE PIT LEGEND

- 35 EP END PIPE
- 33 JP JUNCTION PIT
- 31 SEP SIDE ENTRY PIT
- 51 WW WINGWALL
- 78 GSEP GRATED SIDE ENTRY PIT



### EARTHWORKS LEGEND

- FILL EARTHWORKS - FILL AREA WITHIN LOTS GREATER THAN 150mm DEPTH
- CUT EARTHWORKS - CUT AREA WITHIN LOTS GREATER THAN 150mm DEPTH

THIS PLAN SHOWS ONLY APPROXIMATE EXTENTS & LEVELS OF FILL TO BE PLACED DURING CONSTRUCTION. DEPTH OF FILL USED FOR TOP DRESSING ALL ALLOTMENTS MAY VARY BY UP TO 0.15m. THE EXTENT OF FILL SHOWN IS BASED ON DESIGN AND MAY BE SUBJECT TO CHANGE FOLLOWING FINAL INSPECTION BY GEOTECHNICAL ENGINEER.

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A	ISSUE TO COUNCIL		22.07.21	LP

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DATUM	AHD	AUTHORISED BY	P. MILLER

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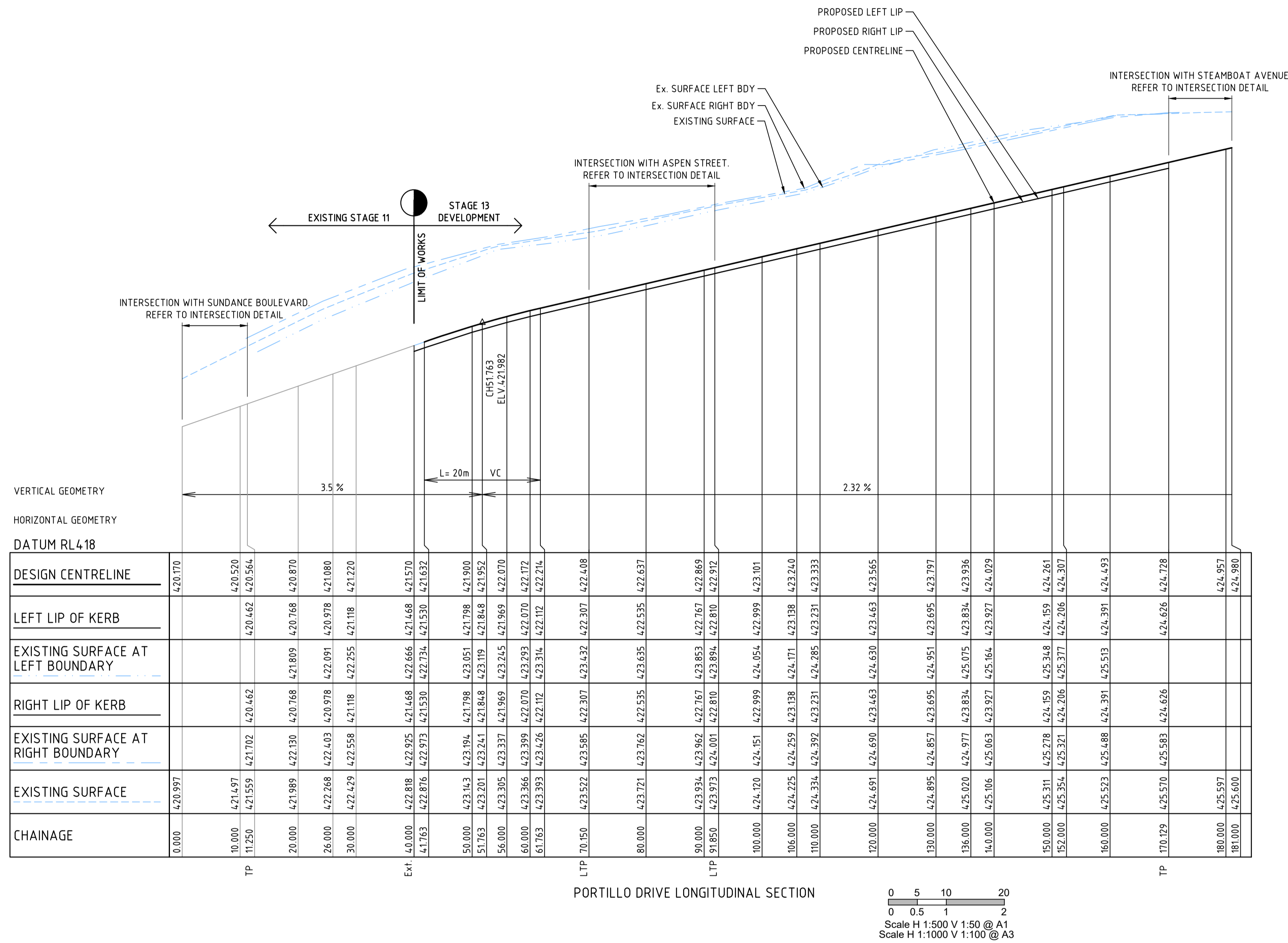
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CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 LAYOUT PLAN - 2

DRAWING No.	13R3	VERSION	A
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SHEET	3 OF 23		



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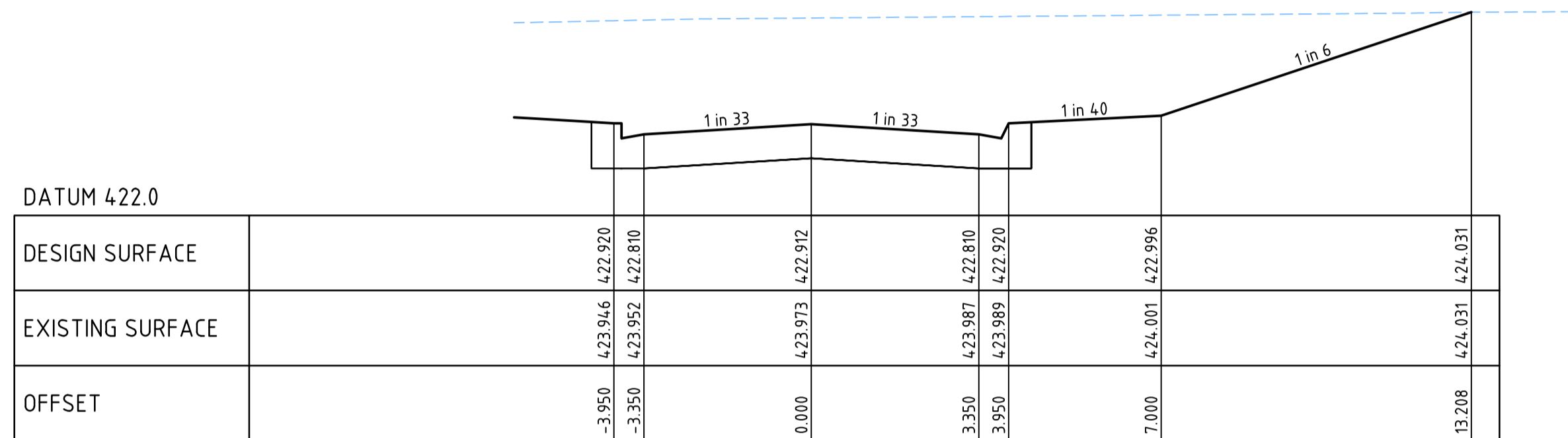
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
PORTILLO DRIVE:  
LONGITUDINAL SECTION

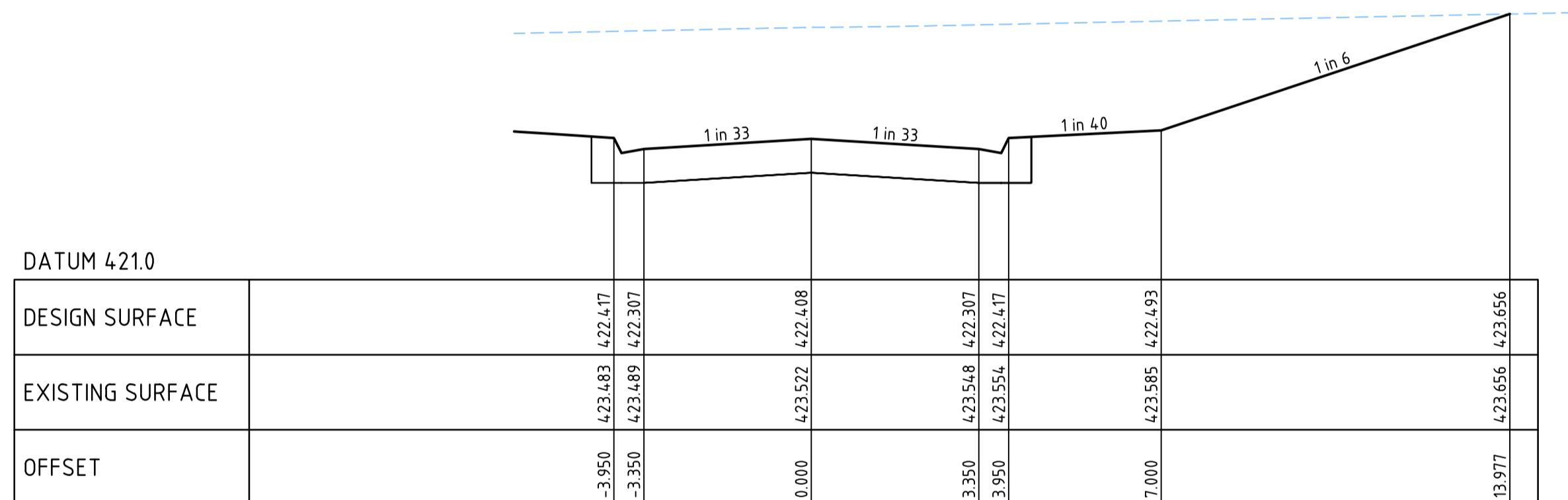
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REFERENCE	23718E/13		
SHEET	5 OF 23		

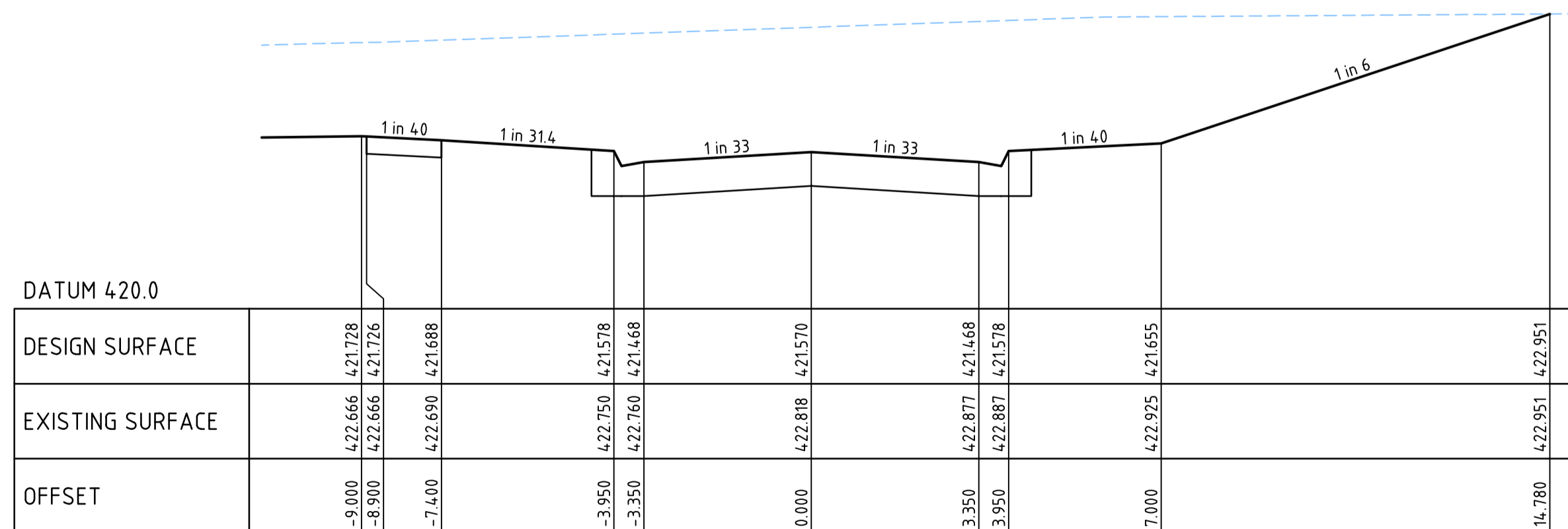
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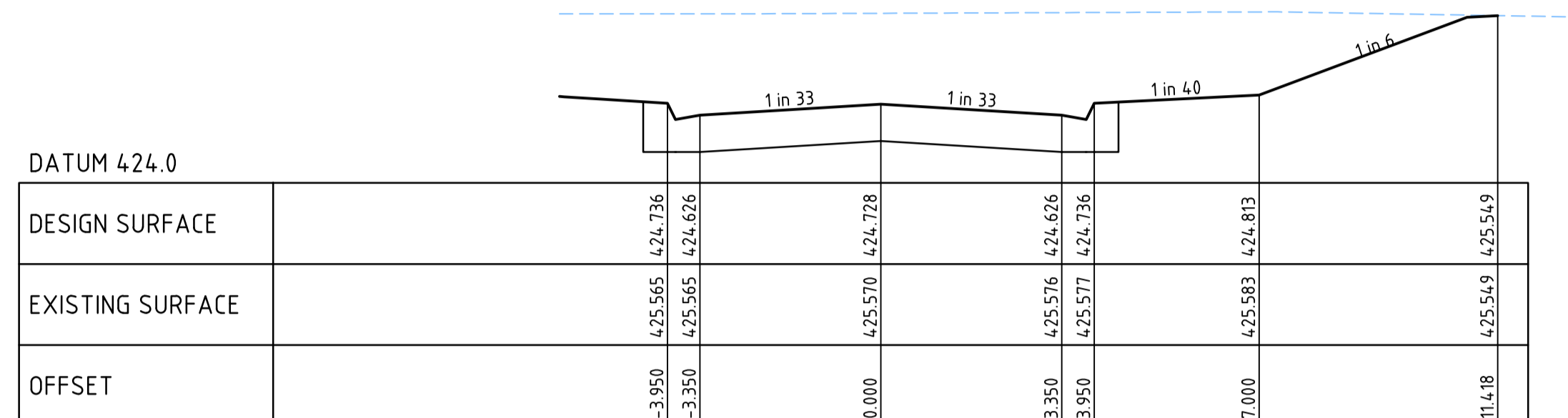
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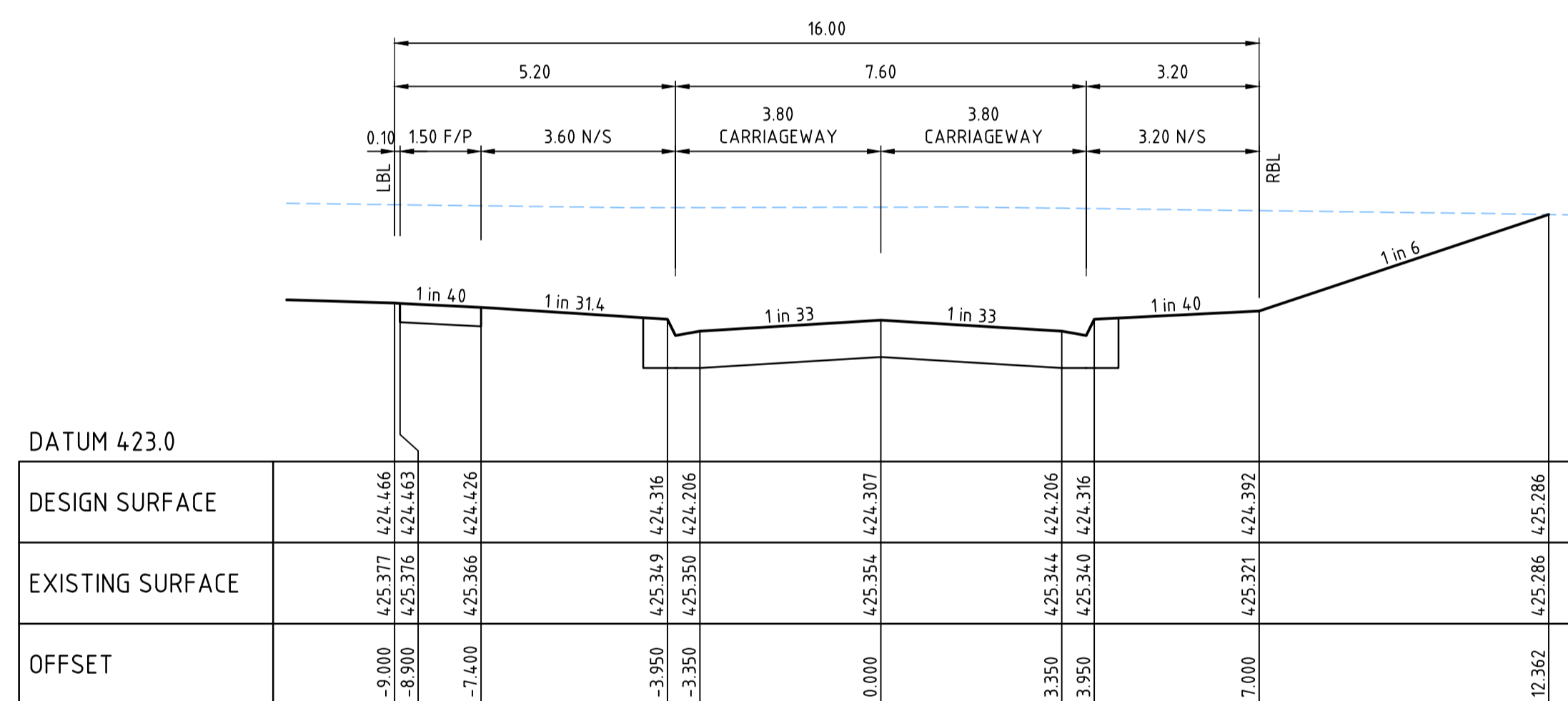
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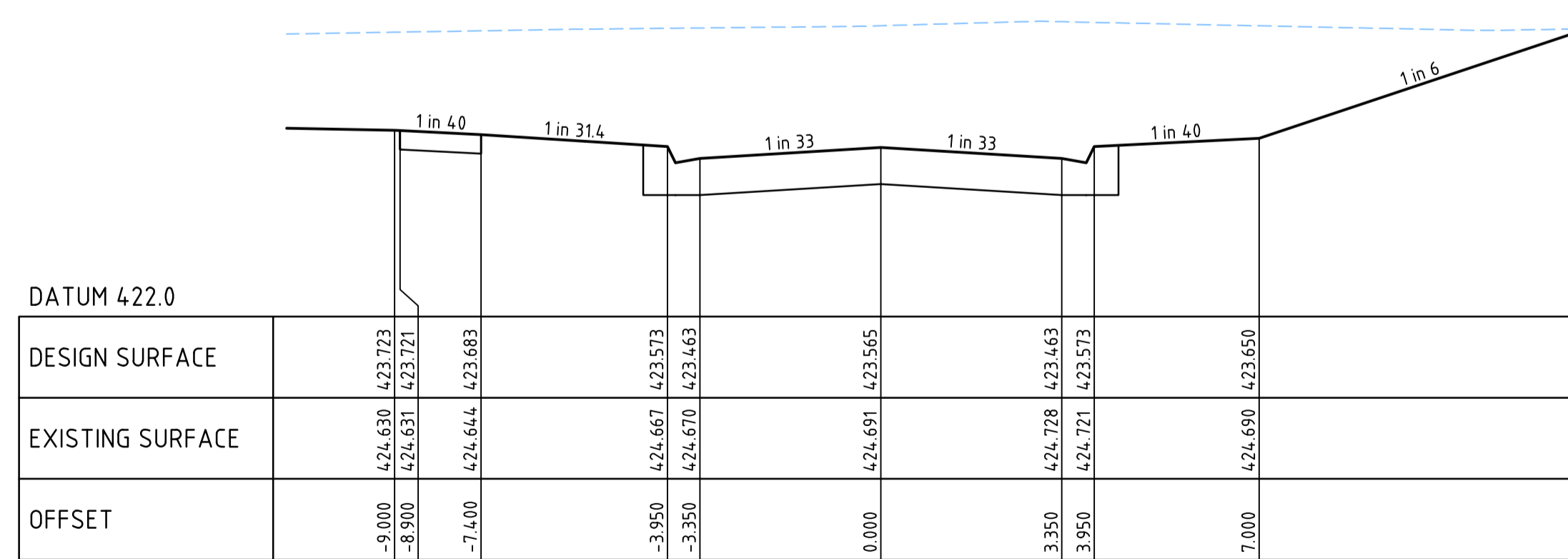
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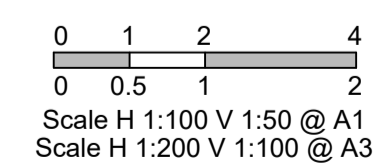
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CH 152.000



CH 120.000



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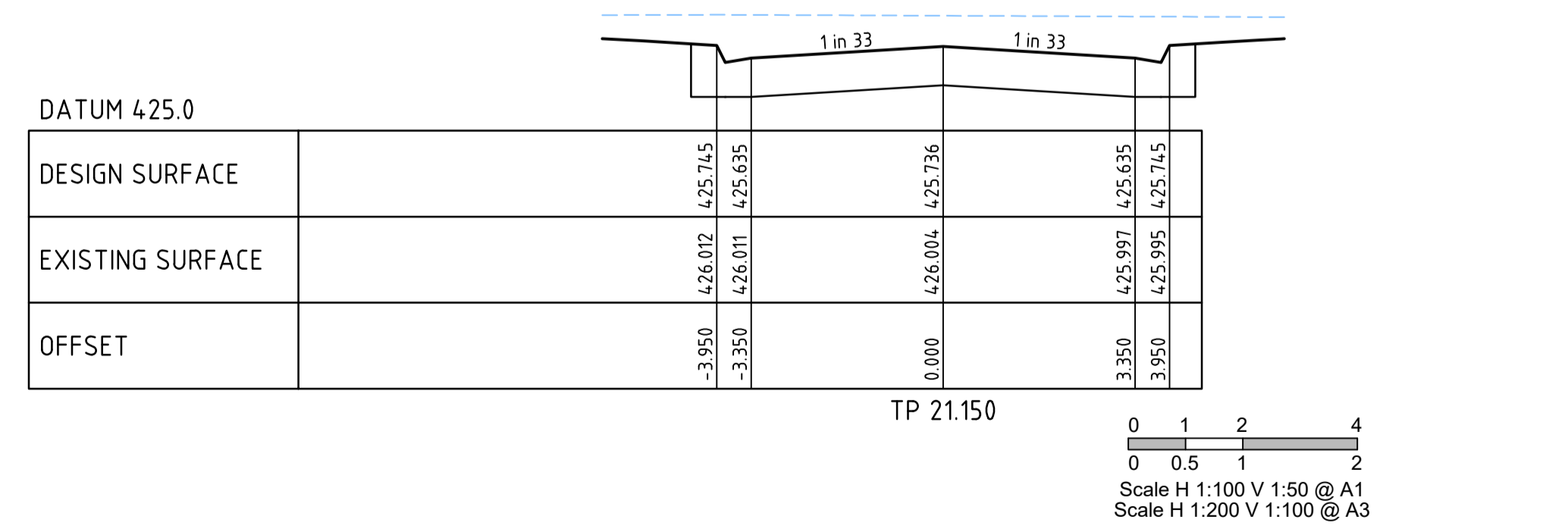
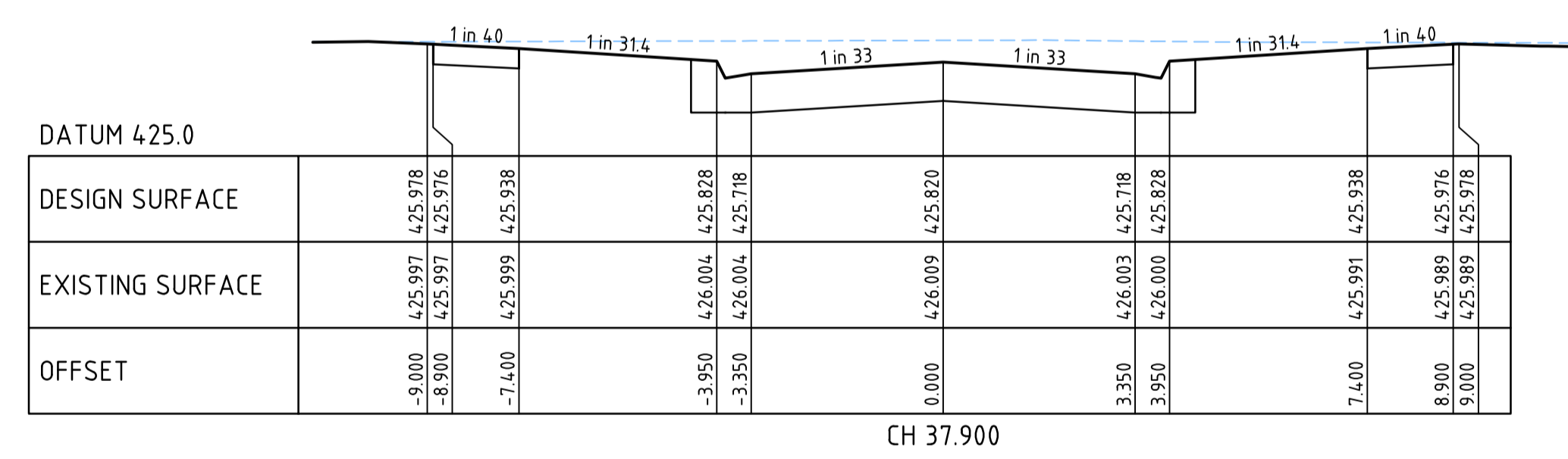
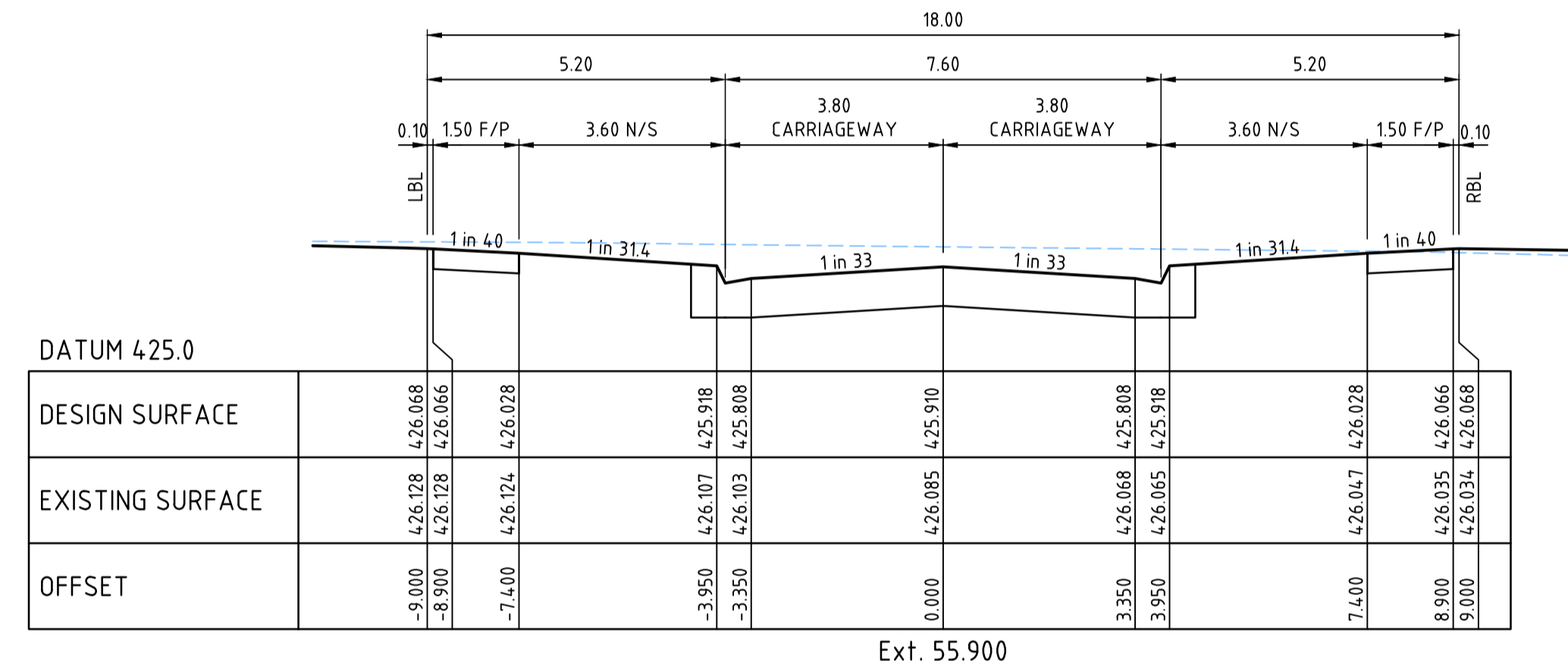
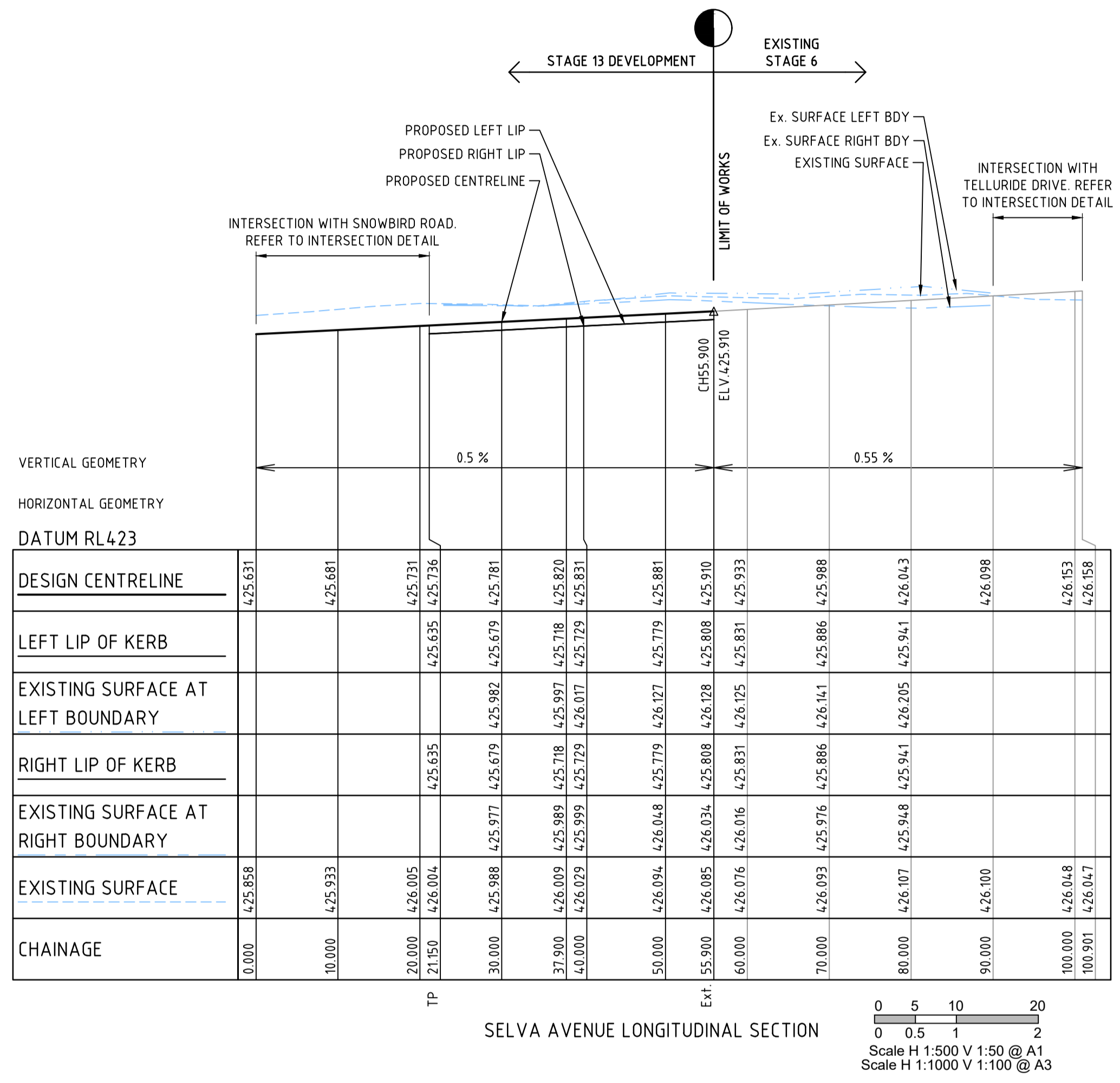
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
PORTILLO DRIVE:  
CROSS SECTIONS

DRAWING No.	13R6	VERSION	A
REFERENCE	23718E/13		
SHEET	6 OF 23		

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DATUM	AHD	AUTHORISED BY	P. MILLER

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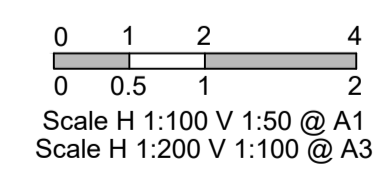
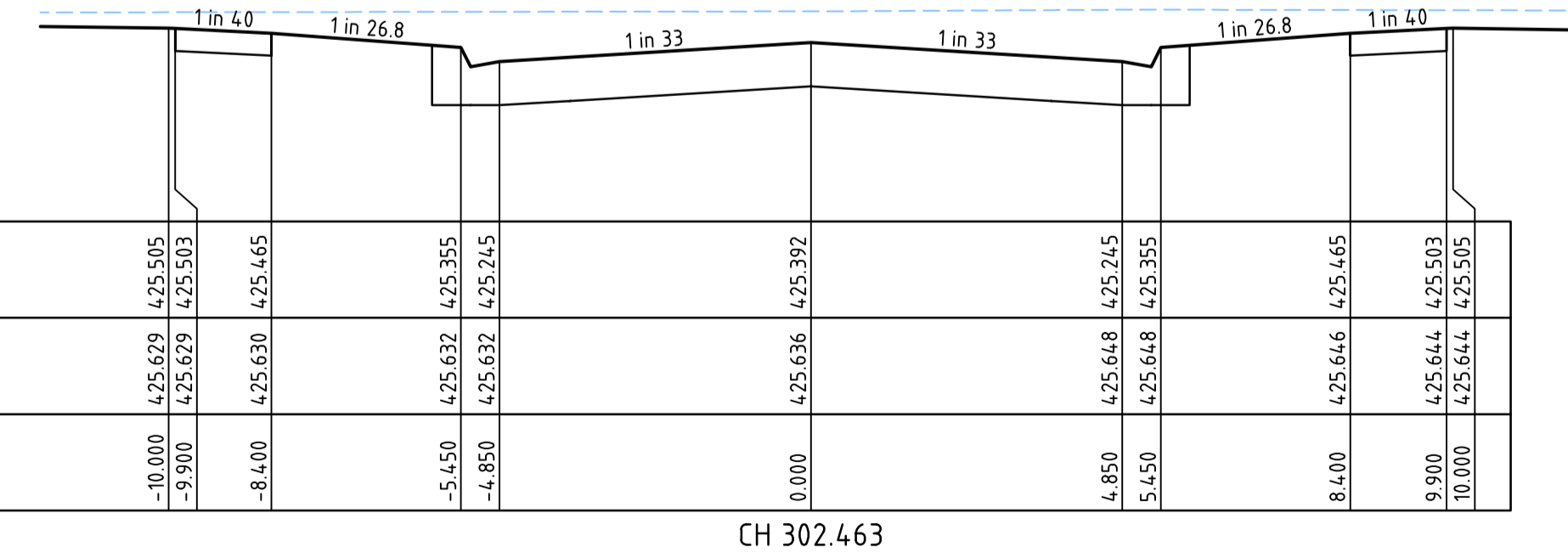
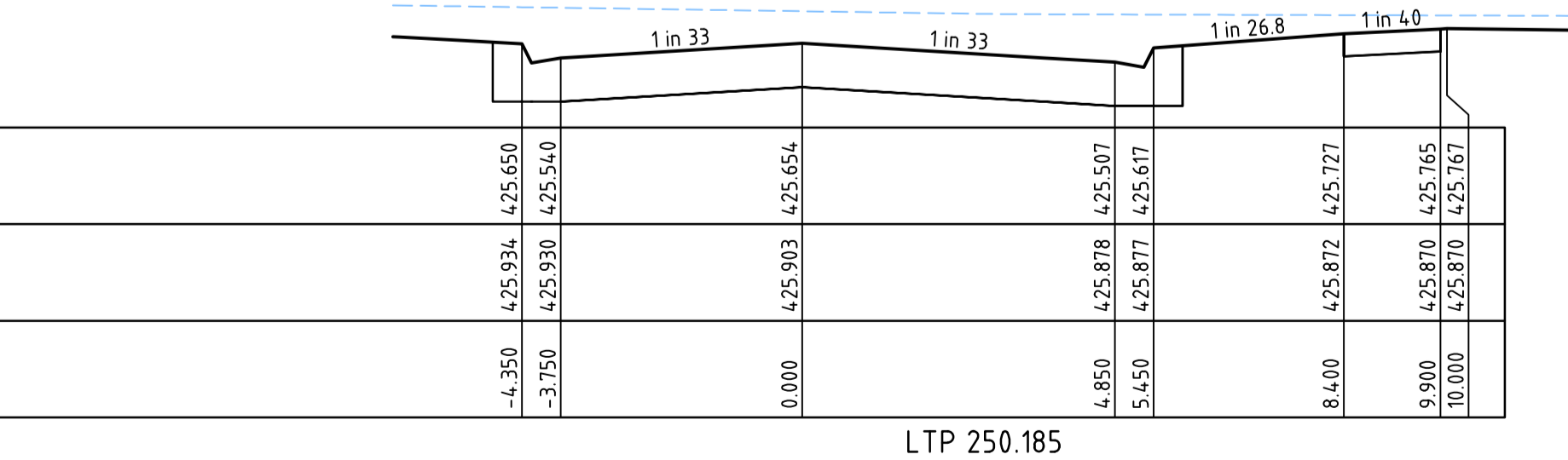
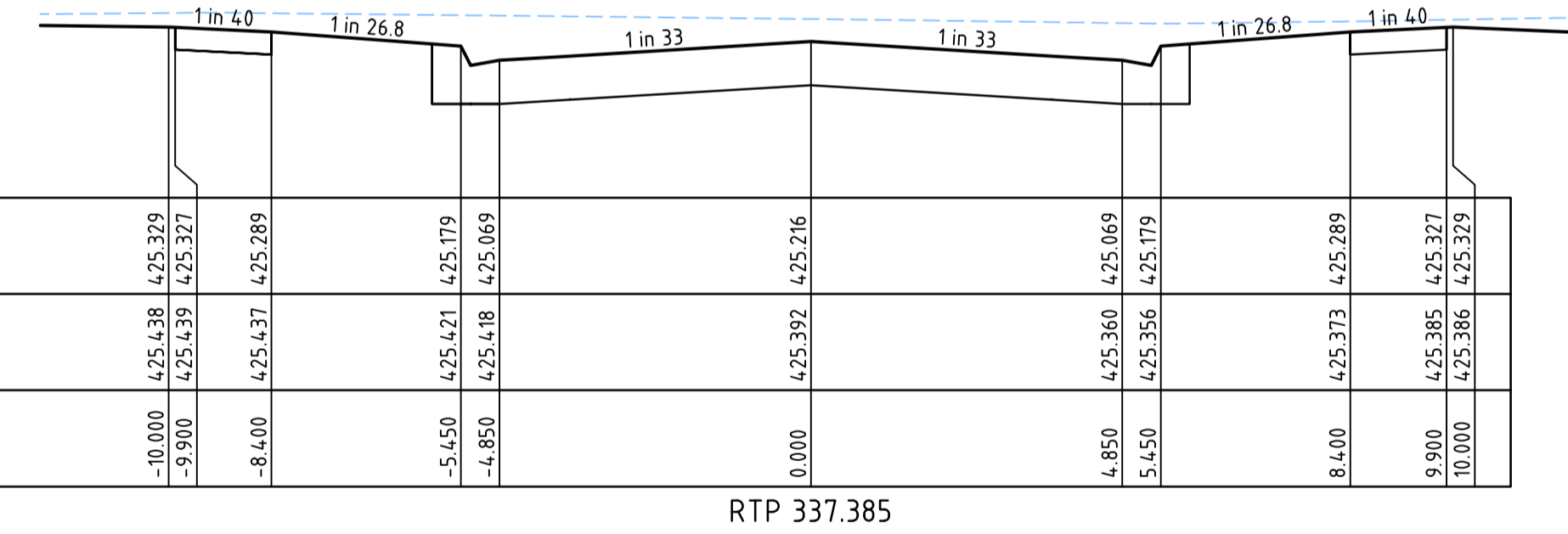
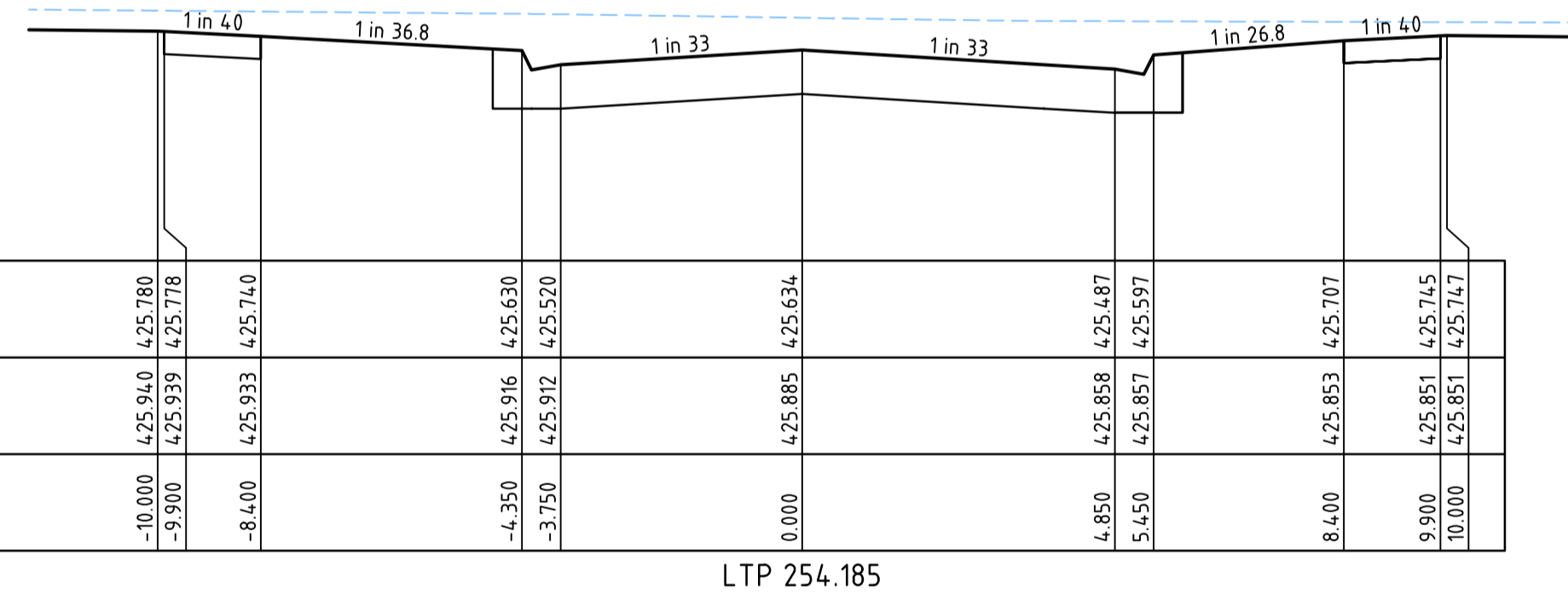
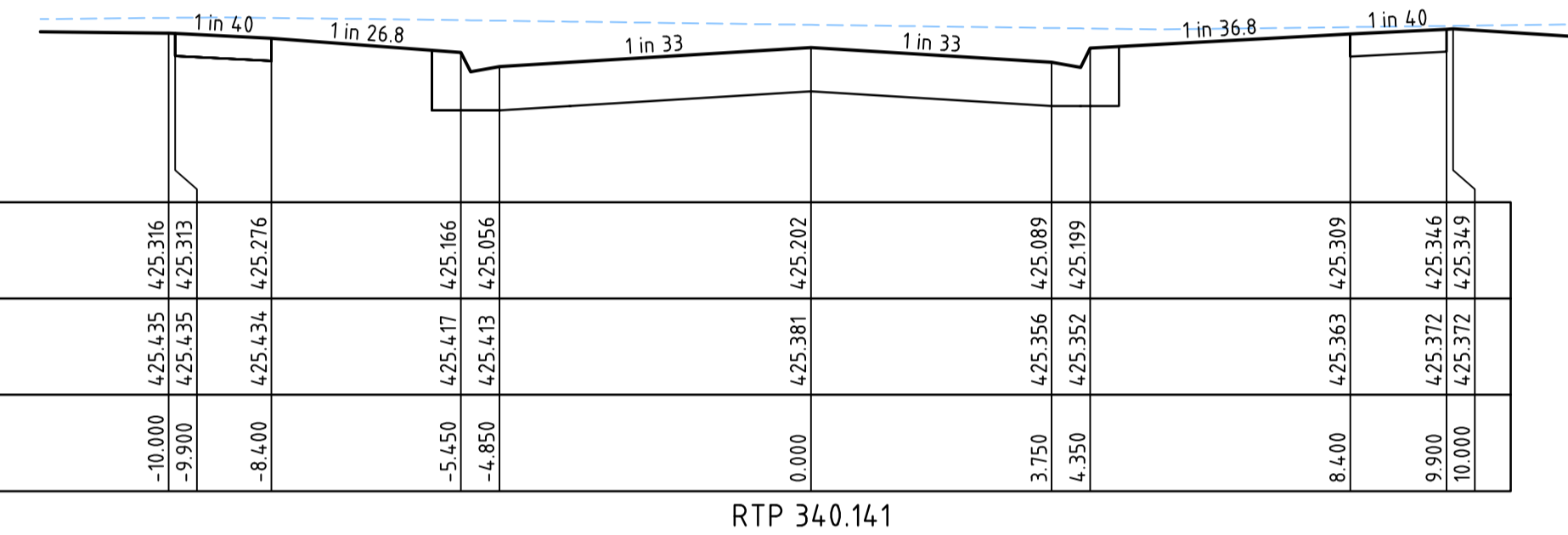
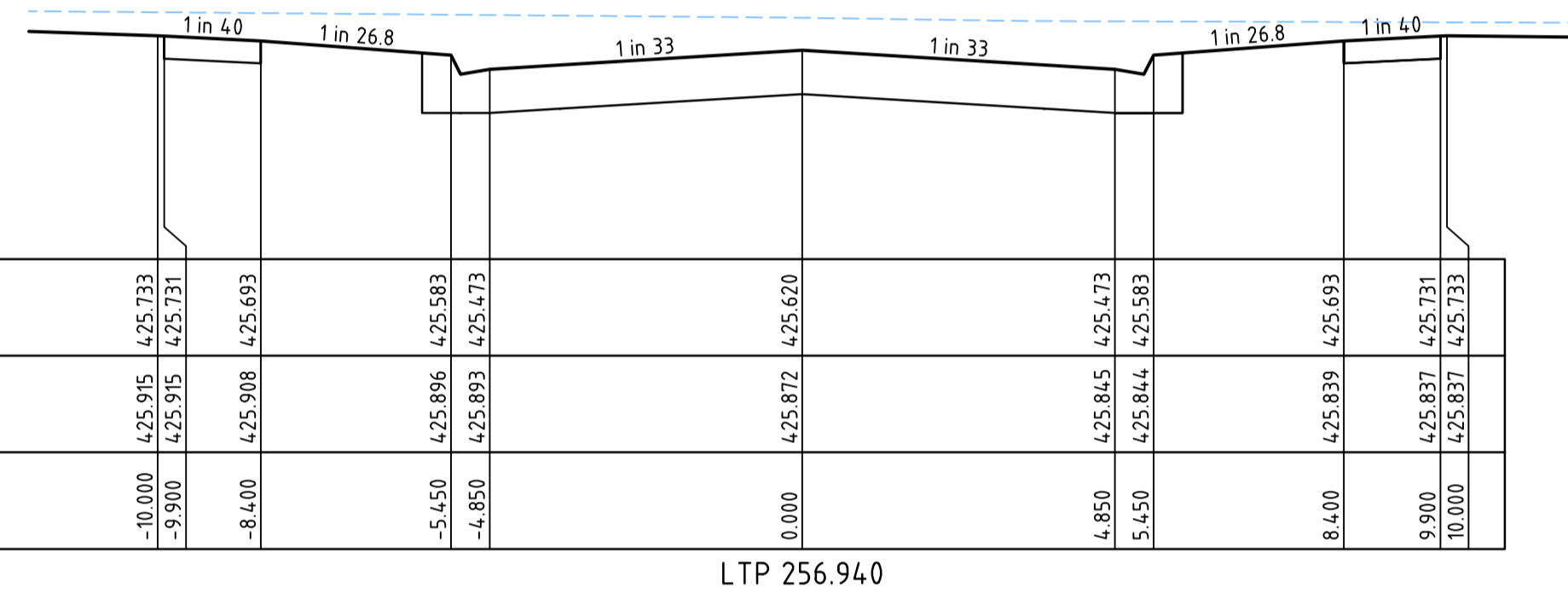
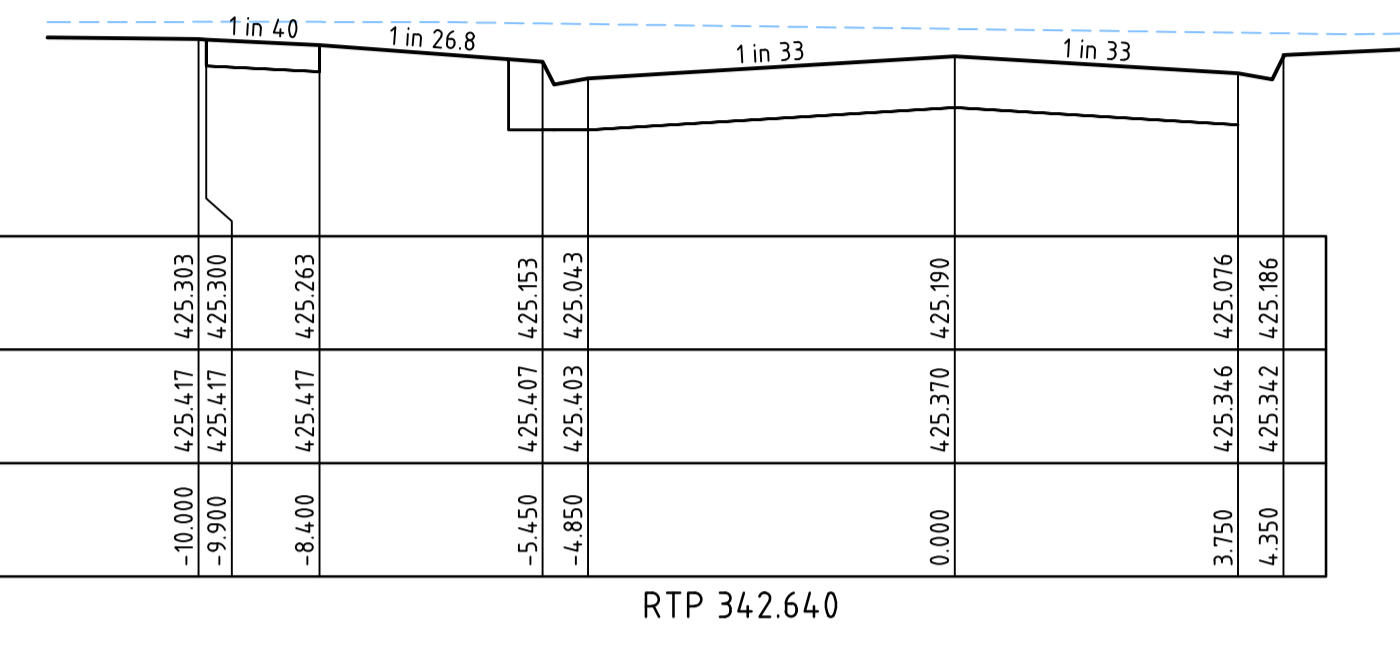
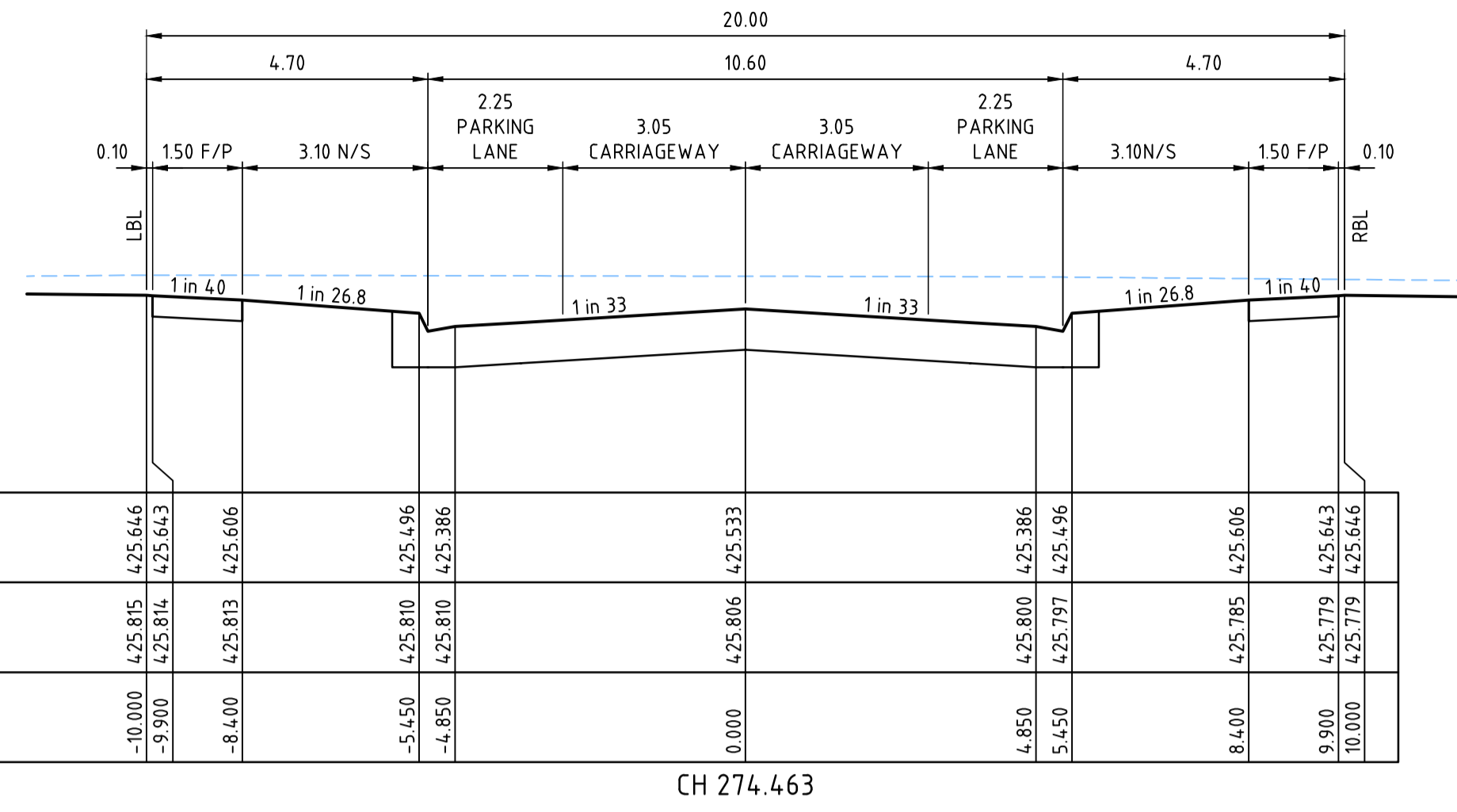
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
SELVA AVENUE  
LONGITUDINAL & CROSS SECTIONS

DRAWING No.	13R8A	VERSION	A
REFERENCE	23718E/13		
SHEET	8 OF 23		







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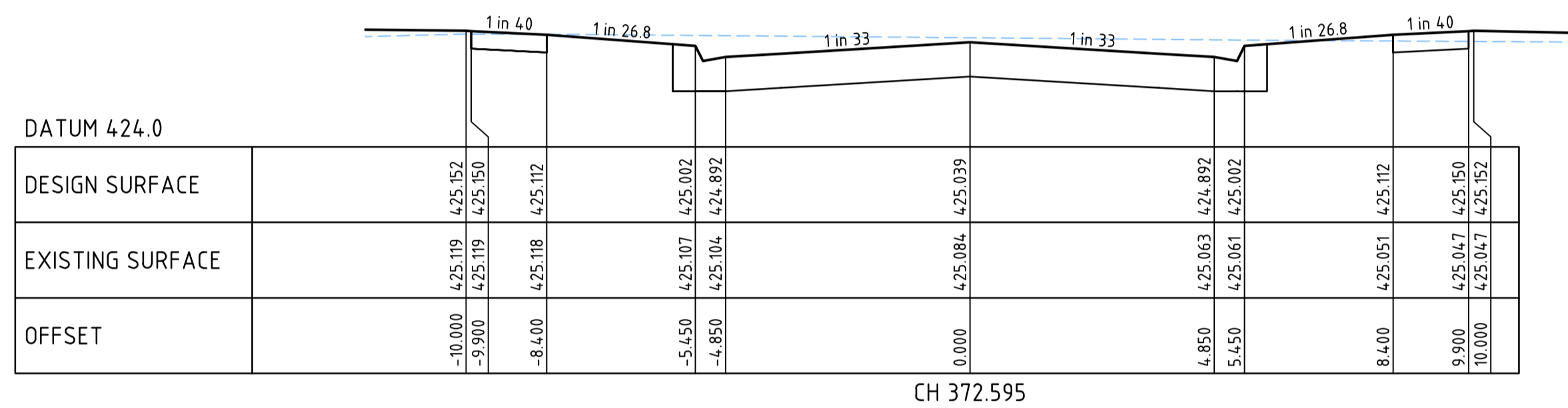
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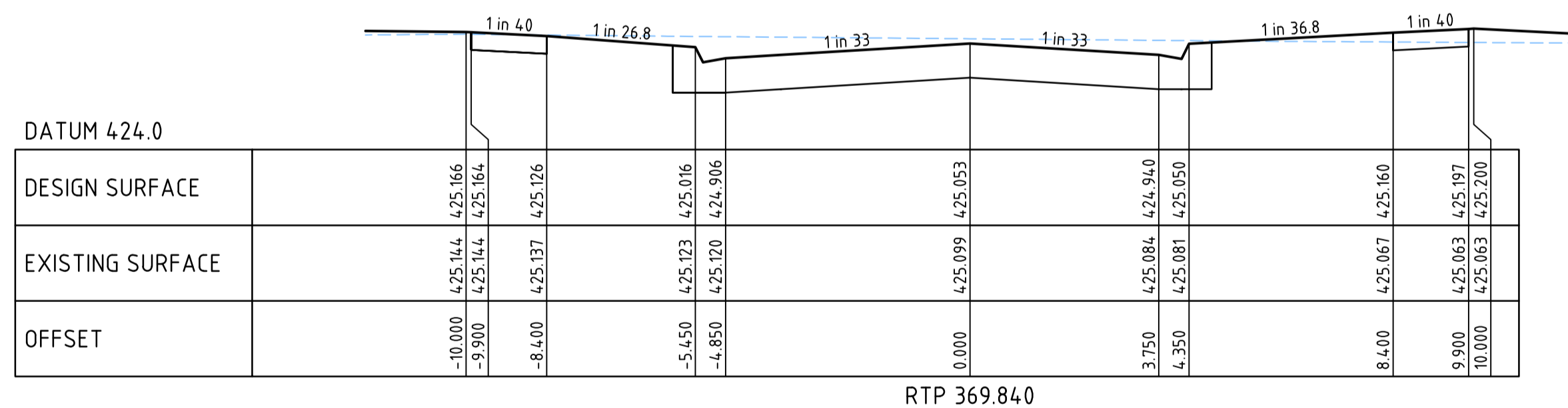
CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 SNOWBIRD ROAD  
 CROSS SECTIONS - 2

DRAWING No.	9R12A	VERSION	A
REFERENCE	23718E/13		
SHEET	9	OF	23

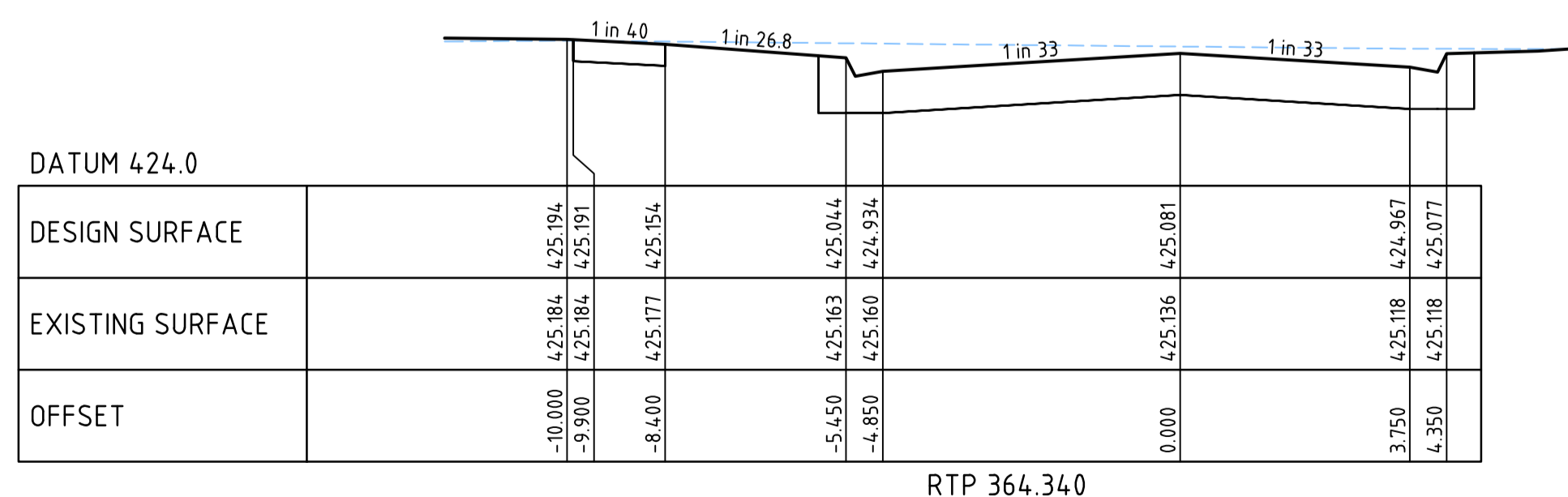
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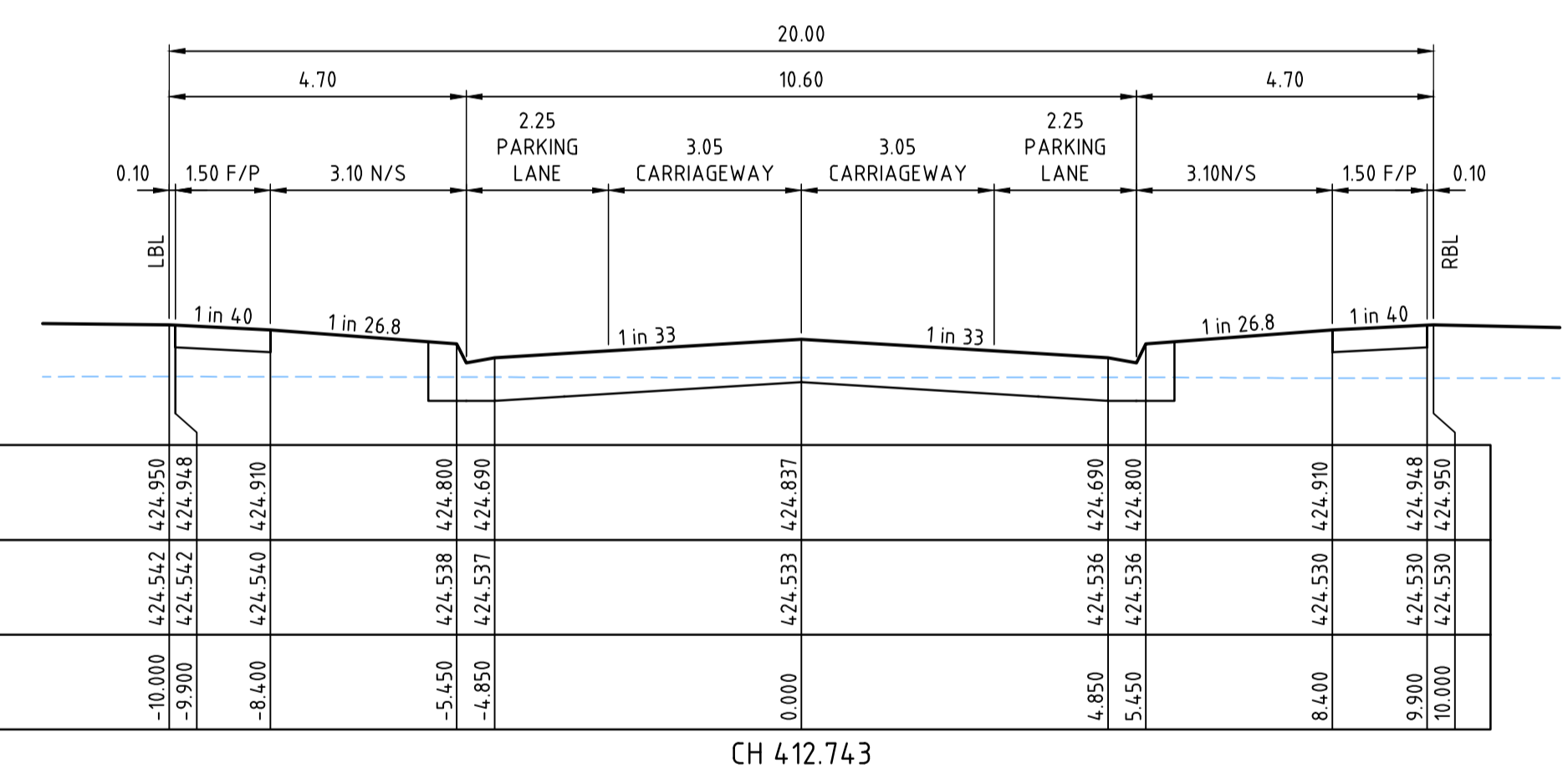
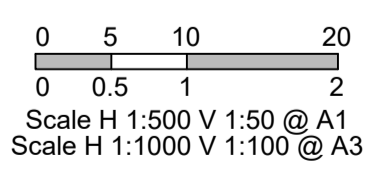
CH 372.595



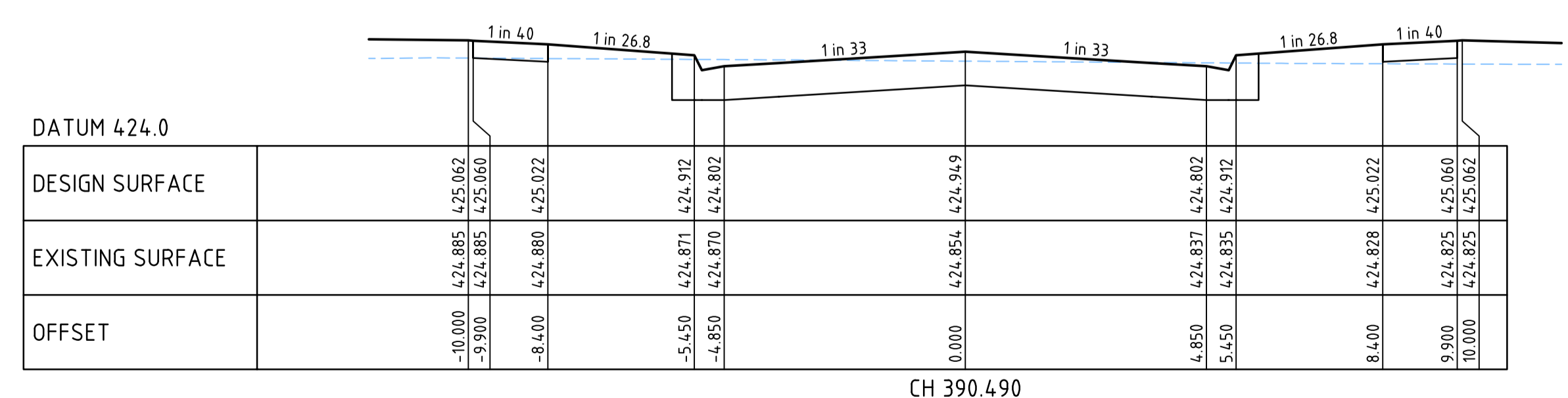
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RTP 364.340



CH 412.743



CH 390.490

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VERSION	ISSUE TO COUNCIL	REMARKS
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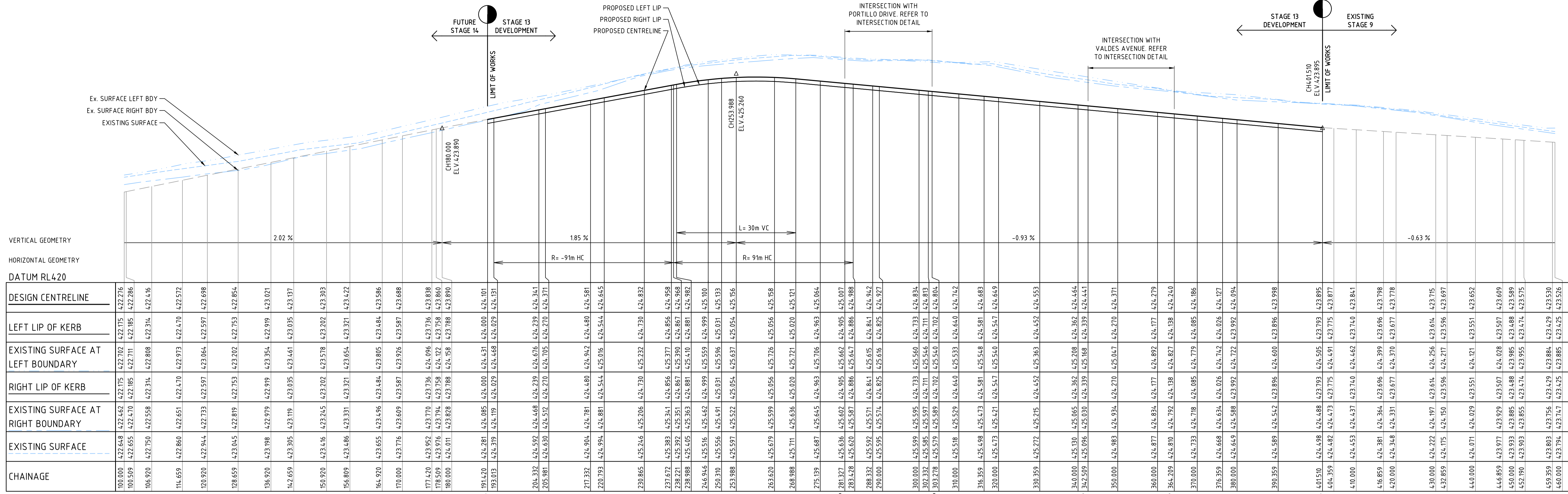
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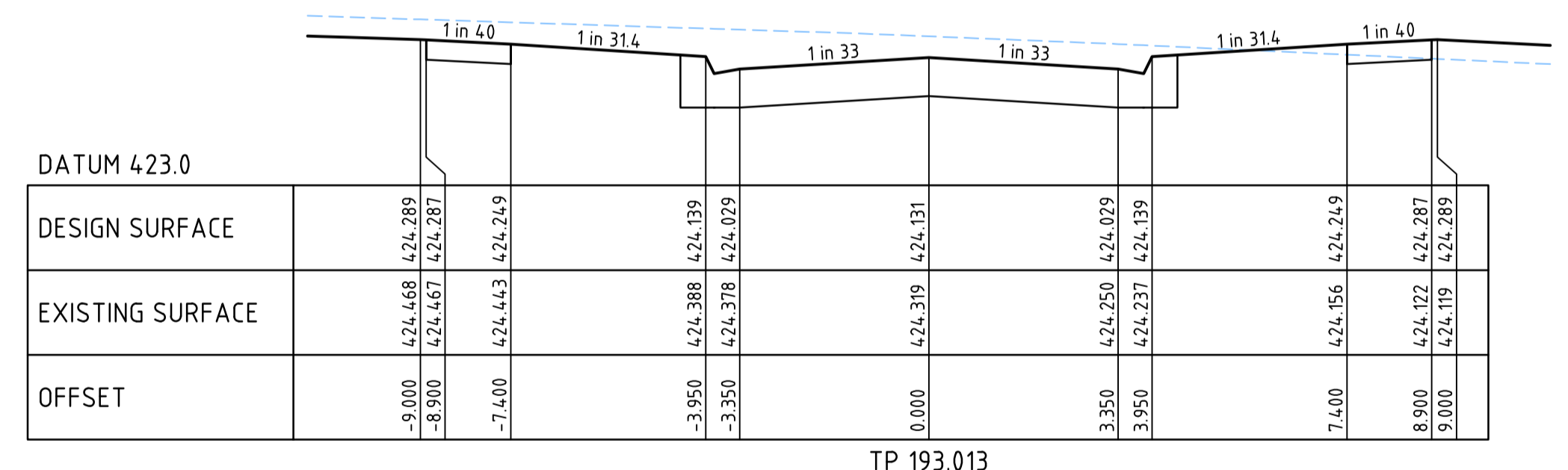
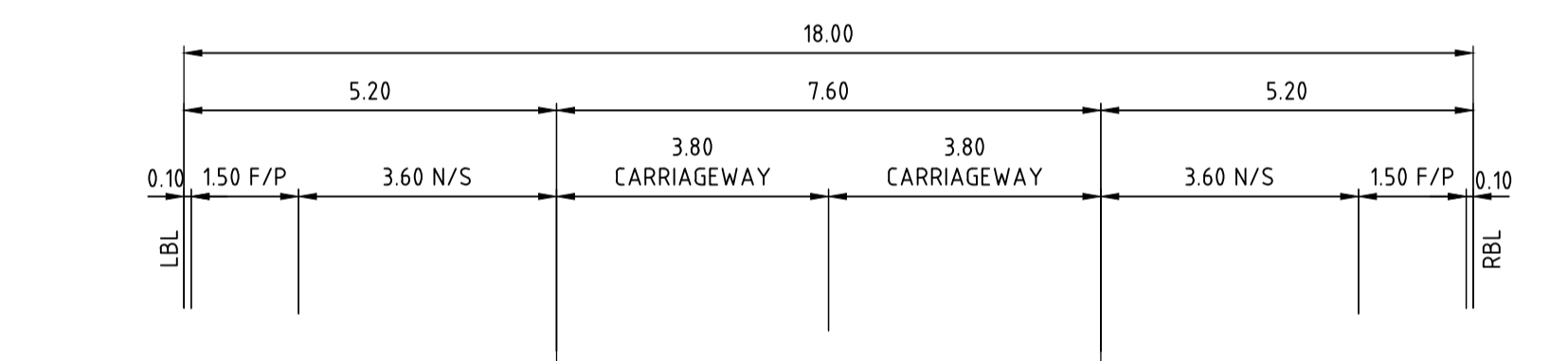
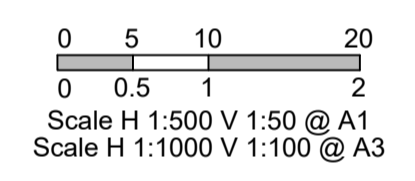
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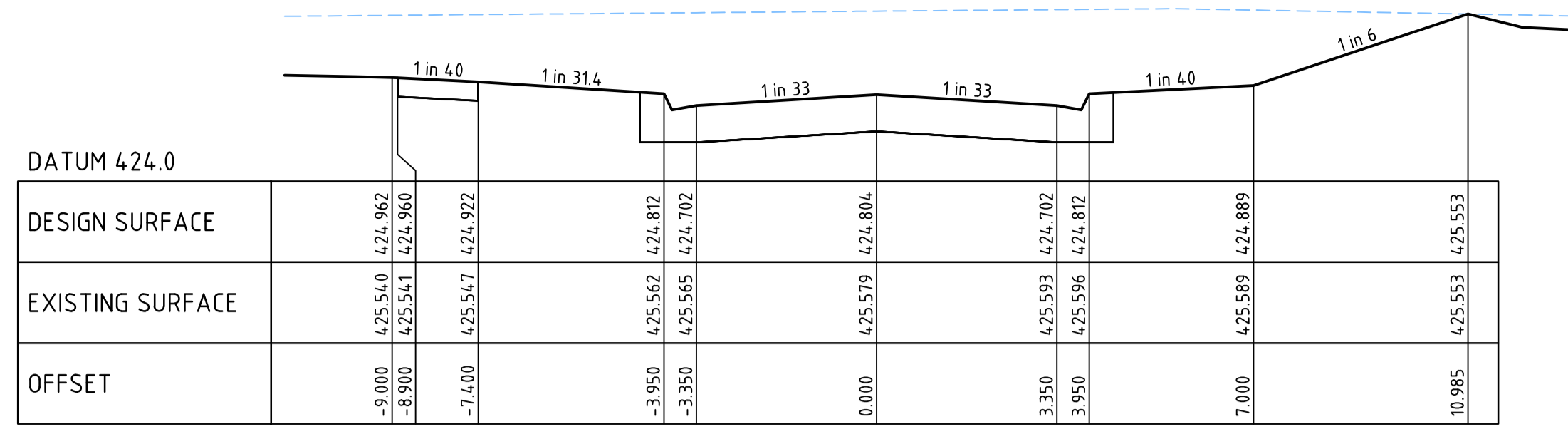
CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 SNOWBIRD ROAD  
 CROSS SECTION - 3

DRAWING No.	13R10A	VERSION	A
REFERENCE	23718E/13		
SHEET	10	OF	23

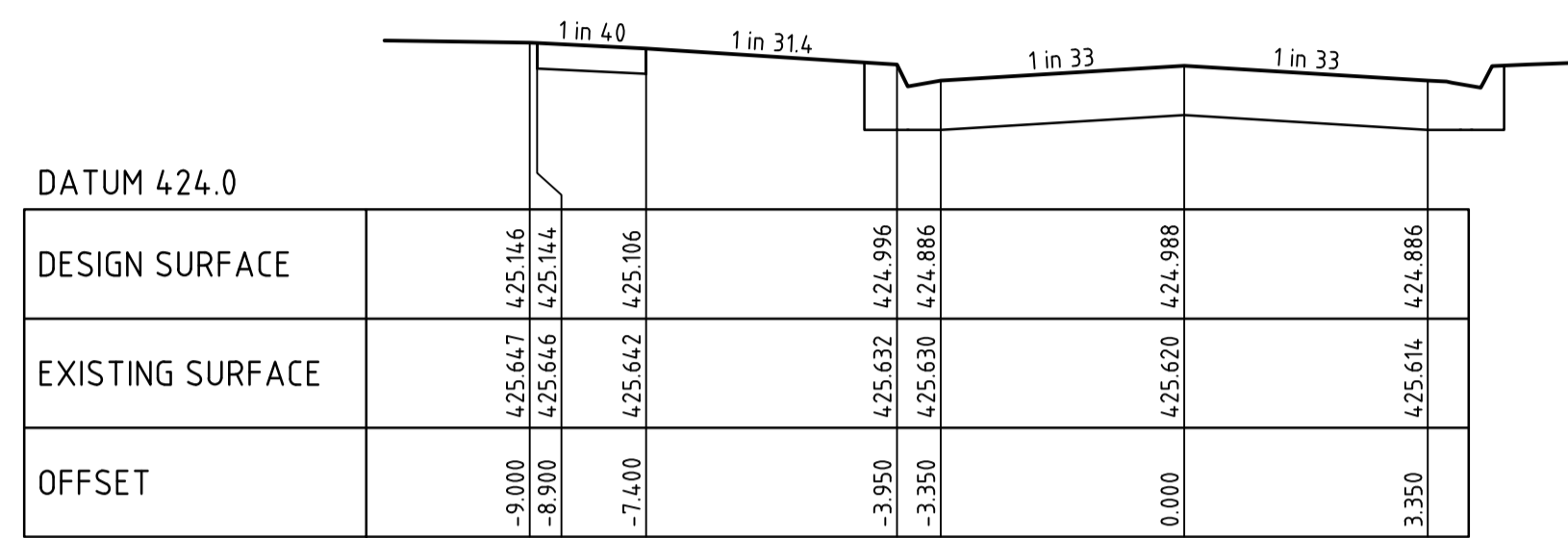


STEAMBOAT AVENUE LONGITUDINAL SECTION

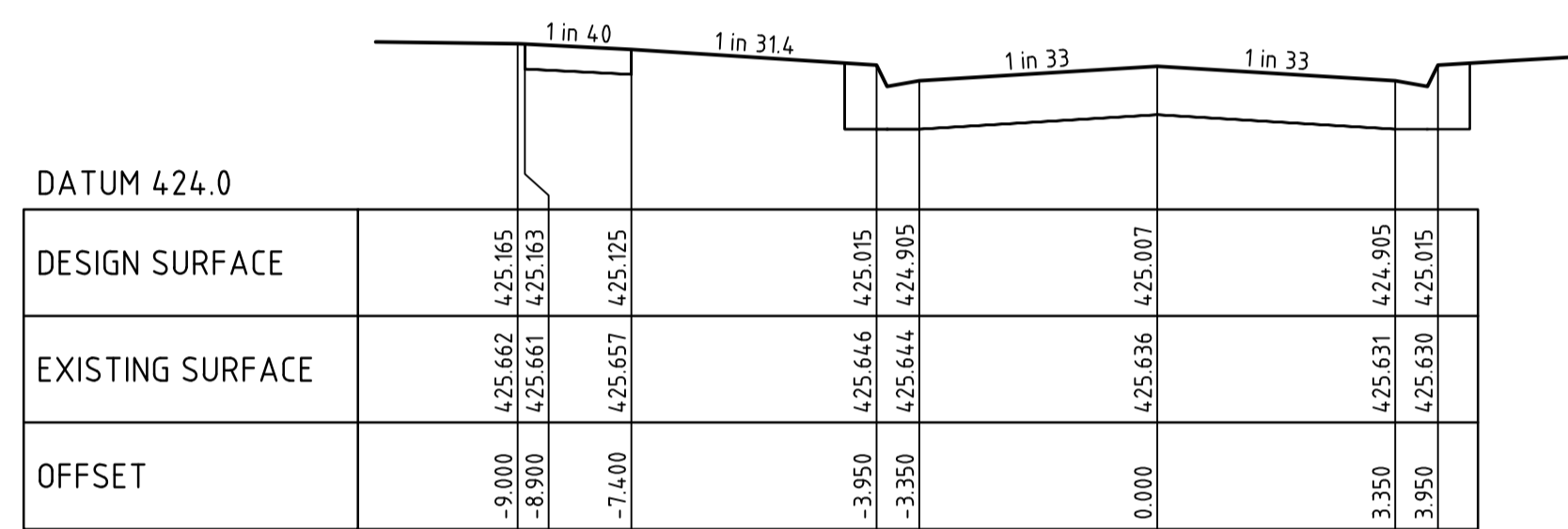




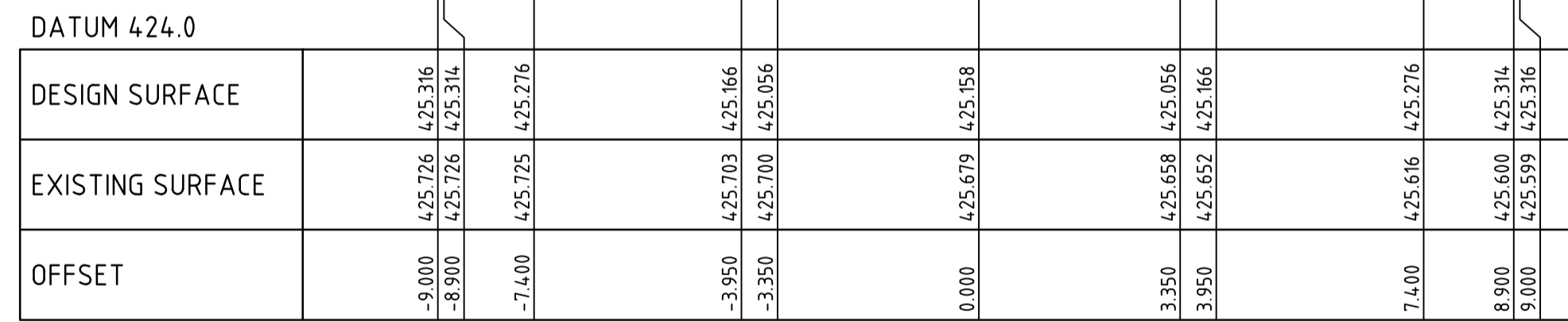
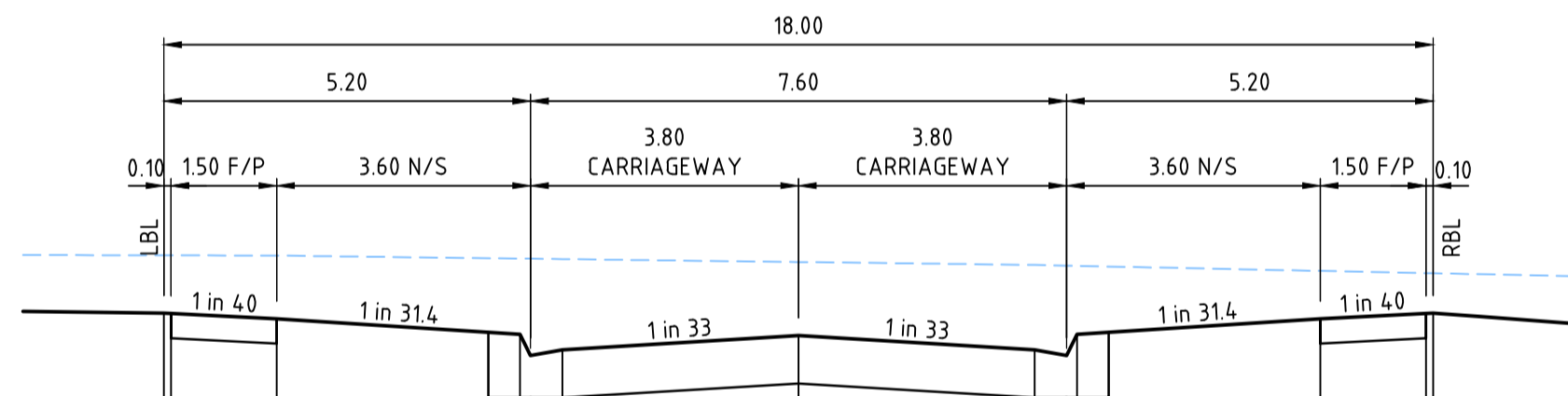
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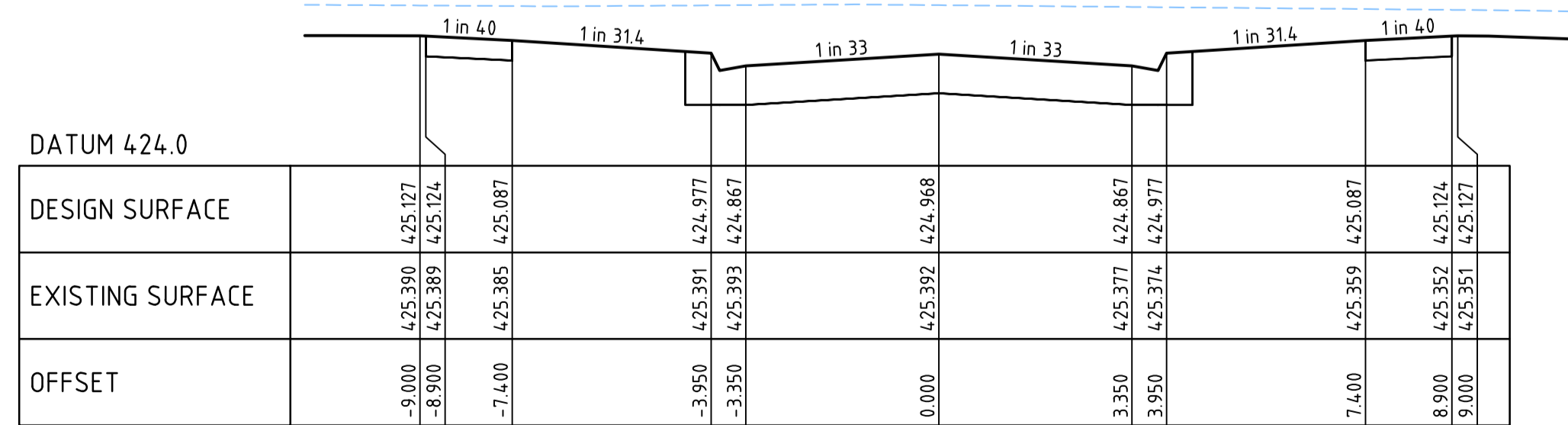
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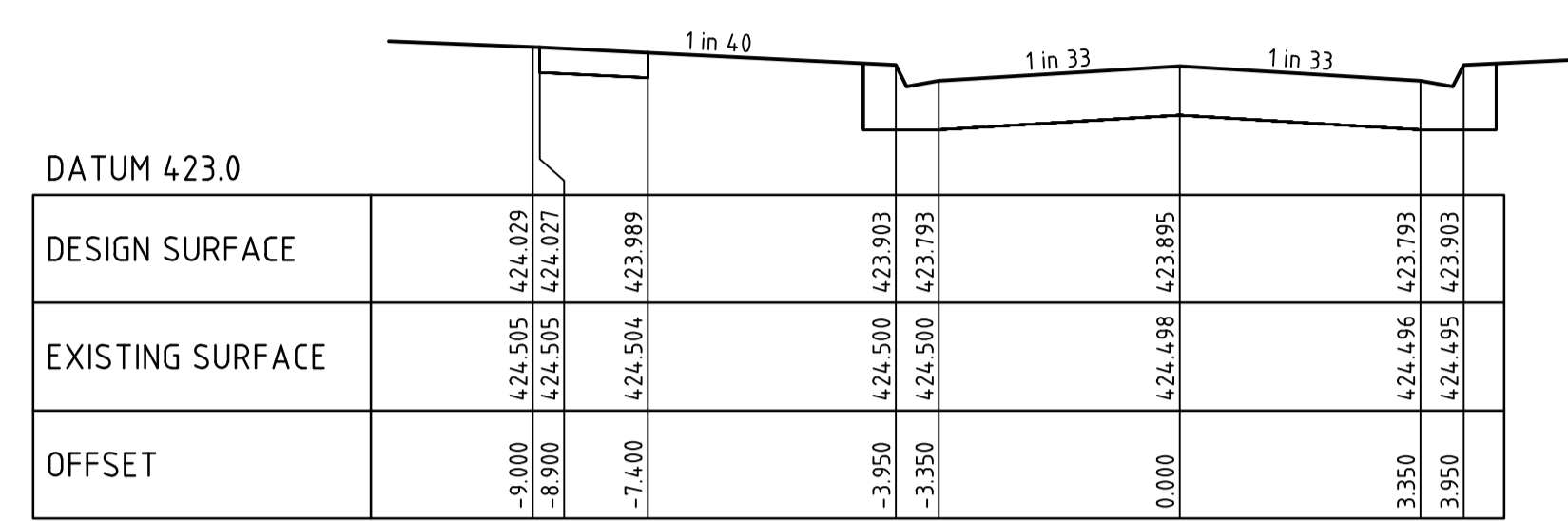
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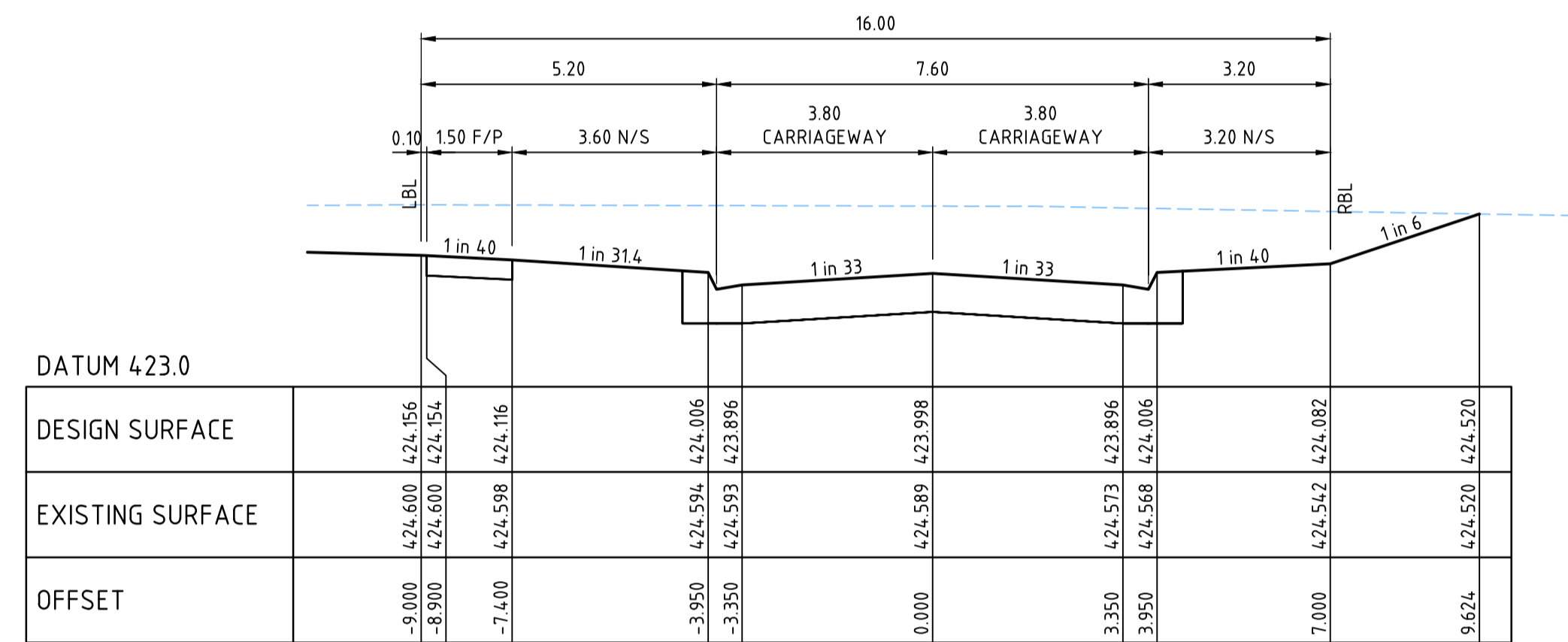
CH 263.620



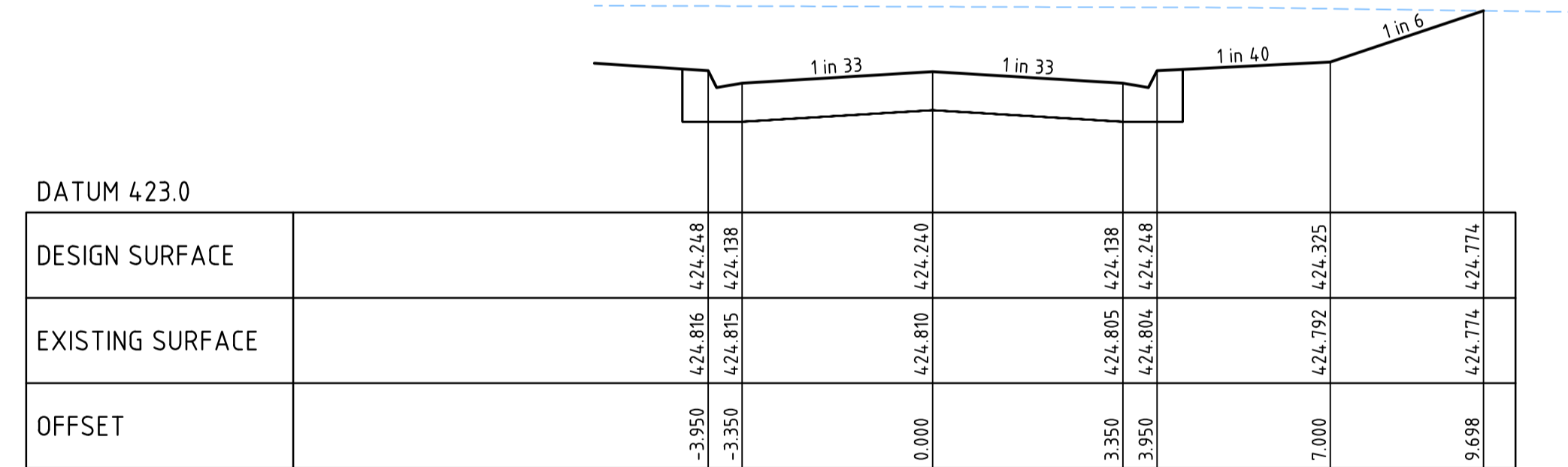
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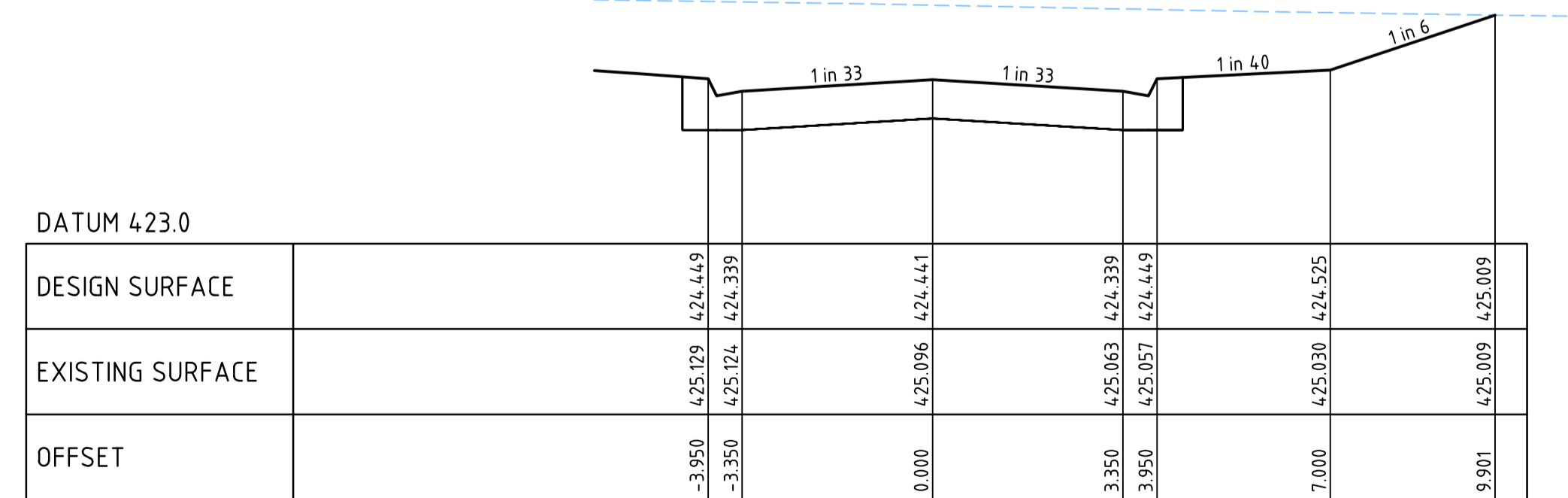
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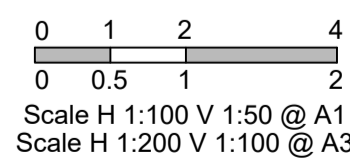
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LTP 364.209



LTP 342.509



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A	ISSUE TO COUNCIL	22.07.21 LP

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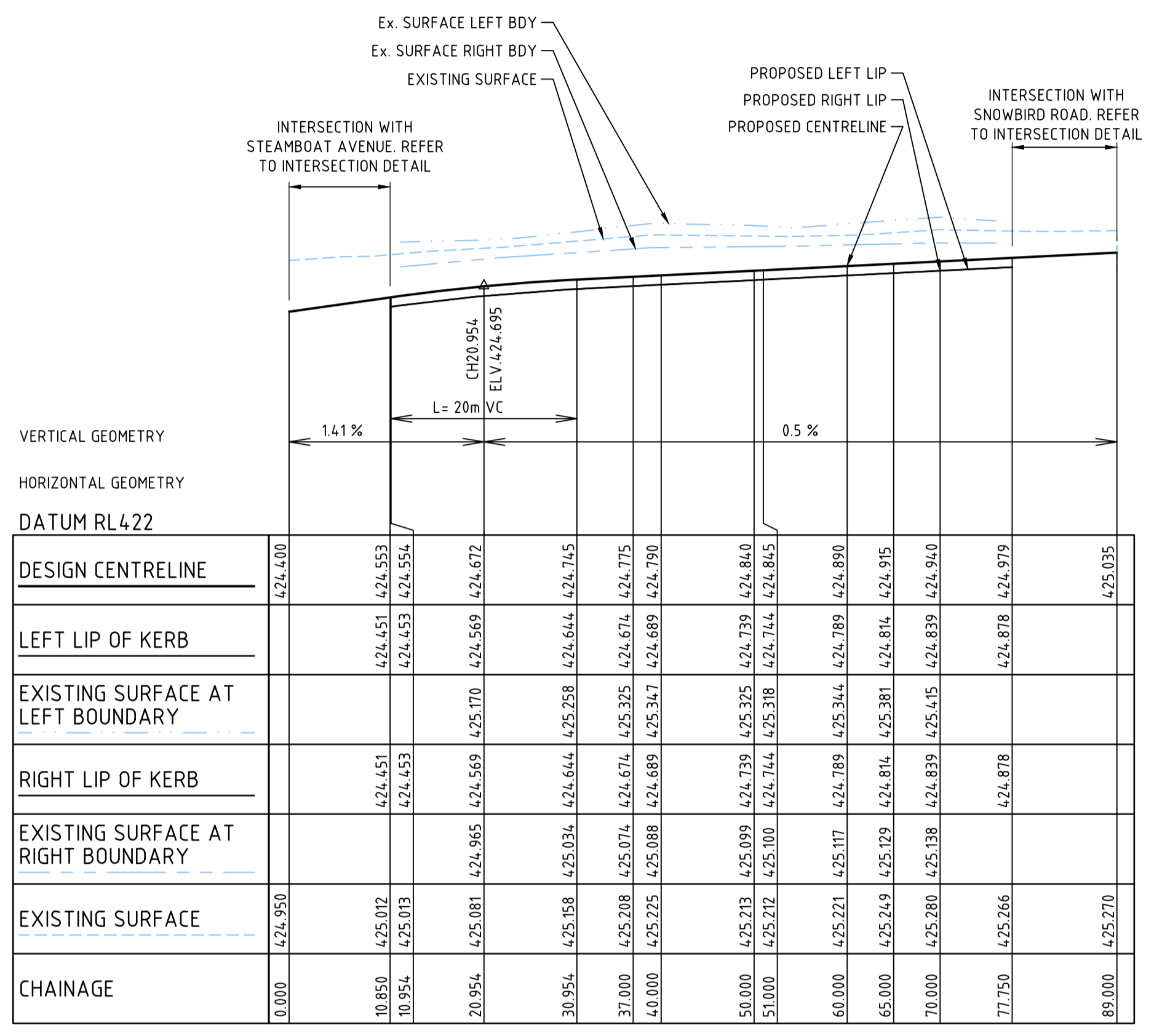
CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 STEAMBOAT AVENUE  
 CROSS SECTIONS - 2

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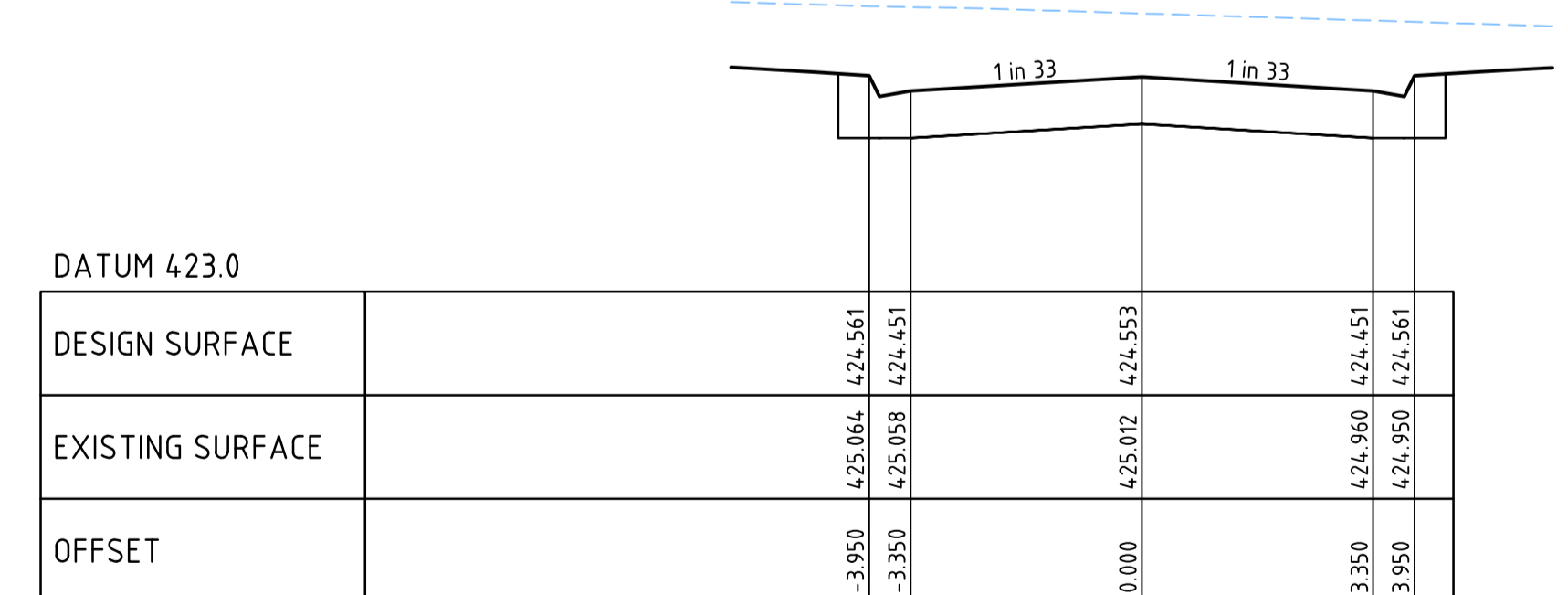
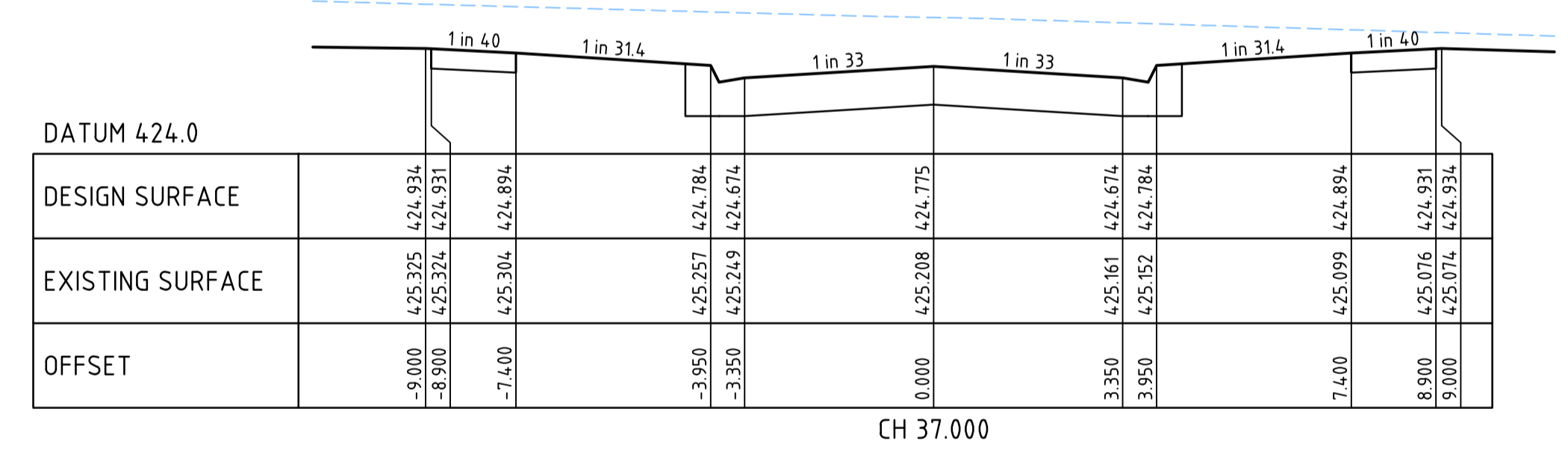
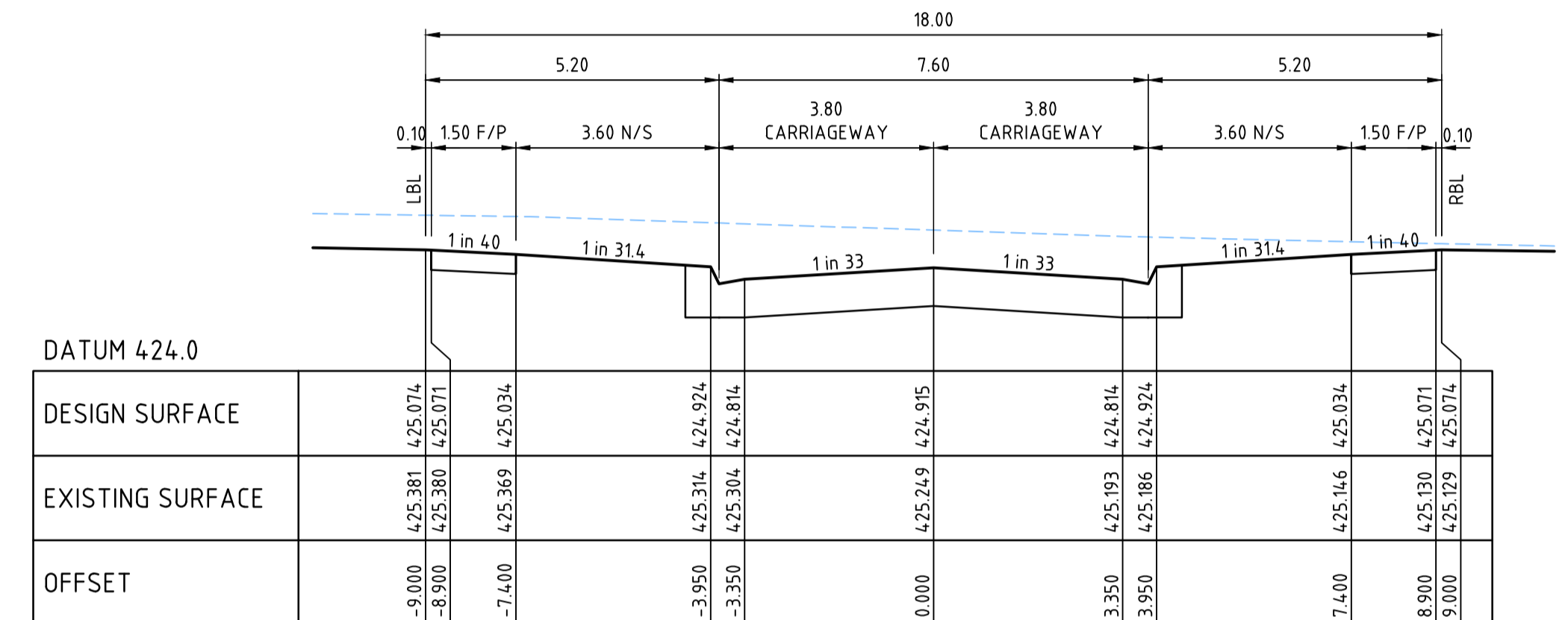
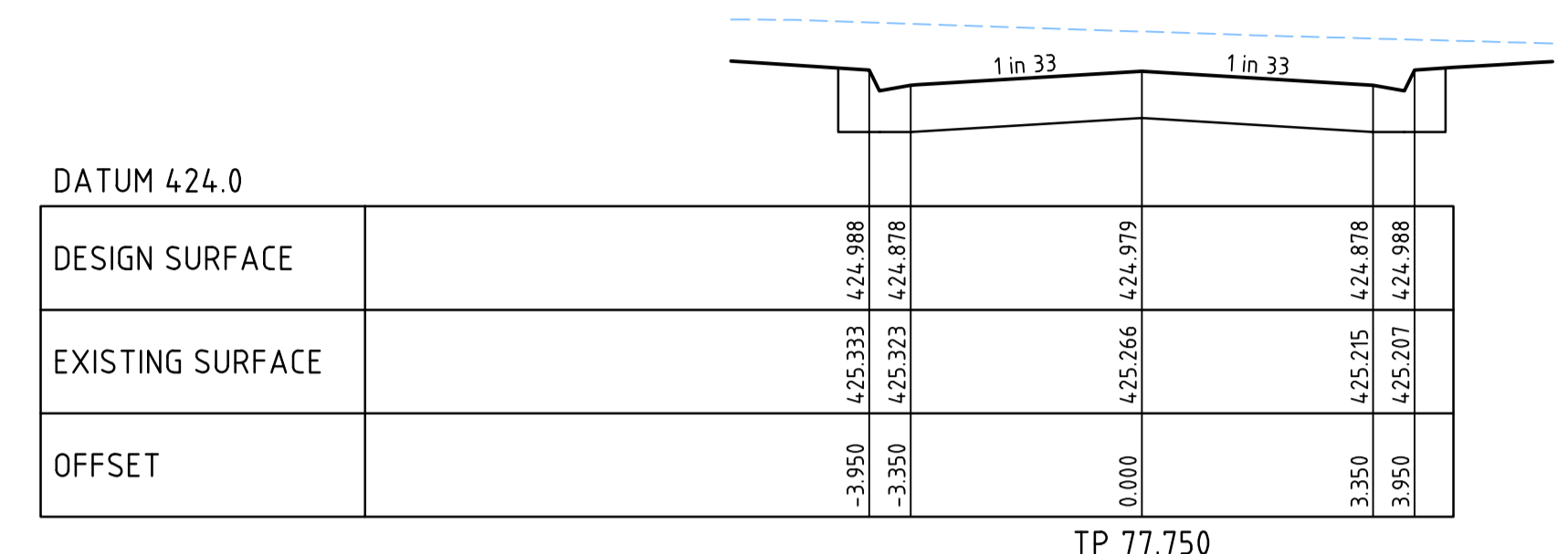
DRAWING No.	13R12	VERSION	A
REFERENCE	23718E/13		
SHEET	12	OF	23

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VALDES AVENUE LONGITUDINAL SECTION  
 Scale H 1:500 V 1:50 @ A1  
 Scale H 1:1000 V 1:100 @ A3



Scale H 1:100 V 1:50 @ A1  
 Scale H 1:200 V 1:100 @ A3

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VERSION	ISSUE TO COUNCIL	22.07.21	LP
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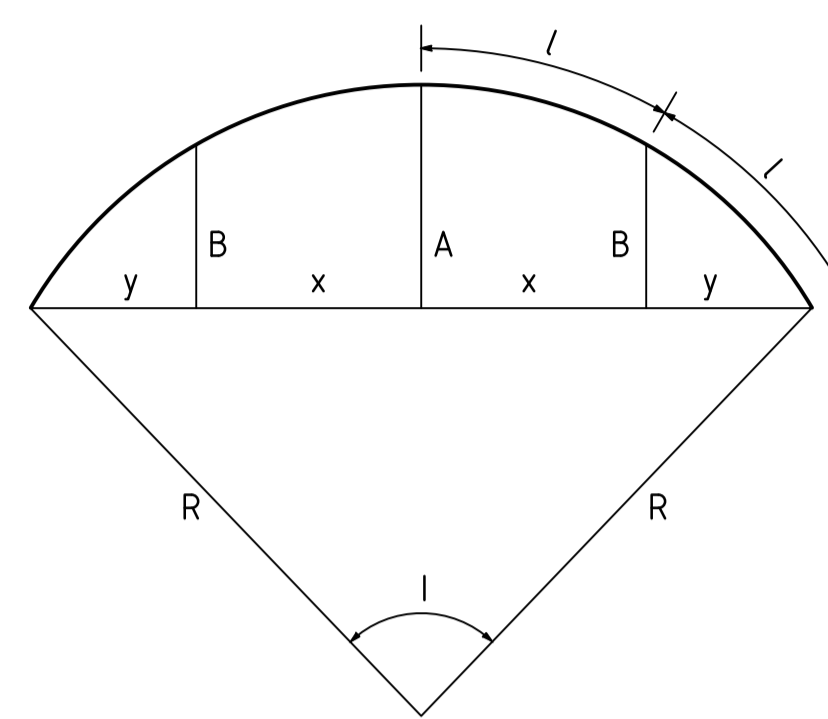
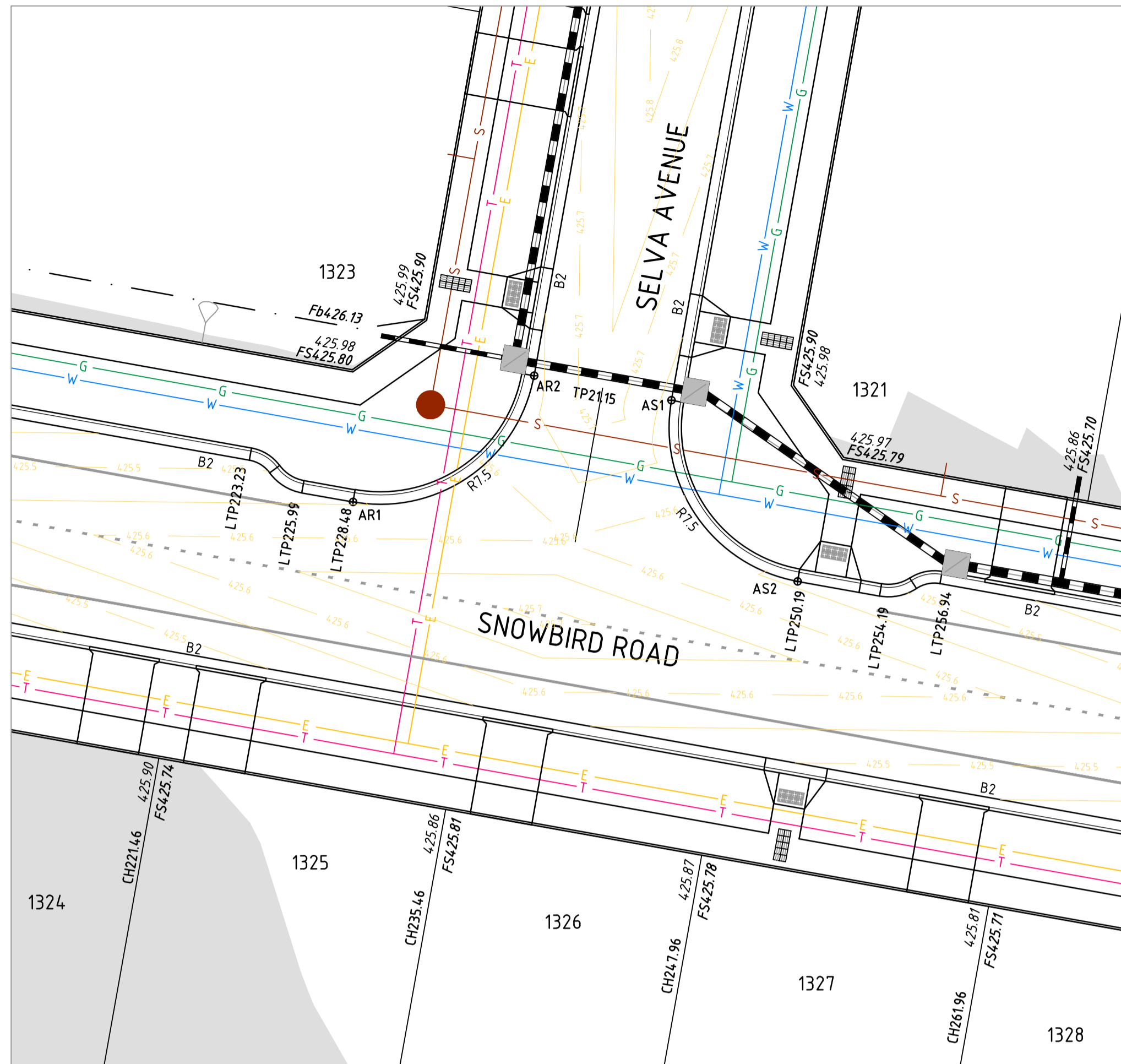
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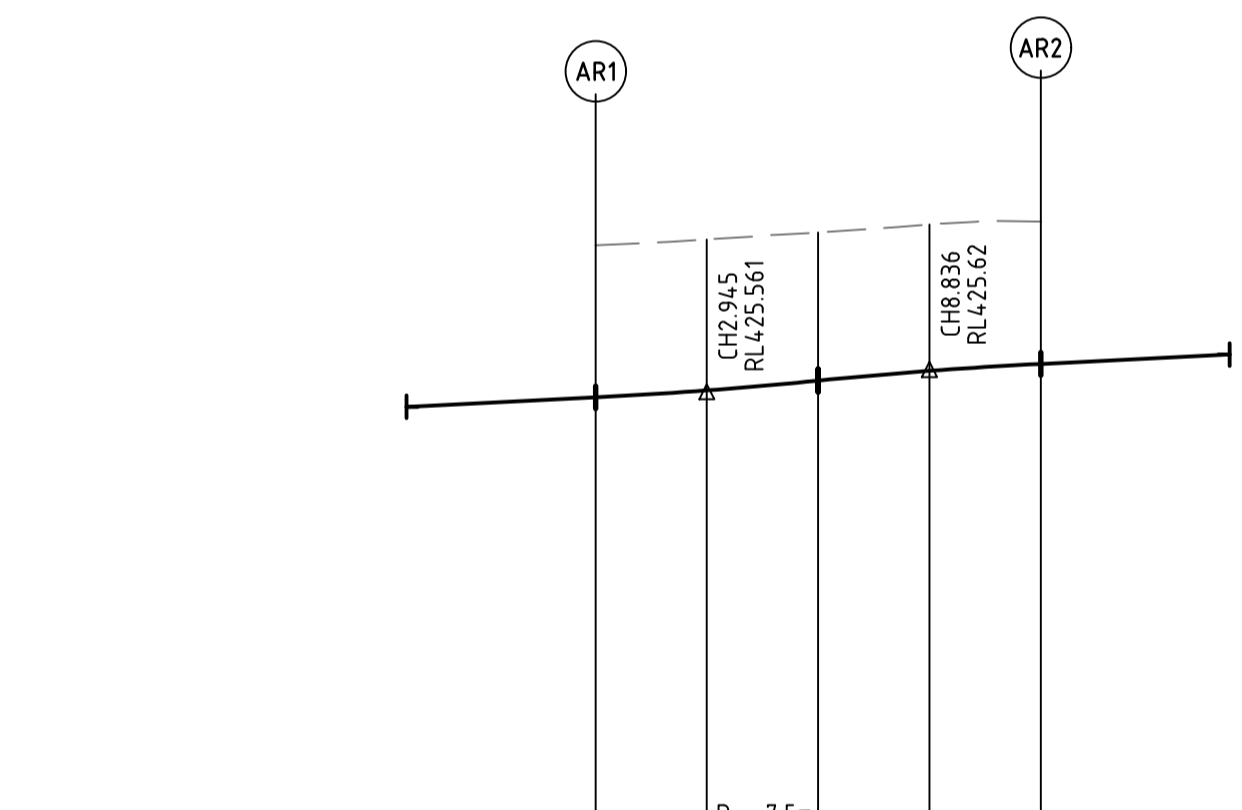
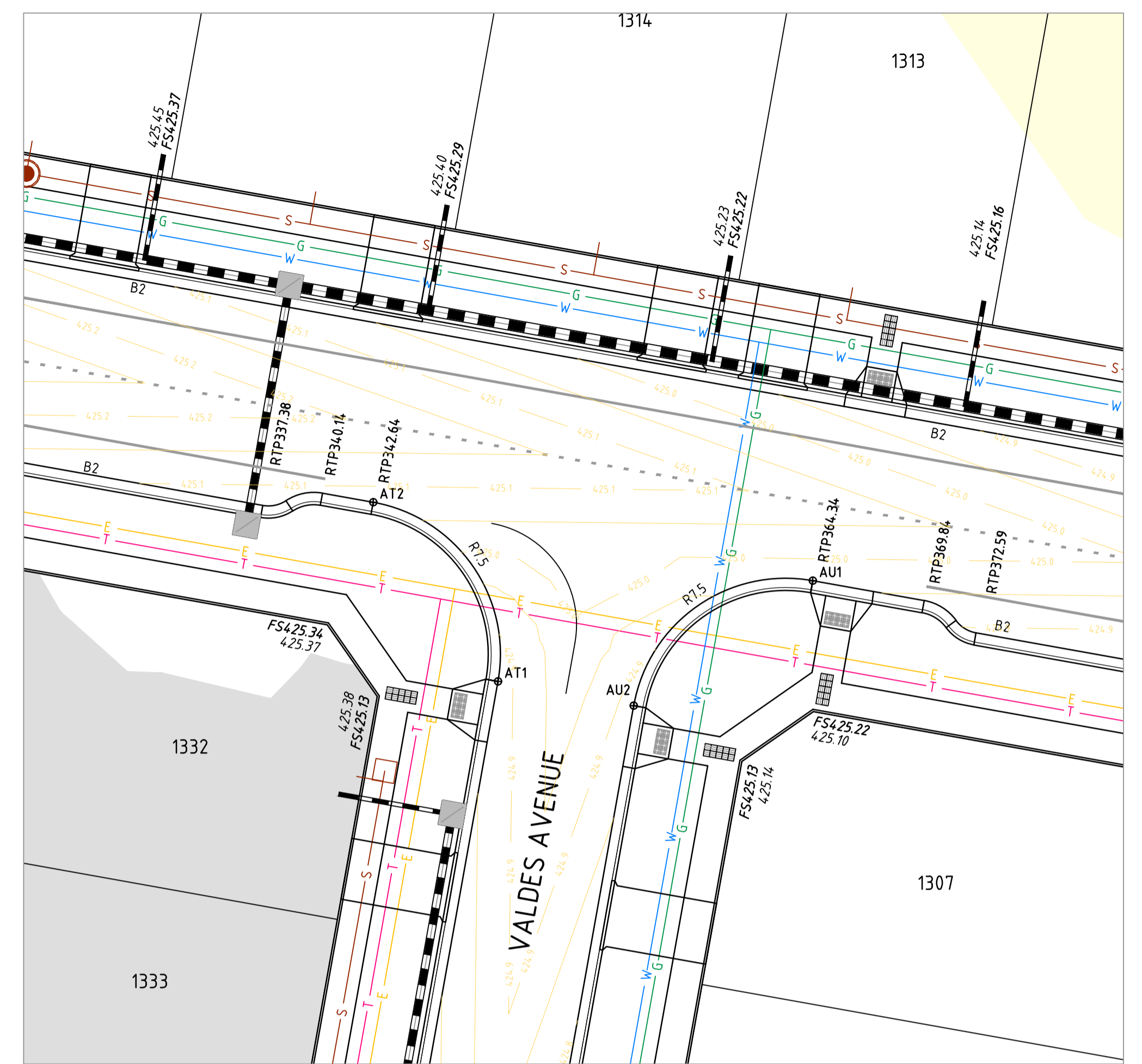
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CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 VALDES AVENUE  
 LONGITUDINAL & CROSS SECTIONS

DRAWING No.	13R13	VERSION	A
REFERENCE	23718E/13		
SHEET	13	OF	23



LIP PROFILE SETOUT



HORIZONTAL GEOMETRY  
VC LENGTH  
VERTICAL GEOMETRY  
DATUM RL424

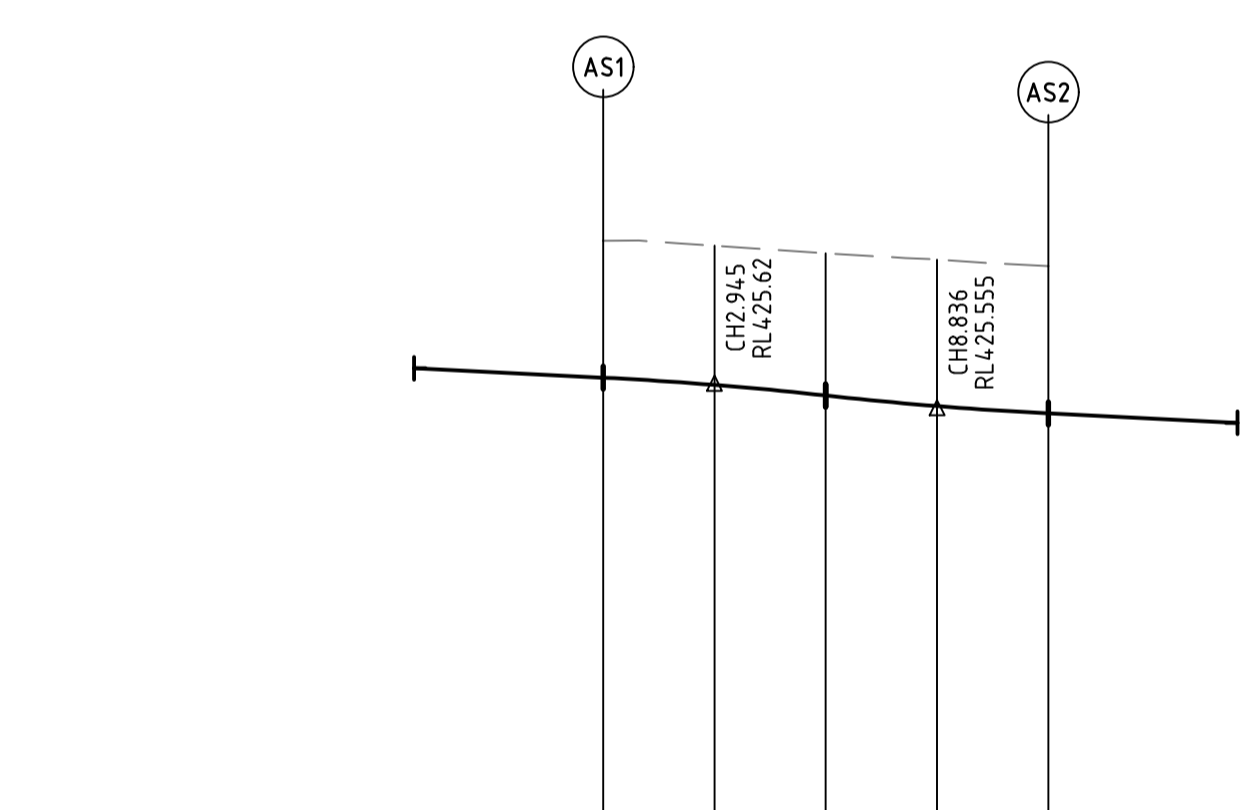
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425.546	425.948	0.000
425.565	425.964	2.945
425.591	425.982	5.890
425.616	426.003	8.836
425.635	426.011	11.781

LIP LINE AR

LIP LINE AR

Point no	Easting	Northing	RL
AR1	746893.762	5836572.880	425.546
AR2	746902.463	5836578.945	425.635

Curve no	L	Radius	Arc	A	B	X	Y	L	Mid point RL
AR1 - AR2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	425.591



HORIZONTAL GEOMETRY  
VC LENGTH  
VERTICAL GEOMETRY  
DATUM RL424

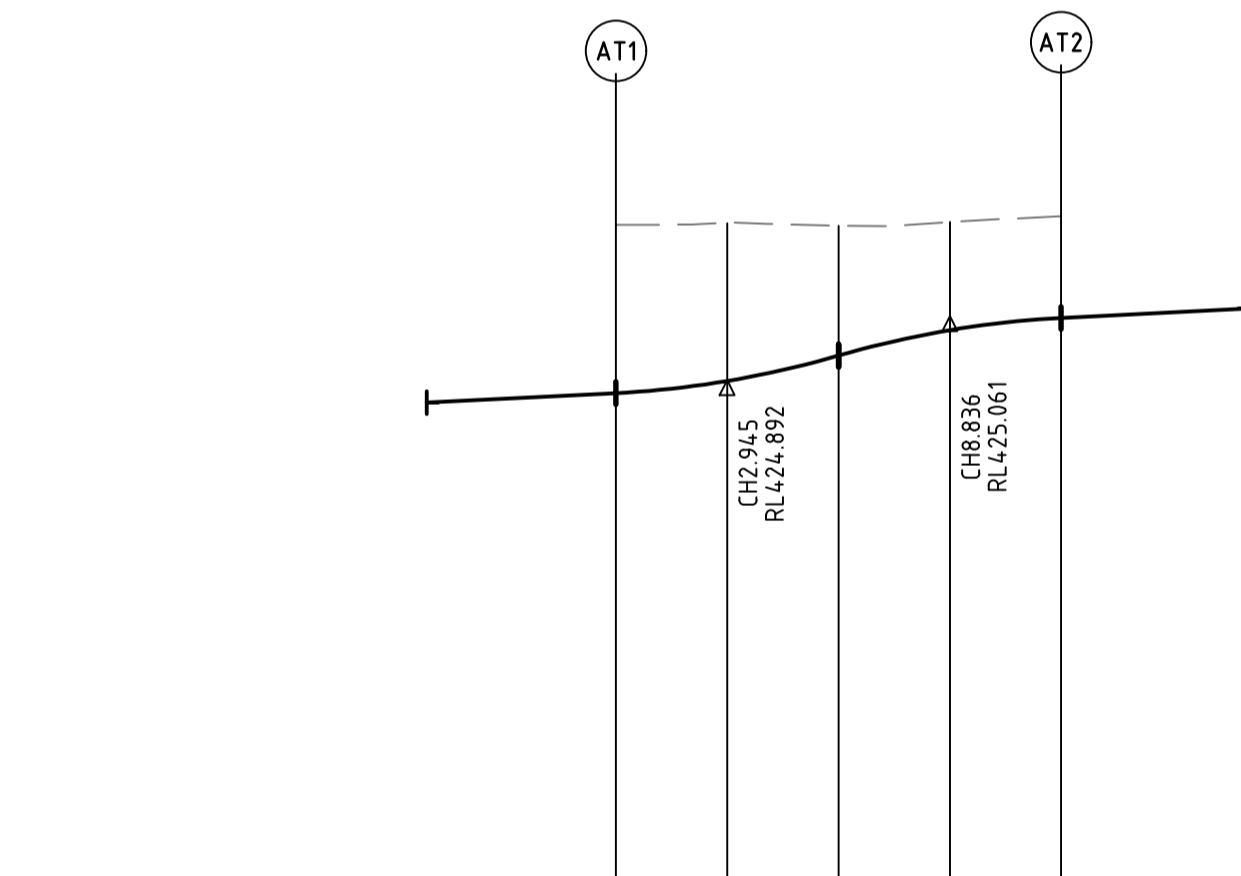
DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
425.635	425.997	0.000
425.616	425.984	2.945
425.588	425.964	5.890
425.560	425.947	8.836
425.540	425.930	11.781

LIP LINE AS

LIP LINE AS

Point no	Easting	Northing	RL
AS1	746909.059	5836577.768	425.635
AS2	746915.124	5836569.066	425.540

Curve no	L	Radius	Arc	A	B	X	Y	L	Mid point RL
AS1 - AS2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	425.588



HORIZONTAL GEOMETRY  
VC LENGTH  
VERTICAL GEOMETRY  
DATUM RL423

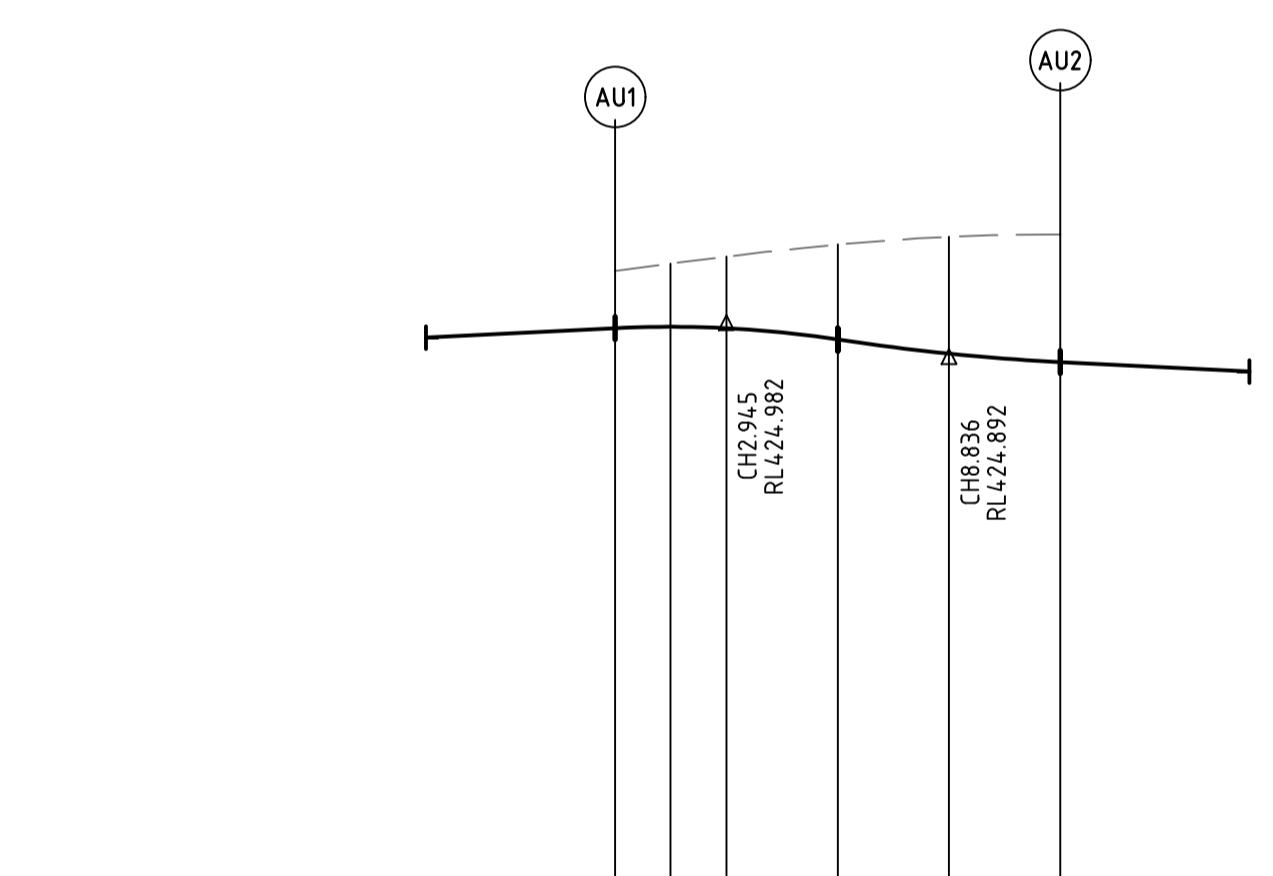
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424.910	425.377	2.945
424.977	425.370	5.890
425.044	425.330	8.836
425.076	425.346	11.781

LIP LINE AT

LIP LINE AT

Point no	Easting	Northing	RL
AT1	747010.888	5836536.735	424.878
AT2	747004.822	5836545.436	425.076

Curve no	L	Radius	Arc	A	B	X	Y	L	Mid point RL
AT1 - AT2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	424.977



HORIZONTAL GEOMETRY  
VC LENGTH  
VERTICAL GEOMETRY  
DATUM RL423

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
424.967	425.118	0.000
424.971	425.138	1.463
424.987	425.157	2.945
424.937	425.188	5.890
424.900	425.209	8.836
424.878	425.215	11.781

LIP LINE AU

LIP LINE AU

Point no	Easting	Northing	RL
AU1	747026.185	5836541.623	424.967
AU2	747017.483	5836535.558	424.878

Curve no	L	Radius	Arc	A	B	X	Y	L	Mid point RL
AU1 - AU2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	424.937

**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.

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DATUM	AHD	AUTHORISED BY	P. MILLER

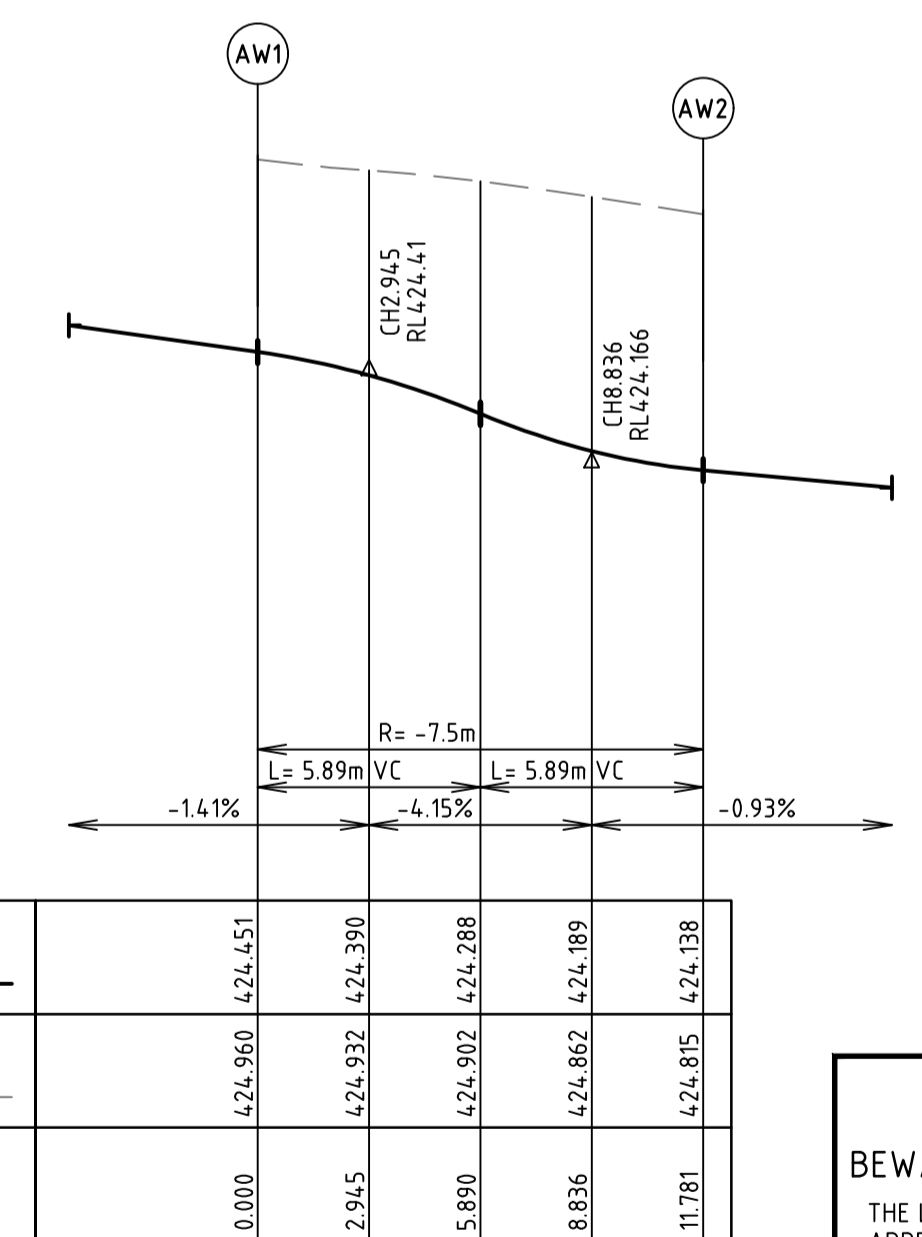
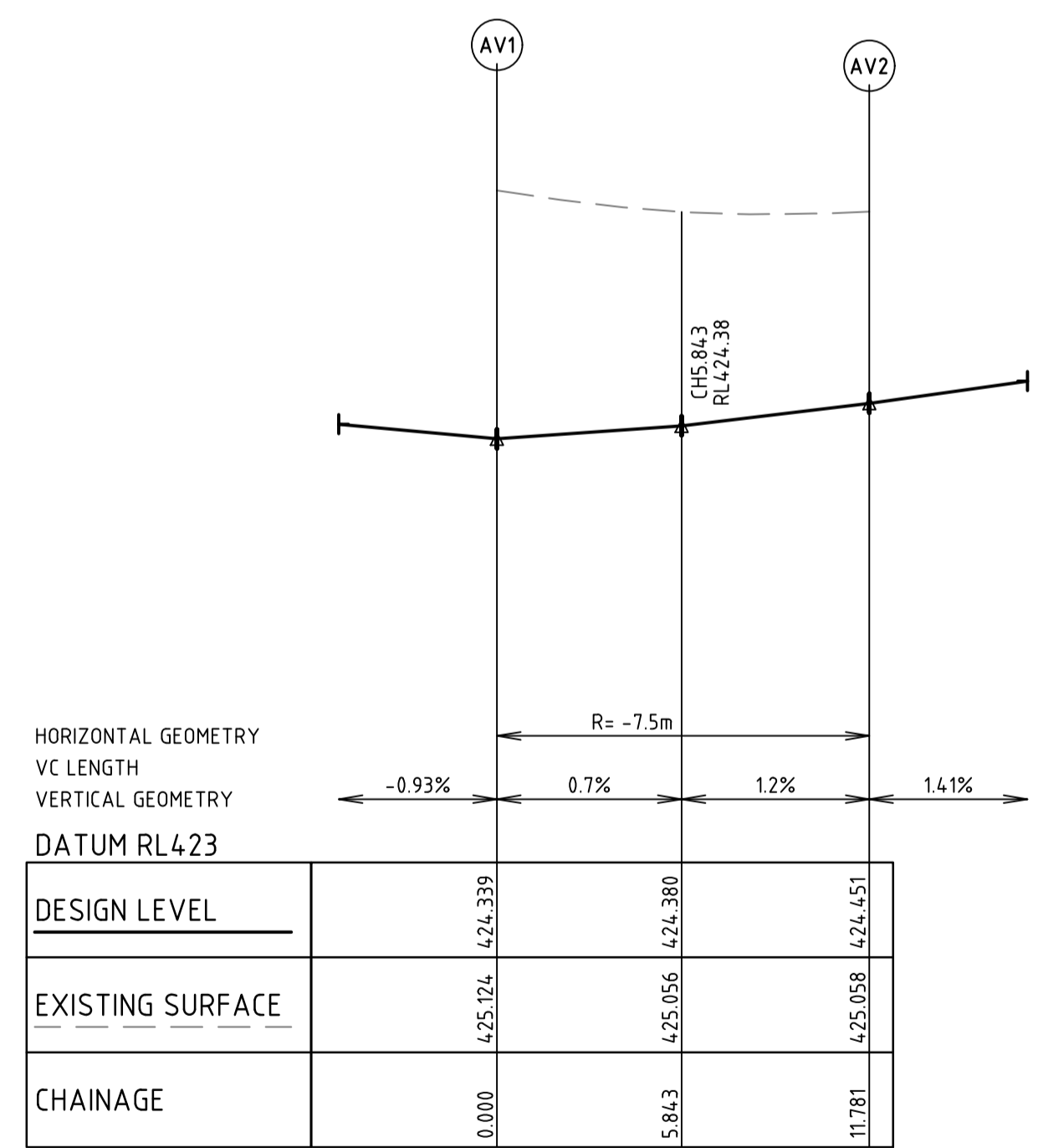
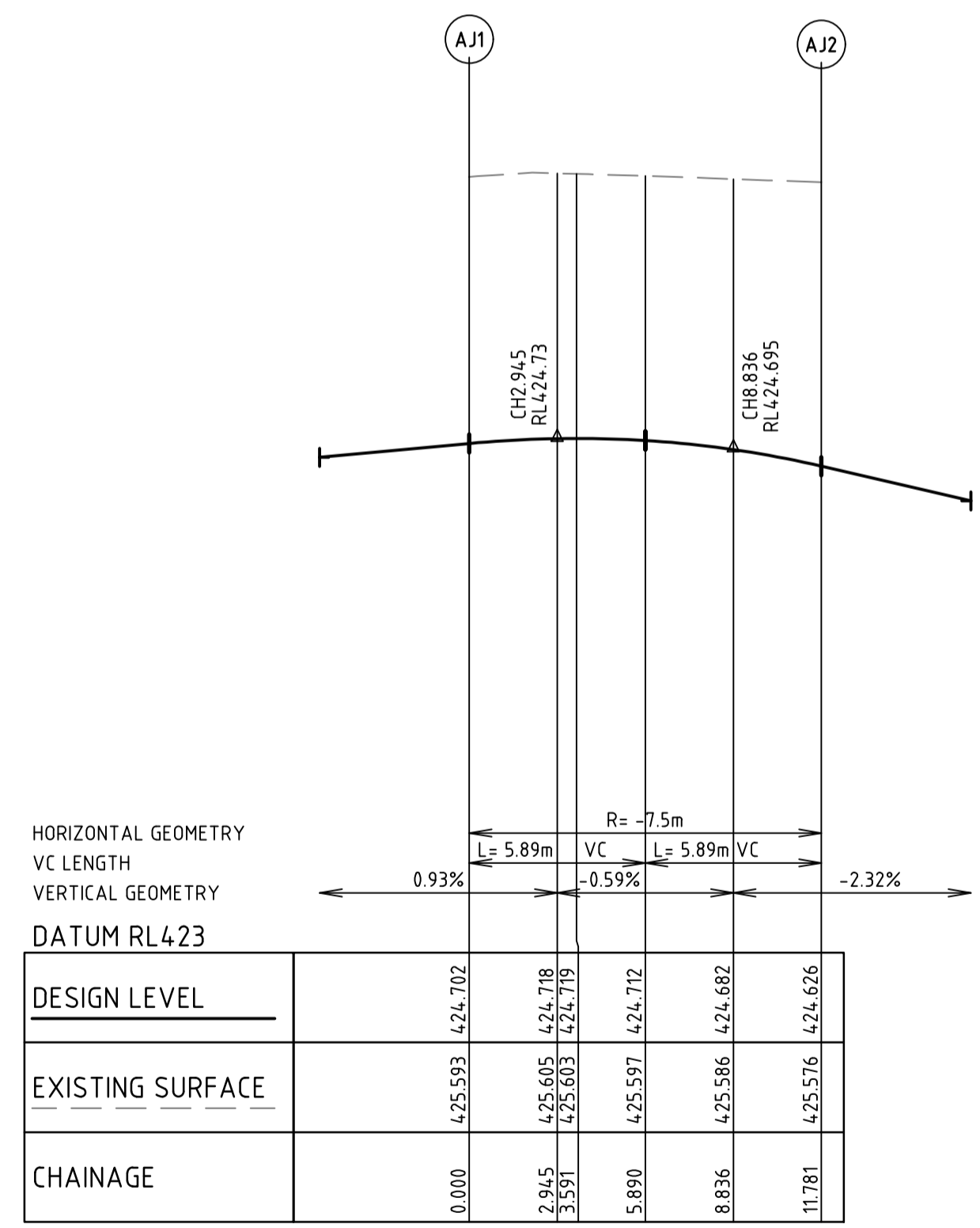
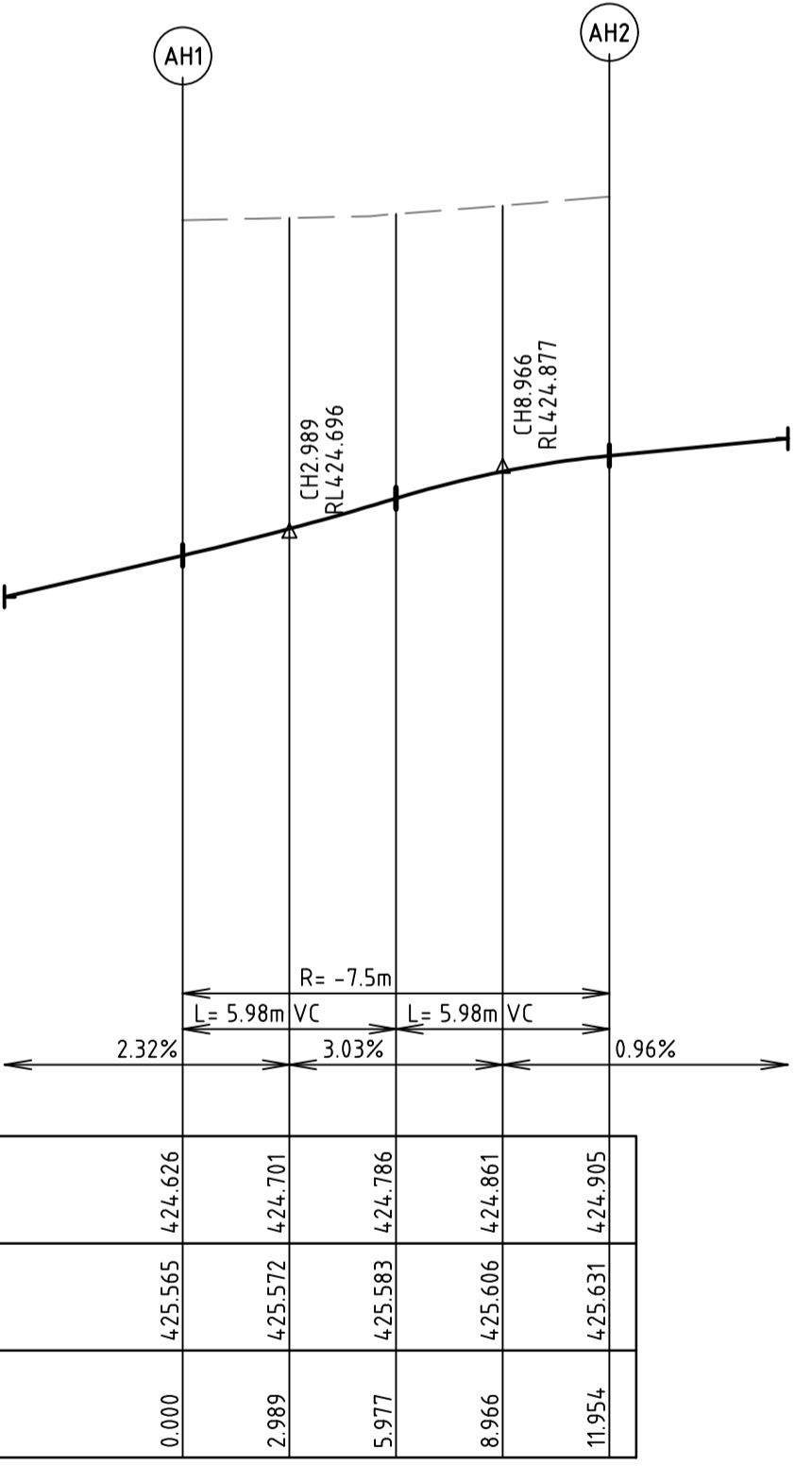
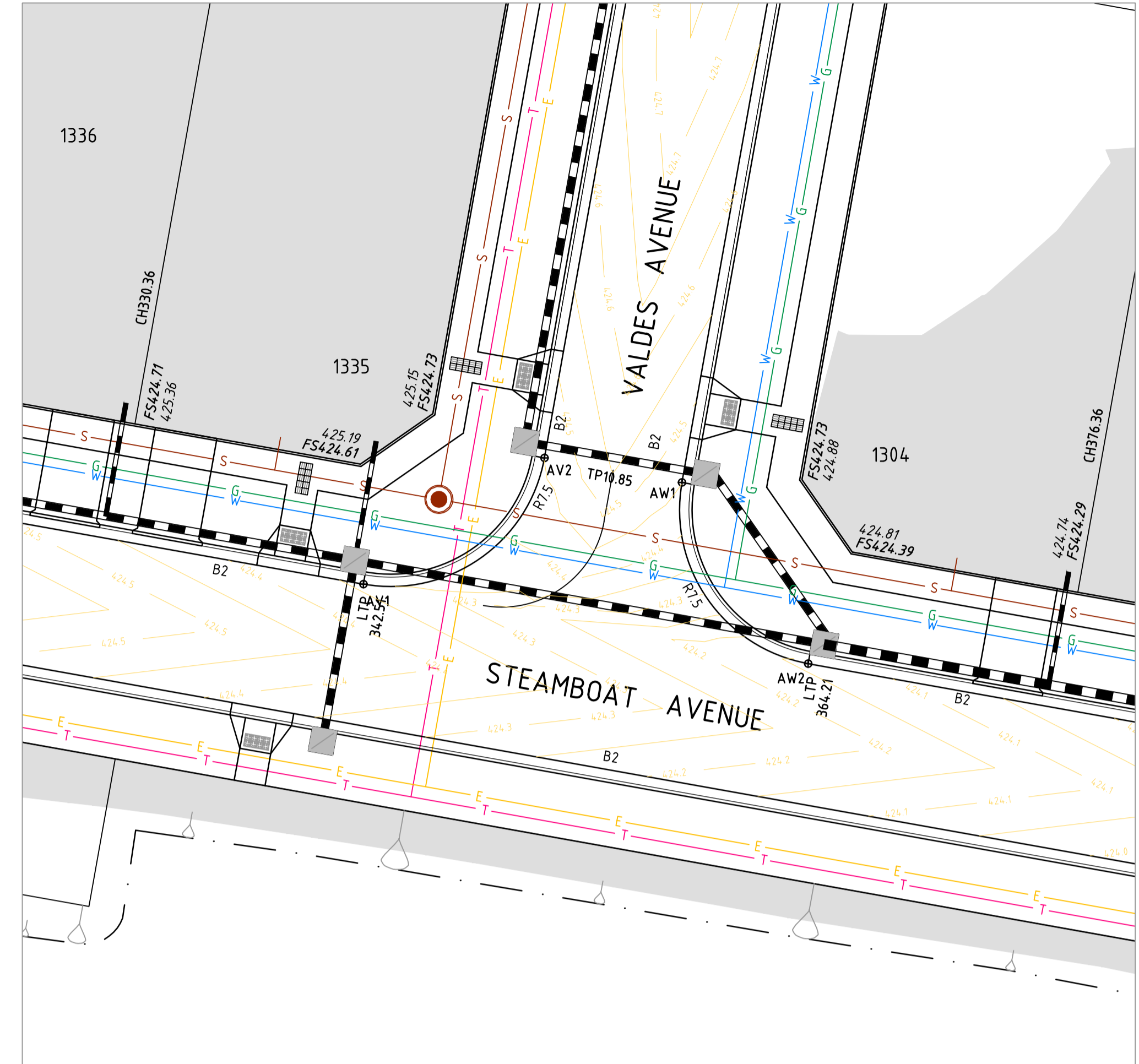
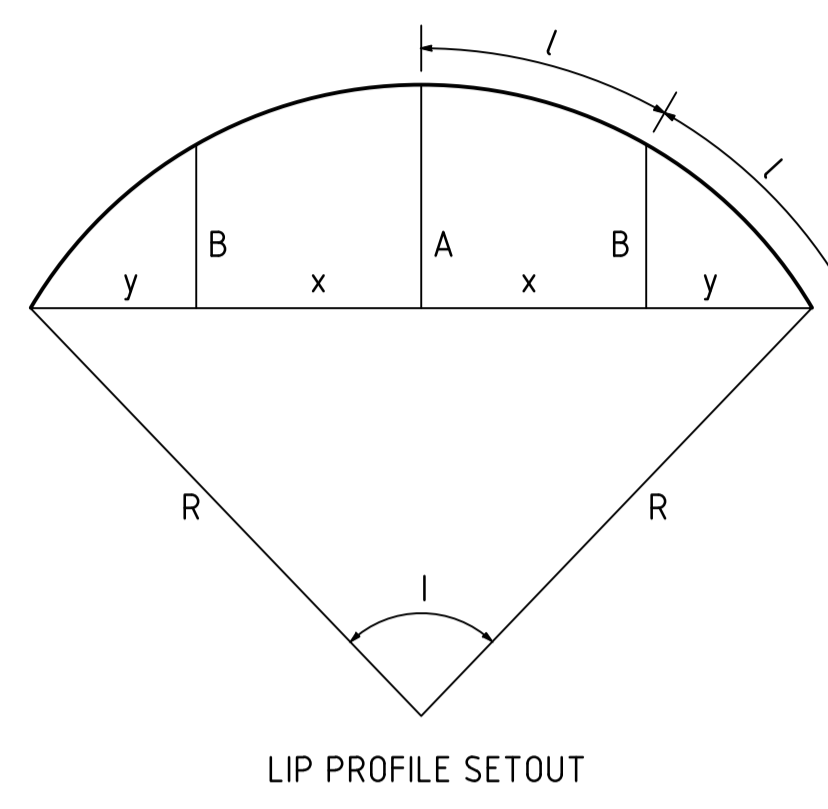
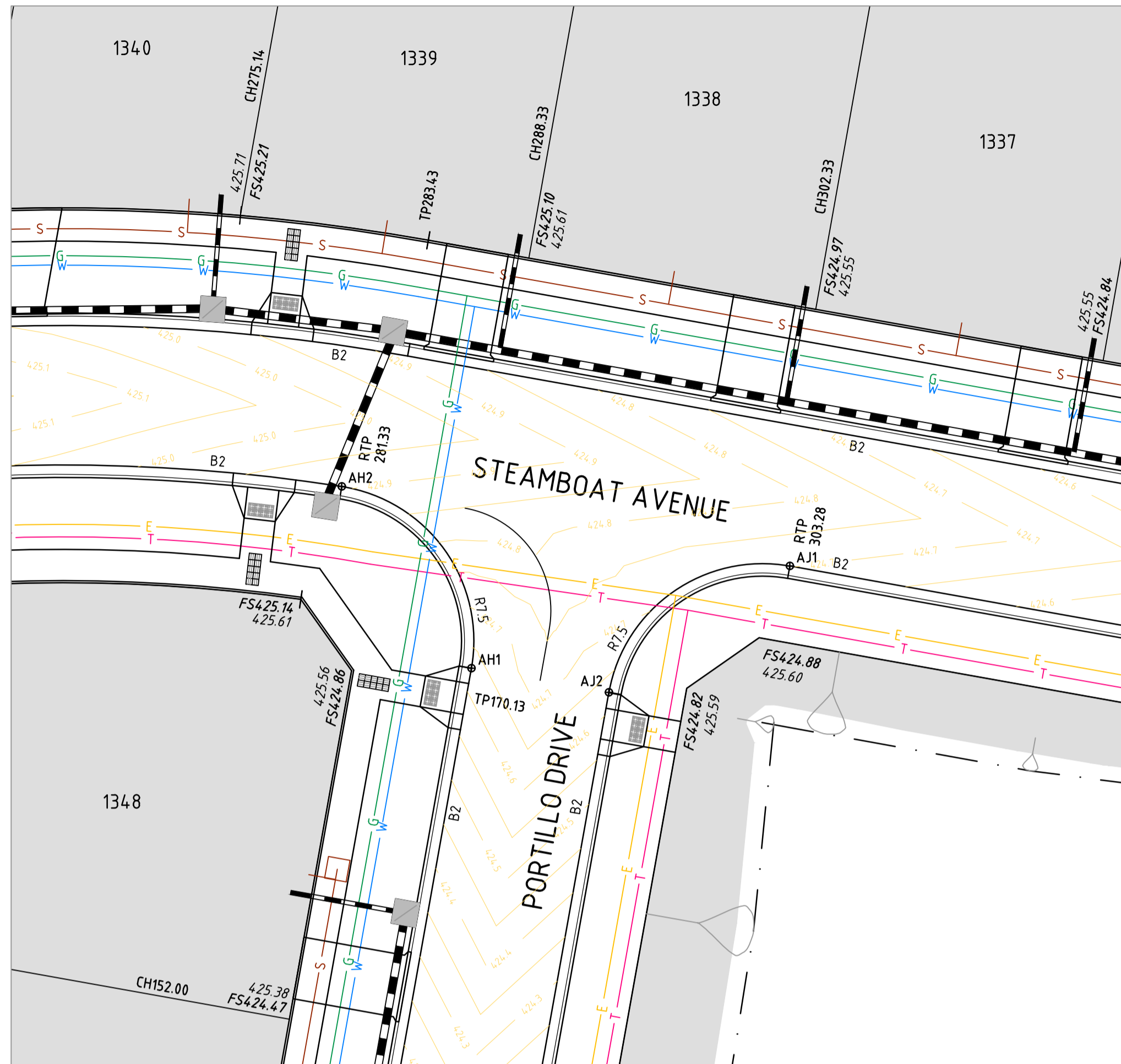
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
INTERSECTION DETAILS  
& LIP PROFILES - 1

DRAWING No.	13R14	VERSION	A
REFERENCE	23718E/13		
SHEET	14 OF 23		

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DATUM RL423

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
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424.701	425.572	2.989
424.786	425.583	5.977
424.861	425.606	8.966
424.905	425.631	11.954

DATUM RL423

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
424.702	425.593	0.000
424.718	425.603	2.945
424.719	425.603	3.591
424.712	425.597	5.890
424.682	425.566	8.836
424.626	425.576	11.781

DATUM RL423

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
424.339	425.724	0.000
424.380	425.056	5.843
424.451	425.058	11.781

DATUM RL423

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
424.451	424.560	0.000
424.390	424.932	2.945
424.288	424.902	5.890
424.189	424.862	8.836
424.138	424.815	11.781

LIP LINE AH

Point no	Easting	Northing	RL
AH1	746935.331	5836460.200	424.626
AH2	746929.095	5836468.930	424.905

Curve no | I | Radius | Arc | A | B | X | Y | I | Mid point RL

AH1 - AH2	91.323	7.500	11.954	2.258	1.671	2.910	2.454	2.989	424.786
-----------	--------	-------	--------	-------	-------	-------	-------	-------	---------

LIP LINE AJ

Point no	Easting	Northing	RL
AJ1	746950.632	5836465.109	424.702
AJ2	746941.931	5836459.044	424.626

Curve no | I | Radius | Arc | A | B | X | Y | I | Mid point RL

AJ1 - AJ2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	424.712
-----------	--------	-------	--------	-------	-------	-------	-------	-------	---------

LIP LINE AV

Point no	Easting	Northing	RL
AV1	746990.430	5836464.811	424.339
AV2	746999.132	5836470.876	424.451

Curve no | I | Radius | Arc | A | B | X | Y | I | Mid point RL

AV1 - AV2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	424.381
-----------	--------	-------	--------	-------	-------	-------	-------	-------	---------

LIP LINE AW

Point no	Easting	Northing	RL
AW1	747005.727	5836469.699	424.451
AW2	747011.793	5836460.998	424.138

Curve no | I | Radius | Arc | A | B | X | Y | I | Mid point RL

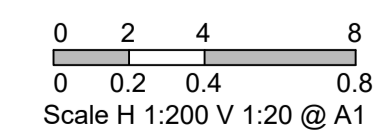
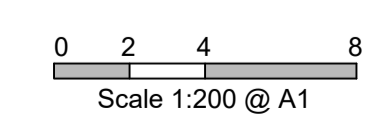
AW1 - AW2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	424.288
-----------	--------	-------	--------	-------	-------	-------	-------	-------	---------

**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.

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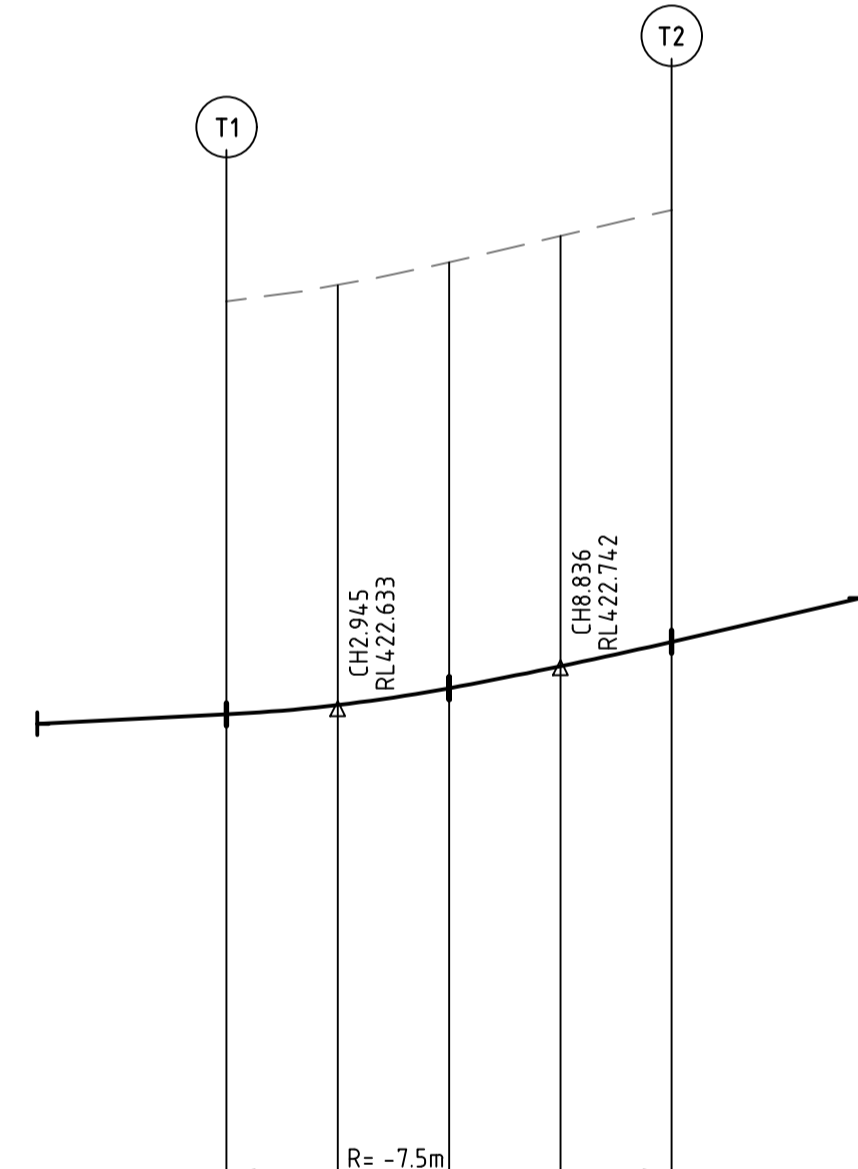
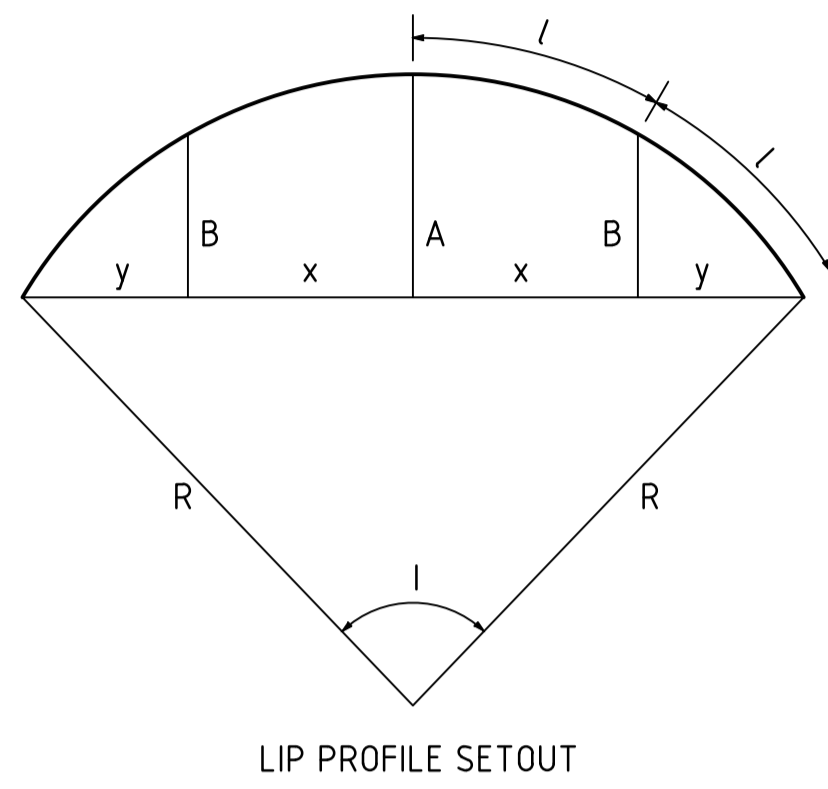
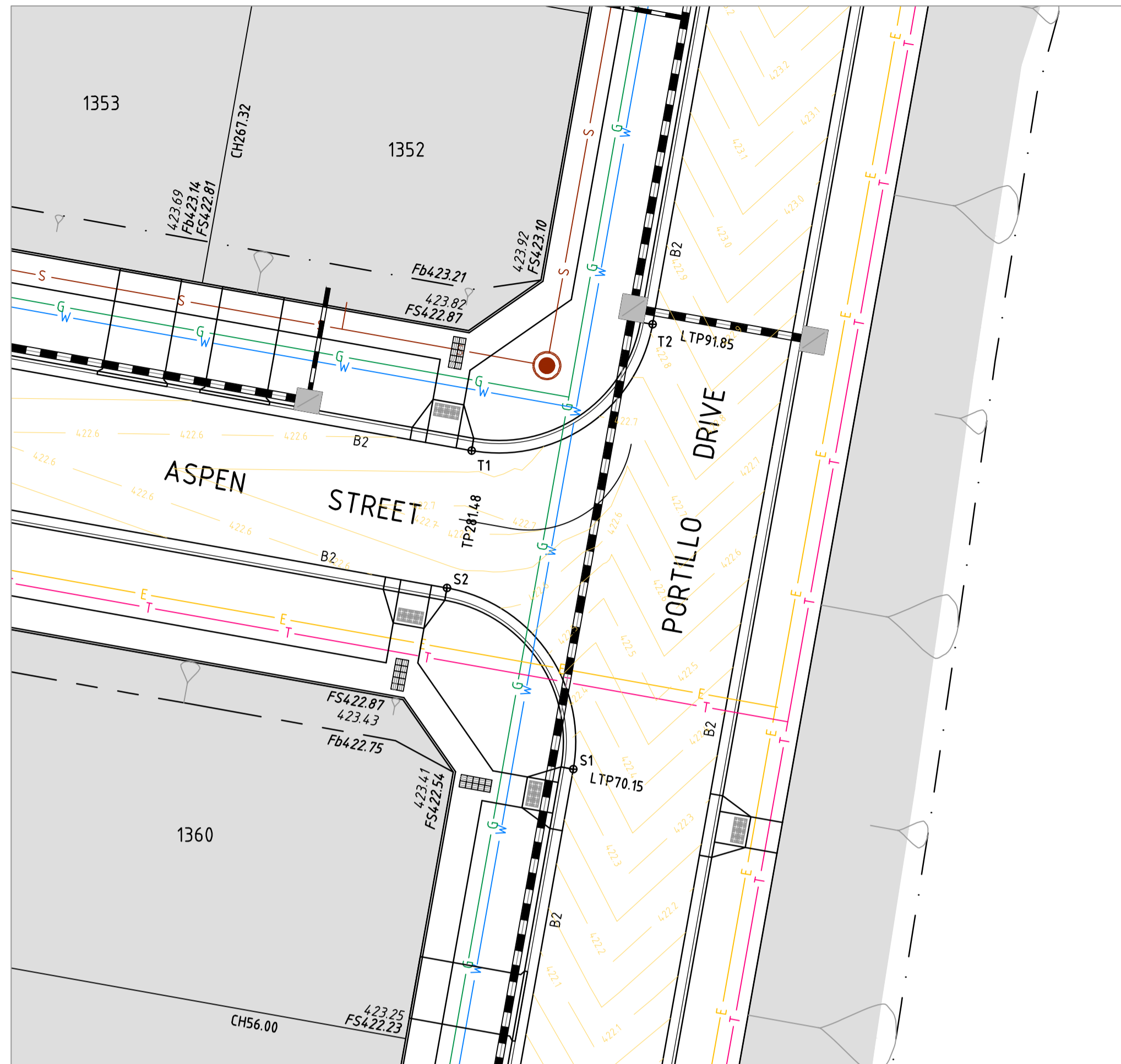
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MELWAY	571 02	CHECKED BY L. PHAN
DATUM	AHD	AUTHORISED BY P. MILLER

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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
INTERSECTION DETAILS  
& LIP PROFILES - 2

DRAWING No.	VERSION
13R15	A
REFERENCE	23718E/13
SHEET	15 OF 23



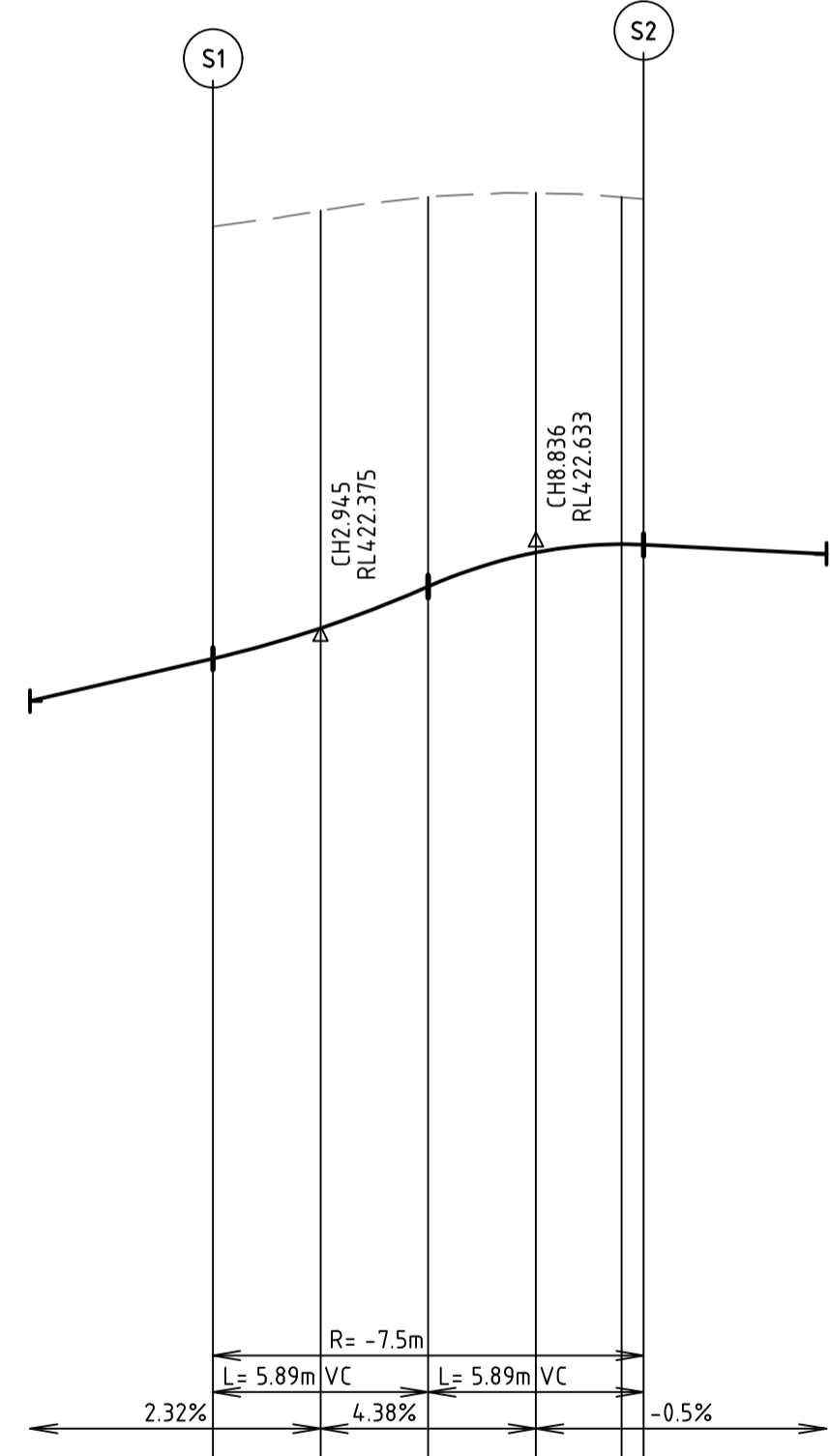
HORIZONTAL GEOMETRY  
VC LENGTH  
VERTICAL GEOMETRY  
DATUM RL421

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
422.618	423.711	0.000
422.643	423.753	2.945
422.687	423.814	5.890
422.745	423.884	8.836
422.810	423.952	11.781

LIP LINE T

Point no	Easting	Northing	RL
T1	746912.874	5836377.074	422.618
T2	746921.576	5836383.140	422.810

Curve no	L	Radius	Arc	A	B	X	Y	L	Mid point RL
T1 - T2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	422.687



HORIZONTAL GEOMETRY  
VC LENGTH  
VERTICAL GEOMETRY  
DATUM RL420

DESIGN LEVEL	EXISTING SURFACE	CHAINAGE
422.307	423.489	0.000
422.390	423.533	2.945
422.504	423.570	5.890
422.597	423.581	8.836
422.620	423.570	11.777
422.618	423.565	11.781

LIP LINE S

Point no	Easting	Northing	RL
S1	746917.762	5836361.777	422.307
S2	746911.697	5836370.478	422.618

Curve no	L	Radius	Arc	A	B	X	Y	L	Mid point RL
S1 - S2	90.000	7.500	11.781	2.197	1.626	2.870	2.433	2.945	422.504

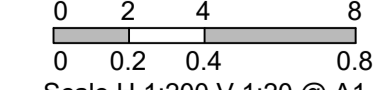
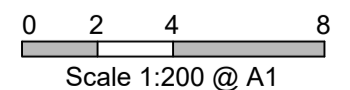
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
INTERSECTION DETAILS  
& LIP PROFILES - 3

DRAWING No.	VERSION
13R16	A

REFERENCE
23718E/13

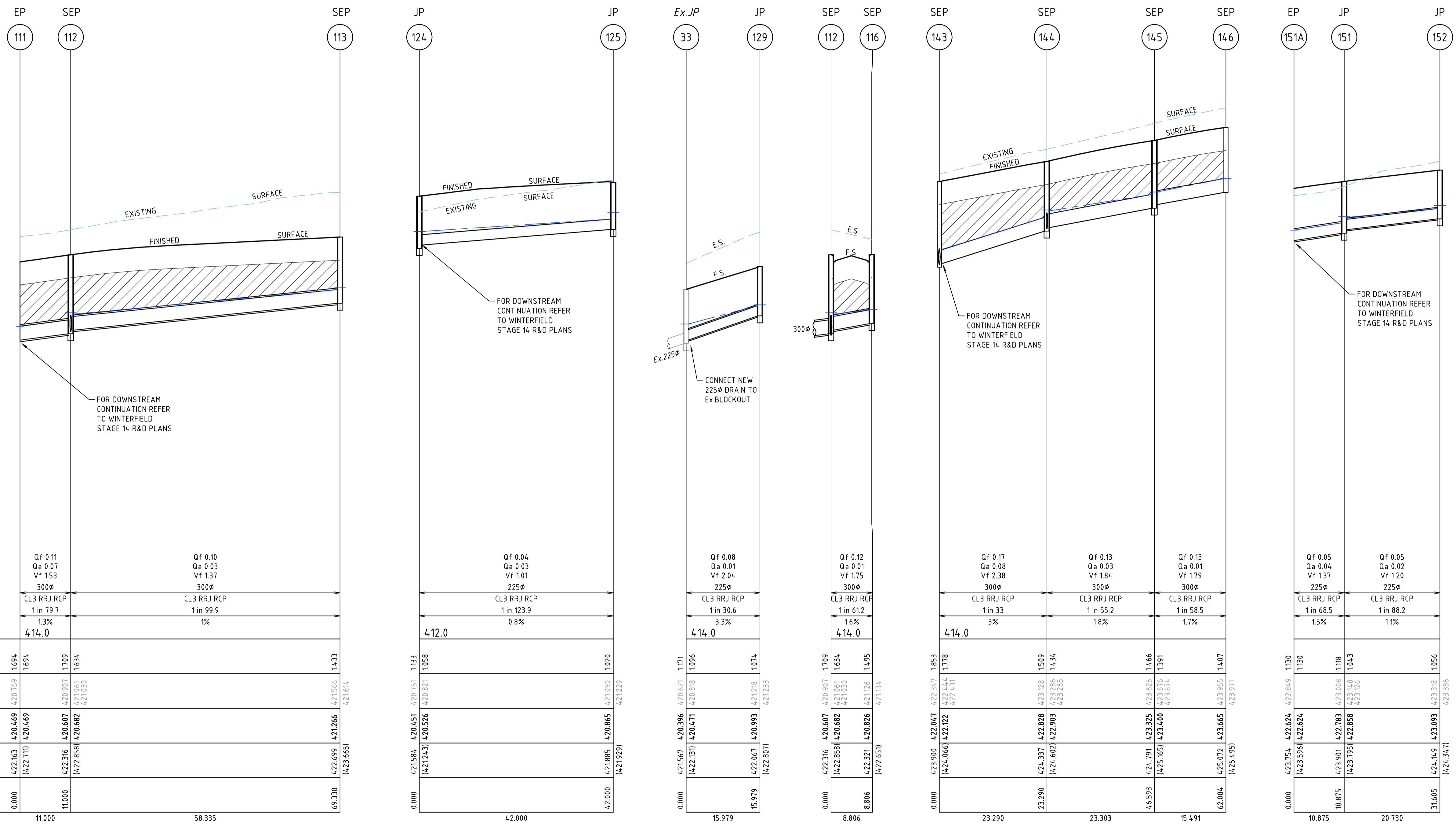
SHEET
16 OF 23



**LEGEND**

- EXISTING SURFACE
- FINISHED SURFACE
- FUTURE SURFACE
- HYDRAULIC GRADE LINE Q5
- CLASS 3 FCR BACKFILL (REFER "DRAINAGE TRENCH BACKFILL" DETAIL BELOW).

NOTE 1:  
225ø DIA. PIPES ARE TO BE EITHER CLASS 3 RRJ RCP'S OR STORMPRO OR BLACKMAX PIPES



FLOW CAPACITY (m <sup>3</sup> /s)	Qf 0.11	Qf 0.10
DESIGN FLOW (m <sup>3</sup> /s)	Qa 0.07	Qa 0.03
CAPACITY VELOCITY (m/s)	Vf 1.53	Vf 1.37
PIPE SIZE (mm) & TYPE	300ø CL3 RRJ RCP 1 in 79.7	300ø CL3 RRJ RCP 1 in 99.9
GRADE	1.3%	1%
DATUM	4.14.0	

DEPTH TO INVERT	1.694	1.694	1.709	1.634	1.433
HYDRAULIC GRADE LINE	420.769	420.769	420.907	421.061	421.566
INVERT	420.469	420.469	420.607	420.682	421.266
FINISHED SURFACE (EXISTING SURFACE)	422.110	422.110	422.858	422.858	422.699
CHAINAGE	0.000	11.000			69.338

DEPTH TO INVERT	1.096	1.096	1.074	1.495
HYDRAULIC GRADE LINE	420.821	420.821	421.238	421.134
INVERT	420.526	420.471	420.993	420.826
FINISHED SURFACE (EXISTING SURFACE)	422.131	422.131	422.067	422.651
CHAINAGE	0.000	15.979		8.806

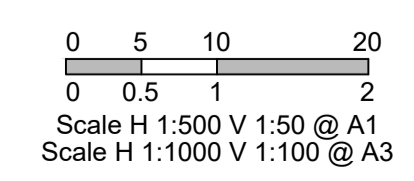
DEPTH TO INVERT	1.853	1.434	1.466	1.407
HYDRAULIC GRADE LINE	422.431	423.286	423.625	423.965
INVERT	422.122	422.903	423.400	423.665
FINISHED SURFACE (EXISTING SURFACE)	424.066	424.602	424.791	425.072
CHAINAGE	0.000	23.290	23.303	15.491

DEPTH TO INVERT	1.130	1.118	1.056
HYDRAULIC GRADE LINE	422.624	423.008	423.318
INVERT	423.596	422.783	423.093
FINISHED SURFACE (EXISTING SURFACE)	423.754	423.901	424.149
CHAINAGE	0.000	10.875	31.605

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CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 DRAINAGE LONG SECTIONS - 1






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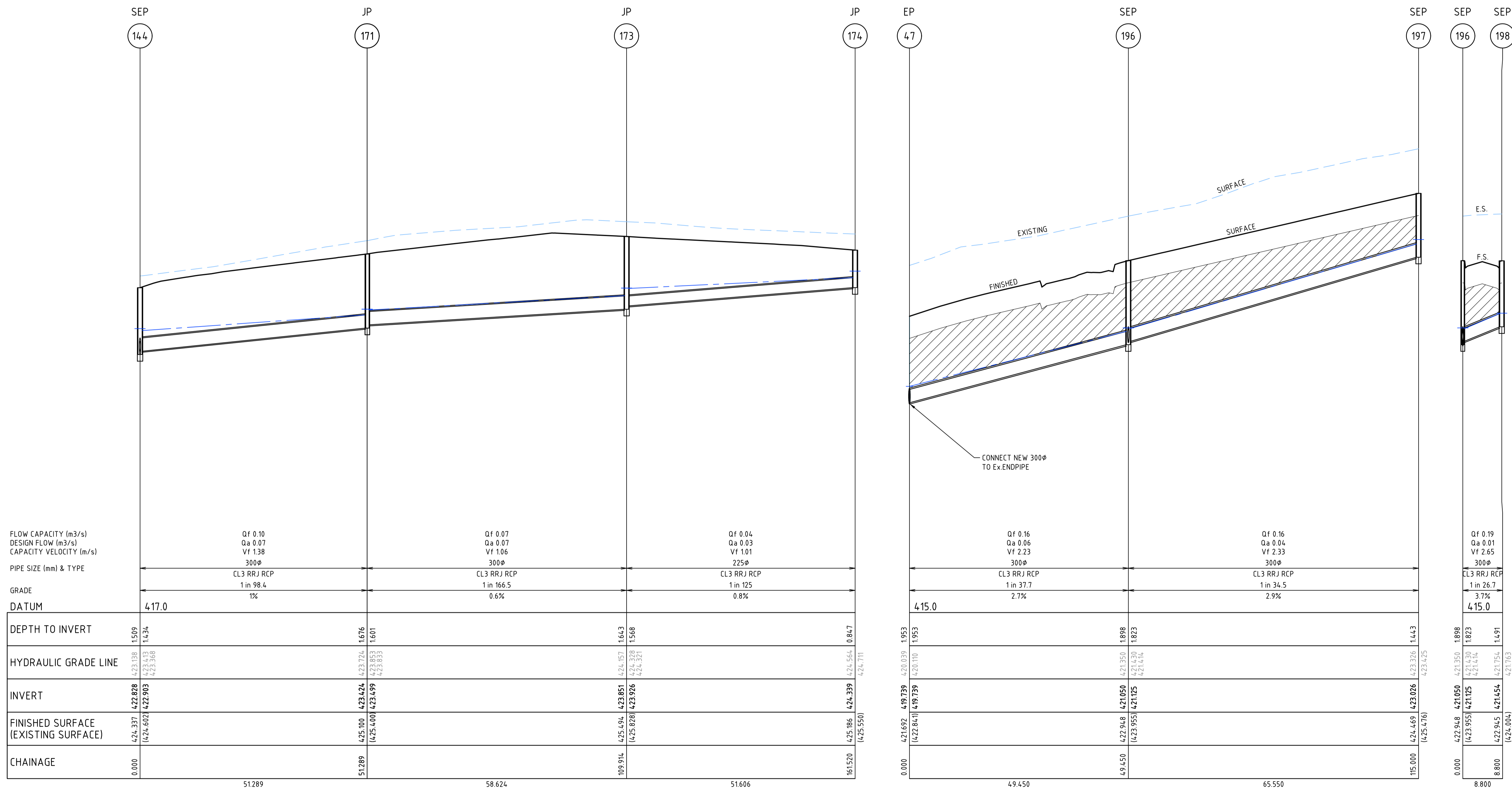
REFERENCE 23718E/13

SHEET 17 OF 23

**LEGEND**

-  EXISTING SURFACE
-  FINISHED SURFACE
-  FUTURE SURFACE
-  HYDRAULIC GRADE LINE Q5
-  CLASS 3 FCR BACKFILL (REFER "DRAINAGE TRENCH BACKFILL" DETAIL BELOW).

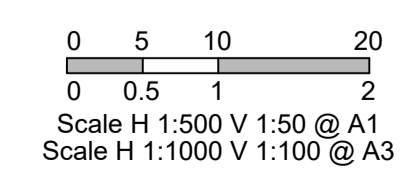
NOTE 1  
225Φ DIA. PIPES ARE TO BE EITHER CLASS 3 RRJ RCP'S OR STORMPRO OR BLACKMAX PIPES



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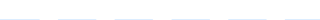




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CITY OF BALLARAT  
 WINTERFIELD ESTATE, WINTER VALLEY  
 STAGE 13  
 DRAINAGE LONG SECTIONS - 2

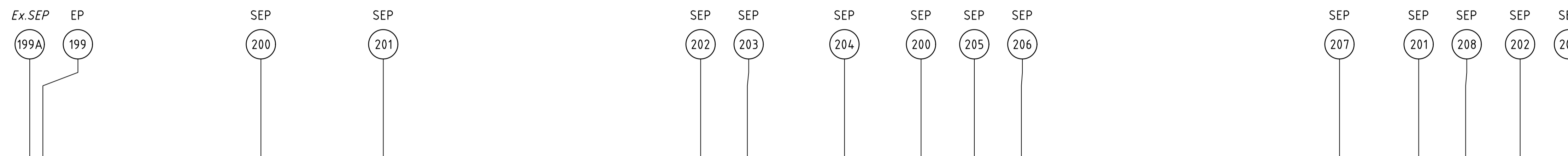
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DRAWING No.	13R18	VERSION	A
REFERENCE	23718E/13		
SHEET	18	OF	23

LEGEND

-  EXISTING SURFACE
-  FINISHED SURFACE
-  FUTURE SURFACE
-  HYDRAULIC GRADE LINE Q5
-  CLASS 3 FCR BACKFILL (REFER "DRAINAGE TRENCH BACKFILL" DETAIL BELOW).

NOTE 1:  
225Ø DIA. PIPES ARE TO BE EITHER CLASS 3 RRJ RCP'S OR STORMPRO OR BLACKMAX PIPES



	199A	199	200	201	202	203	204	205	206	207	208	209
FLOW CAPACITY (m <sup>3</sup> /s)	Qf 0.29	Qf 0.29	Qf 0.11	Qf 0.09	Qf 0.07	Qf 0.10	Qf 0.18	Qf 0.08	Qf 0.09	Qf 0.10	Qf 0.08	Qf 0.08
DESIGN FLOW (m <sup>3</sup> /s)	Qa 0.14	Qa 0.14	Qa 0.08	Qa 0.06	Qa 0.02	Qa 0.01	Qa 0.04	Qa 0.03	Qa 0.02	Qa 0.01	Qa 0.01	Qa 0.01
CAPACITY VELOCITY (m/s)	Vf 1.85	Vf 1.85	Vf 1.50	Vf 1.26	Vf 1.02	Vf 1.37	Vf 2.49	Vf 1.14	Vf 1.22	Vf 1.47	Vf 1.12	Vf 1.12
PIPE SIZE (mm) & TYPE	450Ø	450Ø	300Ø	300Ø	300Ø	300Ø	300Ø	300Ø	300Ø	300Ø	300Ø	300Ø
GRADE	CL3 RRJ RCP 1 in 94	CL3 RRJ RCP 1 in 94	CL3 RRJ RCP 1 in 83.6	CL3 RRJ RCP 1 in 117.8	CL3 RRJ RCP 1 in 178.5	CL3 RRJ RCP 1 in 100	CL3 RRJ RCP 1 in 30.3	CL3 RRJ RCP 1 in 144.3	CL3 RRJ RCP 1 in 126.7	CL3 RRJ RCP 1 in 86.3	CL3 RRJ RCP 1 in 149.9	CL3 RRJ RCP 1 in 149.9
DATUM	4.16.0	1.1%	1.2%	0.8%	0.6%	1%	4.17.0	0.7%	0.8%	4.17.0	0.7%	4.17.0
DEPTH TO INVERT	2.090	1.881	1.808	1.733	1.646	1.571	1.731	1.656	1.595	1.671	1.596	1.646
HYDRAULIC GRADE LINE	4.22.209	4.22.209	4.22.899	4.22.976	4.23.677	4.23.814	4.23.976	4.23.814	4.23.814	4.23.112	4.23.195	4.23.195
INVERT	4.21.780	4.21.989	4.22.449	4.22.524	4.23.452	4.23.501	4.24.863	4.22.928	4.22.989	4.22.873	4.22.975	4.23.477
FINISHED SURFACE (EXISTING SURFACE)	4.23.870	4.24.457	4.24.469	4.24.469	4.25.023	4.25.096	4.24.584	4.24.949	4.24.584	4.24.466	4.24.466	4.25.036
CHAINAGE	-2.438	0.000	4.0.825	63.725	123.107	131.852	150.044	9.970	18.770	76.320	8.800	9.146

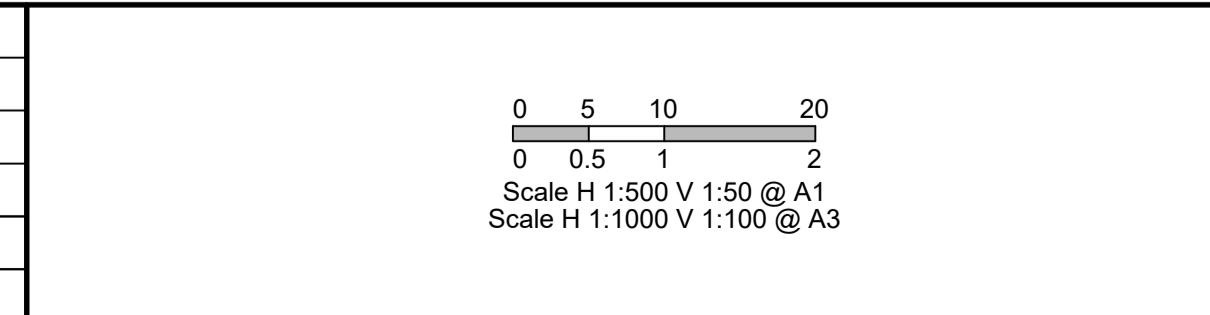
	200	205	206	207	208	209
DEPTH TO INVERT	1.808	1.731	1.656	1.595	1.671	1.646
HYDRAULIC GRADE LINE	4.22.976	4.23.976	4.23.814	4.23.814	4.23.112	4.23.195
INVERT	4.22.524	4.22.863	4.22.928	4.23.064	4.22.873	4.23.477
FINISHED SURFACE (EXISTING SURFACE)	4.24.257	4.24.584	4.24.949	4.24.584	4.24.466	4.25.036
CHAINAGE	0.000	9.970	18.770	76.320	8.800	9.146

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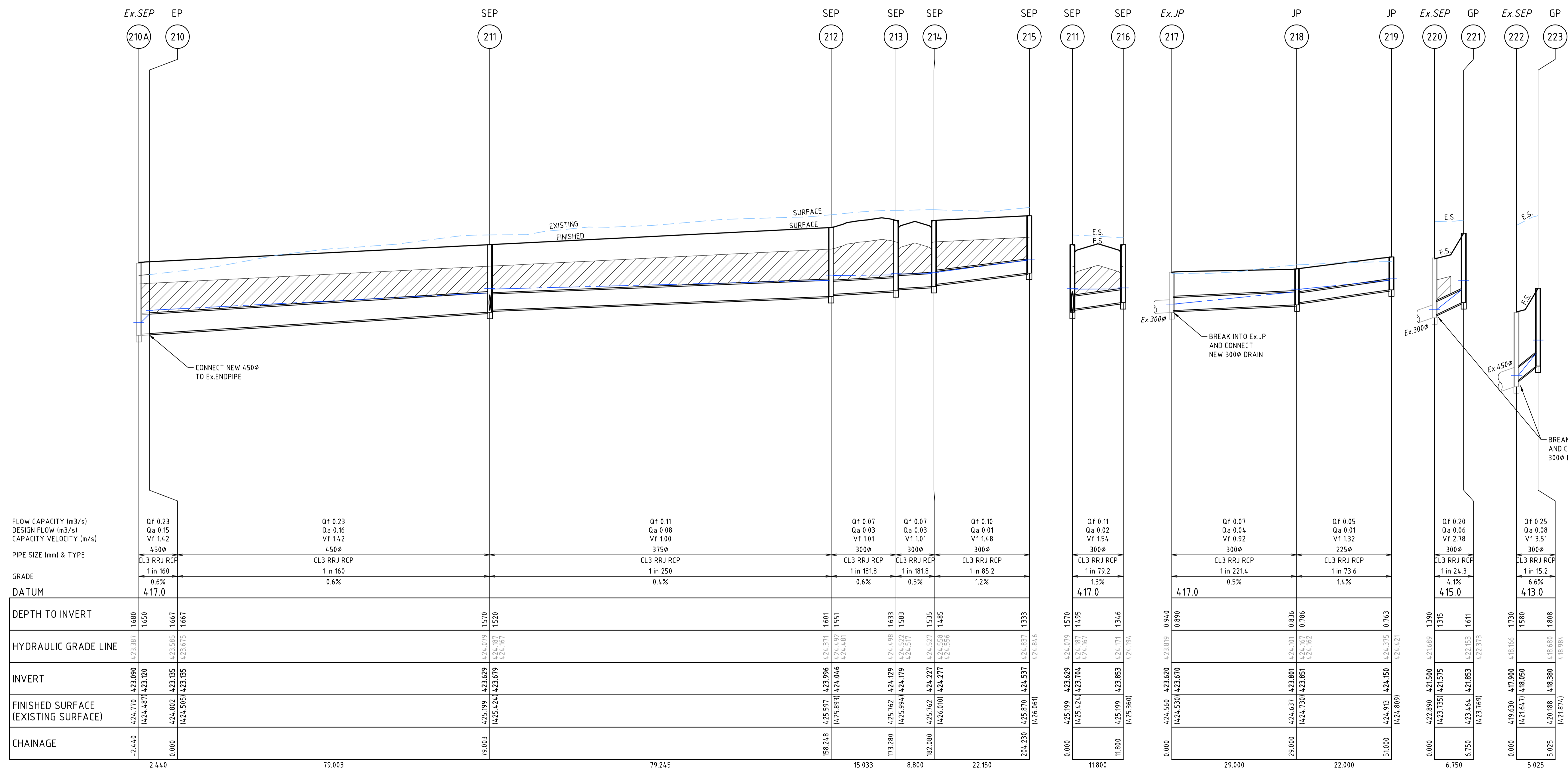
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WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
DRAINAGE LONG SECTIONS - 3

DRAWING No.	13R19	VERSION	A
REFERENCE	23718E/13		
SHEET	19	OF	23

**LEGEND**

- EXISTING SURFACE
- FINISHED SURFACE
- FUTURE SURFACE
- HYDRAULIC GRADE LINE OS
- CLASS 3 FCR BACKFILL (REFER "DRAINAGE TRENCH BACKFILL" DETAIL BELOW).

NOTE 1.  
225Ø DIA. PIPES ARE TO BE EITHER CLASS 3 RRJ RCP'S OR STORMPRO OR BLACKMAX PIPES



	210A	210	211	212	213	214	215	216	217	218	219	220	221	222	223
FLOW CAPACITY (m3/s)	Qf 0.23														
DESIGN FLOW (m3/s)	Qa 0.15														
CAPACITY VELOCITY (m/s)	Vf 1.42														
PIPE SIZE (mm) & TYPE	450Ø CL3 RRJ RCP														
GRADE	1 in 160														
DATUM	417.0														
DEPTH TO INVERT	1.680														
HYDRAULIC GRADE LINE	423.387														
INVERT	423.090														
FINISHED SURFACE (EXISTING SURFACE)	424.770														
CHAINAGE	-2.440														

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Scale: H 1:500 V 1:50 @ A1  
Scale H 1:1000 V 1:100 @ A3

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MELWAY	571 02	CHECKED BY	L. PHAN
DATUM	AHD	AUTHORISED BY	P. MILLER

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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
DRAINAGE LONG SECTIONS - 4

DRAWING No.	13R20	VERSION	A
REFERENCE	23718E/13		
SHEET	20	OF	23

PIT SCHEDULE

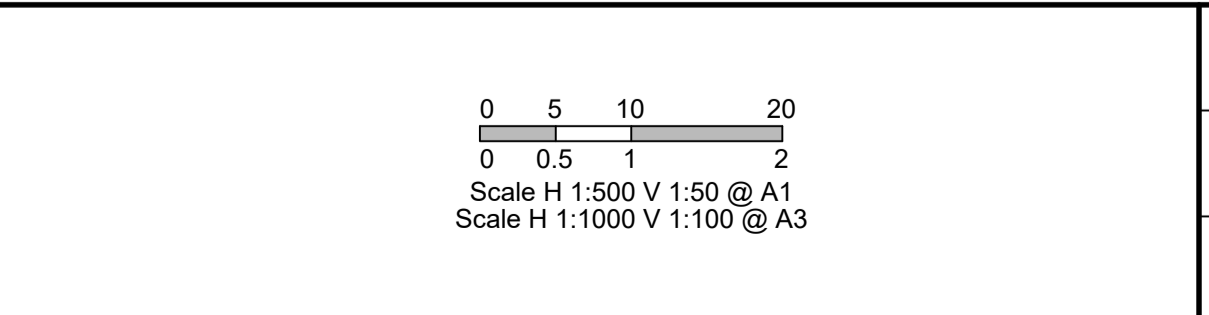
NUMBER	PIT TYPE	INTERNAL DIMENSION		INLET		OUTLET		PIT			REMARKS
		WD	LEN	DIA	INV LEV	DIA	INV LEV	FIN RL	DEPTH	STD DWG	
33	Ex. JUNCTION PIT	Ex. 600	Ex. 900	225	420.471	Ex. 225	Ex. 420.396	421.567	1.171	BALLARAT SD-P10-1	CONNECT PROPOSED 225dia DRAIN TO Ex.BLOCKOUT
47	END PIPE	-	-	300	419.739	300	419.739	421.692	1.953		CONNECT PROPOSED 300dia DRAIN TO Ex.ENDPIPE
111	END PIPE	-	-	300	420.469	300	420.469	422.163	1.694		FOR DOWNSTREAM CONTINUATION REFER TO WINTERFIELD STAGE 14 R&D PLANS
112	SIDE ENTRY PIT	900	900	300	420.682	300	420.607	422.316	1.709	BALLARAT SD-P1-2	PROVIDE STEP IRONS
113	SIDE ENTRY PIT	900	900	300	420.682	300	421.266	422.699	1.433	BALLARAT SD-P1-2	PROVIDE STEP IRONS
116	SIDE ENTRY PIT	900	900	300	420.826	300	420.826	422.321	1.495	BALLARAT SD-P1-2	PROVIDE STEP IRONS
124	JUNCTION PIT	600	900	225	420.526	300	420.451	421.584	1.133	BALLARAT SD-P10-2	FOR DOWNSTREAM CONTINUATION REFER TO WINTERFIELD STAGE 14 R&D PLANS
125	JUNCTION PIT	600	900	225	420.865	225	420.865	421.885	1.020	BALLARAT SD-P10-2	
129	JUNCTION PIT	600	900	225	420.993	225	420.993	422.067	1.074	BALLARAT SD-P10-2	
143	SIDE ENTRY PIT	900	900	300	422.122	Fut. 300	Fut. 422.047	423.9	1.853	BALLARAT SD-P1-2	PROVIDE STEP IRONS. FOR DOWNSTREAM CONTINUATION REFER TO WINTERFIELD STAGE 14 R&D PLANS
144	SIDE ENTRY PIT	900	900	300	422.903	300	422.828	424.337	1.509	BALLARAT SD-P1-2	PROVIDE STEP IRONS
145	SIDE ENTRY PIT	900	900	300	423.4	300	423.325	424.791	1.466	BALLARAT SD-P1-2	PROVIDE STEP IRONS
146	SIDE ENTRY PIT	900	900	300	423.665	300	423.665	425.072	1.407	BALLARAT SD-P1-2	PROVIDE STEP IRONS
151A	END PIPE	-	-	225	422.624	Fut. 225	Fut. 422.624				FOR DOWNSTREAM CONTINUATION REFER TO WINTERFIELD STAGE 14 R&D PLANS
151	JUNCTION PIT	600	900	225	422.858	225	422.783	423.901	1.118	BALLARAT SD-P10-2	
152	JUNCTION PIT	600	900	225	423.093	225	423.093	424.149	1.056	BALLARAT SD-P10-2	
171	JUNCTION PIT	900	900	300	423.499	300	423.424	425.100	1.676	BALLARAT SD-P10-2	PROVIDE STEP IRONS
173	JUNCTION PIT	900	900	225	423.926	300	423.851	425.494	1.643	BALLARAT SD-P10-2	PROVIDE STEP IRONS
174	JUNCTION PIT	600	900	225	424.339	225	424.339	425.186	0.847	BALLARAT SD-P10-2	
196	SIDE ENTRY PIT	900	900	300	421.125	300	421.05	422.948	1.898	BALLARAT SD-P1-2	PROVIDE STEP IRONS
197	SIDE ENTRY PIT	900	900	300	421.125	300	423.026	424.469	1.443	BALLARAT SD-P1-2	PROVIDE STEP IRONS
198	SIDE ENTRY PIT	900	900	300	421.454	300	421.454	422.945	1.491	BALLARAT SD-P1-2	PROVIDE STEP IRONS
199	END PIPE	-	-	450	422.015	Ex. 450	Ex. 422.015	423.886	1.871		CONNECT PROPOSED 450dia DRAIN TO Ex.ENDPIPE
200	SIDE ENTRY PIT	900	900	300	422.524	300	422.449	424.257	1.808	BALLARAT SD-P1-2	PROVIDE STEP IRONS
201	SIDE ENTRY PIT	900	900	300	422.524	300	422.873	424.469	1.671	BALLARAT SD-P1-2	PROVIDE STEP IRONS
202	SIDE ENTRY PIT	900	900	300	423.452	300	423.377	425.023	1.646	BALLARAT SD-P1-2	PROVIDE STEP IRONS
203	SIDE ENTRY PIT	900	900	300	423.576	300	423.501	425.096	1.595	BALLARAT SD-P1-2	PROVIDE STEP IRONS
204	JUNCTION PIT	900	900	300	423.758	300	423.758	425.19	1.432	BALLARAT SD-P10-2	PROVIDE STEP IRONS
205	SIDE ENTRY PIT	900	900	300	422.928	300	422.853	424.584	1.731	BALLARAT SD-P1-2	PROVIDE STEP IRONS
206	SIDE ENTRY PIT	900	900	300	423.064	300	422.989	424.584	1.595	BALLARAT SD-P1-2	PROVIDE STEP IRONS
207	SIDE ENTRY PIT	900	900	300	423.534	300	423.534	424.968	1.434	BALLARAT SD-P1-2	PROVIDE STEP IRONS
208	SIDE ENTRY PIT	900	900	300	422.975	300	422.975	424.466	1.491	BALLARAT SD-P1-2	PROVIDE STEP IRONS
209	SIDE ENTRY PIT	900	900	300	423.74	300	423.74	425.036	1.296	BALLARAT SD-P1-2	PROVIDE STEP IRONS
210	END PIPE	-	-	450	423.135	Ex. 450	Ex. 423.135	424.802	1.667		CONNECT PROPOSED 450dia DRAIN TO Ex.ENDPIPE
211	SIDE ENTRY PIT	900	900	375	423.679	450	423.629	425.199	1.57	BALLARAT SD-P1-2	PROVIDE STEP IRONS
212	SIDE ENTRY PIT	900	900	300	424.046	375	423.996	425.597	1.601	BALLARAT SD-P1-2	PROVIDE STEP IRONS
213	SIDE ENTRY PIT	900	900	300	424.179	300	424.129	425.762	1.633	BALLARAT SD-P1-2	PROVIDE STEP IRONS
214	SIDE ENTRY PIT	900	900	300	424.277	300	424.227	425.762	1.535	BALLARAT SD-P1-2	PROVIDE STEP IRONS
215	SIDE ENTRY PIT	900	900	300	424.537	300	424.537	425.87	1.333	BALLARAT SD-P1-2	PROVIDE STEP IRONS
216	SIDE ENTRY PIT	900	900	300	423.853	300	423.853	425.199	1.346	BALLARAT SD-P1-2	PROVIDE STEP IRONS
217	Ex. JUNCTION PIT	Ex. 600	Ex. 900	300	423.670	Ex. 300	Ex. 423.620	424.560	0.940	BALLARAT SD-P10-2	BREAK INTO Ex.JP AND CONNECT NEW 225dia DRAIN
218	JUNCTION PIT	600	900	225	423.851	300	423.801	424.637	0.836	BALLARAT SD-P10-2	
219	JUNCTION PIT	600	900	225	424.150	225	424.150	424.913	0.763	BALLARAT SD-P10-2	
220	Ex. SIDE ENTRY PIT	Ex. 900	Ex. 900	300	421.575	Ex. 300	Ex. 412.500	422.890	1.390	BALLARAT SD-P1-2	BREAK INTO Ex.SEP AND CONNECT NEW 300dia DRAIN
221	GRADED PIT	900	900	300	421.853	300	421.853	423.464	1.611	BALLARAT SD-P10-2	PROVIDE GRATED COVER TO JUNCTION PIT. PROVIDE STEP IRONS
222	Ex. SIDE ENTRY PIT	Ex. 900	Ex. 900	300	418.050	Ex. 450	Ex. 417.900	419.630	1.730	BALLARAT SD-P1-2	BREAK INTO Ex.SEP AND CONNECT NEW 300dia DRAIN
223	GRADED PIT	900	900	Ex. 300	Ex. 418.200	300	418.380	420.188	1.808	BALLARAT SD-P10-2	PROVIDE GRATED COVER TO JUNCTION PIT PROVIDE STEP IRONS

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MELWAY	571 02	CHECKED BY	L. PHAN
DATUM	AHD	AUTHORISED BY	P. MILLER

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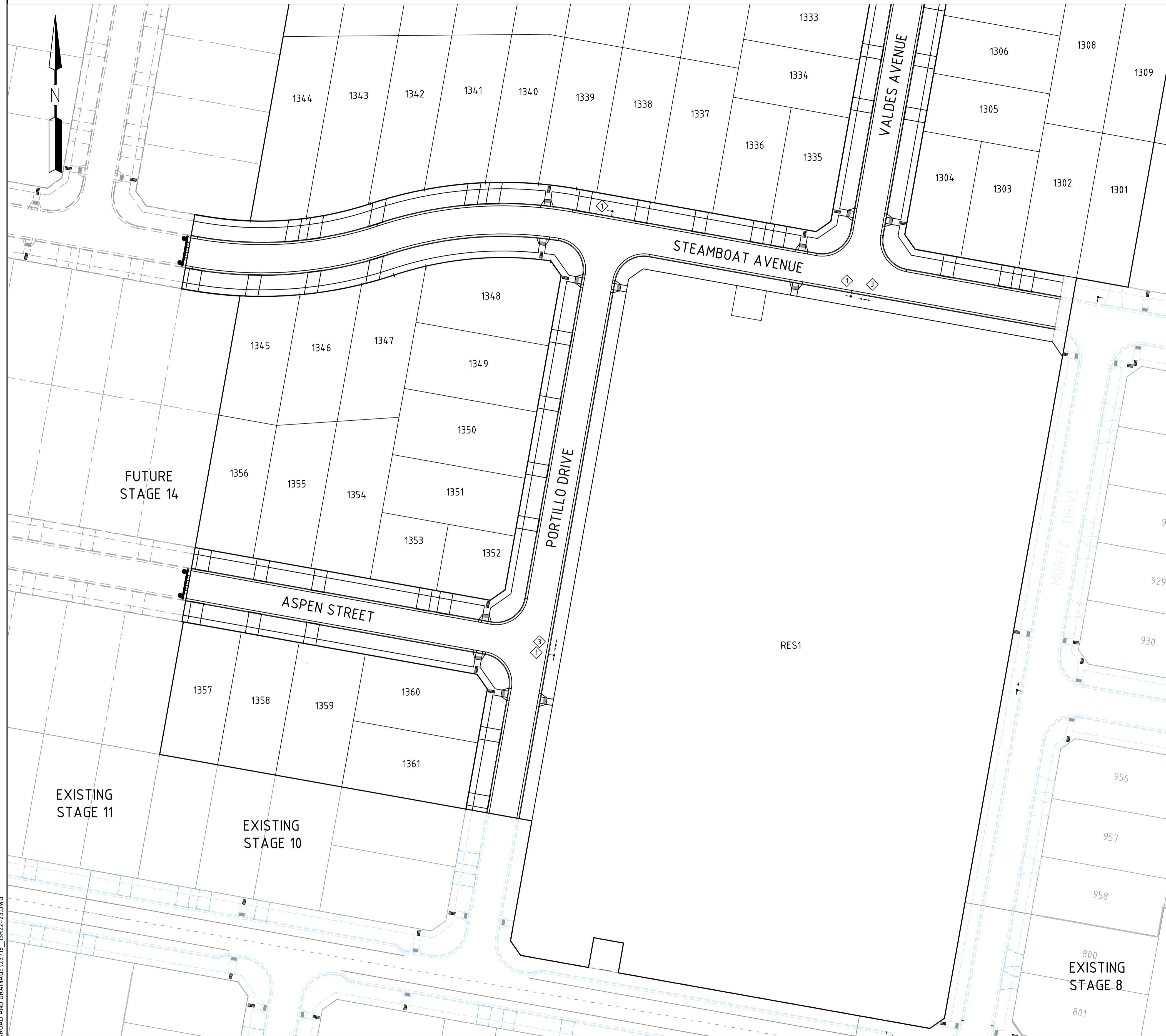
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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
PIT SCHEDULE

DRAWING No.	13R21	VERSION	A
REFERENCE	23718E/13		
SHEET	21	OF	23

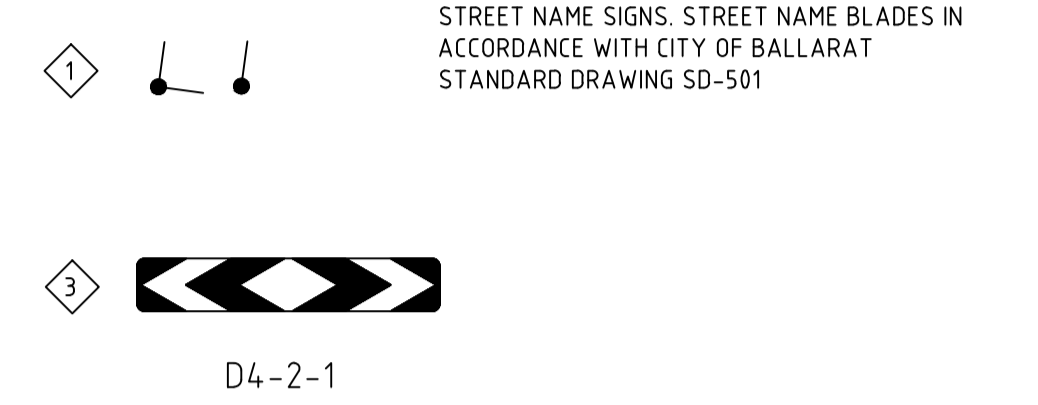
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NOTES

1. SIGNS, LINEMARKING AND RRPMS SHALL BE INSTALLED IN ACCORDANCE WITH AS1742 "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" UNLESS INDICATED OTHERWISE.
2. TACTILE GROUND SURFACE INDICATORS (TGS) TO BE INSTALLED AT LOCATIONS SHOWN ON THE APPROVED PLANS, IN ACCORDANCE WITH AS1428.4

LEGEND

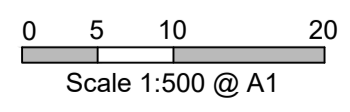


**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
SIGNS & LINEMARKING PLAN - 1

DRAWING No.	VERSION
13R22	A
REFERENCE	
23718E/13	
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22	OF 23



**NOTES**

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2. TACTILE GROUND SURFACE INDICATORS (TGSU) TO BE INSTALLED AT LOCATIONS SHOWN ON THE APPROVED PLANS, IN ACCORDANCE WITH AS1428.4

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- STREET NAME SIGNS, STREET NAME BLADES IN ACCORDANCE WITH CITY OF BALLARAT STANDARD DRAWING SD-501
- D4-2-1

FUTURE STAGE 14

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CITY OF BALLARAT  
WINTERFIELD ESTATE, WINTER VALLEY  
STAGE 13  
SIGNS & LINEMARKING PLAN - 2

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REFERENCE	23718E/13		
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