

DRAWING INDEX

Table with 2 columns: Item ID and Description. Items range from C01 OF 21 (GENERAL NOTES, DRAWING INDEX, STANDARD DETAILS TABLE & LOCALITY PLAN) to C21 OF 21 (CIVIL DETAILS).

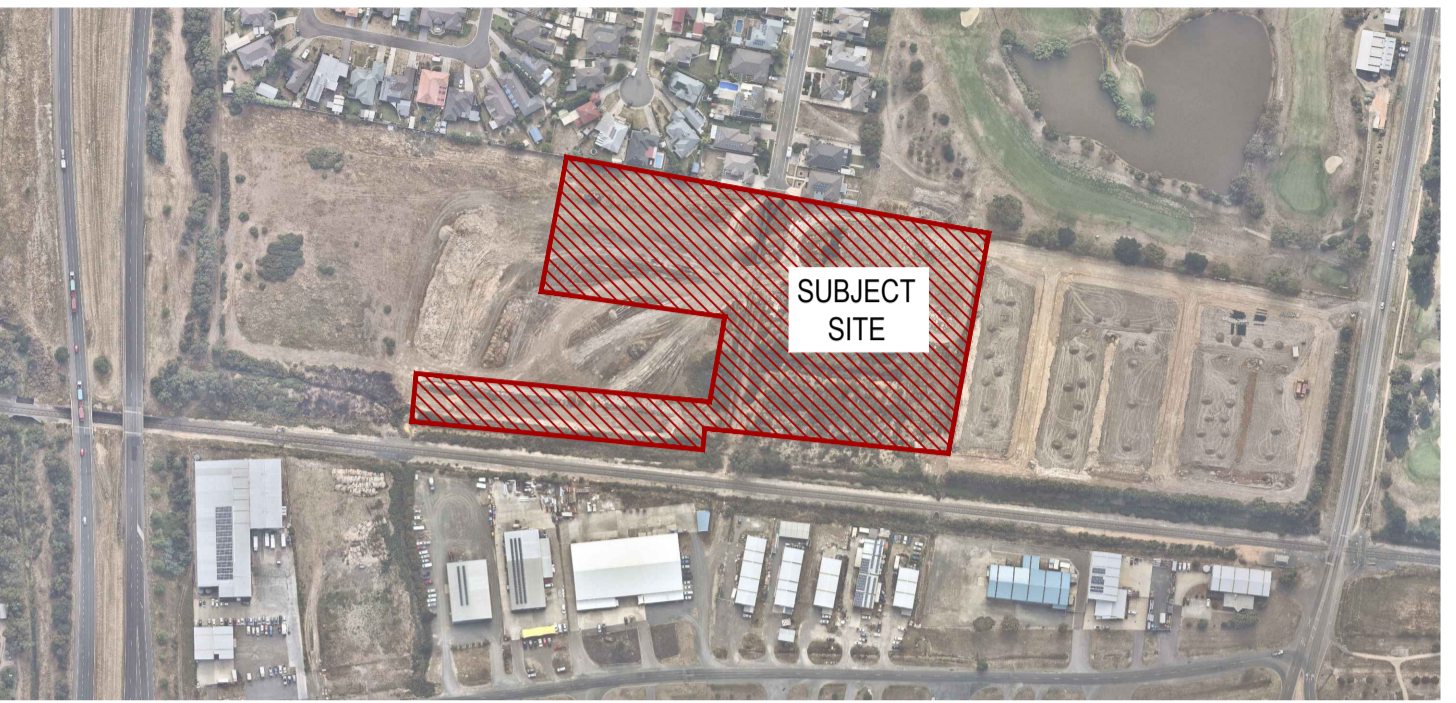
CITY OF BALLARAT logo and stamp: Document Endorsed under Conditions 4-101508 Permit No. PLP/2019/546 dated: 25/10/2023. Endorsed by Natalie Calleja for and on behalf of the City of Ballarat Council. Date: 10/4/2024. Sheet No: 1 of 32.

STANDARD DETAILS TABLE

Table with 3 columns: DESCRIPTION, AUTHORITY, STANDARD DETAIL REFERENCE. Includes items like BCC2 BARRIER KERB & CHANNEL, HOUSE DRAIN CONNECTIONS, AG DRAINS, PEDESTRIAN KERB RAMPS, CONCRETE FOOTPATH, TRENCH BACKFILL, UNHAUNCHED PITS, HAUNCHED PITS, JUNCTION PITS, SIDE ENTRY PITS, DOUBLE SIDE ENTRY PITS, GRATED SIDE ENTRY PITS, GRATED PITS, END WALLS, STATION LINEMARKING.



STAGE 2 DREWS PADDOCK HEINZ LANE, INVERMAY ROAD & DRAINAGE WORKS



NOTE: ANY USE OF THE ELECTRONIC DRAWINGS OR DATA PROVIDED BY STANTEC SHALL BE USED AT THE USER'S RISK. NO RESPONSIBILITY WILL BE TAKEN BY STANTEC AS TO THE ACCURACY OF THE DIGITAL DRAWING OR DATA.

GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ALL OTHER RELEVANT CONSULTANTS DRAWINGS, SPECIFICATIONS, CLIENT INSTRUCTIONS, AND ANY WRITTEN INSTRUCTIONS ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER FOR DISCUSSION BEFORE PROCEEDING WITH WORK.

DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.

SUBSTITUTES WILL NOT BE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

DURING CONSTRUCTION THE SITE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART OF THE SITE SHALL BE UNSAFE AS A RESULT OF THE CONSTRUCTION PROCEDURE.

MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION AND CITY OF BALLARAT STANDARDS, THE CURRENT REVISION OF ALL RELEVANT SAA CODES, THE REQUIREMENTS OF THE VICTORIA BUILDING REGULATIONS, THE BUILDING CODE OF AUSTRALIA AND THE RELEVANT AUTHORITIES.

UNLESS NOTED OTHERWISE ON A PARTICULAR DRAWING THESE NOTES SHALL APPLY.

THE TERM "ENGINEER" SHALL MEAN A REPRESENTATIVE APPOINTED BY THE CITY OF BALLARAT.

CONSTRUCTION HOLD POINTS

THE CONTRACTOR IS TO BE AWARE OF THE CITY OF BALLARAT CONSTRUCTION REQUIREMENTS AND CONTACT THE CITY OF BALLARAT AT EACH OF THEIR REQUIRED HOLD POINTS TO ARRANGE APPROPRIATE TESTING AND INSPECTIONS.

SUB-GRADE INSPECTION - NO CRUSHED ROCK OR OTHER PAVEMENT MATERIAL IS TO BE PLACED UNTIL THE SUBGRADE HAS BEEN INSPECTED AND APPROVED BY THE COUNCIL OFFICER.

TEST ROLLING - SHALL BE CARRIED OUT IN THE PROCESS OF AND TO THE SATISFACTION OF THE COUNCIL OFFICER.

PRIMER COAT - THE COUNCIL OFFICER IS TO GIVE APPROVAL PRIOR TO THE PLACEMENT OF THE PRIMER COAT.

BITUMINOUS CONCRETE WEARING COURSE - (PLACING AND COMPACTION), NO LAYER SHALL BE SPREAD UNTIL THE COUNCIL OFFICER GIVES CONSENT TO PROCEED.

PLACING - CONCRETE SHALL NOT BE PLACED UNTIL THE COUNCIL OFFICER HAS EXAMINED FORMWORK AND REINFORCEMENT IN PLACE AND GIVEN HIS CONSENT TO PROCEED.

FORMS - THE FORMS SHALL BE INSPECTED BY THE COUNCIL OFFICER IMMEDIATELY BEFORE CONCRETE IS PLACED.

PREPARATION BEFORE PLACING FRESH CONCRETE - THE SURFACE PREPARATIONS WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE COUNCIL OFFICER BEFORE CONCRETING PROCEEDS.

BACKFILLING - NO JOINTS ARE TO BE COVERED OR TRENCHES BACKFILLED UNTIL PIPE LAYING HAS BEEN APPROVED BY THE COUNCIL OFFICER.

DRAINAGE PITS - COVERS SHALL NOT BE PLACED UNTIL THE PITS HAVE BEEN INSPECTED AND APPROVED BY THE COUNCIL OFFICER.

CONCRETE NOTES

REFER VICROADS SPECIFICATION STANDARD SECTION 703 "GENERAL CONCRETE PAVING" FOR CONSTRUCTION DETAILS AND ASSOCIATED REFERENCES.

ALL CONCRETE AND CONCRETE PRACTICE SHALL BE GENERALLY IN ACCORDANCE WITH AS 3600 CONCRETE STRUCTURES CODE.

ALL IN-SITU CONCRETE SHALL HAVE A CHARACTERISTIC STRENGTH AT 28 DAYS (F'c) OF 25 MPa UNLESS NOTED OTHERWISE.

CONCRETE ELEMENTS SHOWN ON THESE DRAWINGS MUST NOT BE REDUCED IN ANY WAY WITHOUT THE ENGINEER'S APPROVAL. NO HOLES, CHASES, OR EMBEDMENTS, OTHER THAN THOSE SHOWN WILL BE PERMITTED IN ANY CONCRETE ELEMENTS WITHOUT THE ENGINEER'S APPROVAL.

REINFORCEMENT NOTATION: R - DENOTES STRUCTURAL GRADE PLAIN ROUND BARS TO AS 1302; N - DENOTES HOT ROLLED DEFORMED BARS TO AS 1302 (410Y); SL72 - DENOTES REINFORCEMENT FABRIC TO AS 1304 (72 DENOTES SIZE OF FABRIC).

Table for LAPPIING REINFORCEMENT showing Mesh, Trench Mesh, Bar Size, Top Bars (300mm or more concrete below), and Other Bars. Values include N12, N16, N20, 700, 300, 400, 600.

COVER

CLEAR COVER TO REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS.

CONCRETE COVER SHALL BE MAINTAINED BY THE USE OF APPROVED CHAIRS AND/OR CONCRETE BLOCKS. CONDUITS, PIPES ETC. ARE NOT TO BE PLACED IN CONCRETE COVER.

THE SLUMP OF ALL CONCRETE AT THE TIME OF PLACING AT THE JOB SHALL BE 75mm +/- 15mm TOLERANCE U.N.O.

ALL CONCRETE PLACED IN POSITION SHALL BE ADEQUATELY VIBRATED.

ALL CONCRETE SHALL BE CURED TO THE APPROVAL OF THE ENGINEER.

ALL PIPEWORK CAST INTO CONCRETE IS TO BE SLEEVED OR LAGGED WITH APPROPRIATE COMPRESSIBLE MATERIAL FOR THE FULL LENGTH OF EMBEDMENT.

APPROVED CITY OF BALLARAT stamp with signature of D. Hastings, dated 28 February, 2024.

BENCHMARK LOCATIONS table with columns for TBM ID, Easting, Northing, RL, and STAR PICKET status.

CIVIL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

ALL LEVELS SHOWN ARE BASED ON SITE DATUMS. REFER TO SITE TBM's.

UNLESS OTHERWISE SPECIFIED OR APPROVED BY THE ENGINEER, LAYING OF ALL PIPES OR CULVERTS SHALL COMMENCE AT THE DOWNSTREAM END.

PRIOR TO ANY WORKS COMMENCING THE CONTRACTOR SHALL COMPLETE A CHECK OF ANY EXISTING CONNECTING STORMWATER DETAILS, INCLUDING INVERTS, DIAMETERS, DEPTHS, MATERIAL ETC. TO CONFIRM ANY EXISTING DETAILS SHOWN ON THE DRAWINGS. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.

STORMWATER DRAINS ARE TO BE PVC SEWER QUALITY PIPES OR REINFORCED CONCRETE AS NOTED.

RC PIPES ARE TO BE RUBBER RING JOINTED CLASS 3 UNDER VEHICLE PAVEMENTS U.N.O. ALL RC PIPES ELSEWHERE ARE TO BE CLASS 2 WITHOUT RUBBER RING JOINTS.

DRAINAGE PIPES MUST BE BEDDED IN ACCORDANCE WITH THESE DRAWINGS.

DRAINAGE, SERVICES AND CONDUIT TRENCHES UNDER PAVEMENTS, FOOTPATHS AND PAVING ARE TO BE BACKFILLED TO THE UNDERSIDE OF THE PAVEMENT WITH AN APPROVED CONSOLIDATED MATERIAL IN ACCORDANCE WITH THE RELEVANT MUNICIPALITIES CONDITIONS.

ANY CLASH OF THE WORKS WITH A SERVICE IS TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL ENSURE THAT SERVICES ARE FULLY PROTECTED DURING CONSTRUCTION. ANY SERVICES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

SERVICES OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY EXIST. THE CONTRACTOR IS TO ALLOW FOR THE ALTERATION TO SERVICES WITHIN THE SITE, INCLUDING THE ADJUSTMENT OF PIT COVER LEVELS AND THE REMOVAL AND SEALING OF UNWANTED SERVICES & ASSOCIATED PITS & FITTINGS.

EXPOSED SUBGRADE AREAS SHALL BE PROOF ROLLED UNDER THE SUPERVISION OF THE ENGINEER USING A 10 TONNE AXLE LOAD. SOFT AREAS DETECTED SHALL BE EXCAVATED AND BACKFILLED AS DIRECTED BY THE ENGINEER.

THE PAVEMENT SUB-BASE COURSE IS TO BE COMPACTED TO 97% MODIFIED MAXIMUM DRY DENSITY COMPACTION. THE PAVEMENT BASE COURSE TO 98% MODIFIED MAXIMUM DRY DENSITY. TESTING LOCATIONS IN ACCORDANCE WITH VICROADS SPECIFICATIONS RC316.10. ALL PAVEMENT TESTING TO NATA STANDARDS.

ALL WORKS ADJACENT TO THE SITE ARE TO BE APPROVED AND INSPECTED BY CITY OF BALLARAT.

THE LOCATION OF UNDERGROUND SERVICES SHOWN ARE INDICATIVE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AUTHORITIES TO DETERMINE THE LOCATION OF UNDERGROUND SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORK. ANY CLASH OF WORKS WITH A SERVICE IS TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL ENSURE THAT ALL SERVICES ARE FULLY PROTECTED DURING CONSTRUCTION. ANY SERVICES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

PROVIDE TOOLED JOINTS IN KERBS, KERB AND CHANNEL AT 2.0m MAXIMUM CENTRES.

ALL EARTHEWORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH AS 3798 WITH LEVEL 1 INSPECTIONS & TESTING

PROVIDE 0.3m RADIUS TO KERBS AT INTERNAL CORNERS UNLESS NOTED OTHERWISE.

SAW/CUT EXISTING KERBS & PAVEMENTS WHERE REQUIRED FOR INSTALLATION OF NEW KERBS AND WHERE NEW WORK IS TO MATCH EXISTING.

THE CONTRACTOR SHALL AT ALL TIMES DURING THE CURRENCY OF THE WORK PROTECT THE PUBLIC FROM THE WORKS, PLANT, TRENCHES ETC. OCCASIONED BY THE WORKS BY THE USE OF APPROVED BARRICADES AND BARRIERS. SUCH PROTECTIVE MEASURES WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER AND A REPRESENTATIVE FROM CITY OF BALLARAT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY ARISING FROM THE NEGLECT OR INSUFFICIENCY OF SUCH PRECAUTIONS.

THE CONTRACTOR IS ADVISED THAT THE MINES (TRENCHES) REGULATIONS 1982 WILL APPLY TO THIS PROJECT. THE CONTRACTOR IS REQUIRED TO SATISFY AND/OR PUT INTO EFFECT ALL REQUIREMENTS OF THOSE REGULATIONS AND THOSE OF THE OFFICE OF MINERALS AND ENERGY.

THE WORKS SHOWN HEREIN ARE SUBJECT TO THE SUPERVISION OF THE PRINCIPAL'S APPOINTED SUPERINTENDENT.

CARE IS TO BE TAKEN TO PROTECT EXISTING FENCES, BUILDINGS, FITTINGS, SERVICES, FURNITURE, SIGNAGE, TREES AND OTHER ITEMS TO BE RETAINED FROM ANY DAMAGE.

UNWANTED PITS, PIPES SERVICES ECT. IN PAVEMENT AREAS ARE TO BE REMOVED AND THE HOLE BACKFILLED WITH AN APPROVED CONSOLIDATED MATERIAL IN ACCORDANCE WITH THE RELEVANT MUNICIPALITIES CONDITIONS.

THE CONTRACTOR SHALL INSPECT THE SITE AND DETERMINE THE EXISTING ASPHALT PAVING, PITS, PIPES, SERVICES, TREES, KERBS, DRAINS, BUILDINGS, FITTINGS, FURNITURE, SIGNAGE, ETC. THAT ARE TO BE REMOVED AND THE CONTRACTOR SHALL ALLOW IN THE TENDER PRICE FOR ALL COSTS ASSOCIATED WITH THE NECESSARY REMOVAL.

ALL FILLING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH AS 3798-2007 LEVEL 1 INSPECTION AND TESTING & MINIMUM RELATIVE COMPACTION REQUIREMENTS. PLACEMENT MOISTURE CONDITION - MOISTURE VARIATION TO NOT EXCEED +/-2% OF OPTIMUM MOISTURE CONTENT.

THE CONTRACTOR SHALL ALLOW TO PROVIDE TEMPORARY SHUTTERS FOR ALL TRENCHES AS NECESSARY.

SURPLUS SPOIL NOT REQUIRED BY THE DEVELOPER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, TO THE MUNICIPAL TIP OR A SITE APPROVED UNDER THE COUNCIL PLANNING & ENVIRONMENT ACT AND THE EPA ACT.

THE CONTRACTOR SHALL DEVELOP AND ENSURE THE STRICT IMPLEMENTATION OF AN APPROVED SITE ENVIRONMENT MANAGEMENT SYSTEM GENERALLY IN ACCORDANCE WITH THE EPA PUBLICATION "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL, PUBLICATION No. 275".

THE ORIENTATION OF ALL STORMWATER DRAINAGE ACCESS COVERS & GRATES ARE SHOWN INDICATIVELY AND ARE TO BE MANUFACTURED & INSTALLED IN ACCORDANCE WITH AS3996-2006.

ALL DISTURBED SURFACES, FENCING & OTHER ITEMS TO BE RE-INSTATED TO ORIGINAL CONDITION.

FOR APPROVAL

Footer section containing: ISSUED FOR table, Stantec logo, client logo (villawood properties), project logo (Drew's Paddock), drawing title (GENERAL NOTES, DRAWING INDEX, STANDARD DETAILS TABLE & LOCALITY PLAN), and issue/revision details (REF No: 17547-202, SHEET C01 OF 21, REV: 07).

**LEGEND**

- DESIGN / EXISTING SURFACE CONTOURS
- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED FUTURE STORMWATER DRAINAGE PIPE & PIT
- PROPOSED SEWER MAIN ALIGNMENT & PIT (IN ACCORDANCE WITH CEW DESIGN DOCUMENTS)
- PROPOSED TELSTRA
- PROPOSED POWER
- PROPOSED WATER MAIN
- PROPOSED GAS MAIN
- PROPOSED ELECTRICITY PIT
- EXISTING SEWER MAIN ALIGNMENT
- EXISTING OPTIC FIBRE
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- EXISTING KERB & CHANNEL
- PROPOSED ROAD KERB & CHANNEL
- PROPOSED TITLE BOUNDARY
- PROPOSED EASEMENT
- FUTURE LOT BOUNDARY
- EXISTING LOT BOUNDARY
- PROPOSED ROAD CENTRELINE
- EXISTING DRAINAGE PIPE
- PROPOSED DOUBLE SIDE ENTRY PIT
- PROPOSED JUNCTION PIT
- PROPOSED SIDE ENTRY PIT
- PROPOSED ENDWALL & ROCK BEACHING
- EXTENT OF PROPOSED 385mm THICK ROAD PAVEMENT
- EXTENT OF PROPOSED 335mm THICK ROAD PAVEMENT
- PROPOSED FOOTPATH
- PROPOSED HOUSE DRAIN CONNECTION & PROPERTY INLET PIT: (P) PIPE-(K) KERB
- TEMPORARY SURVEY MARK
- PROPOSED STREET TREES
- EXISTING VEGETATION
- BASIN FENCING

**NOTE:**  
ROCK BEACHING TO BE PROVIDED TO ALL END WALL INLETS/OUTLETS. VICROADS TYPE 1 - BEACHING

**NOTE:**  
2500L RAINWATER TANK TO BE INSTALLED TO ALL DWELLINGS IN ACCORDANCE WITH FLOOD IMPACT ASSESSMENT & WATER QUALITY MEASURES MEMO. REFER 17547-04 -VERSION 3.

**NOTE:**  
HAND RAILING TO BE PROVIDED TO END WALL WITH PIPE OUTLET GREATER THAN 4500

**NOTE:**  
ALL POWER KIOSK TO BE CONSTRUCTED TO MINIMUM 300mm ABOVE 1% AEP FLOOD LEVEL.

**NOTE:**  
THE LOCATION OF EXISTING UNDERGROUND SERVICES ARE SHOWN INDICATIVELY ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AUTHORITIES TO DETERMINE THE LOCATION OF UNDERGROUND SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORK. ANY CLASH OF WORKS WITH A SERVICE IS TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL ENSURE THAT ALL SERVICES ARE FULLY PROTECTED DURING CONSTRUCTION. ANY SERVICES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

**NOTE:**  
TACTILE GROUND SURFACE INDICATORS FOR ALL PEDESTRIAN ROUTES TO BE INSTALLED TO AUSTRALIAN STANDARDS. DISABILITY DISCRIMINATION ACT, VICROADS AND CITY OF BALLARAT REQUIREMENTS.

**NOTE:**  
ALL SIGNS & LINEMARKING TO BE INSTALLED IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOLUME 2 - SIGNS & MARKINGS.

**NOTE:**  
AGRICULTURAL DRAINS ARE TO BE LOCATED AT BACK OF KERB & CHANNEL. WITH THE EXCEPTION OF WHERE A STORMWATER PIPE IS TO BE LOCATED. REFER CITY OF BALLARAT STANDARD DRAWING SD-D2-1

**NOTE:**  
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**NOTE:**  
THE ORIENTATION OF ALL STORMWATER DRAINAGE ACCESS COVERS & GRATES ARE SHOWN INDICATIVELY AND ARE TO BE MANUFACTURED & INSTALLED IN ACCORDANCE WITH AS3996-2006.

**NOTE:**  
ALL STORMWATER PIPES LOCATED BEHIND BACK OF KERB ARE TO BE BACKFILLED WITH COMPACTED NON-DESRIPT CRUSHED ROCK OR APPROVED ALTERNATIVE, TO A MINIMUM DEPTH OF 500mm BELOW BASE OF KERB.

**CITY OF BALLARAT**  
Document Endorsed under  
Conditions 4-10150 Permit No. PLP/2019/546  
dated: 25/10/2023  
Endorsed by *Natalie Calleja* for and on  
behalf of the City of Ballarat Council.  
Date: 10/4/2024  
Sheet No: 2 of 32

Rock beaching and access to existing culverts under railway line is subject to further direction and approval by City of Ballarat

Rock beaching and access to existing culverts under railway line is subject to further direction and approval by City of Ballarat.

**ROAD & DRAINAGE LAYOUT PLAN**  
SCALE 1:500

**APPROVED CITY OF BALLARAT**  
By D. Hastings, 28 February, 2024

**FOR APPROVAL**

**NOTE:**  
THE 3D SURFACE IS TO BE USED IN CONJUNCTION WITH THE DESIGN PLANS. THERE ARE LIKELY TO BE DISCREPANCIES, AND THE DESIGN PLANS ARE TO TAKE PRECEDENCE.  
  
THE CONTRACTOR SHOULD CONTACT STANTEC IF THERE IS UNCERTAINTY REGARDING THE INFORMATION PROVIDED.

**NOTE:**  
THE CONTRACTOR IS TO CONFIRM INVERT LEVELS OF THE EXISTING STORMWATER AT PITS P07, P08 & P24 PRIOR TO ANY DRAINAGE WORKS COMMENCING.  
  
**NOTE:**  
THE CONTRACTOR IS TO NOTIFY LAND OWNERS EFFECTED BY WORKS AT LEAST 7 DAYS PRIOR TO WORKS COMMENCING.

**NOTE:**  
CONTRACTOR IS TO BE AWARE OF THE LOCALISED LOWERING OF SERVICES INFRASTRUCTURE TO PROVIDE MINIMUM CLEARANCES TO EXISTING AND PROPOSED INFRASTRUCTURE. LOCALISED LOCATIONS ARE INDICATED BASED ON ANTICIPATED SERVICE INFRASTRUCTURE ALIGNMENTS AND SHOULD BE CONSIDERED BY THE CONTRACTOR WHEN PRICING.

**NOTE:**  
CONTRACTOR TO CONFIRM EXISTING PAVEMENT LEVELS PRIOR TO COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER. ALL KERB SETOUT TO BE INSPECTED AND APPROVED BY THE COUNCIL OFFICER PRIOR TO PLACEMENT OF KERB & CHANNEL.

**NOTE:**  
ALL DISTURBED SURFACES, FENCING & OTHER ITEMS TO BE RE-INSTATED TO ORIGINAL CONDITION.

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY	13/11/2020	TP/MA						
02	TENDER	18/11/2020	T.P.						
03	INFORMATION	03/03/2023	R.J.F.						
04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

DESIGNED:	M. ANTON	DATE:	NOVEMBER 2020
DRAWN:	T. POPOVSKI	SCALE:	A1: 1:500, A3: 1:1000
SURVEY:	STANTEC	SHEET SIZE:	A1 / A3
CHECKED:	R. DUNN	APPROVED:	R. DUNN
DATE:	18.10.23	DATE:	18.10.23

**Stantec**  
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**villawood properties**  
Communities Designed for Living

**Drew's Paddock**  
INVERMAY PARK

STAGE 2

**CIVIL DRAWING**  
DRAWING TITLE: **ROAD & DRAINAGE LAYOUT PLAN**  
REF. No: 17547-202 SHEET C02 OF 21 REV. 07

**LEGEND**

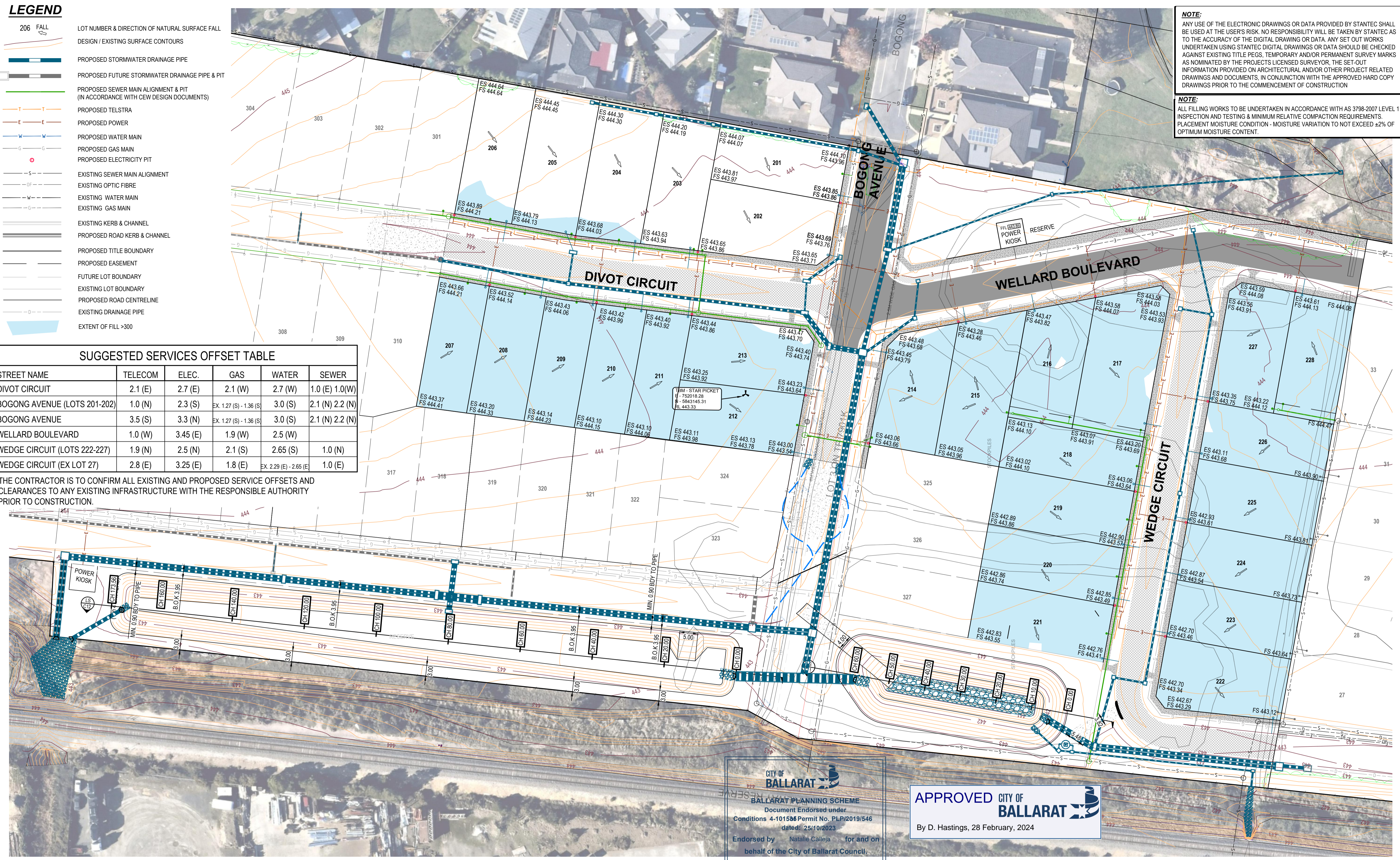
- 206 FALL
- LOT NUMBER & DIRECTION OF NATURAL SURFACE FALL
- DESIGN / EXISTING SURFACE CONTOURS
- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED FUTURE STORMWATER DRAINAGE PIPE & PIT
- PROPOSED SEWER MAIN ALIGNMENT & PIT (IN ACCORDANCE WITH CEW DESIGN DOCUMENTS)
- PROPOSED TELSTRA
- PROPOSED POWER
- PROPOSED WATER MAIN
- PROPOSED GAS MAIN
- PROPOSED ELECTRICITY PIT
- EXISTING SEWER MAIN ALIGNMENT
- EXISTING OPTIC FIBRE
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- EXISTING KERB & CHANNEL
- PROPOSED ROAD KERB & CHANNEL
- PROPOSED TITLE BOUNDARY
- PROPOSED EASEMENT
- FUTURE LOT BOUNDARY
- EXISTING LOT BOUNDARY
- PROPOSED ROAD CENTRELINE
- EXISTING DRAINAGE PIPE
- EXTENT OF FILL >300

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**NOTE:**  
 ALL FILLING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH AS 3798-2007 LEVEL 1 INSPECTION AND TESTING & MINIMUM RELATIVE COMPACTION REQUIREMENTS. PLACEMENT MOISTURE CONDITION - MOISTURE VARIATION TO NOT EXCEED ±2% OF OPTIMUM MOISTURE CONTENT.

SUGGESTED SERVICES OFFSET TABLE					
STREET NAME	TELECOM	ELEC.	GAS	WATER	SEWER
DIVOT CIRCUIT	2.1 (E)	2.7 (E)	2.1 (W)	2.7 (W)	1.0 (E) 1.0(W)
BOGONG AVENUE (LOTS 201-202)	1.0 (N)	2.3 (S)	EX. 1.27 (S) - 1.36 (S)	3.0 (S)	2.1 (N) 2.2 (N)
BOGONG AVENUE	3.5 (S)	3.3 (N)	EX. 1.27 (S) - 1.36 (S)	3.0 (S)	2.1 (N) 2.2 (N)
WELLARD BOULEVARD	1.0 (W)	3.45 (E)	1.9 (W)	2.5 (W)	
WEDGE CIRCUIT (LOTS 222-227)	1.9 (N)	2.5 (N)	2.1 (S)	2.65 (S)	1.0 (N)
WEDGE CIRCUIT (EX LOT 27)	2.8 (E)	3.25 (E)	1.8 (E)	EX. 2.29 (E) - 2.65 (E)	1.0 (E)

THE CONTRACTOR IS TO CONFIRM ALL EXISTING AND PROPOSED SERVICE OFFSETS AND CLEARANCES TO ANY EXISTING INFRASTRUCTURE WITH THE RESPONSIBLE AUTHORITY PRIOR TO CONSTRUCTION.



**CITY OF BALLARAT**  
 BALLARAT PLANNING SCHEME  
 Document Endorsed under  
 Conditions 4-101595 Permit No. PL/Pl/2019/546  
 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024

APPROVED CITY OF BALLARAT  
 By D. Hastings, 28 February, 2024

Sheet No: 3 of 32

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
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06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

DESIGNED: M. ANTON DATE: NOVEMBER 2020  
 DRAWN: T. POPOVSKI SCALE: A1: 1:500, A3: 1:1000  
 SURVEY: STANTEC SHEET SIZE: A1 / A3  
 CHECKED: R.DUNN APPROVED: R.DUNN  
 DATE: 18.10.23 DATE: 18.10.23

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**villawood properties**  
 Communities Designed for Living

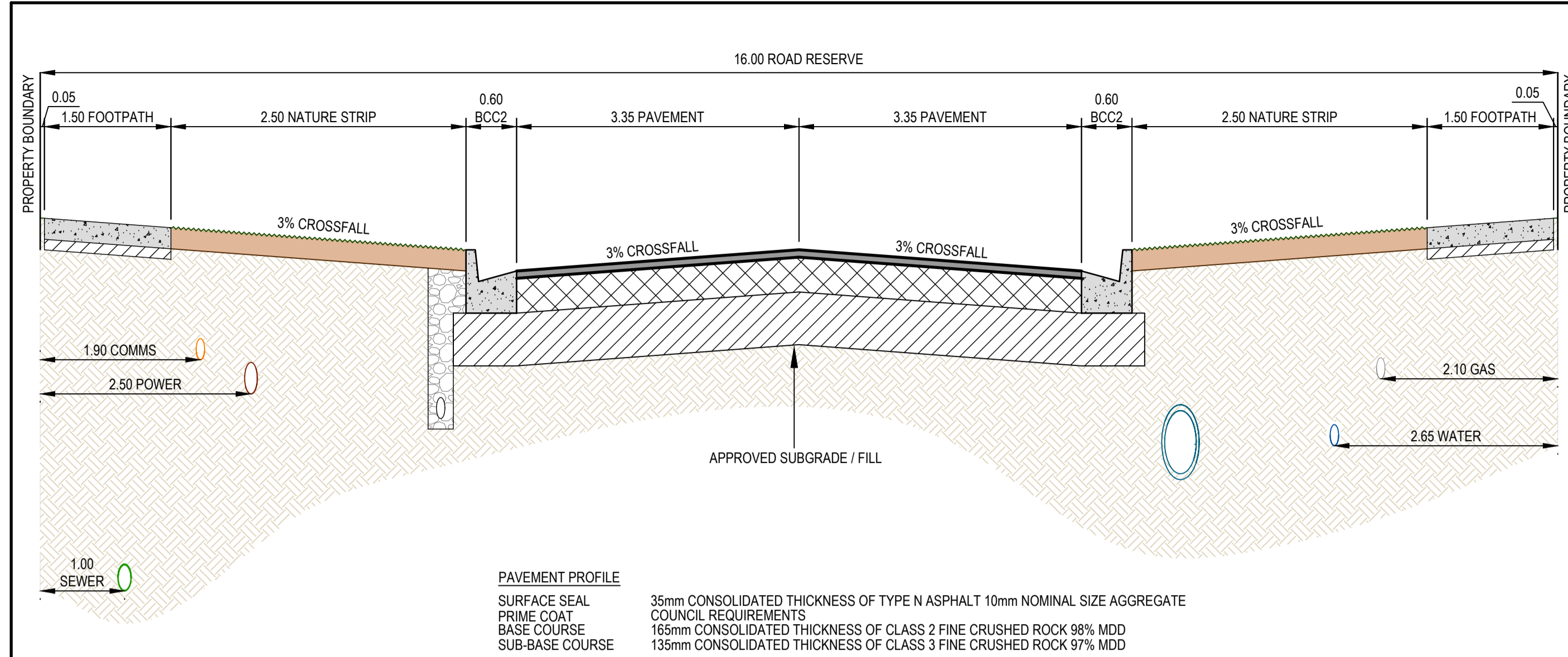
**Drew's Paddock**  
 INVERMAY PARK

STAGE 2

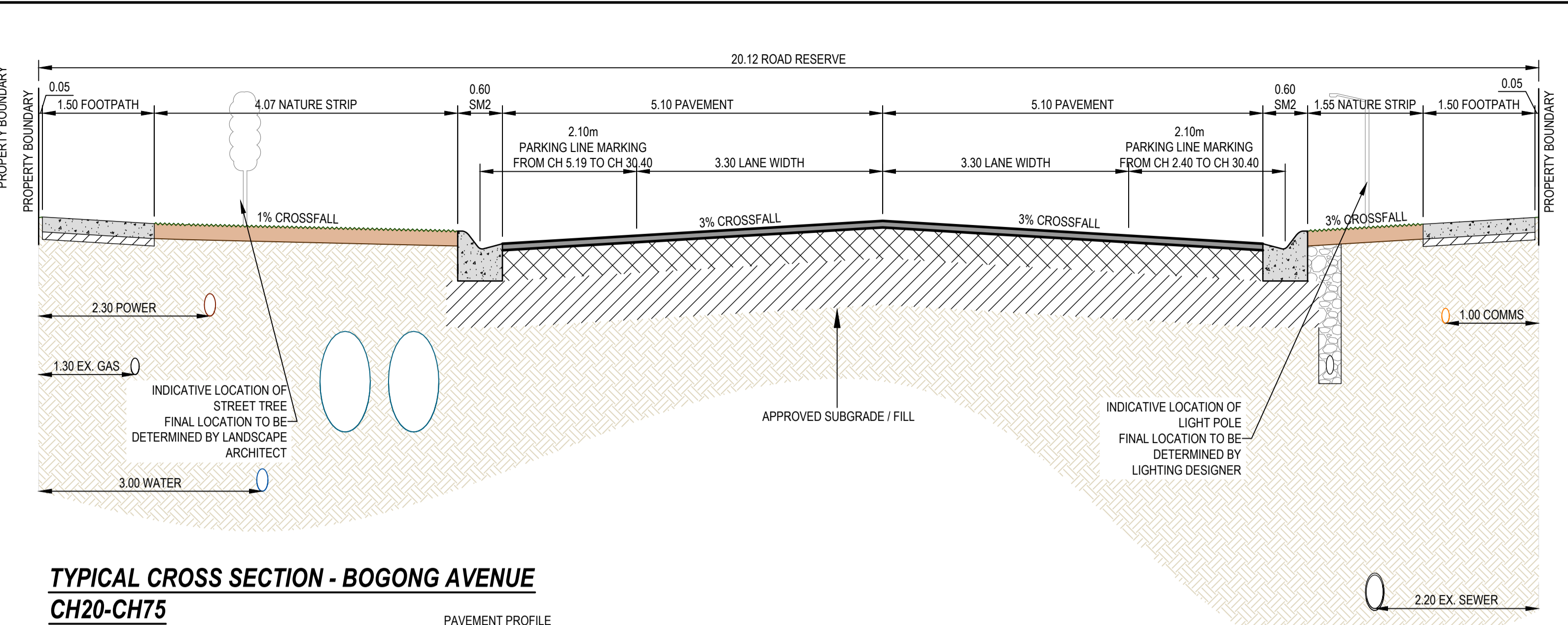
**CIVIL DRAWING**

DRAWING TITLE:  
**EXISTING & FINISHED SURFACE PLAN,  
 BASIN CHAINAGES & SERVICE LOCATION PLAN**

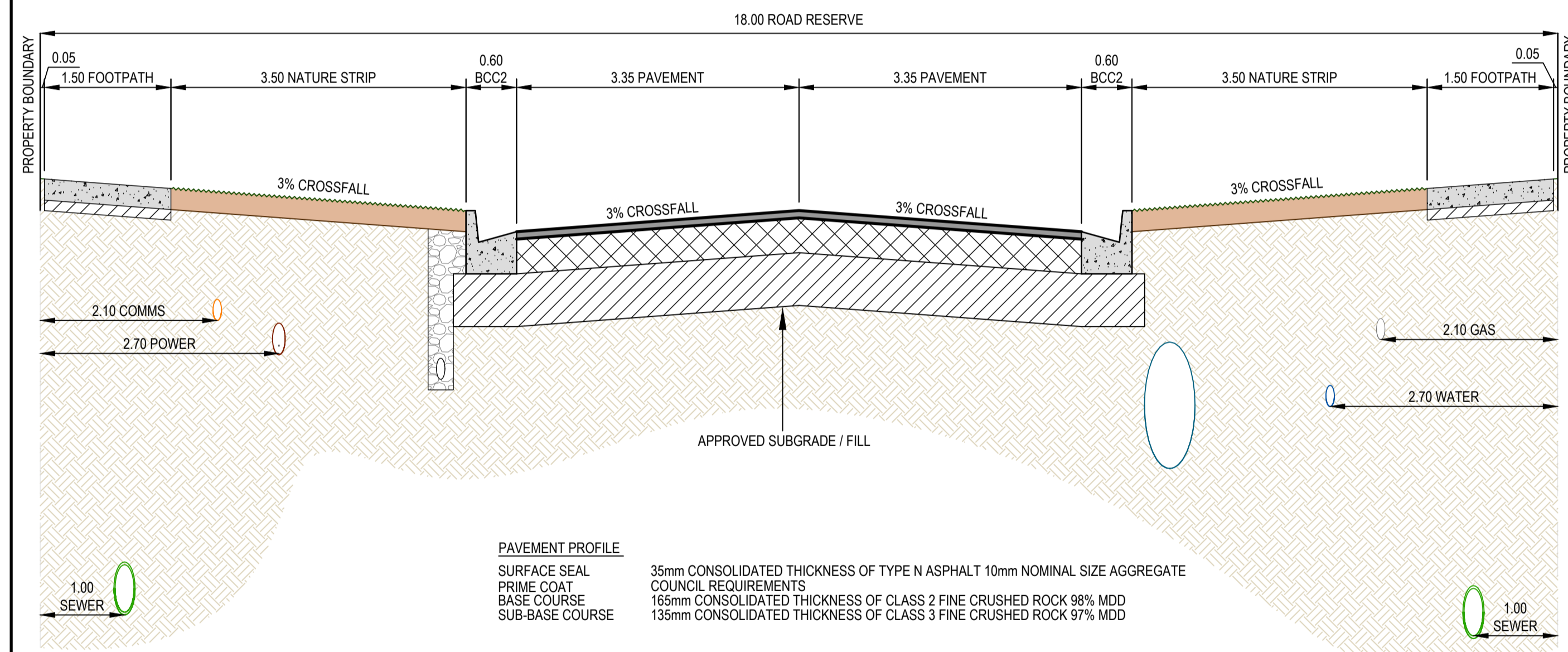
REF. No: 17547-202 SHEET: C03 OF 21 REV: 07



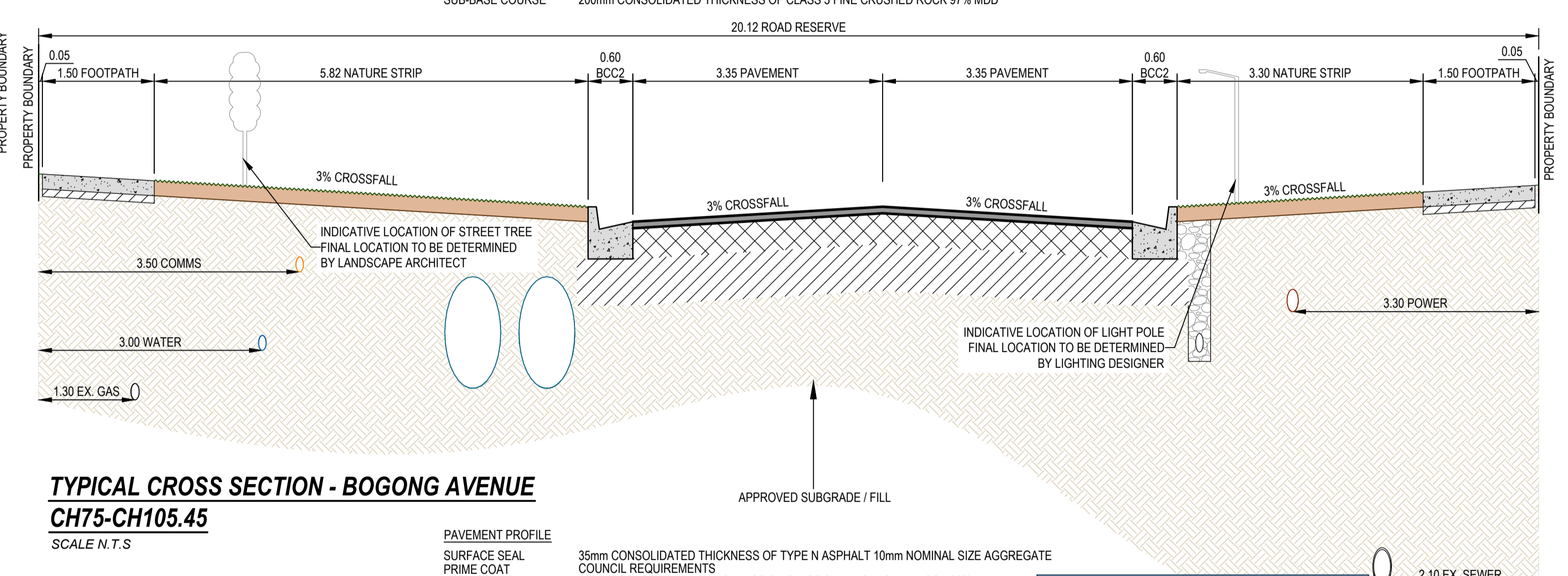
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SCALE N.T.S.



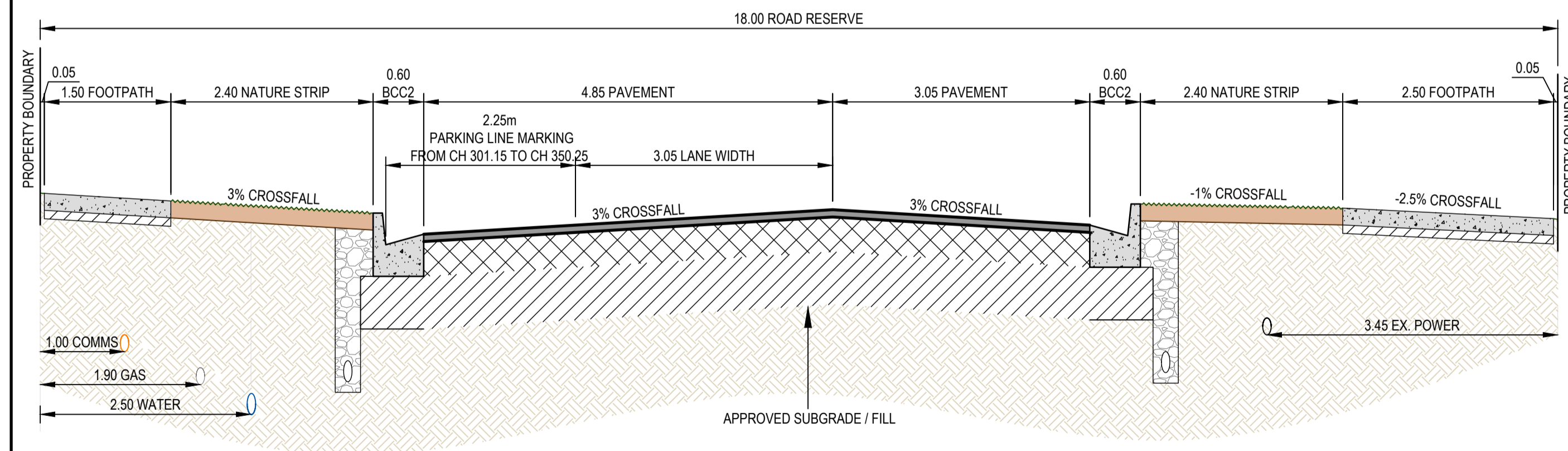
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**CH20-CH75**  
SCALE N.T.S.



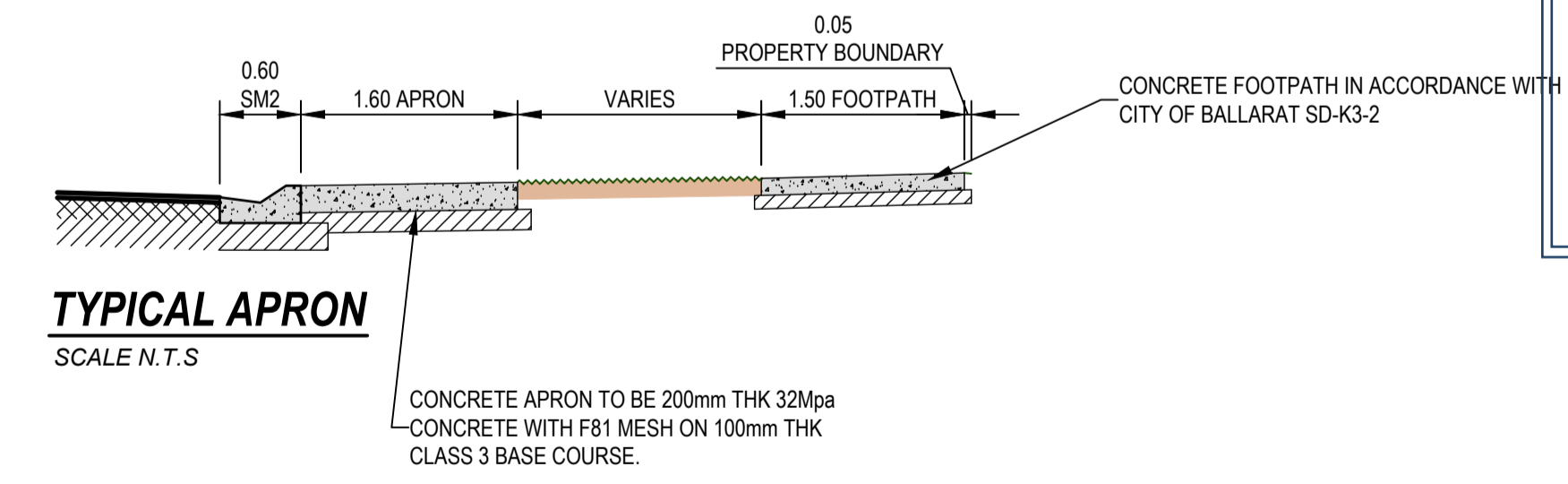
**TYPICAL CROSS SECTION - DIVOT CIRCUIT**  
SCALE N.T.S.



**TYPICAL CROSS SECTION - BOGONG AVENUE**  
**CH75-CH105.45**  
SCALE N.T.S.



**TYPICAL CROSS SECTION - WELLARD BOULEVARD**  
SCALE N.T.S.



**TYPICAL APRON**  
SCALE N.T.S.

**CITY OF BALLARAT**  
BALLARAT PLANNING SCHEME  
Document Endorsed under  
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dated: 25/10/2023  
Endorsed by Natalie Calleja for and on  
behalf of the City of Ballarat Council.  
Date: 10/4/2024  
Sheet No: 4 of 32

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**APPROVED CITY OF BALLARAT**  
By D. Hastings, 28 February, 2024

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY	13/11/2020	TP/MA						
02	TENDER	18/11/2020	T.P.						
03	INFORMATION	03/03/2023	RJF						
04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

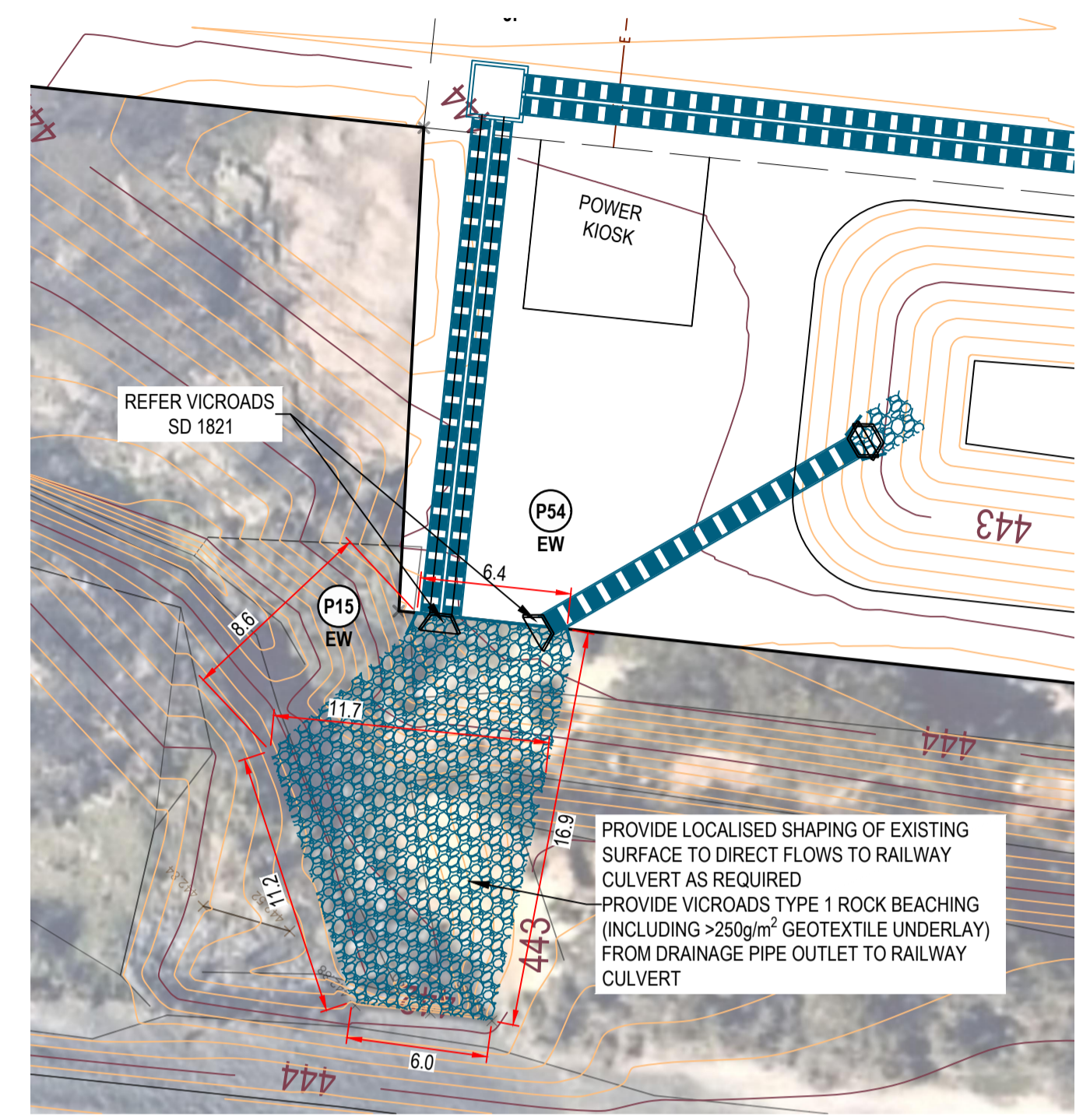
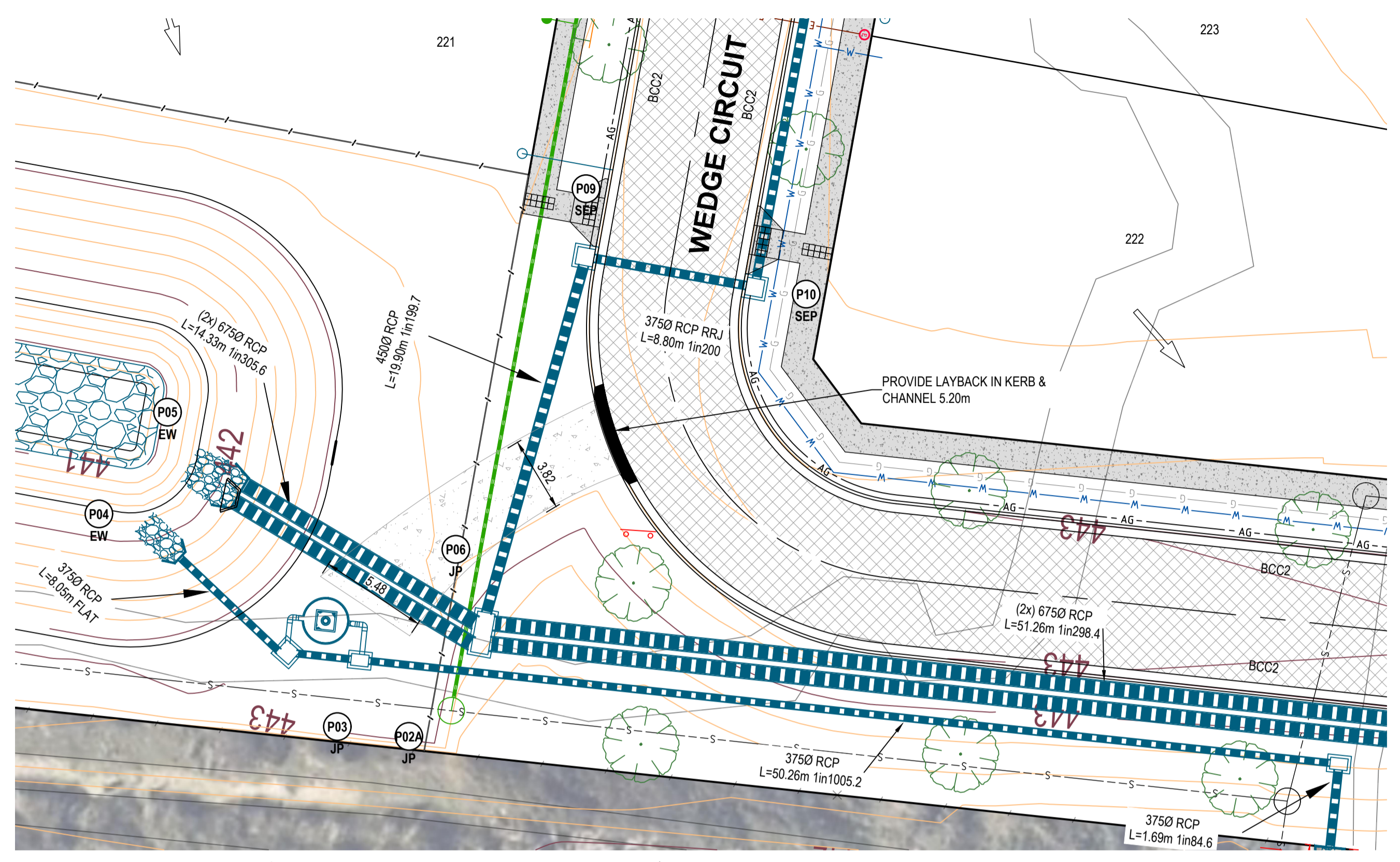
**Stantec**  
ABN 17 007 820 322  
1315 Sturt Street (PO Box 563W) Ballarat, VIC Australia 3350  
Phone +61 3 5330 9999 Fax +61 3 5333 3615  
Web: www.stantec.com

**villawood properties**  
Communities Designed for Living

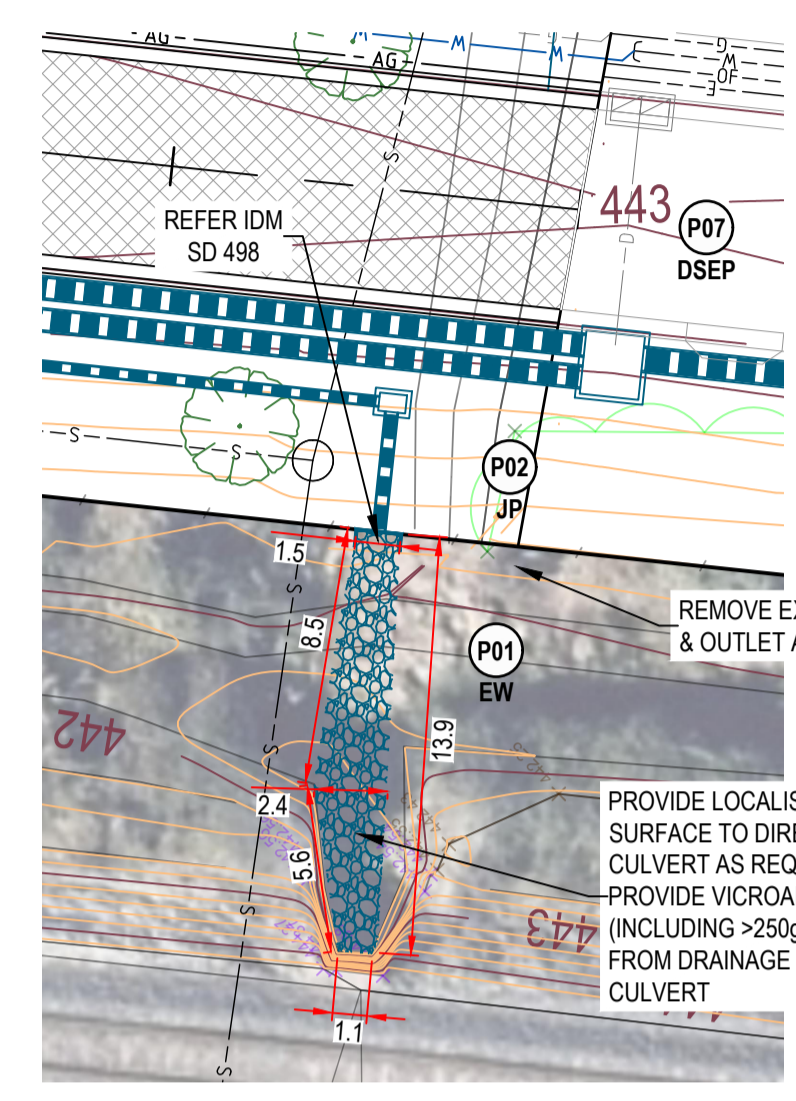
**Drew's Paddock**  
INVERMAY PARK

**CIVIL DRAWING**  
DRAWING TITLE: **TYPICAL ROAD CROSS SECTIONS**  
REF. No: 17547-202  
SHEET: C04 OF 21  
REV: 07

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**NORTH RAILWAY CULVERT OUTLET DETAIL**  
 SCALE 1:250



**SOUTH RAILWAY CULVERT OUTLET DETAIL**  
 SCALE 1:250

**LEGEND**

- NATURAL SURFACE
- FINISHED SURFACE

**WELLARD BLVD / DIVOT CIRCUIT**

DATUM 439.00

CUT -									
FILL +									
DESIGN LIP OF KERB (LEFT SIDE)									
DESIGN LIP OF KERB (RIGHT SIDE)									
DESIGN PAVEMENT LEVEL - CENTRELINE									
EXISTING SURFACE LEVEL									
NORTHING CENTER LINE									
EASTING CENTER LINE									
CHAINAGE									

**BOGONG AVENUE LONGITUDINAL SECTION**  
 SCALE H 1:500, V 1:100

**DIVOT CIRCUIT LONGITUDINAL SECTION**

DATUM 439.00

CUT -									
FILL +									
DESIGN LIP OF KERB (LEFT SIDE)									
DESIGN LIP OF KERB (RIGHT SIDE)									
DESIGN PAVEMENT LEVEL - CENTRELINE									
EXISTING SURFACE LEVEL									
NORTHING CENTER LINE									
EASTING CENTER LINE									
CHAINAGE									

**DIVOT CIRCUIT LONGITUDINAL SECTION**  
 SCALE H 1:500, V 1:100

**CITY OF BALLARAT**

BALLARAT PLANNING SCHEME  
 Document Endorsed under  
 Conditions 4-101586 Permit No. PLP/2019/546  
 dated: 25/10/2023

Endorsed by *Natalie Calleja* for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024

Sheet No: 5 of 32

**APPROVED CITY OF BALLARAT**

By D. Hastings, 28 February, 2024

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY	13/11/2020	TP/MA						
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04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

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**villawood properties**

Communities Designed for Living

**Drew's Paddock**

INVERMAY PARK

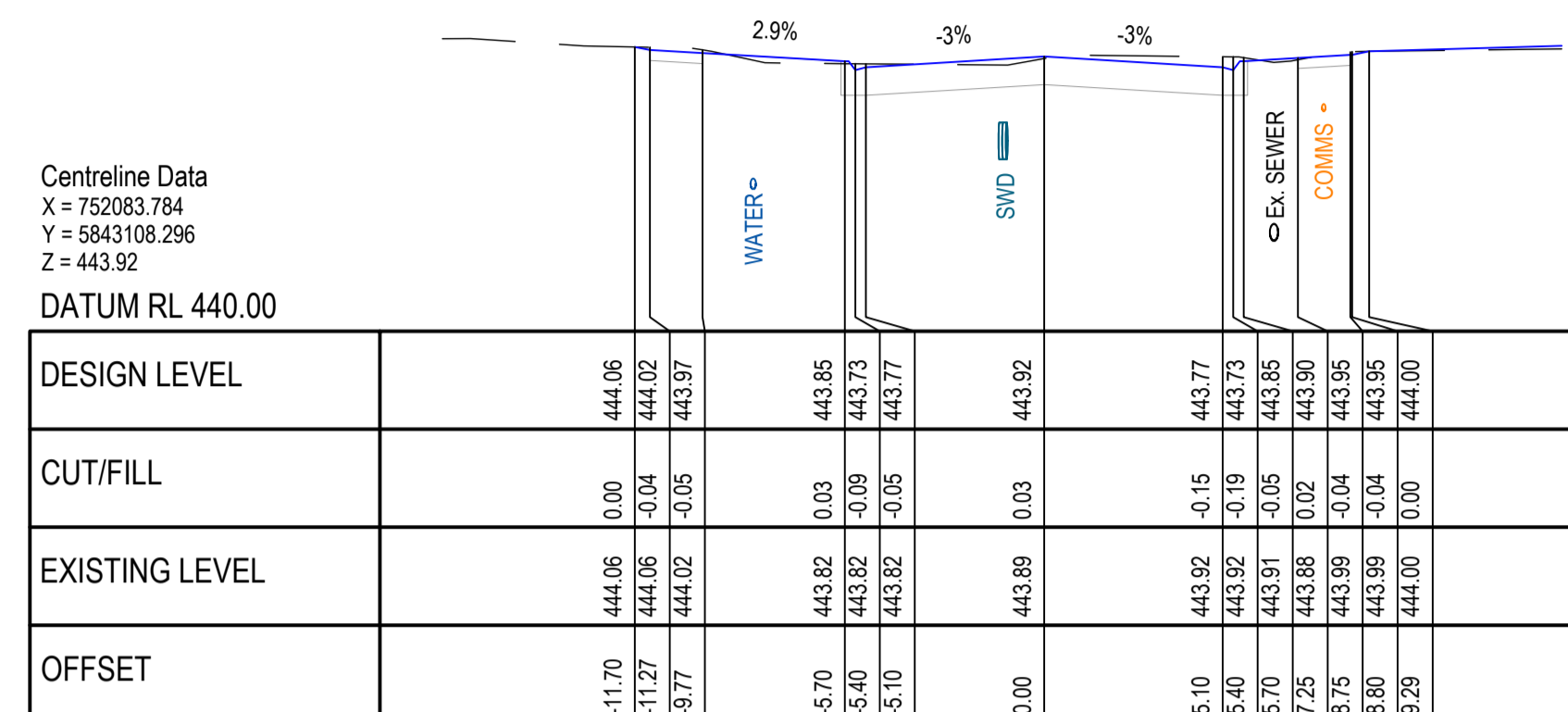
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DRAWING TITLE:  
**OUTLET DETAIL, BOGONG AVENUE & DIVOT CIRCUIT LONGITUDINAL SECTIONS**

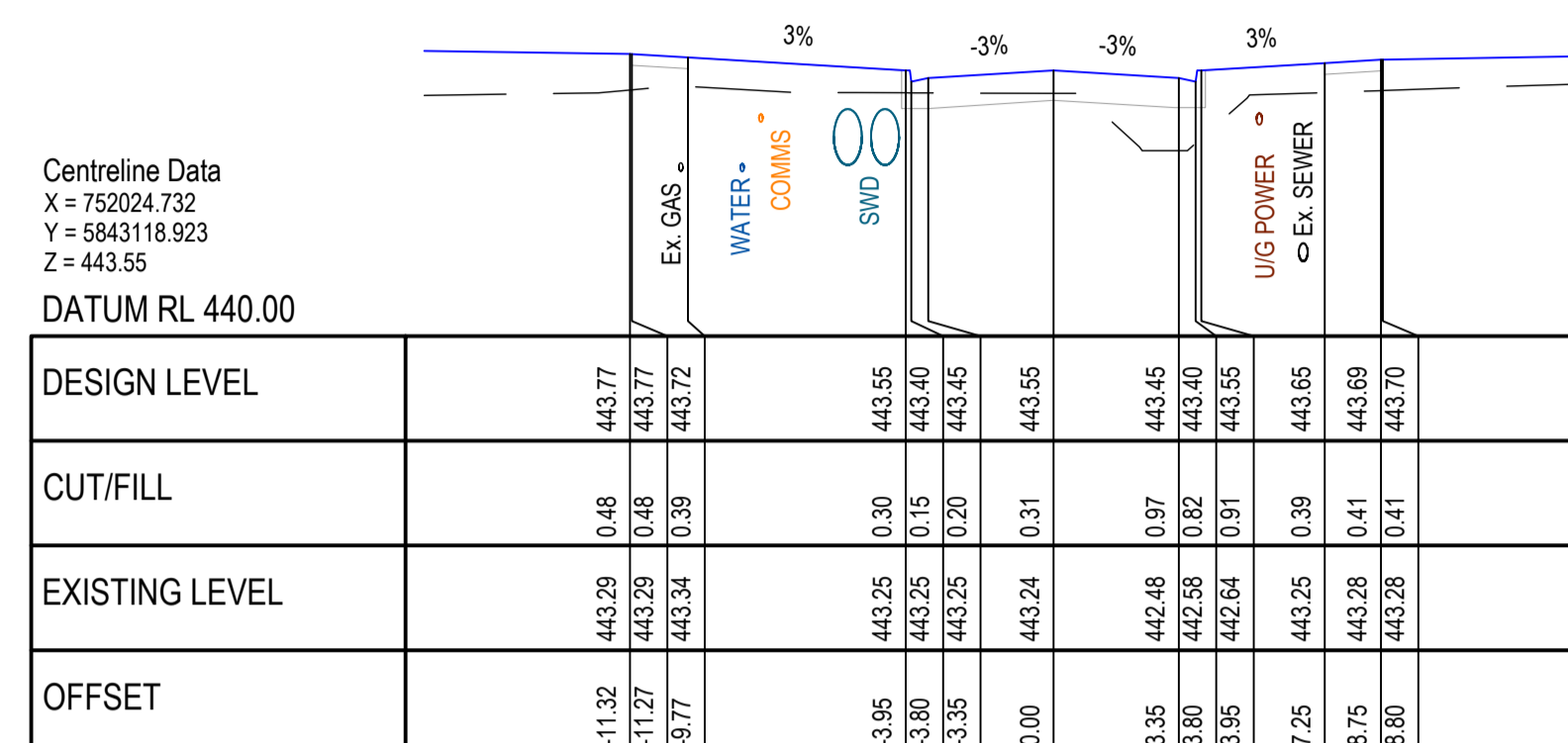
REF. No: 17547-202 SHEET: C05 OF 21 REV: 07

— — —	NATURAL SURFACE
————	FINISHED SURFACE

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CH 20.00



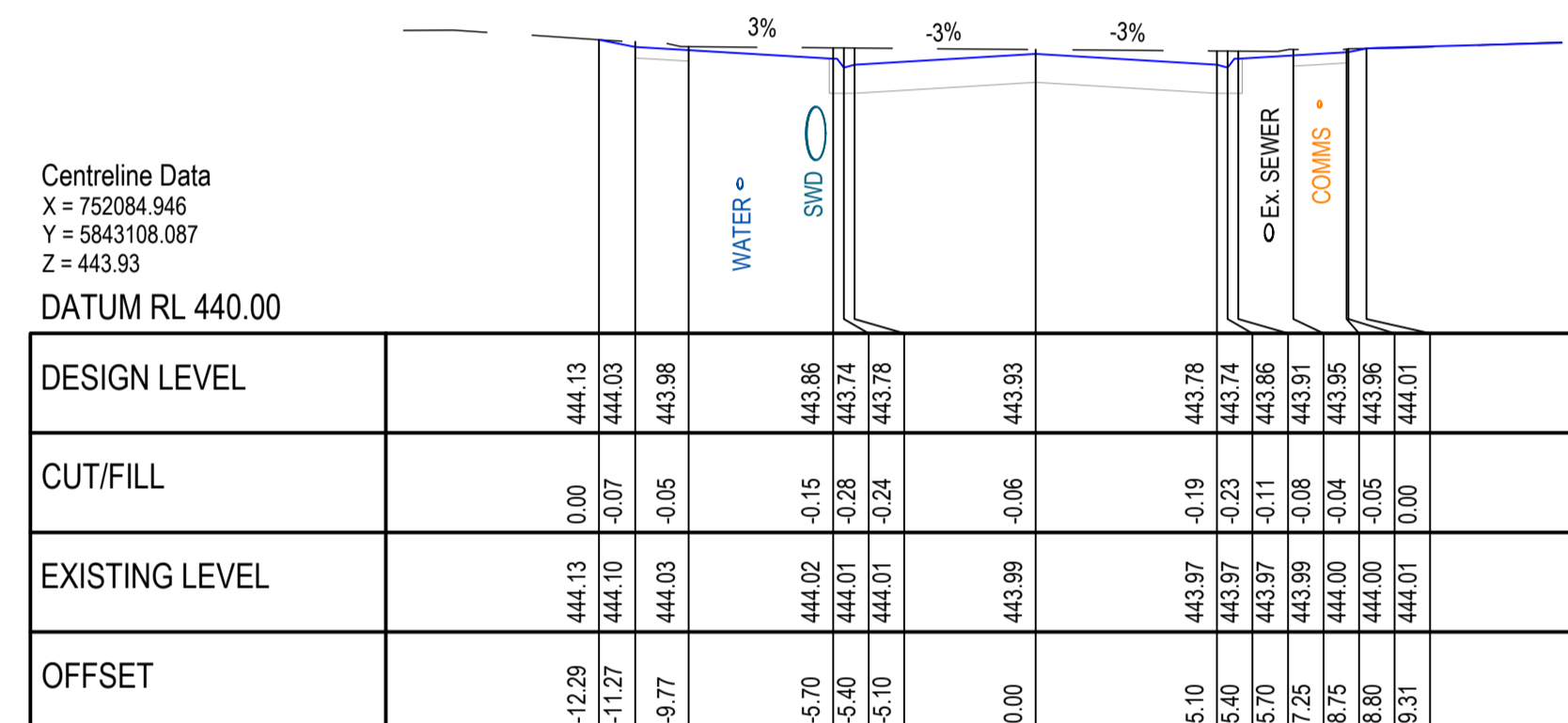
CH 80.00

**CITY OF BALLARAT**

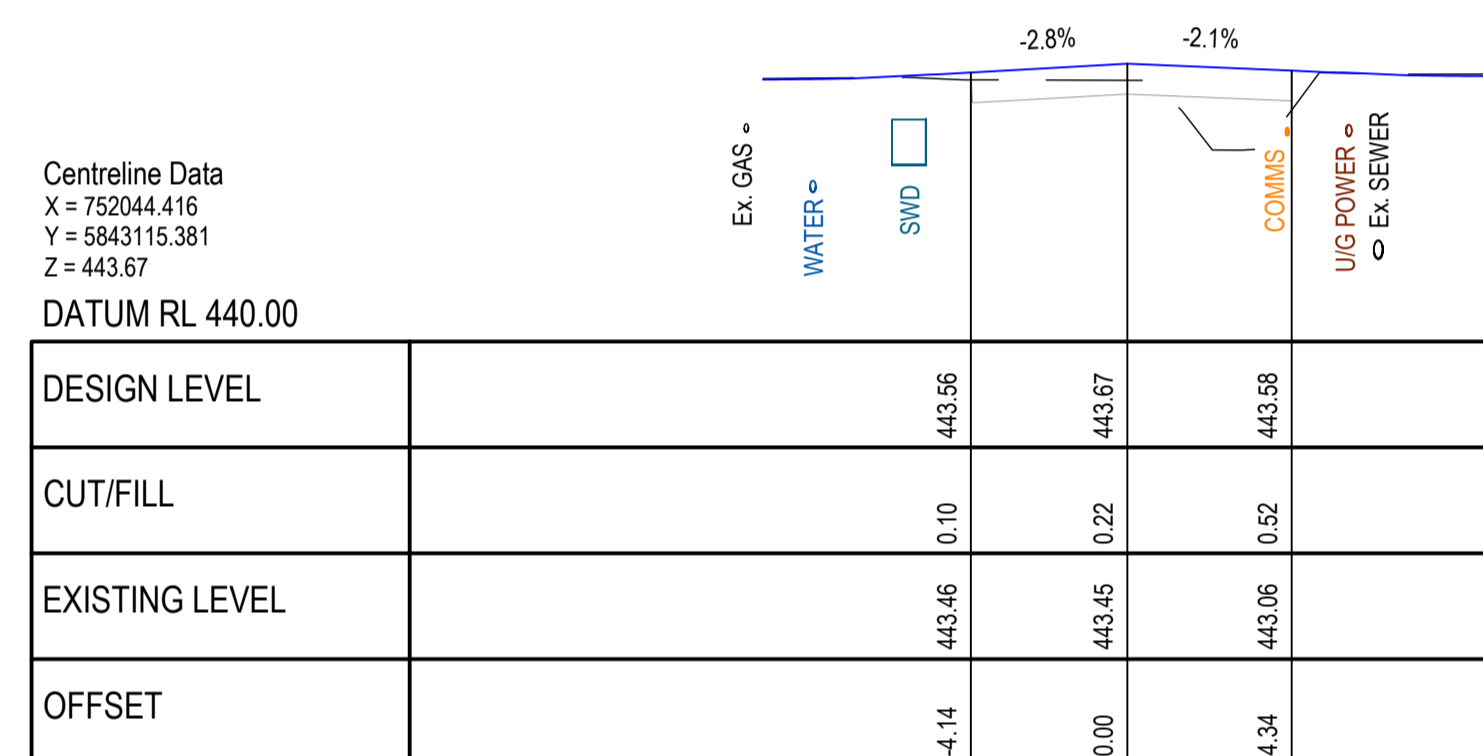
BALLARAT PLANNING SCHEME  
 Document Endorsed under  
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 Date: 10/4/2024

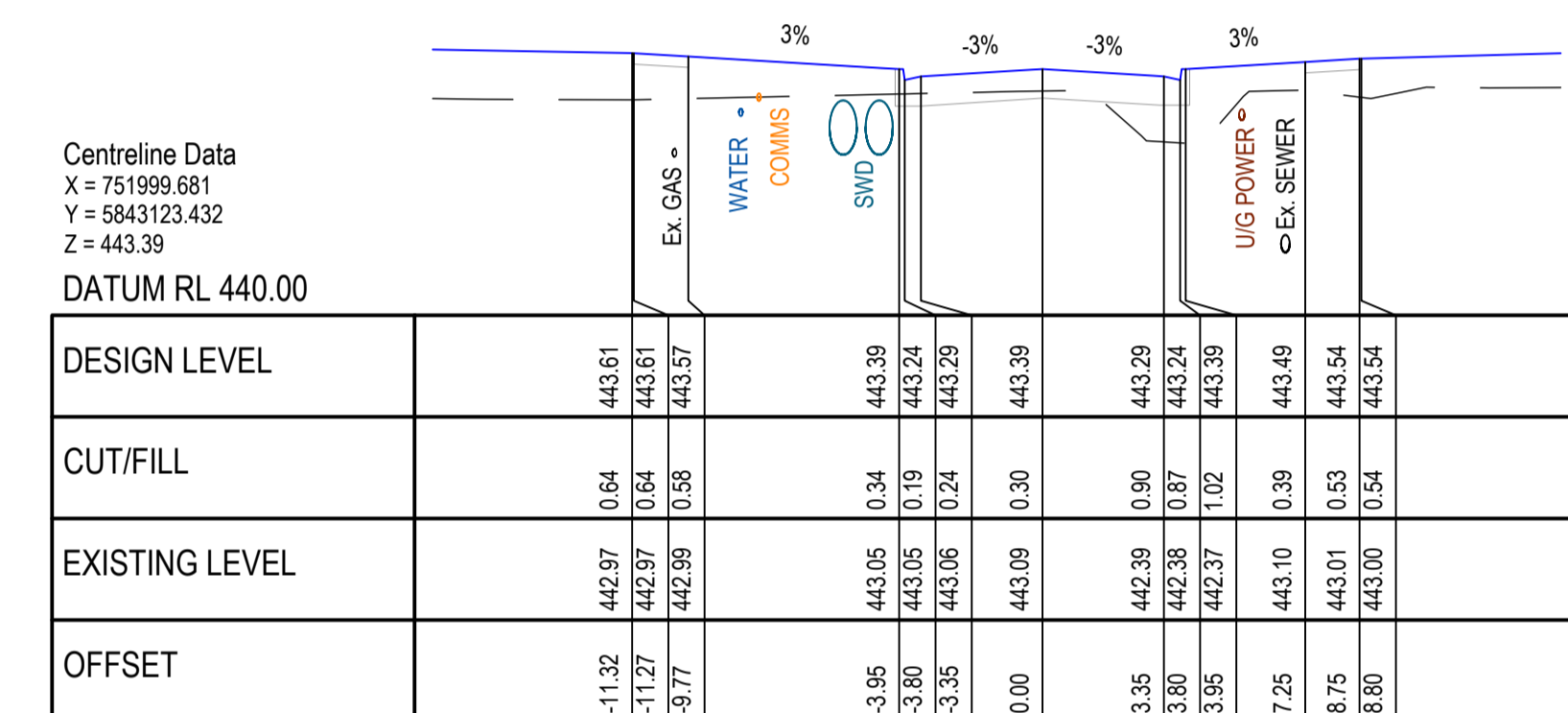
Sheet No: 6 of 32



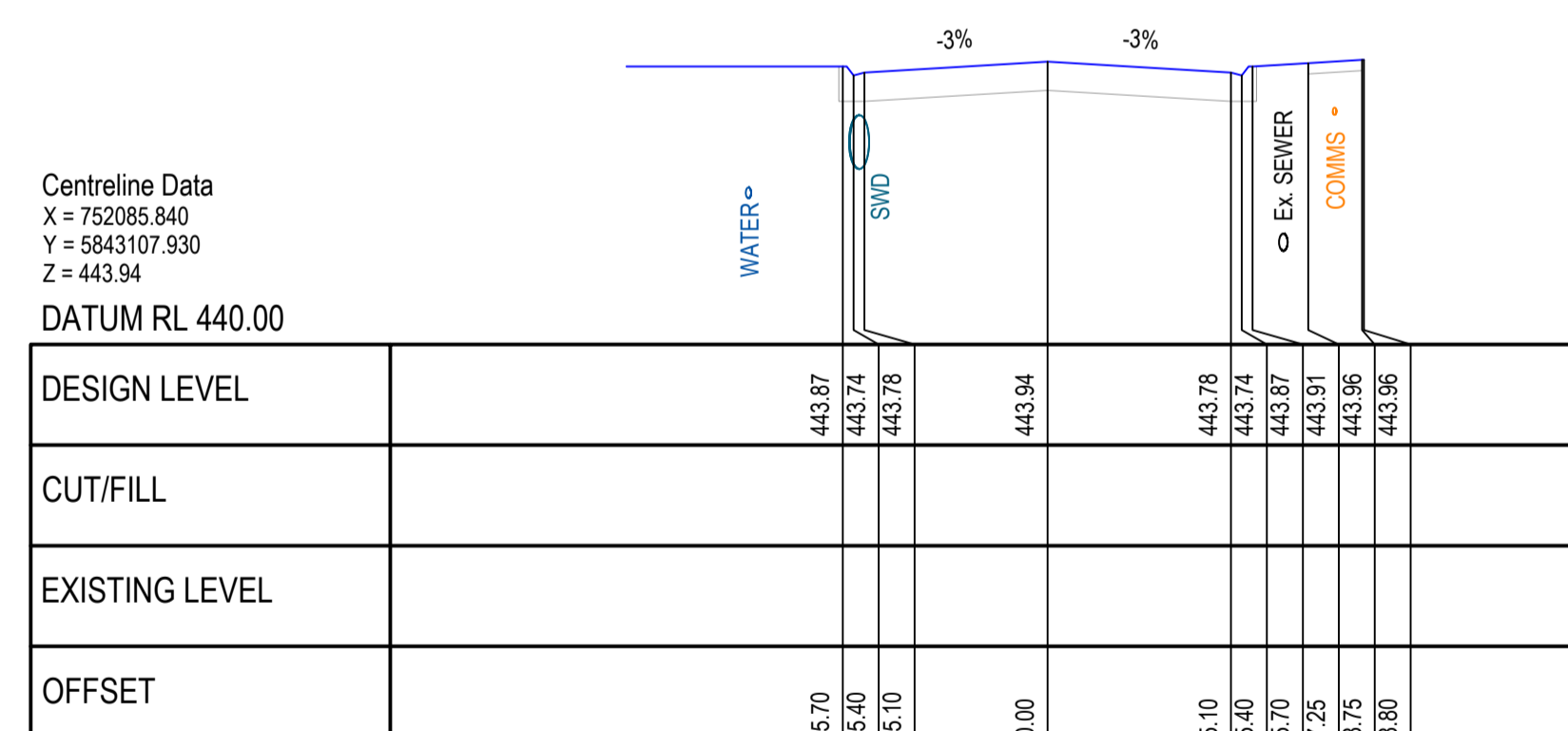
CH 18.82



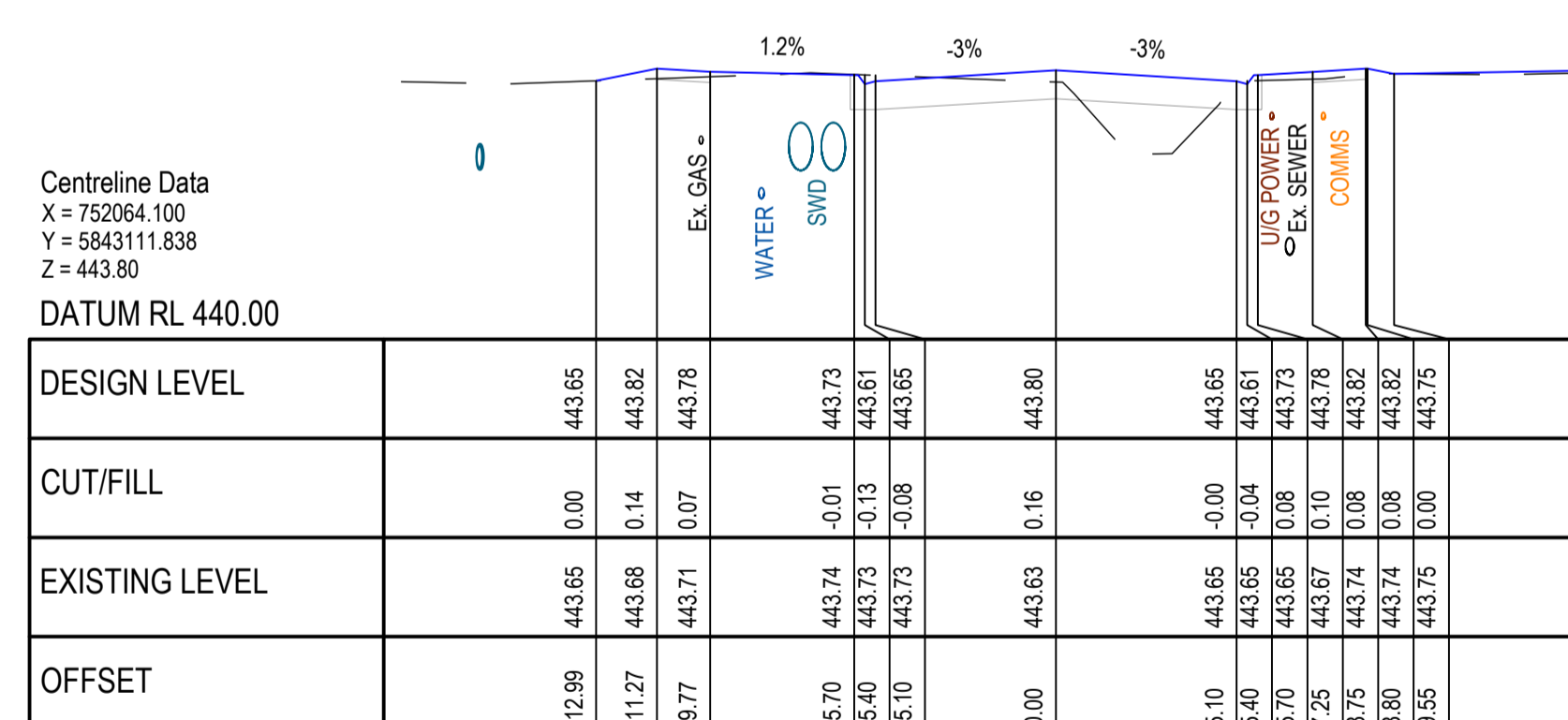
CH 60.00



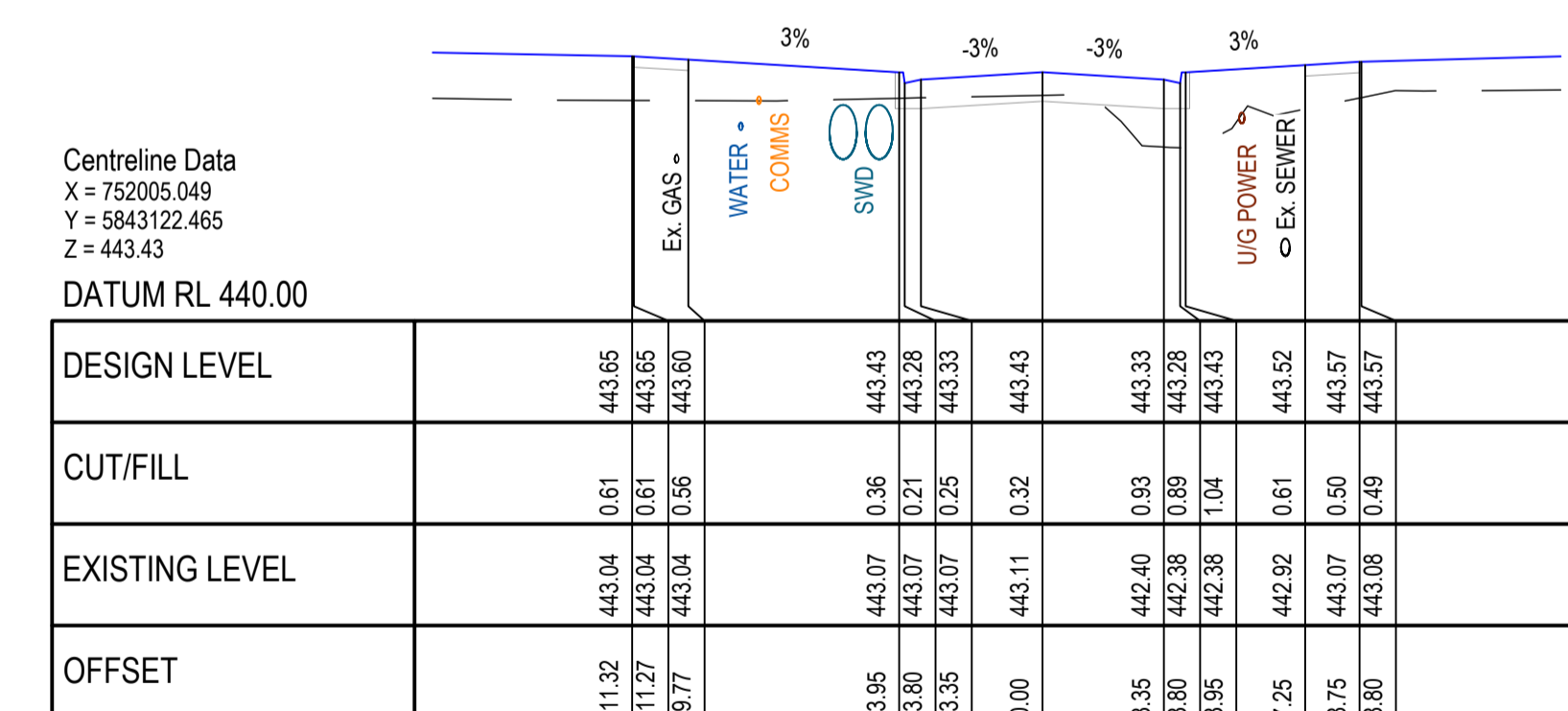
CH 105.45



CH 17.91



CH 40.00



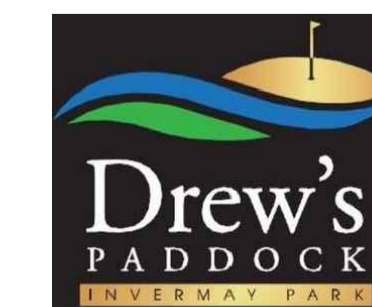
CH 100.00

**BOGONG AVENUE CROSS SECTIONS**  
 SCALE H 1:200, V 1:100

**APPROVED** CITY OF BALLARAT  
 By D. Hastings, 28 February, 2024

FOR APPROVAL

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	DESIGNED:	M. ANTON	DATE:	NOVEMBER 2020
01	PRELIMINARY	13/11/2020	TP/MA							DRAWN:	T. POPOVSKI	SCALE:	A1: 1:200, A3: 1:400
02	TENDER	18/11/2020	T.P.							SURVEY:	STANTEC	SHEET SIZE:	A1 / A3
03	INFORMATION	03/03/2023	RJF							CHECKED:	R.DUNN	APPROVED:	R.DUNN
04	TENDER	07/06/2023	CB/LP							DATE:	18.10.23	DATE:	18.10.23
05	FOR APPROVAL	18/10/2023	ST	R.D.						COPYRIGHT STANTEC			
06	FOR APPROVAL	20/12/2023	ST	R.D.									
07	FOR APPROVAL	16/02/2024	JM	R.D.									



**STAGE 2**

<b>CIVIL DRAWING</b>		
<b>BOGONG AVENUE CROSS SECTIONS</b>		
REF. No:	17547-202	SHEET C06 OF 21 REV. 07

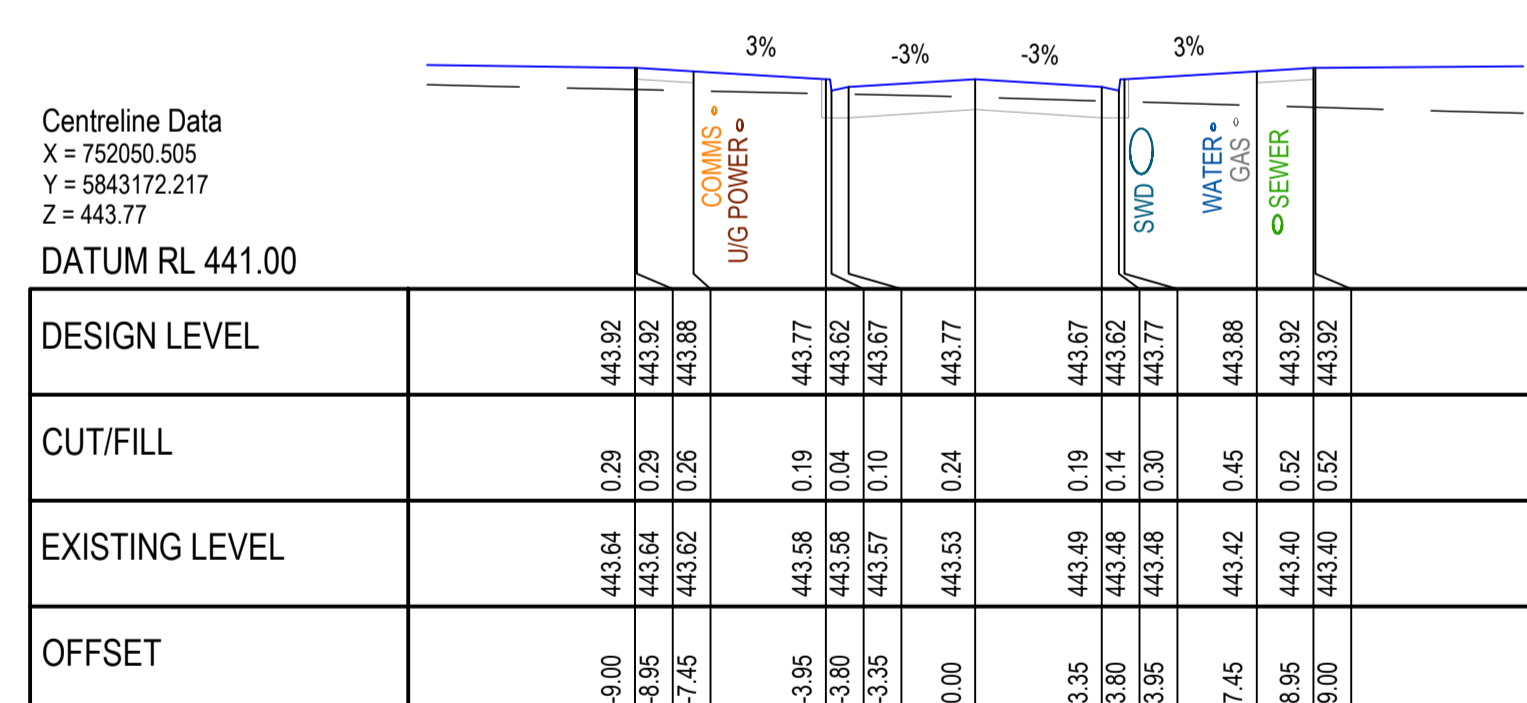
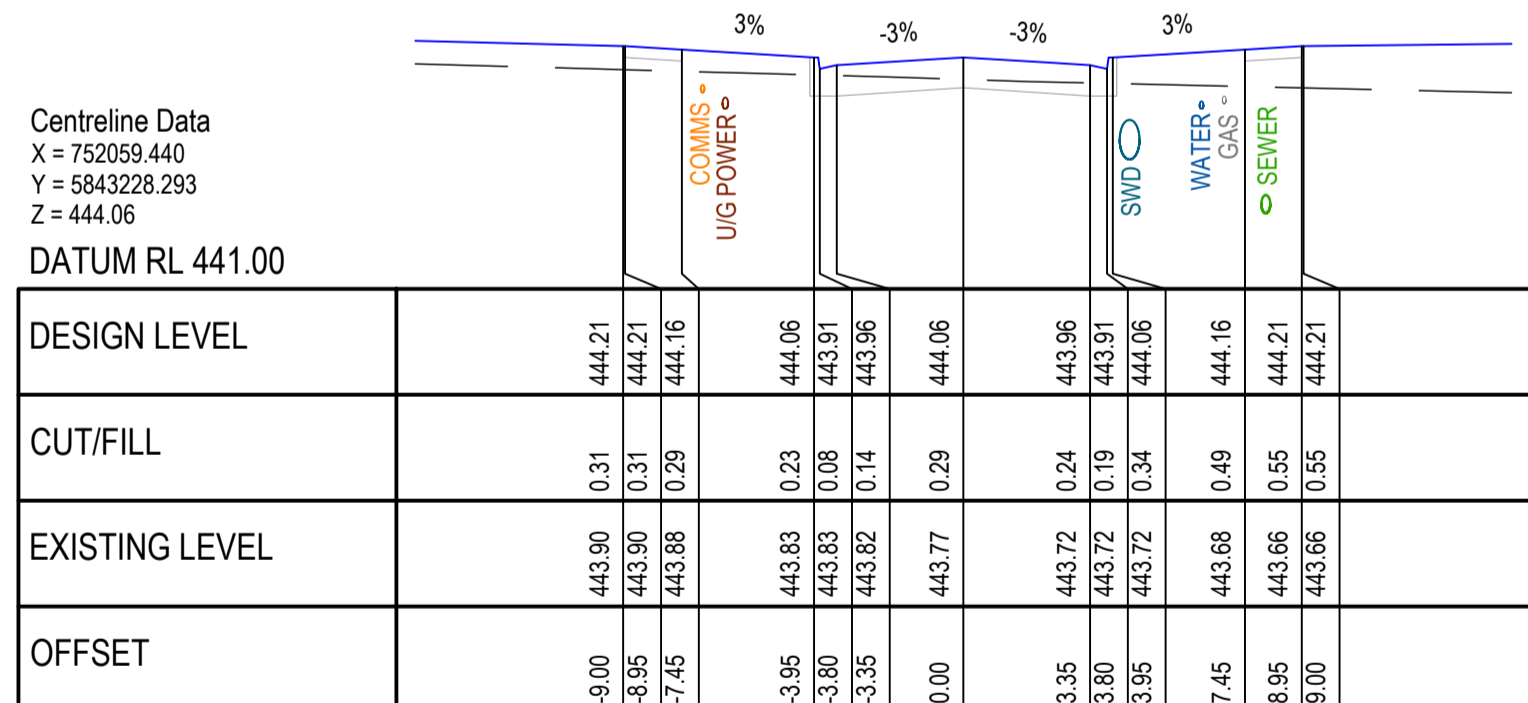
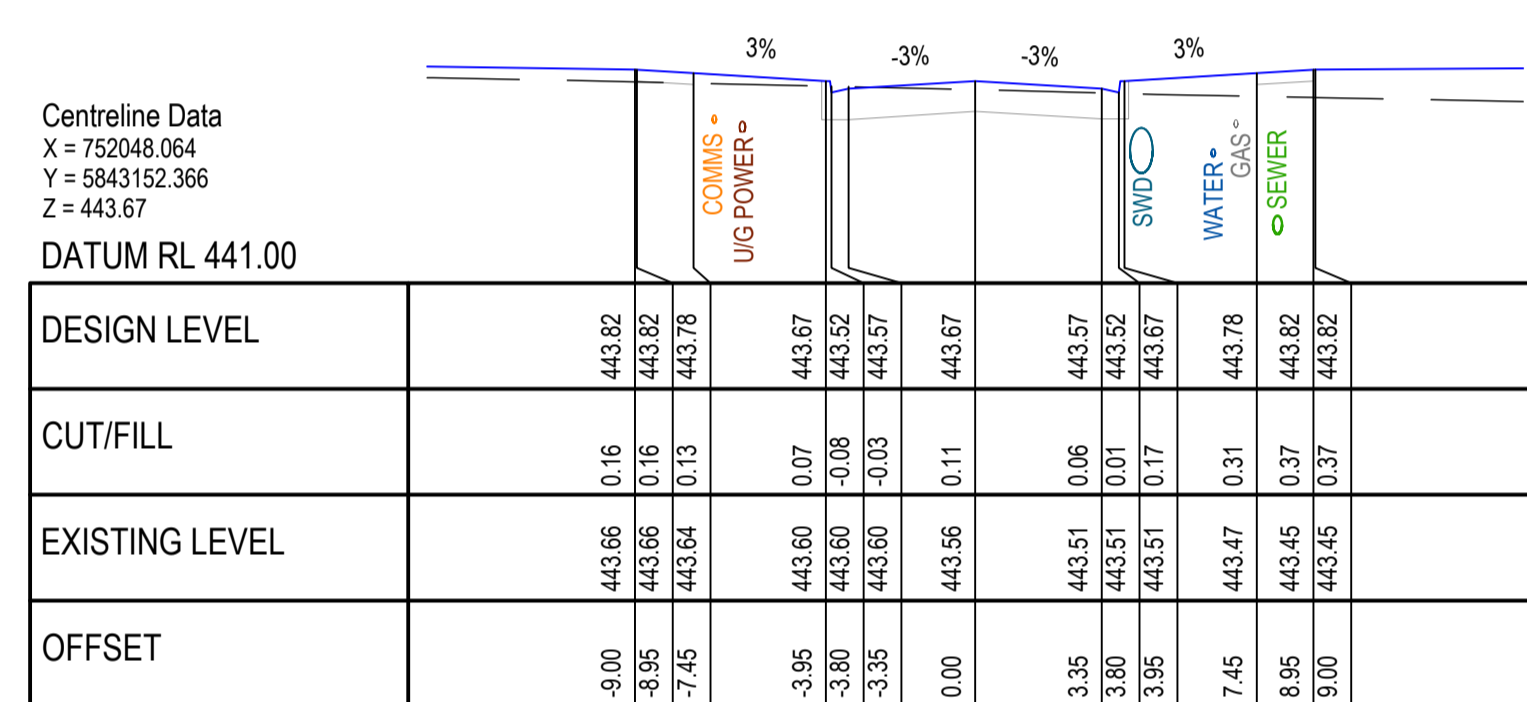
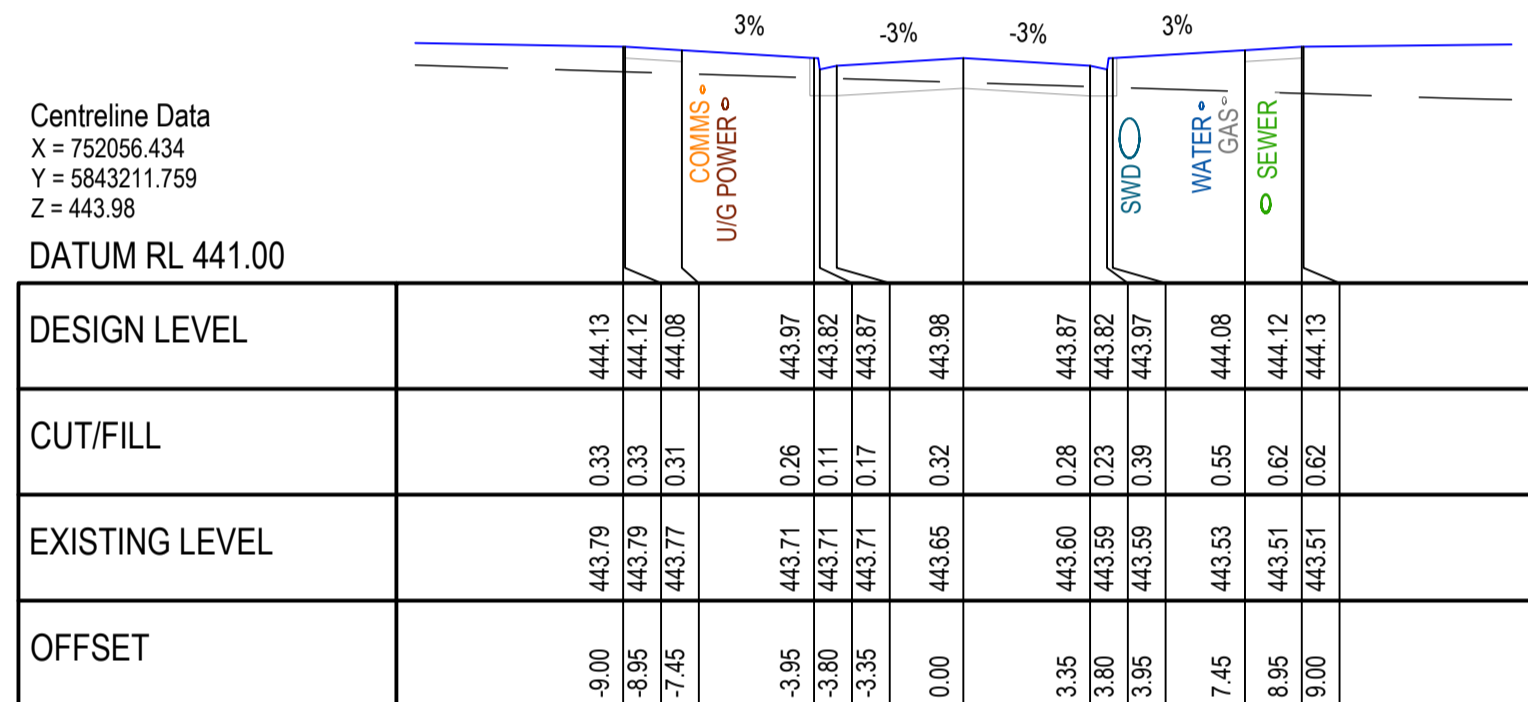
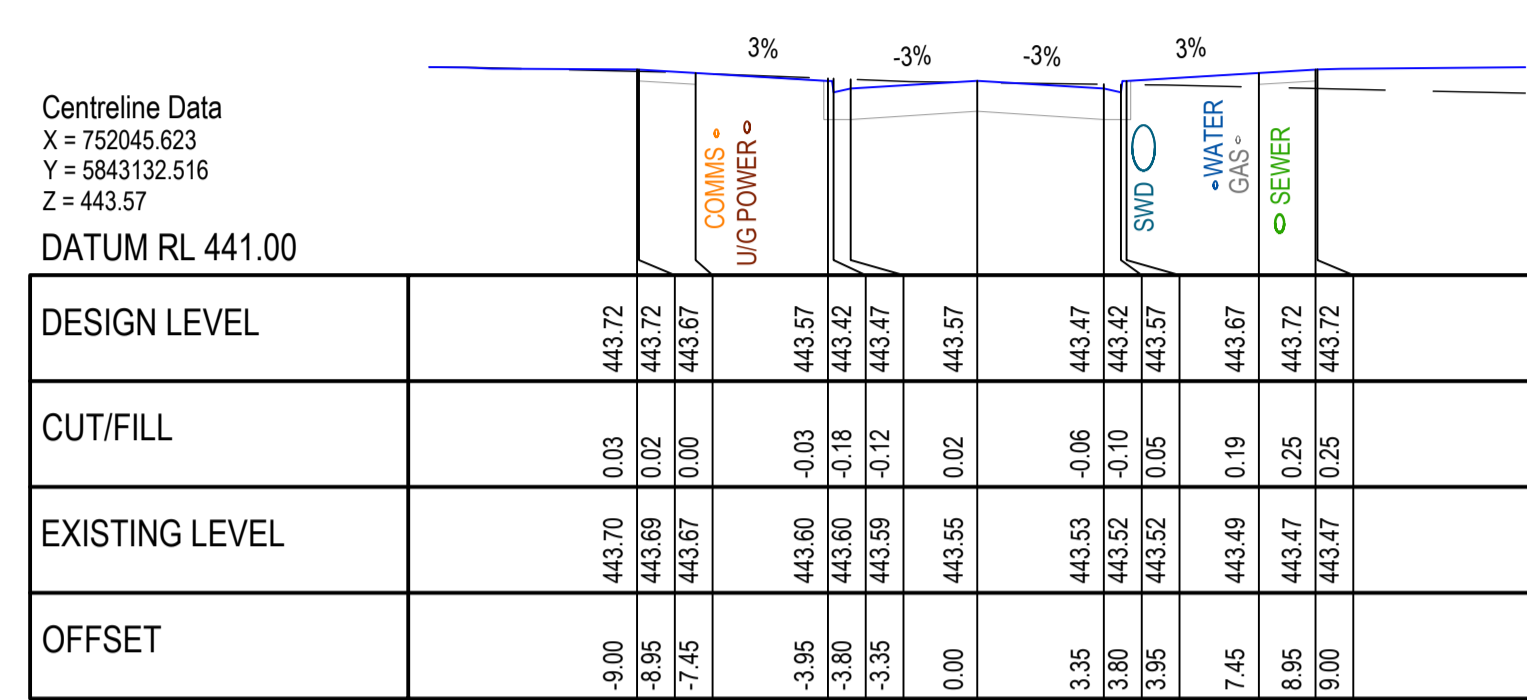
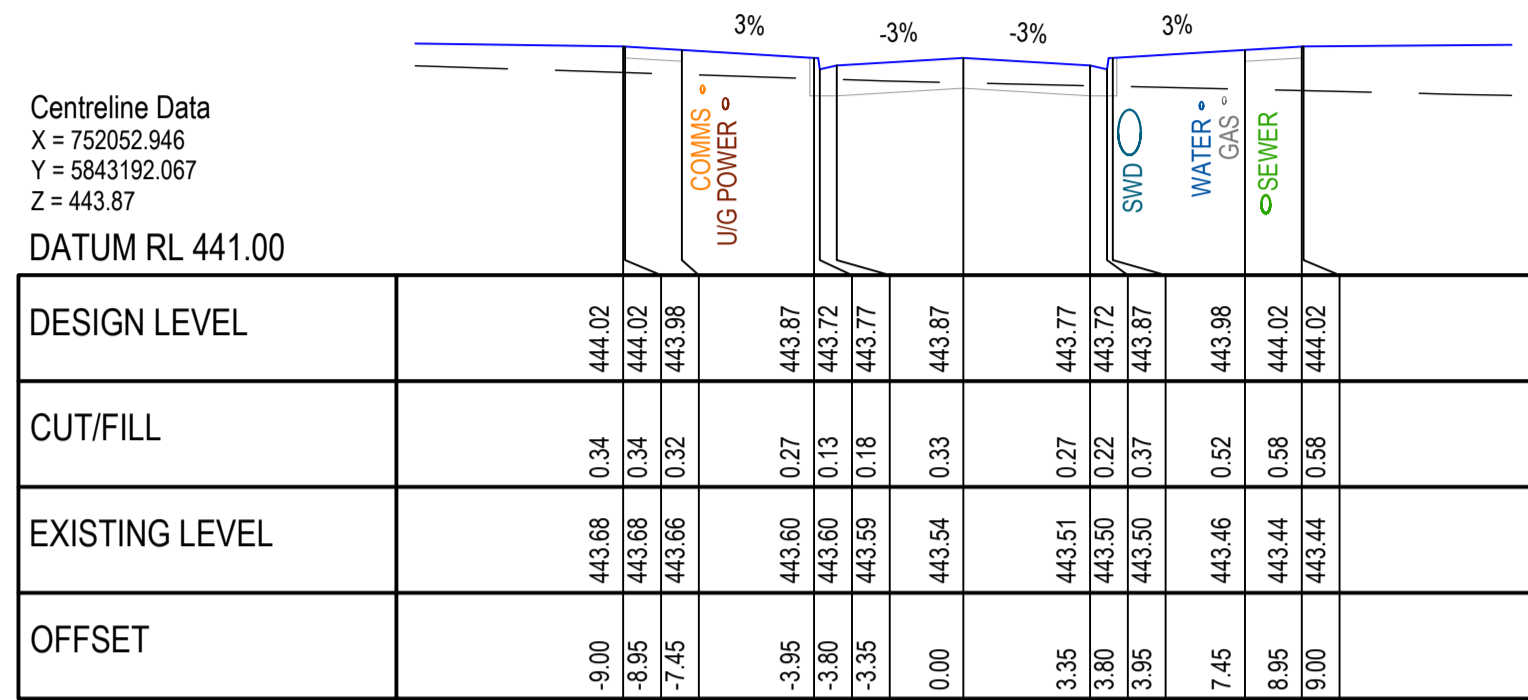
**LEGEND**

--- NATURAL SURFACE

— FINISHED SURFACE

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**DIVOT CIRCUIT CROSS SECTIONS**  
SCALE H 1:200, V 1:100

CITY OF BALLARAT

BALLARAT PLANNING SCHEME

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Sheet No: 7 of 32

APPROVED CITY OF BALLARAT

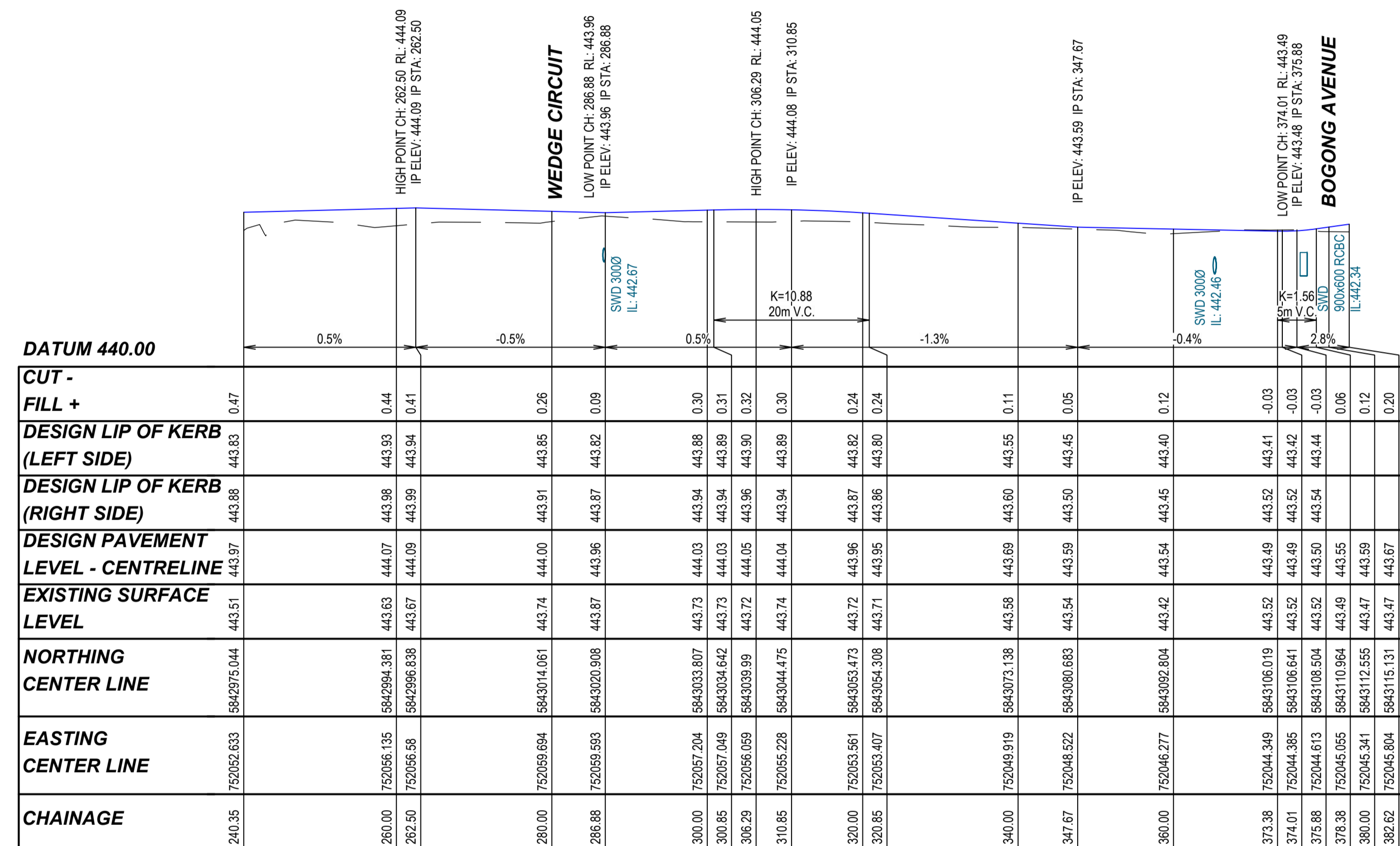
By D. Hastings, 28 February, 2024

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01	PRELIMINARY	13/11/2020	TP/MA						DRAWN: T. POPOVSKI	SCALE: A1: 1:200, A3: 1:400								
02	TENDER	18/11/2020	T.P.						SURVEY: STANTEC	SHEET SIZE: A1 / A3								
03	INFORMATION	03/03/2023	R.J.F.						CHECKED: R.DUNN	APPROVED: R.DUNN								
04	TENDER	07/06/2023	CB/LP						DATE: 18.10.23	DATE: 18.10.23								
05	FOR APPROVAL	18/10/2023	ST	R.D.														
06	FOR APPROVAL	20/12/2023	ST	R.D.														
07	FOR APPROVAL	16/02/2024	JM	R.D.														
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	NATURAL SURFACE
	FINISHED SURFACE

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**WELLARD BOULEVARD LONGITUDINAL SECTION**  
 SCALE H 1:500, V 1:100

**CITY OF BALLARAT**  
 BALLARAT PLANNING SCHEME  
 Document Endorsed under  
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 Sheet No: 8 of 32

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
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05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

DESIGNED: M. ANTON	DATE: NOVEMBER 2020
DRAWN: T. POPOVSKI	SCALE: A1: 1:500, A3: 1:1000
SURVEY: STANTEC	SHEET SIZE: A1 / A3
CHECKED: R.DUNN	APPROVED: R.DUNN
DATE: 18.10.23	DATE: 18.10.23

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 1315 Sturt Street (PO Box 563W) Ballarat, VIC Australia 3350  
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**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK

**STAGE 2**

<b>CIVIL DRAWING</b>	
DRAWING TITLE: <b>WELLARD BOULEVARD LONGITUDINAL SECTION</b>	
REF. No: 17547-202	SHEET: C08 OF 21 REV: 07

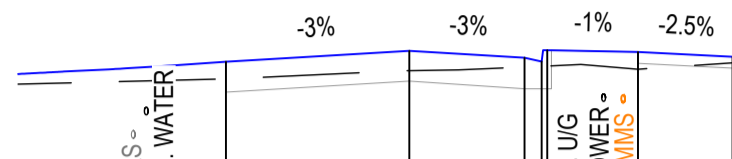


**LEGEND**

	NATURAL SURFACE
	FINISHED SURFACE

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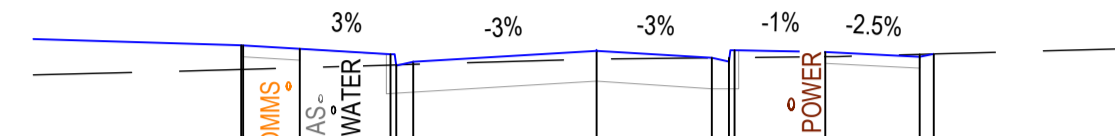
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 DATUM RL 442.00



DESIGN LEVEL									
CUT/FILL									
EXISTING LEVEL									
OFFSET									

CH 280.00

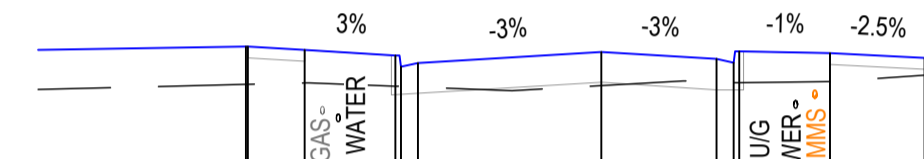
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CUT/FILL									
EXISTING LEVEL									
OFFSET									

CH 340.00

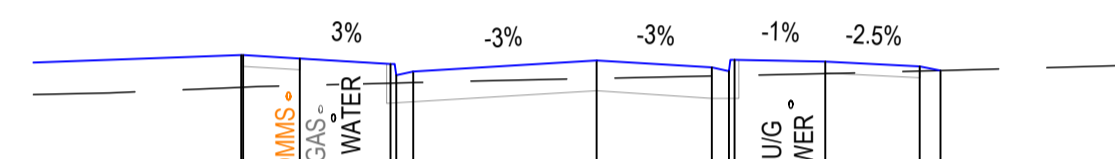
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 DATUM RL 442.00



DESIGN LEVEL									
CUT/FILL									
EXISTING LEVEL									
OFFSET									

CH 260.00

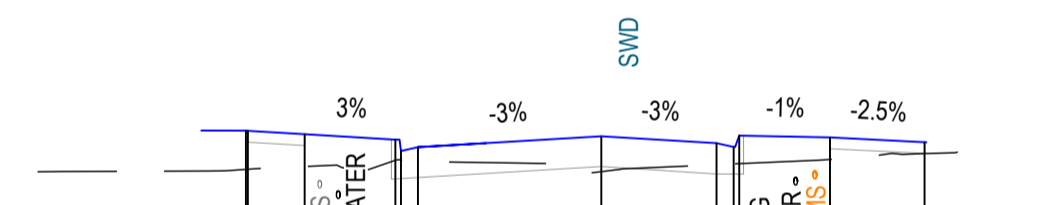
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CUT/FILL									
EXISTING LEVEL									
OFFSET									

CH 320.00

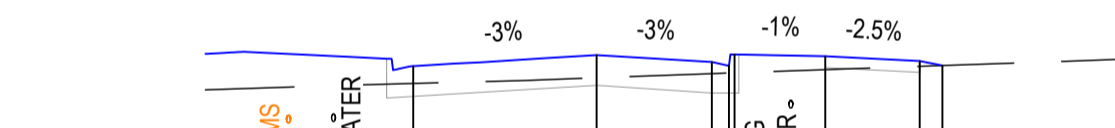
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EXISTING LEVEL									
OFFSET									

CH 240.35

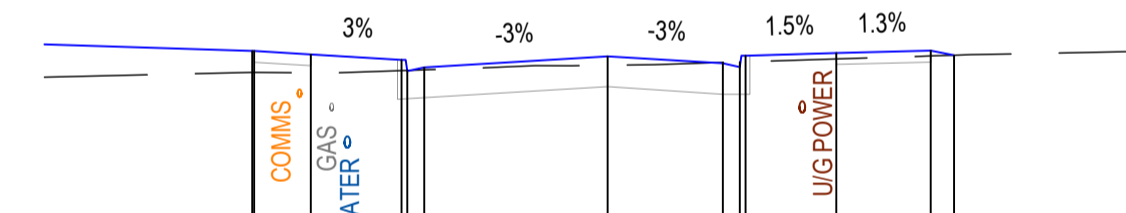
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EXISTING LEVEL									
OFFSET									

CH 300.00

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 Z = 443.54  
 DATUM RL 441.00



DESIGN LEVEL									
CUT/FILL									
EXISTING LEVEL									
OFFSET									

CH 360.00

**CITY OF BALLARAT**  
 BALLARAT PLANNING SCHEME  
 Document Endorsed under  
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 Endorsed by *Natalie Calleja* for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 9 of 32

**WELLARD BOULEVARD CROSS SECTIONS**  
 SCALE H 1:200, V 1:100

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

**FOR APPROVAL**

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01	PRELIMINARY	13/11/2020	TP/MA							DRAWN:	T. POPOVSKI	SCALE:	A1: 1:200, A3: 1:400
02	TENDER	18/11/2020	T.P.							SURVEY:	STANTEC	SHEET SIZE:	A1 / A3
03	INFORMATION	03/03/2023	RJF							CHECKED:	R.DUNN	APPROVED:	R.DUNN
04	TENDER	07/06/2023	CB/LP							DATE:	18.10.23	DATE:	18.10.23
05	FOR APPROVAL	18/10/2023	ST	R.D.						© COPYRIGHT STANTEC			
06	FOR APPROVAL	20/12/2023	ST	R.D.									
07	FOR APPROVAL	16/02/2024	JM	R.D.									

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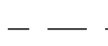

**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK

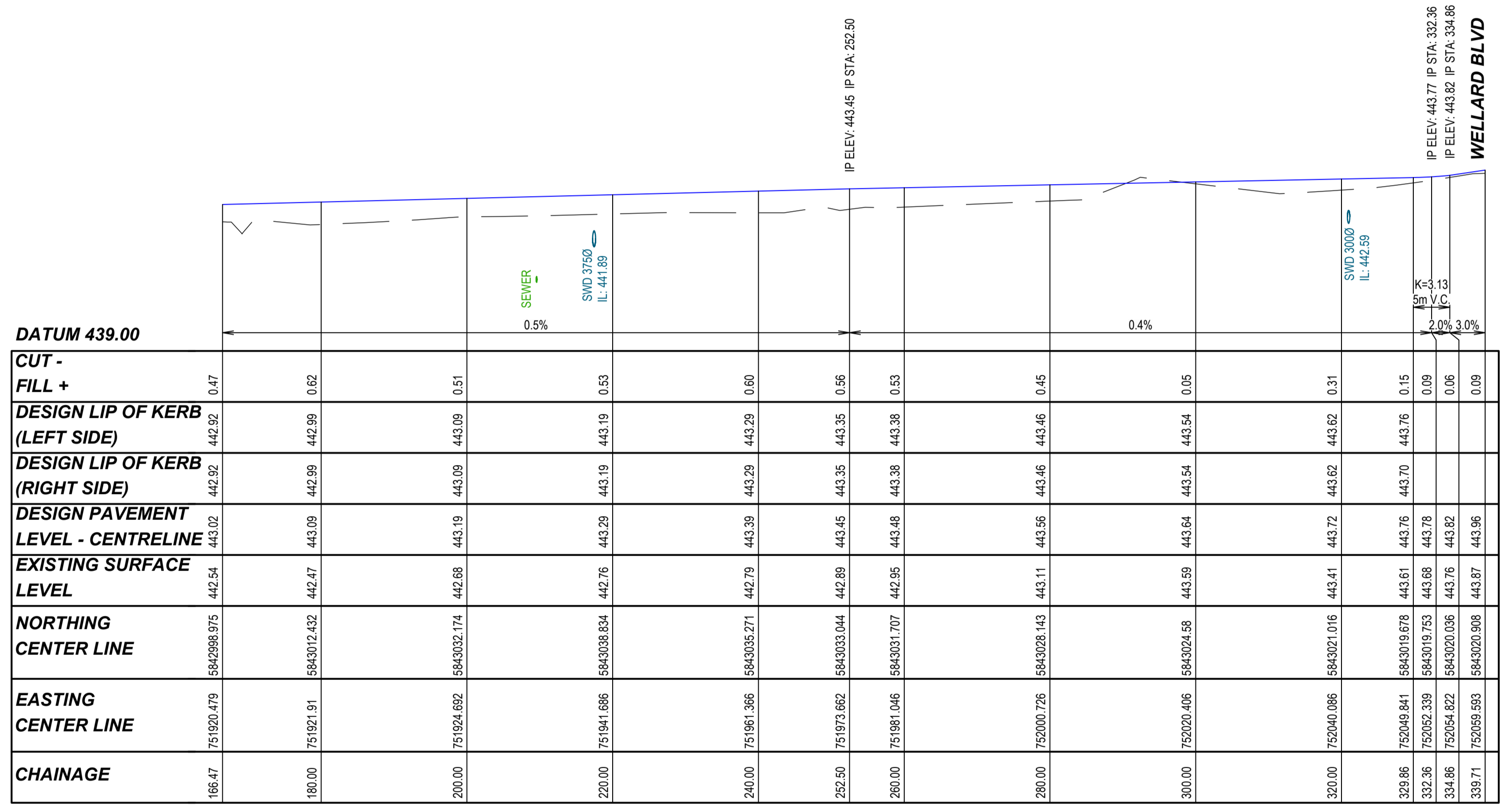
STAGE 2

**WELLARD BOULEVARD CROSS SECTIONS**

REF. No:	17547-202	SHEET	C09	OF	21	REV.	07
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	NATURAL SURFACE
	FINISHED SURFACE

**NOTE:**  
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**WEDGE CIRCUIT LONGITUDINAL SECTION**  
 SCALE H 1:500, V 1:100

**CITY OF BALLARAT**  
**BALLARAT PLANNING SCHEME**  
 Document Endorsed under  
 Conditions 4-101586 Permit No. PLP/2019/546  
 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 10 of 32

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

**FOR APPROVAL**

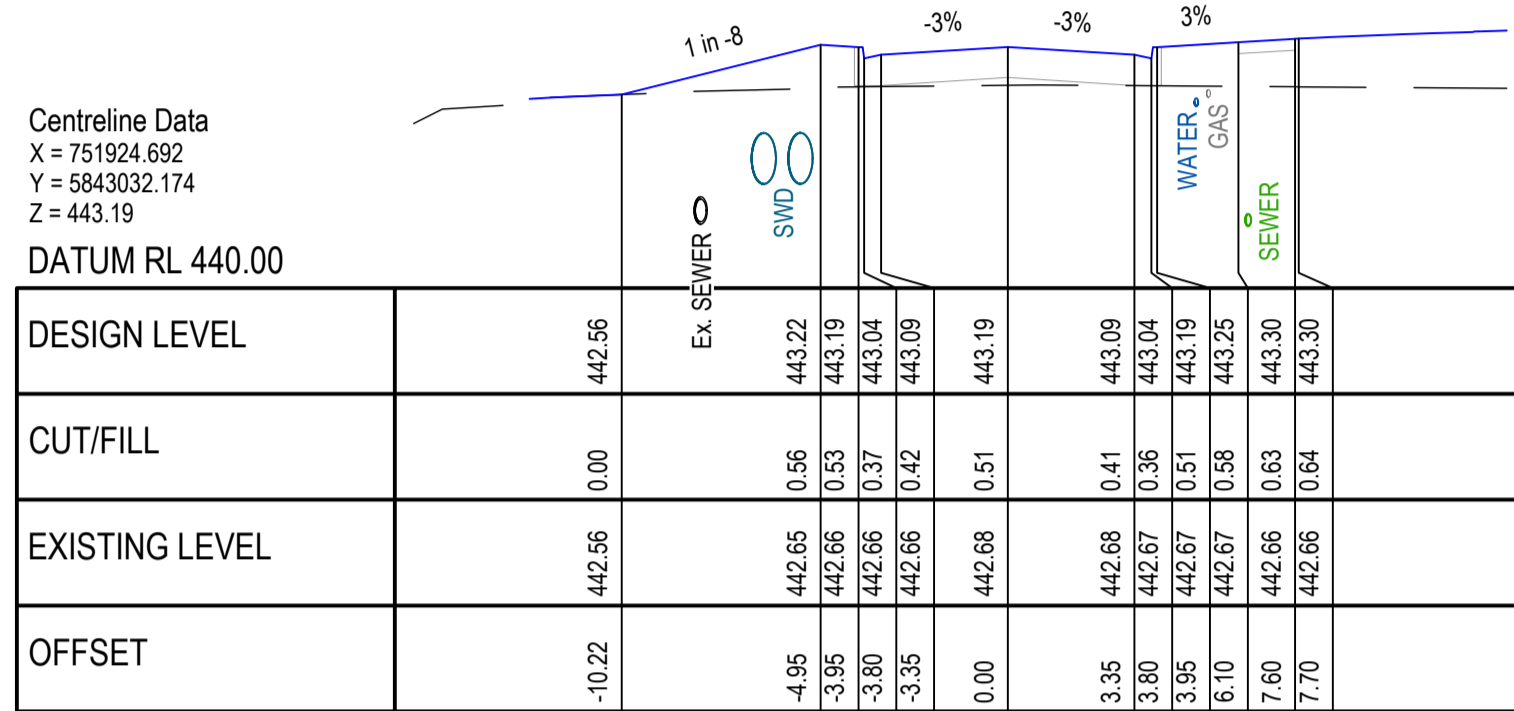
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01	PRELIMINARY	13/11/2020	TP/MA						
02	TENDER	18/11/2020	T.P.						
03	INFORMATION	03/03/2023	R.J.F.						
04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

 ABN 17 007 820 322 1315 Sturt Street (PO Box 563W) Ballarat, VIC Australia 3350 Phone +61 3 5330 8888 Fax +61 3 5333 3815 Web: www.stantec.com	 Communities Designed for Living	 STAGE 2	CLIENT:
			PROJECT:
			DRAWING TITLE: <b>WEDGE CIRCUIT LONGITUDINAL SECTION</b>
CIVIL DRAWING			REF. No: 17547-202
© COPYRIGHT STANTEC			SHEET: C10 OF 21 REV: 07

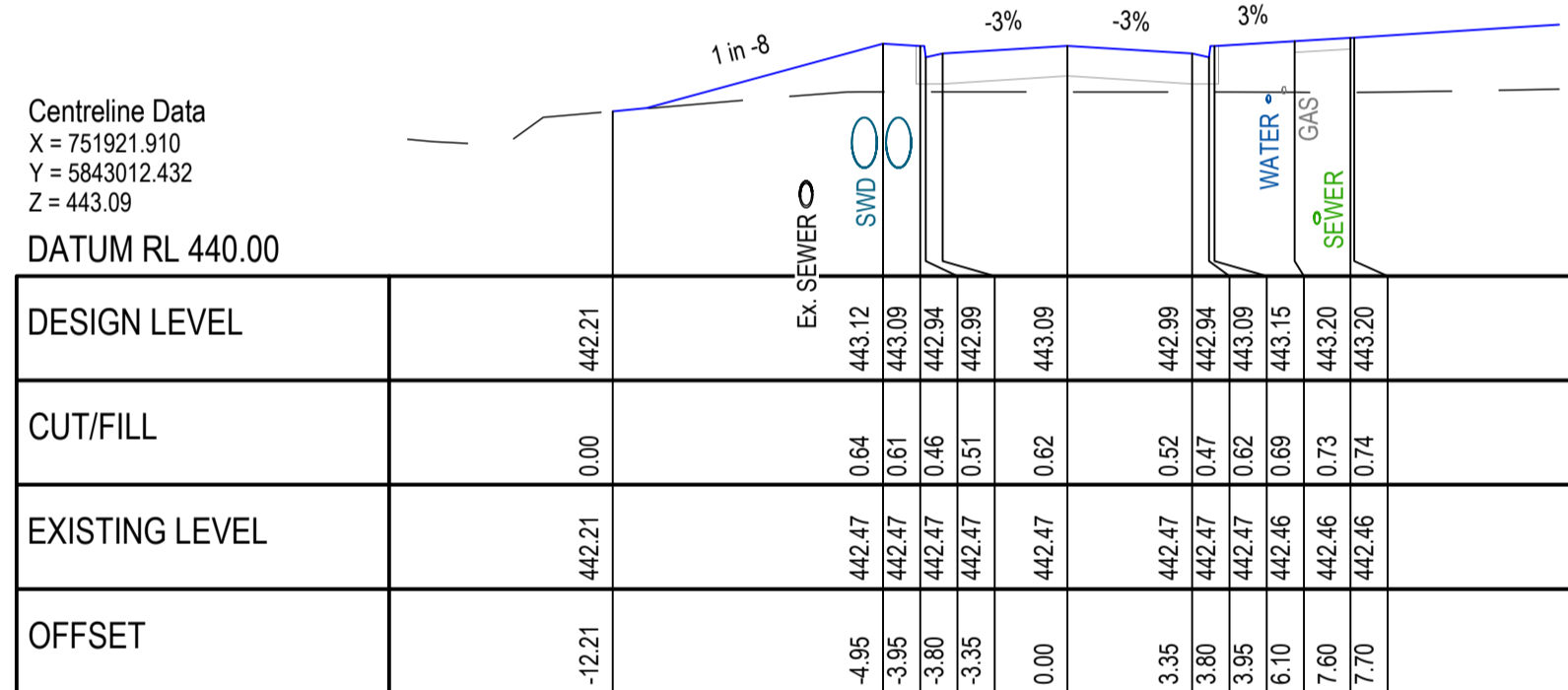
**NOTE:**  
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**LEGEND**

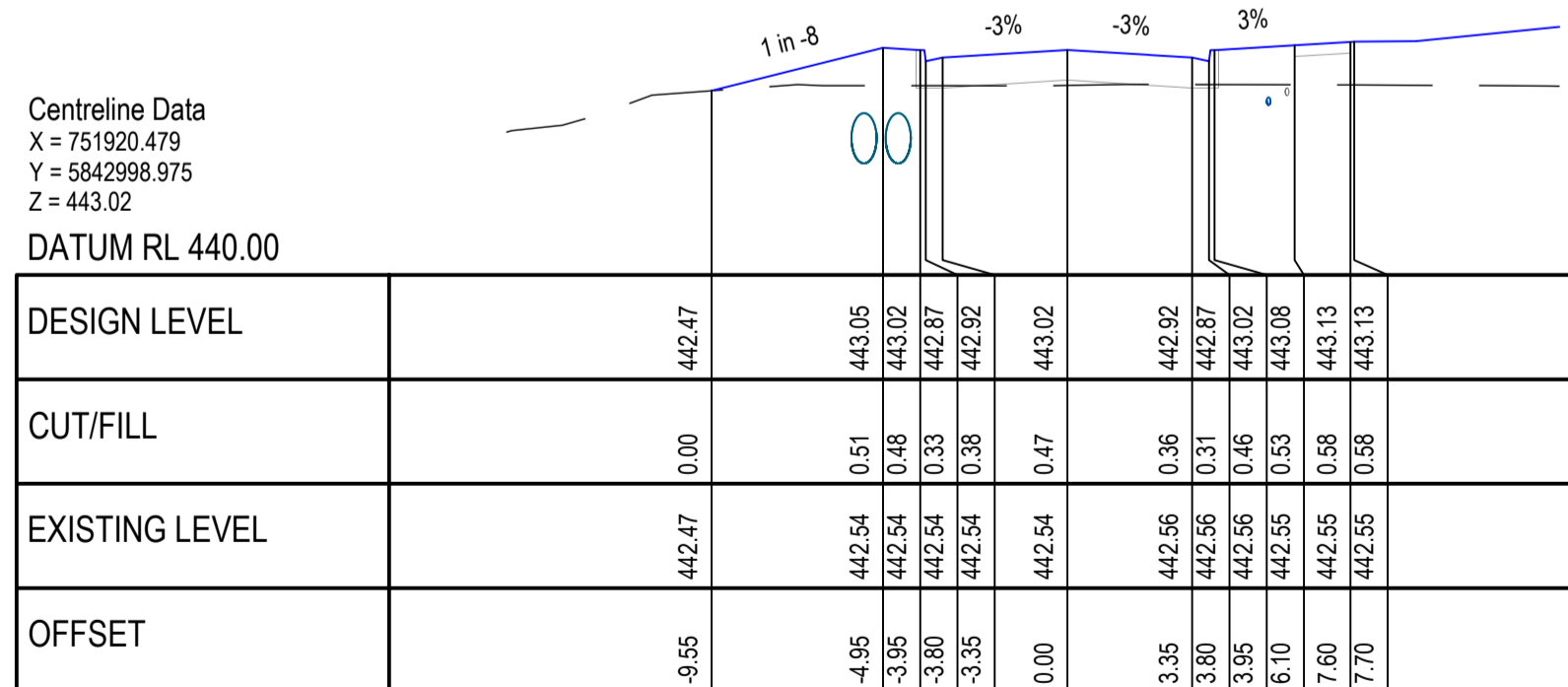
	NATURAL SURFACE
	FINISHED SURFACE



CH 200.00

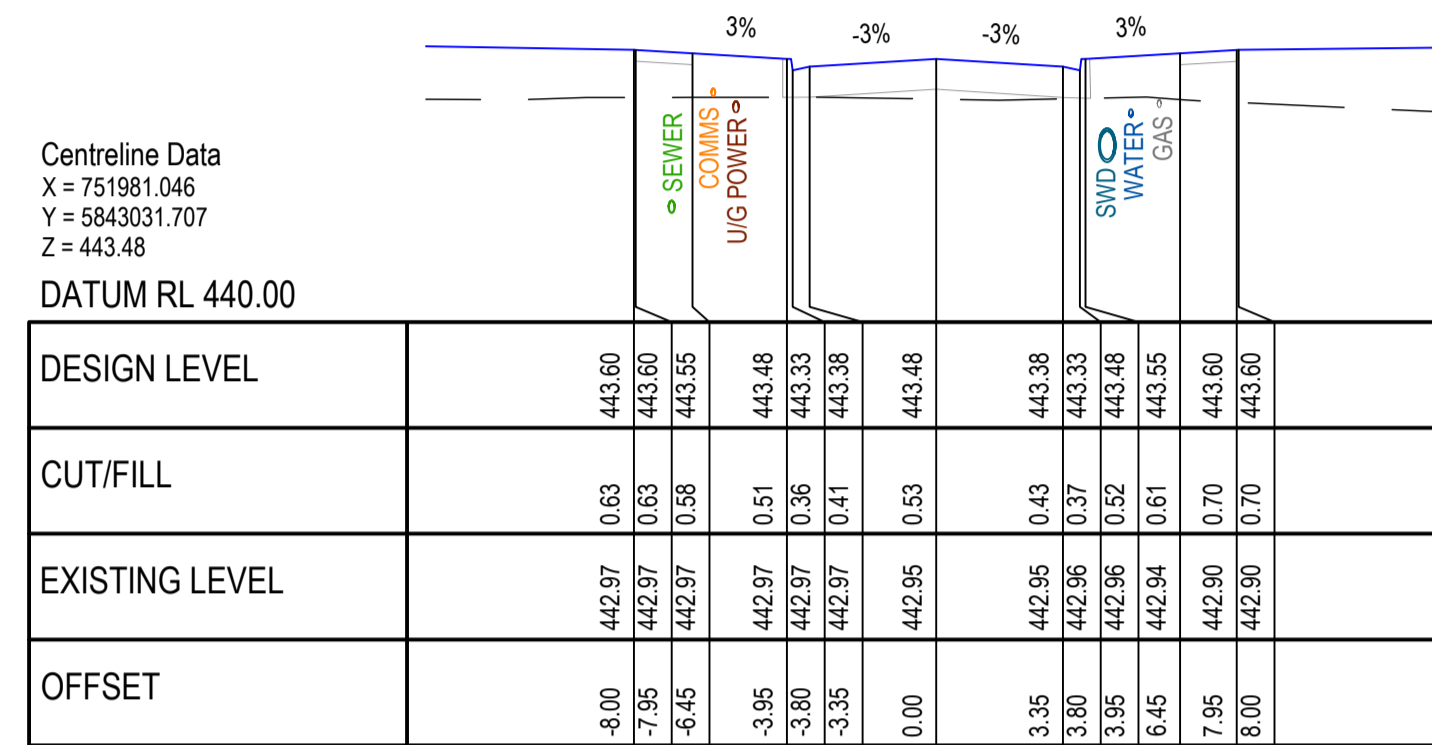


CH 180.00

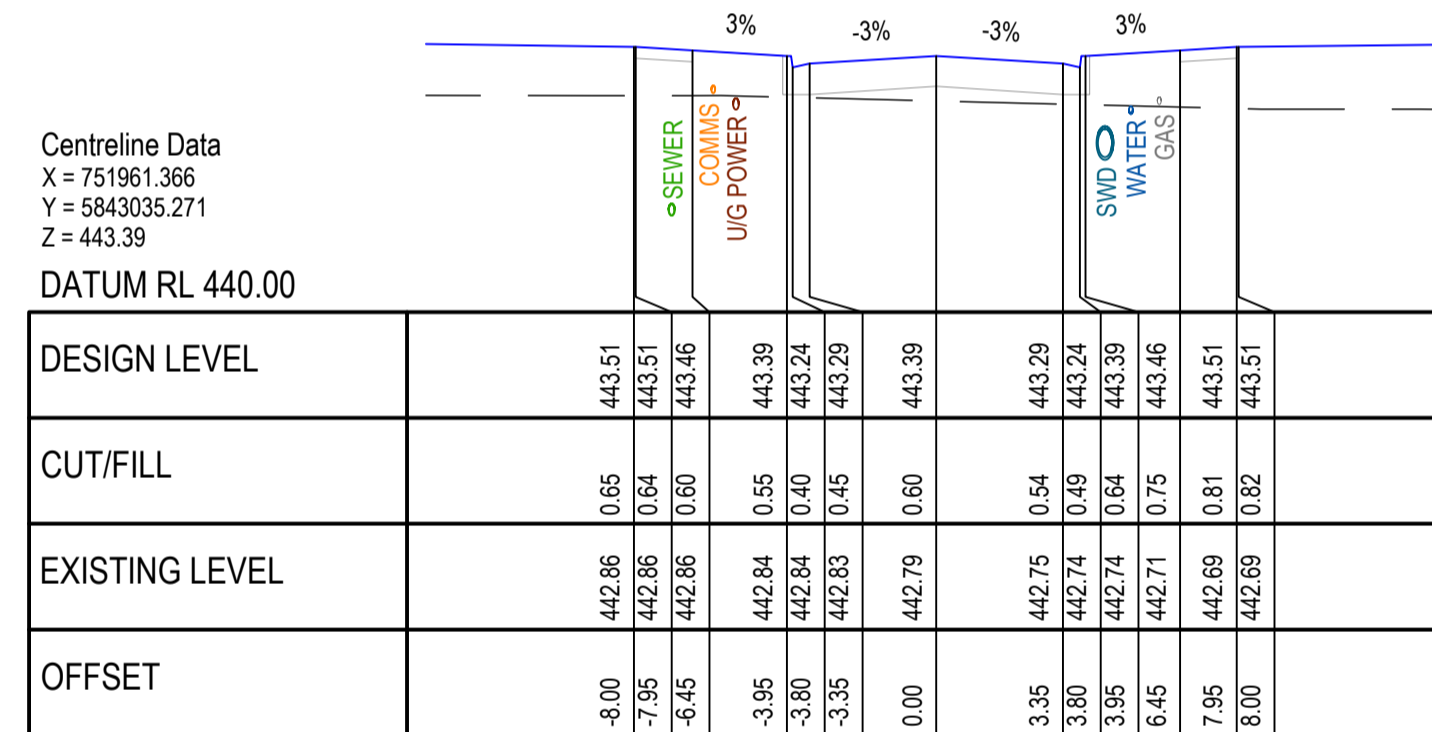


CH 166.47

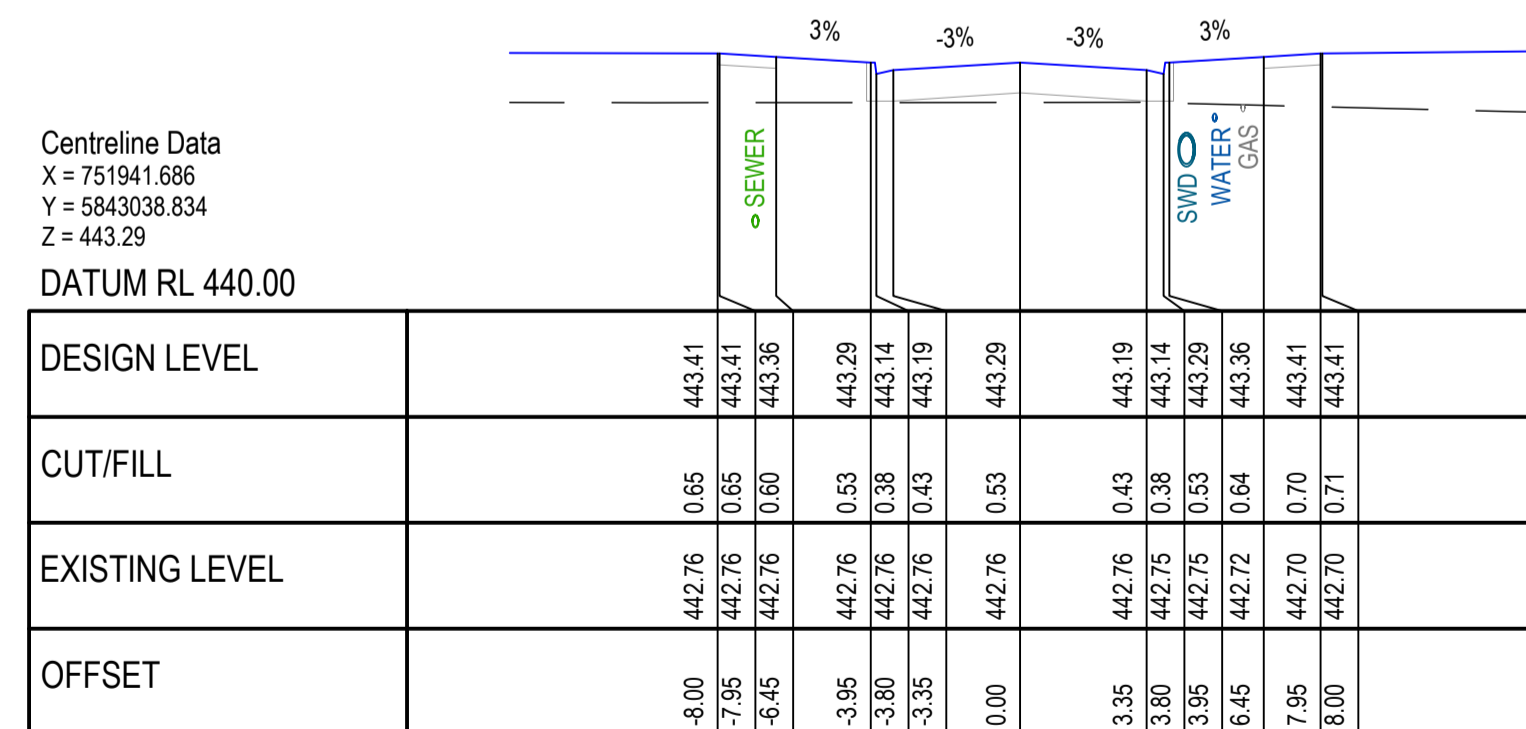
**WEDGE CIRCUIT CROSS SECTIONS**  
 SCALE H 1:200, V 1:100



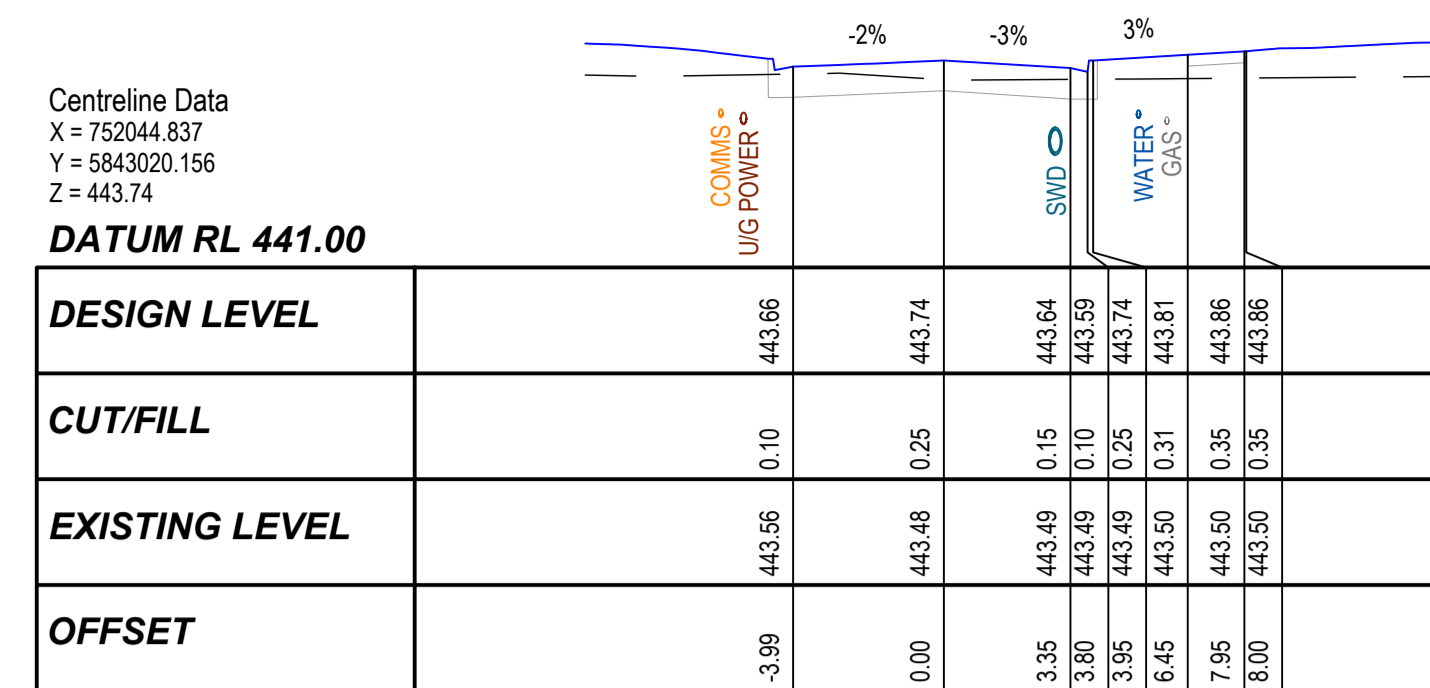
CH 260.00



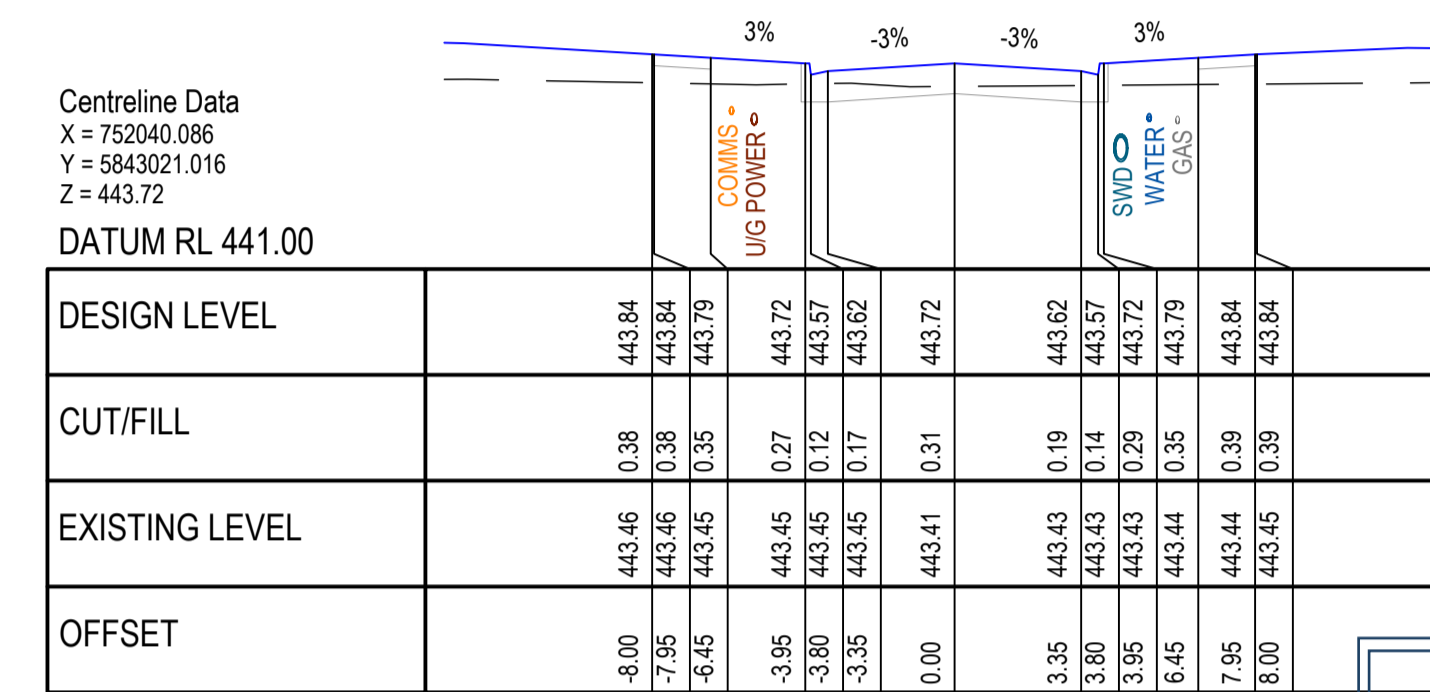
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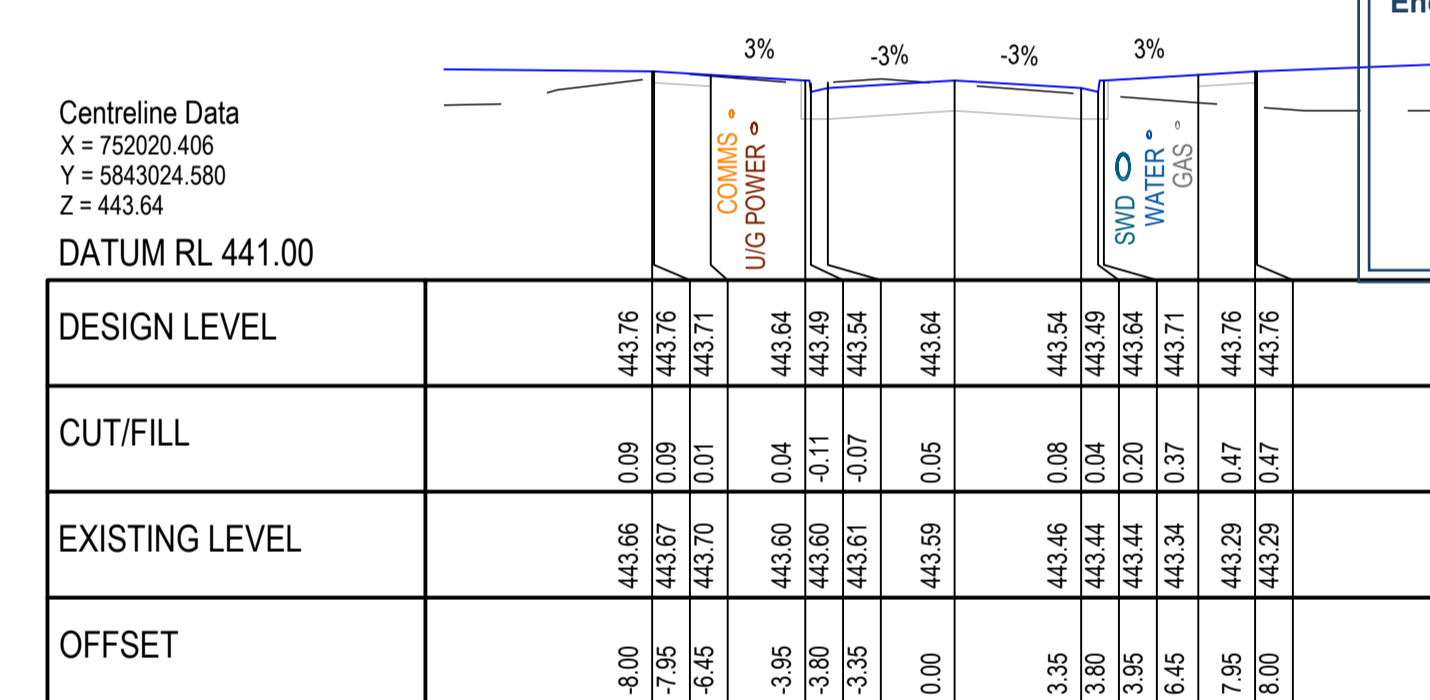
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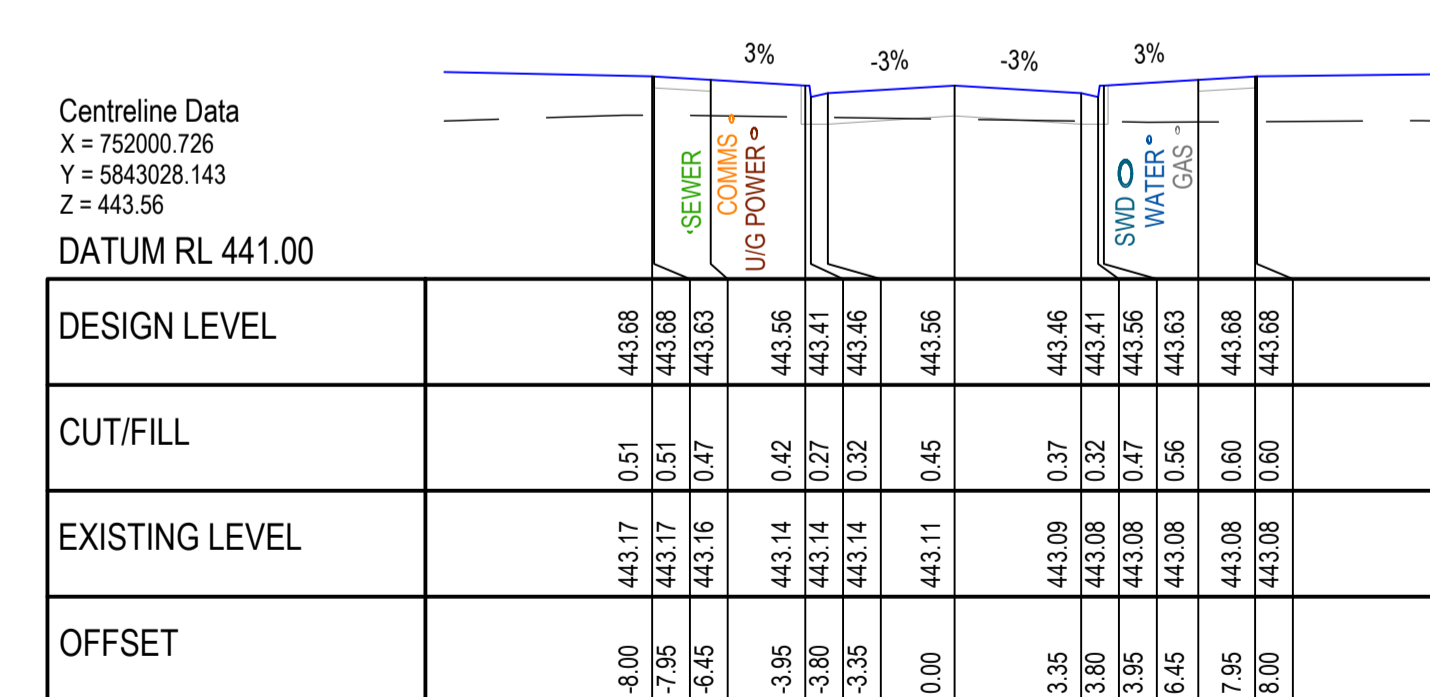
CH 324.83



CH 320.00



CH 300.00



CH 280.00

**FOR APPROVAL**

CITY OF BALLARAT  
 BALLARAT PLANNING SCHEME  
 Document Endorsed under  
 Conditions 4-101586 Permit No. PLP/2019/546  
 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 11 of 32

APPROVED CITY OF BALLARAT  
 By D. Hastings, 28 February, 2024

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	DESIGNED:	DATE:
01	PRELIMINARY	13/11/2020	TP/MA							M. ANTON	NOVEMBER 2020
02	TENDER	18/11/2020	T.P.							T. POPOVSKI	SCALE: A1: 1:200, A3: 1:400
03	INFORMATION	03/03/2023	R.J.F.							STANTEC	SHEET SIZE: A1 / A3
04	TENDER	07/06/2023	CB/LP							R. DUNN	APPROVED:
05	FOR APPROVAL	18/10/2023	ST	R.D.						R. DUNN	DATE: 18.10.23
06	FOR APPROVAL	20/12/2023	ST	R.D.						R. DUNN	DATE: 18.10.23
07	FOR APPROVAL	16/02/2024	JM	R.D.							

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**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK

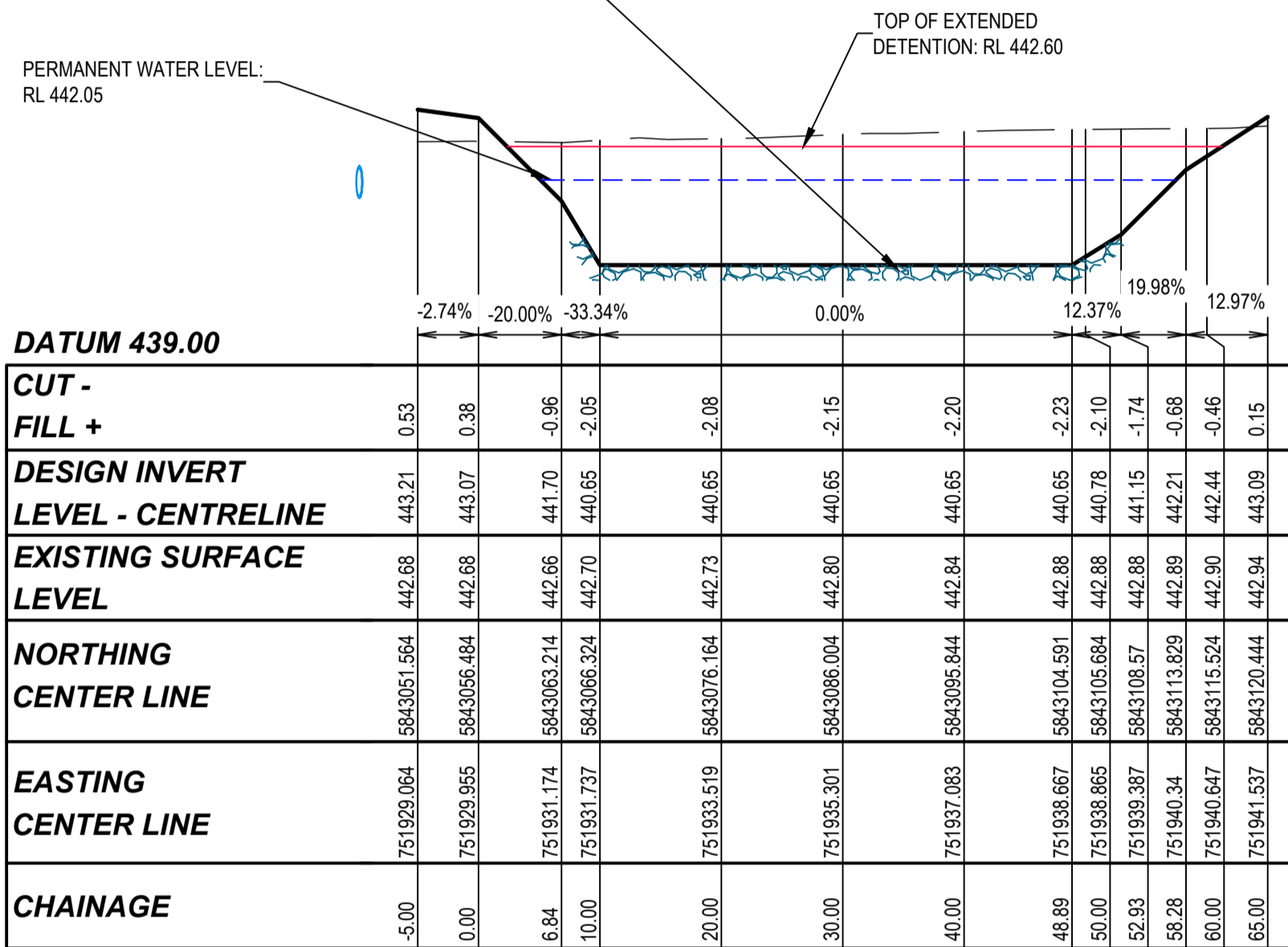
STAGE 2

CIVIL DRAWING		
DRAWING TITLE:	<b>WEDGE CIRCUIT CROSS SECTIONS</b>	
REF. No:	17547-202	SHEET C11 OF 21 REV. 07

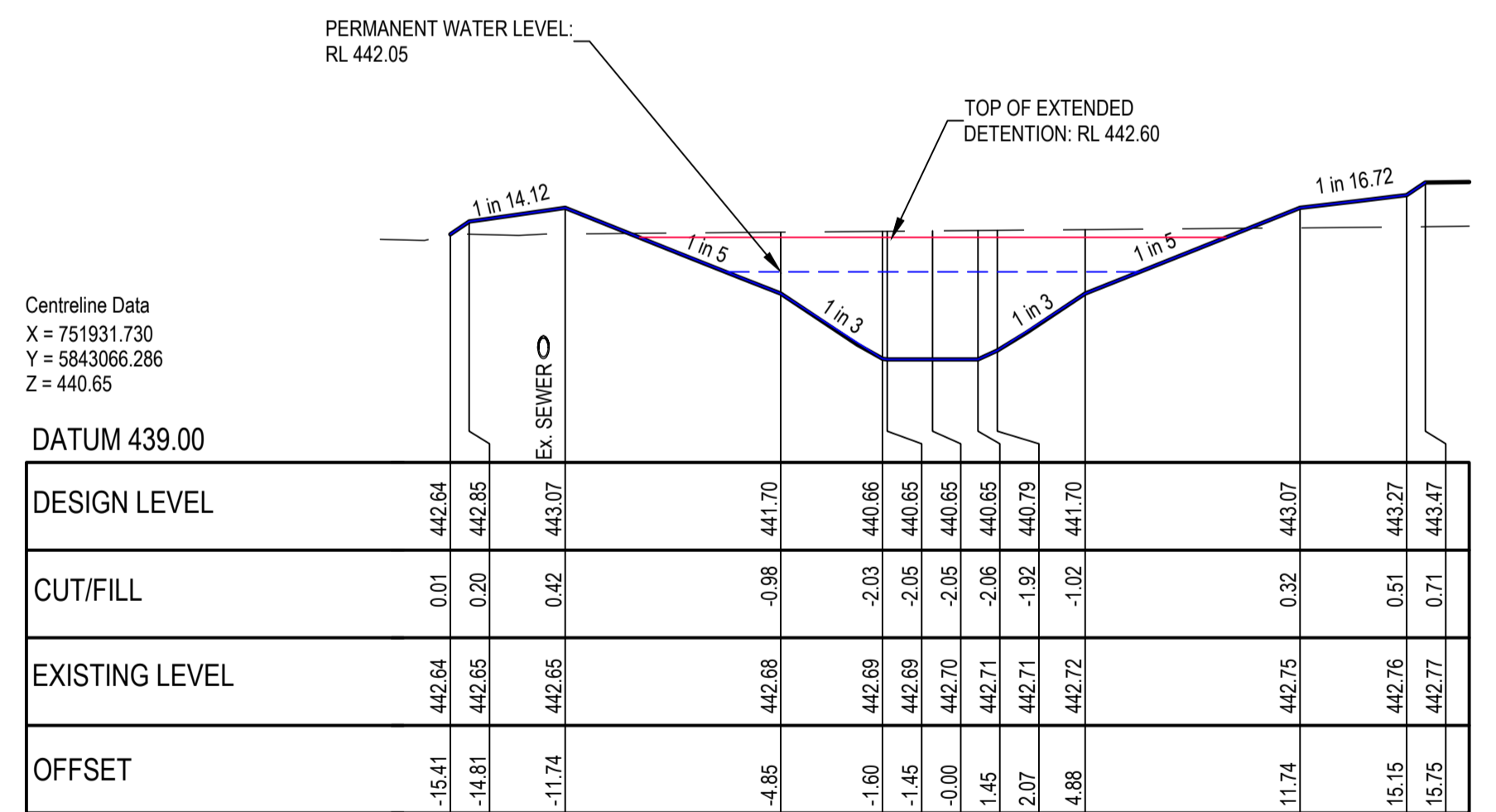
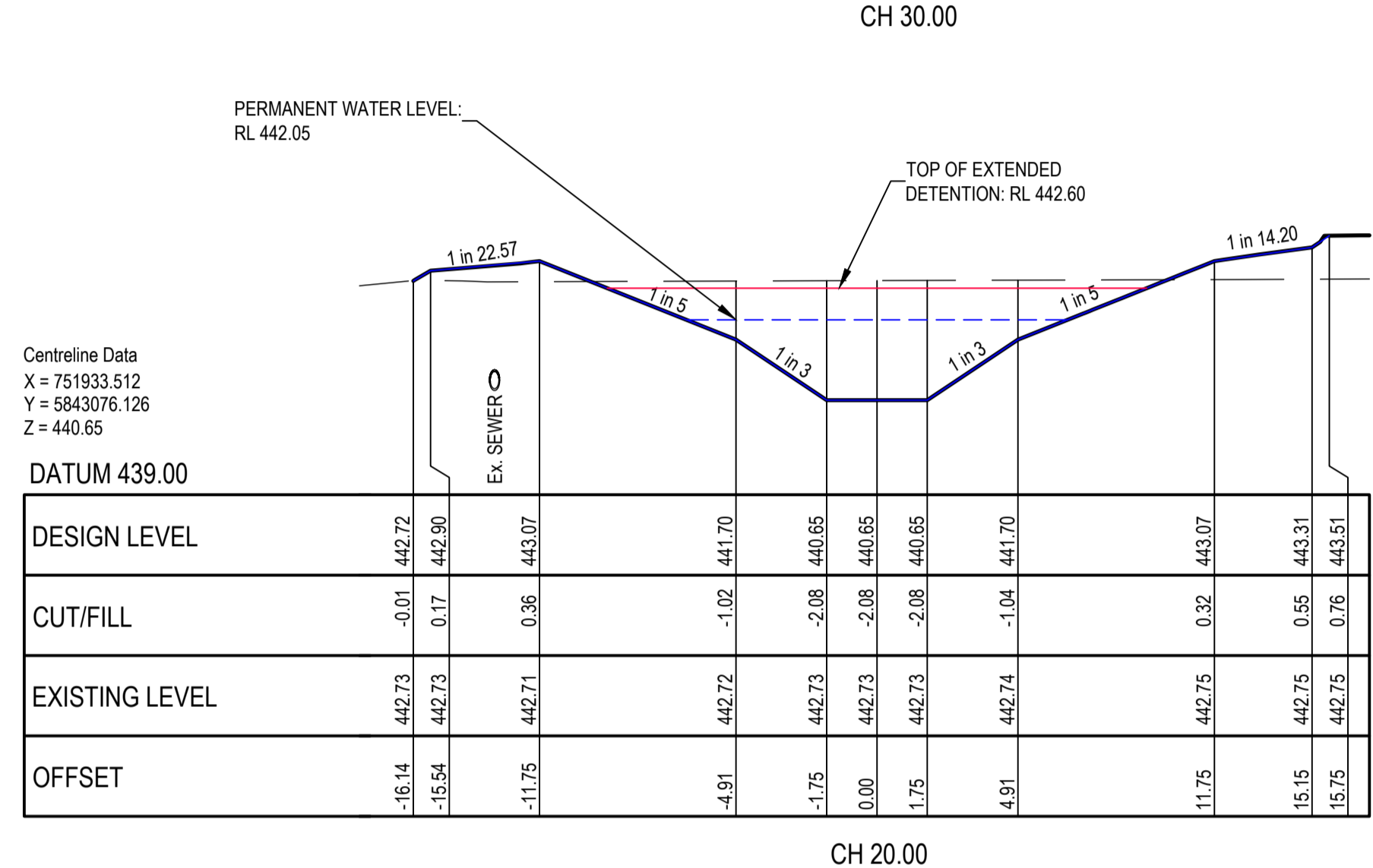
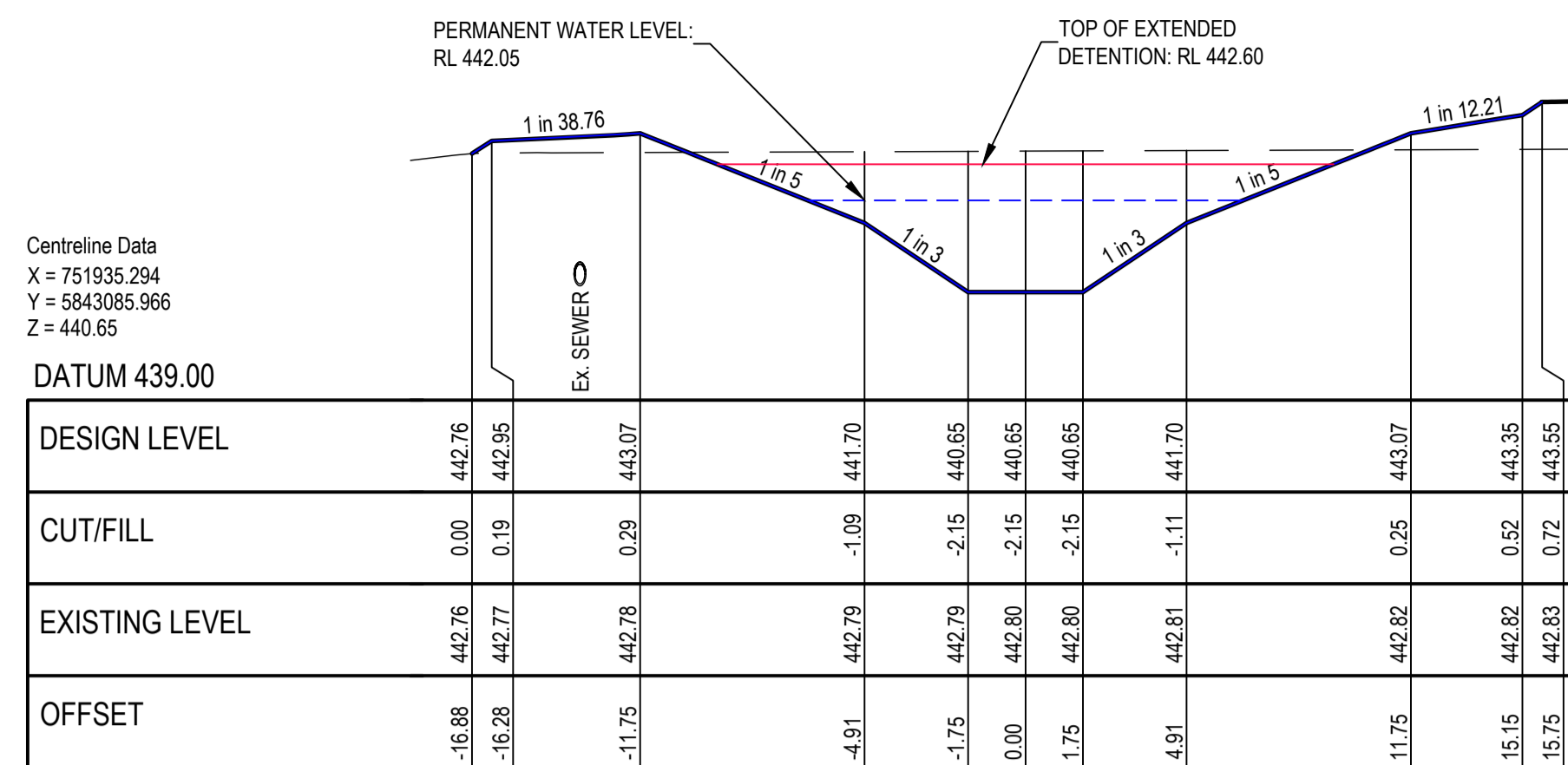
**LEGEND**

---	NATURAL SURFACE
—	FINISHED SURFACE

BASE OF SEDIMENTATION BASIN UP TO IL 440.95 AHD MUST COMPRISE OF COMPACTED SITE - WORN ROCK AT LEAST 400mm THICK AND NOMINAL SIZE. 300mmØ ID BASIN IS EXCAVATED INTO IN-SITU ROCK THIS MAY BE SUFFICIENT. DISCUSS WITH COUNCIL SUPERVISING ENGINEER AND SUPERINTENDENT ON-SITE FOLLOWING EXCAVATION TO FSL'S

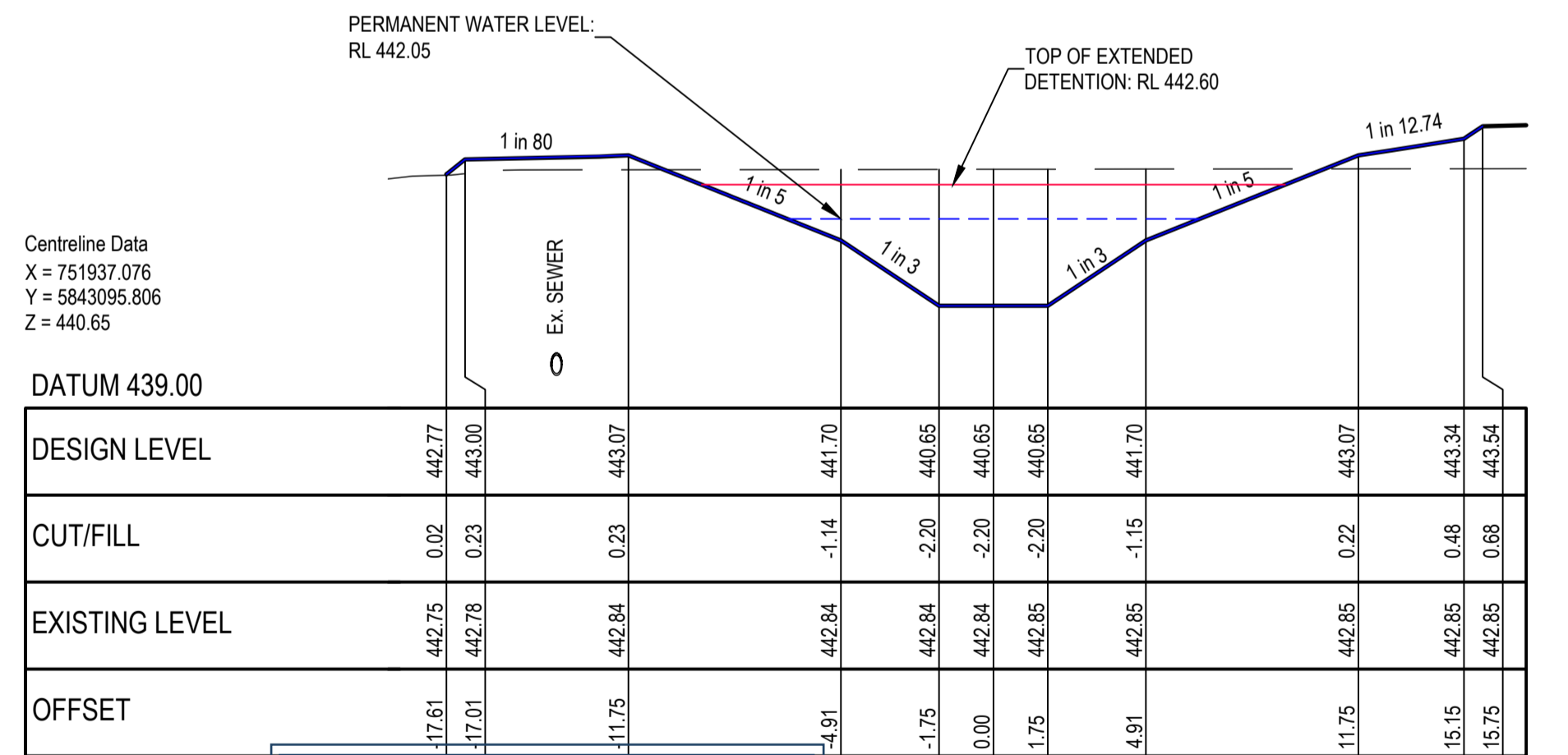
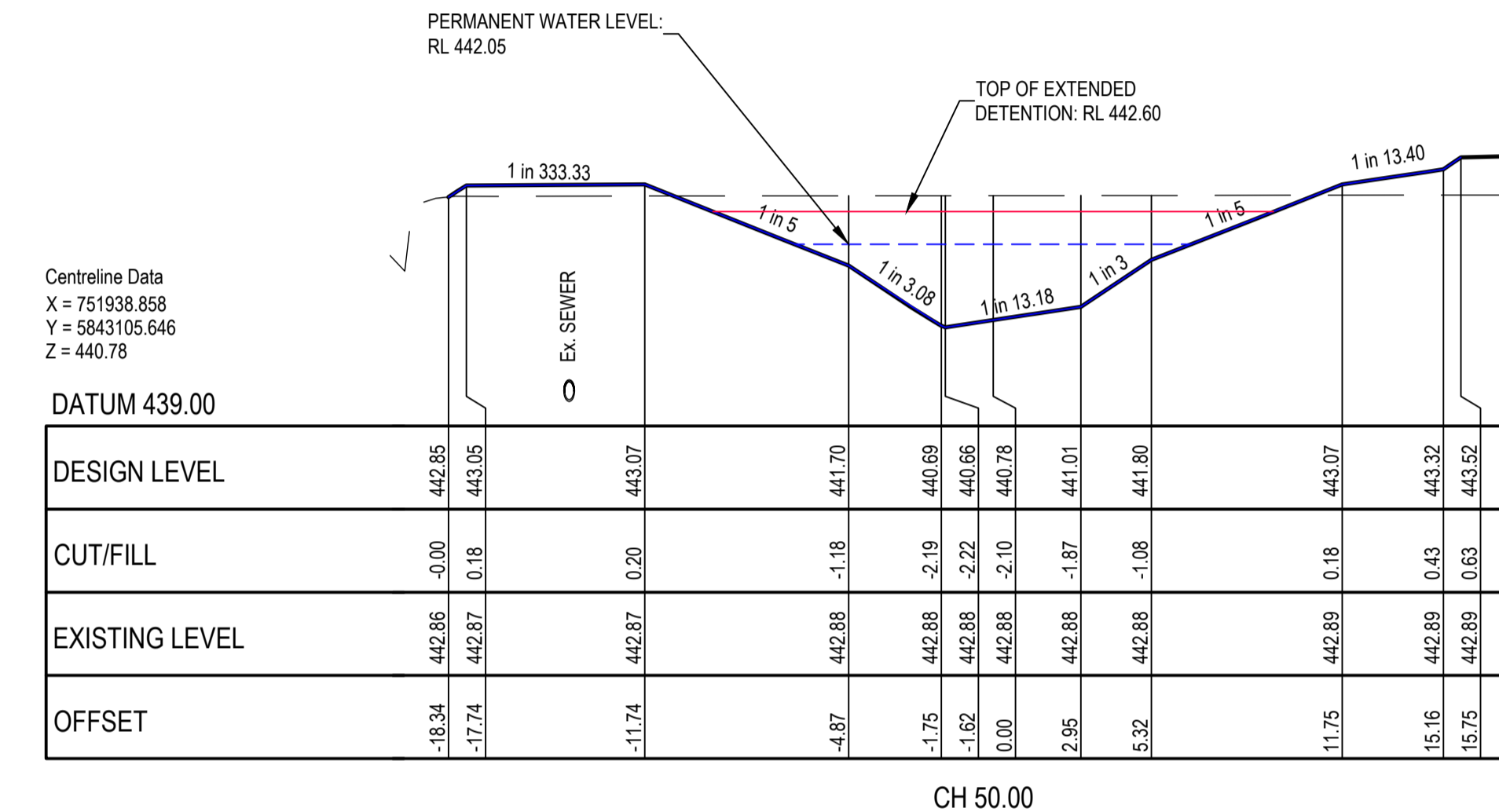


**SMALL BASIN LONGITUDINAL SECTION**  
SCALE H 1:500, V 1:100



**SMALL BASIN CROSS SECTIONS**  
SCALE H 1:200, V 1:100

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**CITY OF BALLARAT**

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Date: 10/4/2024

Sheet No: 12 of 32

**APPROVED CITY OF BALLARAT**

By D. Hastings, 28 February, 2024

FOR APPROVAL

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY	13/11/2020	TP/MA						
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03	INFORMATION	03/03/2023	RJF						
04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

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**villawood properties**  
Communities Designed for Living

**Drew's Paddock**  
INVERMAY PARK

**STAGE 2**

**CIVIL DRAWING**

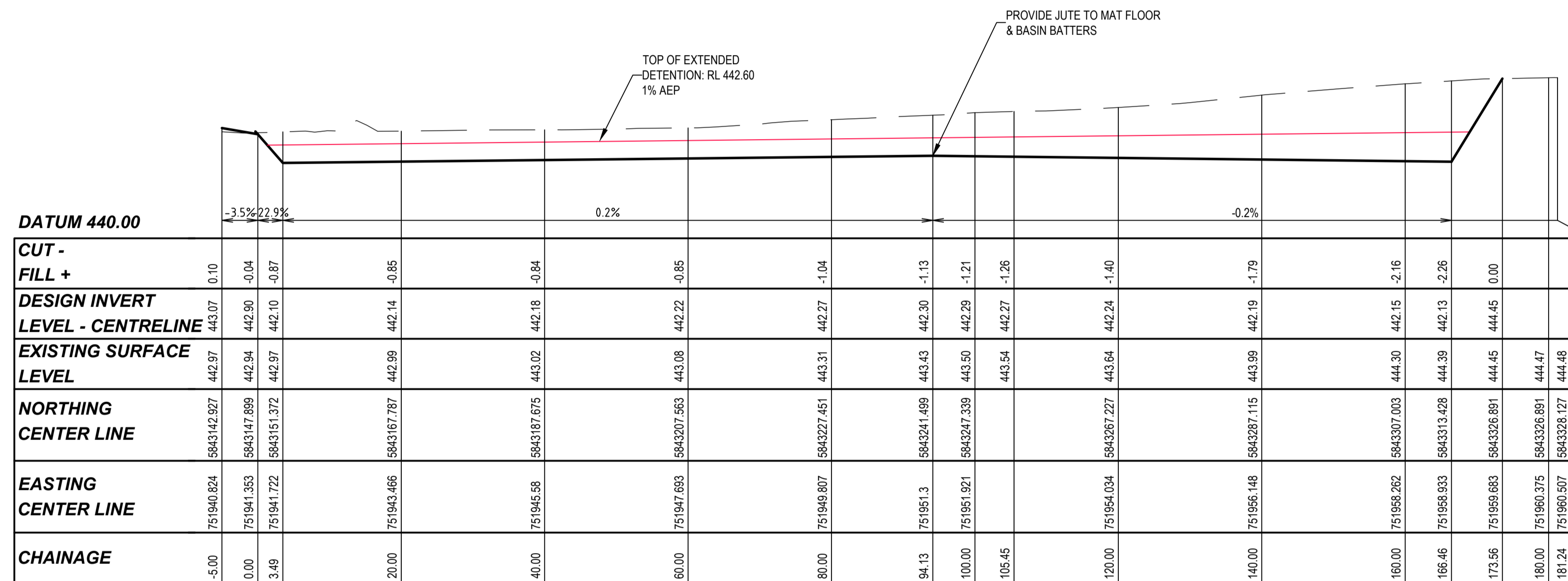
DRAWING TITLE:  
**SMALL BASIN LONGITUDINAL & CROSS SECTIONS**

REF. No: 17547-202 SHEET C12 OF 21 REV. 07

**LEGEND**

--- NATURAL SURFACE  
 — FINISHED SURFACE

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**LARGE BASIN LONGITUDINAL SECTION**  
 SCALE H 1:500, V 1:100

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 Date: 10/4/2024  
 Sheet No: 13 of 32

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

**FOR APPROVAL**

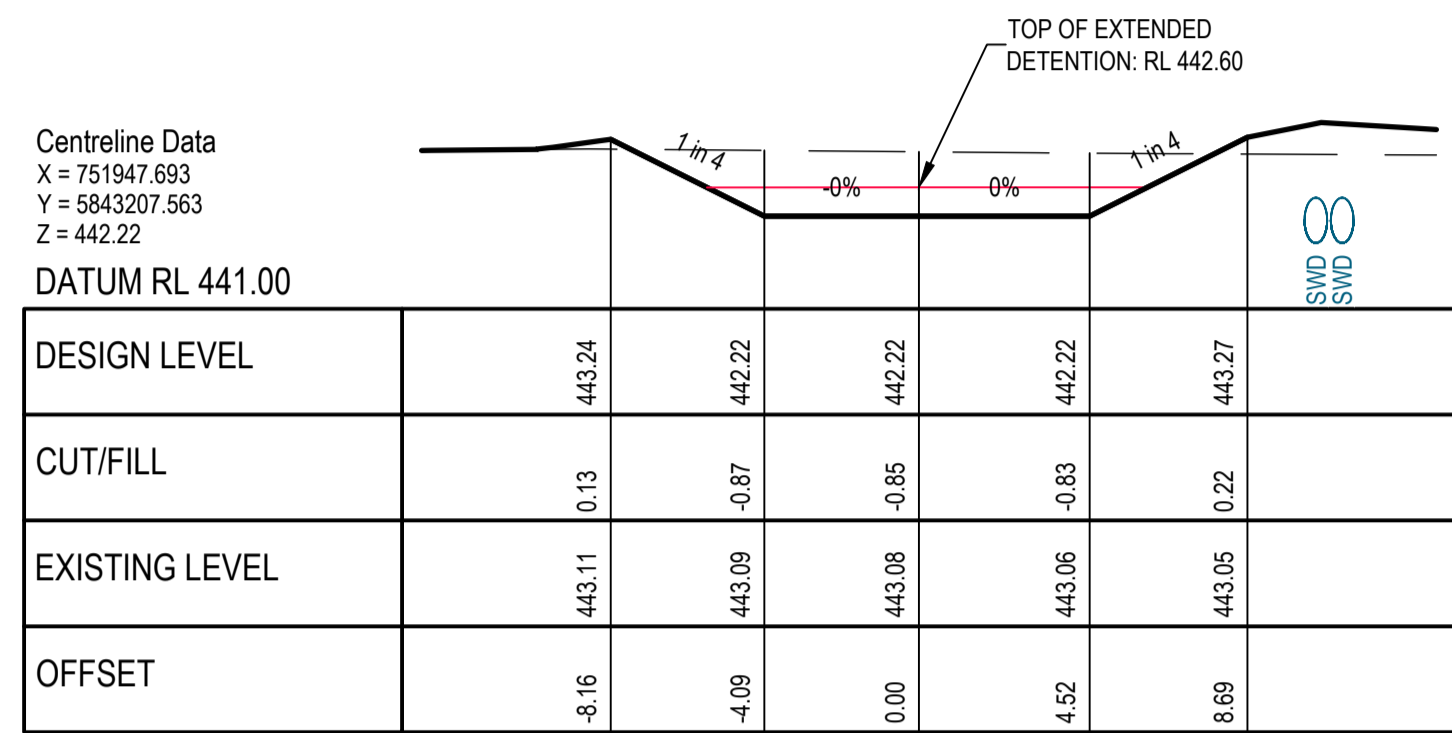
ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	DESIGNED:	DATE:	CLIENT:	PROJECT:	DRAWING TITLE:	REF. No.	SHEET	OF	REV.	
01	PRELIMINARY	13/11/2020	TP/MA							M. ANTON	NOVEMBER 2020	 Stantec ABN 17 007 820 322 1315 Sturt Street (PO Box 563W) Ballarat, VIC Australia 3350 Phone +61 3 5330 9888 Fax +61 3 5333 3815 Web: www.stantec.com	 villawood properties Communities Designed for Living	 Drew's Paddock INVERMAY PARK	<b>STAGE 2</b> <b>CIVIL DRAWING</b> <b>LARGE BASIN LONGITUDINAL SECTION</b>	17547-202	C13	21	07
02	TENDER	18/11/2020	T.P.						T. POPOVSKI	SCALE: A1: 1:500, A3: 1:1000									
03	INFORMATION	03/03/2023	R.J.F.						STANTEC	SHEET SIZE: A1 / A3									
04	TENDER	07/06/2023	CB/LP						R.DUNN	APPROVED: R.DUNN									
05	FOR APPROVAL	18/10/2023	ST	R.D.					DATE: 18.10.23	DATE: 18.10.23									
06	FOR APPROVAL	20/12/2023	ST	R.D.															
07	FOR APPROVAL	16/02/2024	JM	R.D.															

**LEGEND**

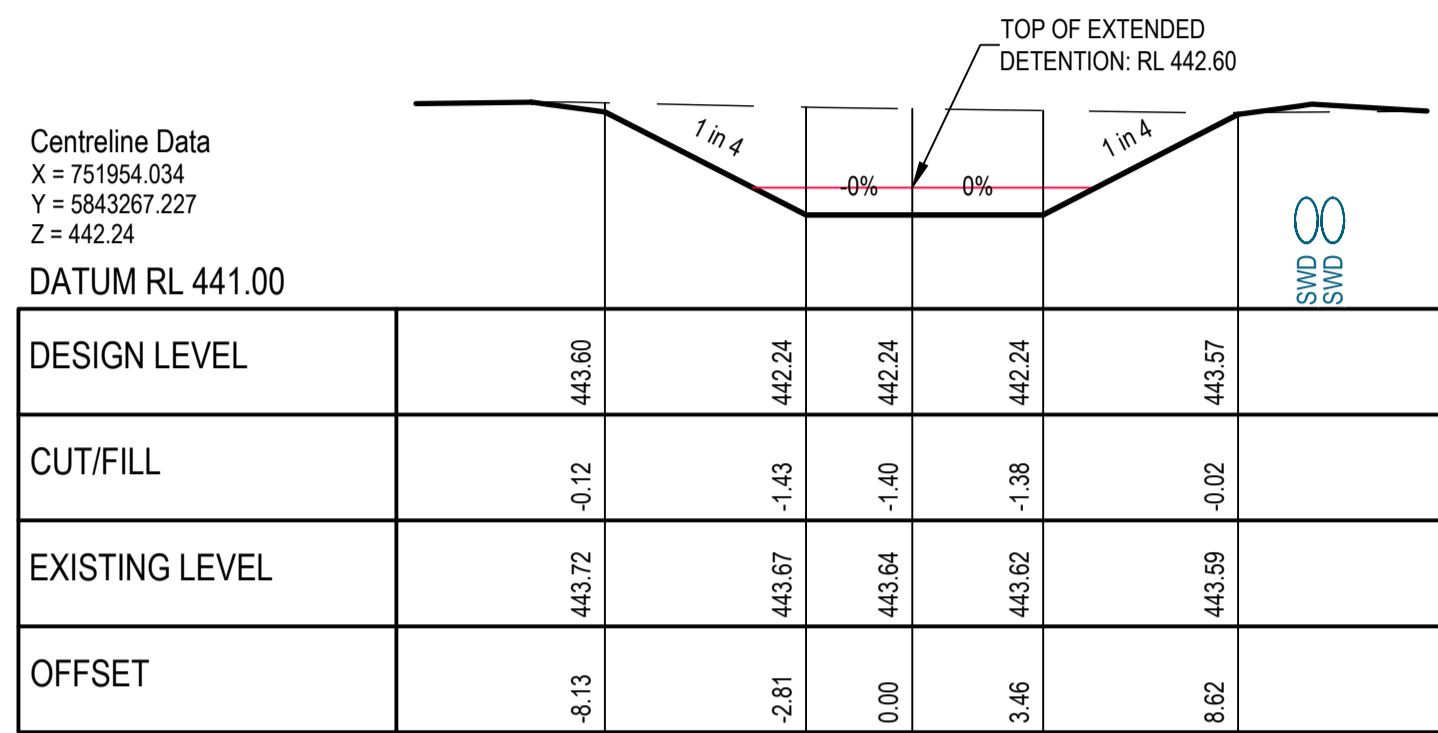
--- NATURAL SURFACE

— FINISHED SURFACE

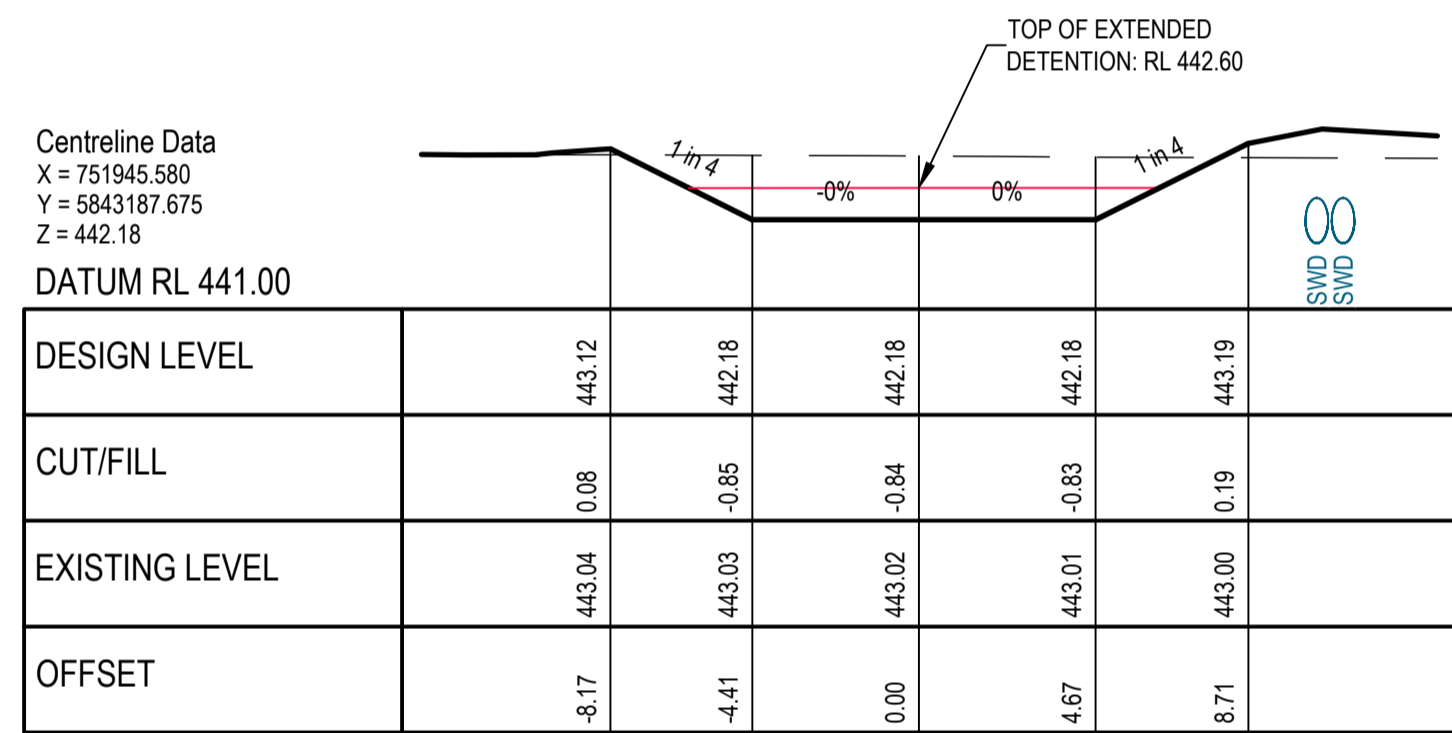
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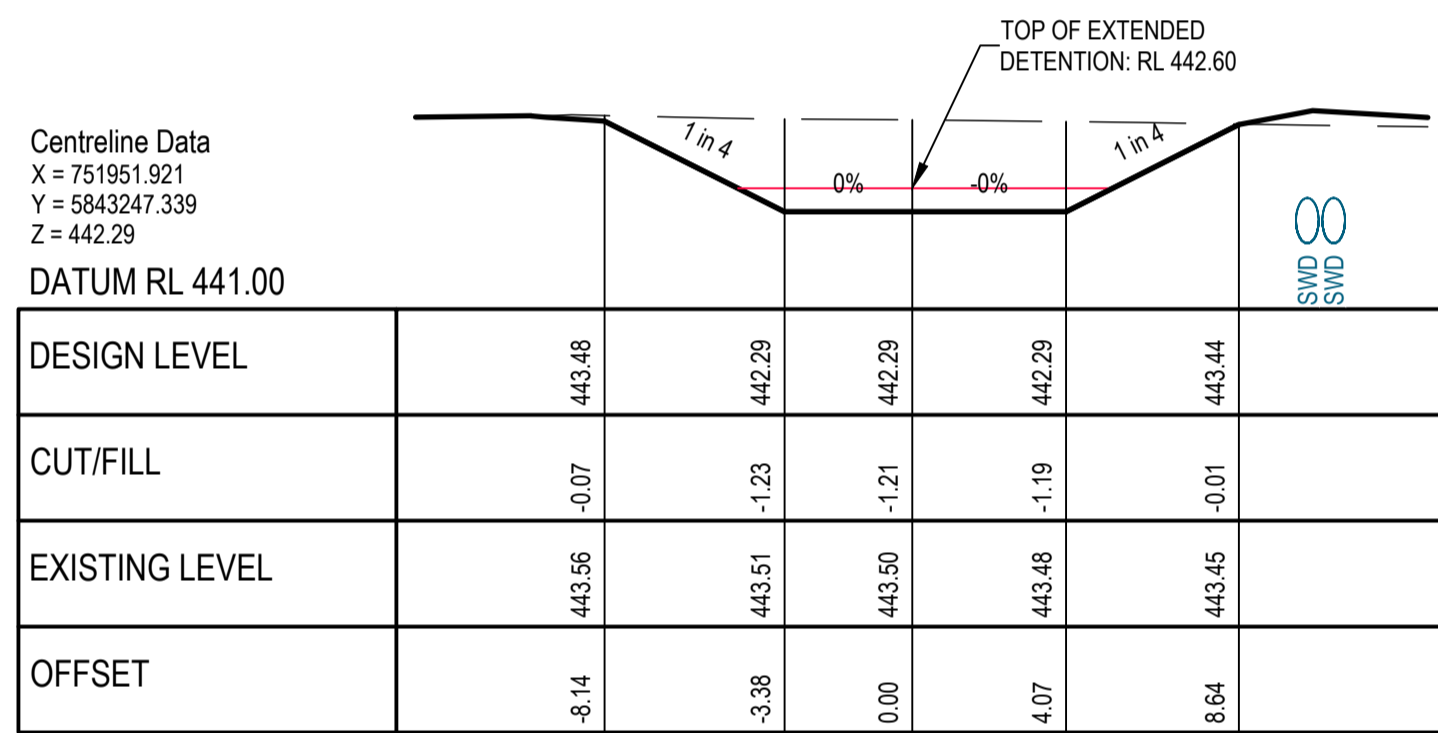
CH 60.00



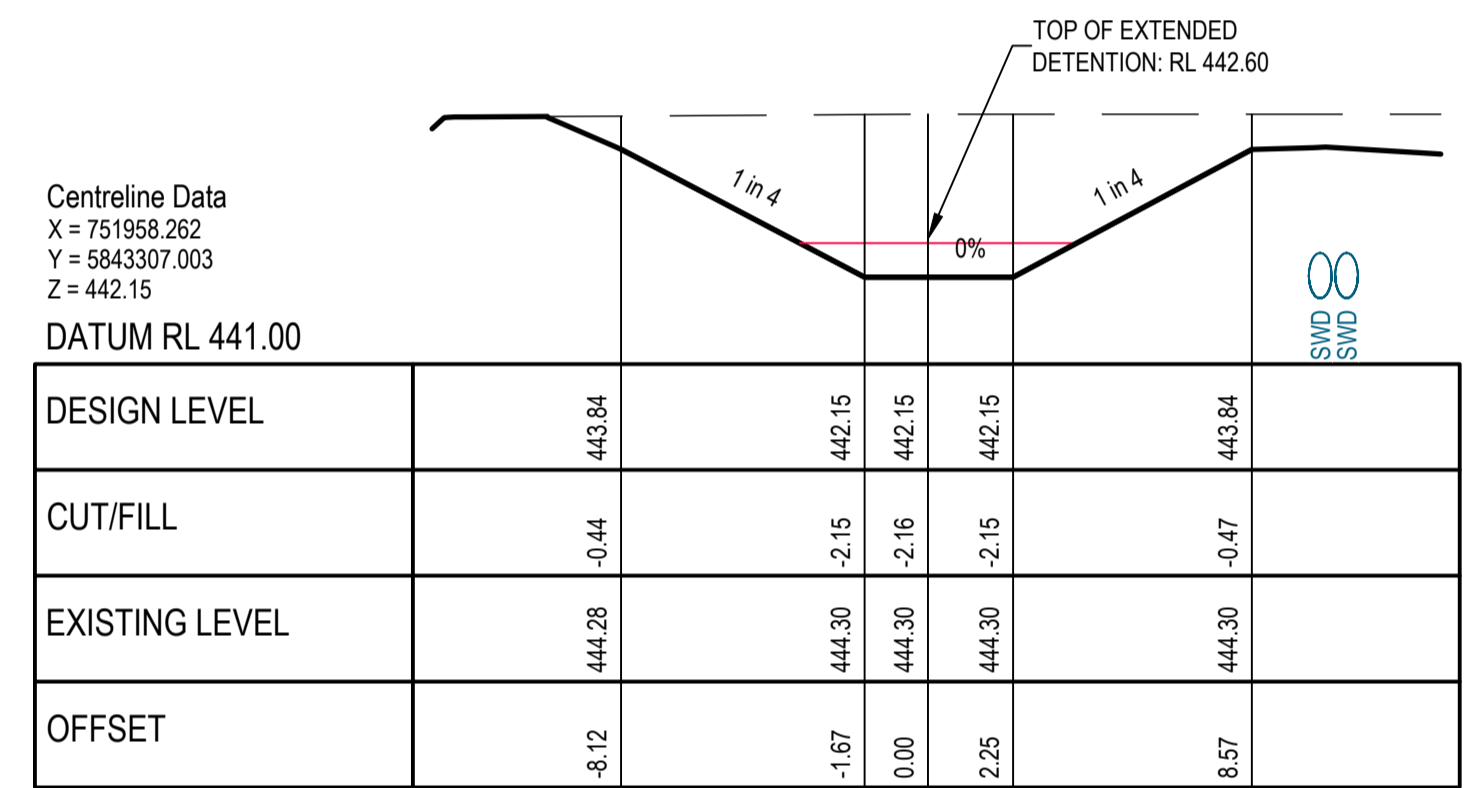
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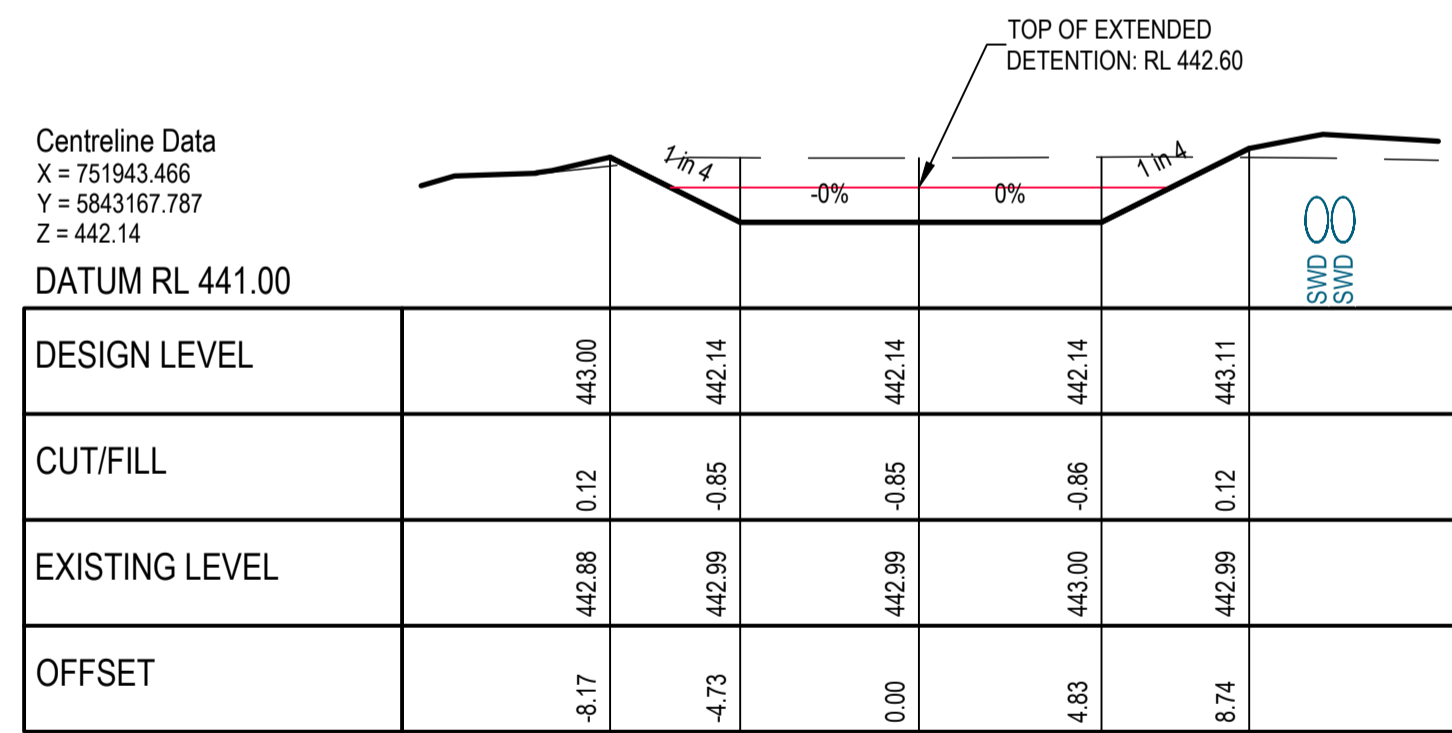
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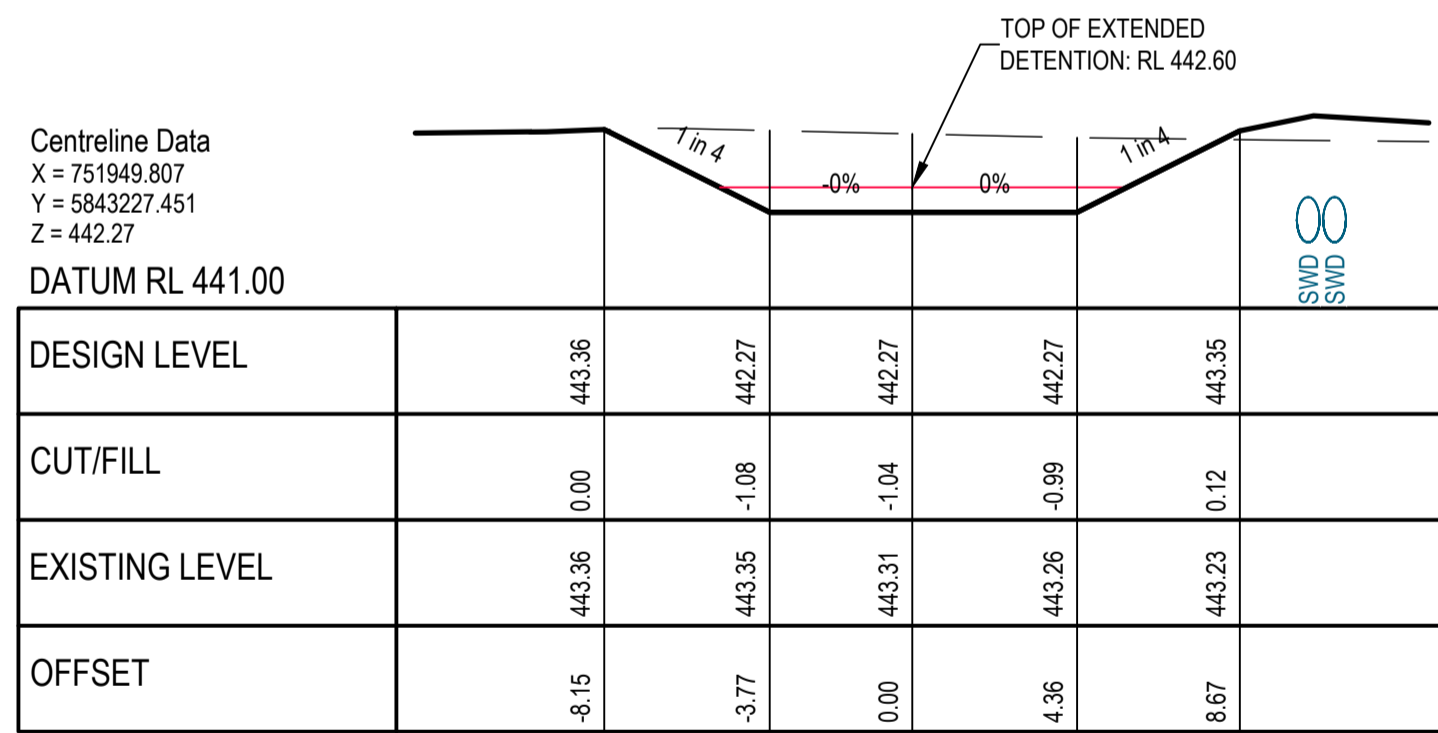
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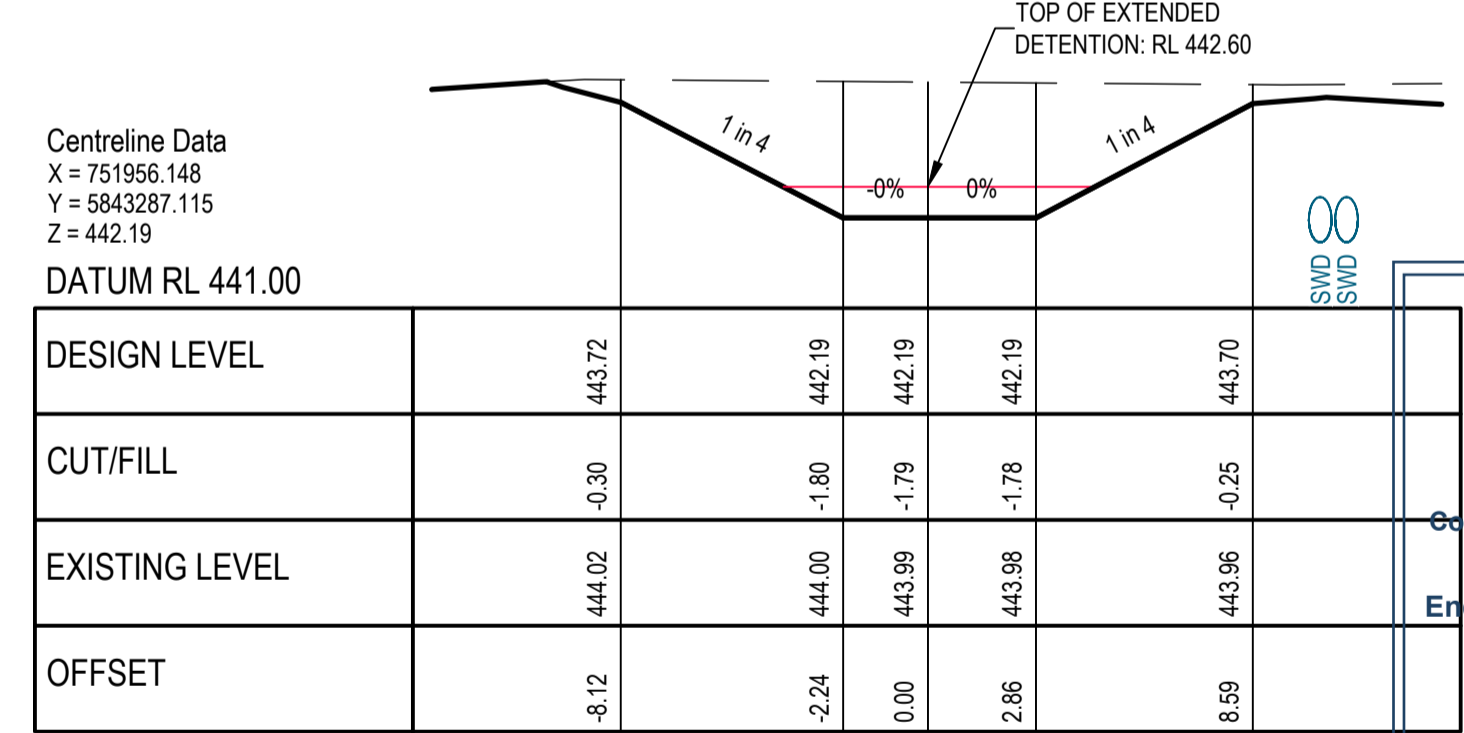
CH 160.00



CH 20.00



CH 80.00



CH 140.00

**CITY OF BALLARAT**

**BALLARAT PLANNING SCHEME**  
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 behalf of the City of Ballarat Council.

Date: 10/4/2024

Sheet No: 14 of 32

**LARGE BASIN CROSS SECTIONS**  
 SCALE H 1:200, V 1:100

**APPROVED CITY OF BALLARAT**

By D. Hastings, 28 February, 2024

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
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05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

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**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK

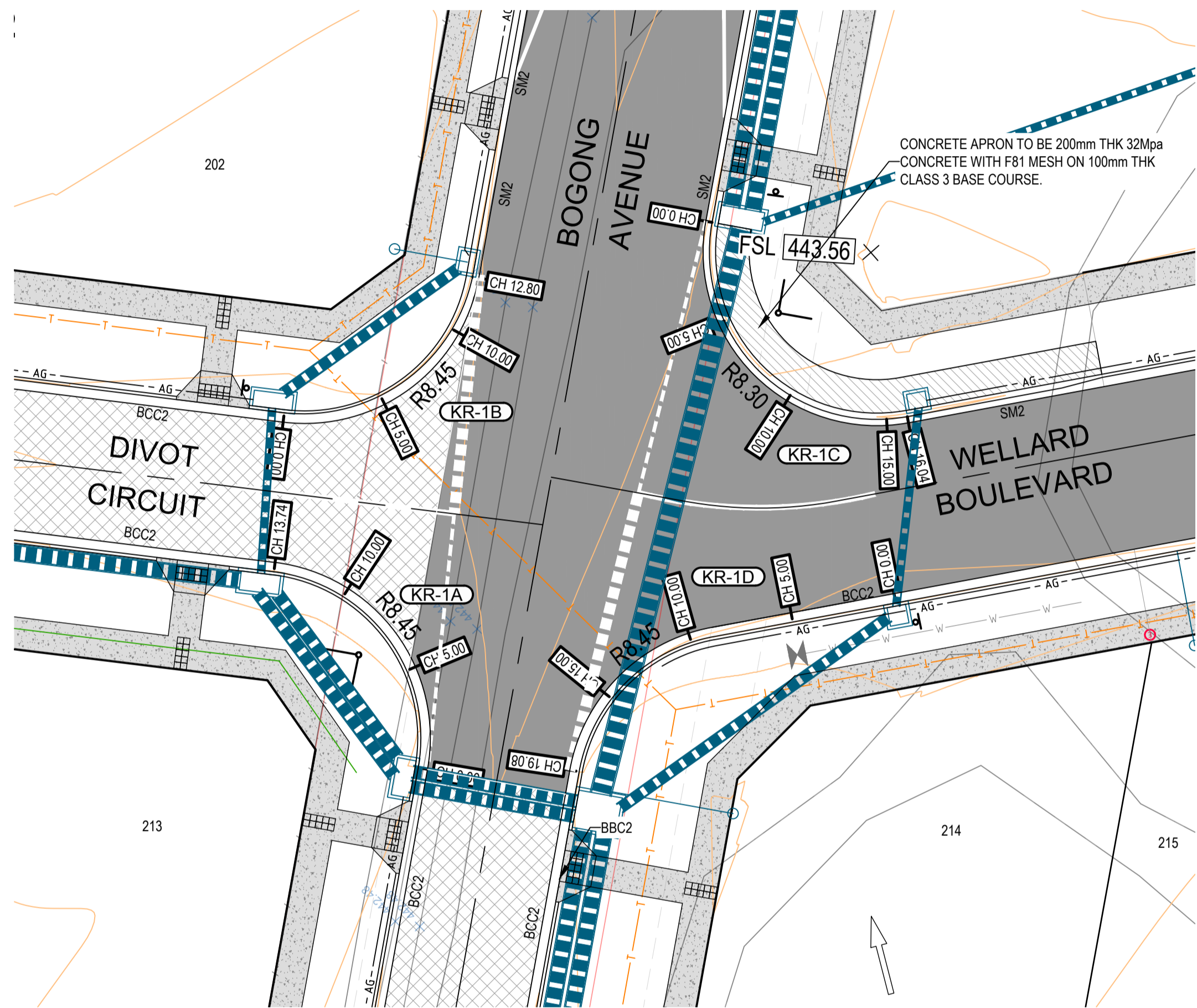
**STAGE 2**

**CIVIL DRAWING**

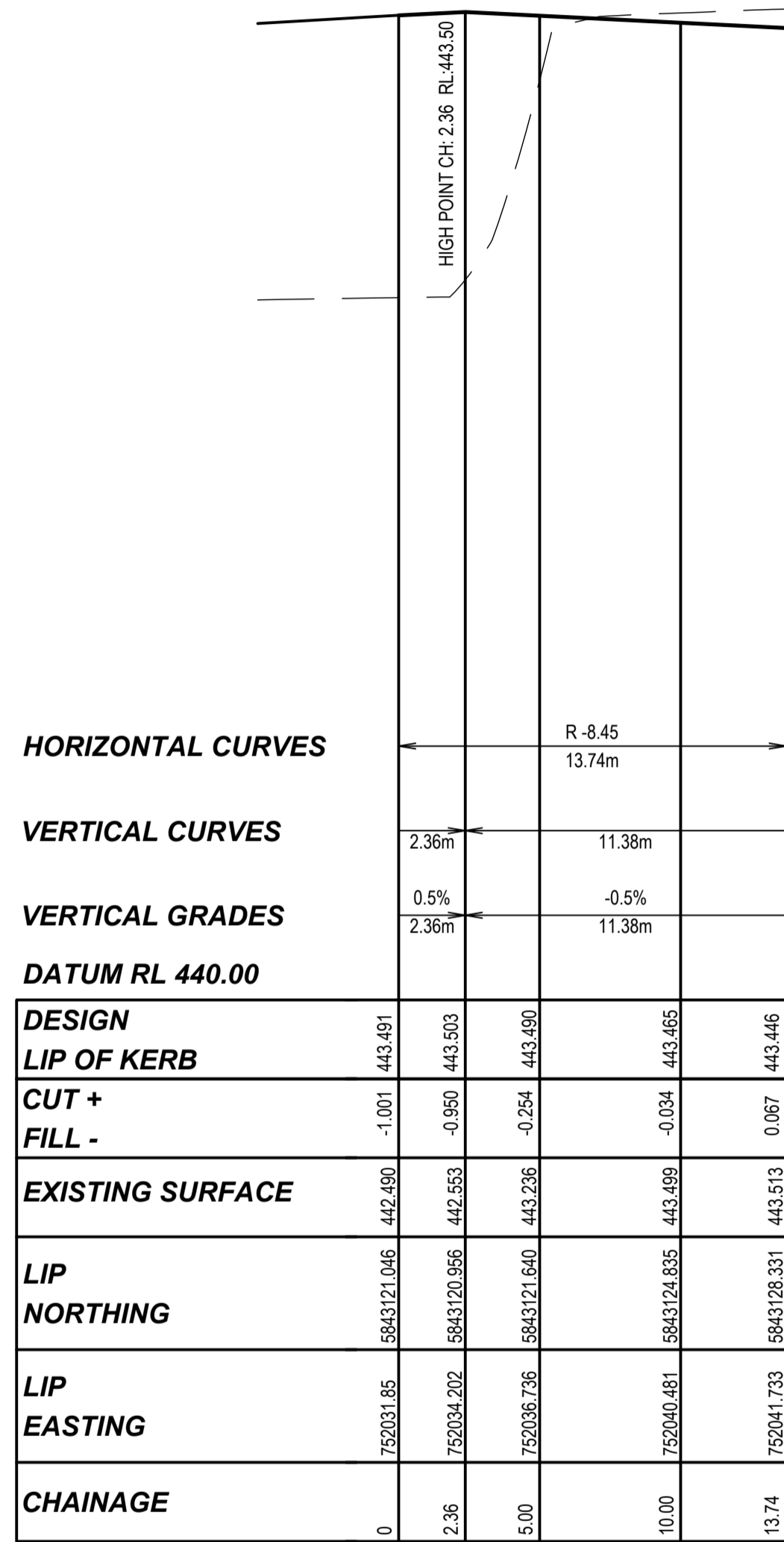
DRAWING TITLE: **LARGE BASIN CROSS SECTIONS**

REF. No: 17547-202 SHEET: C14 OF 21 REV: 07

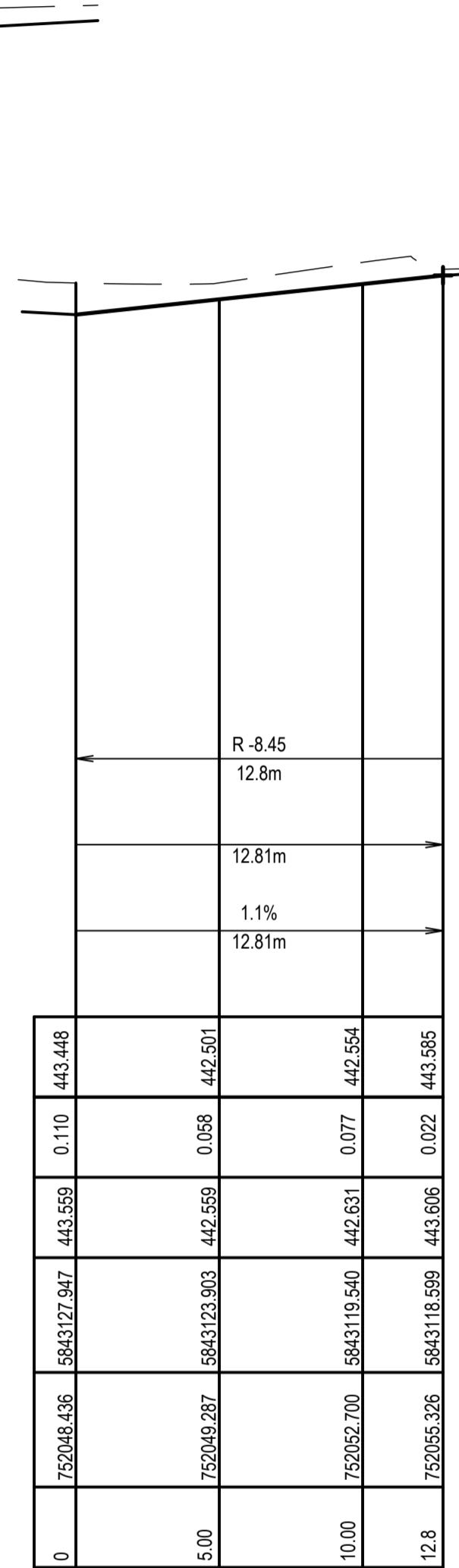
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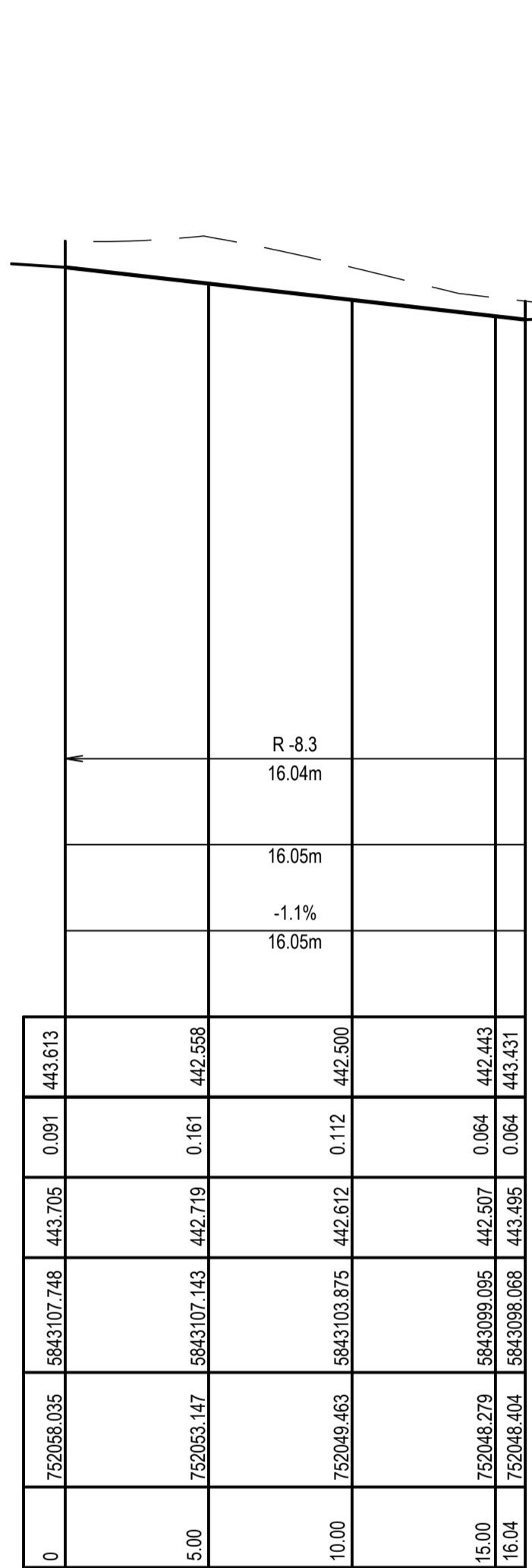
**INTERSECTION PLAN - BOGONG AVENUE / DIVOT CIRCUIT / WELLARD BOULEVARD**  
 SCALE 1:200



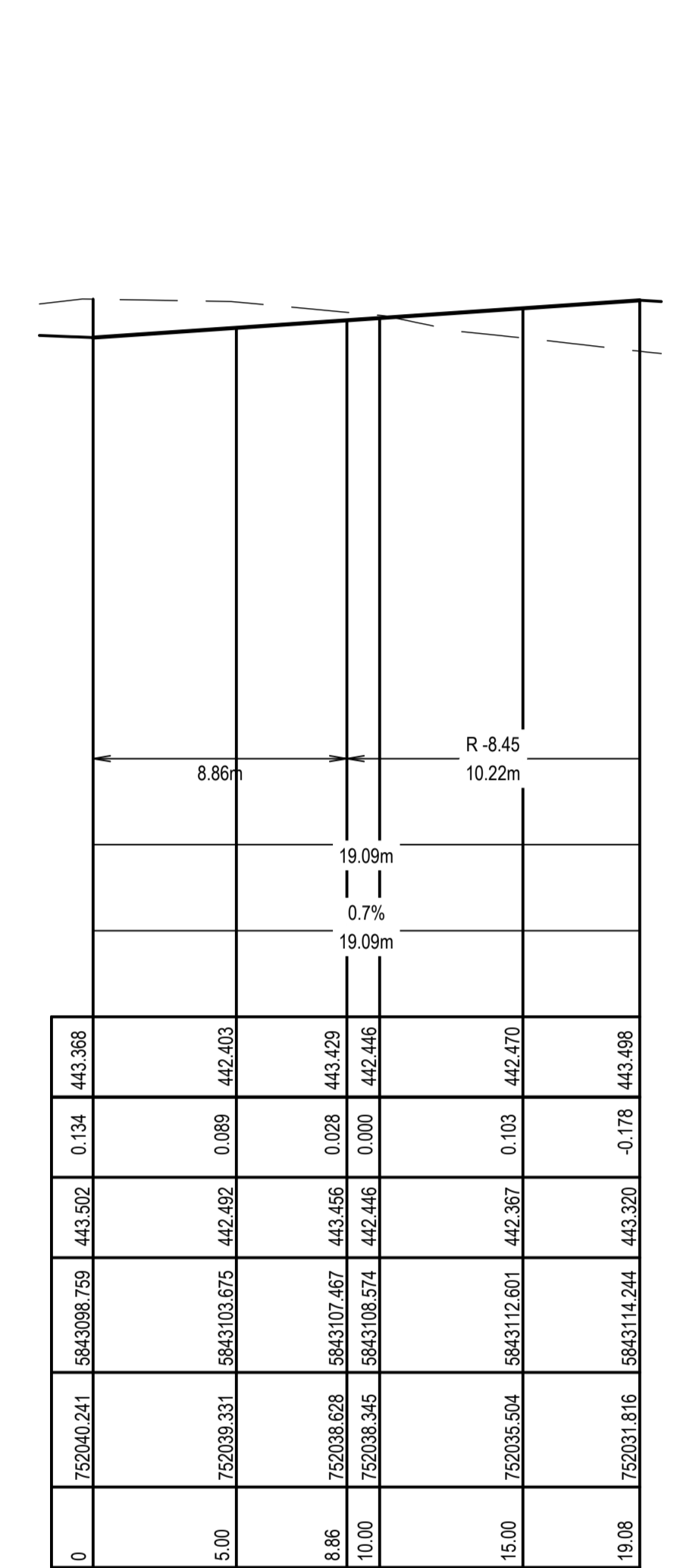
**INTERSECTION KERB 1A LONG SECTION - LIP OF KERB**  
 SCALE H 1:200, V 1:20



**INTERSECTION KERB 1B LONG SECTION - LIP OF KERB**  
 SCALE H 1:200, V 1:20



**INTERSECTION KERB 1C LONG SECTION - LIP OF KERB**  
 SCALE H 1:200, V 1:20



**INTERSECTION KERB 1D LONG SECTION - LIP OF KERB**  
 SCALE H 1:200, V 1:20

**HORIZONTAL CURVES**  
**VERTICAL CURVES**  
**VERTICAL GRADES**  
**DATUM RL 440.00**

DESIGN							
LIP OF KERB							
CUT +							
FILL -							
EXISTING SURFACE							
LIP NORTHING							
LIP EASTING							
CHAINAGE							

DESIGN							
LIP OF KERB							
CUT +							
FILL -							
EXISTING SURFACE							
LIP NORTHING							
LIP EASTING							
CHAINAGE							

DESIGN							
LIP OF KERB							
CUT +							
FILL -							
EXISTING SURFACE							
LIP NORTHING							
LIP EASTING							
CHAINAGE							

DESIGN							
LIP OF KERB							
CUT +							
FILL -							
EXISTING SURFACE							
LIP NORTHING							
LIP EASTING							
CHAINAGE							

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05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

DESIGNED: M. ANTON  
 DRAWN: T. POPOVSKI  
 SURVEY: STANTEC  
 CHECKED: R. DUNN  
 DATE: 18.10.23

DATE: NOVEMBER 2020  
 SCALE: A1: 1:200, A3: 1:400  
 SHEET SIZE: A1 / A3  
 APPROVED: R. DUNN  
 DATE: 18.10.23

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**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK

STAGE 2

CIVIL DRAWING

DRAWING TITLE: **BOGONG AVE/DIVOT CIR/WELLARD BLVD INTERSECTION PLAN & LONG SECTIONS**

REF. No: 17547-202 SHEET: C15 OF 21 REV: 07

**CITY OF BALLARAT**

BALLARAT PLANNING SCHEME  
 Document Endorsed under  
 Conditions 4-101595 Permit No. PLP/2019/546  
 dated: 25/10/2023

Endorsed by Natalia Calleja for and on behalf of the City of Ballarat Council.  
 Date: 10/4/2024

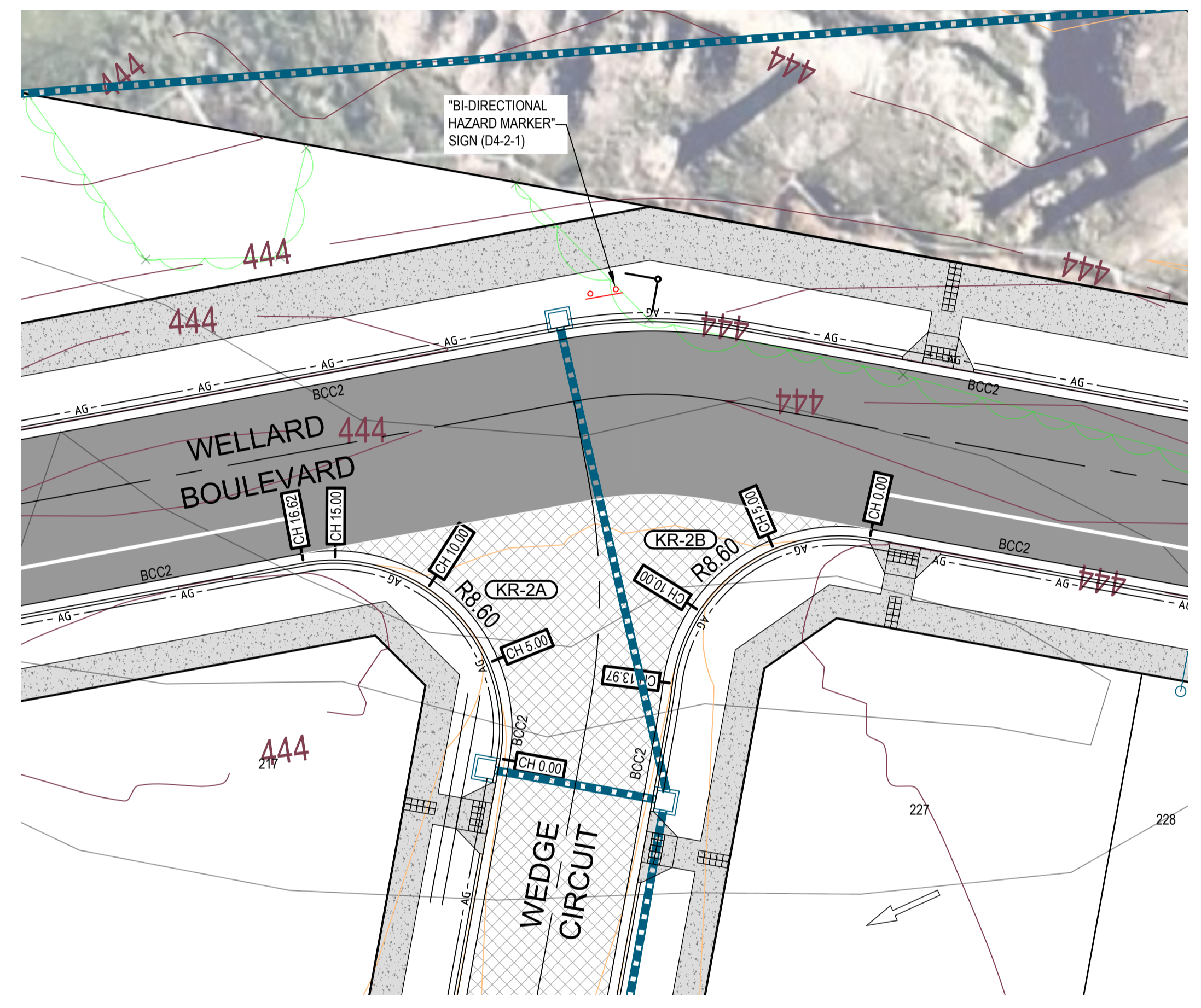
Sheet No: 15 of 32

**APPROVED CITY OF BALLARAT**

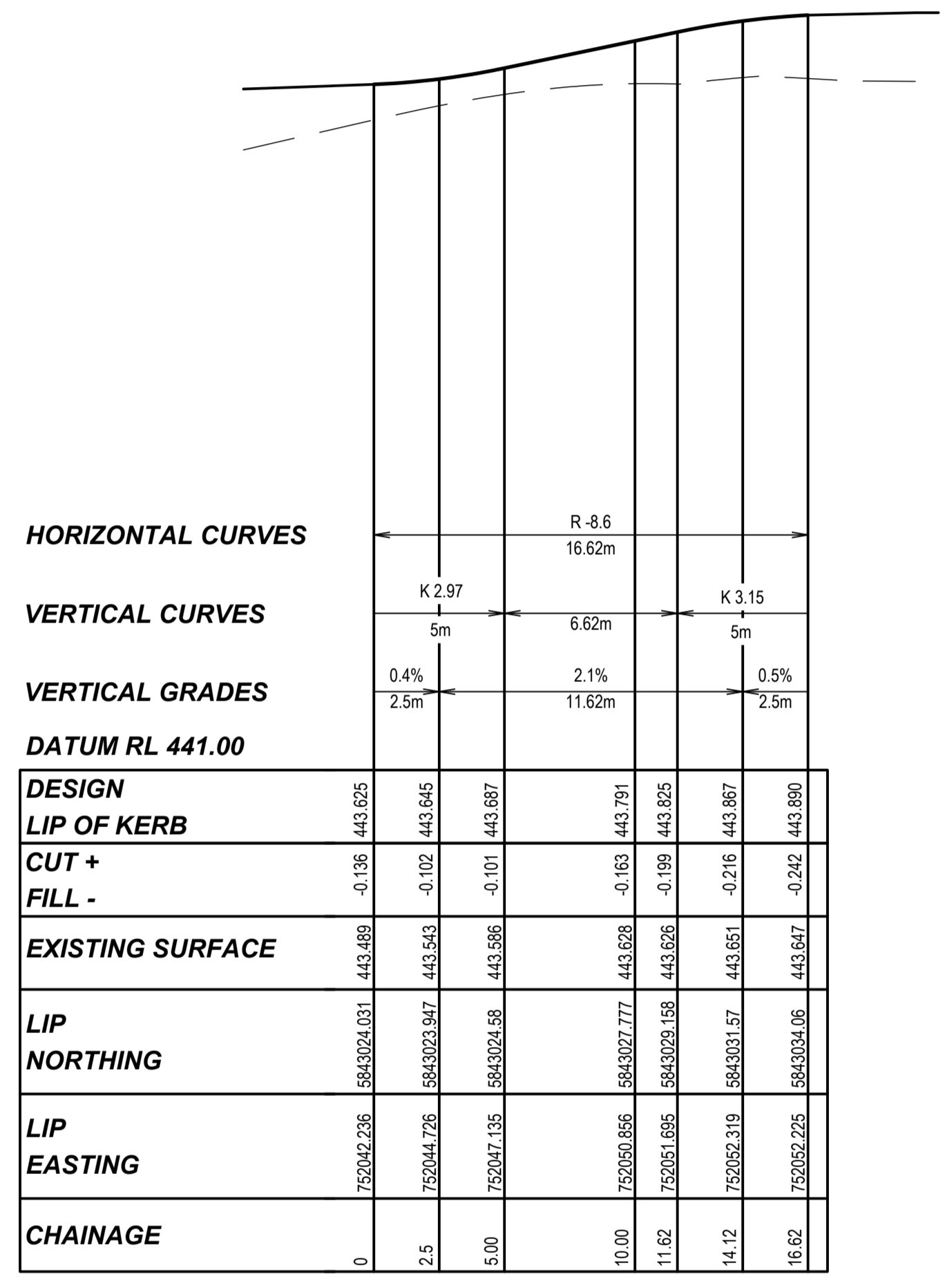
By D. Hastings, 28 February, 2024

**FOR APPROVAL**

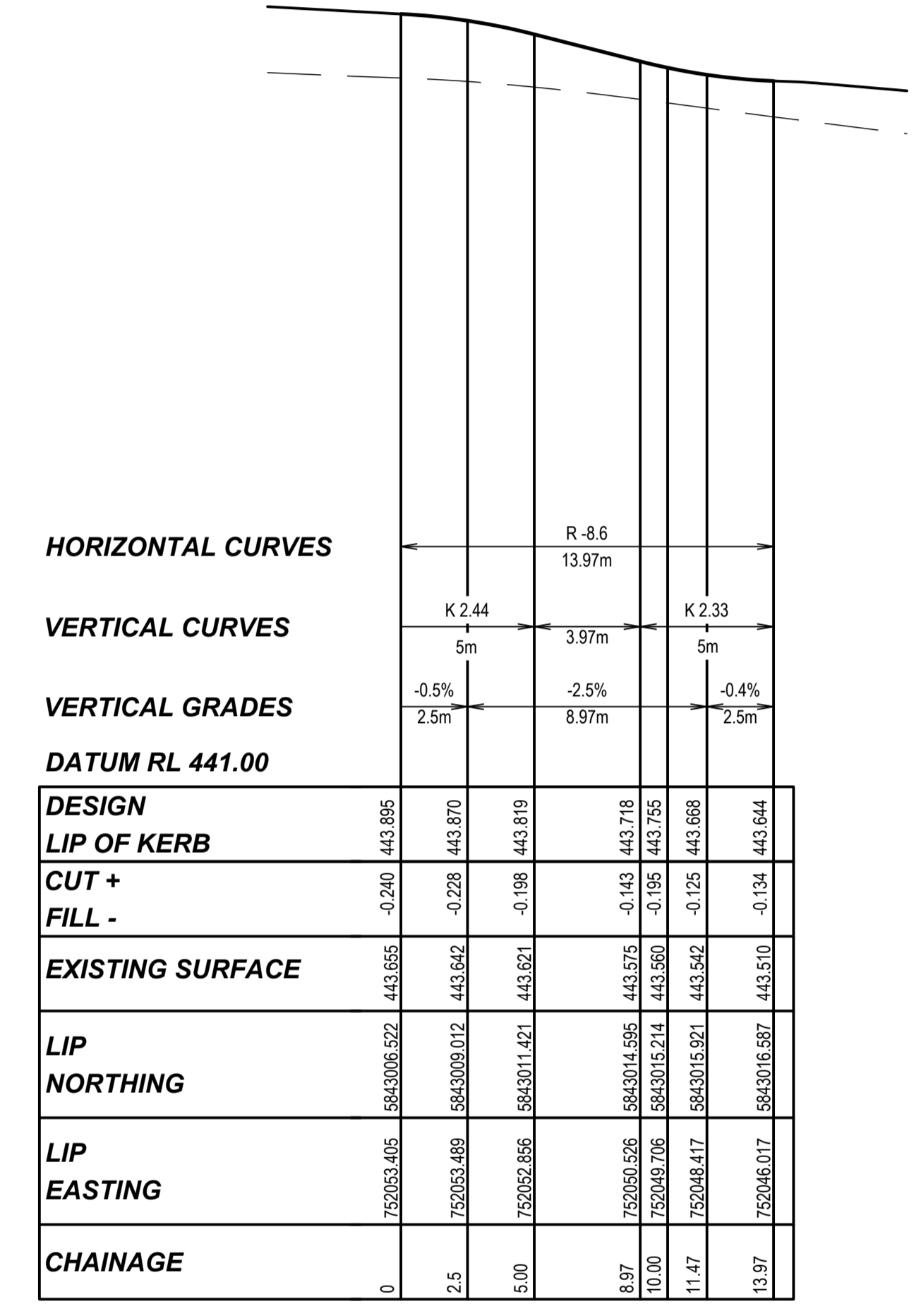
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**INTERSECTION PLAN - WELLARD BOULEVARD / WEDGE CIRCUIT**  
 SCALE 1:200



**INTERSECTION KERB 2A  
 LONG SECTION - LIP OF KERB**  
 SCALE H 1:200, V 1:20



**INTERSECTION KERB 2B  
 LONG SECTION - LIP OF KERB**  
 SCALE H 1:200, V 1:20

**CITY OF BALLARAT**  
 BALLARAT PLANNING SCHEME  
 Document Endorsed under  
 Conditions 4-101506 Permit No. PLP/2019/546  
 dated: 25/10/2023  
 Endorsed by *Natalie Calleja* for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 16 of 32

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
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02	TENDER	18/11/2020	T.P.						
03	INFORMATION	03/03/2023	R.J.F.						
04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

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**villawood properties**  
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**Drew's Paddock**  
 INVERMAY PARK  
 STAGE 2

**CIVIL DRAWING**  
 DRAWING TITLE:  
**WELLARD BLVD/WEDGE CIRCUIT  
 INTERSECTION PLAN & LONG SECTIONS**  
 REF. No: 17547-202 SHEET: C16 OF 21 REV: 07



**LEGEND**

- COMPACTED CLASS 3 CRUSHED ROCK BACKFILL TO SUBGRADE LEVEL
- COMPACTED NDCR CRUSHED ROCK BACKFILL TO 500mm BELOW BASE OF KERB OR APPROVED EQUIVALENT
- NATURAL SURFACE
- FINISHED SURFACE
- HGL

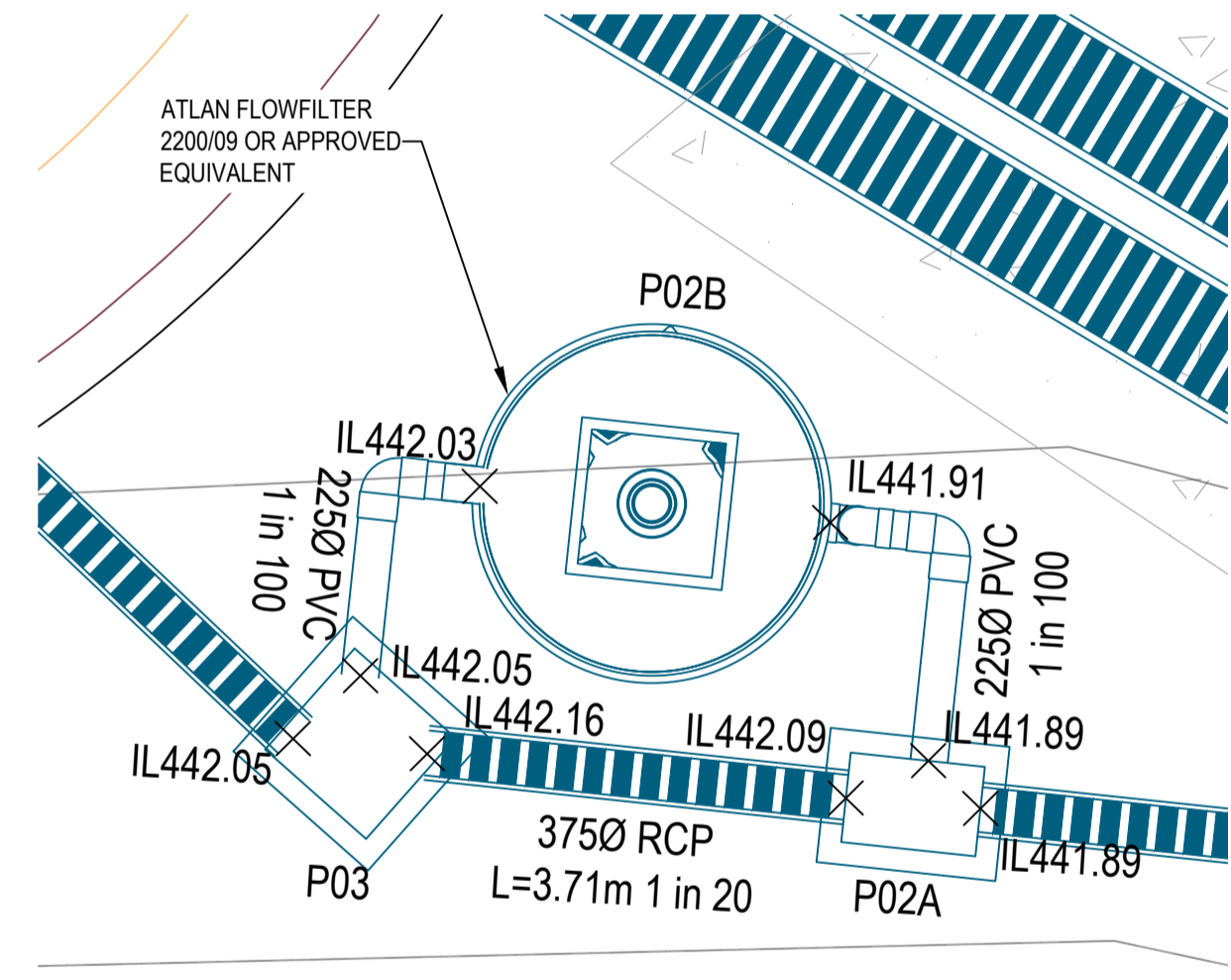
DATUM	EW	IP	JP	DSEP	EXPIT	SEP	SEP	SEP	SEP	SEP	
<b>PIPE SIZE, CLASS AND GRADE</b>	3750 RCP (RRJ) G=1.18 1 in 84.6	3750 RCP (RRJ) G=0.1 1 in 1005.2	3750 RCP (RRJ) G=0.01 1 in 1000000	(2x)6750 RCP (RRJ) G=0.33 1 in 305.6	(2x)6750 RCP (RRJ) G=0.34 1 in 298.4	7500 RCP (RRJ) G=0.33 1 in 300	4500 RCP (RRJ) G=0.5 1 in 199.7	3750 RCP (RRJ) G=0.5 1 in 200	3750 RCP (RRJ) G=0.5 1 in 200	3000 RCP (RRJ) G=0.5 1 in 200.1	3000 RCP (RRJ) G=1.8 1 in 55.5
<b>H.G.L. LEVELS</b>	442.44	442.47	442.44	442.44	442.44	442.60	442.59	442.53	442.55	442.56	442.64
<b>DEPTH TO INVERT</b>	0.81	1.00	0.98	1.22	1.02	1.87	1.85	1.53	1.51	1.52	1.42
<b>DESIGN INVERT LEVEL</b>	441.80	441.82	441.84	441.89	441.89	441.31	441.33	441.50	441.52	441.55	442.73
<b>EXISTING SURFACE</b>	442.47	442.58	442.58	442.84	442.93	443.09	443.09	443.29	443.29	443.54	443.74
<b>DESIGN SURFACE LEVEL</b>	442.81	442.82	442.82	443.11	443.09	443.09	443.09	443.29	443.29	443.54	443.74
<b>CHAINAGE/LENGTH</b>	0.00	1.69	51.95	51.95	56.67	56.05	63.71	0.00	14.33	14.33	51.26
<b>PIPE FLOW (Q)</b>	85l/s	104l/s	109l/s	112l/s	886l/s	2l/s	679l/s	286l/s	163l/s	104l/s	82l/s
<b>PIPE CAPACITY (Qc)</b>	45.8l/s	167%	0l/s	0l/s	1071.7l/s	1080.7l/s	710.6l/s	227.9l/s	227.9l/s	140.9l/s	149.9l/s
<b>PIPE CAPACITY RATIO (Q/Qc)</b>	39%	167%	40%	571%	83%	63%	40%	71%	71%	73%	58%
<b>PIPE FLOW VELOCITY (V)</b>	1.29m/s	1.02m/s	2.09m/s	1.12m/s	1.89m/s	1.89m/s	1.18m/s	1.03m/s	1.26m/s	0.94m/s	1.01m/s

**CITY OF BALLARAT**  
**BALLARAT PLANNING SCHEME**  
 Document Endorsed under  
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 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 17 of 32

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

DATUM	EW	IP	DSEP	JP	JP	DSEP	JP
<b>PIPE SIZE, CLASS AND GRADE</b>	3000 RCP (RRJ) G=2.46 1 in 40.6	(2x)6750 RCP (RRJ) G=0.22 1 in 458.8	(2x)6750 RCP (RRJ) G=0.2 1 in 500	(2x)6750 RCP (RRJ) G=0.2 1 in 500	(2x)900x4500 RCBC G=0.2 1 in 500.2	(2x)6750 RCP (RRJ) G=0.2 1 in 500	(2x)6750 RCP (RRJ) G=0.71 1 in 141.1
<b>H.G.L. LEVELS</b>	442.70	442.70	442.31	442.31	442.35	442.44	442.46
<b>DEPTH TO INVERT</b>	1.64	1.25	2.27	1.90	1.64	1.02	1.29
<b>DESIGN INVERT LEVEL</b>	442.10	442.48	441.66	441.78	441.87	442.04	442.16
<b>EXISTING SURFACE</b>	444.54	444.54	444.45	443.71	443.26	443.07	443.07
<b>DESIGN SURFACE LEVEL</b>	443.74	443.74	443.65	443.68	443.51	443.46	443.45
<b>CHAINAGE/LENGTH</b>	0.00	8.80	22.40	22.40	60.80	83.21	42.43
<b>PIPE FLOW (Q)</b>	7l/s	496l/s	481l/s	519l/s	529l/s	525l/s	408l/s
<b>PIPE CAPACITY (Qc)</b>	174.7l/s	869.7l/s	832.6l/s	832.6l/s	874.6l/s	832.7l/s	1576.2l/s
<b>PIPE CAPACITY RATIO (Q/Qc)</b>	4%	57%	58%	62%	60%	61%	26%
<b>PIPE FLOW VELOCITY (V)</b>	1.13m/s	0.74m/s	0.93m/s	1.27m/s	0.78m/s	1.31m/s	1.17m/s

**DRAINAGE LONGITUDINAL SECTION**  
 SCALE H 1:500, V 1:50



**ATLAN FLOWFILTER CONNECTION DETAIL**  
 SCALE 1:50

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**FOR APPROVAL**

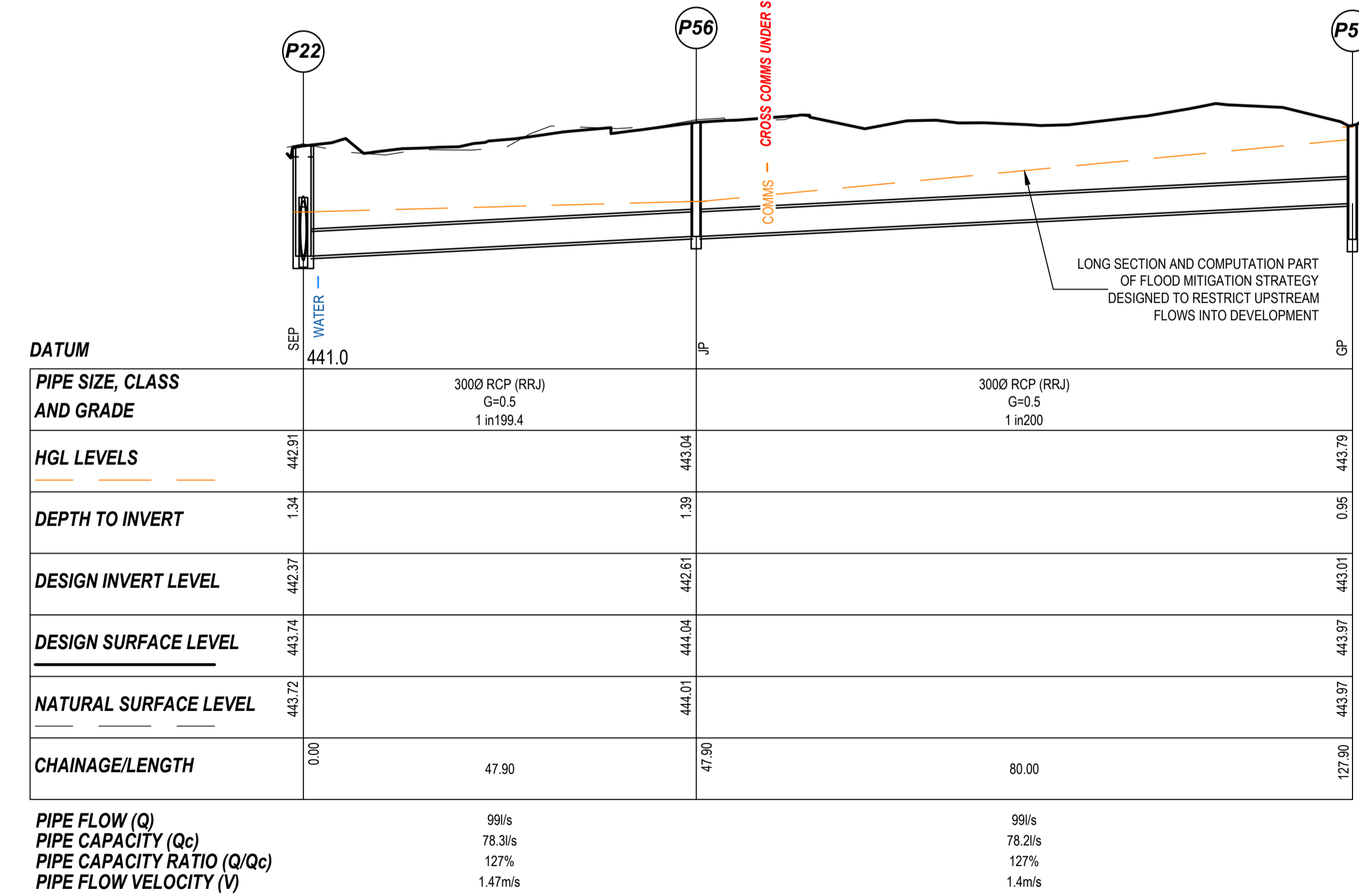
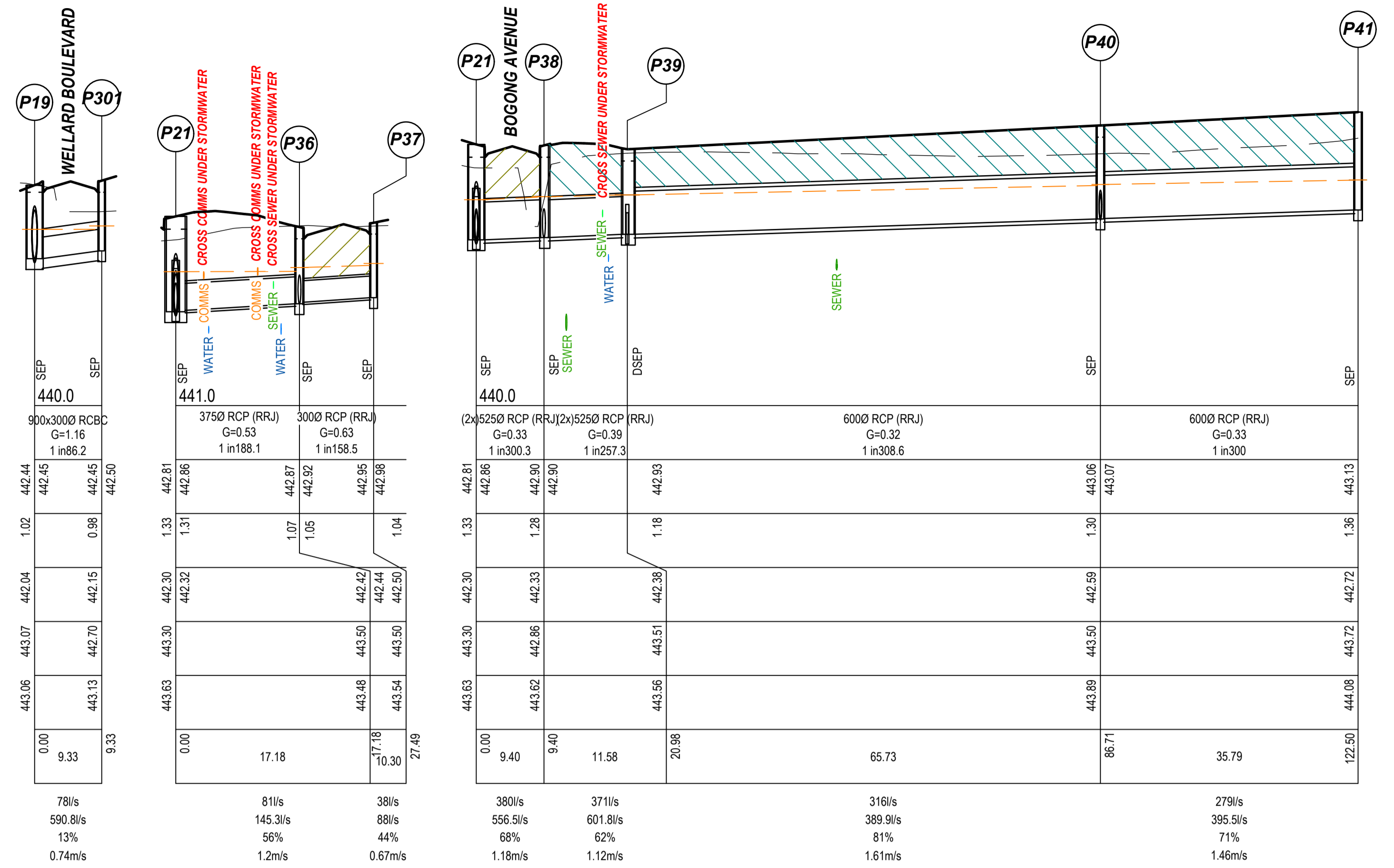
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**LEGEND**

- COMPACTED CLASS 3 CRUSHED ROCK BACKFILL TO SUBGRADE LEVEL
- COMPACTED NDCR CRUSHED ROCK BACKFILL TO 500mm BELOW BASE OF KERB OR APPROVED EQUIVALENT
- NATURAL SURFACE
- FINISHED SURFACE
- HGL

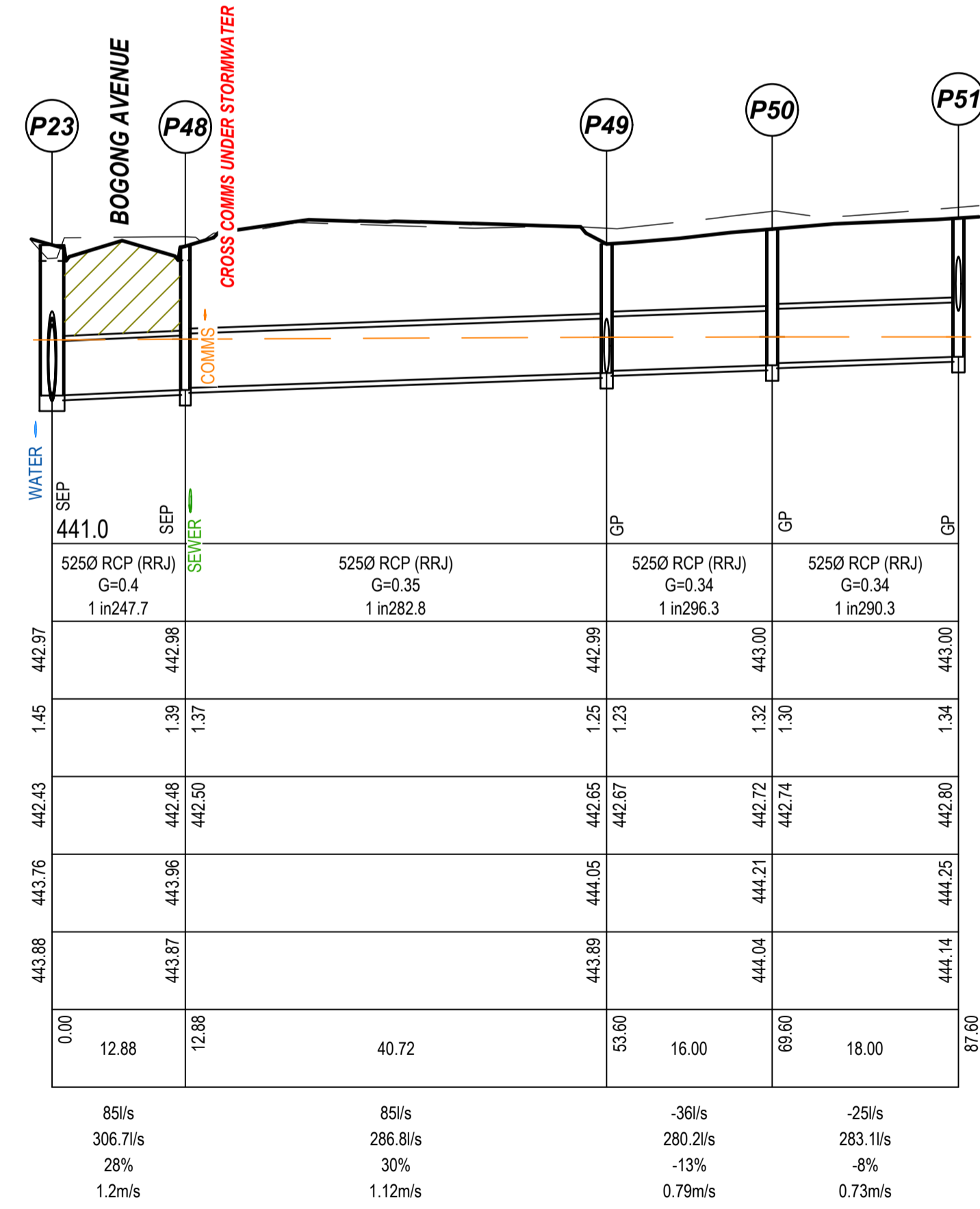
**DATUM**

PIPE SIZE, CLASS AND GRADE	441.0						
		(2x)7500 RCP (RRJ)		900x6000 RCBC		(2x)6750 RCP (RRJ)	7500 RCP (RRJ)
		G=0.18 1 in 548.4		G=0.24 1 in 416.7		G=0.23 1 in 433.9	G=0.25 1 in 392.7
HGL LEVELS	442.46 442.53 442.59		442.81 442.86		442.91	442.97	443.02
DEPTH TO INVERT	1.29		1.33		1.34	1.45	1.42
DESIGN INVERT LEVEL	442.16		442.30		442.37	442.43	442.48
DESIGN SURFACE LEVEL	443.07		443.30		443.74	443.76	443.90
NATURAL SURFACE LEVEL	443.45		443.63		443.72	443.88	443.90
CHAINAGE/LENGTH	229.98	78.82	308.80	29.23	338.03	24.36	362.39
PIPE FLOW (Q)		1171/s		755/s		752/s	473/s
PIPE CAPACITY (Qc)		1047.9/s		1047.9/s		894.5/s	620.3/s
PIPE CAPACITY RATIO (Q/Qc)		112%		106%		84%	76%
PIPE FLOW VELOCITY (V)		1.84m/s		1.76m/s		1.4m/s	1.7m/s



**DATUM**

PIPE SIZE, CLASS AND GRADE	441.0		
		3000 RCP (RRJ)	3000 RCP (RRJ)
		G=0.5 1 in 199.4	G=0.5 1 in 200
HGL LEVELS	442.91		443.04
DEPTH TO INVERT	1.34		1.39
DESIGN INVERT LEVEL	442.37		442.61
DESIGN SURFACE LEVEL	443.74		444.04
NATURAL SURFACE LEVEL	443.72		444.01
CHAINAGE/LENGTH	0.00	47.90	47.90
PIPE FLOW (Q)		99/s	99/s
PIPE CAPACITY (Qc)		78.3/s	78.2/s
PIPE CAPACITY RATIO (Q/Qc)		127%	127%
PIPE FLOW VELOCITY (V)		1.47m/s	1.4m/s



**DRAINAGE LONGITUDINAL SECTION**

SCALE H 1:500, V 1:50

**CITY OF BALLARAT**

**BALLARAT PLANNING SCHEME**  
Document Endorsed under  
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Endorsed by *Natalie Calleja* for and on  
behalf of the City of Ballarat Council.  
Date: 10/4/2024

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**APPROVED CITY OF BALLARAT**

By D. Hastings, 28 February, 2024

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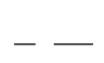
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**Drew's Paddock**  
INVERMAY PARK

**STAGE 2**

CIVIL DRAWING	
DRAWING TITLE:	<b>DRAINAGE LONGITUDINAL SECTIONS</b>
	<b>SHEET 2 OF 3</b>
REF. No:	17547-202
SHEET:	C18 OF 21
REV:	07

**LEGEND**

-  COMPACTED CLASS 3 CRUSHED ROCK BACKFILL TO SUBGRADE LEVEL
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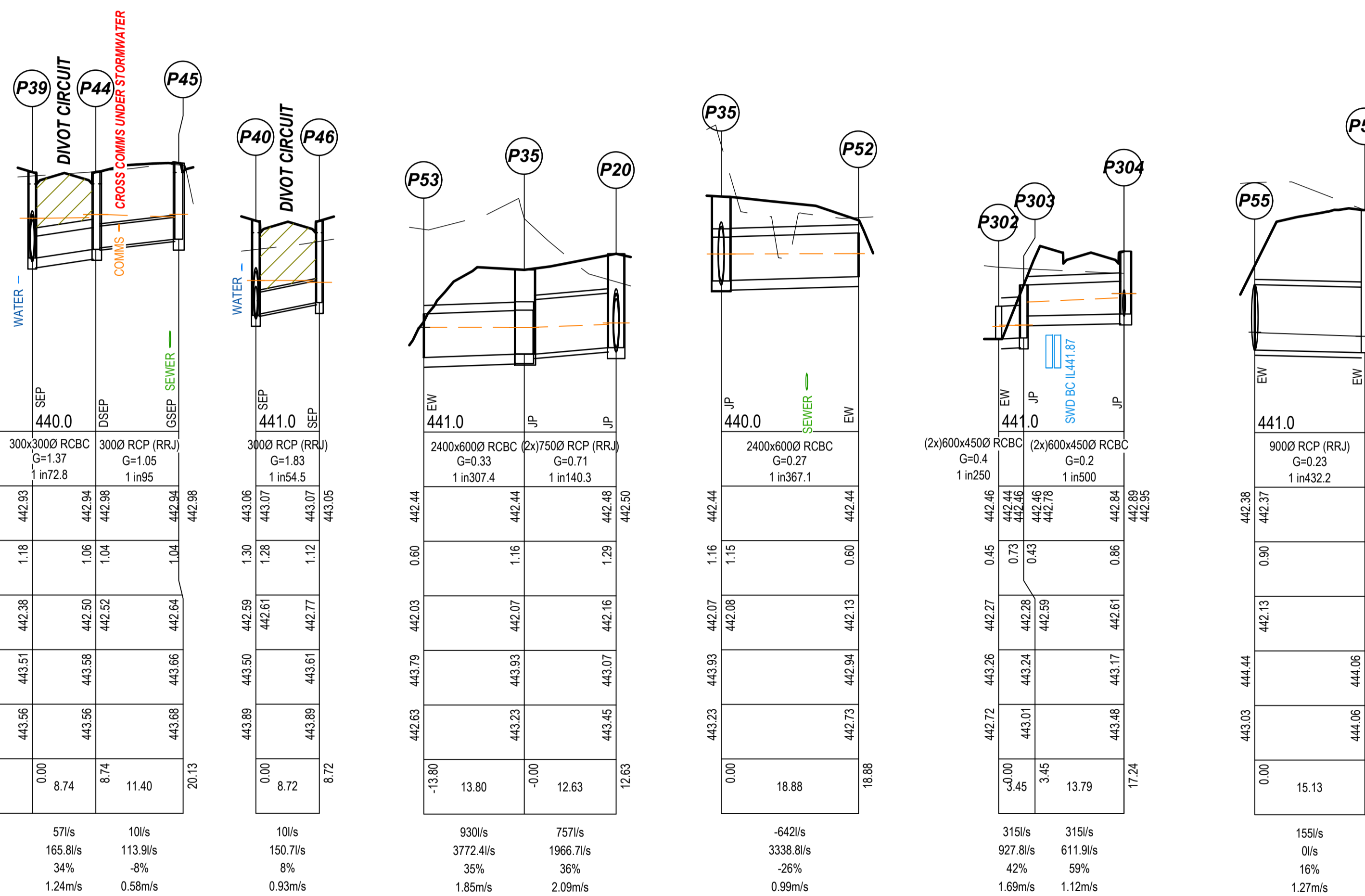
**DATUM**

PIPE SIZE, CLASS AND GRADE	300x3000 RCBC G=1.37 1 in 72.8	3000 RCP (RRJ) G=1.05 1 in 95	3000 RCP (RRJ) G=1.83 1 in 54.5
<b>HGL LEVELS</b>	442.93	442.94	442.94
<b>DEPTH TO INVERT</b>	1.18	1.06	1.04
<b>DESIGN INVERT LEVEL</b>	442.38	442.50	442.52
<b>DESIGN SURFACE LEVEL</b>	443.51	443.58	443.66
<b>NATURAL SURFACE LEVEL</b>	443.56	443.56	443.66
<b>CHAINAGE/LENGTH</b>	0.00 8.74	8.74	11.40

<b>PIPE FLOW (Q)</b>	57l/s	10l/s	10l/s
<b>PIPE CAPACITY (Qc)</b>	165.8l/s	113.9l/s	150.7l/s
<b>PIPE FLOW VELOCITY (V)</b>	34%	-8%	8%
	1.24m/s	0.58m/s	0.93m/s

**DRAINAGE LONGITUDINAL SECTION**

SCALE H 1:500, V 1:50



**CITY OF BALLARAT**

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Sheet No: 19 of 32

**APPROVED CITY OF BALLARAT**

By D. Hastings, 28 February, 2024

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04	TENDER	07/06/2023	CB/LP						
05	FOR APPROVAL	18/10/2023	ST	R.D.					
06	FOR APPROVAL	20/12/2023	ST	R.D.					
07	FOR APPROVAL	16/02/2024	JM	R.D.					

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**villawood properties**  
Communities Designed for Living

**Drew's Paddock**  
INVERMAY PARK

**STAGE 2**

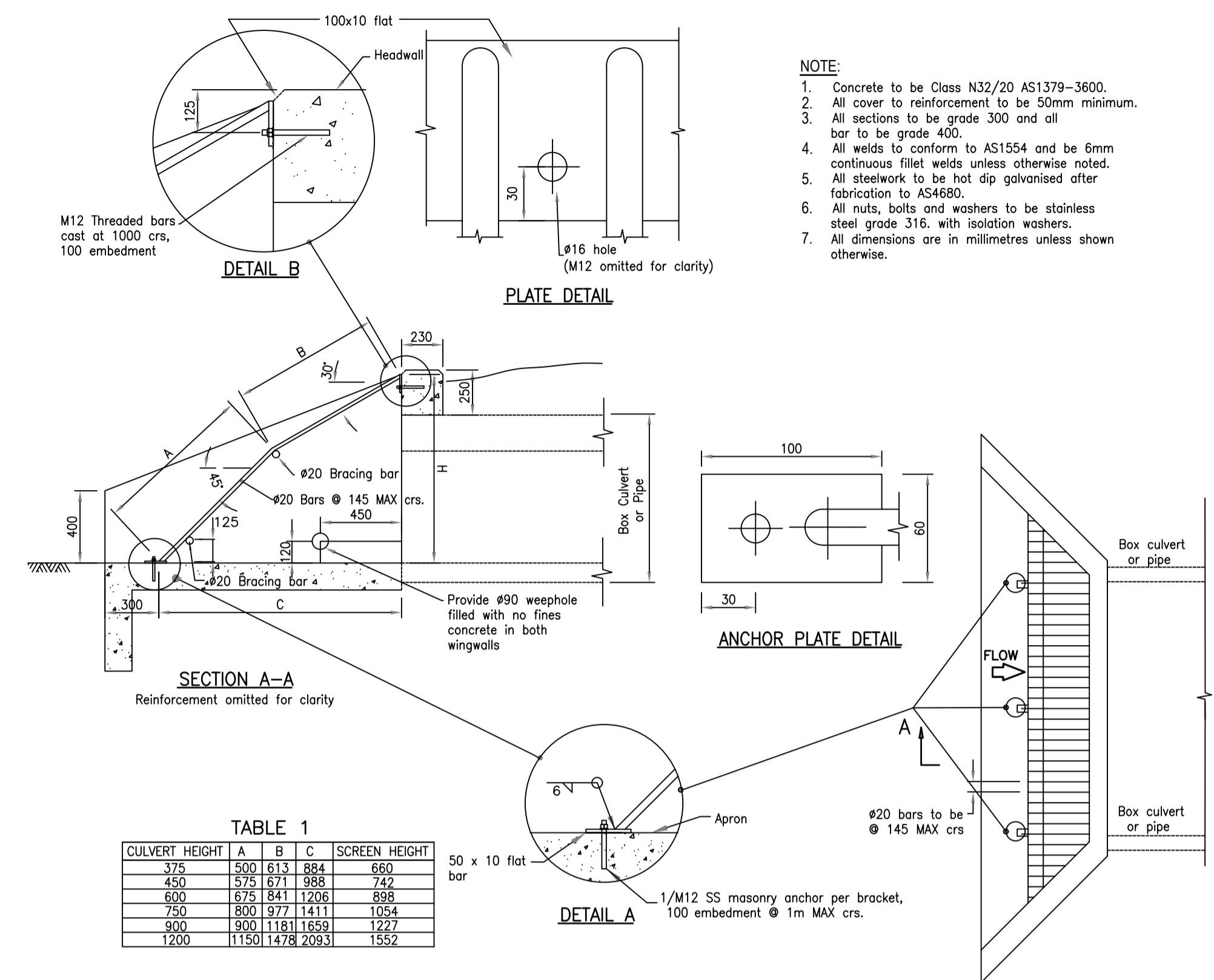
**CIVIL DRAWING**

**DRAINAGE LONGITUDINAL SECTIONS**  
**SHEET 3 OF 3**

REF. No: 17547-202 SHEET C19 OF 21 REV. 07

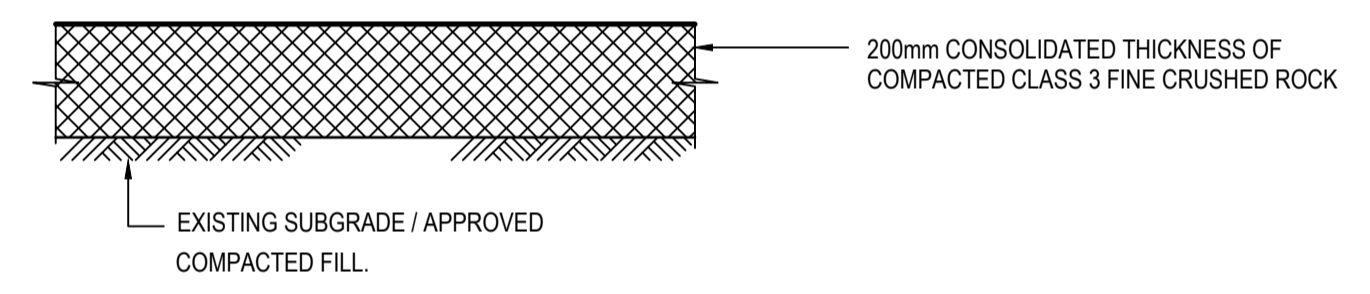
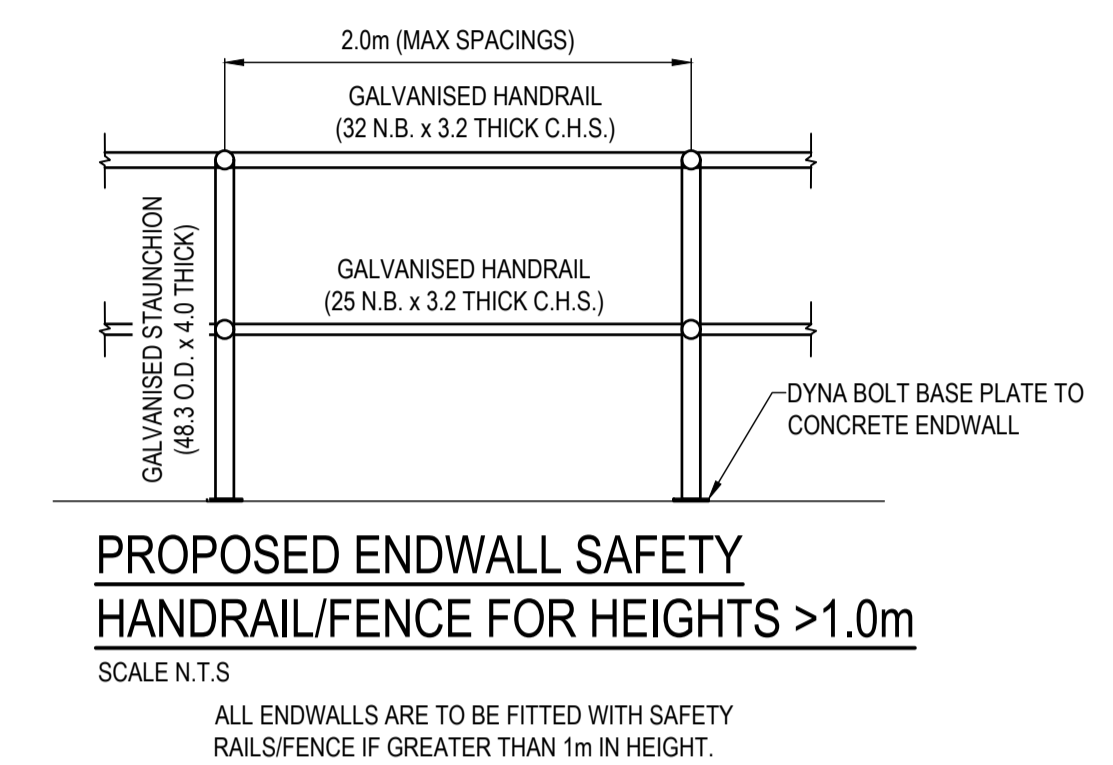


**NOTE:**  
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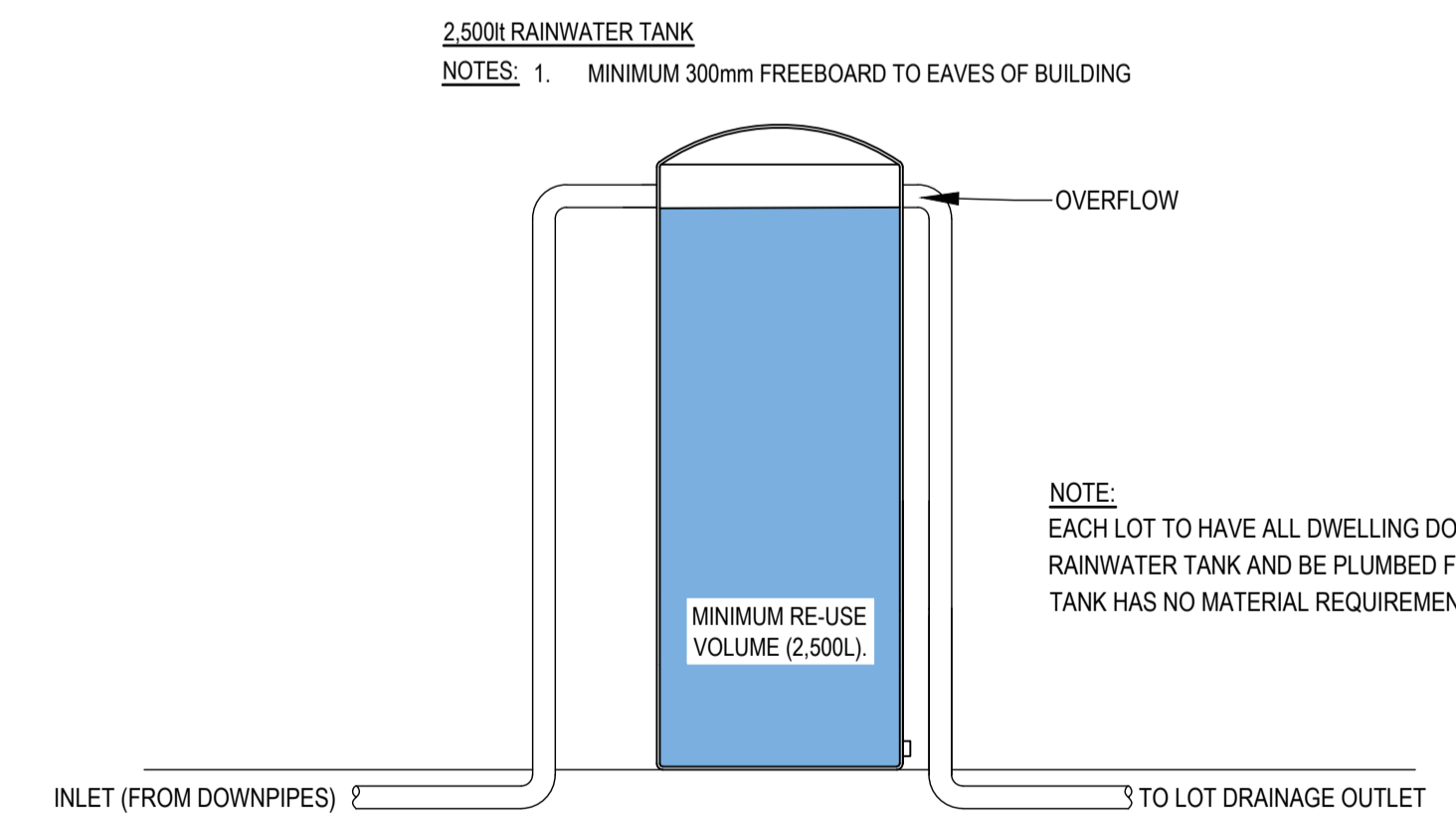
**ENDWALL DRAINAGE OUTLET SCREEN FOR 450mmØ OR GREATER**

SCALE N.T.S.  
**NOTE:**  
 ALL STORMWATER DRAINAGE OUTLETS 450mmØ OR GREATER ARE TO HAVE SAFETY GRILLS INSTALLED.



**TEMPORARY TURNING AREA & MAINTENANCE ACCESS TRACK DETAIL**

SCALE:- N.T.S.



**CITY OF BALLARAT**  
**BALLARAT PLANNING SCHEME**  
 Document Endorsed under  
 Conditions 4-101506 Permit No. PLP/2019/546  
 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 21 of 32

**APPROVED CITY OF BALLARAT**  
 By D. Hastings, 28 February, 2024

**FOR APPROVAL**

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	DESIGNED:	DATE:
01	PRELIMINARY	13/11/2020	TP/MA							M. ANTON	NOVEMBER 2020
02	TENDER	18/11/2020	T.P.							T. POPOVSKI	SCALE: A1: 1:500, A3: 1:1000
03	INFORMATION	03/03/2023	R.J.F.							STANTEC	SHEET SIZE: A1 / A3
04	TENDER	07/06/2023	CB/LP							R. DUNN	APPROVED: R. DUNN
05	FOR APPROVAL	18/10/2023	ST	R.D.						DATE: 18.10.23	DATE: 18.10.23
06	FOR APPROVAL	20/12/2023	ST	R.D.							
07	FOR APPROVAL	16/02/2024	JM	R.D.							

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**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK  
**STAGE 2**

CIVIL DRAWING	
DRAWING TITLE:	<b>CIVIL DETAILS</b>
REF. No:	17547-202
SHEET:	C21 OF 21
REV:	07









12d Dynamic Drainage Results

Hydrology Return Period Event Storms durations run
Laurenson 10 Minor drainage st2 st3 dynamic initial cont loss\_45\_5950
Notes: All Results are maximums and flows in l/s
Negative Flow Values Indicate Reverse Flows

Note:

- 1) These drainage computations are based off P15 set tailwater level(not dynamic). Below computations shows worst case scenario where it is assumed that the tailwater is already present at time zero.
2) Reverse flows shows worst case scenario at critical rain event, due to backflows from the tailwater at worse case scenario. These flows will eventually flow out of the system in a positive direction and flow.

Table with columns: Group, Pit, Link Name, Pit Type, Pit HGL, Pipe HGL Upstream, Pipe HGL Downstream, Ku (at max headloss), Ku headloss, Flow (Storm ID), Flow, Capacity Ratio, Velocities (Upstream, Pipe, Downstream), Pipe Data (Grate level, Pit Depth, Link Size, US IL, DS IL, Pipe Length), Pipe Grade (percentage, 1 in). Rows include various dynamic and static scenarios across different pipe links and pits.

CITY OF BALLARAT logo
BALLARAT PLANNING SCHEME
Document Endorsed under
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dated: 25/10/2023
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Date: 10/4/2024
Sheet No: 25 of 32









12d Dynamic Drainage Results

Hydrology Return Period Event Storms durations run

Laurensen 10 Minor drainage st2 st3 dynamic initial cont loss\_45\_5950

Notes: All Results are maximums and flows in l/s

Negative Flow Values Indicate Reverse Flows

Note:

1) These drainage computations are based off P15 set tailwater level(not dynamic). Below computations shows worst case scenario where it is assumed that the tailwater is already present at time zero.

2) Reverse flows shows worst case scenario at critical rain event, due to backflows from the tailwater at worse case scenario. These flows will eventually flow out of the system in a positive direction and flow.

Group	Pit	Link Name	Pit Type	Pit HGL	Pipe HGL Upstream	Pipe HGL Downstream	Ku (at max headloss)	Ku headloss	Flow (Storm ID)	Flow	Capacity Ratio	Velocities			Pipe Data					Pipe Grade				
												Upstream	Pipe	Downstream	Grate level	Pit Depth	Link Size	US IL	DS IL	Pipe Length	percentage	1 in		
dynamic/30				442.800	442.800	442.800	0.20	0.008	5783	17.00		1.130	0.430	0.27										
dynamic	D38	D38 to P38	DUMMY	442.824	442.824	442.823	0.20	0.008	5782	10.00		1.030	0.450	0.28	443.663	1.278	400	442.385	442.335	3.34	1.495084	66.89		
dynamic/10				442.824	442.824	442.823	0.20	0.008	5782	10.00		1.030	0.450	0.28										
dynamic/15				442.804	442.804	442.804	0.20	0.008	5816	10.00		1.030	0.450	0.28										
dynamic/20				442.789	442.789	442.790	0.20	0.006	5852	9.00		0.910	0.370	0.21										
dynamic/25				442.743	442.743	442.743	0.20	0.006	5881	8.00		0.960	0.350	0.21										
dynamic/30				442.768	442.768	442.769	0.20	0.005	5783	8.00		0.590	0.290	0.16										



**BALLARAT PLANNING SCHEME**  
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 dated: 25/10/2023

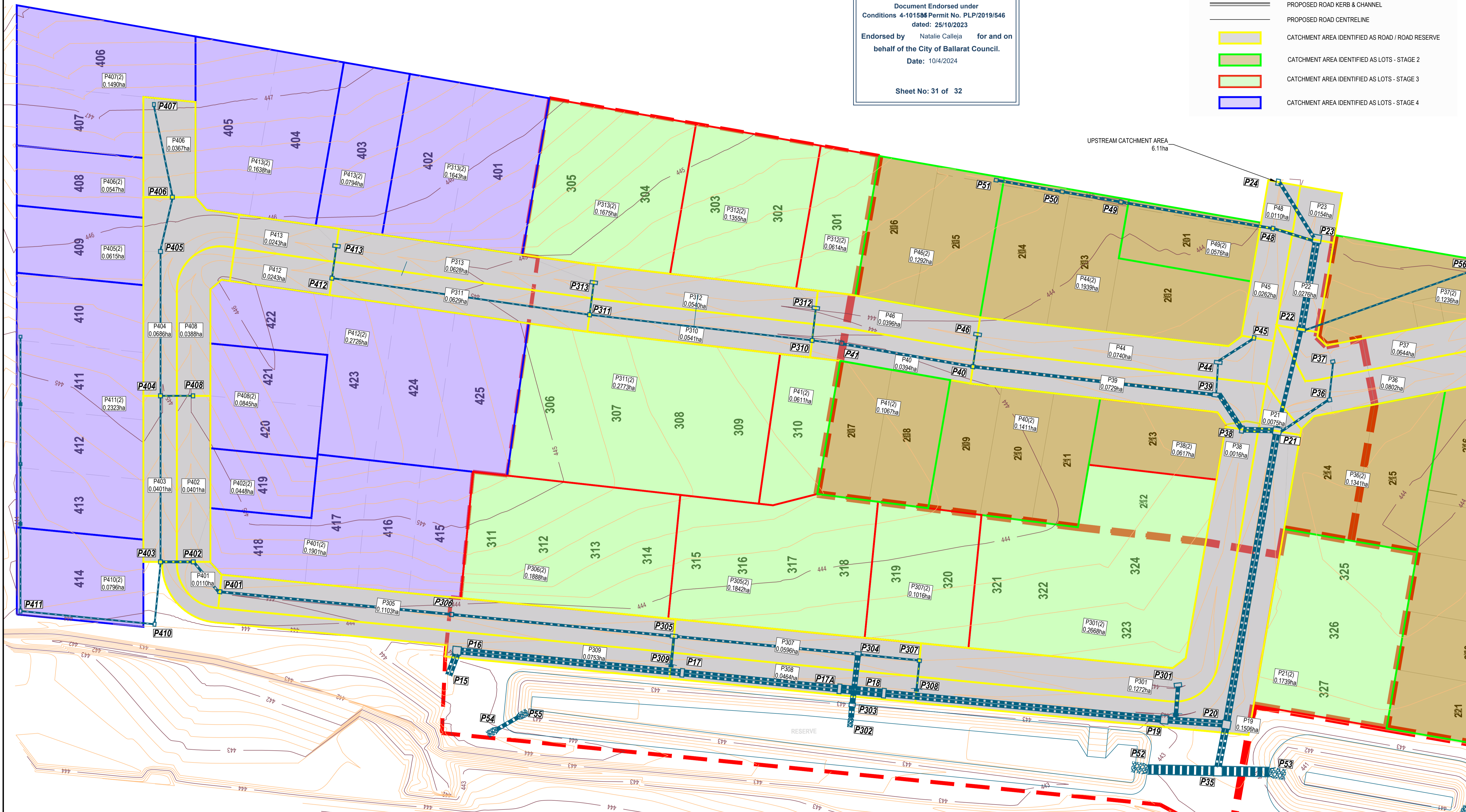
Endorsed by **Natalie Calleja** for and on  
 behalf of the **City of Ballarat Council**.

Date: 10/4/2024

Sheet No: 30 of 32

**CITY OF BALLARAT**  
**BALLARAT PLANNING SCHEME**  
 Document Endorsed under  
 Conditions 4-101566 Permit No. PLP/2019/546  
 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 31 of 32

- LEGEND**
- DESIGN SURFACE CONTOURS (0.2m INTERVALS)
  - PROPOSED STORMWATER DRAINAGE PIPE
  - PROPOSED ROAD KERB & CHANNEL
  - PROPOSED ROAD CENTRELINE
  - CATCHMENT AREA IDENTIFIED AS ROAD / ROAD RESERVE
  - CATCHMENT AREA IDENTIFIED AS LOTS - STAGE 2
  - CATCHMENT AREA IDENTIFIED AS LOTS - STAGE 3
  - CATCHMENT AREA IDENTIFIED AS LOTS - STAGE 4



UPSTREAM CATCHMENT AREA  
6.11ha

**DRAINAGE CATCHMENT PLAN**  
SCALE 1:500

**PRELIMINARY DRAWING**  
NOT TO BE USED FOR CONSTRUCTION

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY	18/10/2023	S.T.	R.D.					

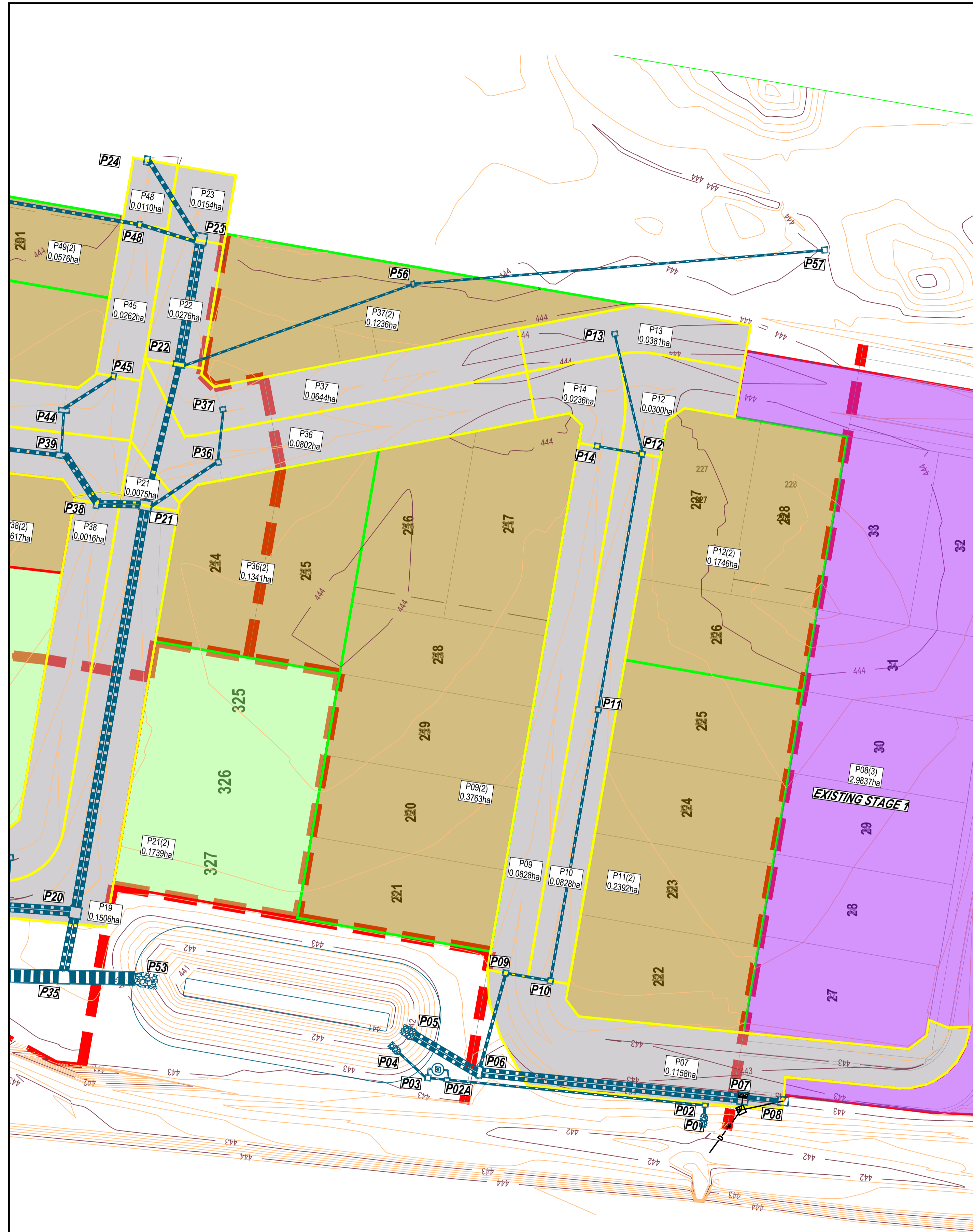
DESIGNED:	S.THAPA	DATE:	09/10/2023
DRAWN:	S.THAPA	SCALE:	AS SHOWN
SURVEY:	Stantec	SHEET SIZE:	A1
CHECKED:	R.DUNN	APPROVED:	R.DUNN
DATE:	18.10.23	DATE:	18.10.23

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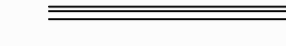





CLIENT: R.D. **villawood properties**  
 Communities Designed for Living

PROJECT: **Drew's Paddock**  
 INVERMAY PARK  
 STAGES 2, 3, & 4

CIVIL DRAWING  
 DRAWING TITLE: **DRAINAGE CATCHMENT PLAN**  
**SHEET 1 OF 2**  
 REF. No: 304317547-202 SHEET DC01 OF 2 REV. 01



**LEGEND**

-  DESIGN SURFACE CONTOURS (0.2m INTERVALS)
-  PROPOSED STORMWATER DRAINAGE PIPE
-  PROPOSED ROAD KERB & CHANNEL
-  PROPOSED ROAD CENTRELINE
-  CATCHMENT AREA IDENTIFIED AS ROAD / ROAD RESERVE
-  CATCHMENT AREA IDENTIFIED AS LOTS - STAGE 2
-  CATCHMENT AREA IDENTIFIED AS LOTS - STAGE 3
-  CATCHMENT AREA IDENTIFIED AS LOTS - STAGE 4

**DRAINAGE CATCHMENT PLAN**  
SCALE 1:500

**CITY OF BALLARAT**  
**BALLARAT PLANNING SCHEME**  
 Document Endorsed under  
 Conditions 4-101506 Permit No. PLP/2019/546  
 dated: 25/10/2023  
 Endorsed by Natalie Calleja for and on  
 behalf of the City of Ballarat Council.  
 Date: 10/4/2024  
 Sheet No: 32 of 32

**PRELIMINARY DRAWING**  
NOT TO BE USED FOR CONSTRUCTION

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY	18/10/2023	S.T.	R.D.					

DESIGNED:	S.THAPA	DATE:	09/10/2023
DRAWN:	S.THAPA	SCALE:	AS SHOWN
SURVEY:	Stantec	SHEET SIZE:	A1
CHECKED:	R.DUNN	APPROVED:	R.DUNN
DATE:	18.10.23	DATE:	18.10.23

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**villawood properties**  
 Communities Designed for Living

**Drew's Paddock**  
 INVERMAY PARK  
 STAGES 2, 3, & 4

<b>CIVIL DRAWING</b>	
DRAWING TITLE: <b>DRAINAGE CATCHMENT PLAN</b> <b>SHEET 2 OF 2</b>	
REF. No: 304317547-202	SHEET DC02 OF 2 REV. 01