

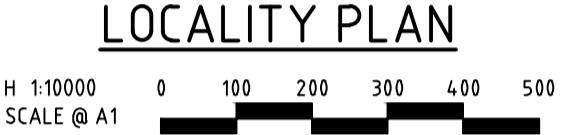
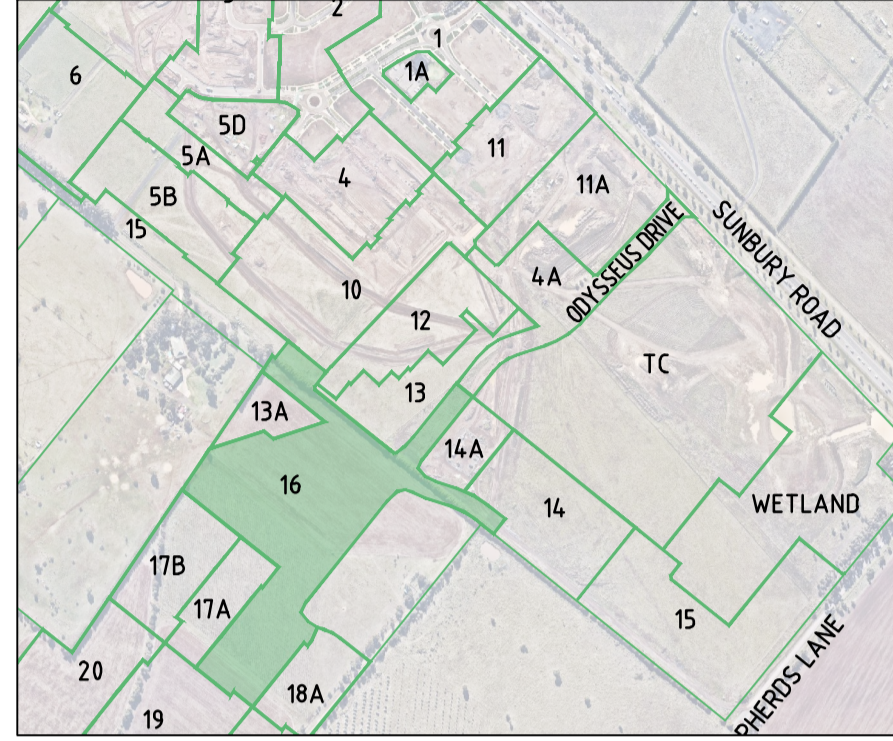
HUME CITY COUNCIL GENERAL NOTES:

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH V.P.A. AND HUME CITY COUNCIL STANDARD DRAWINGS, SPECIFICATIONS, APPROVED PLANS AND TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- COUNCIL TO BE NOTIFIED SEVEN (7) CLEAR WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORKS WITH A PRE-COMMENCEMENT MEETING BEING HELD BETWEEN HUME CITY COUNCIL, THE CONSULTANT AND THE CONTRACTOR BEFORE WORKS COMMENCE. A SITE MANAGEMENT PLAN IS TO BE SUBMITTED PRIOR TO COMMENCEMENT OF WORKS AND PRIOR TO AN ONSITE PRE-COMMENCEMENT MEETING.
- PRIOR TO COMMENCEMENT OF THE WORKS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:
 - SOURCE OF QUARRY MATERIAL.
 - N.A.T.A. APPROVED TESTS RESULTS FOR THE F.C.R. THAT IS TO BE USED.
 - IF THE SOURCE OF THE QUARRY MATERIAL IS CHANGED DURING THE COURSE OF THE WORKS, THEN NEW TEST RESULTS SHALL BE PROVIDED.
- PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004 AND O.H.S. REGULATIONS 2007 HAVE BEEN AND WILL BE COMPLIED WITH.
- ON COMMENCEMENT OF CONSTRUCTION WORKS, THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE ENVIRONMENT PROTECTION AUTHORITY PUBLICATION "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL." APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE WORKS.
- THE DISPOSAL SITE FOR SPOIL REMOVAL FROM SITE AND TRUCK ROUTE IS TO BE SUBMITTED TO AND APPROVED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE IN WRITING PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES, THESE SERVICES ARE TO BE LOCATED AND EXPOSED/PROVED PRIOR TO COMMENCEMENT OF WORKS, AND THE RELEVANT AUTHORITIES NOTIFIED SEVEN (7) CLEAR DAYS PRIOR TO THE COMMENCEMENT OF THE WORKS.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.)
- ALL CO-ORDINATES ARE TO MAP GRID OF AUSTRALIA (M.G.A.)
- THE CONTRACTOR MUST ARRANGE THE REQUISITE INSPECTIONS OF THE WORKS WITH THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE AS PER THE HOLD POINTS IN THE V.P.A. MANUAL AND HUME CITY COUNCIL SPECIFICATIONS.
- FILL AREAS TO BE STRIPPED OF TOPSOIL, FILLED AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS SHOWN ON PLAN. FILLING IS TO BE CLEAN CLAY COMPACTED TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH A.S.1289.5.1.1-2003.
- FILLING TO COMPLY WITH A.S.3798-2007, LEVEL 1 UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION NO 448 (SEPT '95) AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL IF REQUIRED PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- WHERE, AS A CONDITION OF THE PLANNING PERMIT OR AS A RESULT OF THE PRE-CONSTRUCTION MEETING, FENCING OF AREAS CONTAINING TREES, NATIVE GRASSES AND SHRUBS IS REQUIRED, A THREE STRAND STAR PICKET AND WIRE FENCE SHALL BE CONSTRUCTED.
- NO TREE OR NATIVE VEGETATION IS TO BE DISTURBED OR REMOVED WITHOUT PRIOR APPROVAL FROM COUNCIL'S SUSTAINABLE ENVIRONMENT DEPARTMENT. ANY TREES REMOVED, VEGETATION OR OTHER MATERIALS ARE NOT TO BE BURNT ON SITE.
- BEFORE COMMENCING WORK ON TRENCHES IN EXCESS OF 1.5m DEEP, NOTICE OF SUCH PROPOSAL IS TO BE FORWARDED BY THE CONTRACTOR TO WORKSAFE VICTORIA.
- THE CONTRACTOR IS TO OBTAIN A BUILDING PERMIT FOR ANY STRUCTURES / FENCES AND FOR ANY RETAINING WALLS OVER 1.0m IN HEIGHT.
- ANY INFRASTRUCTURE DAMAGE DURING THE DEFECTS LIABILITY PERIOD IS THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVE AND IS TO BE REINSTATED TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER OR HIS REPRESENTATIVE.
- PRIOR TO STATEMENT OF COMPLIANCE ALL DISTURBED AREAS INCLUDING NATURE STRIPS, BATTERS, ALLOTMENTS WITH GRADES OF 1:5 AND GREATER, AND RESERVES) ARE TO BE REINSTATED TO A CLEAN, TIDY CONDITION, TOP DRESSED (100MM LOAMY TOP SOIL FREE OF RUBBISH, DEBRIS, CLUMPS, SODS AND CLAY LUMPS), LIGHTLY COMPACTED AND HYDRO MULCHING. NATIVE GRASSES AND SHRUBS IS REQUIRED, A THREE STRAND STAR PICKET AND WIRE FENCE SHALL BE CONSTRUCTED.
- NO TREE OR NATIVE VEGETATION IS TO BE DISTURBED OR REMOVED WITHOUT PRIOR APPROVAL FROM COUNCIL'S SUSTAINABLE ENVIRONMENT DEPARTMENT. ANY TREES REMOVED, VEGETATION OR OTHER MATERIALS ARE NOT TO BE BURNT ON SITE.
- BEFORE COMMENCING WORK ON TRENCHES IN EXCESS OF 1.5m DEEP, NOTICE OF SUCH PROPOSAL IS TO BE FORWARDED BY THE CONTRACTOR TO WORKSAFE VICTORIA.
- THE CONTRACTOR IS TO OBTAIN A BUILDING PERMIT FOR ANY STRUCTURES / FENCES AND FOR ANY RETAINING WALLS OVER 1.0m IN HEIGHT.
- ANY INFRASTRUCTURE DAMAGE DURING THE DEFECTS LIABILITY PERIOD IS THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVE AND IS TO BE REINSTATED TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER OR HIS REPRESENTATIVE.
- PRIOR TO STATEMENT OF COMPLIANCE ALL DISTURBED AREAS INCLUDING NATURE STRIPS, BATTERS, ALLOTMENTS WITH GRADES OF 1:5 AND GREATER, AND RESERVES) ARE TO BE REINSTATED TO A CLEAN, TIDY CONDITION, TOP DRESSED (100MM LOAMY TOP SOIL FREE OF RUBBISH, DEBRIS, CLUMPS, SODS AND CLAY LUMPS), LIGHTLY COMPACTED AND HYDRO MULCHING. NATIVE GRASSES AND SHRUBS IS REQUIRED, A THREE STRAND STAR PICKET AND WIRE FENCE SHALL BE CONSTRUCTED.
- SOIL BINDER, SPECIFICALLY MANUFACTURED FOR HYDROMULCHING, USED AT MANUFACTURERS RECOMMENDED RATES. (E.G. ORGANIC GAUR TACKIFIERS @ 20 - 30 KG/HA, BASED ON, SITE CONDITIONS).
- GRASS IS TO BE ESTABLISHED PRIOR TO THE END OF THE MAINTENANCE PERIOD, UNLESS OTHERWISE AGREED IN WRITING.
- FOOTPATHS ARE TO BE 50mm OFFSET FROM TITLE BOUNDARIES UNLESS NOTED OTHERWISE. VEHICLE CROSSING ALIGNMENTS ARE GENERALLY TO BE PARALLEL TO THE SIDE BOUNDARY.
- ALL NEW CONCRETE WORKS SHALL BE JOINED INTO ABUTTING EXISTING CONCRETE WITH 450mm LONG Y20 DOWEL BARS @ 600 CENTRES, UNLESS OTHERWISE SPECIFIED.
- ANY EXPOSED AGGREGATE CONCRETE WORKS TO BE ACHIEVED BY SAND-BLASTING ONLY. WASHING AGGREGATE OFF WITH WATER IS NOT PERMITTED.
- ALL SERVICE CONDUITS TRENCHES UNDER ROAD PAVEMENTS ARE TO BE BACKFILLED WITH 20mm 3% CEMENT TREATED CLASS 3 CRUSHED ROCK COMPACTED TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH A.S.1289.5.2.1-2003. ALL SERVICE CONDUITS TRENCHES UNDER FOOTPATH, VEHICULAR CROSSINGS, PARKING BAYS AND WITHIN 750MM OF PARKING BAYS TO BE BACKFILLED WITH CLASS 3 CRUSHED ROCK.
- ALL STORMWATER DRAINS ARE TO BE CLASS 2 R.C. OR RIGID F.R.C. PIPES WITH ADCOL FLEXIBLE COLLARS UNLESS NOTED OTHERWISE. ALL PIPES UP TO AND INCLUDING 750mm DIAMETER ARE TO BE RUBBER RING JOINTED INTERLOCKING / FLUSH JOINTS WITH EXTERNAL BANDS CAN ONLY BE USED ON PIPE SIZES OVER 750mm DIAMETER.
- WHERE NEW ASPHALT, CONCRETE KERB & CHANNEL, PATHS AND DRIVEWAYS MATCH INTO EXISTING, THE EXISTING SURFACE IS TO BE SAW CUT AND MATCHED NEATLY.
- ALL REDUNDANT ASSETS ARE TO BE REMOVED AND DISPOSED OFF SITE.
- ALL TREES AND SHRUBS ARE TO BE RETAINED UNLESS OTHERWISE SHOWN OR DIRECTED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- AT THE COMPLETION OF ALL WORKS, ALL RUBBISH, DEBRIS AND SURPLUS SPOIL SHALL BE REMOVED AND THE SITE SHALL BE CLEANED TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- ALL DRAINS BEHIND KERB AND CHANNEL SHALL BE BACKFILLED TO MATCH PAVEMENT SUBGRADE LEVEL WITH 20mm CLASS 3 F.C.R. COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH A.S. 1289.5.2.1-2003. ALL DRAINS, SEWERS, GAS & WATER MAINS LAID THROUGH THE ROAD PAVEMENT (EXCEPT CONDUITS) ARE TO BE BACKFILLED WITH 20mm CLASS 2 FCR COMPACTED TO 98% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH A.S.1289.5.2.1-2003.
- PAVEMENT DEPTH SPECIFIED IS A MINIMUM DEPTH AND MAY BE VARIED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE. SOFT SPOTS SHALL BE EXCAVATED TO A PROOF ROLLED BASE AND BACKFILLED WITH APPROVED MATERIAL COMPACTED IN 150mm LAYERS TO ACHIEVE TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH A.S.1289.5.1.1-2003.
- ALL EXISTING ASSETS AFFECTED BY THE WORKS; E.G. SIGNS, VEHICLE CROSSINGS, FOOTPATHS, KERB AND LINEMARKING SHALL BE REINSTATED BY THE CONTRACTOR PRIOR TO THE COMPLETION OF THE WORKS TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- PRIOR TO THE COMPLETION OF THE WORKS ALL FIRE HYDRANTS ARE TO BE MARKED IN ACCORDANCE WITH "IDENTIFICATION OF STREET HYDRANTS FOR FIREFIGHTING PURPOSES" PUBLICATION (DEVELOPED BY C.F.A, M.F.B. & E.S.B). MARKINGS TO BE VIA BLUE PAVEMENT MARKER AND A (RED TOPPED) WHITE POST.
- AGRICULTURAL DRAINS ARE TO BE PLACED BEHIND ALL KERB AND CHANNEL, KERB ONLY AND EDGE STRIPS IN ACCORDANCE WITH COUNCIL STANDARD DRAWING S202.
- ALL TABLE DRAINS AND VERGES ARE TO BE REINSTATED UPON COMPLETION OF WORKS TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- ALL TRAFFIC CONTROL MEASURES, SIGNS AND LINEMARKING SHALL BE IN ACCORDANCE WITH A.S.1742 - 1, 2 & 3. STREET NAME SIGNS ARE TO BE IN ACCORDANCE WITH COUNCIL STANDARD DRAWING S0408.
- ALL LINEMARKING PAINT SHALL BE LONG LIFE TYPE IN ACCORDANCE WITH SECTION 95C OF THE HUME CITY COUNCIL SPECIFICATIONS. LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGAUR PLASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL.
- ALL SIGNS TO BE CLASS 1 HIGH INTENSITY TYPE AND TO COMPLY WITH THE REQUIREMENTS OF A.S.1743 -2001.

REDSTONE ESTATE STAGE 16 VILLAWOOD PROPERTIES

DRAWING SCHEDULE

DRAWING	DESCRIPTION	SHEET No.	REVISION
CR100	FACE SHEET	1	1
CR200	FACE PLAN - SHEET 1	2	1
CR201	FACE PLAN - SHEET 2	3	0
CR202	FACE PLAN - SHEET 3	4	0
CR203	SERVICES PLAN - SHEET 1	5	1
CR204	SERVICES PLAN - SHEET 2	6	0
CR205	SERVICES PLAN - SHEET 3	7	0
CR206	EXISTING SITE PLAN - SHEET 1	8	0
CR207	EXISTING SITE PLAN - SHEET 2	9	0
CR208	EXISTING SITE PLAN - SHEET 3	10	0
CR300	ROAD LONG SECTIONS - SHEET 1	11	0
CR301	ROAD LONG SECTIONS - SHEET 2	12	0
CR302	ROAD LONG SECTIONS - SHEET 3	13	0
CR303	ROAD LONG SECTIONS - SHEET 4	14	0
CR304	ROAD LONG SECTIONS - SHEET 5	15	0
CR305	ROAD LONG SECTIONS - SHEET 6	16	0
CR306	ROAD LONG SECTIONS - SHEET 7	17	0
CR400	TYPICAL ROAD CROSS SECTIONS - SHEET 1	18	0
CR401	TYPICAL ROAD CROSS SECTIONS - SHEET 2	19	0
CR402	TYPICAL ROAD CROSS SECTIONS - SHEET 3	20	0
CR403	TYPICAL ROAD CROSS SECTIONS - SHEET 4	21	0
CR404	ROAD CROSS SECTIONS - SHEET 5	22	0
CR405	ROAD CROSS SECTIONS - SHEET 6	23	0
CR406	ROAD CROSS SECTIONS - SHEET 7	24	1
CR407	ROAD CROSS SECTIONS - SHEET 8	25	0
CR408	ROAD CROSS SECTIONS - SHEET 9	26	0
CR409	ROAD CROSS SECTIONS - SHEET 10	27	0
CR410	ROAD CROSS SECTIONS - SHEET 11	28	0
CR411	ROAD CROSS SECTIONS - SHEET 12	29	0
CR412	ROAD CROSS SECTIONS - SHEET 13	30	0
CR413	ROAD CROSS SECTIONS - SHEET 14	31	0
CR414	ROAD CROSS SECTIONS - SHEET 15	32	0
CR500	INTERSECTION DETAILS - SHEET 1	33	0
CR501	INTERSECTION DETAILS - SHEET 2	34	0
CR502	INTERSECTION DETAILS - SHEET 3	35	0
CR503	INTERSECTION DETAILS - SHEET 4	36	0
CR504	INTERSECTION DETAILS - SHEET 5	37	0
CR505	INTERSECTION DETAILS - SHEET 6	38	0
CR506	INTERSECTION DETAILS - SHEET 7	39	0
CR507	INTERSECTION DETAILS - SHEET 8	40	0
CR508	INTERSECTION DETAILS - SHEET 9	41	0
CR509	INTERSECTION DETAILS - SHEET 10	42	0
CR600	DRAINAGE LONG SECTIONS - SHEET 1	43	0
CR601	DRAINAGE LONG SECTIONS - SHEET 2	44	0
CR602	DRAINAGE LONG SECTIONS - SHEET 3	45	0
CR603	DRAINAGE LONG SECTIONS - SHEET 4	46	0
CR604	DRAINAGE LONG SECTIONS - SHEET 5	47	0
CR605	DRAINAGE LONG SECTIONS - SHEET 6	48	0
CR606	DRAINAGE LONG SECTIONS - SHEET 7	49	0
CR607	DRAINAGE LONG SECTIONS - SHEET 8	50	0
CR608	DRAINAGE LONG SECTIONS - SHEET 9	51	0
CR609	DRAINAGE LONG SECTIONS - SHEET 10	52	0
CR610	DRAINAGE LONG SECTIONS - SHEET 11	53	0
CR611	DRAINAGE PIT SCHEDULE - SHEET 12	54	0
CR612	PIT SETOUT CO-ORDINATES TABLE & DETAILS - SHEET 13	55	0
CR613	SWALE DETAILS - SHEET 14	56	0
CR700	PAVEMENT AND TYPICAL DETAILS - SHEET 1	57	1
CR701	PAVEMENT AND TYPICAL DETAILS - SHEET 2	58	0
CR702	PAVEMENT AND TYPICAL DETAILS - SHEET 3	59	0
CR703	PAVEMENT AND TYPICAL DETAILS - SHEET 4	60	0
CR704	PAVEMENT AND TYPICAL DETAILS - SHEET 5	61	0
CR800	SIGNAGE AND LINEMARKING - SHEET 1	62	1
CR801	SIGNAGE AND LINEMARKING - SHEET 2	63	0
CR802	SIGNAGE AND LINEMARKING - SHEET 3	64	0
CR900	RETAINING WALL - SHEET 1	65	1
CR901	RETAINING WALL - SHEET 2	66	0
CR902	RETAINING WALL - SHEET 3	67	0
CR903	RETAINING WALL - SHEET 4	68	1
CR904	RETAINING WALL - SHEET 5	69	0
CR905	RETAINING WALL - SHEET 6	70	0
CR906	RETAINING WALL - SHEET 7	71	0



- HOUSE DRAIN CONNECTIONS TO 150mm DIAMETER PIPES TO BE VIA A MANUFACTURED JUNCTION PIECE. 150mm DIAMETER STORMWATER PIPES ARE TO BE HEAVY DUTY SEWER GRADE. PVC PIPES SHALL BE BACKFILLED WITH 10mm MINUS F.C.R. TO 150mm ABOVE TOP OF PIPE IN ALL LOCATIONS.
- 100mm HOUSE DRAIN CONNECTIONS TO BE LAID AT AN OFFSET OF 5.5m FROM THE LOW SIDE TITLE BOUNDARY AND PROPERTY INLETS 1.0m FROM THE LOW SIDE OF TITLE BOUNDARY REAR EASEMENTS UNLESS OTHERWISE SHOWN.
- BLASTING GENERALLY IS NOT ENCOURAGED, HOWEVER BLASTING MAY BE REQUIRED AS A LAST RESORT DEPENDING ON GROUND CONDITIONS. COUNCIL IS TO BE NOTIFIED IN WRITING IF ANY BLASTING IS NECESSARY. RESIDENTS LIKELY TO BE AFFECTED BY THE BLASTING AND ALL SERVICE AUTHORITIES SHALL BE NOTIFIED IN WRITING PRIOR TO WORKS COMMENCING. COPIES OF THESE NOTIFICATIONS ARE TO BE SUBMITTED TO COUNCIL. RESIDENT NOTIFICATION LETTER IS TO INCLUDE BLASTING GUIDELINES, FIRING AND MISFIRE PROCEDURES AND CONTRACTOR AND CONSULTANT CONTACT NAMES AND PHONE NUMBERS. ALL BLASTING IS TO BE WITHIN THE LIMITS FOR AIR AND GROUND VIBRATION LEVELS AS SET DOWN IN A.S.2187.2-1993. ALL BLASTS SHALL BE MONITORED FOR AIR AND NOISE VIBRATION AT POTENTIALLY AFFECTED RESIDENCES "FORM A" FROM A.S. 2187.2-1993, AND WAVE TRACE COPIES ARE TO BE SUBMITTED TO COUNCIL FOR EACH BLAST. BLASTING IS TO BE RESTRICTED TO BETWEEN 9.00am AND 3.30pm. BLASTING IS NOT TO OCCUR ON WEEKENDS OR PUBLIC HOLIDAYS. BLASTING AREA SIGNS ARE TO BE PLACED AT ALL ENTRANCES TO THE SITE.
- FENCING TO BE PROVIDED ALONG LOT BOUNDARIES ABUTTING RESERVES TO THE SATISFACTION OF THE RESPONSIBLE AUTHORITY.
- WHERE SODIC SOILS ARE ENCOUNTERED, SODIC SOIL INVESTIGATIONS SHOULD BE CARRIED OUT BY A QUALIFIED SOIL SCIENTIST AND THE RECOMMENDATIONS OF THE REPORT SHOULD BE APPLIED DURING ROAD & DRAINAGE DESIGN AND CONSTRUCTION.

SPiIRE GENERAL NOTES:

- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES AND ARE ACCURATE TO WITHIN ±0.05m.
- ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
- WHERE REQUIRED ANY BUILDINGS, TRENCHES, FENCES AND OTHER STRUCTURES ON SITE ARE TO BE REMOVED AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL IS TO BE INCLUDED IN THE OVERALL EARTHWORKS FIGURE UNLESS A SPECIFIC ITEM FOR REMOVAL IS DENOTED IN THE SCHEDULE.
- ALL FILLING ON LOTS AND WITHIN ROAD RESERVES GREATER THAN 200mm IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH A.S.3798-2007. FILLING MATERIAL IS TO BE IN ACCORDANCE WITH THE SPECIFICATION, A.S.3798-2007 & TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT.
- ALL BATTERS SHALL BE 1 IN 5, UNLESS OTHERWISE SHOWN.
- NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE FOR PUBLIC OPEN SPACE UNLESS OTHERWISE DIRECTED OR APPROVED BY THE SUPERINTENDENT.
- T.B.M.'S TO BE RE-ESTABLISHED BY THE LICENSED SURVEYOR IF FOUND TO BE MISSING AT THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR WILL BE RESPONSIBLE FOR CARE AND MAINTENANCE OF T.B.M.'S THEREAFTER.
- AT LEAST THREE (3) DAYS PRIOR TO COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 1.50m DEEP, A NOTIFICATION FORM MUST BE SENT TO WORKSAFE. THE CONTRACTOR IS TO COMPLY WITH WORKSAFE, THE MINES (TRENCHES) REGULATION 1982, THE MINES ACT 1958 AND OCCUPATIONAL HEALTH AND SAFETY ACT 1985, 2004.
- WHERE REQUIRED, ALL EXISTING DAMS, DEPRESSIONS AND DRAINS ARE TO BE BREACHED, DRAINED, DE-SLUDGED AND SHALL BE EXCAVATED TO A CLEAN FIRM BASE. THE SURFACE SHALL BE INSPECTED, APPROVED AND LEVELLED BY THE ENGINEER PRIOR TO COMMENCEMENT OF FILLING. THE FILL SHALL BE APPROVED SELECTED ON SITE MATERIAL OR APPROVED IMPORTED MATERIAL. THE FILL SHALL BE PLACED UNDER CONTROLLED MOISTURE CONDITIONS IN ACCORDANCE WITH THE SPECIFICATION.
- GAS AND WATER CONDUITS SIZES ARE AS FOLLOWS:
80mm CLASS 12 P.V.C. - SINGLE SERVICE
100mm CLASS 12 P.V.C. - DUAL SERVICE (DRINKING AND NON DRINKING WATER)
WITH THE FOLLOWING MINIMUM COVER TO FINISHED SURFACE LEVELS:
ROAD PAVEMENT - 0.80m
VERGE & FOOTPATHS - 0.45m
- A.G. / SUBSOIL DRAIN TO BE LAID BEHIND KERB & CHANNEL, KERB ONLY AND EDGE STRIPS WHERE REQUIRED IN ACCORDANCE WITH EDM STANDARD DRAWING EDM 202 AND CONNECTED TO UNDERGROUND DRAINAGE.
- CENTRE LINES OF ALL EASEMENT DRAINS ARE OFFSET 1.0m OR 2.2m (WHERE OUTSIDE OF SEWER) FROM THE PROPERTY LINE UNLESS SHOWN OTHERWISE.
- WHERE CURVED PIPE ALIGNMENTS ARE SHOWN ON THE FACE PLANS THEY ARE TO BE LAID PARALLEL TO THE BACK OF KERB, EXCEPT WHERE A RADIUS HAS BEEN SPECIFICALLY NOMINATED. CURVED PIPES ARE TO BE APPROVED BY COUNCIL AND IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT.
- TELSTRA IS TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS.
- PAVEMENT DEPTHS MAY BE MODIFIED AS DIRECTED BY THE SUPERINTENDENT. PAVEMENT TO BE BOXED OUT TO MINIMUM DEPTH DENOTED, INSPECTED AND IF SUBGRADE IS IN QUESTION, FURTHER TESTING CARRIED OUT TO DETERMINE FINAL PAVEMENT DEPTH.
- WHERE PAVEMENT IS CONSTRUCTED ON FILLER, FILL MATERIAL IS TO BE APPROVED BY THE SUPERINTENDENT AND COUNCIL. FILLING TO BE CONSTRUCTED IN LAYERS 150mm THICK WITH COMPACTION ACHIEVING 95% AUSTRALIAN STANDARD DENSITY.
- WHEN PAVEMENT EXCAVATION IS IN ROCK, ALL LOOSE MATERIAL (INCLUDING ROCKS AND CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.
- ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE SUPPLIED AND MAINTAINED IN ACCORDANCE WITH A.S.1742-3.
- THE CONTRACTOR IS REQUIRED TO OBTAIN A "PERMIT TO WORK" FROM MELBOURNE WATER'S SURVEILLANCE OFFICER AT THE PRE-COMMENCEMENT MEETING. THE CONTRACTOR IS REQUIRED TO ENSURE THAT THE "PERMIT TO WORK" IS KEPT UP TO DATE FOR THE DURATION OF THE CONTRACT.
- CONTRACTOR TO ENSURE SEWER MANHOLES ARE WHOLLY LOCATED IN PROPOSED FOOTPATHS.
- COMMS PITS IN FOOTPATHS TO BE CONSTRUCTED AS PER DRAWING EDM402 AND ELECTRICAL PITS IN FOOTPATHS TO BE CONSTRUCTED AS PER HUME DRAWING SD309

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN, VALVE AND HYDRANT		
UNDERGROUND ELECTRICITY		
OPTIC FIBRE		
SEWER & MAINTENANCE STRUCTURE		
CENTRAL INVERT		
COUNCIL STORMWATER DRAIN AND PIT		
COUNCIL 50YR STORMWATER DRAIN AND PIT		
STORM WATER DRAINAGE PROPERTY INLETS		
COUNCIL STORM WATER PITS		
HOUSE DRAIN		
AG DRAIN AND FLUSHER		
STORM WATER DRAINAGE PIT NUMBER		
WATER CONDUITS		
CONCRETE VEHICLE CROSSING		
CONCRETE VEHICLE CROSSING (INDUSTRIAL)		
CONCRETE VEHICLE CROSSING (NON-STANDARD)		
SURFACE CONTOUR MINOR		
SURFACE CONTOUR MAJOR		
SURFACE LEVEL		
BATTER LEVEL (TOP / TOE)		
RETAINING WALL LEVEL (TOP/BOTTOM)		
EARTHWORKS GRADE		
SIGN AND POST		
STREET SIGN		
PERMANENT SURVEY MARK		
TEMPORARY BENCH MARK		
ROAD CHAINAGES		
LOT CHAINAGES		
SETOUT POINT		
LIMIT OF WORKS		
BATTER		
EXCAVATION GREATER THAN 0.20m		
FILLING GREATER THAN 0.20m		
RETAINING WALL CONCRETE		
RETAINING WALL STONE		
RETAINING WALL ROCK WITH FENCE		
FENCE - VEHICLE EXCLUSION		
FENCES		
FENCE TEMPORARY		
VEGETATION LINE		
FOOTPATH		
TACTILE GROUND SURFACE INDICATOR		
KERB TRANSITION		



WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

file name: 31066CR100.dwg, layout name: CS000, plotted by: Luke Bruce, file location: G:\311\310666\1\A1\A1.dwg, plot date: 14/03/2024 10:43 AM, Sheet: 1 of 71 Sheets

Rev	Amendments	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	AMENDED AS PER COUNCIL COMMENTS	M.R	20/09/24
D	AMENDED AS PER COUNCIL COMMENTS	M.T-S	17/07/24
C	AMENDED AS PER COUNCIL COMMENTS	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22

Scale



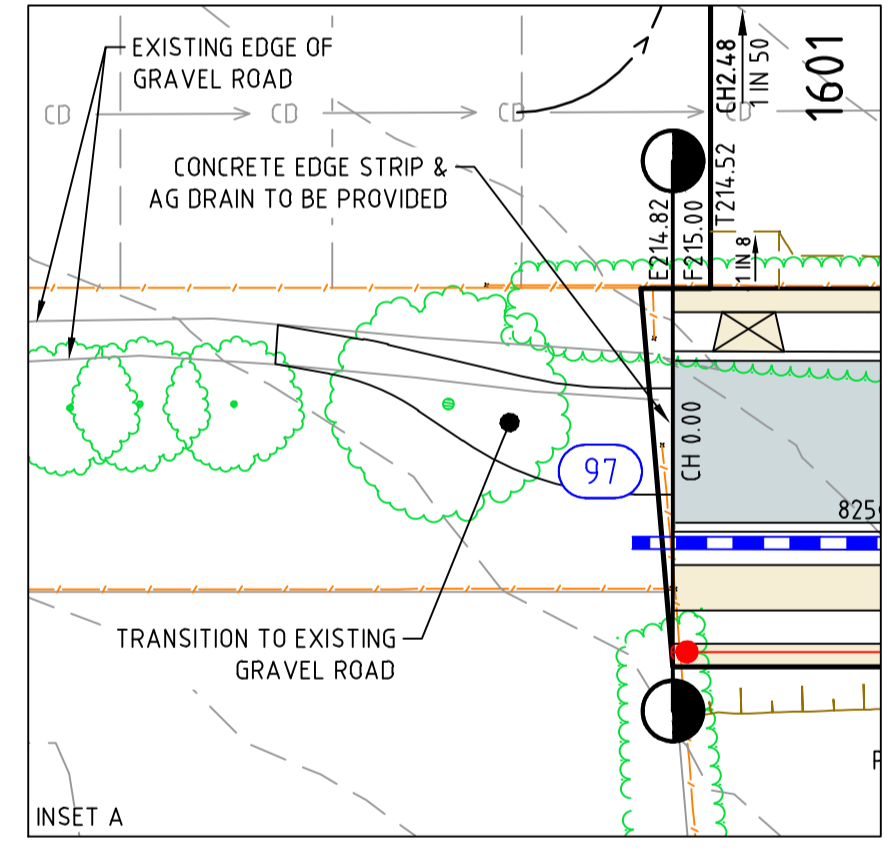
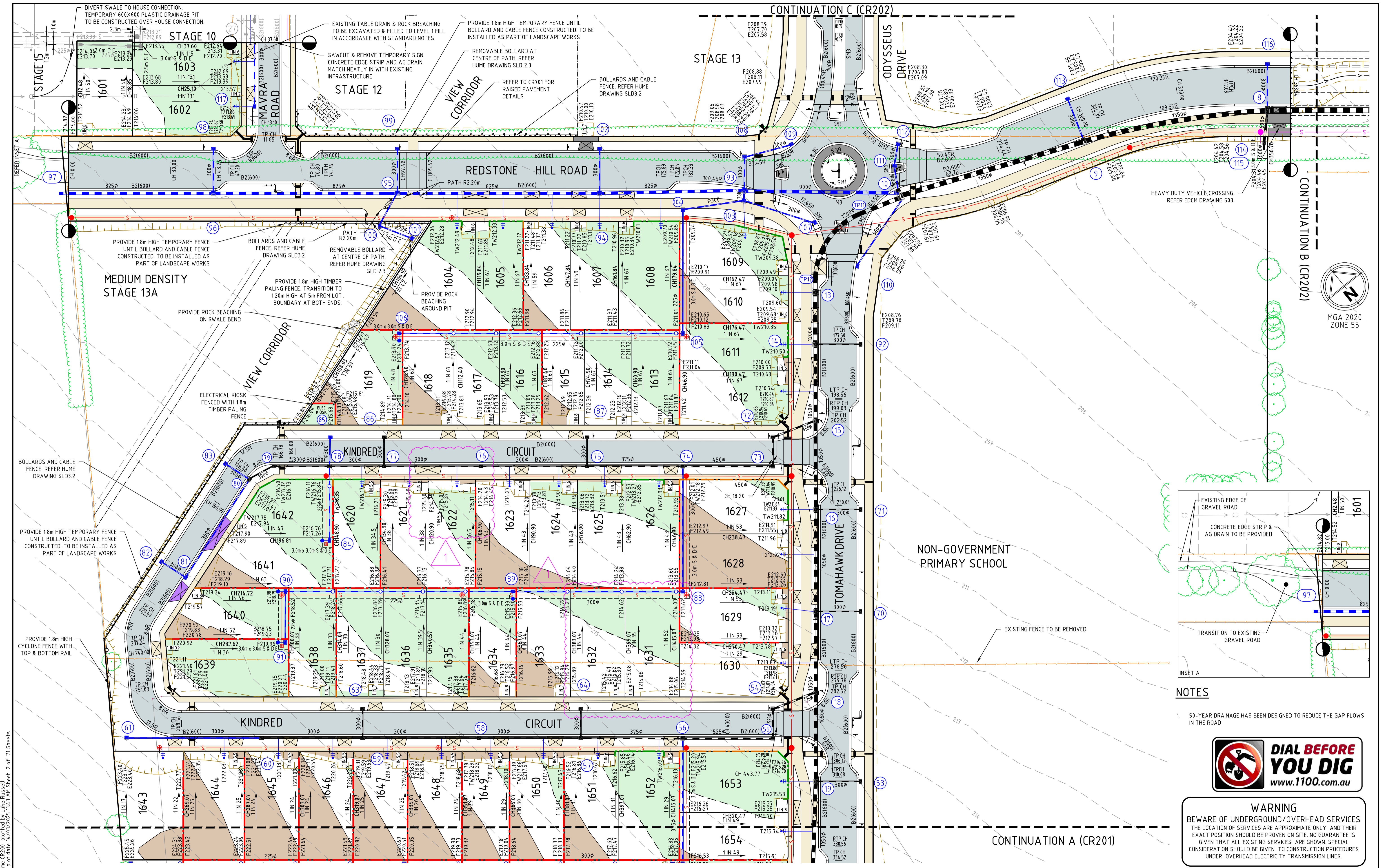
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villawood properties
Communities Designed for Living
Designed H.HOGGARD
Authorised J.POYNER
Checked J.POYNER
Date APRIL 2024

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**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
FACE SHEET**
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION Drg No 310066CR100 Rev 1



NOTES

1. 50-YEAR DRAINAGE HAS BEEN DESIGNED TO REDUCE THE GAP FLOWS IN THE ROAD

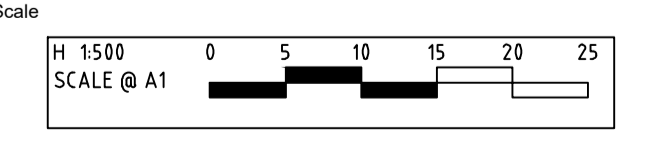


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file name: 31066CR200.dwg, layout: rsmc CR200, Method: by Luke Pinesall, file location: G:\31066CR200\WALKAD\plot date: 14/03/2025 11:43 AM Sheet: 2 of 71 Sheets

Rev	Description	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	RAISED LOT 1643 WESTERN SIDE, REMOVED SWALE, AND ADDED PLINTH ON FENCE	M.T-S	20/09/24
D	TEMPORARY FENCE CHANGED, STONE ROCK RETAINING RETURN UP LOTS	M.T-S	17/07/24
C	BIKE PATH SHIFTED, OTHER AMENDMENTS	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22
Rev	Amendments	Approved	Date



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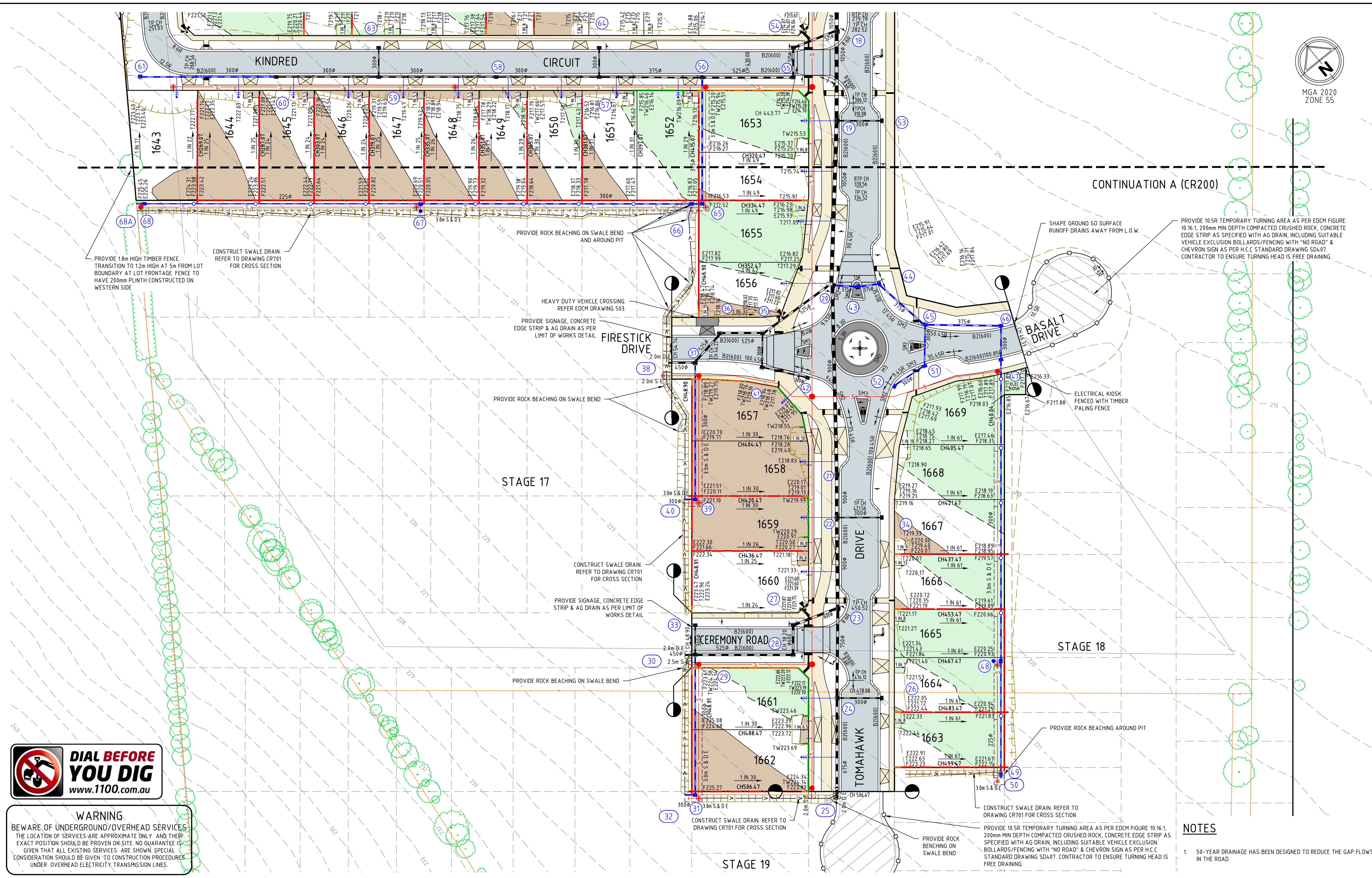
Checked
J.POYNER

Date
APRIL 2024

**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
FACE PLAN - SHEET 1
HUME CITY COUNCIL
VILLAWOOD PROPERTIES**

CONSTRUCTION 31066CR200

Rev 1



PROVIDE 1.8m HIGH TIMBER FENCE. TRANSITION TO 1.2m HIGH AT 5m FROM LOT BOUNDARY AT LOT FRONTAGE. FENCE TO HAVE 200mm PLINTH CONSTRUCTED ON WESTERN SIDE

CONSTRUCT SWALE DRAIN REFER TO DRAWING CR701 FOR CROSS SECTION

PROVIDE ROCK BEACHING ON SWALE BEND AND AROUND PIT

HEAVY DUTY VEHICLE CROSSING REFER EDM DRAWING 503

PROVIDE SIGNAGE, CONCRETE EDGE STRIP & AG DRAIN AS PER LIMIT OF WORKS DETAIL

PROVIDE ROCK BEACHING ON SWALE BEND

CONSTRUCT SWALE DRAIN REFER TO DRAWING CR701 FOR CROSS SECTION

PROVIDE SIGNAGE, CONCRETE EDGE STRIP & AG DRAIN AS PER LIMIT OF WORKS DETAIL

PROVIDE ROCK BEACHING ON SWALE BEND

CONSTRUCT SWALE DRAIN REFER TO DRAWING CR701 FOR CROSS SECTION

PROVIDE ROCK BEACHING ON SWALE BEND

CONSTRUCT SWALE DRAIN REFER TO DRAWING CR701 FOR CROSS SECTION

PROVIDE 10.5R TEMPORARY TURNING AREA AS PER EDM FIGURE 10.16.1, 200mm MIN DEPTH COMPACTED CRUSHED ROCK, CONCRETE EDGE STRIP AS SPECIFIED WITH AG DRAIN, INCLUDING SUITABLE VEHICLE EXCLUSION BOLLARDS/FENCING WITH 'NO ROAD' & CHEVRON SIGN AS PER H.C.C STANDARD DRAWING SD407. CONTRACTOR TO ENSURE TURNING HEAD IS FREE DRAINING.

PROVIDE 10.5R TEMPORARY TURNING AREA AS PER EDM FIGURE 10.16.1, 200mm MIN DEPTH COMPACTED CRUSHED ROCK, CONCRETE EDGE STRIP AS SPECIFIED WITH AG DRAIN, INCLUDING SUITABLE VEHICLE EXCLUSION BOLLARDS/FENCING WITH 'NO ROAD' & CHEVRON SIGN AS PER H.C.C STANDARD DRAWING SD407. CONTRACTOR TO ENSURE TURNING HEAD IS FREE DRAINING.

SHAPE GROUND SO SURFACE RUNOFF DRAINS AWAY FROM L.O.W.

ELECTRICAL KIOSK FENCED WITH TIMBER PALING FENCE

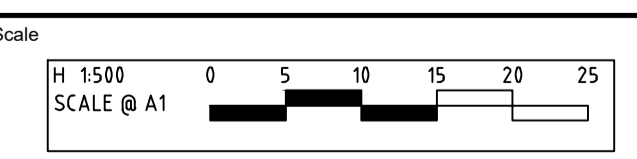


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NOTES
1. 50-YEAR DRAINAGE HAS BEEN DESIGNED TO REDUCE THE GAP FLOWS IN THE ROAD

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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	RAISED LOT 1643 WESTERN SIDE, REMOVED SWALE, AND ADDED PLINTH ON FENCE	M.T-S	20/09/24
D	EASEMENTS FOR SWALES REMOVED, TEMPORARY FENCE CHANGED, STONE ROCK RETAINING RETURN UP LOTS	M.T-S	17/07/24
C	BIKE PATH SHIFTED, OTHER AMENDMENTS	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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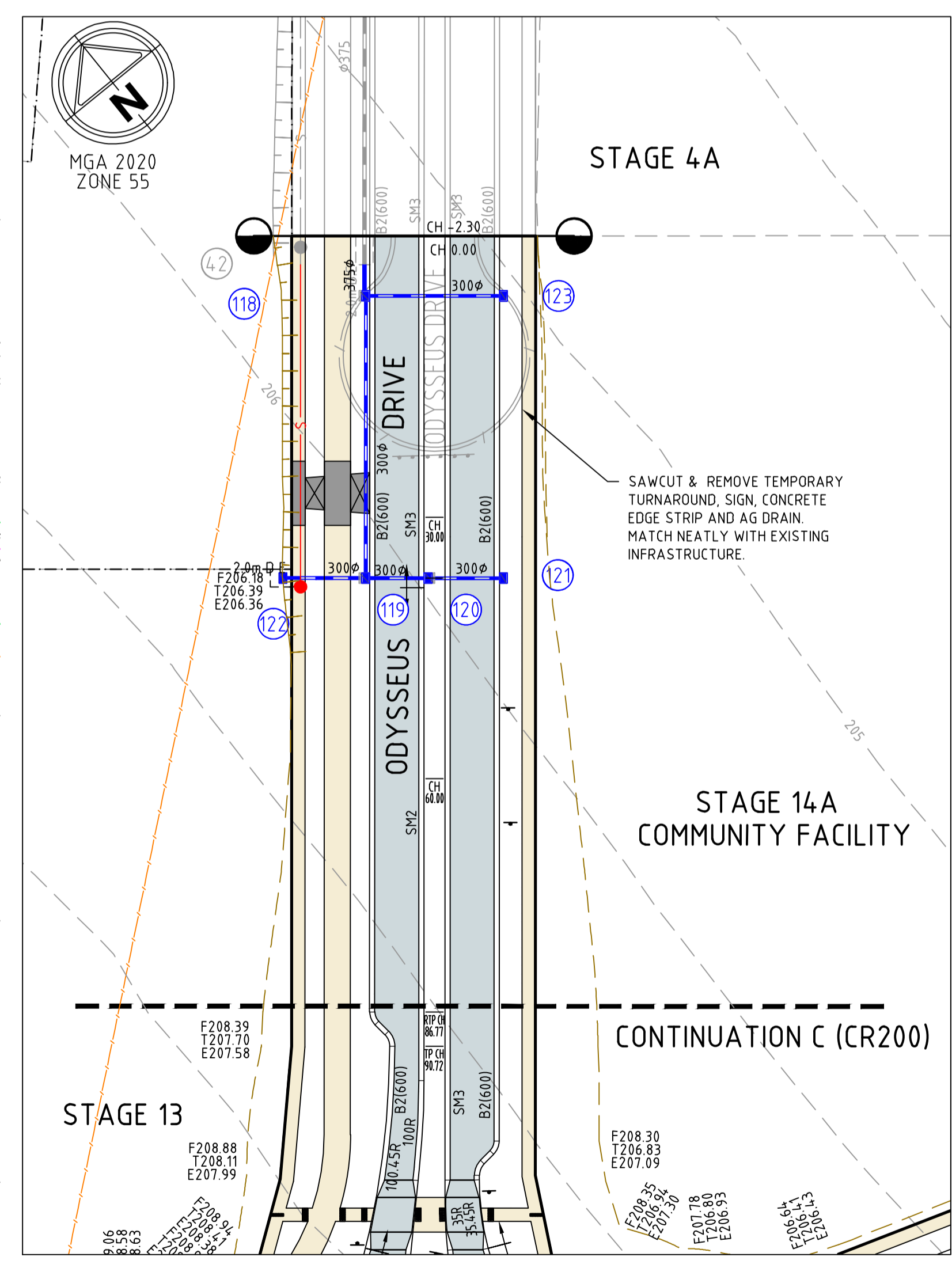
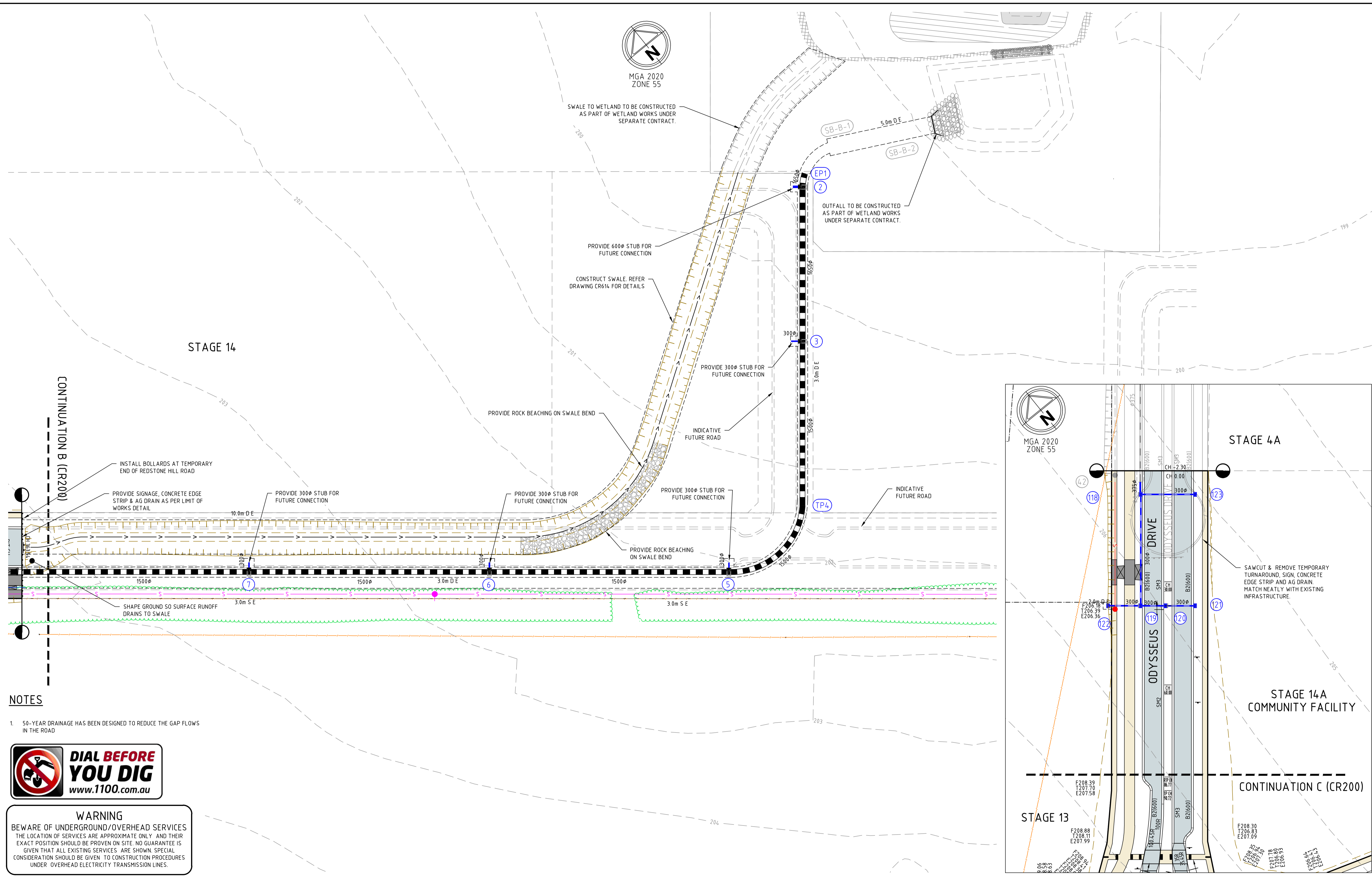
Designed
H.HOGGARD
Authorised
J.POYNER



Checked
J.POYNER
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
FACE PLAN - SHEET 2
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION Drg No **31066CR201** Rev **0**



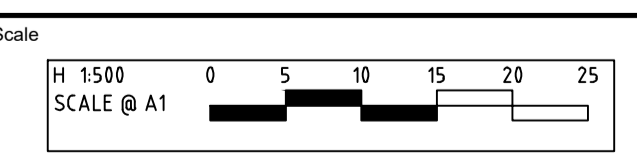
NOTES

1. 50-YEAR DRAINAGE HAS BEEN DESIGNED TO REDUCE THE GAP FLOWS IN THE ROAD



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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	MINOR UPDATE TO LIMIT OF WORKS	M.T-S	17/07/24
C	SWALE TRANSITION AMENDED, OTHER AMENDMENTS	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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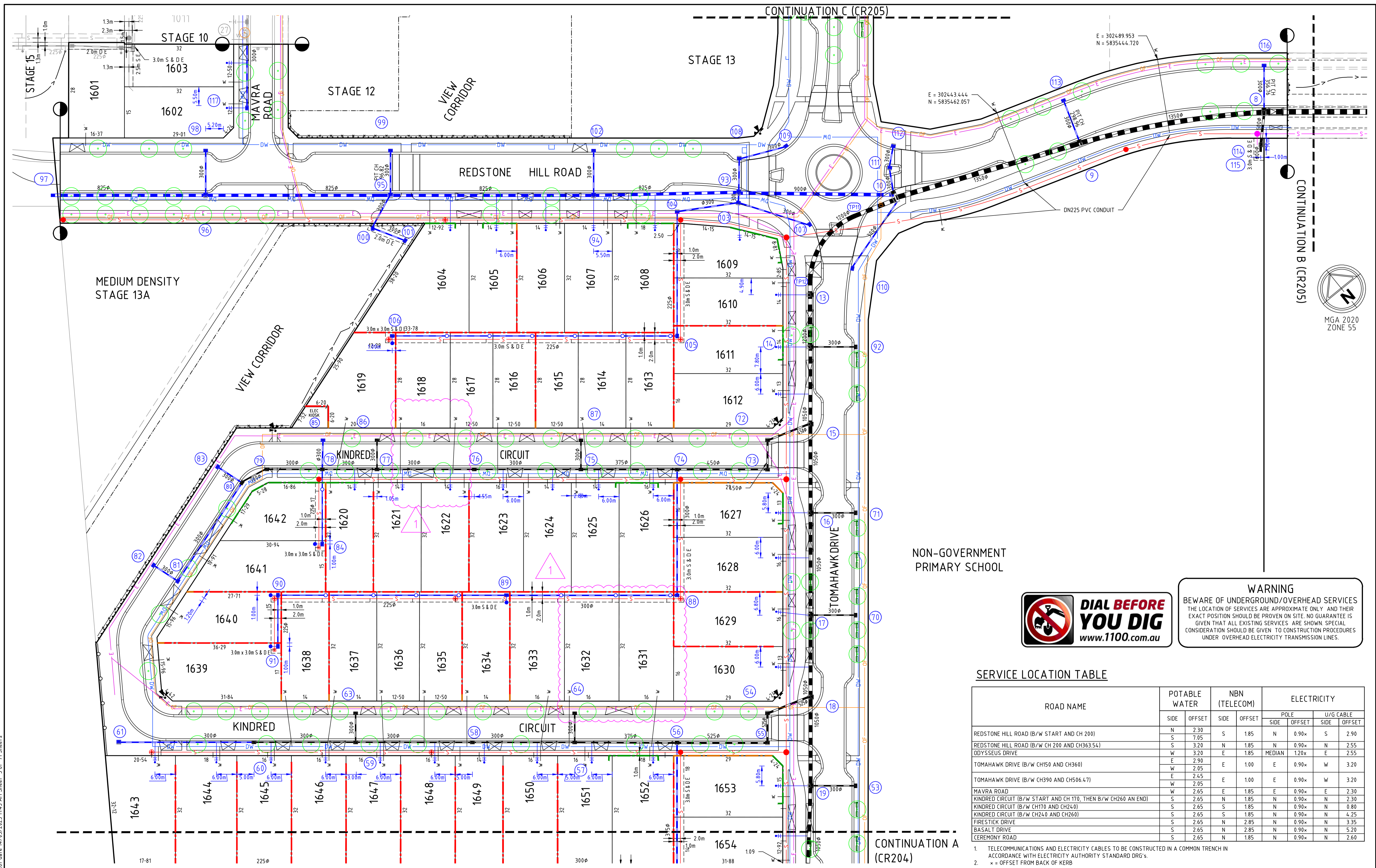
Date
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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
FACE PLAN - SHEET 3
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

Drg No
CONSTRUCTION 310066CR202

Rev
0

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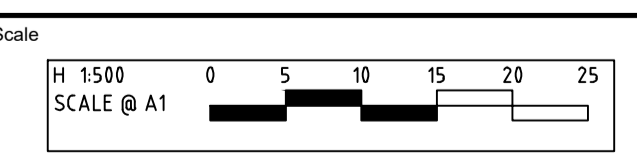
SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		NBN (TELECOM)		ELECTRICITY			
	SIDE	OFFSET	SIDE	OFFSET	POLE SIDE	POLE OFFSET	U/G CABLE SIDE	U/G CABLE OFFSET
REDSTONE HILL ROAD (B/W START AND CH 200)	N	2.30	S	1.85	N	0.90x	S	2.90
REDSTONE HILL ROAD (B/W CH 200 AND CH363.54)	S	7.05	N	1.85	N	0.90x	N	2.55
ODYSSEUS DRIVE	W	3.20	E	1.85	MEDIAN	1.20x	E	2.55
TOMAHAWK DRIVE (B/W CH150 AND CH360)	E	2.90	E	1.00	E	0.90x	W	3.20
	W	2.05						
TOMAHAWK DRIVE (B/W CH390 AND CH506.47)	E	2.45	E	1.00	E	0.90x	W	3.20
	W	2.05						
MAVRA ROAD	W	2.65	E	1.85	E	0.90x	E	2.30
KINDRED CIRCUIT (B/W START AND CH 170, THEN B/W CH260 AN END)	S	2.65	N	1.85	N	0.90x	N	2.30
KINDRED CIRCUIT (B/W CH170 AND CH240)	S	2.65	S	1.85	N	0.90x	N	0.80
KINDRED CIRCUIT (B/W CH240 AND CH260)	S	2.65	S	1.85	N	0.90x	N	4.25
FIRESTICK DRIVE	S	2.65	N	2.85	N	0.90x	N	3.35
BASALT DRIVE	S	2.65	N	2.85	N	0.90x	N	5.20
CEREMONY ROAD	S	2.65	N	1.85	N	0.90x	N	2.60

1. TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRG's.
2. x = OFFSET FROM BACK OF KERB

file name: 31066CR203.dwg, layout: name: CR203, plotted by: Luke Russell, file location: G:\31066\31066.dwg, V:\AKAD\plot date: 11/03/2025 11:42 AM, Sheet: 5 of 71 Sheets

Rev	Amendments	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	MINOR UPDATE TO DRAINAGE AT LIMIT OF WORKS	M.R	20/09/24
C	SERVICE LOCATIONS UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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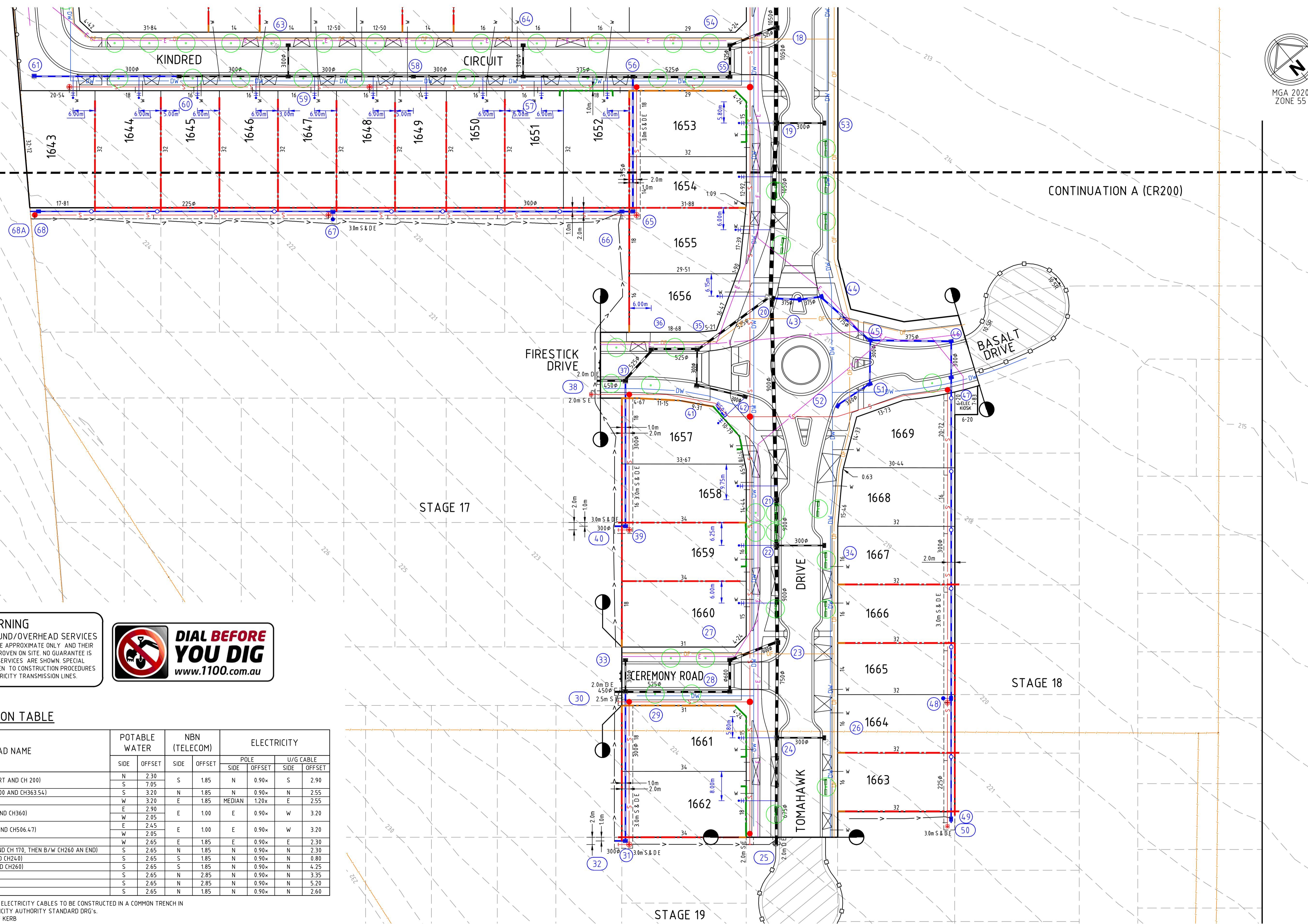
 Checked
 J.POYNER

 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
SERVICES PLAN - SHEET 1
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION

Drg No: **31066CR203** Rev: **1**



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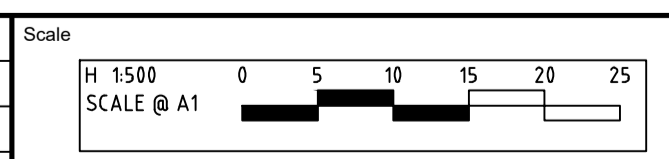


SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		NBN (TELECOM)		ELECTRICITY			
	SIDE	OFFSET	SIDE	OFFSET	POLE	U/G CABLE		
					SIDE	OFFSET	SIDE	OFFSET
REDSTONE HILL ROAD (B/W START AND CH 200)	N	2.30	S	1.85	N	0.90x	S	2.90
REDSTONE HILL ROAD (B/W CH 200 AND CH363.54)	S	7.05	N	1.85	N	0.90x	N	2.55
ODYSSEUS DRIVE	W	3.20	E	1.85	MEDIAN	1.20x	E	2.55
TOMAHAWK DRIVE (B/W CH150 AND CH360)	E	2.90	E	1.00	E	0.90x	W	3.20
TOMAHAWK DRIVE (B/W CH390 AND CH506.47)	W	2.05	E	1.00	E	0.90x	W	3.20
MAVRA ROAD	W	2.65	E	1.85	E	0.90x	E	2.30
KINDRED CIRCUIT (B/W START AND CH 170, THEN B/W CH260 AN END)	S	2.65	N	1.85	N	0.90x	N	2.30
KINDRED CIRCUIT (B/W CH170 AND CH240)	S	2.65	S	1.85	N	0.90x	N	0.80
KINDRED CIRCUIT (B/W CH240 AND CH260)	S	2.65	S	1.85	N	0.90x	N	4.25
FIRESTICK DRIVE	S	2.65	N	2.85	N	0.90x	N	3.35
BASALT DRIVE	S	2.65	N	2.85	N	0.90x	N	5.20
CEREMONY ROAD	S	2.65	N	1.85	N	0.90x	N	2.60

1. TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRG'S.
2. * = OFFSET FROM BACK OF KERB

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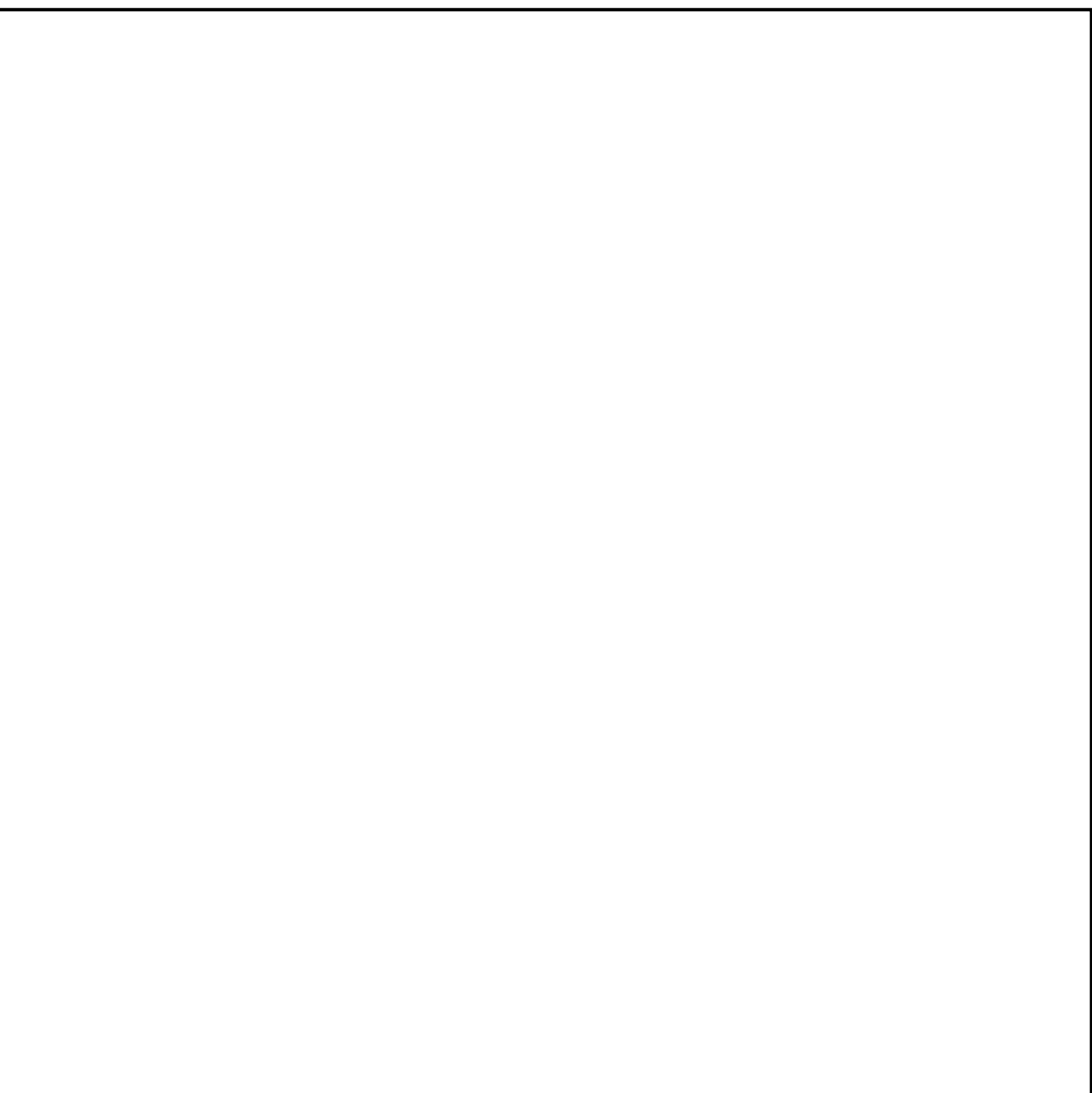
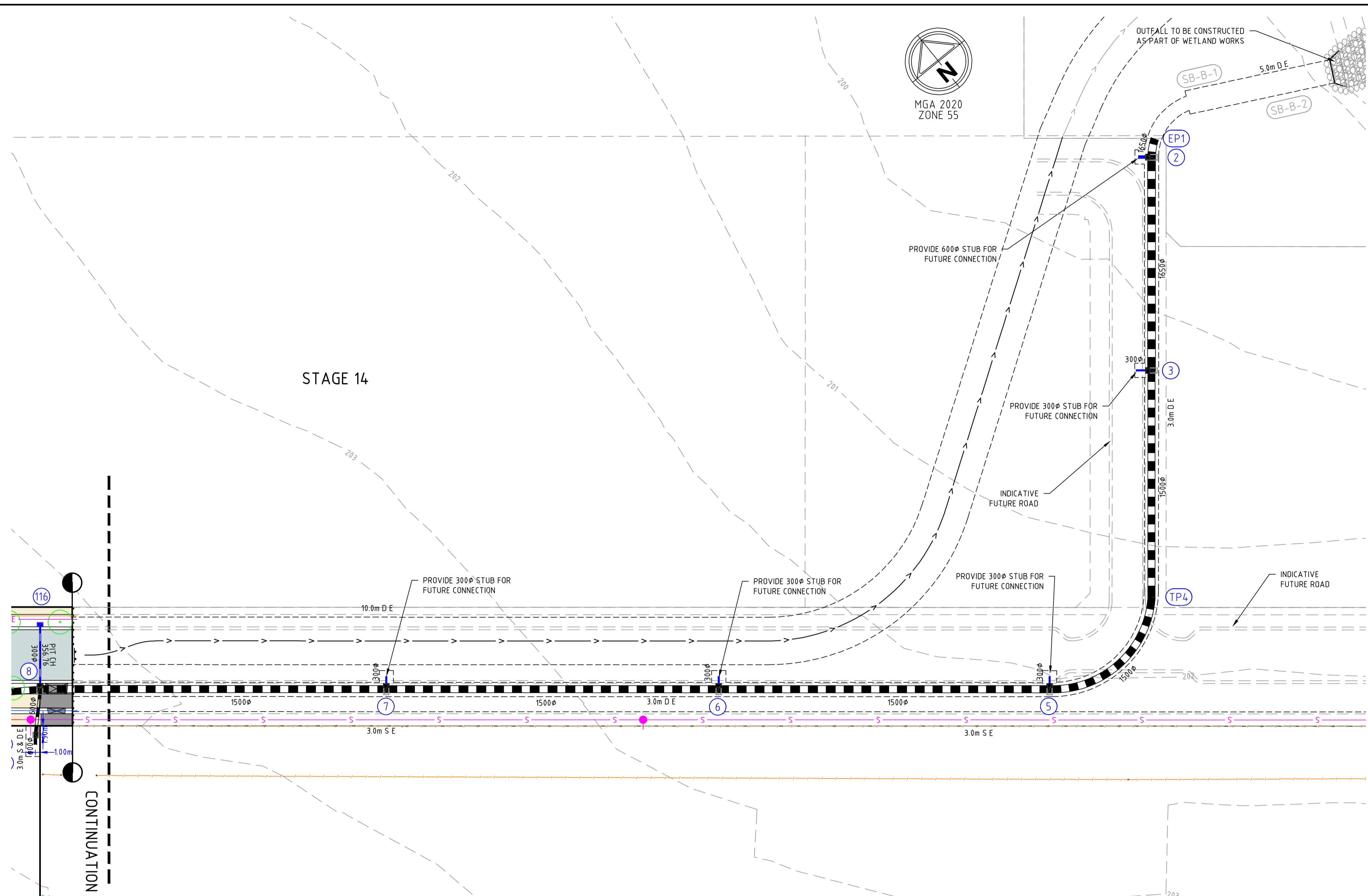
Communities Designed for Living
 Designed by H.HOGGARD
 Authorised by J.POYNER



Checked by J.POYNER
 Date: APRIL 2024

REDSTONE ESTATE
STAGE 16
 ROAD AND DRAINAGE
 SERVICES PLAN - SHEET 2
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

CONSTRUCTION Drg No 31066CR204 Rev 0



SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		NBN (TELECOM)		ELECTRICITY			
	SIDE	OFFSET	SIDE	OFFSET	POLE		U/G CABLE	
					SIDE	OFFSET	SIDE	OFFSET
REDSTONE HILL ROAD (B/W START AND CH 200)	N	2.30	S	1.85	N	0.90x	S	2.90
REDSTONE HILL ROAD (B/W CH 200 AND CH363.54)	S	7.05			N	0.90x	N	2.55
ODYSSEUS DRIVE	W	3.20	E	1.85	MEDIAN	1.20x	E	2.55
TOMAHAWK DRIVE (B/W CH150 AND CH360)	E	2.90	E	1.00	E	0.90x	W	3.20
TOMAHAWK DRIVE (B/W CH390 AND CH506.47)	W	2.05	E	1.00	E	0.90x	W	3.20
MAVRA ROAD	W	2.65	E	1.85	E	0.90x	E	2.30
KINDRED CIRCUIT (B/W START AND CH 170, THEN B/W CH260 AN END)	S	2.65	N	1.85	N	0.90x	N	2.30
KINDRED CIRCUIT (B/W CH170 AND CH240)	S	2.65	S	1.85	N	0.90x	N	0.80
KINDRED CIRCUIT (B/W CH240 AND CH260)	S	2.65	S	1.85	N	0.90x	N	4.25
FIRESTICK DRIVE	S	2.65	N	2.85	N	0.90x	N	3.35
BASALT DRIVE	S	2.65	N	2.85	N	0.90x	N	5.20
CEREMONY ROAD	S	2.65	N	1.85	N	0.90x	N	2.60

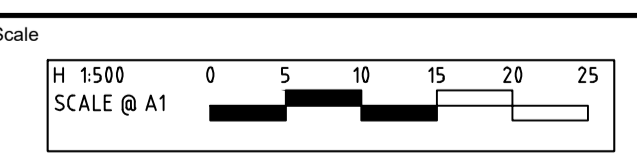
- TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRG's.
- x = OFFSET FROM BACK OF KERB



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file name: 31066CR205.dwg, layout: name: CR205, method: AutoCAD, plot date: 14/03/2025, time: 11:42 AM, sheet: 7 of 71 sheets

Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	SERVICE LOCATION TABLE UPDATE	M.R	20/09/24
D	MINOR UPDATE TO LIMIT OF WORKS	M.T-S	17/07/24
C	SERVICE LOCATIONS UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22
Rev	Amendments	Approved	Date



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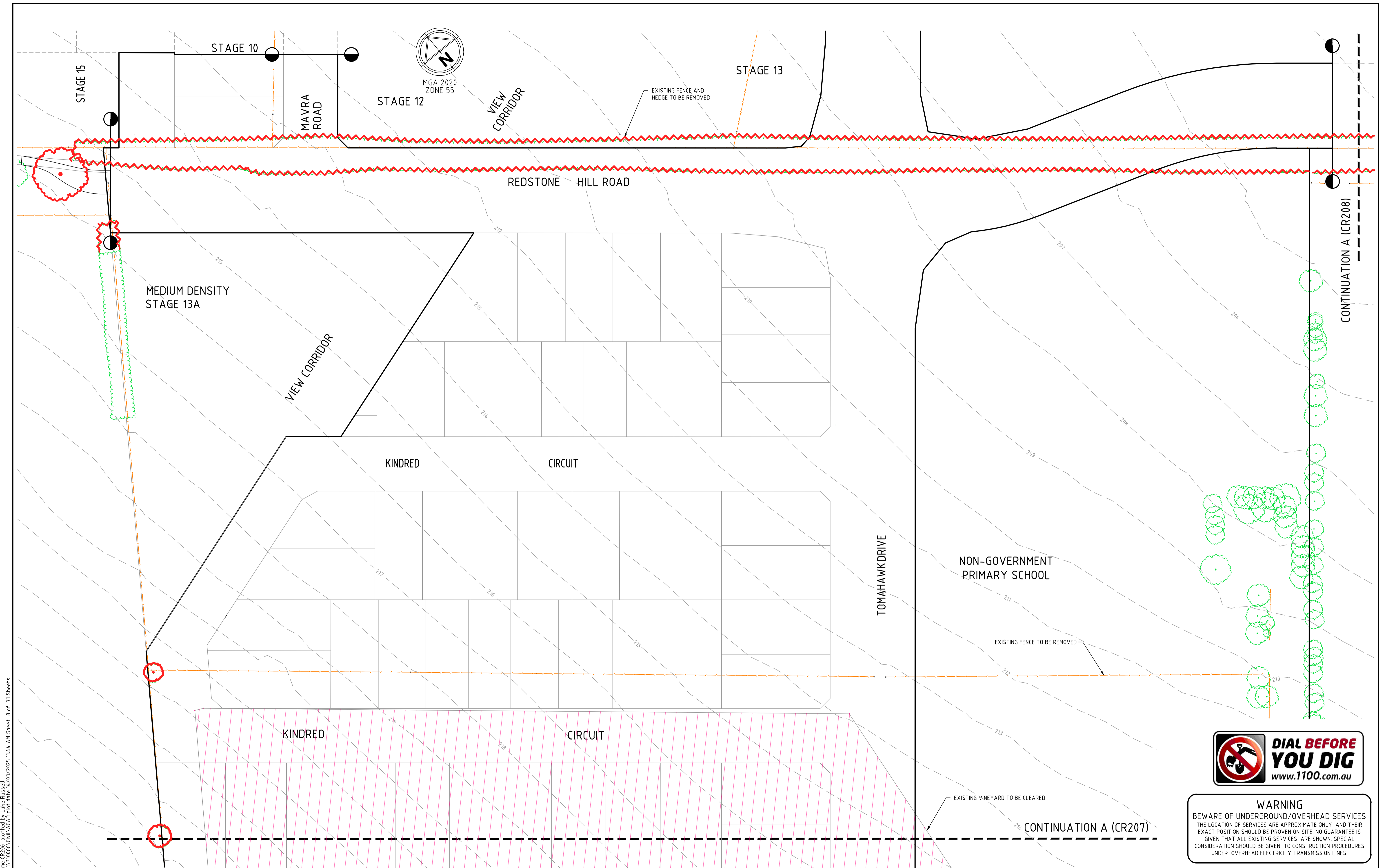
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REDSTONE ESTATE
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SERVICES PLAN - SHEET 3
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CONSTRUCTION Drg No **31066CR205** Rev **0**

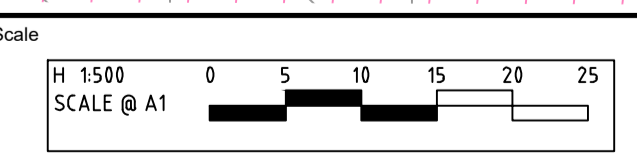


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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
B	ISSUED TO COUNCIL	M.T-S	26/04/24
A	ISSUED TO VILLOWOOD	M.T-S	25/01/24

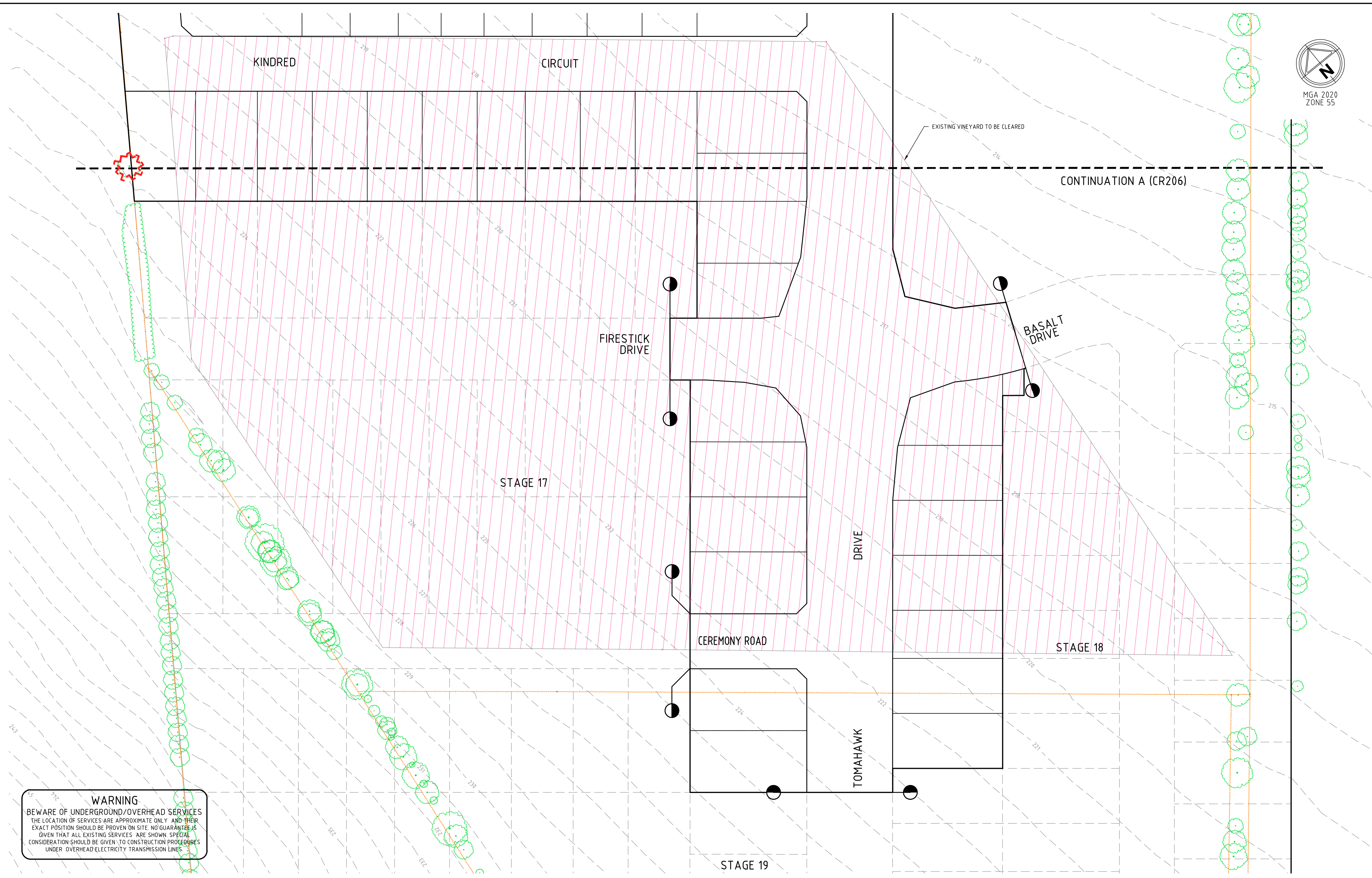


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 Checked J.POYNER
 Date APRIL 2024

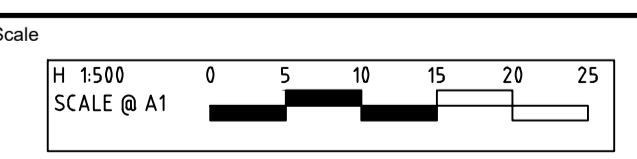
REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
EXISTING SITE PLAN - SHEET 1
 HUME CITY COUNCIL
 VILLOWOOD PROPERTIES
CONSTRUCTION Drg No **31066CR206** Rev **0**



WARNING
 BEWARE OF UNDERGROUND/OVERHEAD SERVICES
 THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

file name: 310066CR207.dwg, layout: rnsd, cadd, plotted by: Luke Russell, file location: G:\310066\310066.dwg, plot date: 11/03/2025 11:44 AM, Sheet: 9 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
B	ISSUED TO COUNCIL	M.T-S	26/04/24
A	ISSUED TO VILLAWOOD	M.T-S	25/01/24



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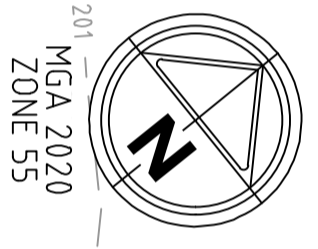
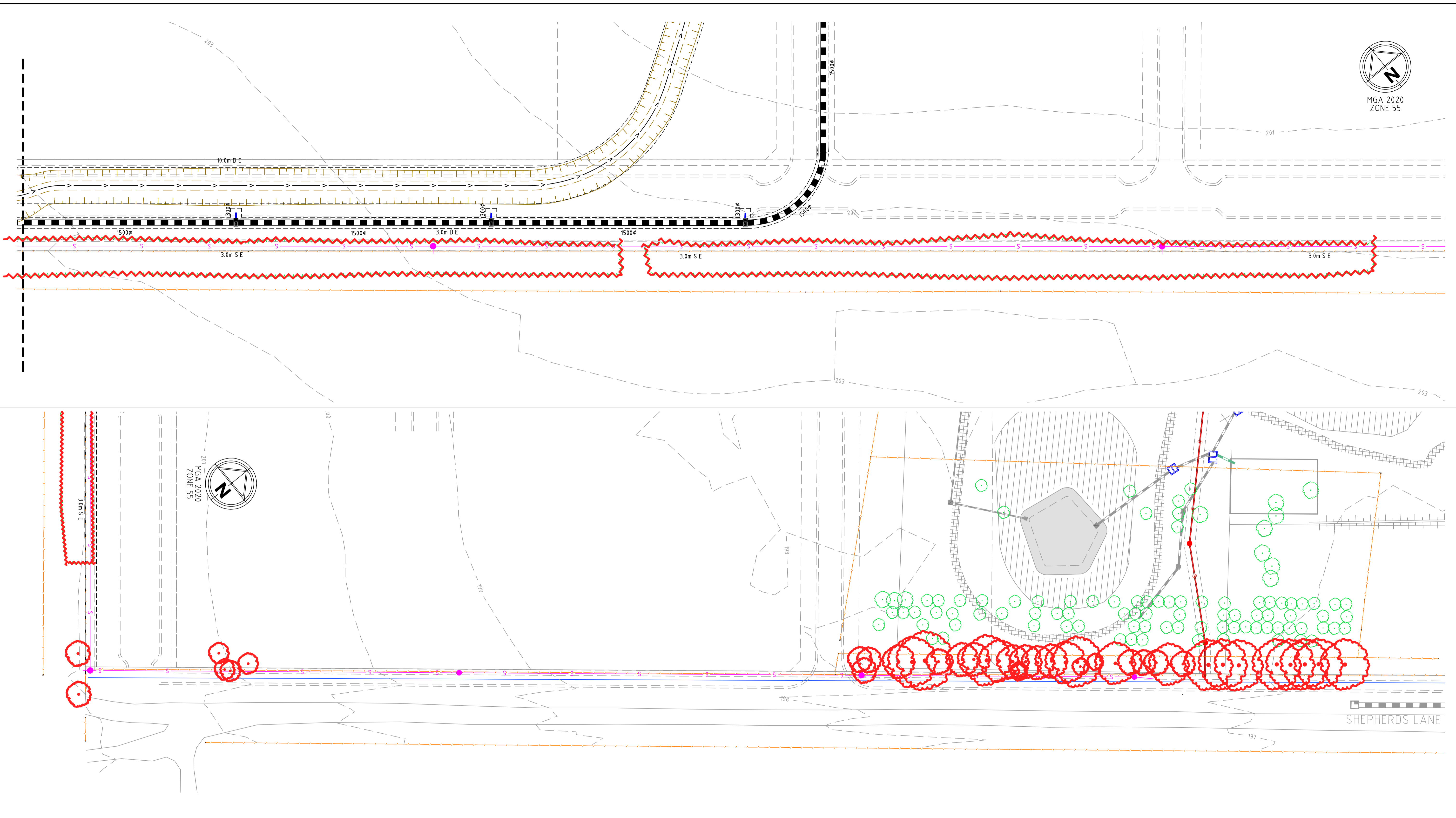
L6 414 LA TROBE STREET PO BOX 16084 MELBOURNE
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Communities Designed for Living
 Designed
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 Authorised
 J.POYNER

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 Checked
 J.POYNER
 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
EXISTING SITE PLAN - SHEET 2
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION

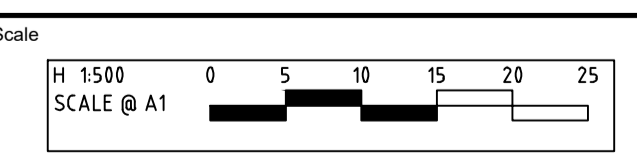
Drg No
310066CR207
 Rev
0



WARNING
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file name: 31066CR208.dwg, layout: rans_CD208, plot date: 03/03/2025 11:44, AM Sheet: 10 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
A	ISSUED TO COUNCIL	M.T-S	26/04/24



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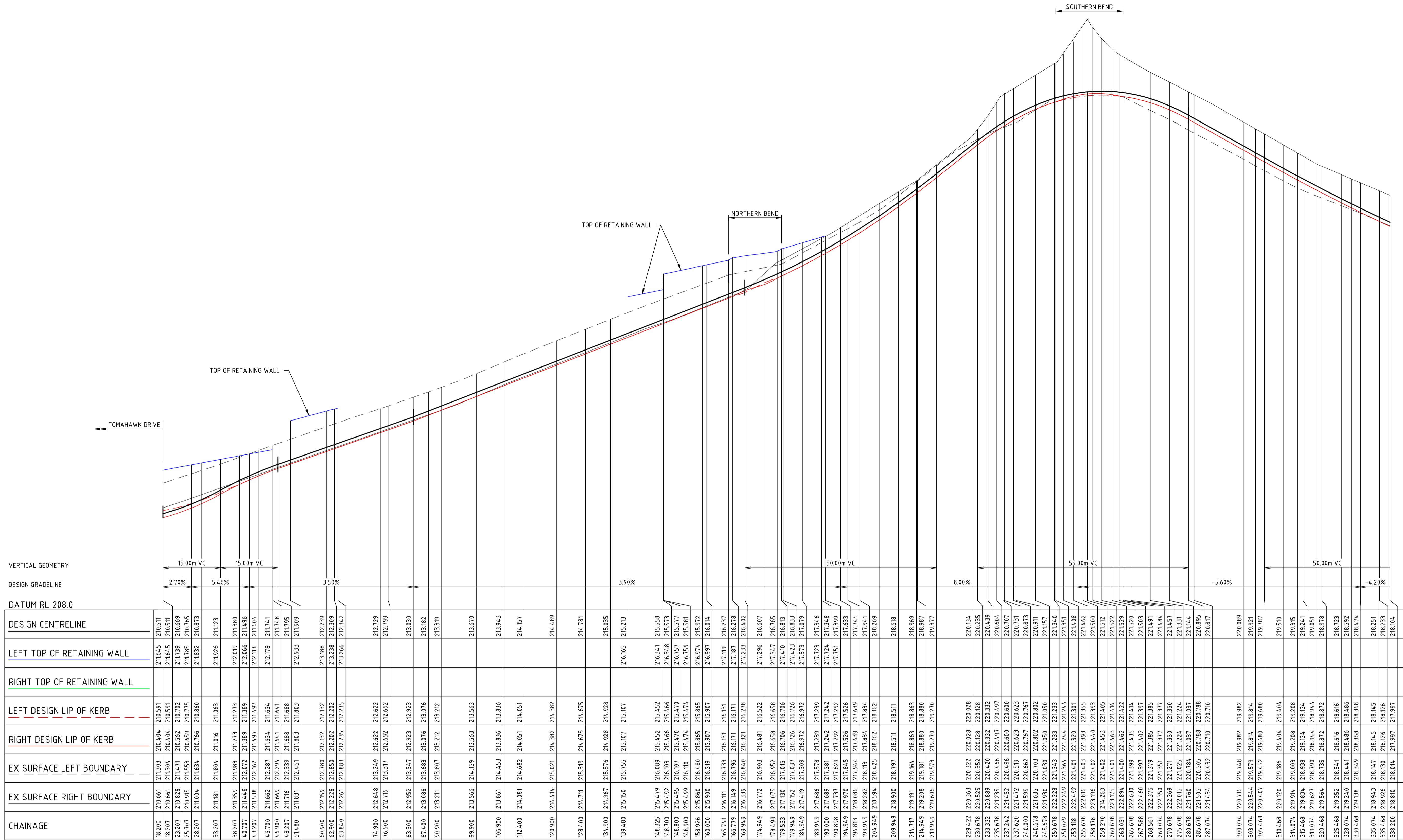
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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
EXISTING SITE PLAN - SHEET 3
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION

Drg No: 31066CR208 Rev: 0

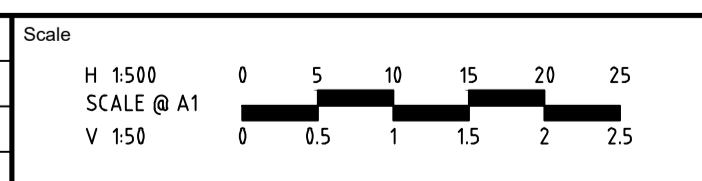
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CHAINAGE	EX SURFACE RIGHT BOUNDARY	EX SURFACE LEFT BOUNDARY	RIGHT DESIGN LIP OF KERB	LEFT DESIGN LIP OF KERB	RIGHT TOP OF RETAINING WALL	LEFT TOP OF RETAINING WALL	DESIGN CENTRELINE
18.200	210.661	211.303	210.404	210.591	211.645	210.511	210.511
18.207	210.661	211.304	210.404	210.591	211.645	210.511	210.511
23.207	210.828	211.471	210.562	210.702	211.739	210.669	210.669
25.707	210.915	211.553	210.659	210.775	211.785	210.765	210.765
28.207	211.004	211.634	210.766	210.860	211.832	210.873	210.873
35.207	211.181	211.804	211.016	211.063	211.926	211.123	211.123
38.207	211.359	211.983	211.273	211.273	212.019	211.380	211.380
40.707	211.448	212.072	211.389	211.389	212.066	211.496	211.496
43.207	211.538	212.162	211.497	211.497	212.113	211.604	211.604
46.700	211.632	212.287	211.634	211.634	212.178	211.741	211.741
48.900	211.669	212.294	211.641	211.641	212.174	211.748	211.748
48.900	211.716	212.339	211.688	211.688	212.179	211.795	211.795
51.480	211.831	212.451	211.803	211.803	212.233	211.909	211.909
60.900	212.159	212.780	212.132	212.132	213.188	212.239	212.239
62.900	212.228	212.850	212.202	212.202	213.238	212.309	212.309
63.840	212.261	212.883	212.235	212.235	213.266	212.342	212.342
74.900	212.648	213.249	212.622	212.622	212.729	212.729	212.729
76.900	212.719	213.317	212.692	212.692	212.799	212.799	212.799
83.500	212.952	213.547	212.923	212.923	213.030	213.030	213.030
87.400	213.088	213.683	213.076	213.076	213.182	213.182	213.182
90.900	213.211	213.807	213.212	213.212	213.319	213.319	213.319
99.900	213.566	214.159	213.563	213.563	213.670	213.670	213.670
106.900	213.861	214.453	213.836	213.836	213.943	213.943	213.943
112.400	214.081	214.682	214.051	214.051	214.157	214.157	214.157
120.900	214.414	215.021	214.382	214.382	214.489	214.489	214.489
128.400	214.711	215.319	214.675	214.675	214.781	214.781	214.781
134.900	214.967	215.576	214.928	214.928	215.035	215.035	215.035
139.480	215.150	215.755	215.107	215.107	215.219	215.219	215.219
148.325	215.479	216.089	215.452	215.452	216.341	215.558	215.558
148.700	215.492	216.103	215.466	215.466	216.348	215.573	215.573
148.800	215.495	216.110	215.470	215.470	216.357	215.577	215.577
148.900	215.499	216.116	215.474	215.474	216.365	215.581	215.581
158.926	215.860	216.480	215.865	215.865	216.974	215.972	215.972
160.000	215.900	216.519	215.907	215.907	216.997	216.014	216.014
165.741	216.111	216.733	216.131	216.131	217.119	216.237	216.237
166.779	216.149	216.796	216.171	216.171	217.180	216.278	216.278
169.949	216.339	216.840	216.321	216.321	217.233	216.402	216.402
174.949	216.772	216.903	216.481	216.481	217.296	216.607	216.607
178.499	217.075	216.952	216.658	216.658	217.347	216.765	216.765
179.533	217.130	217.015	216.706	216.706	217.400	216.813	216.813
179.949	217.152	217.037	216.726	216.726	217.423	216.833	216.833
184.949	217.419	217.309	216.972	216.972	217.573	217.079	217.079
189.949	217.686	217.578	217.239	217.239	217.723	217.346	217.346
190.000	217.689	217.581	217.242	217.242	217.724	217.348	217.348
194.949	217.970	217.845	217.526	217.526	217.751	217.399	217.399
196.813	218.086	217.944	217.639	217.639	217.633	217.633	217.633
199.949	218.282	218.113	217.834	217.834	217.941	217.941	217.941
204.949	218.594	218.425	218.162	218.162	218.269	218.269	218.269
209.949	218.900	218.797	218.511	218.511	218.618	218.618	218.618
214.717	219.191	219.164	218.863	218.863	218.969	218.969	218.969
214.949	219.208	219.181	218.880	218.880	218.987	218.987	218.987
219.949	219.606	219.573	219.270	219.270	219.377	219.377	219.377
229.422	220.363	220.322	220.028	220.028	220.134	220.134	220.134
230.678	220.525	220.352	220.188	220.188	220.235	220.235	220.235
233.332	220.889	220.420	220.332	220.332	220.439	220.439	220.439
235.678	221.235	220.466	220.497	220.497	220.707	220.707	220.707
237.620	221.452	220.496	220.600	220.600	220.707	220.707	220.707
240.000	221.599	220.662	220.767	220.767	220.731	220.731	220.731
240.678	221.635	220.703	220.802	220.802	220.911	220.911	220.911
245.678	221.930	221.030	221.050	221.050	221.157	221.157	221.157
250.678	222.228	221.343	221.233	221.233	221.340	221.340	221.340
251.029	222.249	221.364	221.244	221.244	221.351	221.351	221.351
253.188	222.452	221.401	221.320	221.301	221.408	221.408	221.408
255.678	222.816	221.403	221.393	221.393	221.462	221.462	221.462
259.770	224.263	221.402	221.440	221.440	221.500	221.500	221.500
260.678	223.175	221.401	221.463	221.463	221.512	221.512	221.512
263.031	222.894	221.400	221.462	221.462	221.529	221.529	221.529
265.678	222.630	221.399	221.435	221.435	221.520	221.520	221.520
267.588	222.460	221.397	221.402	221.397	221.503	221.503	221.503
268.561	222.376	221.379	221.385	221.385	221.491	221.491	221.491
269.074	222.350	221.351	221.377	221.377	221.484	221.484	221.484
270.678	222.269	221.271	221.350	221.350	221.457	221.457	221.457
275.678	222.015	221.025	221.224	221.224	221.331	221.331	221.331
280.678	221.760	220.784	221.037	221.037	221.144	221.144	221.144
285.678	221.505	220.505	220.888	220.888	220.895	220.895	220.895
287.074	221.434	220.432	220.710	220.710	220.817	220.817	220.817
300.074	220.716	219.748	219.982	219.982	220.089	220.089	220.089
303.074	220.544	219.579	219.814	219.814	219.921	219.921	219.921
305.468	220.407	219.452	219.680	219.680	219.787	219.787	219.787
310.468	220.120	219.186	219.404	219.404	219.510	219.510	219.510
314.074	219.914	219.003	219.208	219.208	219.315	219.315	219.315
315.468	219.834	218.938	219.134	219.134	219.241	219.241	219.241
319.074	219.627	218.790	218.944	218.944	219.051	219.051	219.051
320.468	219.564	218.735	218.872	218.872	218.978	218.978	218.978
325.468	219.352	218.541	218.616	218.616	218.723	218.723	218.723
328.074	219.240	218.441	218.486	218.486	218.592	218.592	218.592
330.468	219.138	218.349	218.368	218.368	218.474	218.474	218.474
335.074	218.943	218.147	218.145	218.145	218.251	218.251	218.251
335.468	218.926	218.130	218.126	218.126	218.233	218.233	218.233
338.000	218.810	218.014	217.997	217.997	218.104	218.104	218.104

KINDRED CIRCUIT

Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	REMOVAL OF LOT 1643 RETAINING	M.T-S	17/07/24
C	MINOR AMENDMENTS	M.T-S	26/04/24
B	MINOR AMENDMENTS	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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Communities Designed for Living

 Designed by H.HOGGARD

 Authorised by J.POYNER

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 Checked by J.POYNER

 Date: APRIL 2024

REDSTONE ESTATE

STAGE 16

ROAD AND DRAINAGE

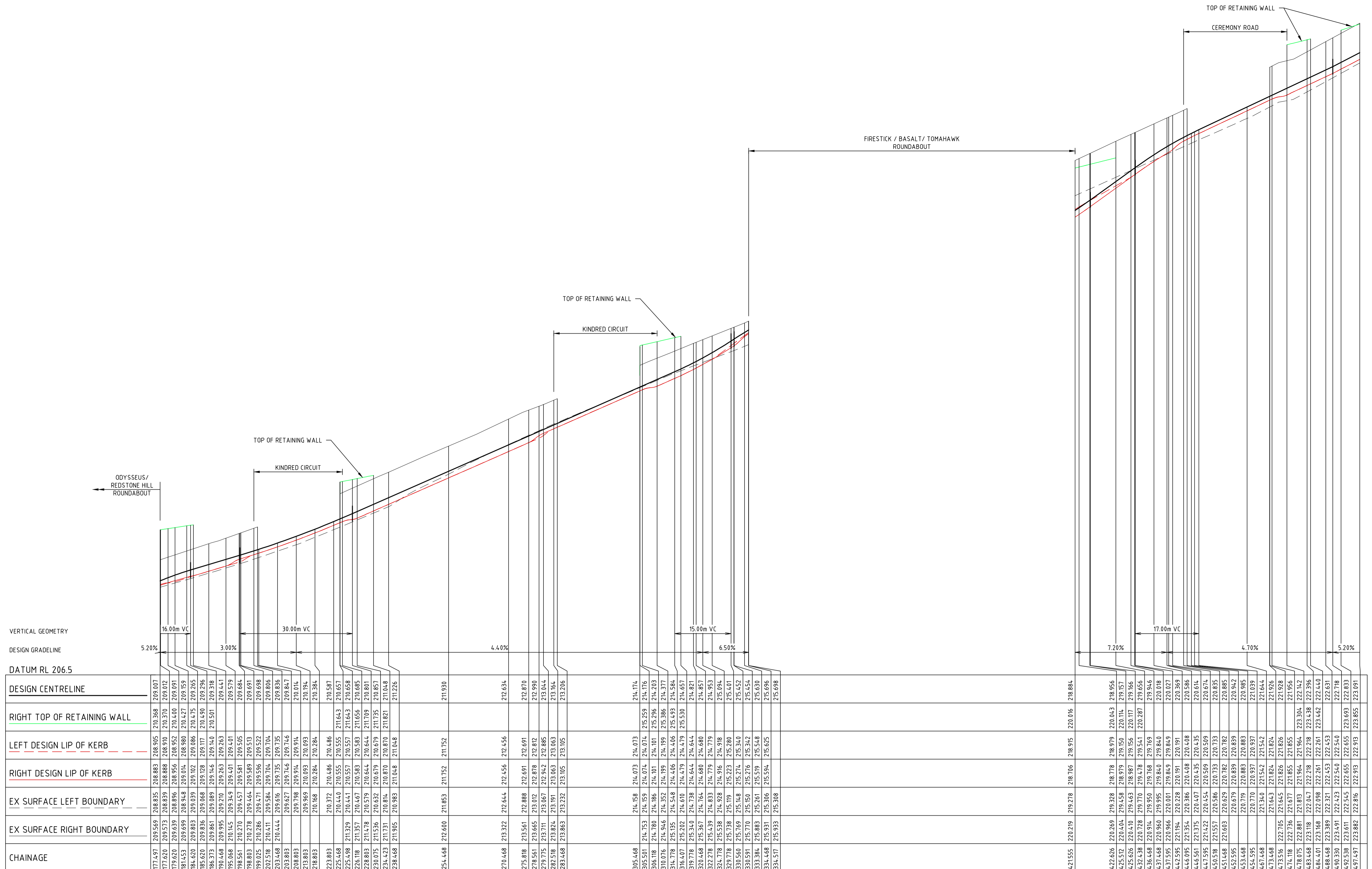
ROAD LONG SECTIONS - SHEET 1

 HUME CITY COUNCIL

 VILLAWOOD PROPERTIES

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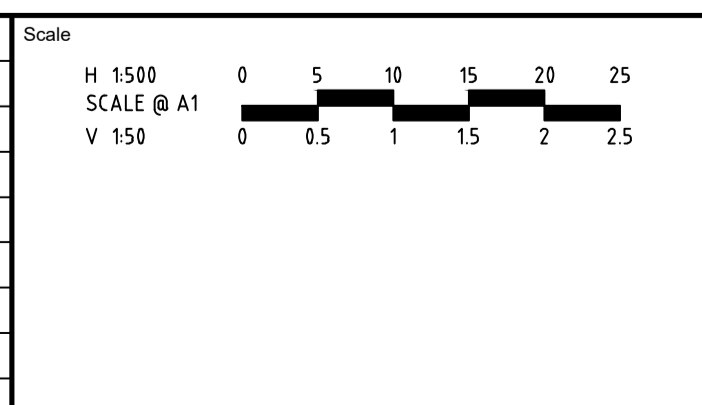
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CHAINAGE	EX SURFACE LEFT BOUNDARY	EX SURFACE RIGHT BOUNDARY	RIGHT DESIGN LIP OF KERB	LEFT DESIGN LIP OF KERB	RIGHT TOP OF RETAINING WALL	DESIGN CENTRELINE
177.497	209.569	208.835	208.883	208.905	210.368	209.007
177.620	209.573	208.839	208.888	208.910	210.370	209.012
179.620	209.639	208.896	208.956	208.952	210.400	209.091
181.453	209.699	208.948	209.014	208.980	210.427	209.159
184.620	209.803	209.039	209.102	209.086	210.475	209.265
186.373	209.861	209.089	209.146	209.140	210.501	209.318
190.468	209.995	209.210	209.263	209.263	210.501	209.318
195.068	210.145	209.349	209.401	209.401	210.501	209.318
198.561	210.270	209.457	209.581	209.581	210.501	209.318
198.803	210.278	209.464	209.589	209.589	210.501	209.318
199.025	210.286	209.471	209.596	209.596	210.501	209.318
202.518	210.411	209.584	209.704	209.704	210.501	209.318
203.468	210.444	209.616	209.735	209.735	210.501	209.318
203.803	209.627	209.746	209.746	209.746	210.501	209.318
208.803	209.968	209.916	209.916	210.016	210.501	209.318
213.803	209.969	209.917	209.917	210.017	210.501	209.318
218.803	210.168	210.284	210.284	210.384	210.501	209.318
223.803	210.372	210.486	210.486	210.587	210.501	209.318
225.468	210.440	210.555	210.555	211.643	210.457	209.058
225.498	211.329	210.441	210.557	210.557	211.643	209.058
226.718	210.357	210.467	210.583	210.583	211.656	210.685
228.803	211.478	210.579	210.644	210.644	211.709	210.801
230.075	211.536	210.632	210.679	210.679	211.735	210.857
234.423	211.731	210.814	210.870	210.870	211.821	211.048
238.468	211.905	210.983	211.048	211.048	211.821	211.048
254.468	212.600	211.853	211.752	211.752	211.930	211.930
270.468	213.322	212.644	212.456	212.456	212.634	212.634
275.818	213.561	212.888	212.691	212.691	212.870	212.870
278.561	213.665	213.012	212.878	212.878	212.990	212.990
279.775	213.711	213.067	212.942	212.885	213.044	213.044
282.518	213.824	213.191	213.063	213.063	213.164	213.164
283.468	213.863	213.232	213.105	213.105	213.206	213.206
305.468	214.158	214.073	214.073	214.073	214.174	214.174
305.501	214.753	214.159	214.074	214.074	215.259	214.716
306.718	214.780	214.186	214.101	214.101	215.296	214.203
314.778	214.946	214.352	214.199	214.199	215.386	214.377
316.407	215.135	214.548	214.406	214.406	215.493	214.584
316.407	215.202	214.610	214.479	214.479	215.530	214.657
319.778	215.340	214.738	214.644	214.644	214.821	214.821
320.468	215.367	214.764	214.680	214.680	214.857	214.857
322.278	215.439	214.833	214.779	214.779	214.953	214.953
324.778	215.538	214.928	214.916	214.916	215.094	215.094
329.778	215.738	215.119	215.223	215.223	215.401	215.401
330.560	215.769	215.168	215.274	215.340	215.452	215.452
330.591	215.770	215.150	215.276	215.342	215.454	215.454
333.384	215.883	215.261	215.519	215.548	215.630	215.630
334.468	215.931	215.306	215.594	215.625	215.696	215.696
334.517	215.933	215.308	215.594	215.625	215.698	215.698
421.555	220.219	218.278	218.706	218.915	220.016	218.884
422.626	220.269	219.328	218.778	218.979	220.043	218.956
425.512	220.404	219.458	218.979	219.150	220.114	219.157
425.626	220.410	219.463	218.987	219.156	220.117	219.166
432.438	220.728	219.770	219.478	219.541	220.287	219.656
436.468	220.914	219.950	219.768	219.769	219.946	219.946
437.468	220.960	219.995	219.840	219.840	220.018	220.018
437.595	220.966	220.001	219.849	219.849	220.027	220.027
442.595	221.184	220.278	220.191	220.191	220.369	220.369
446.095	221.354	220.386	220.408	220.408	220.586	220.586
446.561	221.375	220.407	220.435	220.435	220.614	220.614
447.595	221.422	220.454	220.509	220.509	220.674	220.674
450.518	221.557	220.586	220.733	220.733	220.835	220.835
451.468	221.603	220.629	220.782	220.782	220.885	220.885
452.595	220.679	220.839	220.839	220.942	220.942	220.942
454.468	220.719	220.883	220.883	220.985	220.985	220.985
454.595	220.770	220.937	220.937	221.039	221.039	221.039
467.468	221.340	221.542	221.542	221.644	221.644	221.644
473.468	221.643	221.824	221.824	221.926	221.926	221.926
473.516	222.705	221.645	221.826	221.826	221.928	221.928
474.118	222.736	221.677	221.855	221.855	221.956	221.956
478.075	222.881	221.813	221.964	221.964	222.142	222.142
483.468	223.118	222.047	222.218	222.218	222.338	222.338
484.401	223.168	222.098	222.261	222.261	222.440	222.440
488.468	223.389	222.321	222.453	222.453	222.631	222.631
490.330	223.491	222.423	222.540	222.540	222.718	222.718
492.538	223.611	222.545	222.655	222.655	222.833	222.833
497.497	223.882	222.816	222.913	222.913	223.855	223.855

TOMAHAWK DRIVE

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	MINOR AMENDMENTS	M.T-S	26/04/24
B	LIMIT OF WORKS CHANGED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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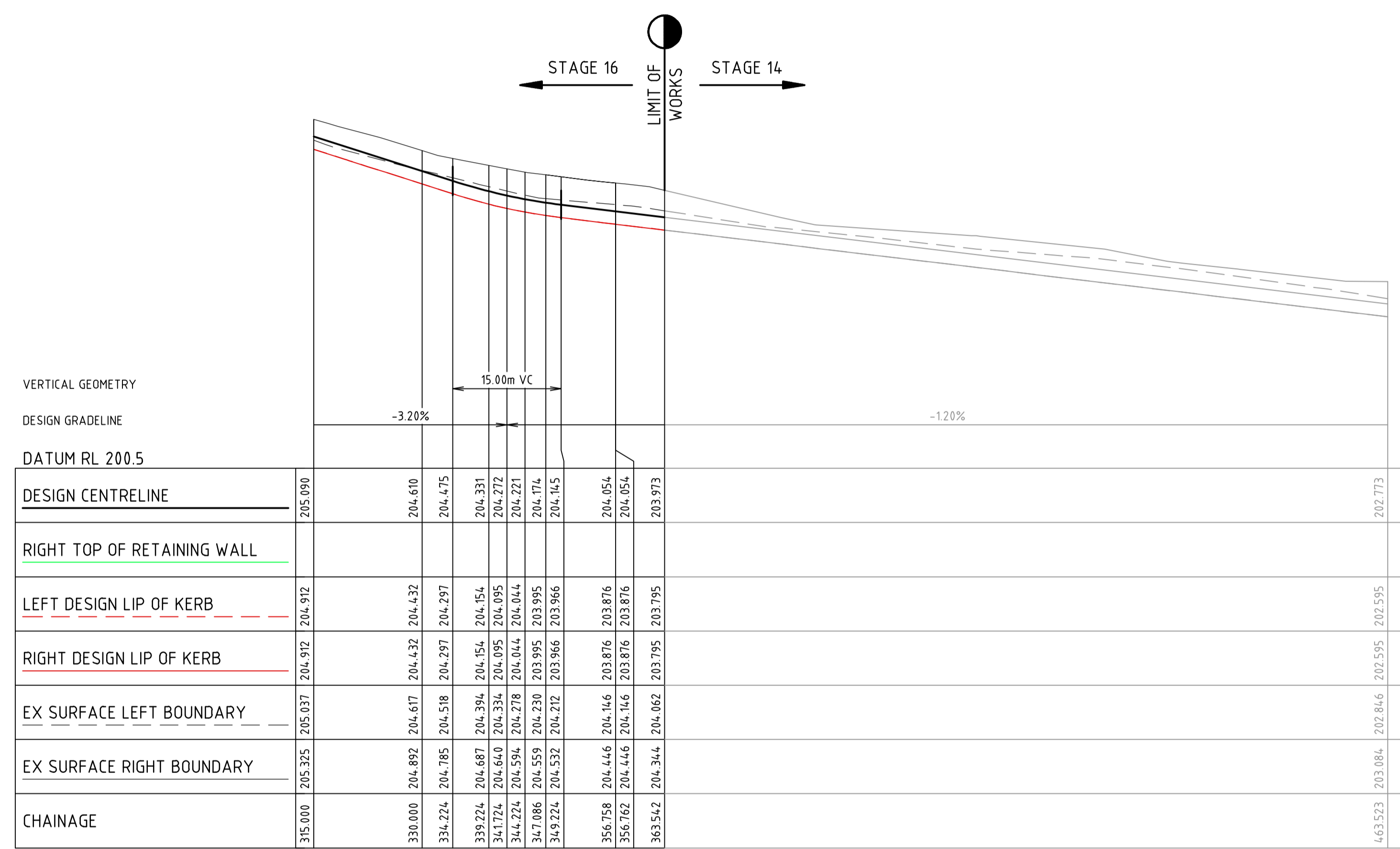
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD LONG SECTIONS - SHEET 3
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

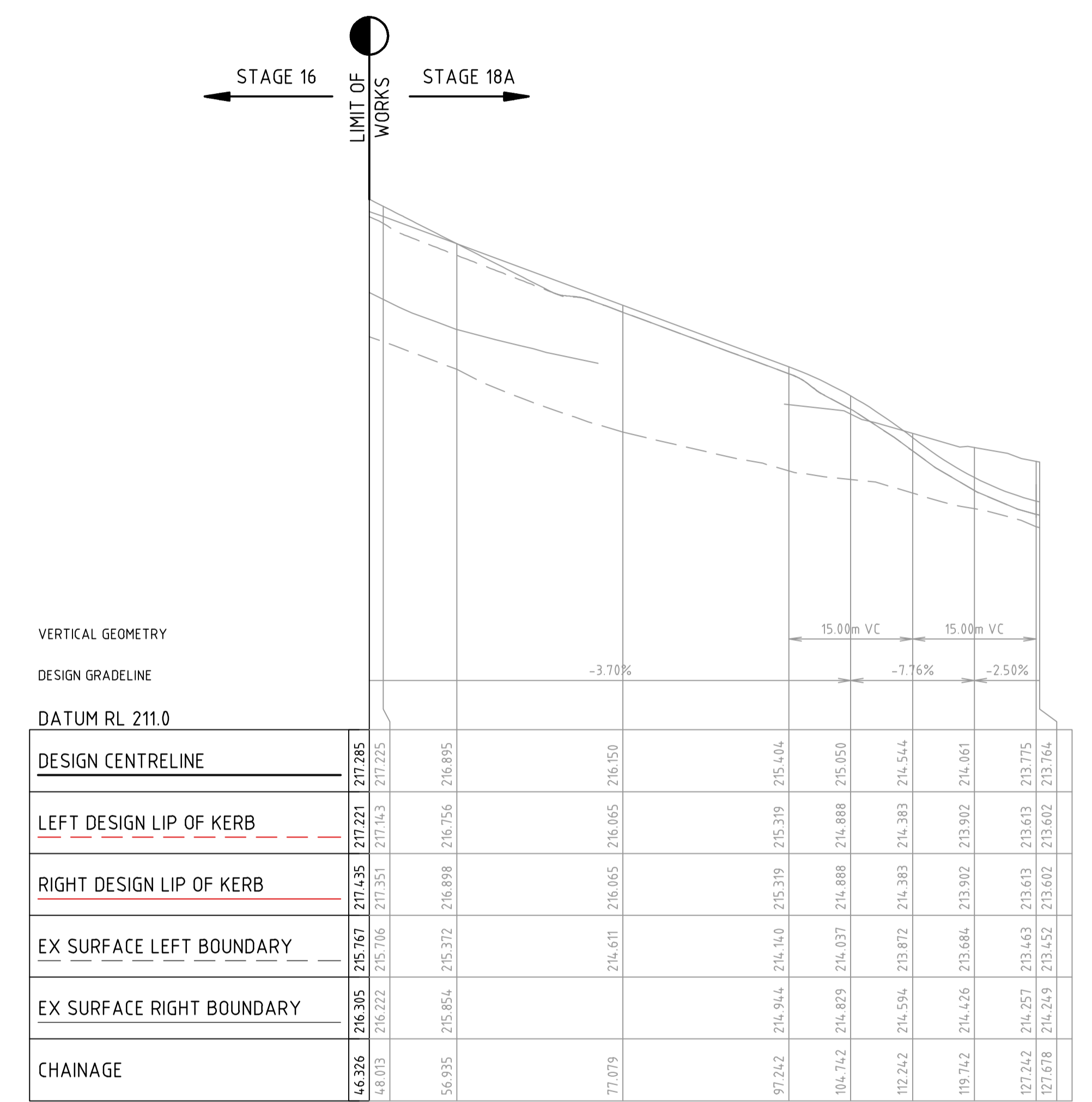
CONSTRUCTION

Drg No **31066CR302** Rev **0**

file name: 31066CR306.dwg, layout: rans_CDR306, plotted by: Luke Russell, file location: G:\310666\work\A4\A4.plt, date: 16/03/2025 11:45 AM, Sheet: 17 of 71 Sheets

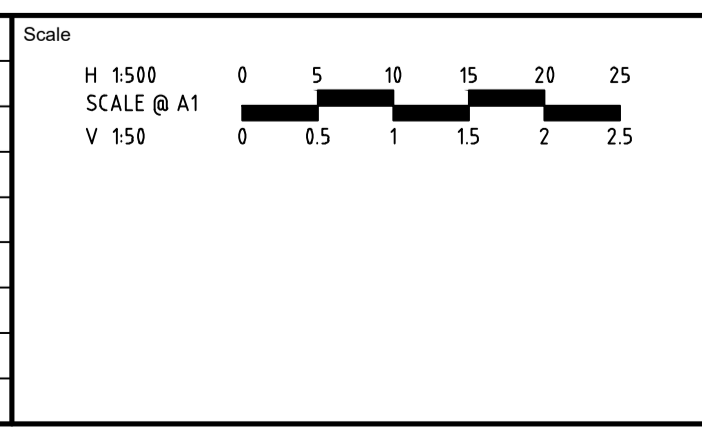


REDSTONE HILL ROAD



BASALT DRIVE

0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	BASALT SECTION ADDED	M.T-S	26/04/24
B	LIMIT OF WORKS CHANGED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22
Rev	Amendments	Approved	Date



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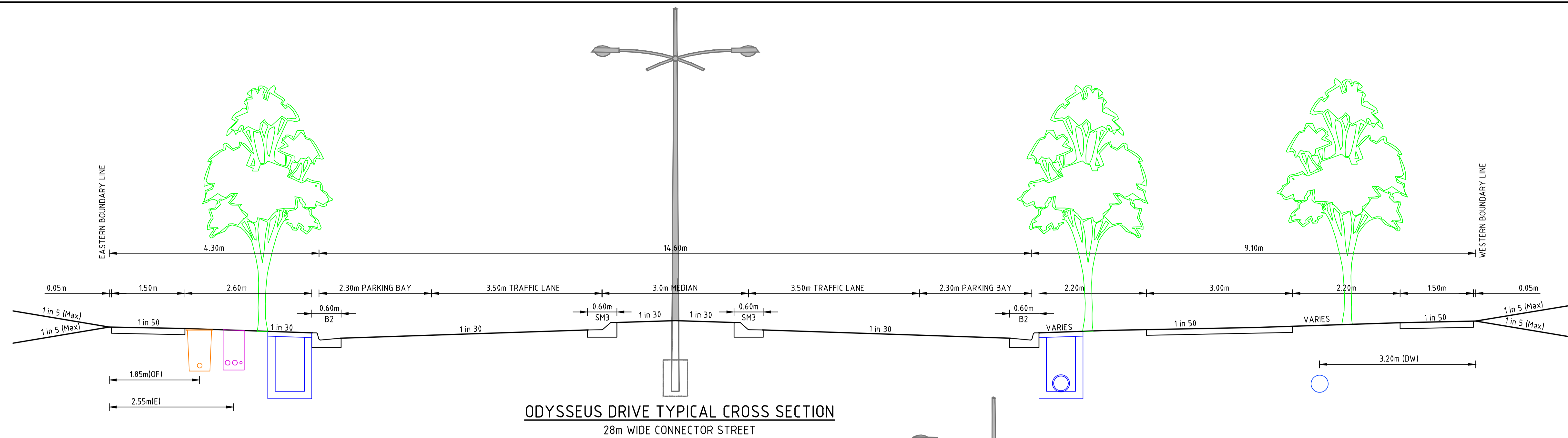
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD LONG SECTIONS - SHEET 7
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

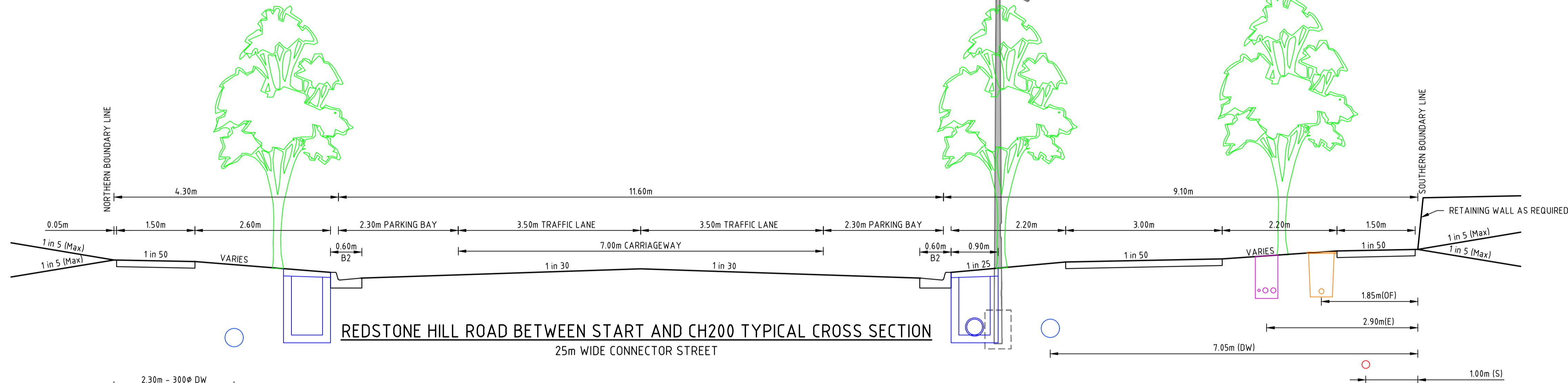
CONSTRUCTION 31066CR306

Drg No
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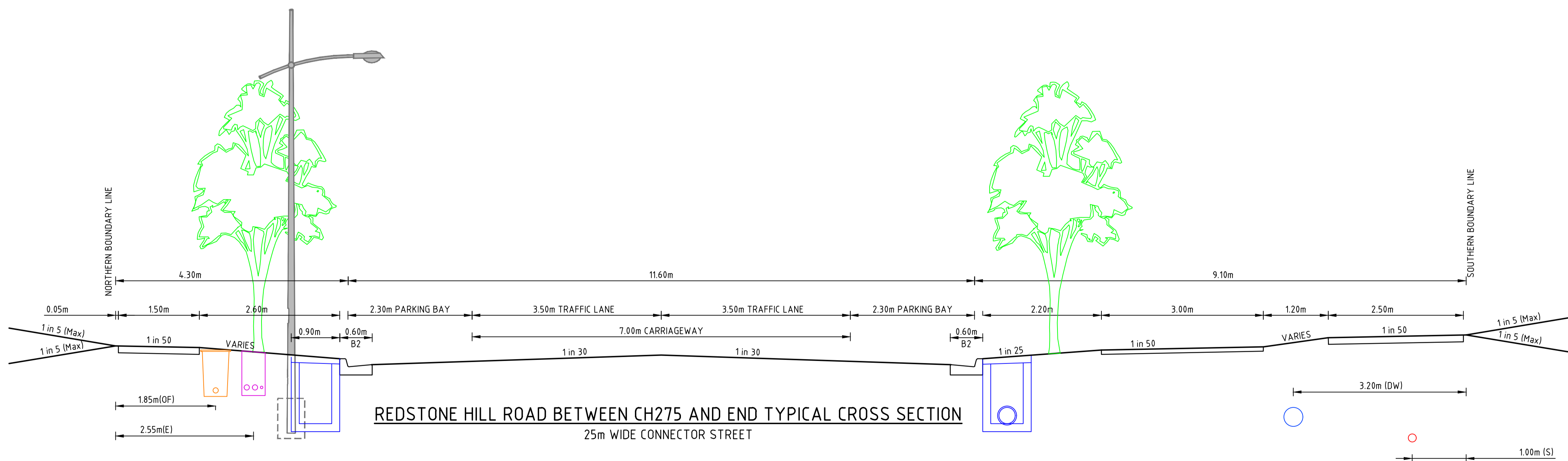
Rev
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ODYSSEUS DRIVE TYPICAL CROSS SECTION
28m WIDE CONNECTOR STREET



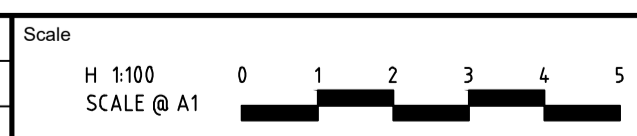
REDSTONE HILL ROAD BETWEEN START AND CH200 TYPICAL CROSS SECTION
25m WIDE CONNECTOR STREET



REDSTONE HILL ROAD BETWEEN CH275 AND END TYPICAL CROSS SECTION
25m WIDE CONNECTOR STREET

file name: 31066CR400.dwg, layout: rsmc, cdu:00, plotted by: Luke Russell, plot date: 11/03/2025 14:45, AM Sheet: 18 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	ELECTRICITY OFFSET UPDATE	M.R	20/09/24
C	BIKE PATH MOVED, SERVICES AMENDED	M.T.S	26/04/24
B	NATURE STRIP GRADES AMENDED	M.T.S	23/12/23
A	ISSUED TO COUNCIL	M.T.S	22/12/22



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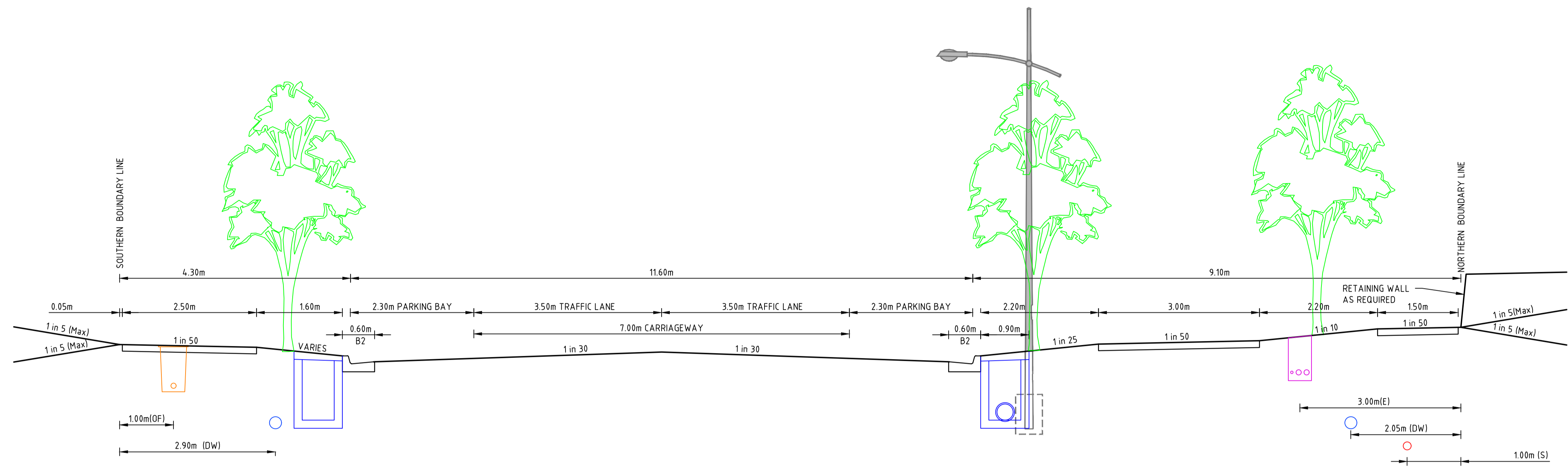
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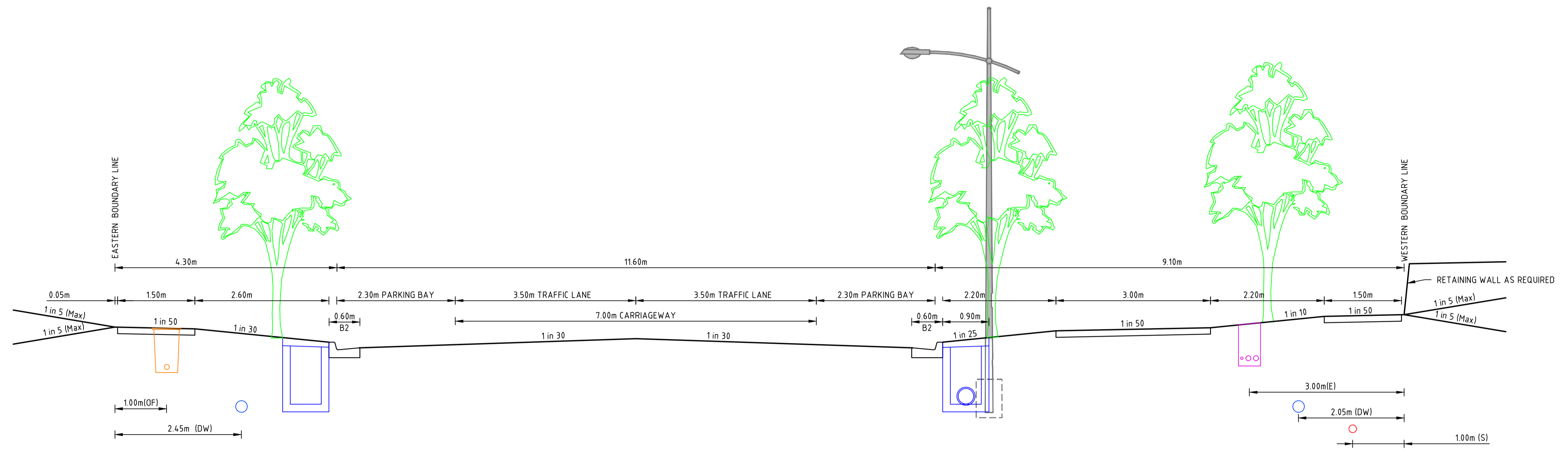
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 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
 ROAD AND DRAINAGE
 TYPICAL ROAD CROSS SECTIONS - SHEET 1
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

CONSTRUCTION Drg No 31066CR400 Rev 0



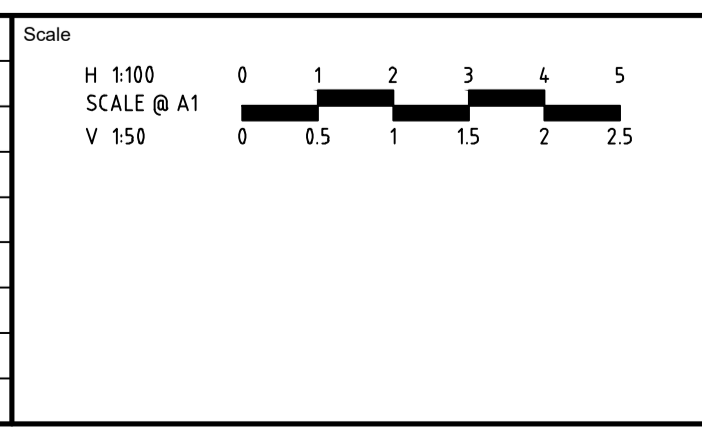
TOMAHAWK DRIVE BETWEEN CH150 AND CH360 TYPICAL CROSS SECTION
25m WIDE CONNECTOR STREET



TOMAHAWK DRIVE BETWEEN CH390 AND END TYPICAL CROSS SECTION
25m WIDE CONNECTOR STREET

file name: 31066CR401.dwg, layout: rmp, cdu:1, plotted by: Luke Russell, file location: G:\31066CR401\AA\AA1.dwg, plot date: 11/03/2025 11:45 AM, Sheet: 19 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	ELECTRICITY OFFSET UPDATE	M.R	20/09/24
C	BIKE PATH MOVED, SERVICES AMENDED	M.T.S	26/04/24
B	TOMAHAWK SECTION ADDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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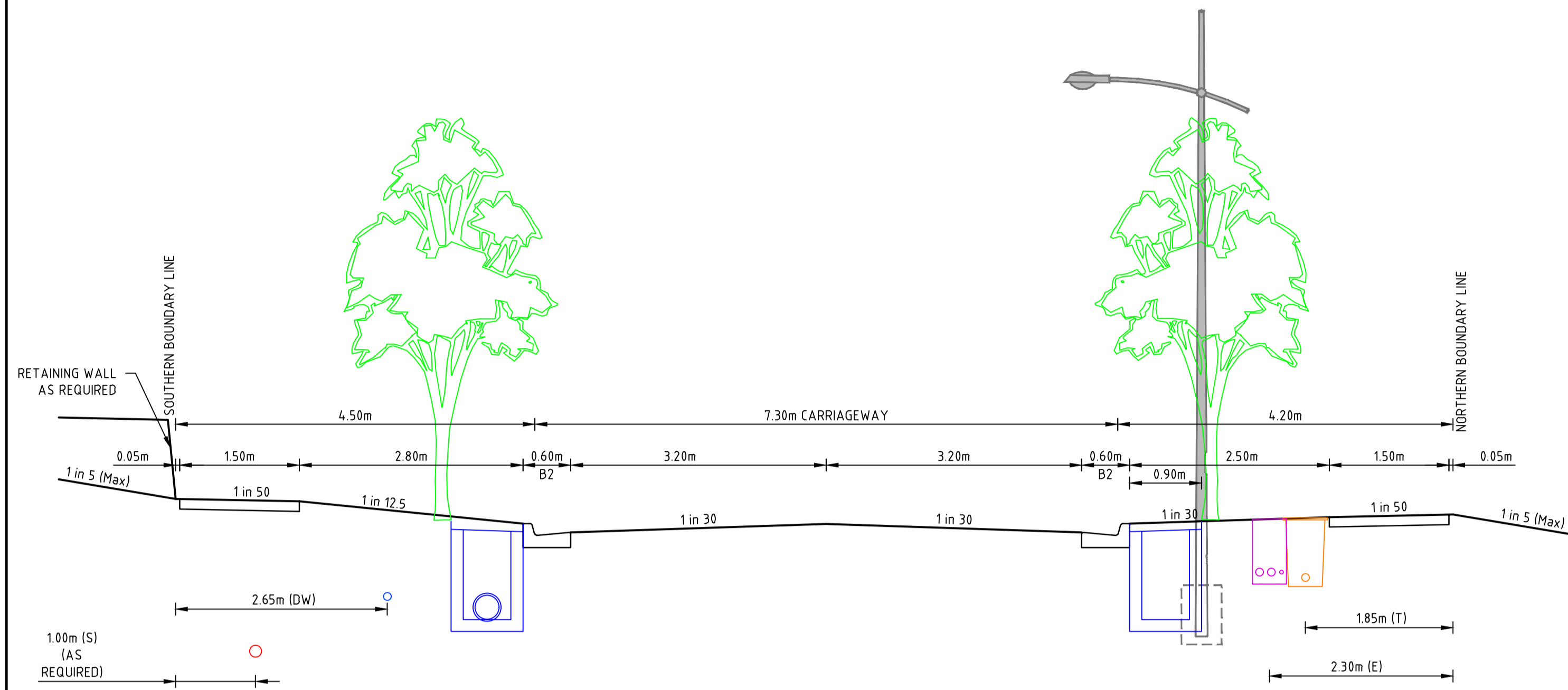
Checked
J.POYNER

Date
APRIL 2024

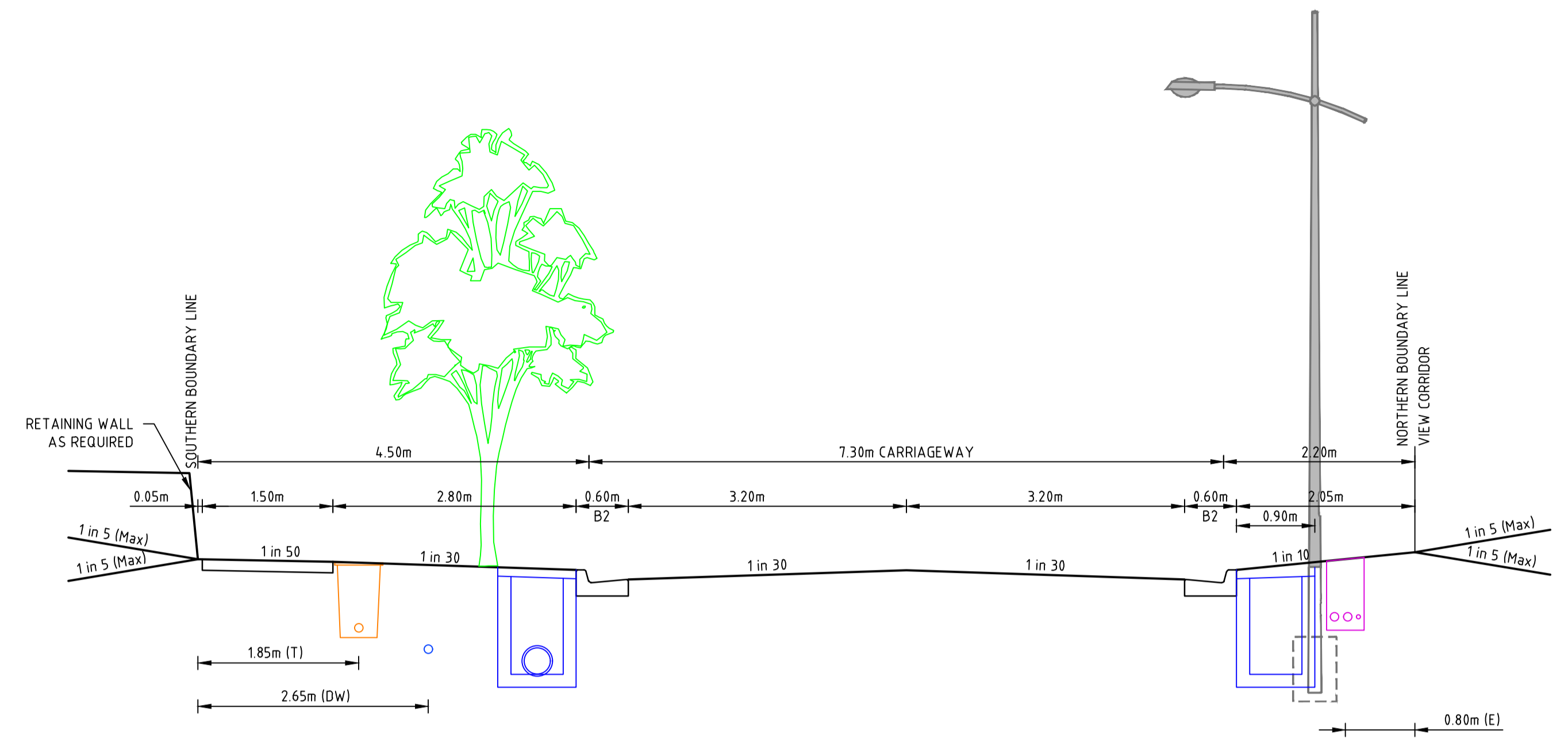
REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
TYPICAL ROAD CROSS SECTIONS - SHEET 2
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

Drg No
CONSTRUCTION 31066CR401

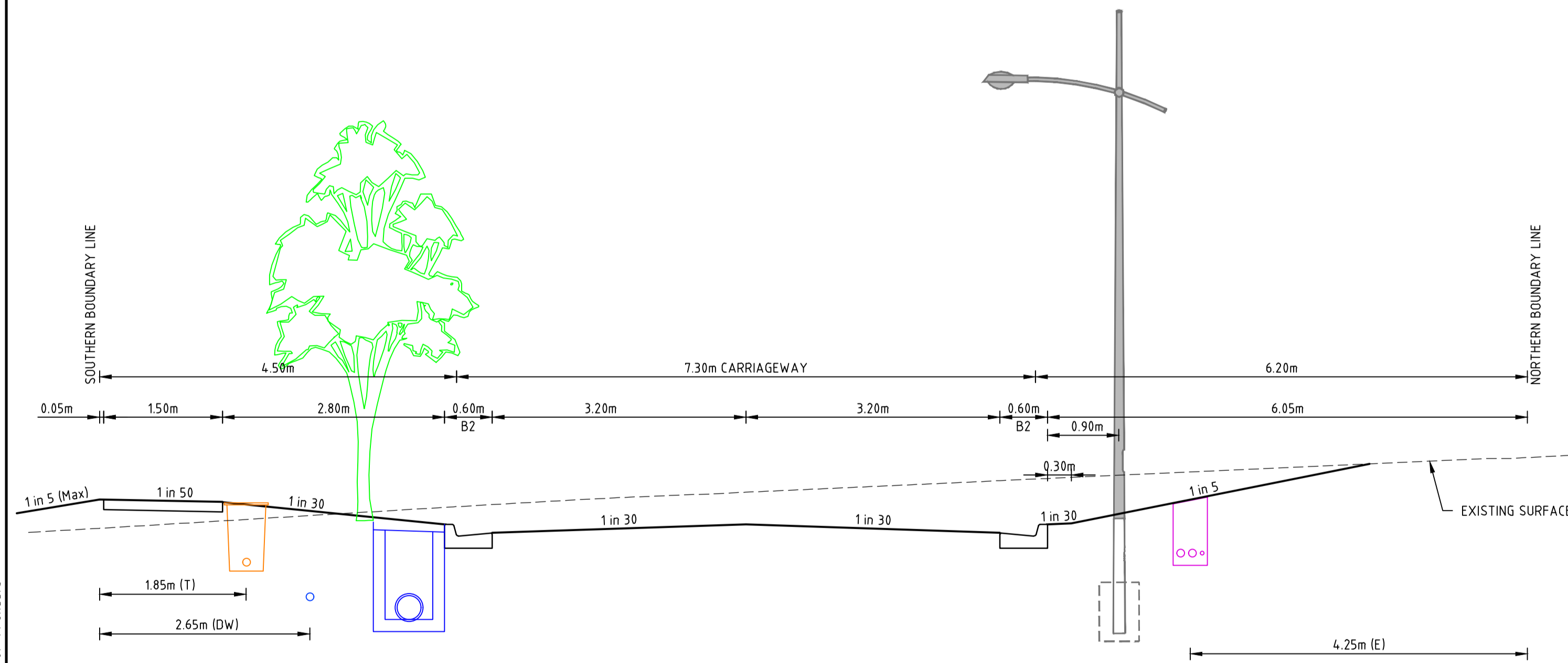
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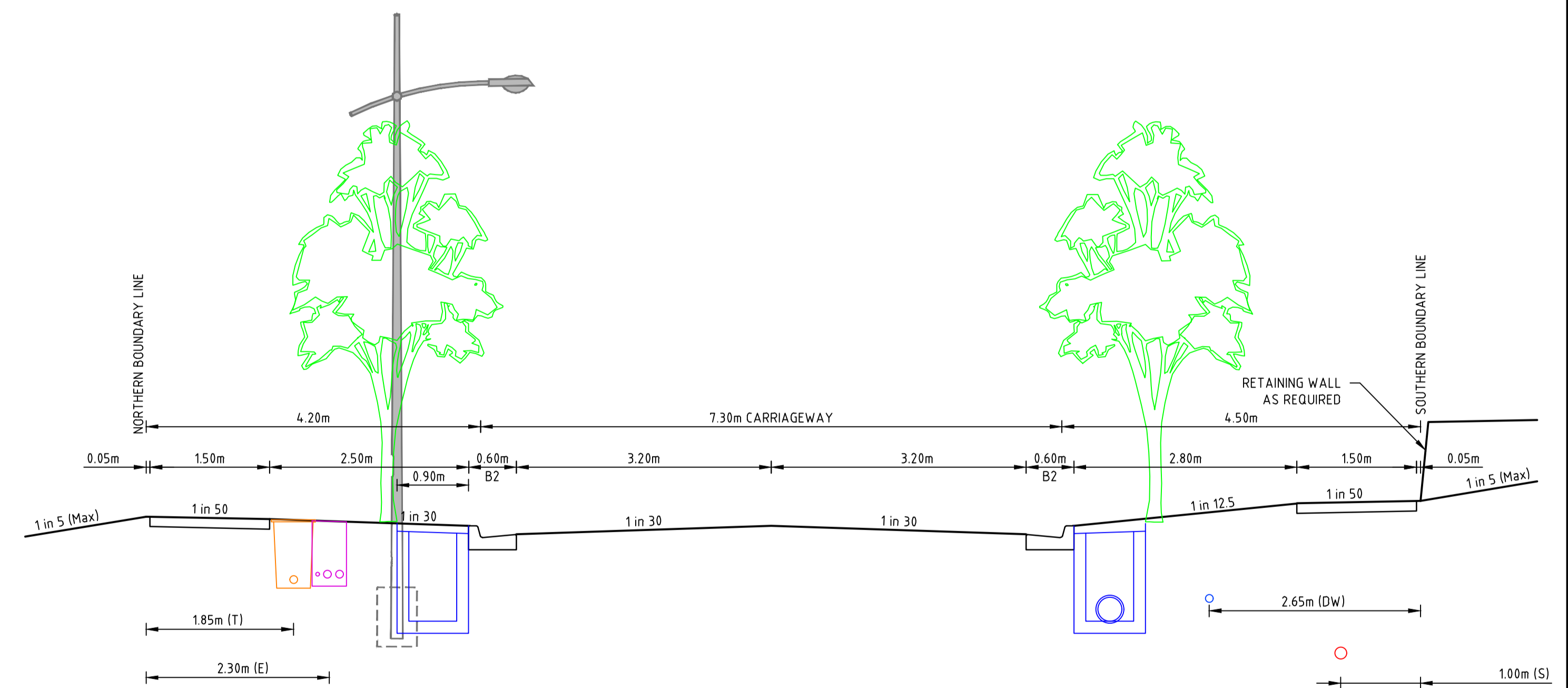
KINDRED CIRCUIT TYPICAL CROSS SECTION (START - CH170)
16m WIDE ACCESS STREET



KINDRED CIRCUIT TYPICAL CROSS SECTION (CH170 - CH240)
14m WIDE ACCESS STREET



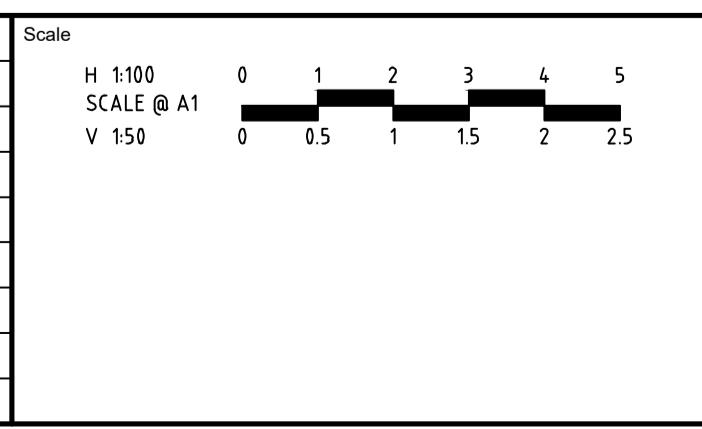
KINDRED CIRCUIT TYPICAL CROSS SECTION (CH237 - CH260)
18m WIDE ACCESS STREET



KINDRED CIRCUIT TYPICAL CROSS SECTION (CH260 - END)
16m WIDE ACCESS STREET

file name: 31066CR402.dwg, layout name: CD02, plotted by: Luke Russell, file location: G:\31066CR402\31066CR402.dwg, plot date: 16/03/2025 11:45 AM, Sheet 20 of 71 Sheets

Rev	Amendments	Approved	Date
A	ISSUED TO COUNCIL	M.T-S	22/12/22
B	NATURE STRIP GRADES AMENDED	M.T-S	23/12/23
C	SERVICES AMENDED	M.T-S	26/04/24
D	KINDRED 18M CROSS SECTION BATTER TO EXISTING AMENDMENT	M.T-S	17/07/24
E	ELECTRICITY OFFSET UPDATE	M.R	20/09/24
O	ISSUED FOR CONSTRUCTION	M.R	28/10/24



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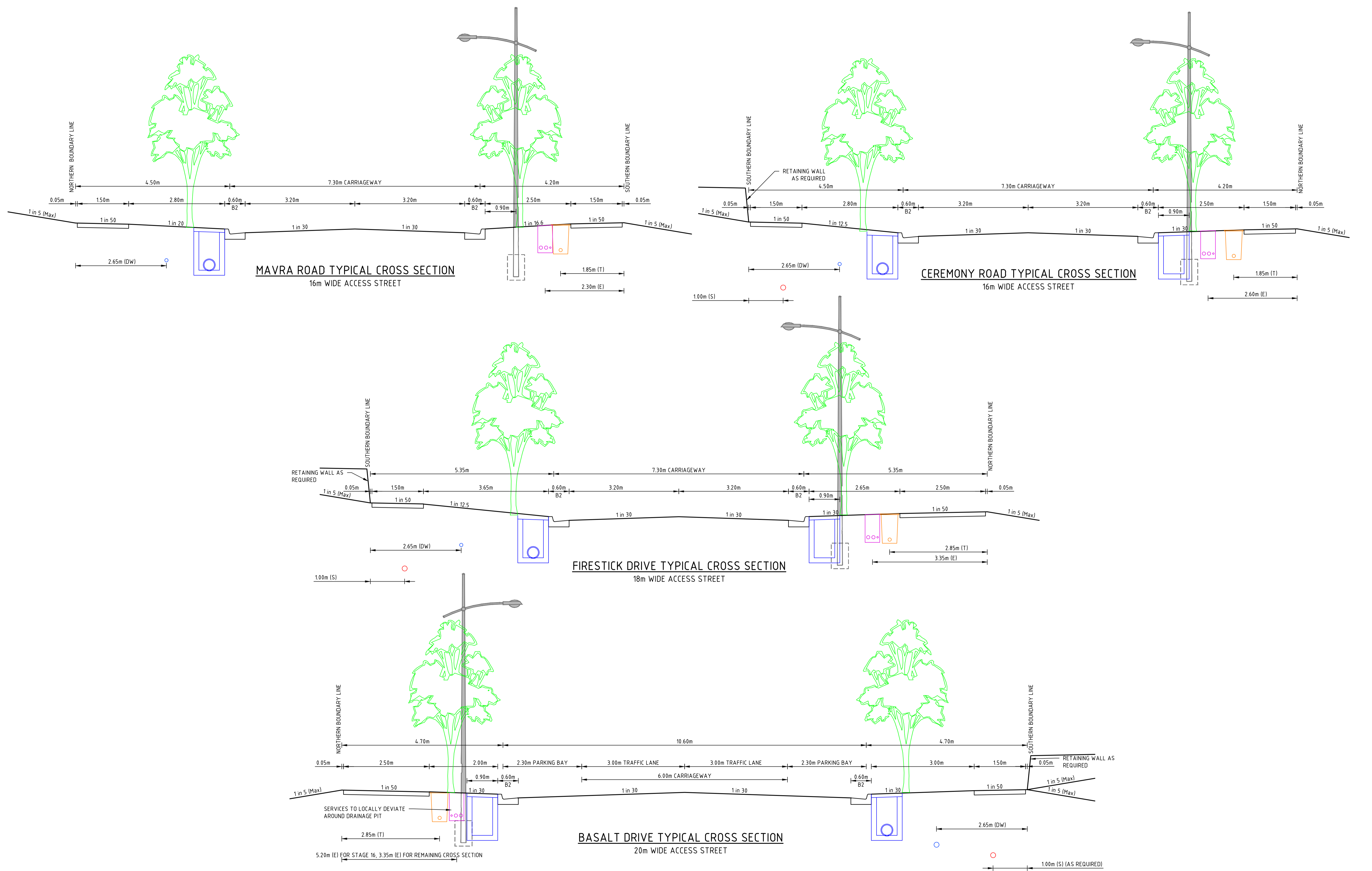
 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
TYPICAL ROAD CROSS SECTIONS - SHEET 3
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

CONSTRUCTION

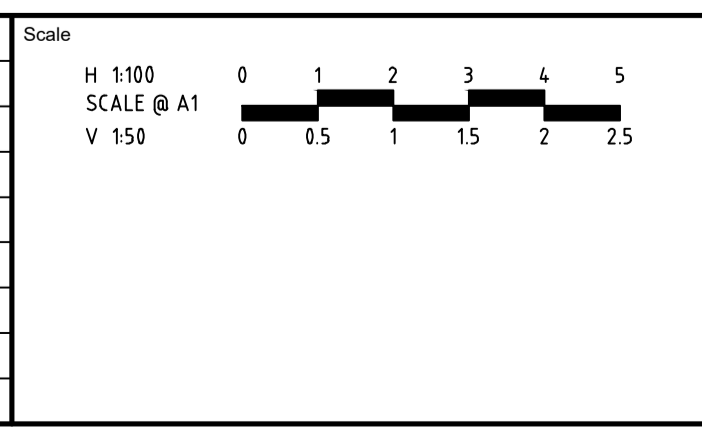
 Drg No
31066CR402

 Rev
0



file name: 31066CR403.dwg, layout name: CD/03, plotted by: Luke Russell, plot date: 14/03/2025 14:5, sheet 21 of 71 sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R.	28/10/24
E	ELECTRICITY OFFSET UPDATE	M.R.	20/09/24
D	CEREMONY ROAD CHANGED TO TWO WAY CROSSFALL	M.T.S	17/07/24
C	SERVICES AMENDED	M.T.S	26/04/24
B	NATURE STRIP GRADES AMENDED	M.T.S	23/12/23
A	ISSUED TO COUNCIL	M.T.S	22/12/22



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Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 4
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

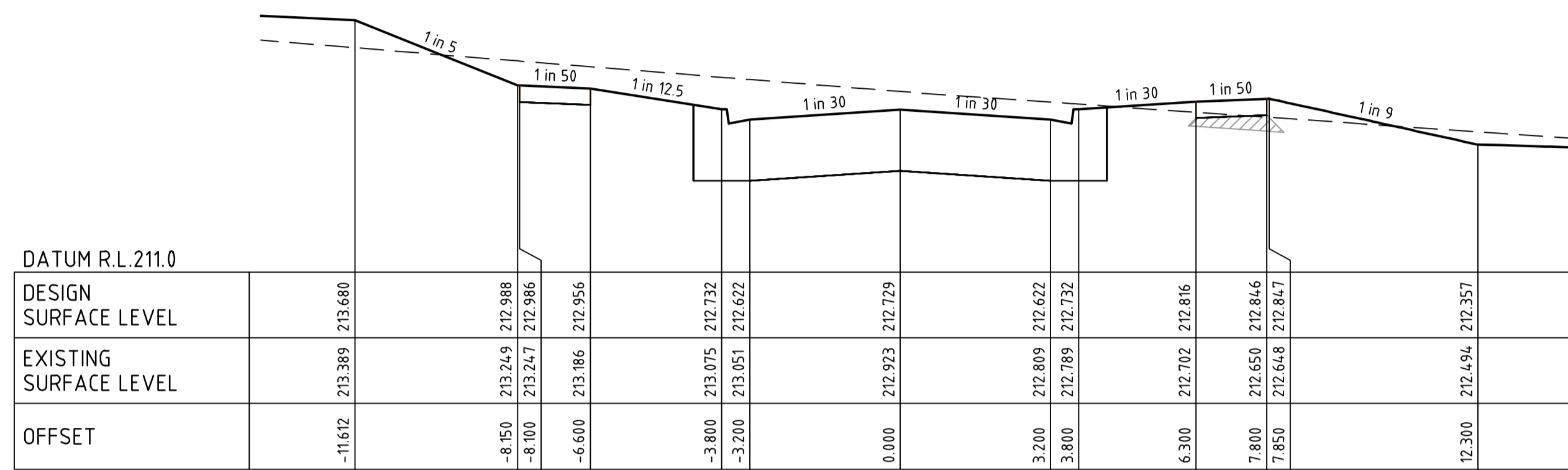
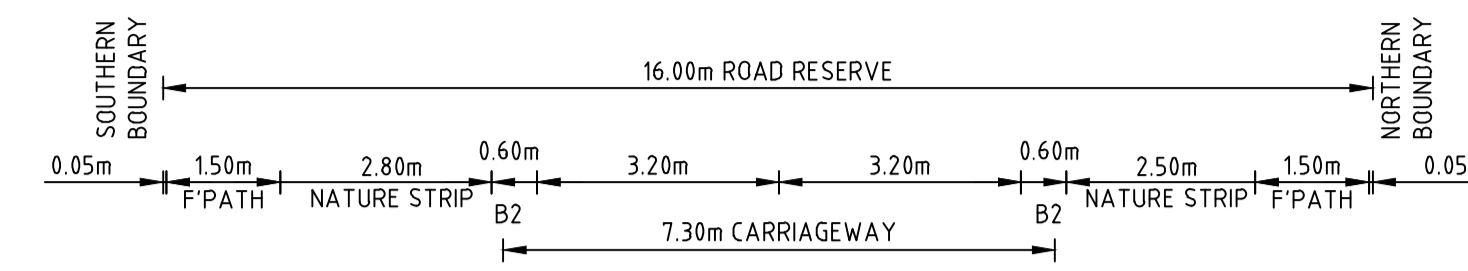
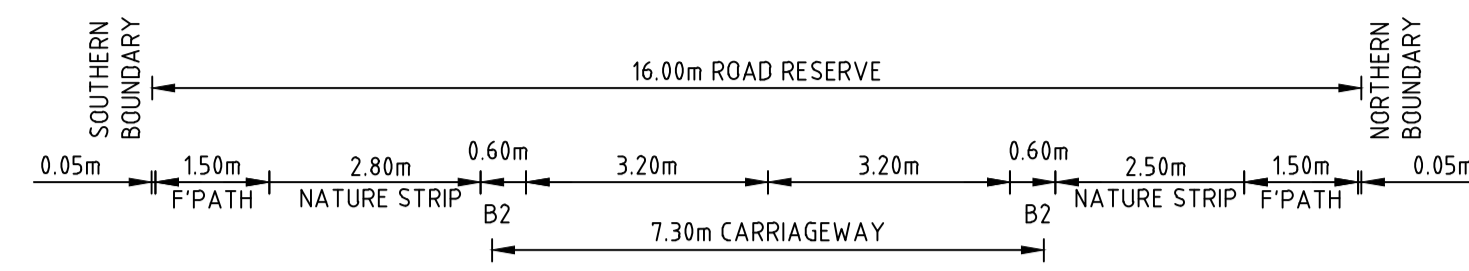
CONSTRUCTION 31066CR403

Drg No
31066CR403

Rev
0

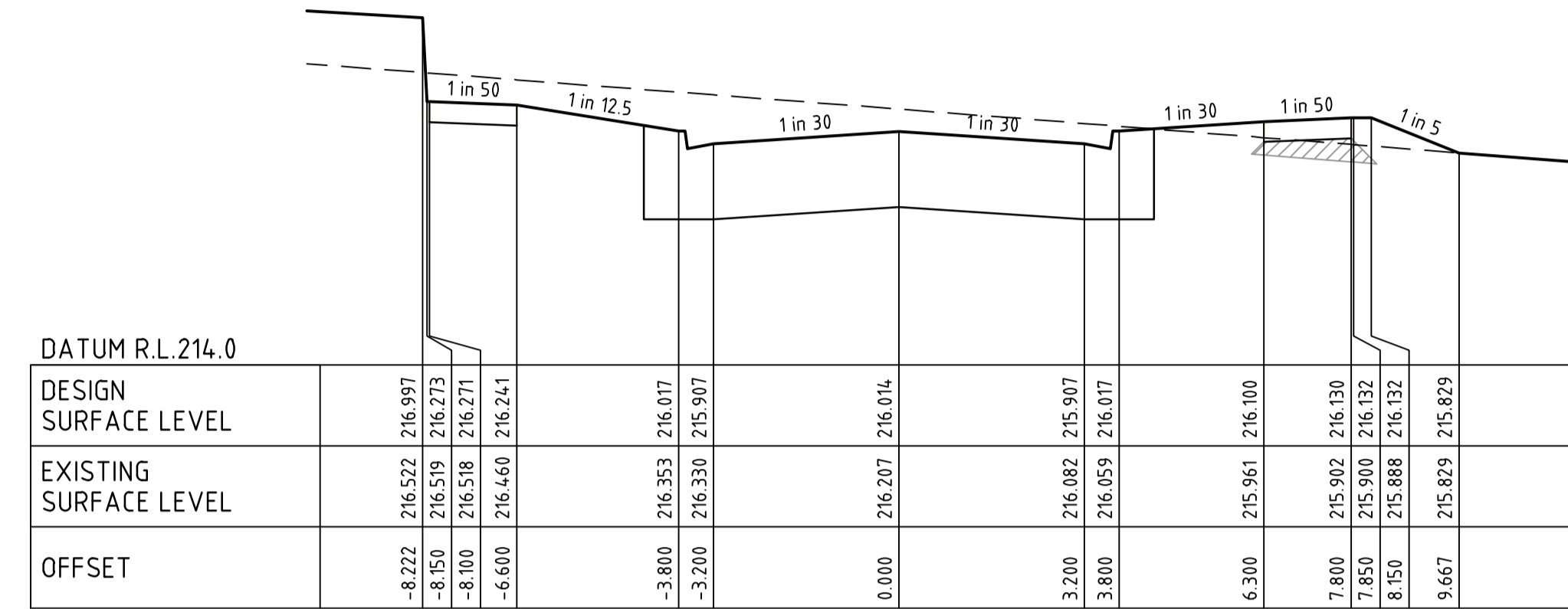
STRUCTURAL FILL IN ACCORDANCE
(REFER TO FILLING NOTE)

FILLING NOTE
ALL FILLING WITHIN ROAD RESERVES IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007 AND TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS. FILLING UNDERNEATH FOOTPATH TO BE CLASS 3 CRUSHED ROCK IN ACCORDANCE WITH COUNCIL STANDARDS.



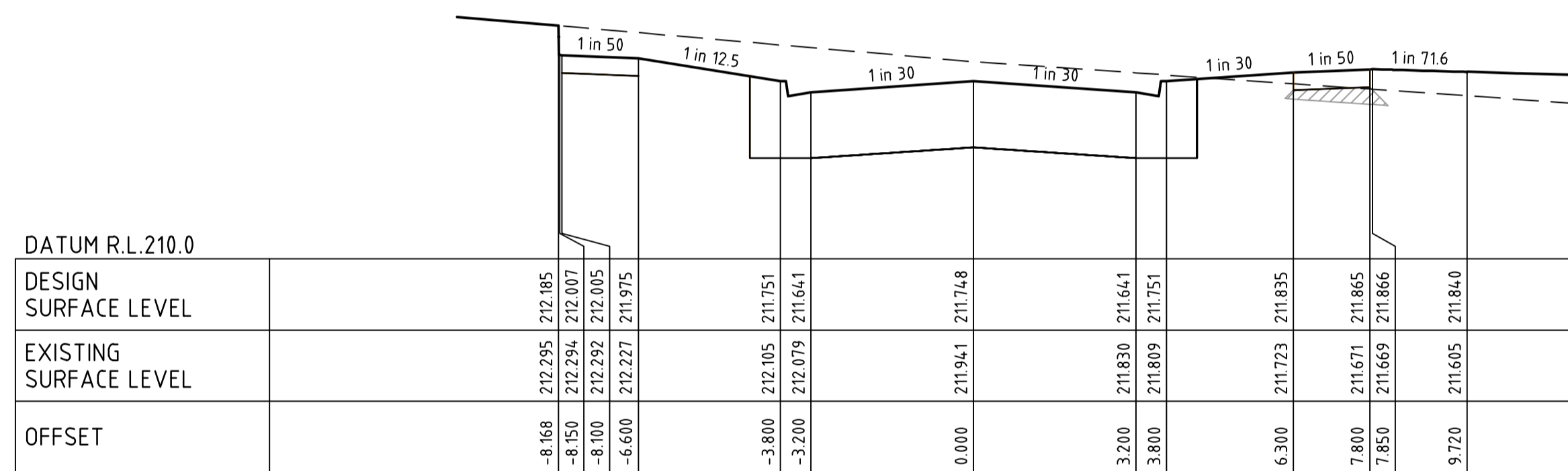
KINDRED CIRCUIT

CH 74.90



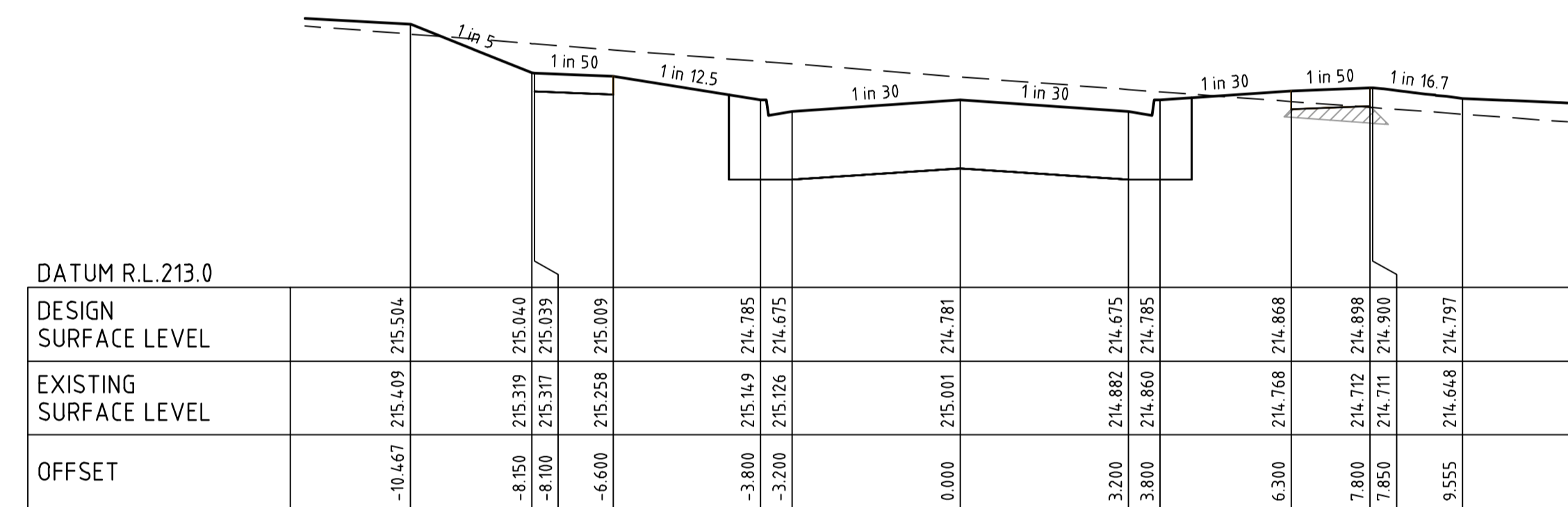
KINDRED CIRCUIT

CH 160.00



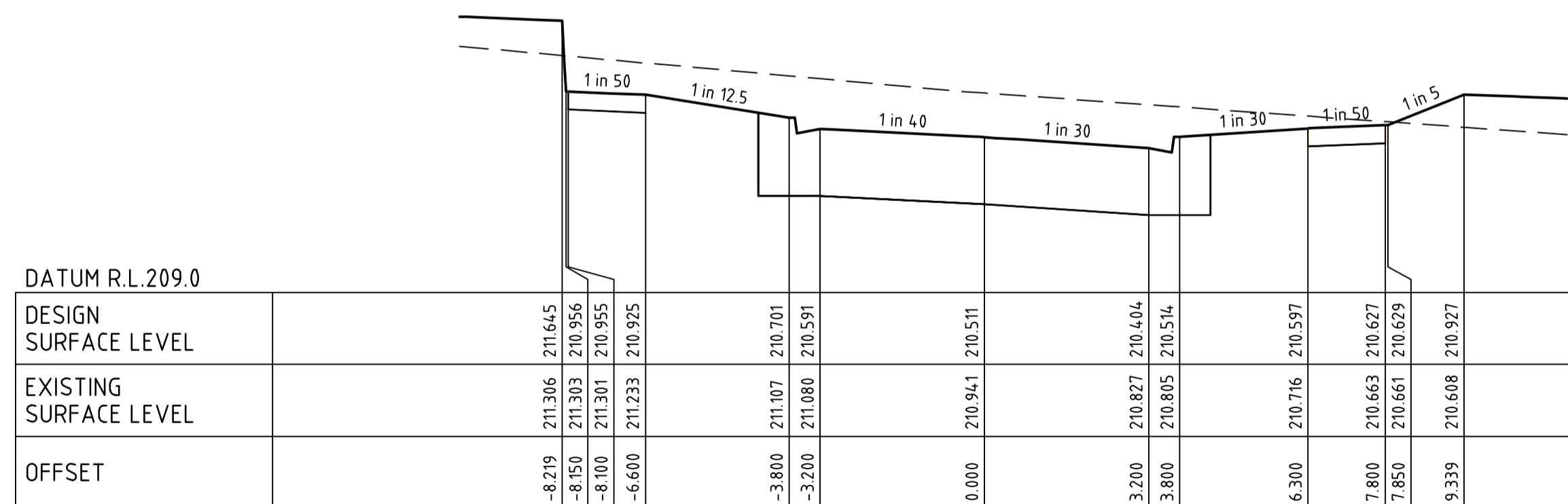
KINDRED CIRCUIT

CH 46.90



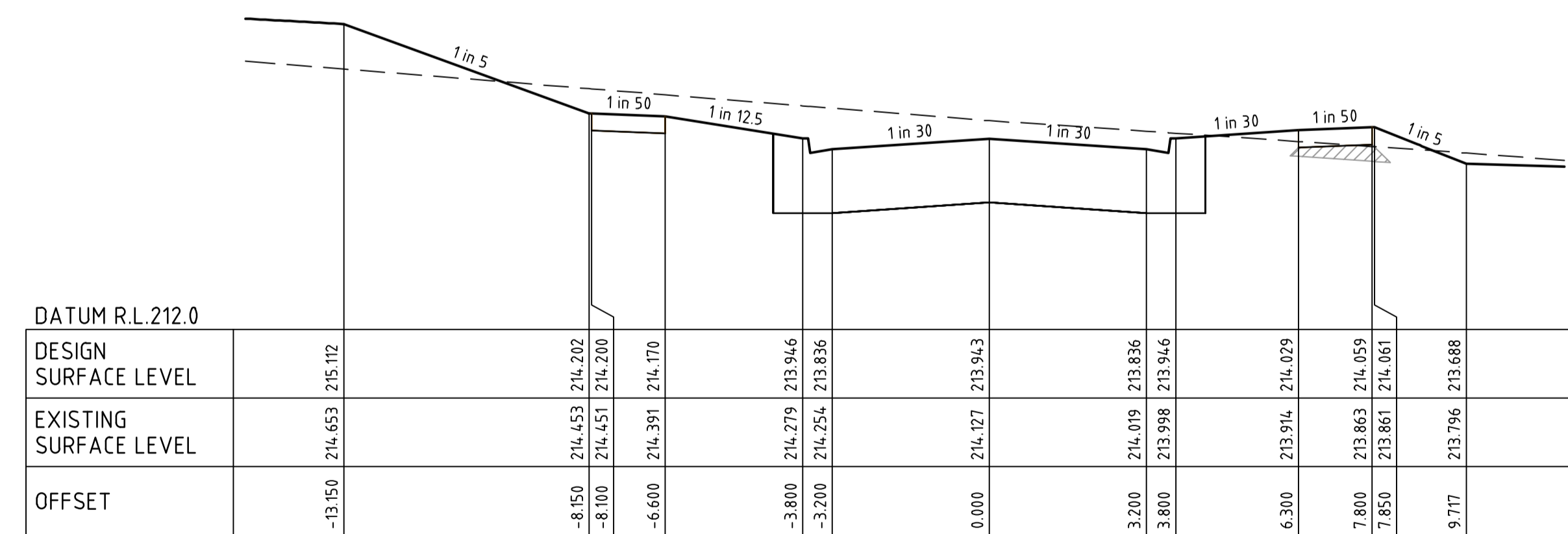
KINDRED CIRCUIT

CH 128.40



KINDRED CIRCUIT

CH 18.20

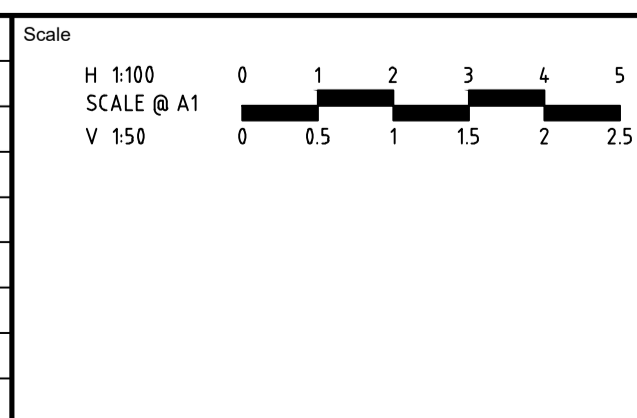


KINDRED CIRCUIT

CH 106.90

file name: 31066CR404.dwg, layout name: CD/CL, plotted by: Luke Russell, file location: G:\31066CR404\CD/CL\31066CR404.dwg, plot date: 14/03/2025 11:45 AM, Sheet 22 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	SECTION AMENDED, BATTERS ADDED	M.T-S	26/04/24
B	CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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Authorised
J.POYNER

Checked
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Date
APRIL 2024

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**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 5**
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION Drg No **31066CR404** Rev **0**

STRUCTURAL FILL IN ACCORDANCE
(REFER TO FILLING NOTE)

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DATUM R.L. 220.0

DESIGN SURFACE LEVEL	221.276	221.602	221.601	221.571	221.487	221.377	221.484	221.377	221.487	221.711	221.741	221.743	222.764
EXISTING SURFACE LEVEL	221.253	221.351	221.354	221.452	221.616	221.655	221.865	222.056	222.091	222.256	222.347	222.350	222.654
OFFSET	-9.479	-7.850	-7.800	-6.300	-3.800	-3.200	0.000	3.200	3.800	6.600	8.100	8.150	13.258

KINDRED CIRCUIT

CH 269.07

DATUM R.L. 219.0

DESIGN SURFACE LEVEL	220.977	221.002	221.000	220.970	220.877	220.767	220.873	220.767	220.877	221.326	220.877	220.887	221.501
EXISTING SURFACE LEVEL	220.511	220.662	220.665	220.749	220.917	220.952	221.128	221.295	221.326	221.341	221.341	221.341	221.501
OFFSET	-9.954	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	4.100	4.100	4.100	7.172

KINDRED CIRCUIT

CH 24.00

DATUM R.L. 217.0

DESIGN SURFACE LEVEL	219.373	219.988	219.996	219.866	218.973	218.863	218.969	218.863	218.973	219.178	219.195	219.195	219.420
EXISTING SURFACE LEVEL	219.162	219.164	219.164	219.164	219.166	219.166	219.172	219.181	219.183	219.191	219.194	219.195	219.203
OFFSET	-10.653	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	5.850	6.150	6.238	13.150

KINDRED CIRCUIT

CH 214.72

DATUM R.L. 216.0

DESIGN SURFACE LEVEL	217.724	217.471	217.475	217.445	217.352	217.242	217.348	217.242	217.352	217.557	217.557	217.696	221.148
EXISTING SURFACE LEVEL	217.581	217.581	217.581	217.581	217.614	217.619	217.644	217.668	217.673	217.689	217.691	217.696	221.026
OFFSET	-8.175	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	5.850	6.150	6.848	13.150

KINDRED CIRCUIT

CH 190.00

DATUM R.L. 215.0

DESIGN SURFACE LEVEL	216.524	216.968	216.966	216.936	216.853	216.743	216.849	216.743	216.853	217.077	217.107	217.108	217.636
EXISTING SURFACE LEVEL	216.609	216.786	216.788	216.838	216.944	216.971	217.114	217.257	217.283	217.408	217.475	217.478	217.598
OFFSET	-12.150	-7.850	-7.800	-6.300	-3.800	-3.200	0.000	3.200	3.800	6.600	8.100	8.150	10.787

KINDRED CIRCUIT

CH 367.07

DATUM R.L. 216.0

DESIGN SURFACE LEVEL	218.145	218.370	218.368	218.338	218.255	218.145	218.251	218.145	218.255	218.479	218.509	218.510	219.420
EXISTING SURFACE LEVEL	218.093	218.147	218.150	218.224	218.347	218.376	218.538	218.695	218.724	218.862	218.940	218.943	219.203
OFFSET	-8.975	-7.850	-7.800	-6.300	-3.800	-3.200	0.000	3.200	3.800	6.600	8.100	8.150	13.150

KINDRED CIRCUIT

CH 335.07

DATUM R.L. 218.0

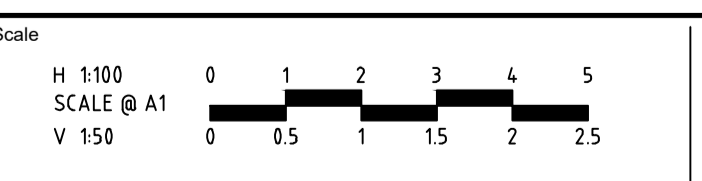
DESIGN SURFACE LEVEL	220.439	220.207	220.205	220.175	220.092	220.092	220.089	220.092	220.092	220.316	220.346	220.348	221.148
EXISTING SURFACE LEVEL	219.679	219.748	219.751	219.844	219.994	220.030	220.222	220.414	220.450	220.620	220.713	220.716	221.026
OFFSET	-9.008	-7.850	-7.800	-6.300	-3.800	-3.200	0.000	3.200	3.800	6.600	8.100	8.150	13.150

KINDRED CIRCUIT

CH 300.07

file name: 31066CR405.dwg, layout name: CR405, plotted by: Luke Russell, file location: G:\31066CR405\31066CR405.dwg, plot date: 16/03/2025 11:45 AM, Sheet 23 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	KINDRED 18M CROSS SECTION BATTER TO EXISTING AMENDMENT	M.T-S	17/07/24
C	BATTERS ADDED	M.T-S	26/04/24
B	FOOTPATH REMOVED, CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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Authorised
J.POYNER



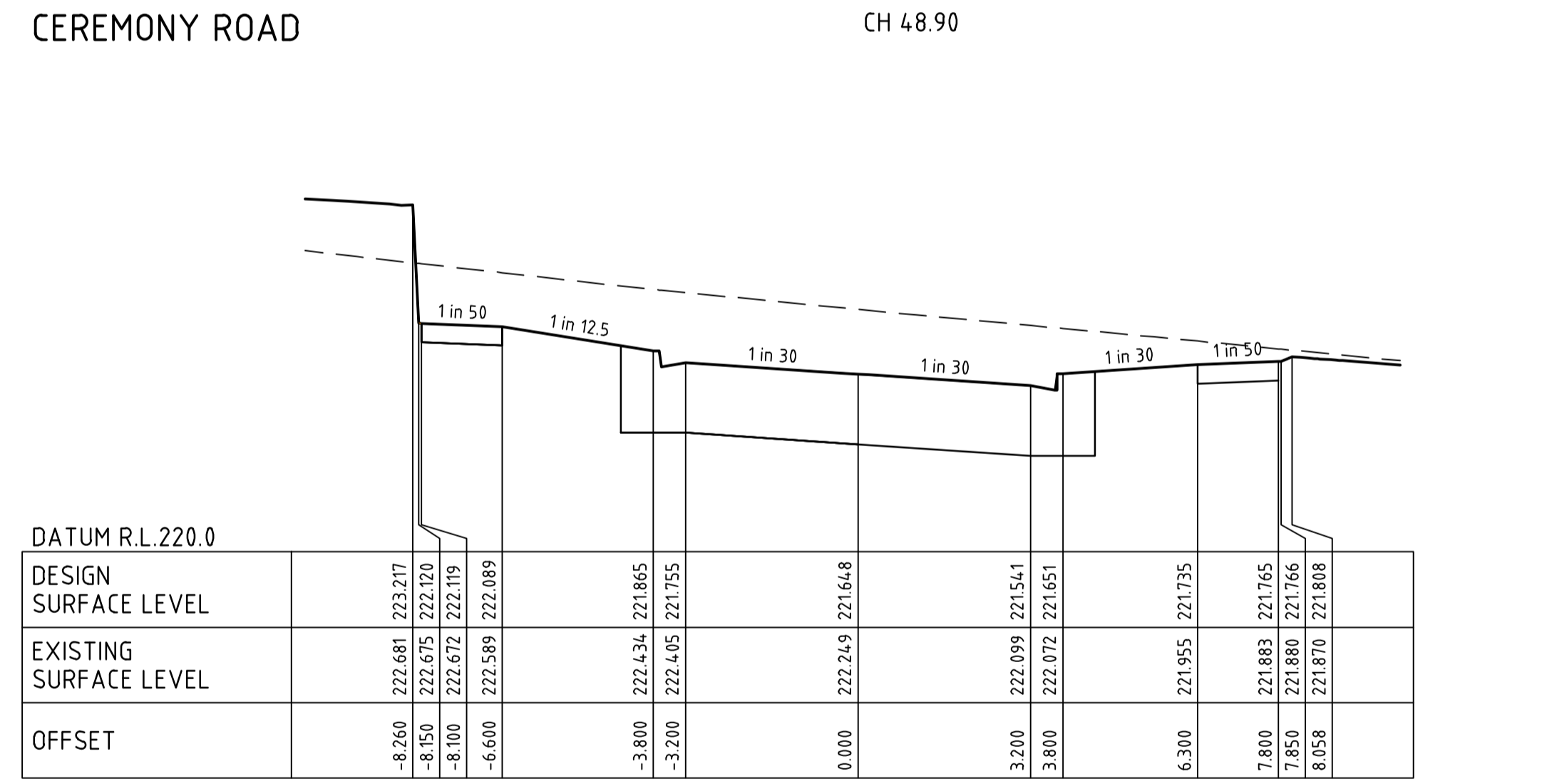
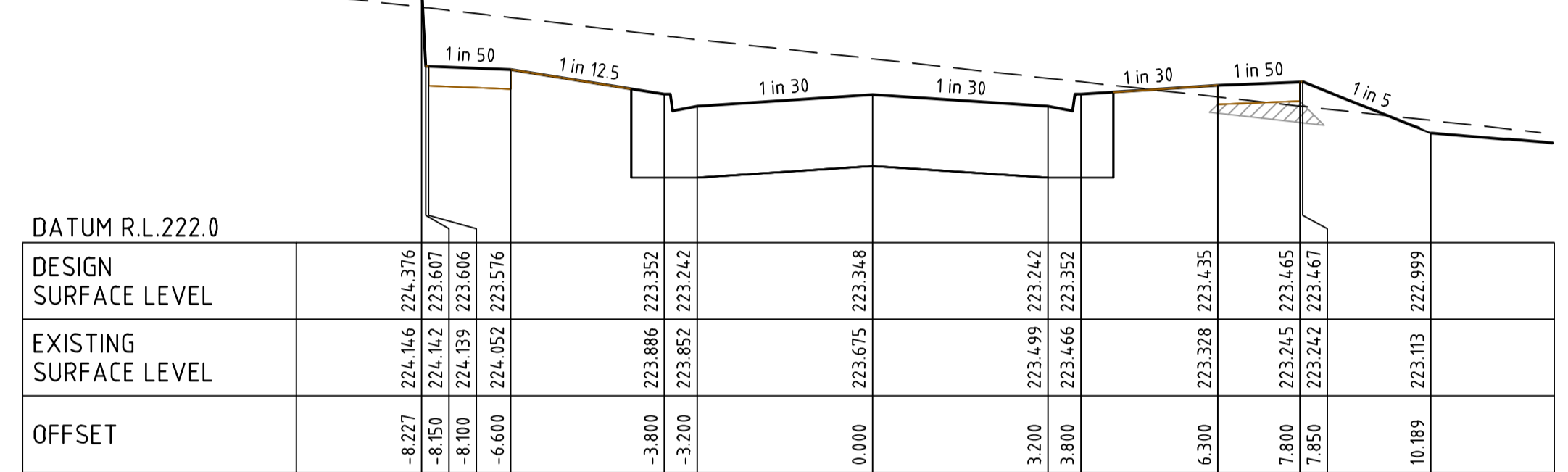
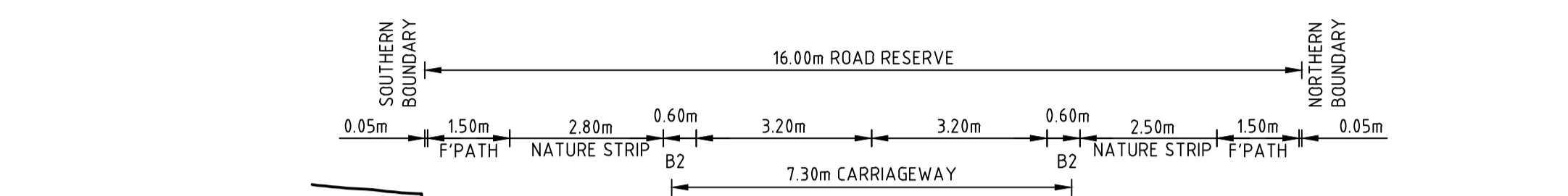
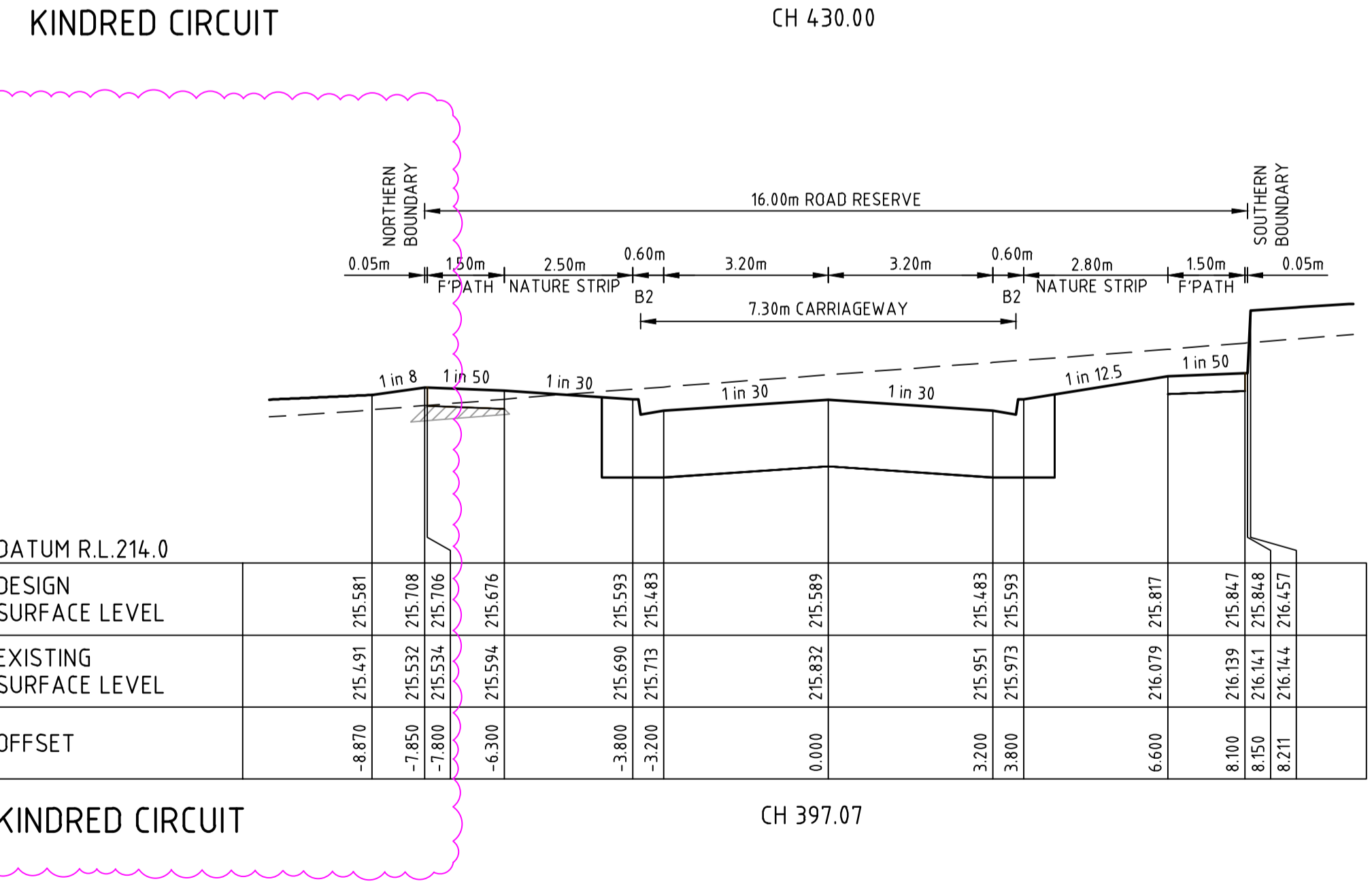
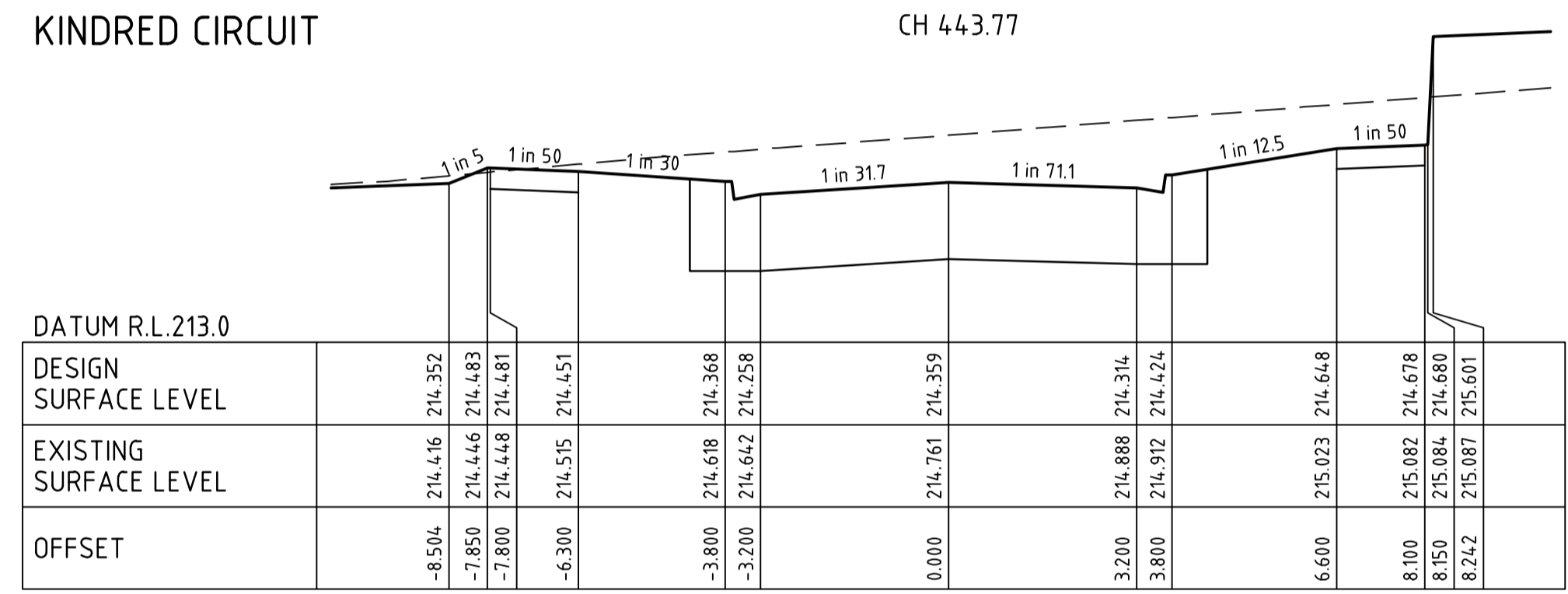
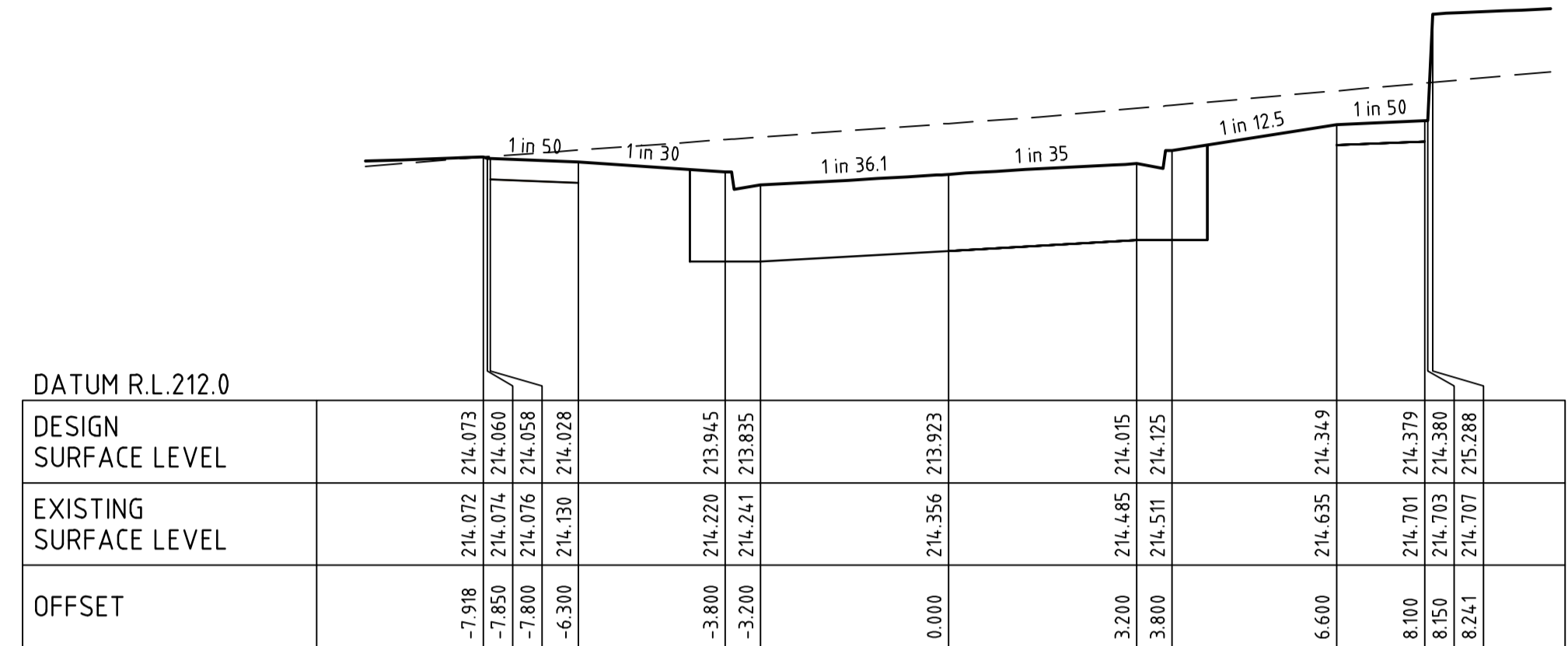
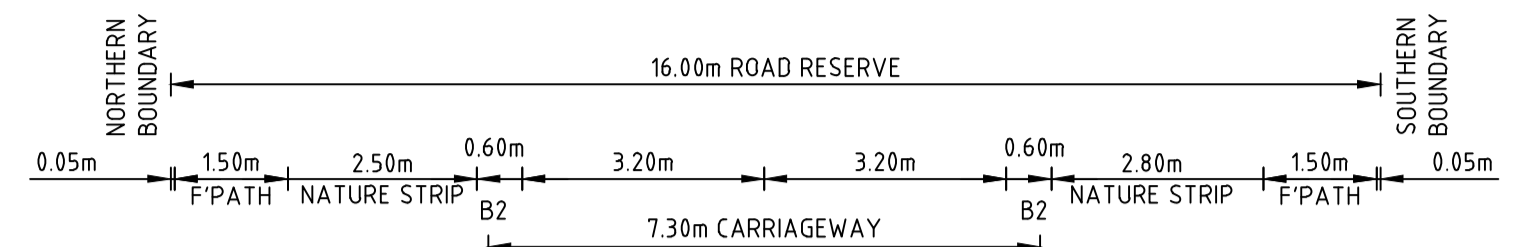
Checked
J.POYNER
Date
APRIL 2024

**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 6
HUME CITY COUNCIL
VILLAWOOD PROPERTIES**

CONSTRUCTION Drg No **31066CR405** Rev **0**

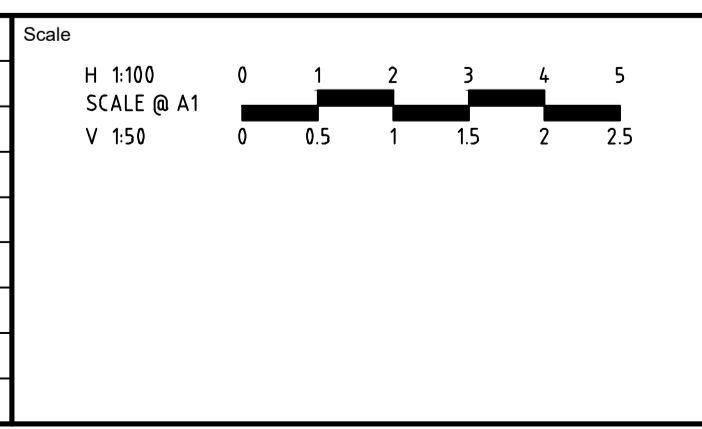
STRUCTURAL FILL IN ACCORDANCE
(REFER TO FILLING NOTE)

FILLING NOTE
ALL FILLING WITHIN ROAD RESERVES IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007 AND TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS. FILLING UNDERNEATH FOOTPATH TO BE CLASS 3 CRUSHED ROCK IN ACCORDANCE WITH COUNCIL STANDARDS.



file name: 31066CR406.dwg, layout name: CD/06, plotted by: Luke Russell, file location: G:\31066CR406\31066CR406.dwg, plot date: 14/03/2025 11:45 AM, Sheet: 24 of 71 Sheets

Rev	Description	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	CEREMONY ROAD CHANGED TO TWO WAY CROSSFALL	M.T-S	17/07/24
C	SECTIONS AMENDED, BATTERS ADDED	M.T-S	26/04/24
B	CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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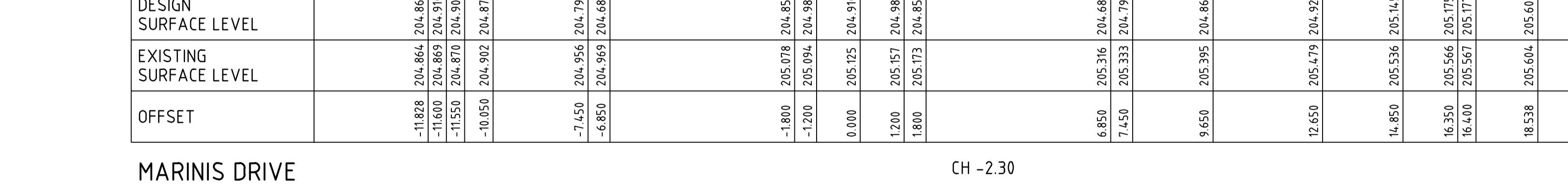
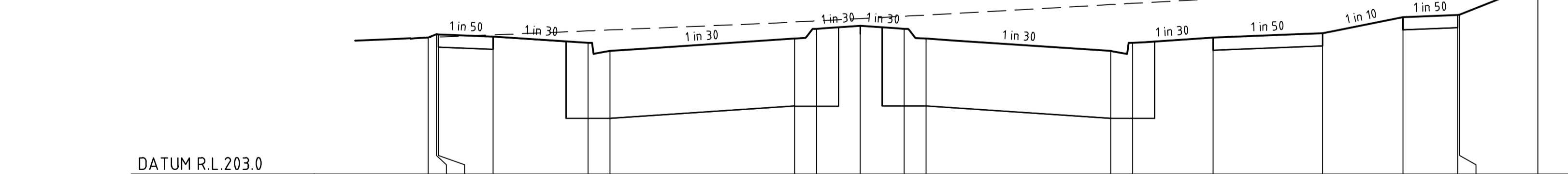
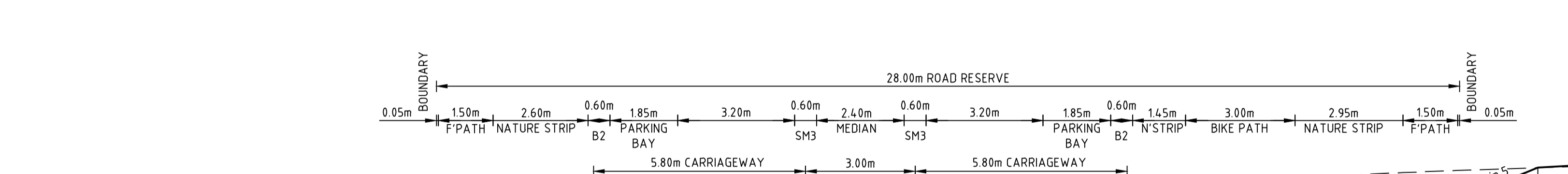
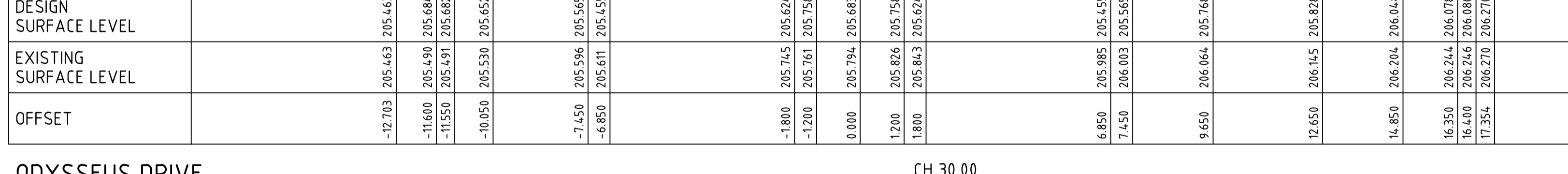
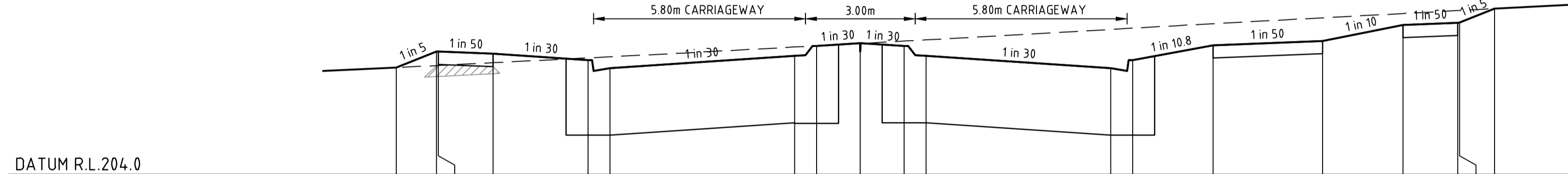
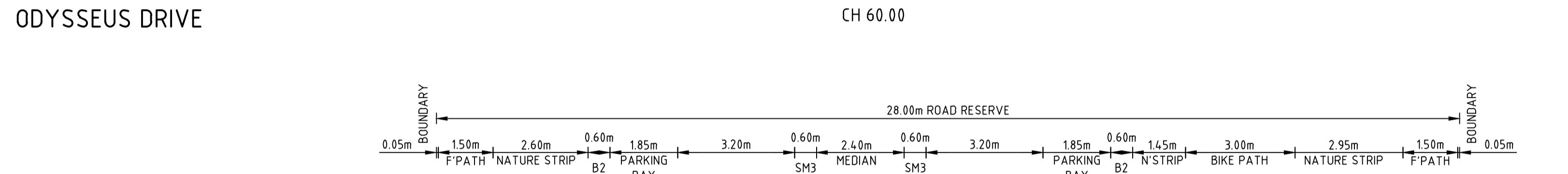
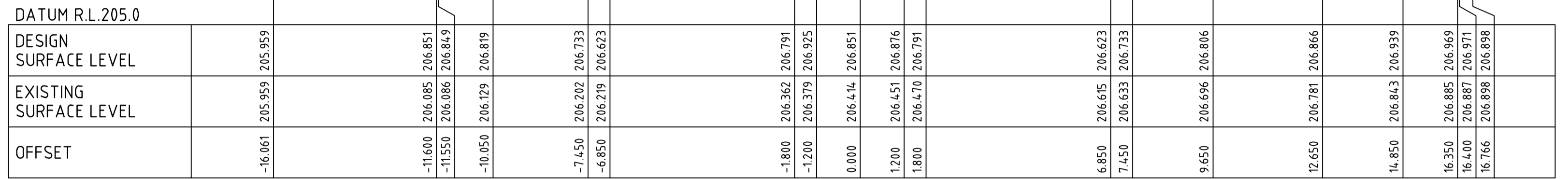
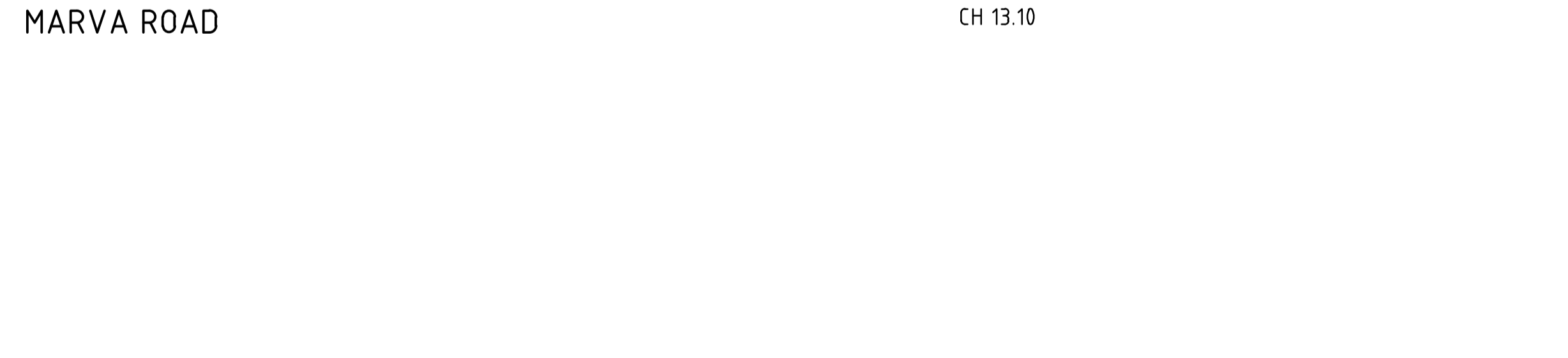
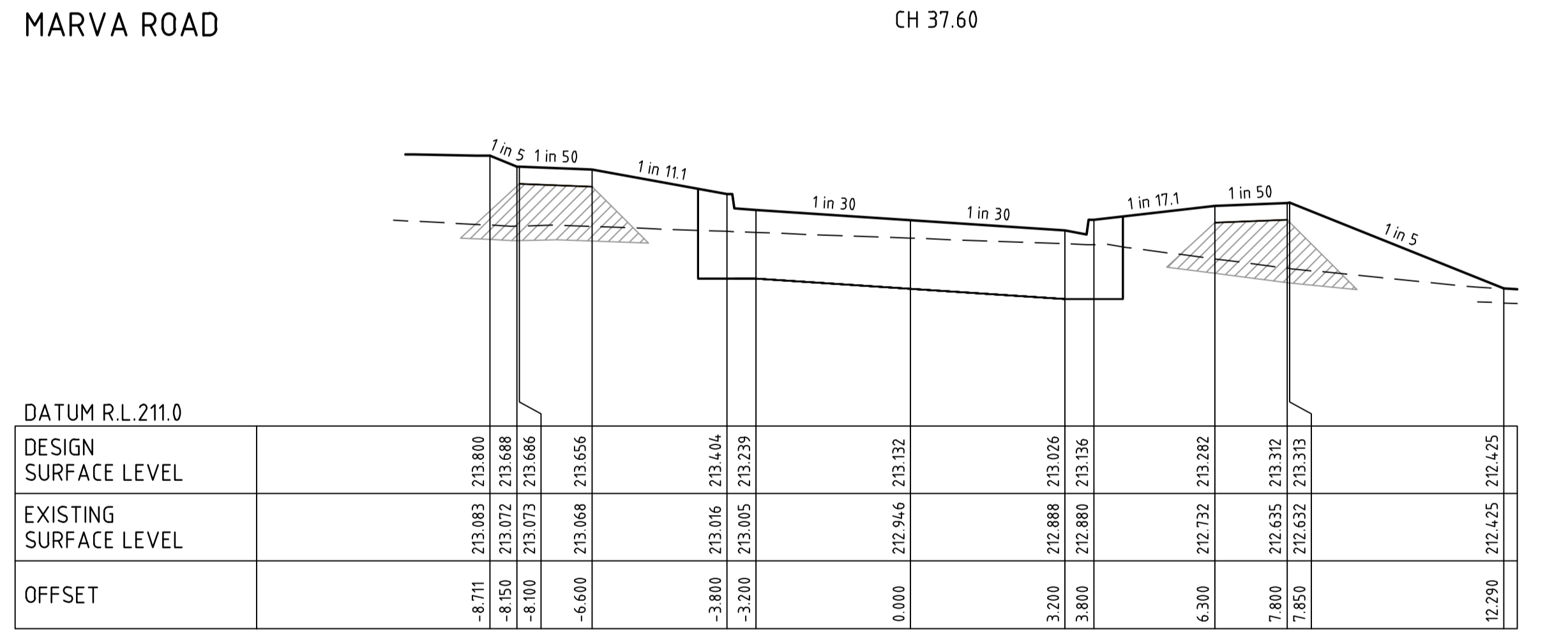
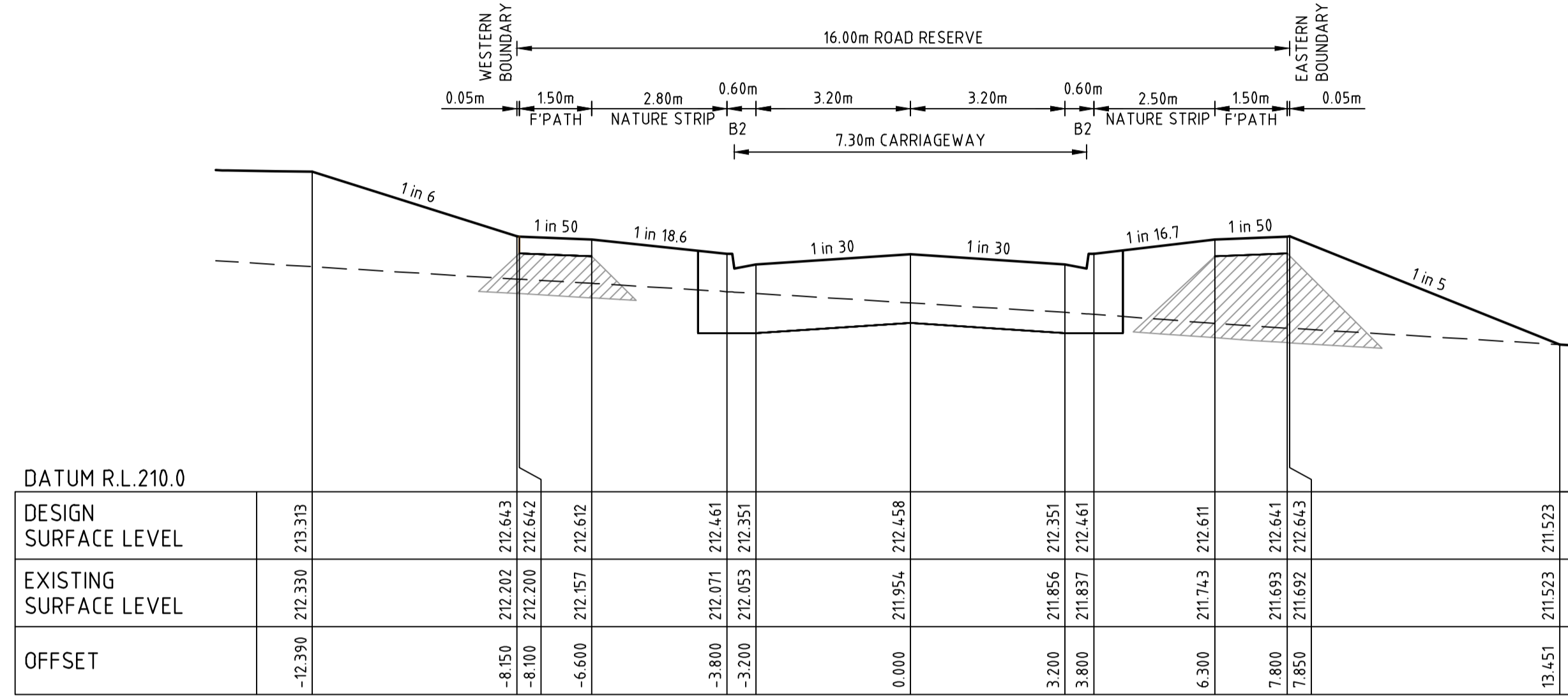
villawood properties
Communities Designed for Living
Designed
H.HOGGARD
Authorised
J.POYNER

Redstone.
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Checked
J.POYNER
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 7
HUME CITY COUNCIL
VILLAWOOD PROPERTIES
CONSTRUCTION 31066CR406
Rev 1

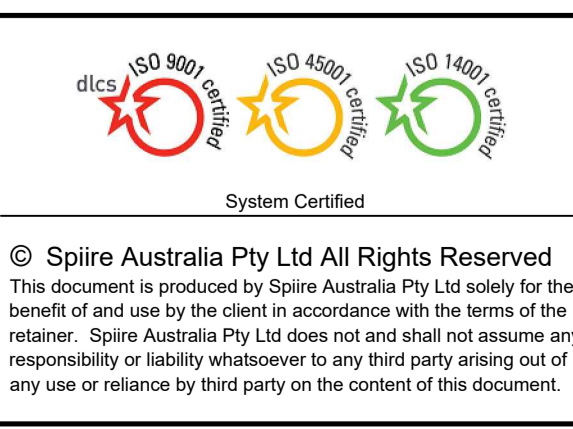
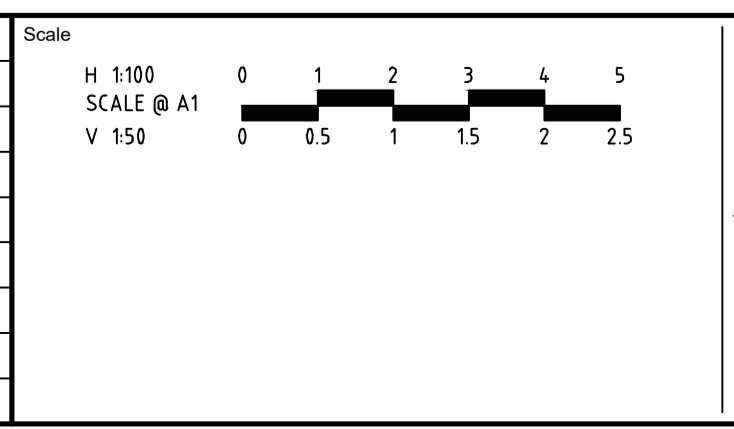
STRUCTURAL FILL IN ACCORDANCE
(REFER TO FILLING NOTE)

FILLING NOTE
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file name: 31066CR407.dwg, layout name: CR407, plotted by: Luke Russell, file location: G:\31066CR407\31066CR407.dwg, plot date: 16/03/2025 11:45 AM, sheet: 25 of 71, sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	MINOR UPDATE TO LIMIT OF WORKS	M.T-S	17/07/24
C	MAVRA ROAD AMENDED TO MATCH STAGE 10, BIKE PATH SHIFTED	M.T-S	26/04/24
B	CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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villawood properties
Communities Designed for Living
Designed by **H.HOGGARD**
Authorised by **J.POYNER**

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Checked by **J.POYNER**
Date **APRIL 2024**

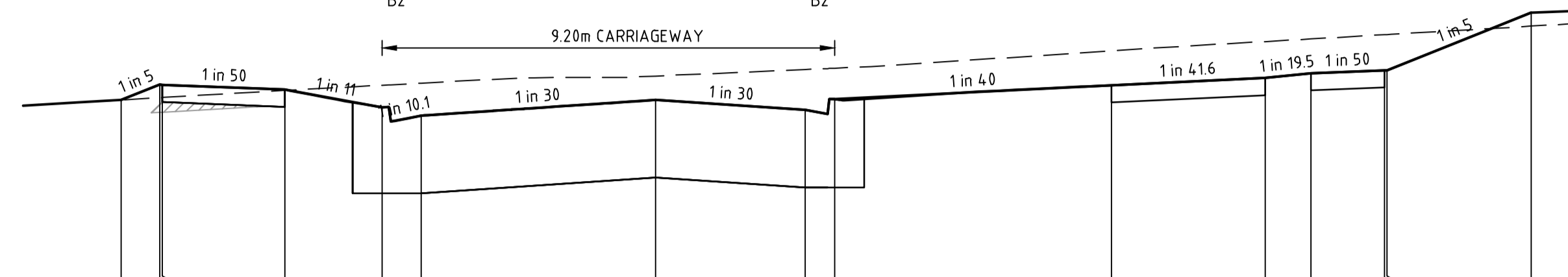
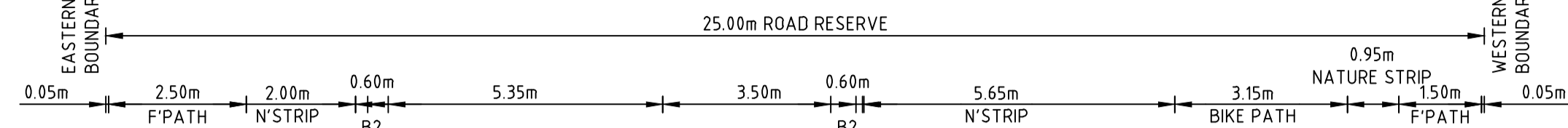
REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 8
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION 31066CR407

Drg No 31066CR407 Rev 0

FILLING NOTE
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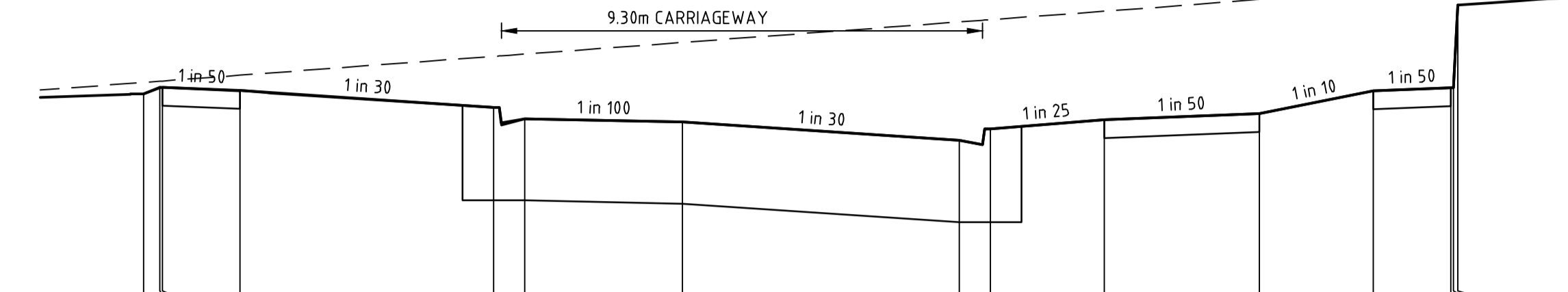
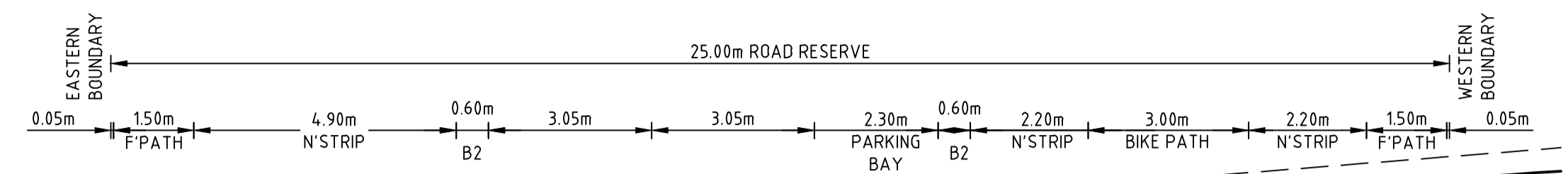
 STRUCTURAL FILL IN ACCORDANCE (REFER TO FILLING NOTE)



DATUM R.L.211.0	
DESIGN SURFACE LEVEL	213.044, 213.044, 213.201, 213.200, 213.150, 212.970, 212.885, 213.044, 213.193, 213.268, 213.316, 213.346, 213.348, 213.935
EXISTING SURFACE LEVEL	213.044, 213.067, 213.069, 213.141, 213.194, 213.216, 213.288, 213.545, 213.640, 213.667, 213.710, 213.711, 213.797
OFFSET	-10.895, -10.100, -10.050, -7.550, -5.575, -4.778, 0.000, 3.050, 3.650, 9.289, 12.416, 13.350, 14.850, 14.900, 17.836

TOMAHAWK DRIVE

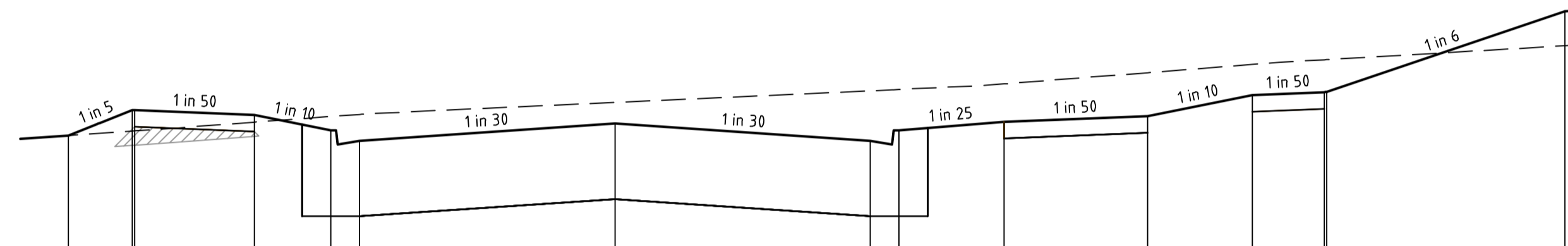
CH 279.77



DATUM R.L.217.0	
DESIGN SURFACE LEVEL	219.157, 219.220, 219.218, 219.188, 219.025, 218.884, 218.706, 218.816, 218.904, 218.964, 219.184, 219.214, 219.216, 220.016
EXISTING SURFACE LEVEL	219.266, 219.278, 219.280, 219.336, 219.518, 219.541, 219.653, 219.851, 219.873, 219.954, 220.071, 220.158, 220.217, 220.219, 220.223
OFFSET	-10.416, -10.100, -10.050, -8.550, -3.652, -3.052, 0.000, 5.350, 5.950, 8.150, 11.150, 13.350, 14.850, 14.900

TOMAHAWK DRIVE

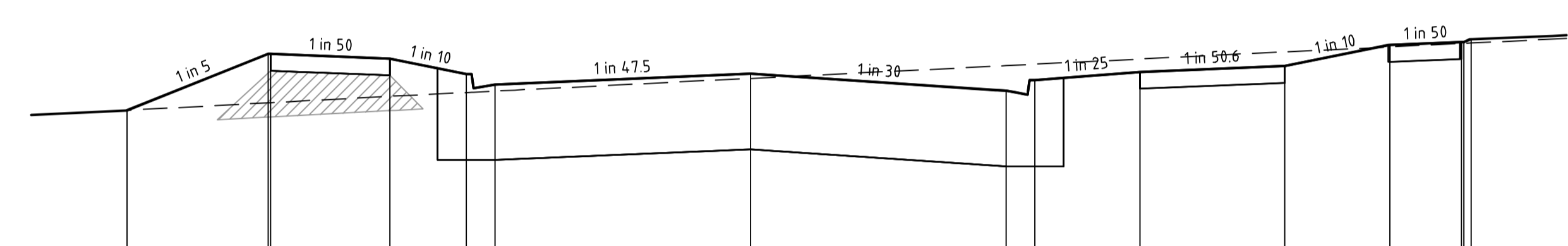
CH 421.56



DATUM R.L.210.0	
DESIGN SURFACE LEVEL	211.805, 212.074, 212.072, 212.022, 211.862, 211.752, 211.930, 212.010, 212.230, 212.260, 212.262, 213.105
EXISTING SURFACE LEVEL	211.805, 211.853, 211.854, 211.946, 212.005, 212.028, 212.152, 212.288, 212.549, 212.598, 212.600, 212.745
OFFSET	-11.441, -10.100, -10.050, -7.550, -5.950, -5.350, 0.000, 5.350, 5.950, 8.150, 11.150, 13.350, 14.850, 14.900, 18.890

TOMAHAWK DRIVE

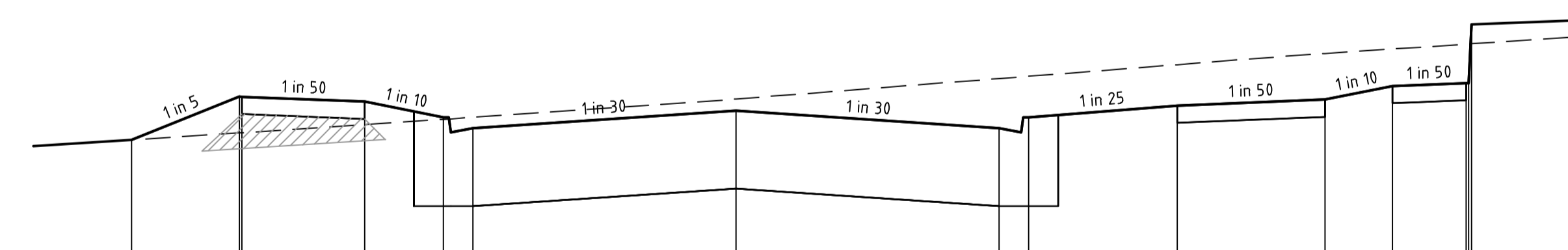
CH 254.47



DATUM R.L.213.0	
DESIGN SURFACE LEVEL	215.070, 215.661, 215.660, 215.610, 215.450, 215.340, 215.452, 215.274, 215.384, 215.472, 215.532, 215.752, 215.782, 215.784, 215.814
EXISTING SURFACE LEVEL	215.070, 215.148, 215.150, 215.216, 215.256, 215.271, 215.404, 215.537, 215.552, 215.607, 215.681, 215.733, 215.766, 215.770, 215.773
OFFSET	-13.058, -10.100, -10.050, -7.550, -5.950, -5.350, 0.000, 5.350, 5.950, 8.150, 11.183, 13.383, 14.883, 14.933, 15.085

TOMAHAWK DRIVE

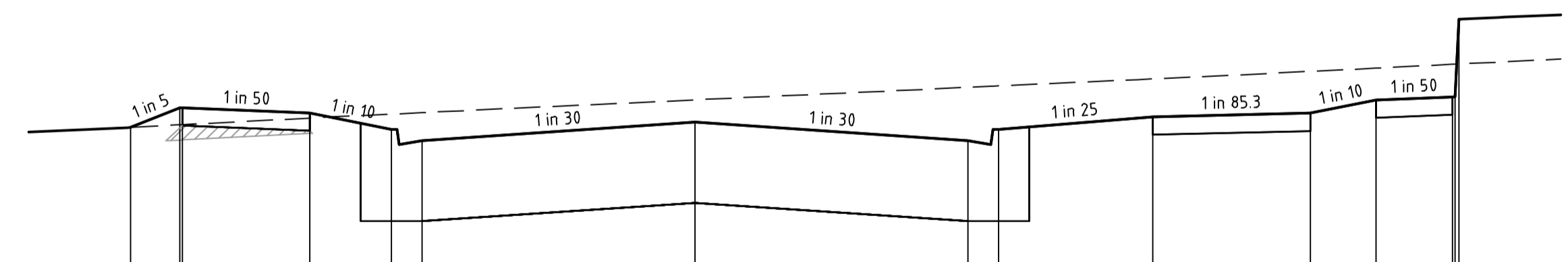
CH 330.56



DATUM R.L.209.0	
DESIGN SURFACE LEVEL	210.561, 211.000, 210.999, 210.949, 210.789, 210.679, 210.857, 210.910, 210.970, 211.107, 211.137, 211.199, 211.735
EXISTING SURFACE LEVEL	210.561, 210.632, 210.634, 210.715, 210.769, 210.790, 210.976, 211.325, 211.438, 211.484, 211.534, 211.536, 211.538
OFFSET	-12.295, -10.100, -10.050, -7.550, -5.950, -5.350, 0.000, 5.350, 5.950, 8.976, 11.976, 13.350, 14.850, 14.900, 14.960

TOMAHAWK DRIVE

CH 230.07



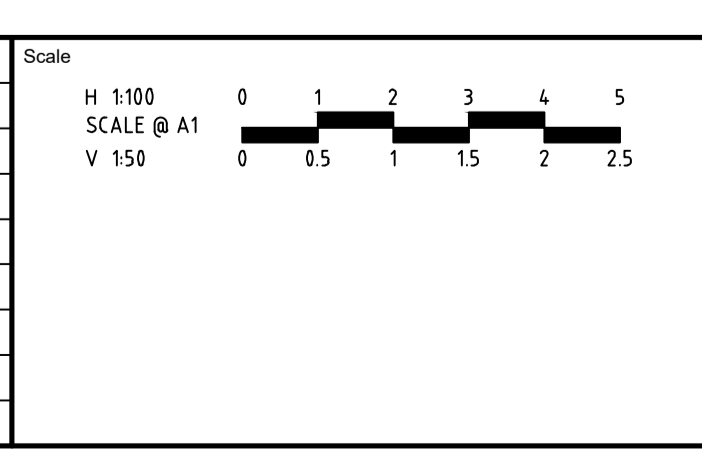
DATUM R.L.212.0	
DESIGN SURFACE LEVEL	214.327, 214.500, 214.519, 214.469, 214.309, 214.199, 214.377, 214.199, 214.309, 214.430, 214.466, 214.595, 214.625, 214.627, 214.886
EXISTING SURFACE LEVEL	214.327, 214.352, 214.354, 214.419, 214.458, 214.472, 214.597, 214.719, 214.733, 214.802, 214.875, 214.907, 214.944, 214.946, 214.948
OFFSET	-11.066, -10.100, -10.050, -7.550, -5.950, -5.350, 0.000, 5.350, 5.950, 8.976, 12.059, 13.350, 14.850, 14.900, 14.976


TOMAHAWK DRIVE

CH 310.08


file name: 31066CR409.dwg, layout name: CD409, plotted by: Luke Russell, file location: G:\31066CR409\CD409.dwg, plot date: 16/03/2025 11:45 AM, Sheet: 27 of 71, Sheets


Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	BIKE PATH SHIFTED	M.T-S	26/04/24
B	CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22




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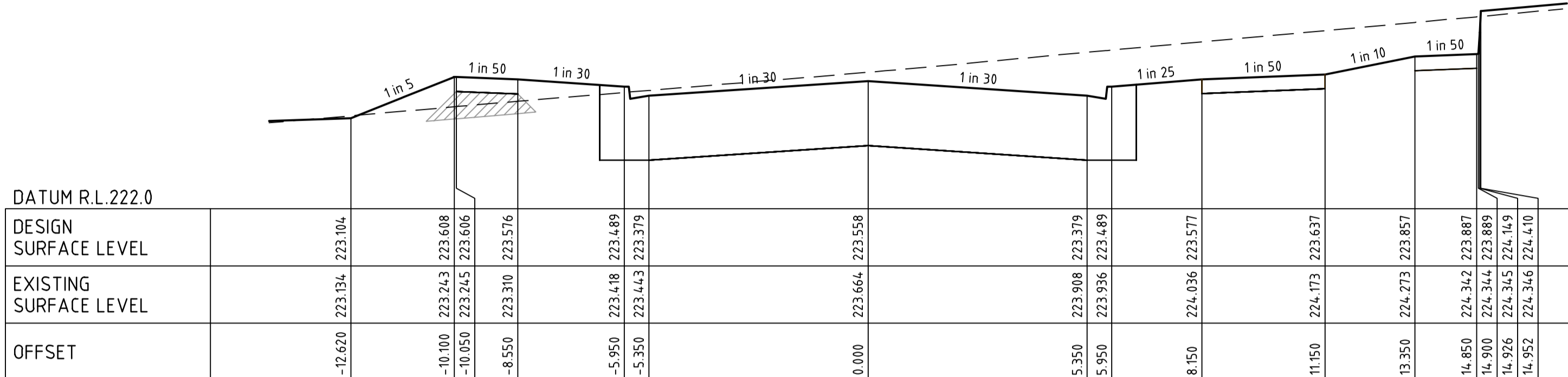
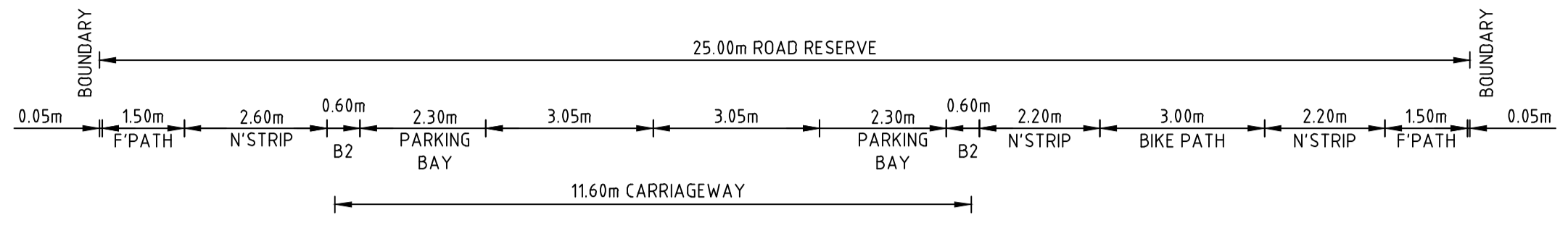

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J.POYNER
 Date
APRIL 2024

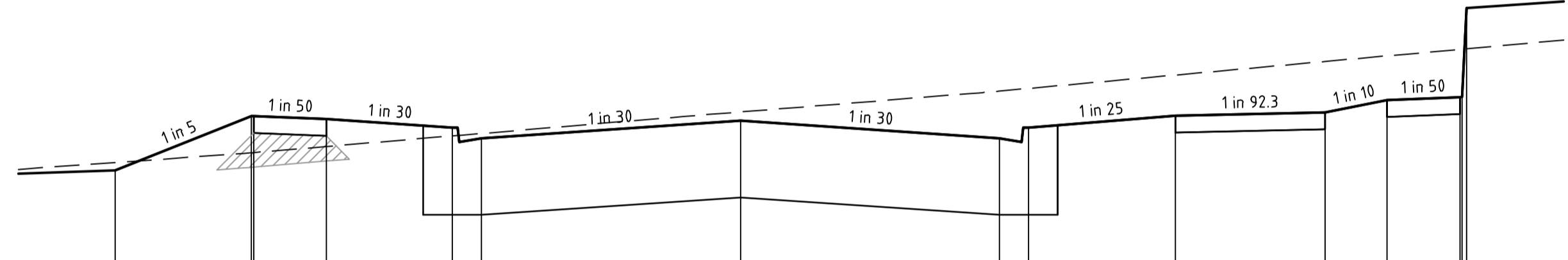
REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 10
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION Drg No **31066CR409** Rev **0**

 STRUCTURAL FILL IN ACCORDANCE
(REFER TO FILLING NOTE)

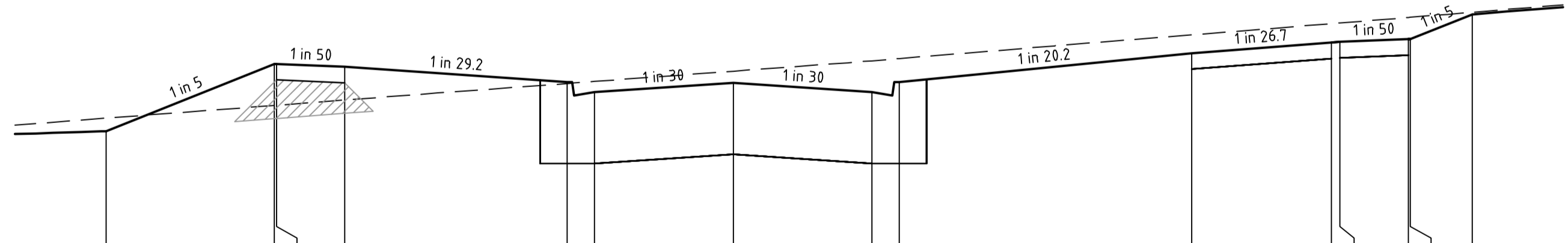
FILLING NOTE
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TOMAHAWK DRIVE CH 506.47



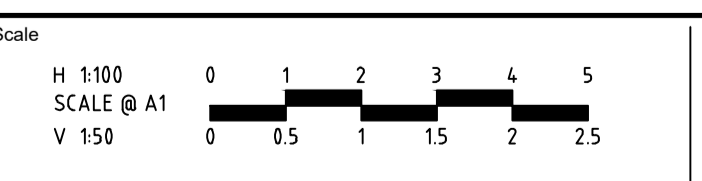
TOMAHAWK DRIVE CH 478.07



TOMAHAWK DRIVE CH 450.52

file name: 31066CR410.dwg, layout: rsmc_CD110, plotted by: Luke Russell, file location: G:\31066CR410\AKAD\plot_date: 14/03/2025 11:45 AM Sheet 28 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	BIKE PATH SHIFTED	M.T-S	26/04/24
B	CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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Designed
H.HOGGARD
Authorised
J.POYNER



Checked
J.POYNER
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 11
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION 31066CR410 Rev 0

FILLING NOTE
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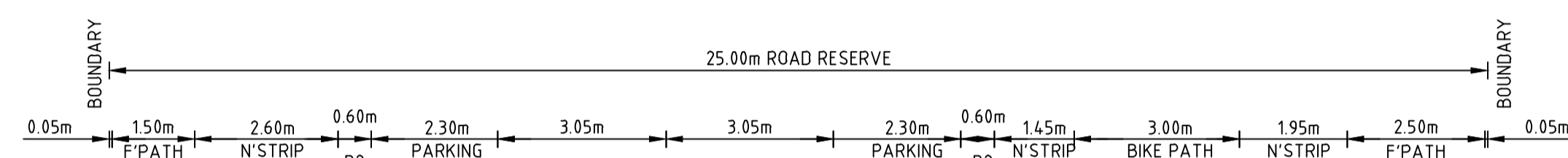
 STRUCTURAL FILL IN ACCORDANCE (REFER TO FILLING NOTE)

BASALT DRIVE

DATUM R.L. 214.0

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
215.386	215.386	-20.699
217.526	215.767	-10.001
217.524	215.769	-9.951
217.474	215.855	-7.451
217.331	215.975	-3.150
217.221	215.990	-2.550
217.285	216.052	0.000
217.435	216.170	4.850
217.545	216.184	5.450
217.645	216.257	8.450
217.675	216.304	9.950
217.676	216.385	10.000
216.493	216.493	15.918

CH 46.33

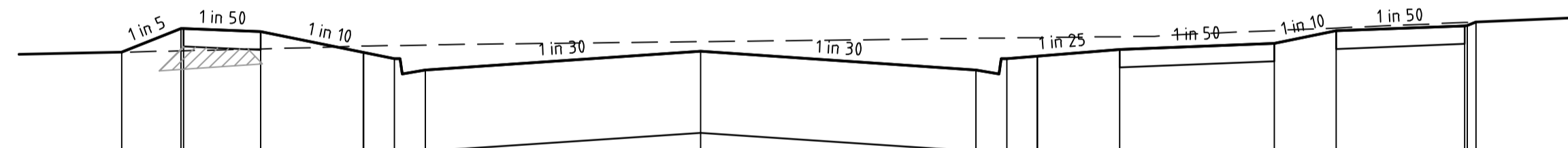


DATUM R.L. 202.0

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
204.051	204.051	-10.826
204.196	204.062	-10.100
204.195	204.062	-10.650
204.165	204.084	-8.550
203.905	204.119	-5.950
203.795	204.125	-5.350
203.973	204.178	0.000
203.985	204.231	5.350
203.985	204.234	5.950
203.993	204.258	8.150
204.053	204.299	11.150
204.173	204.321	12.350
204.223	204.345	14.850
204.224	204.344	14.900
204.331	204.331	15.434

REDSTONE HILL ROAD

CH 363.54

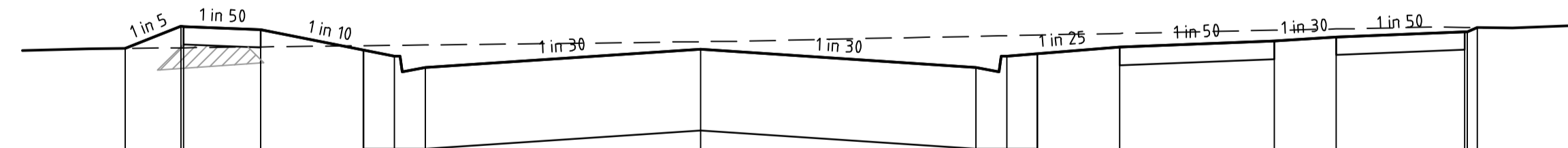


DATUM R.L. 203.0

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
204.604	204.604	-112.8
204.833	204.616	-10.100
204.832	204.617	-10.050
204.802	204.635	-8.550
204.542	204.667	-5.950
204.432	204.672	-5.350
204.610	204.705	0.000
204.542	204.711	5.350
204.542	204.711	5.950
204.630	204.754	8.150
204.690	204.813	11.150
204.810	204.838	12.350
204.860	204.891	14.850
204.861	204.892	14.900
204.896	204.896	15.073

REDSTONE HILL ROAD

CH 330.00

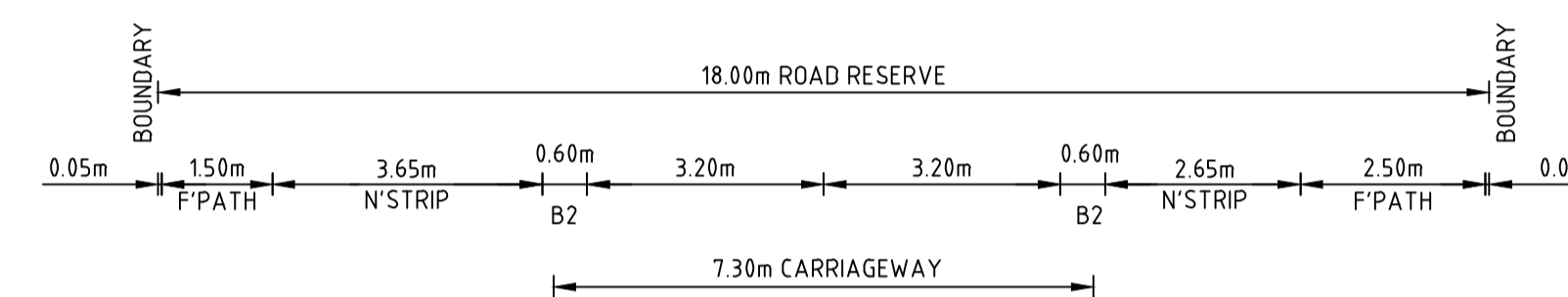


DATUM R.L. 204.0

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
205.577	205.577	-11.180
205.793	205.584	-10.100
205.792	205.584	-10.050
205.762	205.593	-8.550
205.502	205.608	-5.950
205.392	205.612	-5.350
205.570	205.643	0.000
205.392	205.702	5.350
205.392	205.702	5.950
205.590	205.725	8.150
205.650	205.755	11.150
205.690	205.768	12.350
205.740	205.782	14.850
205.741	205.781	14.900
205.780	205.780	15.095

REDSTONE HILL ROAD

CH 300.00

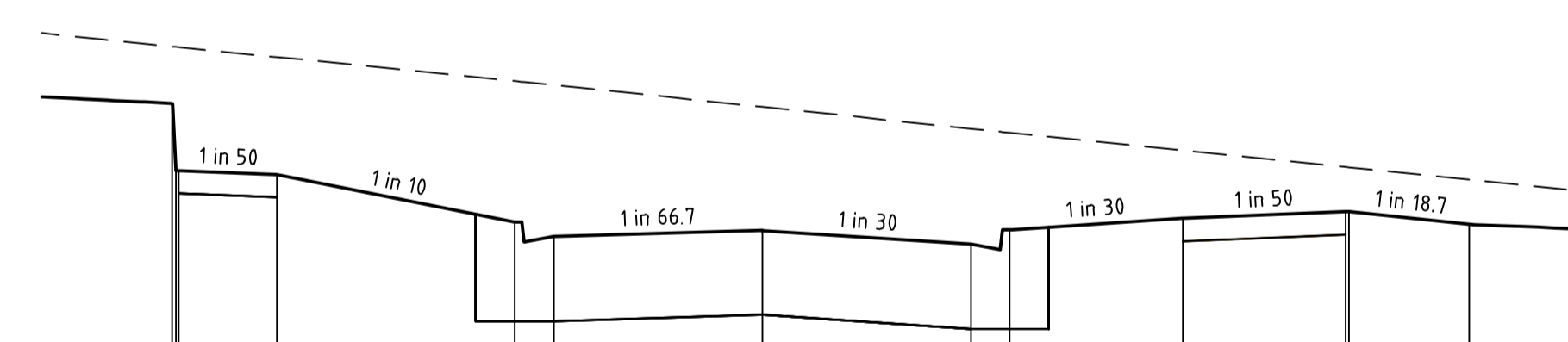


DATUM R.L. 218.0

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
220.033	220.077	-9.077
219.262	220.013	-5.000
219.260	220.010	-8.950
219.230	219.932	-7.450
218.902	219.740	-3.800
218.792	219.709	-3.200
218.899	219.541	0.000
218.782	219.373	3.200
218.892	219.342	3.800
218.981	219.204	6.450
219.031	219.075	8.950
219.032	219.072	9.000
218.586	218.938	11.229

FIRESTICK DRIVE

CH 54.74



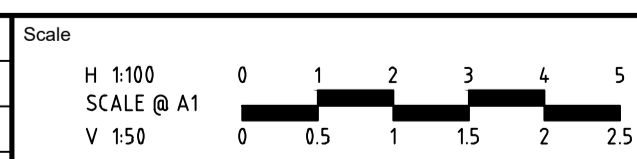
DATUM R.L. 216.0

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
219.121	219.558	-9.052
218.606	219.555	-9.000
218.604	219.552	-8.950
218.574	219.477	-7.450
218.209	219.292	-3.800
218.099	219.262	-3.200
218.147	219.094	0.000
218.040	218.926	3.200
218.150	218.895	3.800
218.239	218.760	6.450
218.289	218.632	8.950
218.290	218.629	9.000
218.191	218.535	10.850

FIRESTICK DRIVE

CH 44.22

file name: 31066CR414.dwg, layout: rnsd, CD:14, file location: G:\31066CR414\AKAD\plot date: 16/03/2025 11:45 AM Sheet: 32 of 71 Sheets



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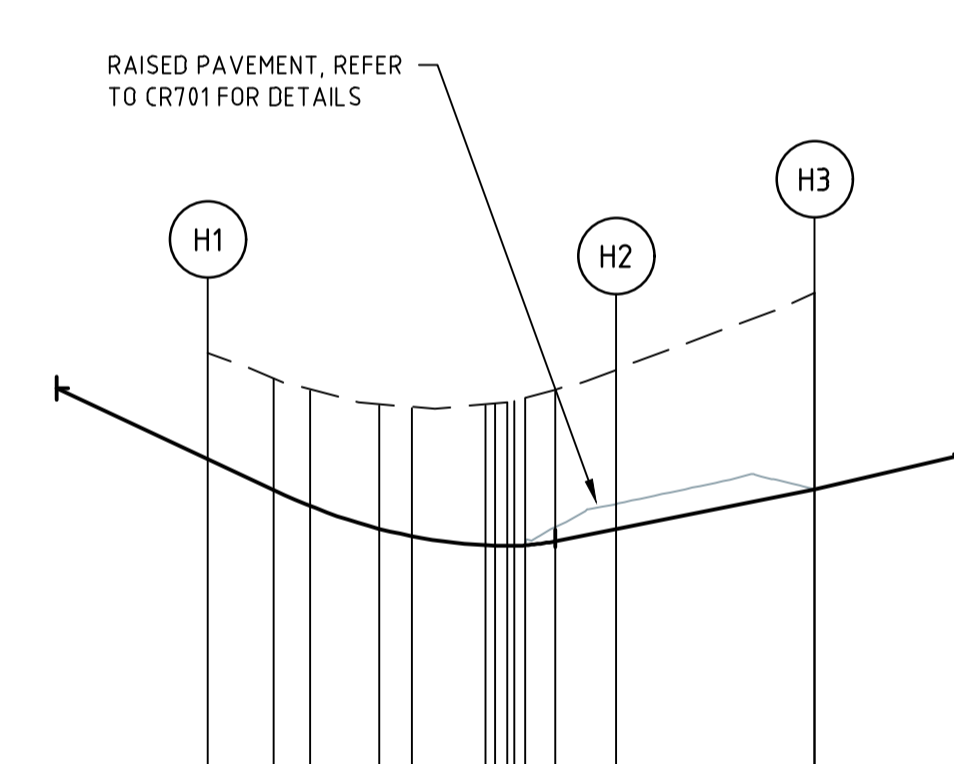
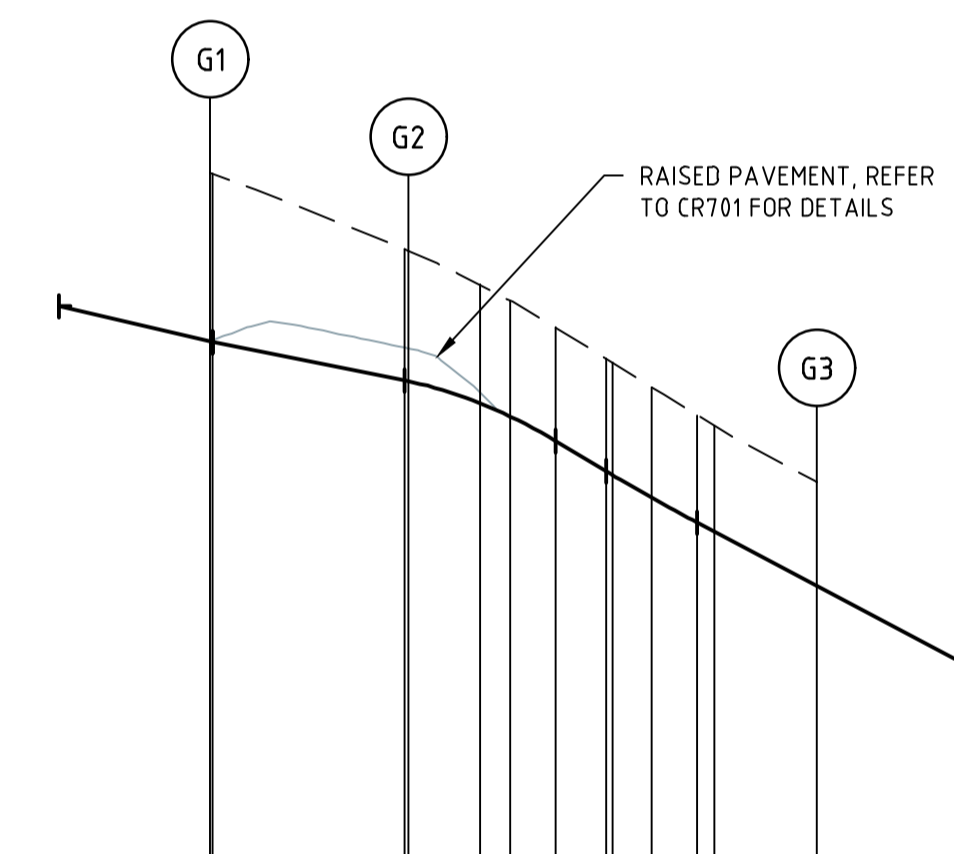
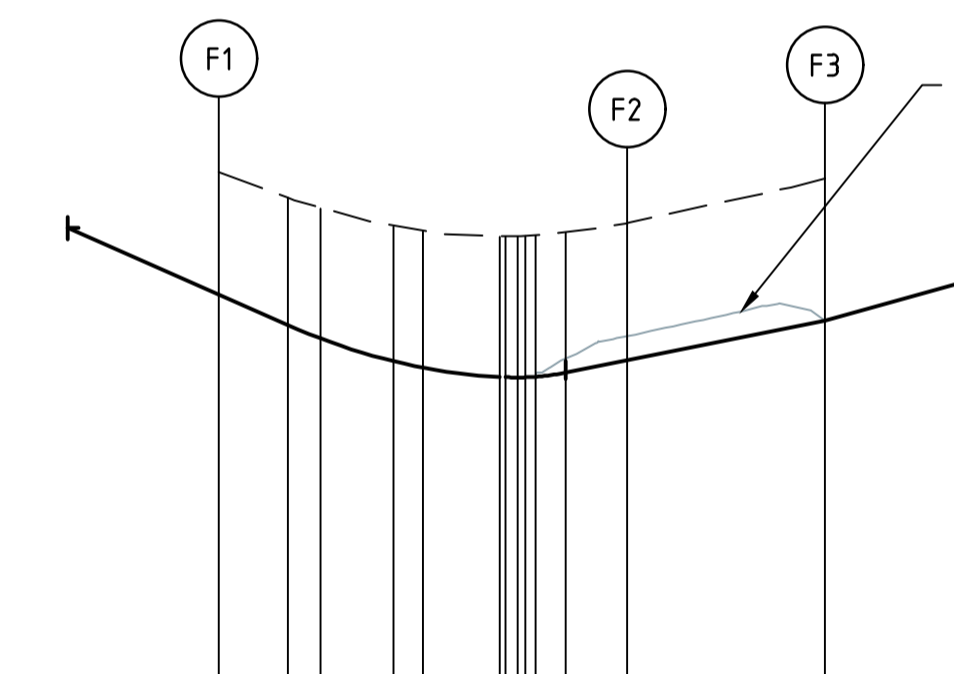
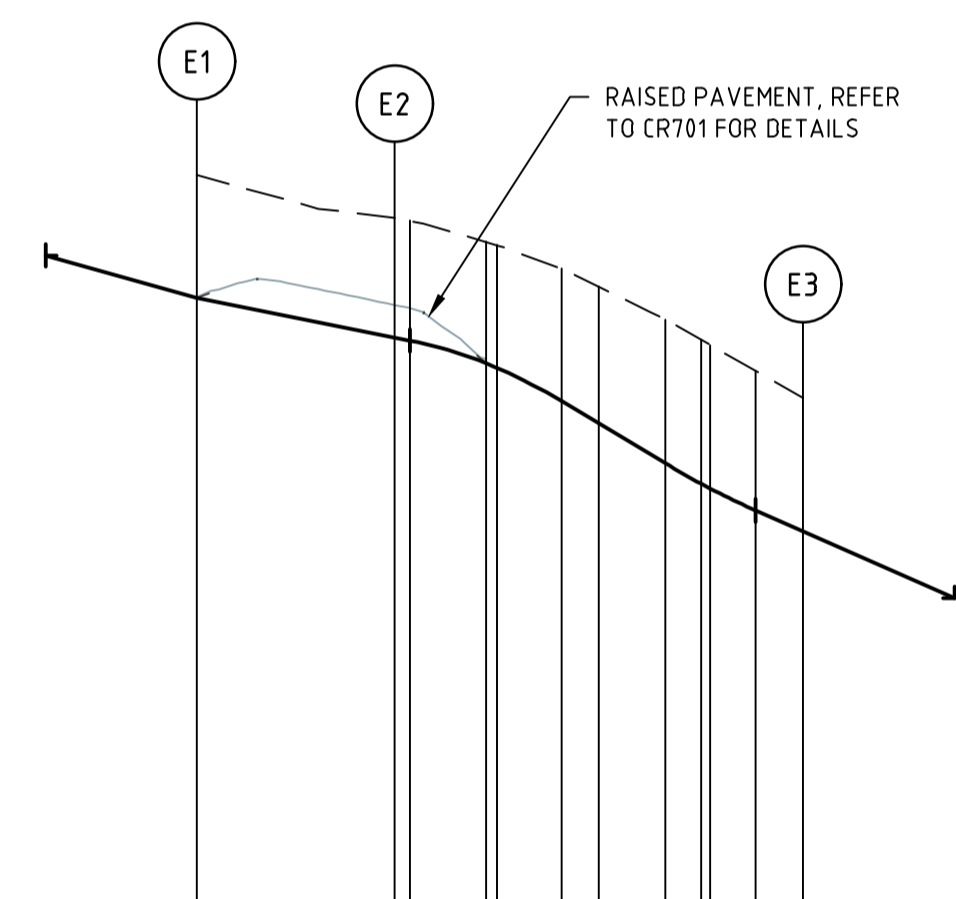
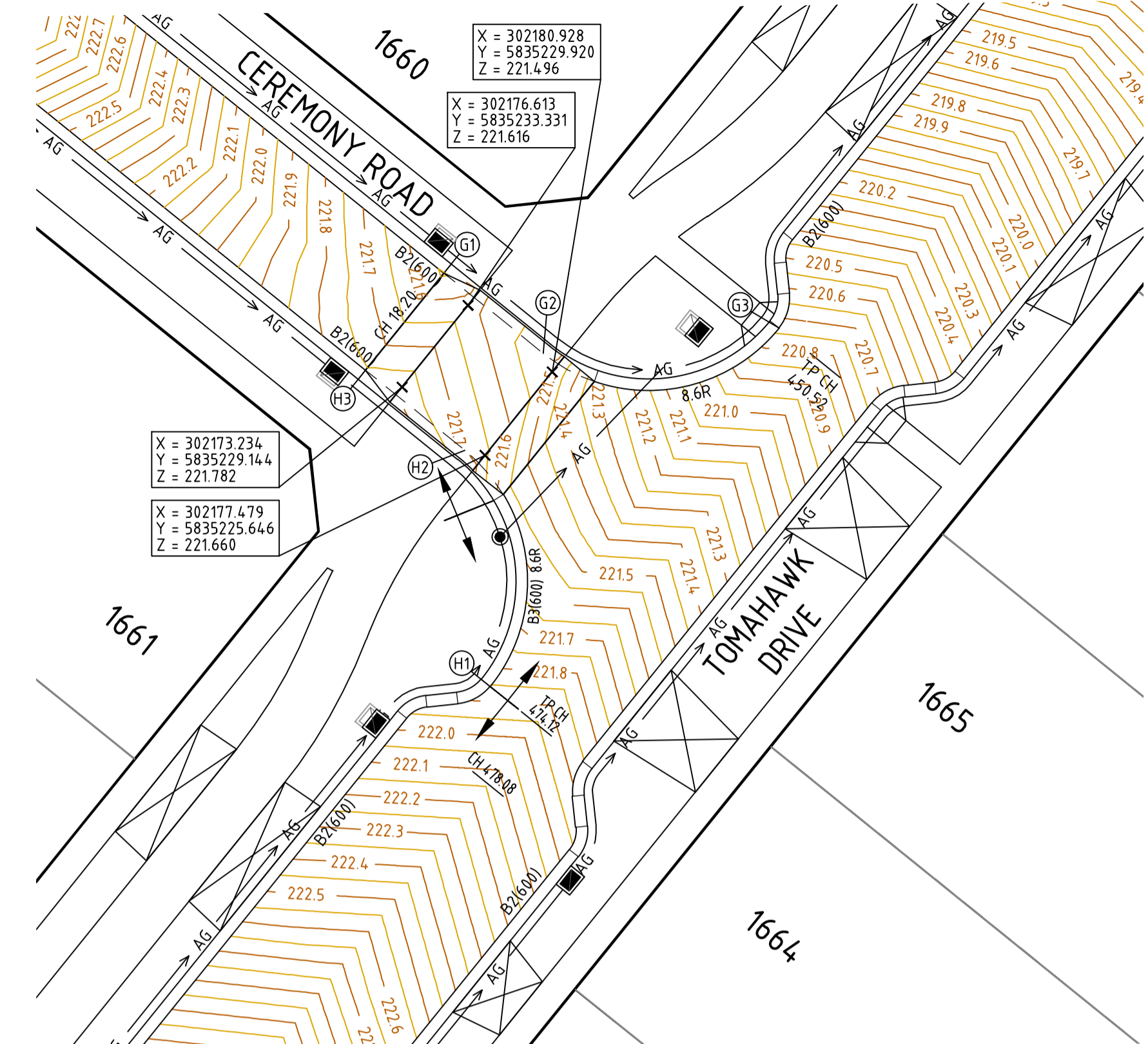
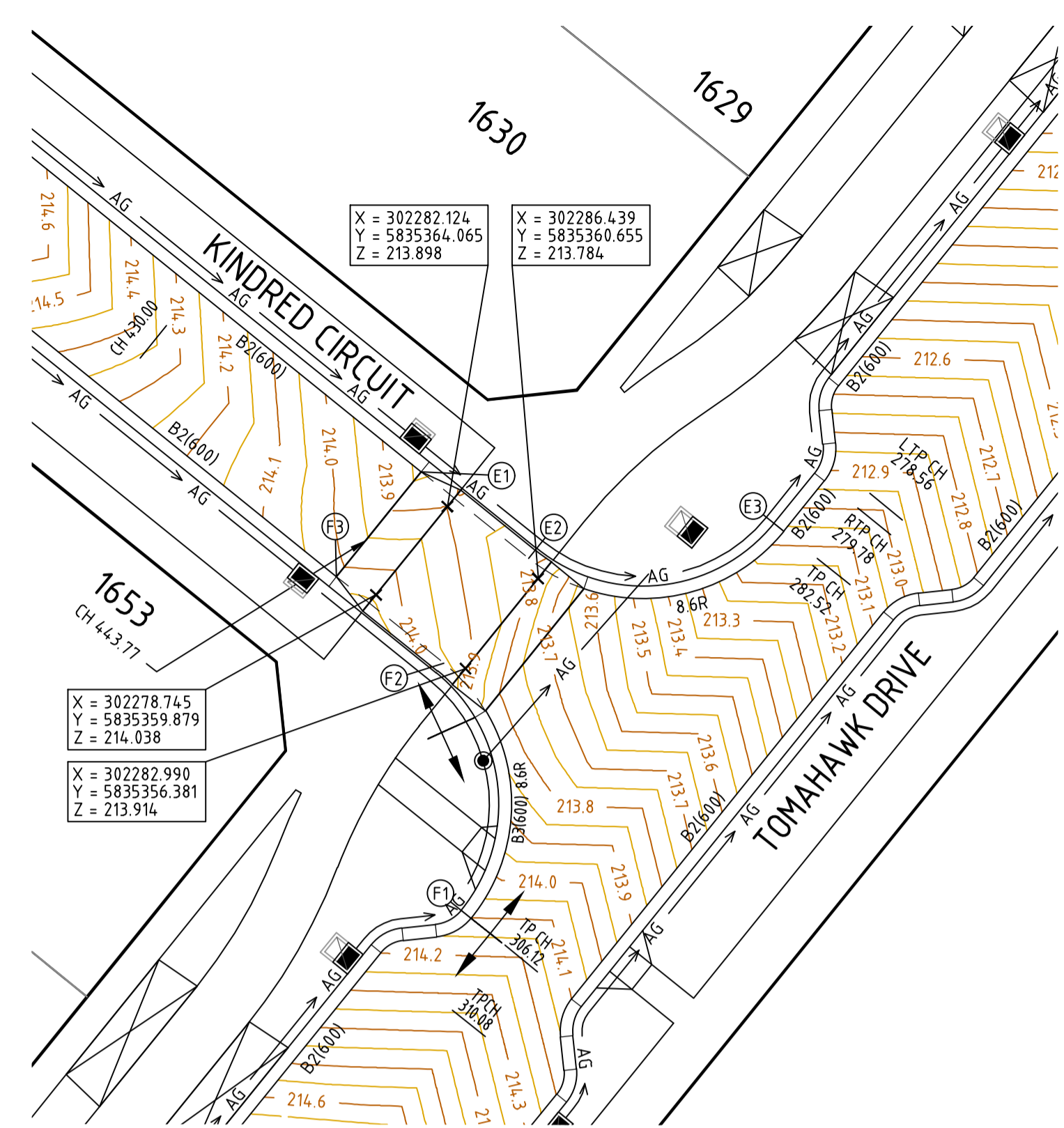
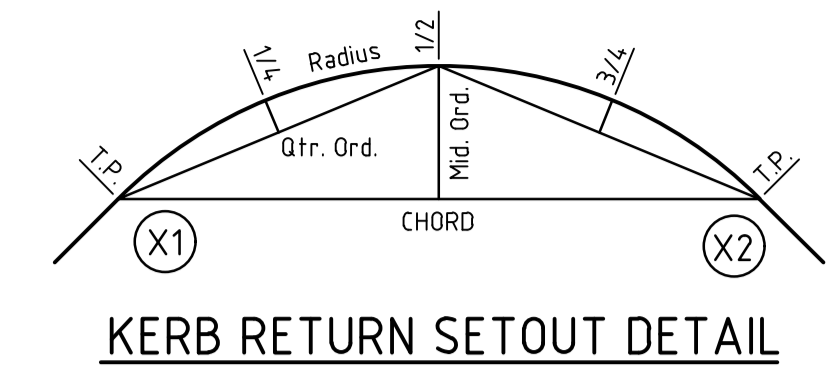
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villawood properties
 Communities Designed for Living
 Designed by H.HOGGARD
 Authorised by J.POYNER

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 Date: APRIL 2024

REDSTONE ESTATE
STAGE 16
 ROAD AND DRAINAGE
 ROAD CROSS SECTIONS - SHEET 15
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION 31066CR414
 Drg No: 31066CR414 Rev: 0

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	CROSS SECTIONS ADDED	M.T-S	26/04/24
B	CROSS SECTIONS AMENDED	M.T-S	23/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



VERTICAL GEOMETRY

DESIGN GRADELINE

DATUM RL 211.0

DESIGN LEVEL	CHAINAGE
213.835	0.000
213.704	6.550
213.694	7.060
213.619	9.560
213.603	9.927
213.494	12.060
213.419	13.305
213.288	15.488
213.220	16.682
213.204	18.488
213.132	19.999
213.063	20.059

VERTICAL GEOMETRY

DESIGN GRADELINE

DATUM RL 212.0

DESIGN LEVEL	CHAINAGE
214.102	0.000
214.001	2.288
213.956	3.377
213.881	5.788
213.860	6.754
213.830	9.288
213.829	9.485
213.828	9.885
213.828	10.132
213.830	10.485
213.842	11.485
213.884	13.509
214.015	20.059

VERTICAL GEOMETRY

DESIGN GRADELINE

DATUM RL 219.0

DESIGN LEVEL	CHAINAGE
221.542	0.000
221.540	0.076
221.413	6.433
221.410	6.550
221.338	8.933
221.294	9.927
221.213	11.433
221.102	13.105
221.025	14.605
220.943	16.105
220.912	16.682
220.733	20.059

VERTICAL GEOMETRY

DESIGN GRADELINE

DATUM RL 220.0

DESIGN LEVEL	CHAINAGE
221.655	0.000
221.753	2.176
221.700	3.377
221.625	5.676
221.600	6.754
221.571	9.176
221.568	9.500
221.568	9.900
221.568	10.132
221.584	11.500
221.624	13.509
221.755	20.052
221.755	20.059

ALIGNMENT E

ALIGNMENT E

POINT NO	EASTING	NORTHING	RL
E1	302280.888	5835365.719	213.835
E2	302285.957	5835361.605	213.704
1/4	302288.957	5835360.048	213.603
1/2	302292.299	5835359.746	213.419
3/4	302295.502	5835356.746	213.220
E3	302298.078	5835362.896	213.063

ALIGNMENT F

ALIGNMENT F

POINT NO	EASTING	NORTHING	RL
F1	302283.257	5835344.531	214.101
1/4	302284.814	5835347.503	213.956
1/2	302285.116	5835350.845	213.860
3/4	302284.115	5835354.048	213.828
F2	302281.966	5835356.625	213.883
F3	302276.868	5835360.738	214.014

ALIGNMENT G

ALIGNMENT G

POINT NO	EASTING	NORTHING	RL
G1	302175.377	5835234.984	221.541
G2	302180.474	5835230.871	221.410
1/4	302183.447	5835229.313	221.294
1/2	302186.789	5835229.011	221.100
3/4	302189.992	5835230.012	220.912
G3	302192.568	5835232.162	220.733

ALIGNMENT H

ALIGNMENT H

POINT NO	EASTING	NORTHING	RL
H1	302177.746	5835213.797	221.855
1/4	302179.304	5835216.769	221.700
1/2	302179.605	5835220.111	221.600
3/4	302178.605	5835223.314	221.568
H2	302176.455	5835225.890	221.624
H3	302171.358	5835230.004	221.755

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
E2-E3	8.600	13.509	12.162	2.519	-0.655

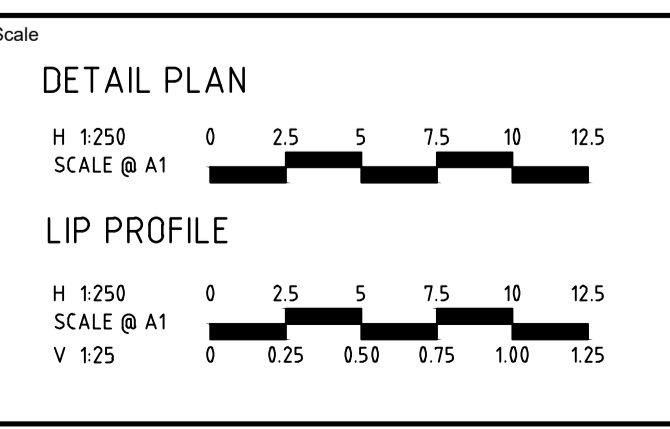
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
F1-F2	8.600	13.509	12.162	2.519	-0.655

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
G2-G3	8.600	13.509	12.162	2.519	-0.655

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
H1-H2	8.600	13.509	12.162	2.519	-0.655

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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	CEREMONY ROAD CHANGED TO TWO WAY CROSSFALL	M.T-S	17/07/24
C	KERB RETURNS EXTENDED, RAISED PAVEMENT SETOUT ADDED	M.T-S	26/04/24
B	MINOR AMENDMENTS TO SECTIONS & AG DRAIN	M.T-S	22/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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H.HOGGARD

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J.POYNER

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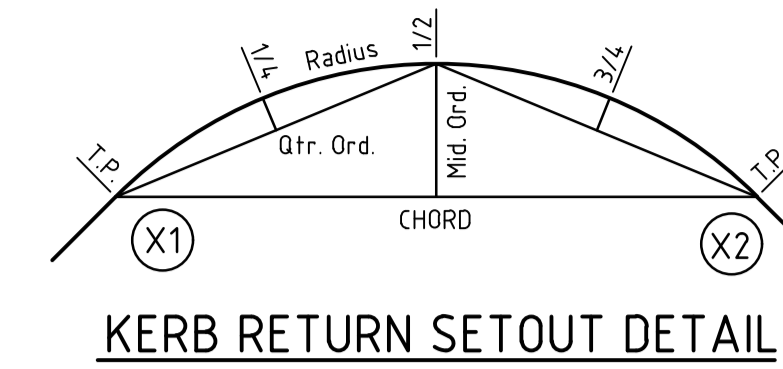
Date
APRIL 2024

**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 2**

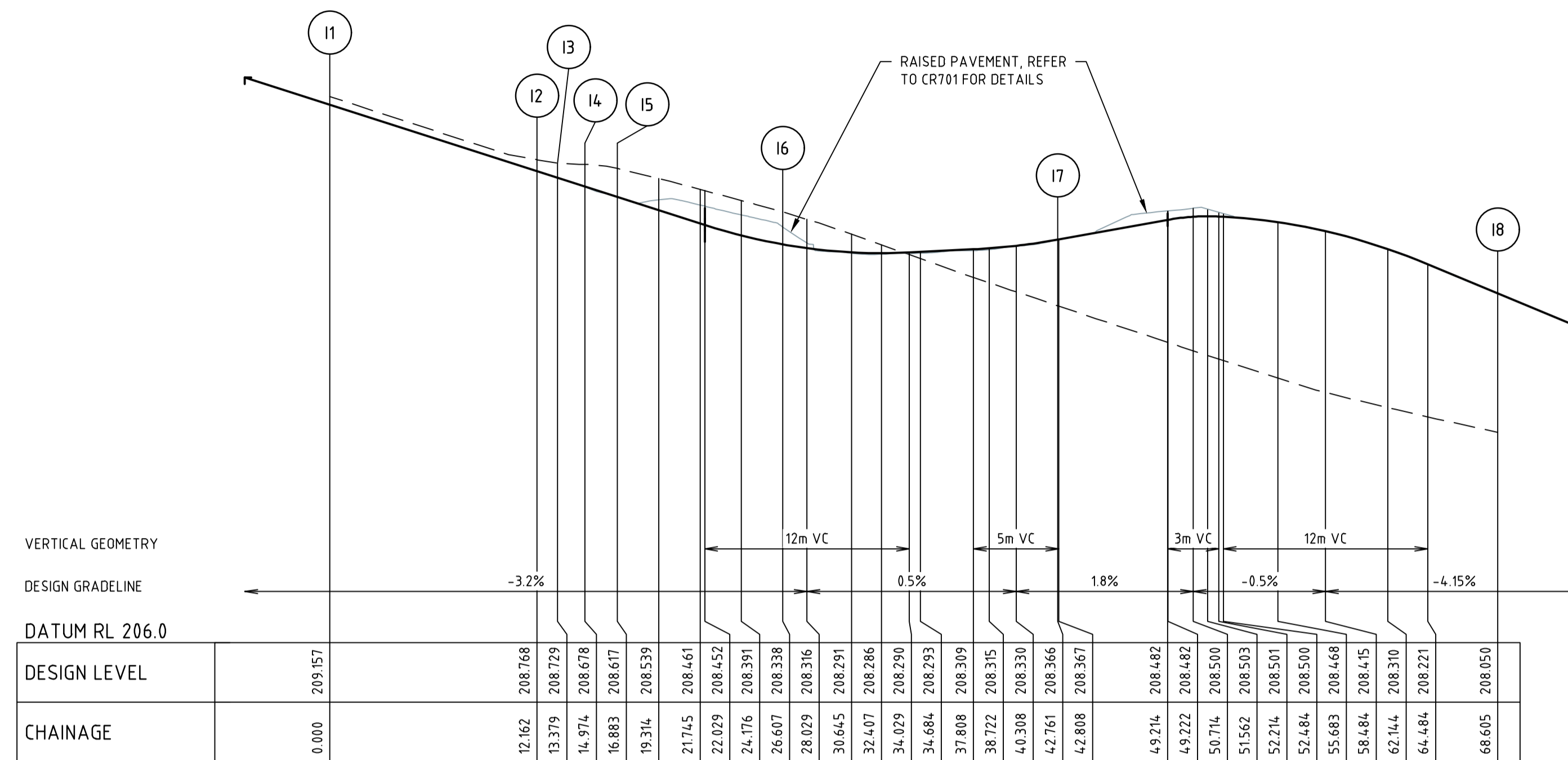
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION 31066CR501

Drg No 31066CR501 Rev 0



KERB RETURN SETOUT DETAIL

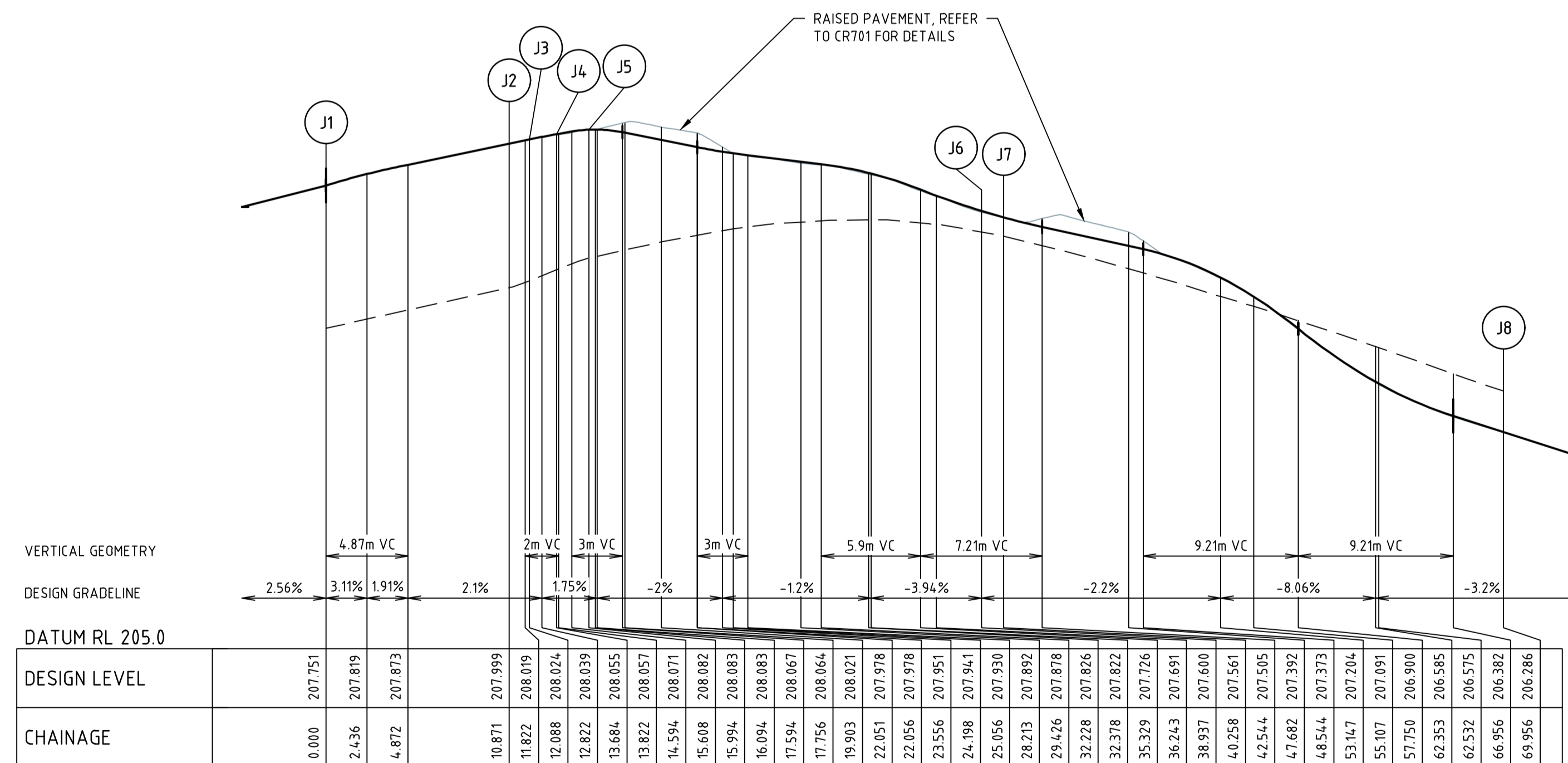


ALIGNMENT I

POINT NO	EASTING	NORTHING	RL
11	302364.057	5835510.501	209.157
12	302373.521	5835502.863	208.768
13	302374.089	5835501.822	208.729
14	302374.258	5835500.236	208.678
15	302375.144	5835498.599	208.617
1/4	302377.077	5835497.126	208.539
1/2	302379.107	5835495.790	208.461
3/4	302381.224	5835494.595	208.393
16	302383.417	5835493.548	208.344
1/4	302387.287	5835492.434	208.302
1/2	302391.314	5835492.358	208.308
3/4	302395.223	5835493.325	208.329
17	302398.749	5835495.270	208.368
1/4	302403.825	5835499.265	208.482
1/2	302408.634	5835503.578	208.468
3/4	302413.156	5835508.192	208.310
18	302417.372	5835513.086	208.050

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
12-13	1.550	1.217	1.186	0.118	0.030
14-15	2.450	1.909	1.861	0.184	-0.046
15-16	35.450	9.724	9.693	0.333	-0.083
16-17	15.450	16.154	15.428	2.064	-0.525
17-18	100.450	25.844	25.772	0.830	-0.208

ALIGNMENT I



ALIGNMENT J

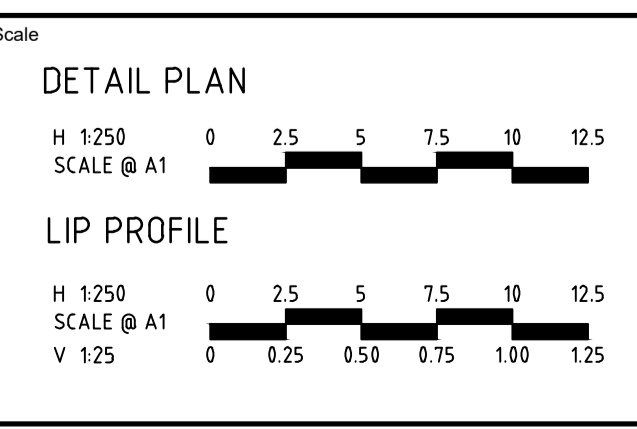
POINT NO	EASTING	NORTHING	RL
J1	302426.246	5835505.925	207.751
J2	302419.418	5835497.465	207.999
J3	302418.377	5835496.891	208.024
J4	302416.790	5835496.728	208.055
J5	302415.143	5835495.830	208.082
1/4	302413.846	5835494.119	208.064
1/2	302412.655	5835492.333	208.021
3/4	302411.574	5835490.478	207.978
J6	302410.607	5835488.561	207.941
1/4	302409.433	5835484.735	207.892
1/2	302409.353	5835480.734	207.826
3/4	302410.374	5835476.864	207.691
J7	302412.416	5835473.423	207.561
1/4	302417.463	5835467.986	207.392
1/2	302423.253	5835463.349	207.091
3/4	302429.660	5835459.610	206.575
J8	302436.545	5835456.851	206.286

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
J2-J3	1.550	1.217	1.186	0.118	0.030
J4-J5	2.450	1.924	1.875	0.187	-0.047
J5-J6	35.450	8.590	8.569	0.260	-0.065
J6-J7	14.450	16.059	15.245	2.174	-0.554
J7-J8	50.450	29.699	29.272	2.170	-0.545

ALIGNMENT J

file name: 31066CR503.dwg, layout: name: CR503, plotted by: Luke Russell, file location: G:\310666\310666\WILLAKAD\plot date: 11/13/2025 11:45 AM Sheet: 36 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	ALIGNMENTS AMENDED	M.T-S	26/04/24
B	CARPARKS EXTENDED	M.T-S	22/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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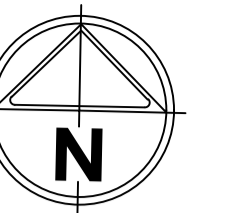
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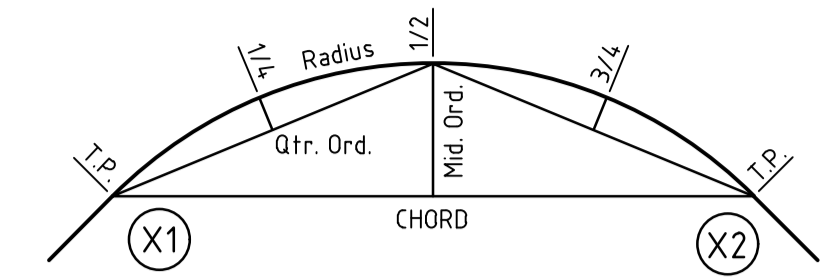
 Date APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 4
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

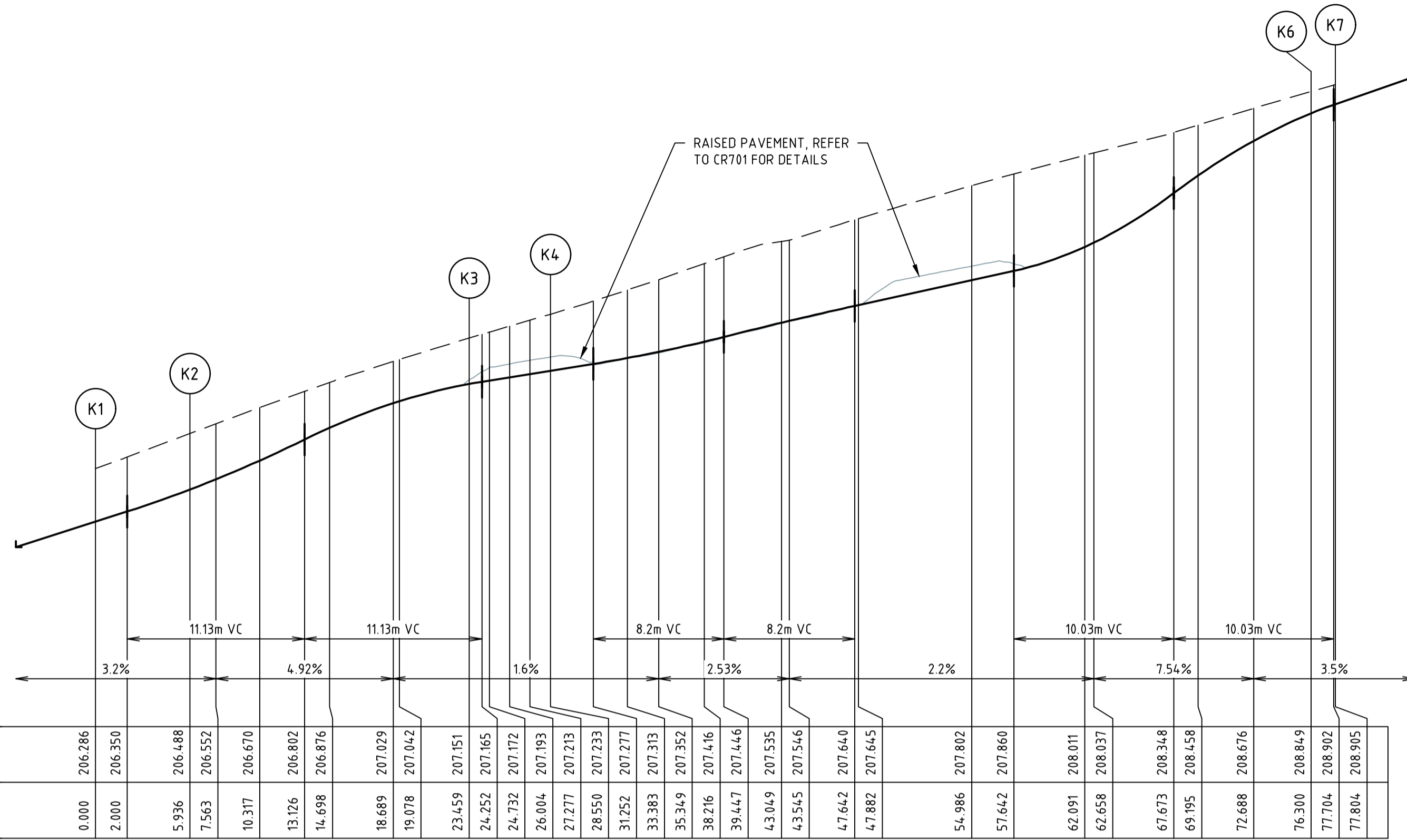
 Drg No 31066CR503 Rev 0



MGA 2020
ZONE 55



KERB RETURN SETOUT DETAIL



ALIGNMENT K

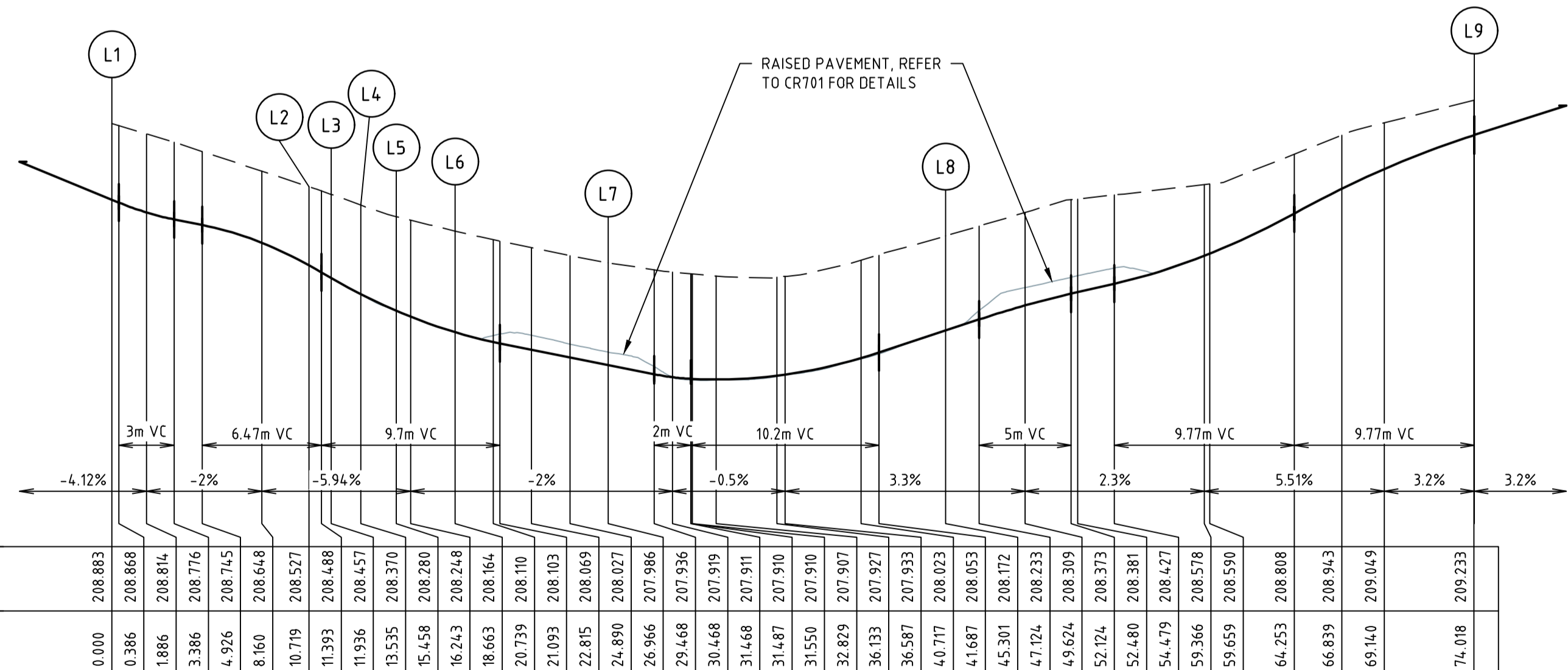
POINT NO	EASTING	NORTHING	RL
K1	302434.699	5835451.037	206.286
K2	302429.041	5835452.834	206.488
1/4	302424.915	5835454.302	206.670
1/2	302420.899	5835456.051	206.876
3/4	302417.013	5835458.071	207.042
K3	302413.275	5835460.353	207.151
1/4	302412.200	5835461.034	207.172
1/2	302411.101	5835461.676	207.193
3/4	302409.980	5835462.278	207.213
K4	302408.838	5835462.840	207.233
1/4	302404.245	5835464.301	207.313
1/2	302399.431	5835464.523	207.416
3/4	302394.724	5835463.490	207.535
K5	302390.444	5835461.274	207.645
1/4	302384.765	5835457.008	207.802
1/2	302379.402	5835452.351	208.011
3/4	302374.381	5835447.327	208.458
K6	302369.727	5835441.961	208.849
K7	302368.782	5835440.791	208.905

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
K2-K3	63.700	17.523	17.467	0.602	0.151
K3-K4	35.450	5.091	5.086	0.091	-0.023
K4-K5	18.450	19.332	18.460	2.475	-0.629
K5-K6	100.450	28.418	28.323	1.003	-0.251

VERTICAL GEOMETRY
DESIGN GRADELINE
DATUM RL 205.0

DESIGN LEVEL	CHAINAGE
206.286	0.000
206.350	2.000
206.488	5.936
206.552	7.563
206.670	10.317
206.802	13.126
206.876	14.698
207.029	18.689
207.042	19.078
207.151	23.459
207.165	24.252
207.172	24.732
207.213	27.277
207.233	28.550
207.313	33.383
207.352	35.349
207.416	38.216
207.446	39.447
207.535	43.049
207.546	43.545
207.640	47.642
207.645	47.882
207.802	54.986
207.860	57.642
208.011	62.091
208.037	62.658
208.348	67.673
208.458	69.195
208.676	72.688
208.849	76.300
208.902	77.704
208.905	77.804

ALIGNMENT K



ALIGNMENT L

POINT NO	EASTING	NORTHING	RL
L1	302362.246	5835446.066	208.883
L2	302368.978	5835454.408	208.527
L3	302370.018	5835454.975	208.457
L4	302371.609	5835455.146	208.370
L5	302373.254	5835456.044	208.280
L6	302375.267	5835458.538	208.164
1/4	302376.522	5835460.190	208.110
1/2	302377.679	5835461.914	208.069
3/4	302378.733	5835463.702	208.027
L7	302379.681	5835465.548	207.986
1/4	302381.090	5835469.896	207.910
1/2	302381.322	5835474.460	207.927
3/4	302380.361	5835478.929	208.023
L8	302378.273	5835482.994	208.172
1/4	302373.977	5835488.744	208.381
1/2	302369.281	5835494.173	208.590
3/4	302364.210	5835499.253	208.943
L9	302358.789	5835503.958	209.233

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
L2-L3	1.550	1.216	1.185	0.118	0.030
L4-L5	2.450	1.923	1.874	0.186	-0.047
L6-L7	35.450	8.303	8.284	0.243	-0.061
L7-L8	17.450	18.334	17.503	2.353	-0.599
L8-L9	100.450	28.717	28.620	1.025	-0.256

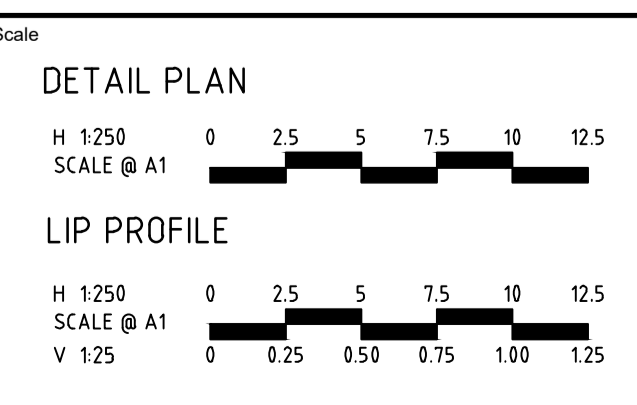
VERTICAL GEOMETRY
DESIGN GRADELINE
DATUM RL 207.0

DESIGN LEVEL	CHAINAGE
208.883	0.000
208.868	0.386
208.814	1.886
208.776	3.386
208.745	4.926
208.648	8.160
208.527	10.719
208.488	11.393
208.457	11.936
208.370	13.535
208.280	15.458
208.248	16.243
208.164	18.663
208.110	20.739
208.103	21.093
208.069	22.815
208.027	24.890
207.986	26.966
207.936	29.468
207.919	30.468
207.911	31.468
207.910	31.487
207.910	31.550
207.907	32.829
207.927	36.133
207.933	36.587
208.023	40.717
208.053	41.687
208.172	45.301
208.233	47.124
208.309	49.624
208.373	52.124
208.381	52.480
208.427	54.479
208.578	59.366
208.590	59.659
208.808	64.253
208.943	66.839
209.049	69.140
209.233	74.018

ALIGNMENT L

file name: 31066CR504.dwg, layout: name: CEREOL, plotted by: Luke Russell, file location: G:\31066CR504\AKAD\plot date: 16/03/2025 11:45 AM Sheet: 37 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	ALIGNMENTS AMENDED	M.T-S	26/04/24
B	LONG SECTIONS AMENDED	M.T-S	22/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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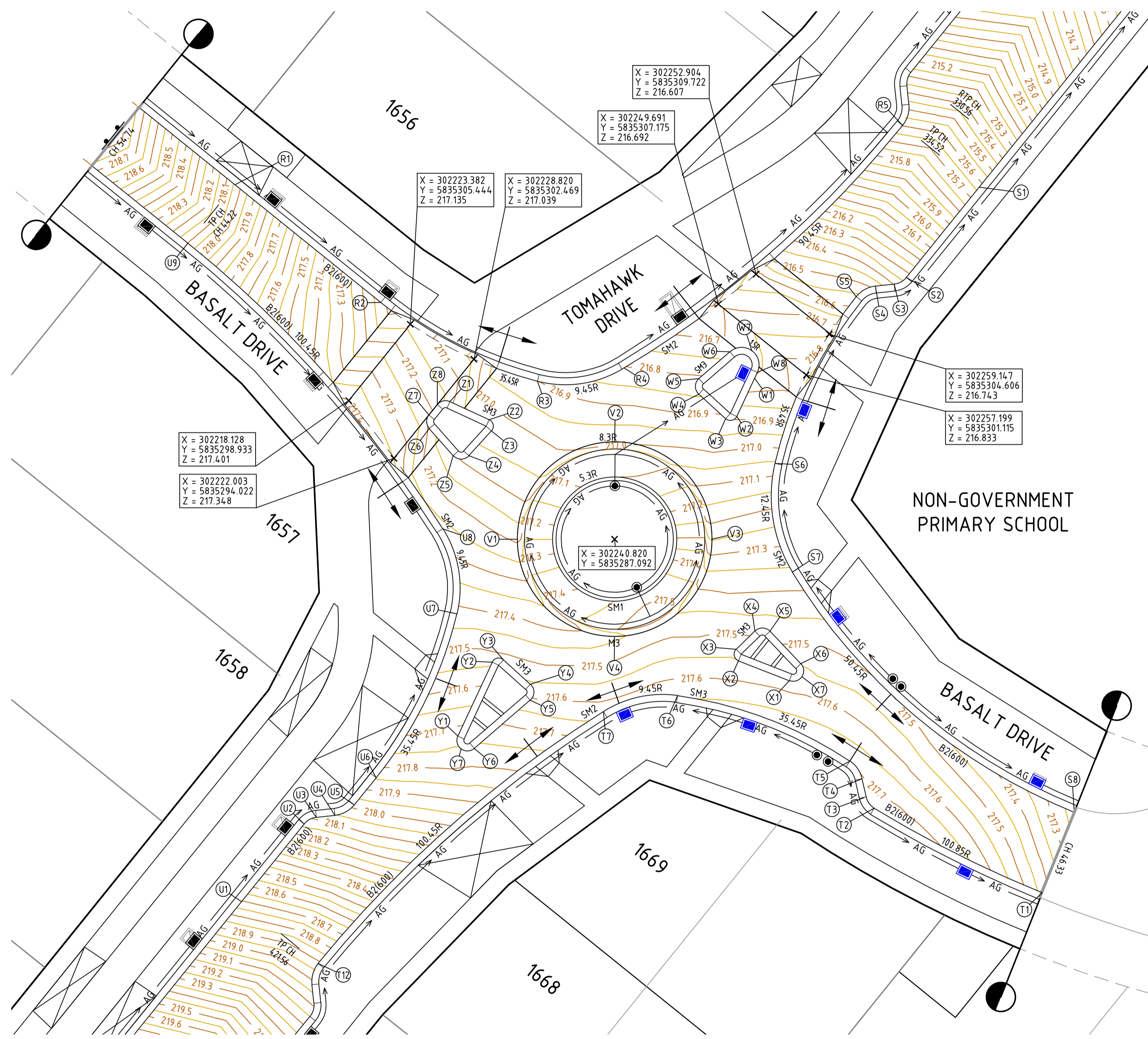
Designed: H.HOGGARD
 Authorised: J.POYNER

Checked: J.POYNER
 Date: APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 5
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

Drg No: **CONSTRUCTION 31066CR504**
 Rev: **0**

NOTE: FOR FURTHER KERB SET OUTS AND LONG SECTIONS REFER TO PLANS CR506, CR507 AND CR508.



ALIGNMENT V

POINT NO	EASTING	NORTHING	RL
V1	302232.520	5835287.092	217.191
1/4	302233.151	5835290.269	217.101
1/2	302234.951	5835281.223	217.352
3/4	302237.643	5835294.761	216.999
V2	302240.820	5835295.392	216.991
1/4	302243.996	5835294.761	217.012
1/2	302246.689	5835292.961	217.062
3/4	302233.151	5835283.916	217.287
V3	302249.120	5835287.092	217.246
1/4	302248.488	5835283.916	217.366
1/2	302246.689	5835281.223	217.441
3/4	302233.151	5835283.916	217.287
V4	302240.820	5835278.792	217.437
1/4	302237.643	5835279.424	217.395
1/2	302234.951	5835281.223	217.352
3/4	302233.151	5835283.916	217.287

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
V1-V2	8.300	13.038	11.738	2.431	0.632
V2-V3	8.300	13.038	11.738	2.431	0.632
V3-V4	8.300	13.038	11.738	2.431	0.632
V4-V1	8.300	13.038	11.738	2.431	0.632

ALIGNMENT W

POINT NO	EASTING	NORTHING	RL
W1	302252.777	5835300.830	216.753
W2	302251.259	5835297.574	216.890
W3	302250.312	5835297.383	216.907
W4	302248.013	5835299.473	216.843
W5	302248.029	5835300.819	216.808
W6	302250.674	5835303.108	216.727
W7	302252.559	5835303.171	216.732
W8	302253.015	5835301.340	216.748

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
W2-W3	0.600	1.123	0.966	0.244	0.065
W4-W5	0.900	1.522	1.347	0.303	0.079
W6-W7	1.500	2.040	1.887	0.334	0.086
W7-W8	1.500	2.040	1.887	0.334	0.086

ALIGNMENT X

POINT NO	EASTING	NORTHING	RL
X9	302255.744	5835275.013	217.574
X1	302255.744	5835275.013	217.574
X2	302251.409	5835276.711	217.552
1/4	302251.168	5835276.884	217.549
1/2	302251.039	5835277.152	217.545
3/4	302251.055	5835277.448	217.541
X3	302251.209	5835277.700	217.536
X4	302252.815	5835279.261	217.487
1/4	302253.112	5835279.453	217.481
1/2	302253.460	5835279.515	217.476
3/4	302253.805	5835279.439	217.474
X5	302254.094	5835279.236	217.475
X6	302256.724	5835276.472	217.544
1/4	302256.893	5835276.220	217.550
1/2	302256.969	5835275.927	217.556
3/4	302256.943	5835275.625	217.561
X7	302256.819	5835275.349	217.565
1/4	302256.610	5835275.130	217.568
1/2	302256.340	5835274.992	217.571
3/4	302256.040	5835274.952	217.573
X8	302255.744	5835275.013	

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
X2-X3	0.600	1.198	1.009	0.275	0.073
X4-X5	0.900	1.423	1.280	0.267	0.069
X6-X7	0.900	1.217	1.126	0.198	0.051
X7-X8	0.900	1.217	1.126	0.198	0.051

ALIGNMENT Y

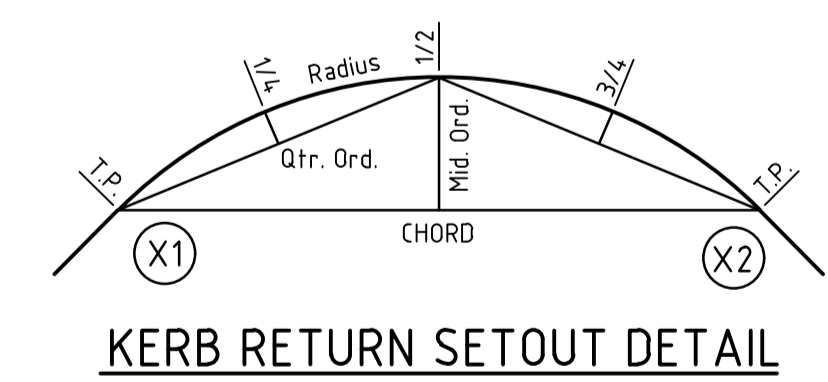
POINT NO	EASTING	NORTHING	RL
Y1	302227.447	5835270.294	217.726
Y2	302230.388	5835276.605	217.518
Y3	302231.335	5835276.795	217.519
Y4	302233.634	5835274.706	217.565
Y5	302233.618	5835273.359	217.607
Y6	302228.851	5835269.234	217.782
Y7	302227.720	5835269.196	217.762

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
Y2-Y3	0.600	1.123	0.966	0.244	0.065
Y4-Y5	0.900	1.522	1.347	0.303	0.079
Y6-Y7	0.900	1.224	1.132	0.200	0.052
Y7-Y1	0.900	1.224	1.132	0.200	0.052

ALIGNMENT Z

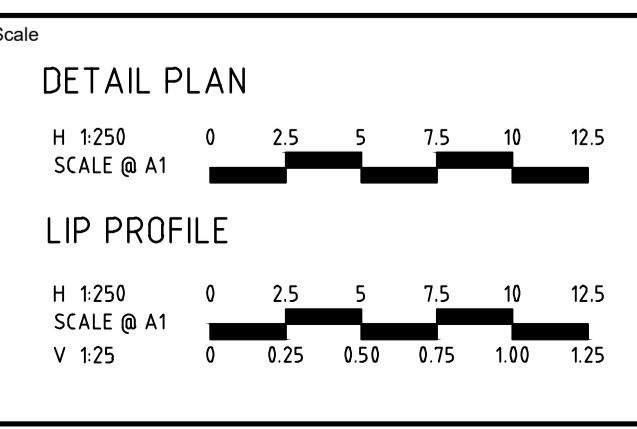
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Z1	302227.466	5835298.519	217.079
Z2	302230.125	5835297.291	217.033
Z3	302230.317	5835296.342	217.030
Z4	302228.392	5835294.226	217.079
Z5	302227.053	5835294.234	217.115
Z6	302225.004	5835296.545	217.192
Z7	302224.977	5835297.707	217.209
Z8	302225.689	5835298.590	217.180
Z9	302226.767	5835298.842	217.113

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
Z2-Z3	0.600	1.126	0.968	0.245	0.065
Z4-Z5	0.900	1.510	1.339	0.299	0.078
Z6-Z7	0.900	1.264	1.163	0.213	0.055
Z8-Z9	0.900	1.192	1.107	0.190	0.049



file name: 31066CR505.dwg layout: name: CR505 file location: G:\31066CR505\A1.dwg plot date: 11/13/2025 11:45 AM sheet: 38 of 71 sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	ALIGNMENTS AMENDED	M.T-S	26/04/24
B	CARPARKS EXTENDED	M.T-S	22/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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H.HOGGARD

Authorised
J.POYNER

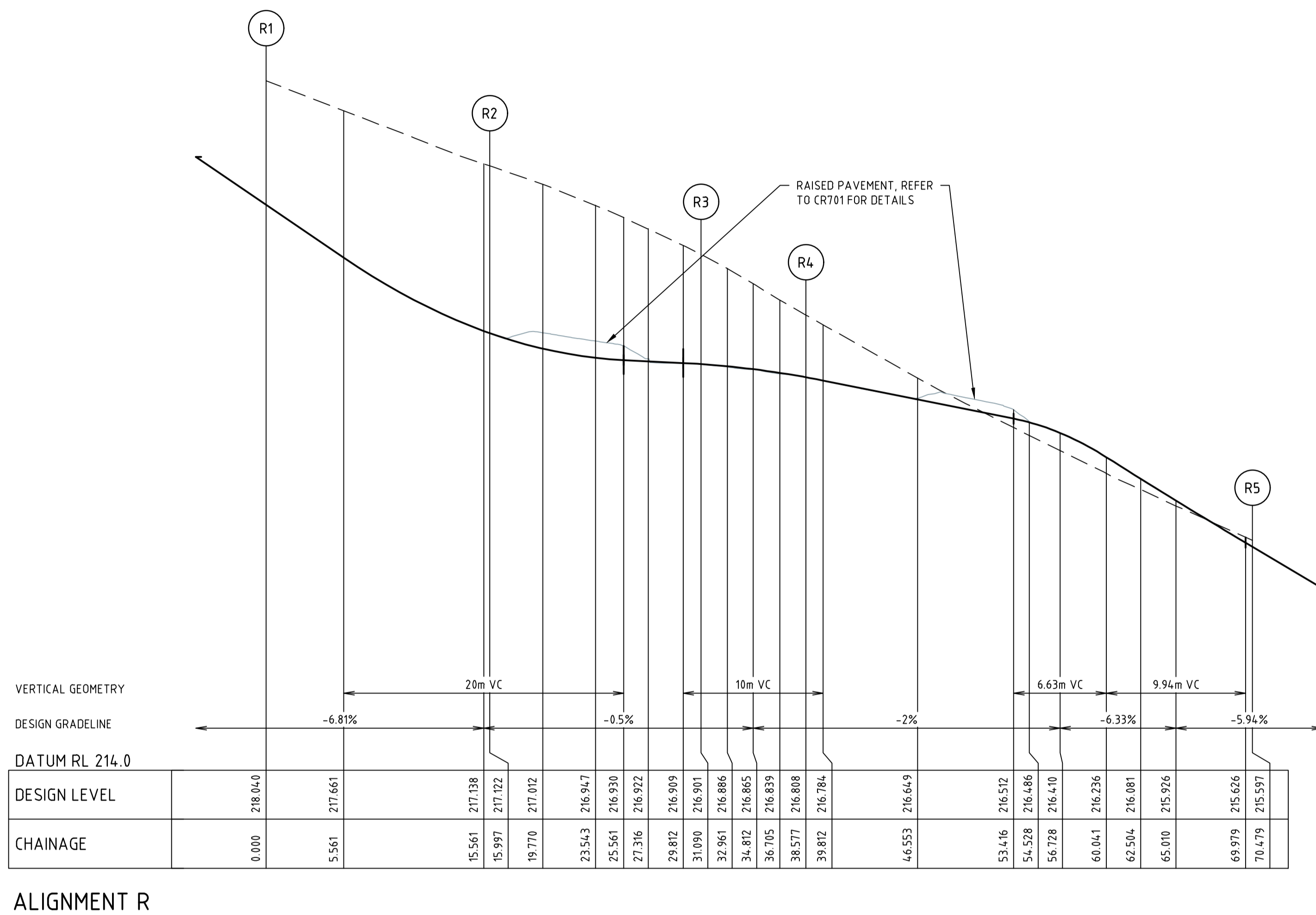
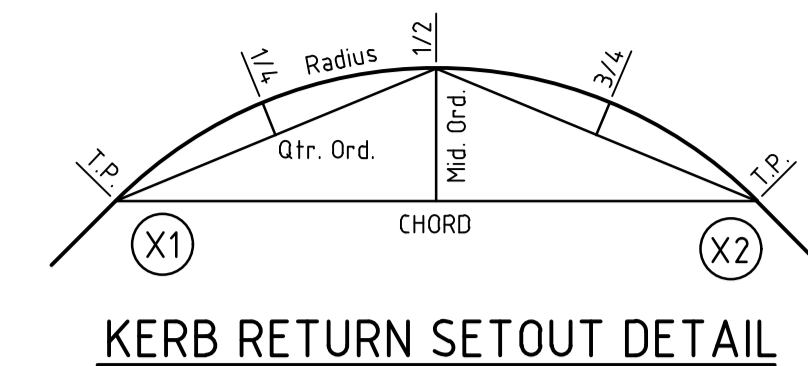
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Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 6
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION Drg No **31066CR505** Rev **0**



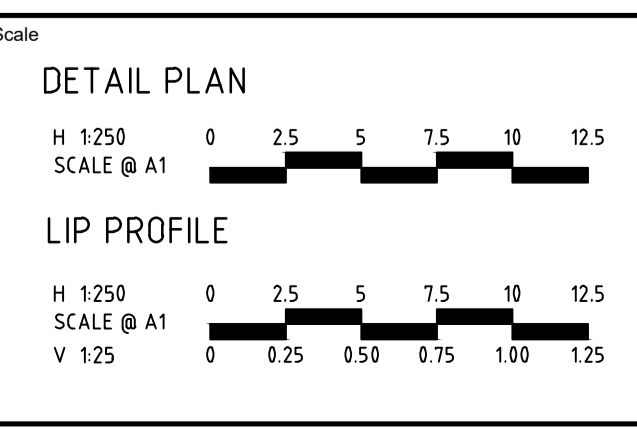
ALIGNMENT R

POINT NO	EASTING	NORTHING	RL
R1	302208.417	5835317.355	218.040
R2	302220.866	5835307.308	217.122
1/4	302223.923	5835305.099	217.012
1/2	302227.197	5835303.227	216.947
3/4	302230.651	5835301.714	216.922
R3	302234.247	5835300.576	216.901
1/4	302236.093	5835300.289	216.886
1/2	302237.960	5835300.371	216.865
3/4	302239.775	5835300.819	216.839
R4	302241.466	5835301.615	216.808
1/4	302248.121	5835306.005	216.649
1/2	302254.364	5835310.964	216.486
3/4	302260.145	5835316.454	216.081
R5	302265.421	5835322.432	215.597

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
R2-R3	35.450	15.093	14.979	0.800	-0.201
R3-R4	9.450	7.488	7.293	0.732	-0.185
R4-R5	90.450	31.902	31.737	1.403	-0.351

file name: 31066CR506.dwg, layout: name: CR506, plotted by: Luke Russell, file location: G:\31066CR506\A1.dwg, plot date: 11/13/2025 11:45 AM, Sheet 39 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	ALIGNMENTS AMENDED	M.T-S	26/04/24
B	CARPARKS EXTENDED	M.T-S	22/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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Designed
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Authorised
J.POYNER

Checked
J.POYNER

Date
APRIL 2024

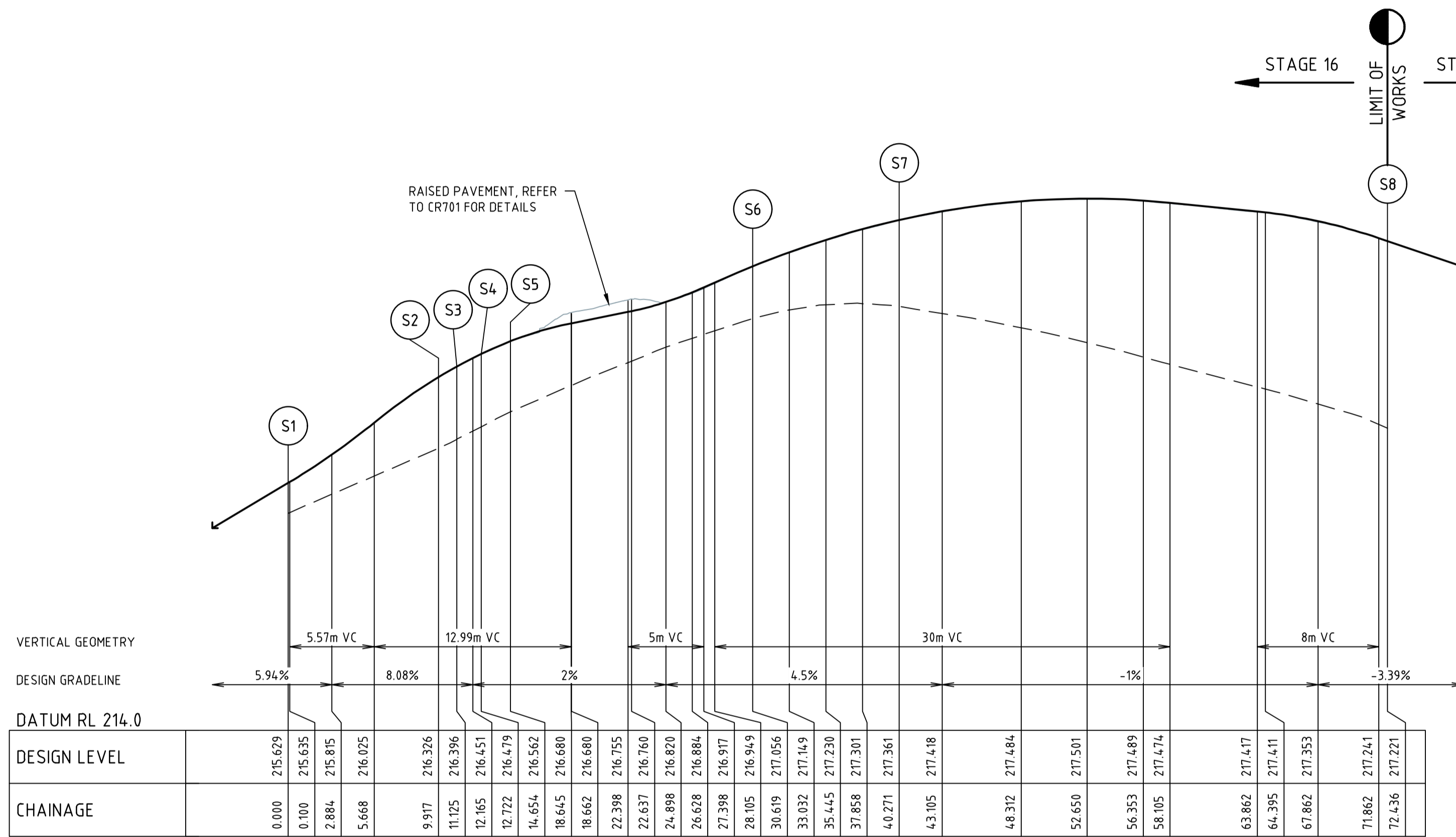
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**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 7**
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

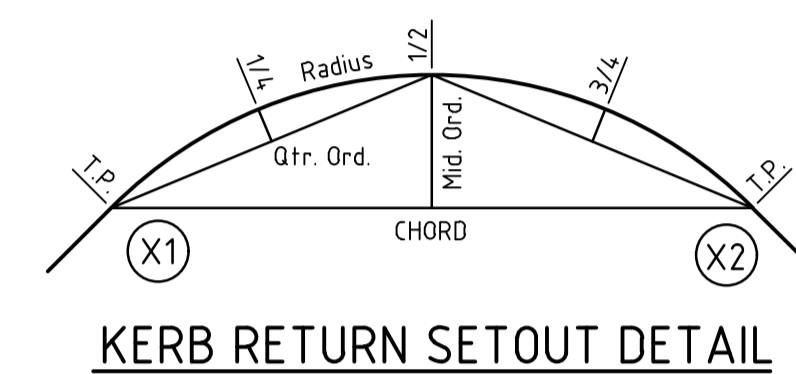
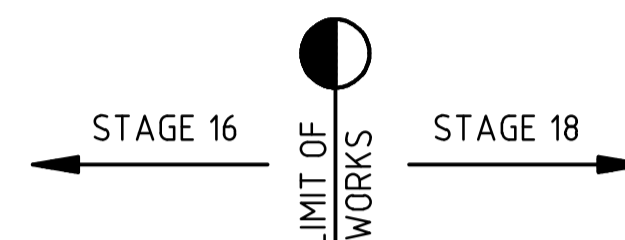
CONSTRUCTION 31066CR506

Rev 0

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ALIGNMENT S

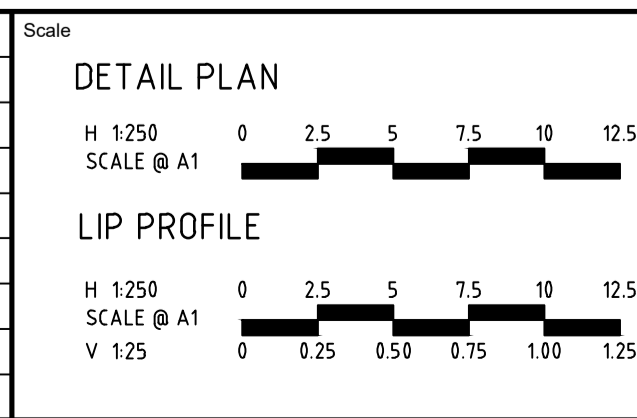


ALIGNMENT S

POINT NO	EASTING	NORTHING	RL
S1	302271.958	5835317.156	215.629
S2	302265.730	5835309.439	216.326
S3	302264.696	5835308.875	216.396
S4	302263.108	5835308.706	216.479
S5	302261.455	5835307.805	216.562
1/4	302259.129	5835304.564	216.680
1/2	302257.181	5835301.083	216.760
3/4	302255.636	5835297.405	216.884
S6	302254.515	5835293.576	217.056
1/4	302254.198	5835291.188	217.149
1/2	302254.348	5835288.784	217.230
3/4	302254.958	5835286.453	217.301
S7	302256.005	5835284.283	217.361
1/4	302260.713	5835277.775	217.484
1/2	302266.395	5835272.097	217.489
3/4	302272.905	5835267.392	217.411
S8	302280.080	5835263.780	217.221

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
S2-S3	1.539	1.209	1.178	0.117	0.030
S4-S5	2.459	1.931	1.882	0.187	-0.047
S5-S6	35.450	15.966	15.831	0.895	-0.224
S6-S7	12.450	9.651	9.412	0.924	-0.233
S7-S8	50.450	32.165	31.623	2.542	-0.639

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	ALIGNMENTS AMENDED	M.T-S	26/04/24
B	CARPARKS EXTENDED	M.T-S	22/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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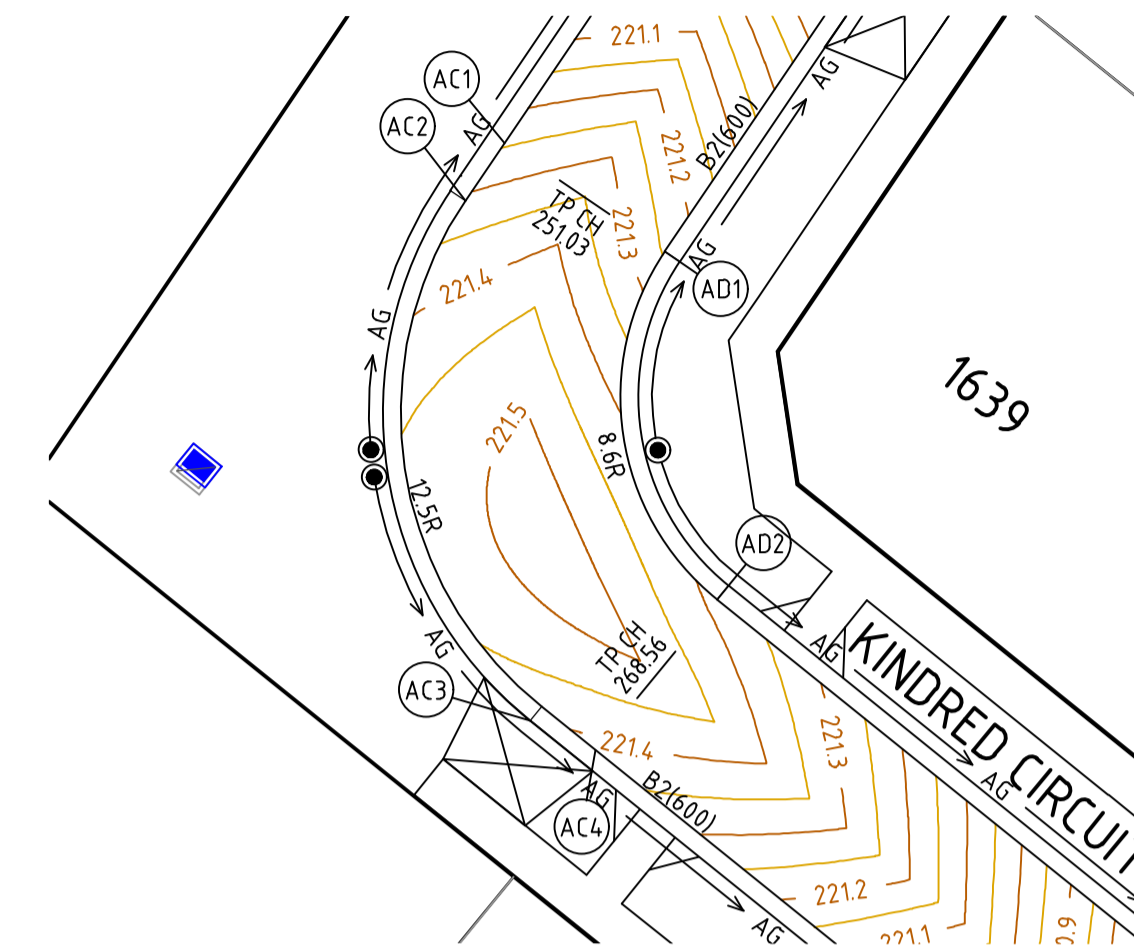
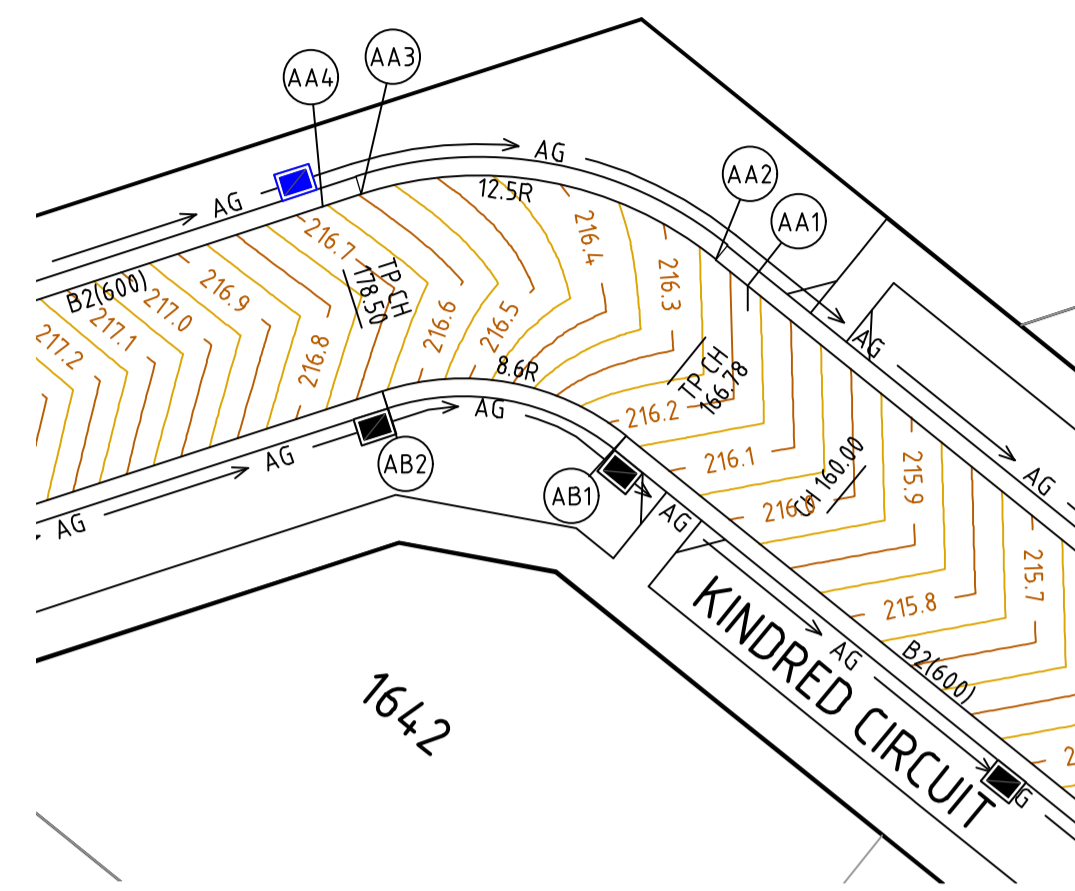
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Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 8
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION 31066CR507

Rev 0



ALIGNMENT AA

POINT NO	EASTING	NORTHING	RL
AA1	302215.509	5835521.287	216.171
AA2	302214.455	5835522.138	216.224
1/4	302211.824	5835523.769	216.333
1/2	302208.873	5835524.703	216.411
3/4	302205.782	5835524.883	216.484
AA3	302202.762	5835524.298	216.596
AA4	302201.454	5835523.880	216.658

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
AA2-AA3	12.500	12.415	11.911	1.510	-0.383

ALIGNMENT AB

POINT NO	EASTING	NORTHING	RL
AB1	302211.490	5835516.306	216.171
1/4	302209.680	5835517.428	216.268
1/2	302207.649	5835518.071	216.407
3/4	302205.523	5835518.195	216.549
AB2	302203.431	5835517.793	216.658

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
AB1-AB2	8.600	8.541	8.195	1.039	-0.264

ALIGNMENT AC

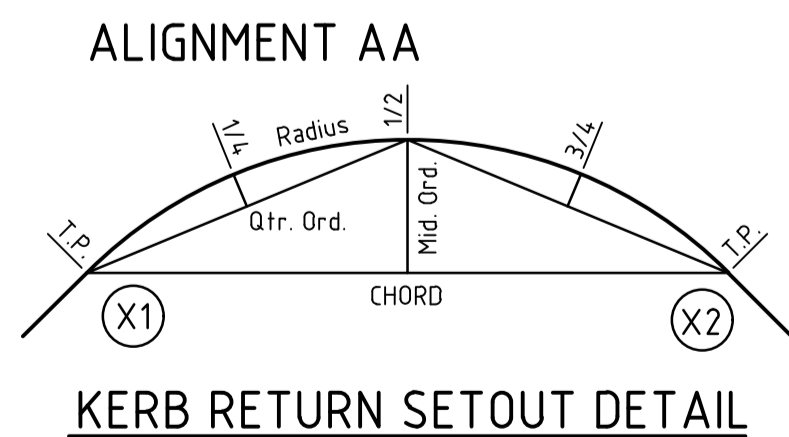
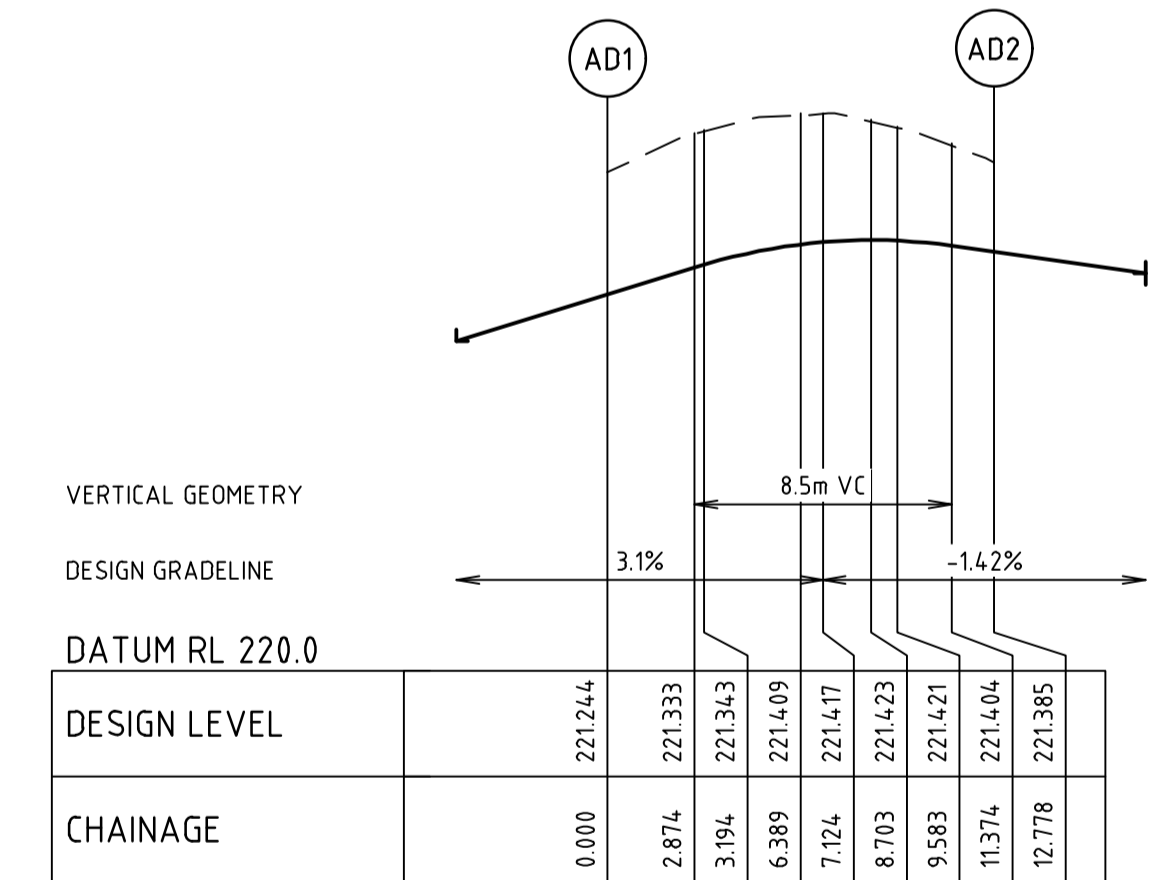
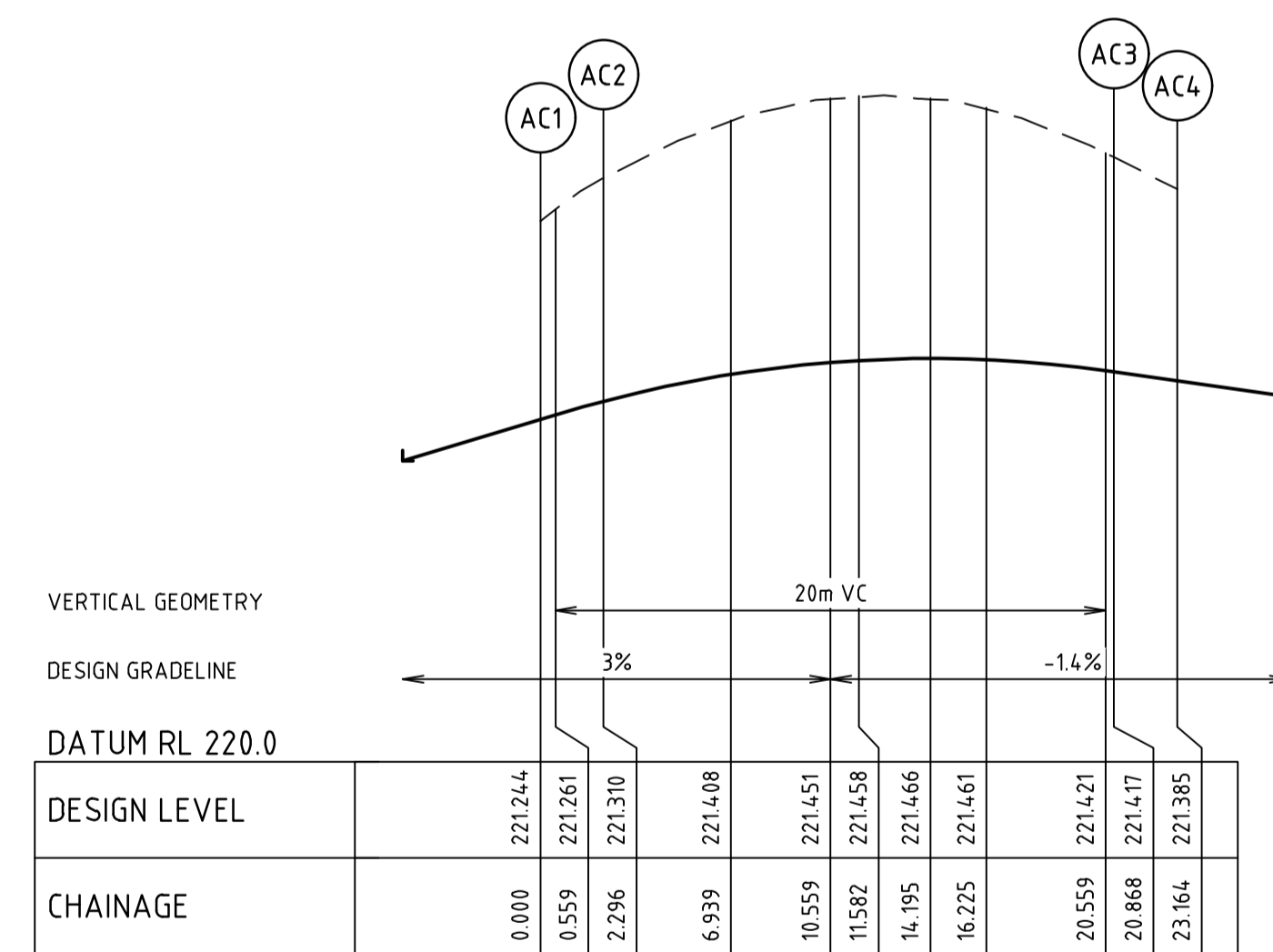
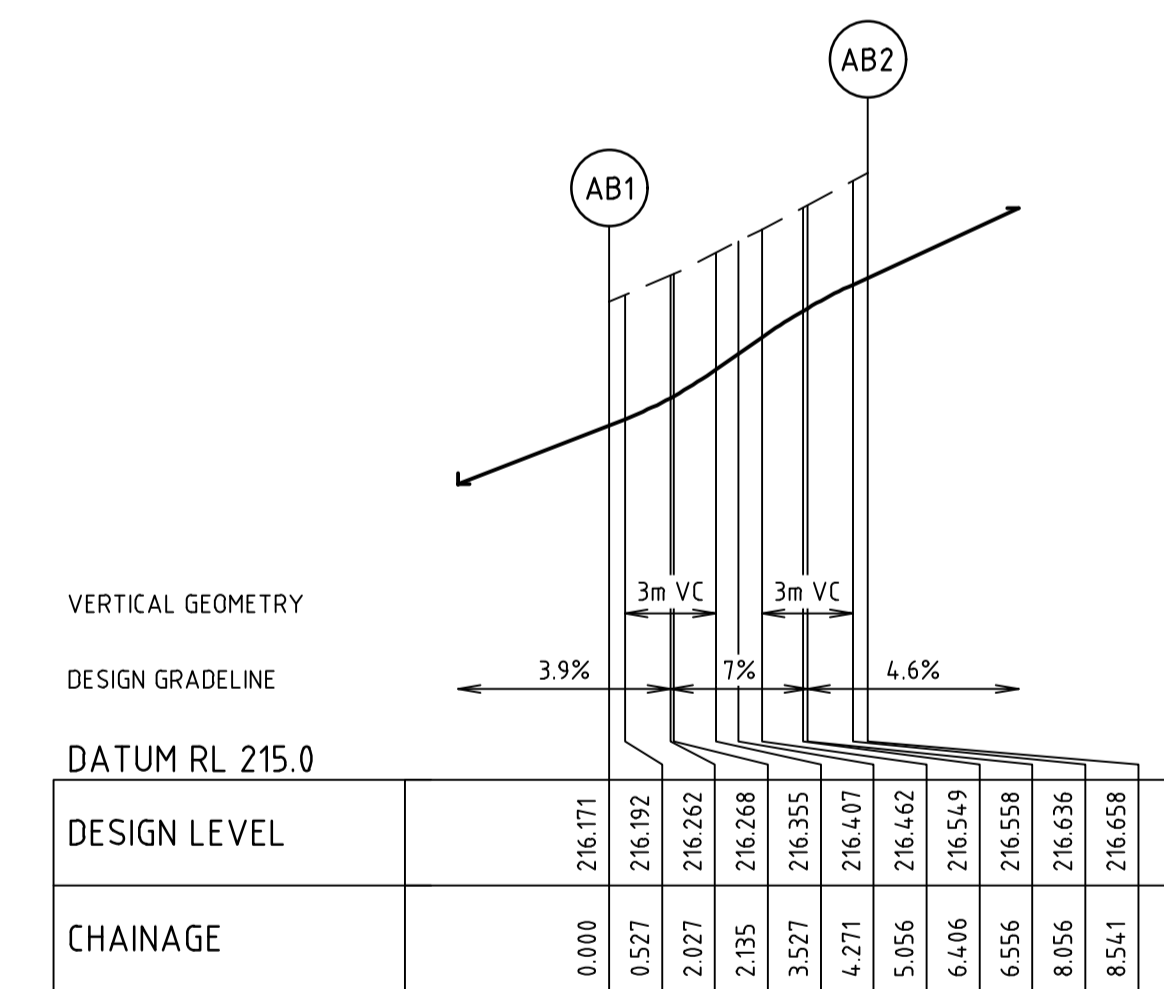
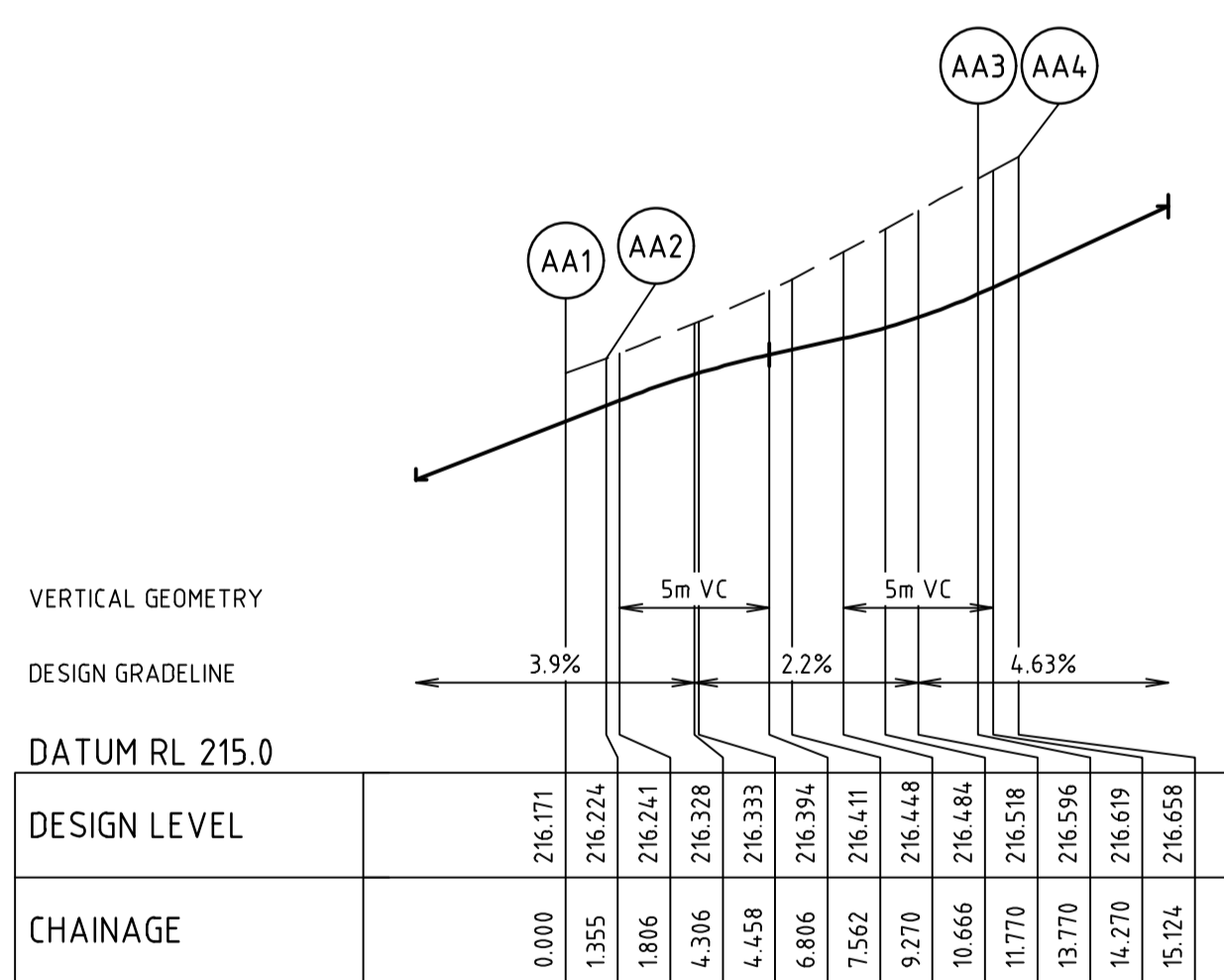
POINT NO	EASTING	NORTHING	RL
AC1	302137.510	5835490.847	221.244
AC2	302136.226	5835488.944	221.310
1/4	302134.393	5835484.707	221.408
1/2	302134.223	5835480.094	221.458
3/4	302135.739	5835475.734	221.461
AC3	302138.734	5835472.221	221.417
AC4	302140.521	5835470.779	221.385

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
AC2-AC3	12.500	18.572	16.910	3.293	-0.852

ALIGNMENT AD

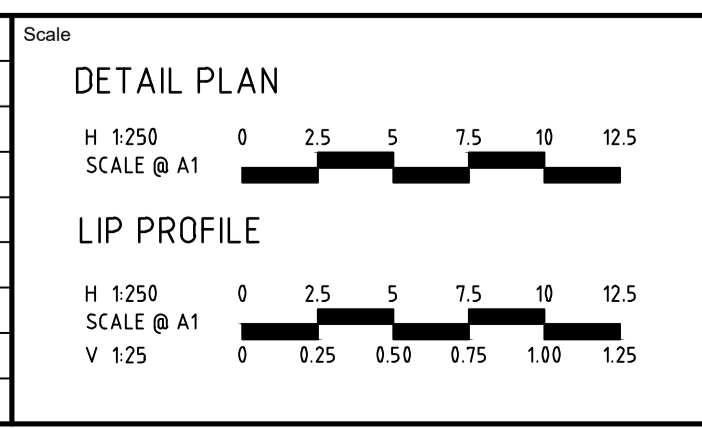
POINT NO	EASTING	NORTHING	RL
AD1	302142.814	5835487.265	221.244
1/4	302141.553	5835484.350	221.343
1/2	302141.436	5835481.176	221.409
3/4	302142.479	5835478.176	221.421
AD2	302144.540	5835475.759	221.385

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
AD1-AD2	8.600	12.778	11.634	2.266	-0.586



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Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
A	ISSUED TO COUNCIL	M.T-S	26/04/24
	Amendments	Approved	Date



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Designed: H.HOGGARD
 Authorised: J.POYNER

Checked: J.POYNER
 Date: APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 10
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

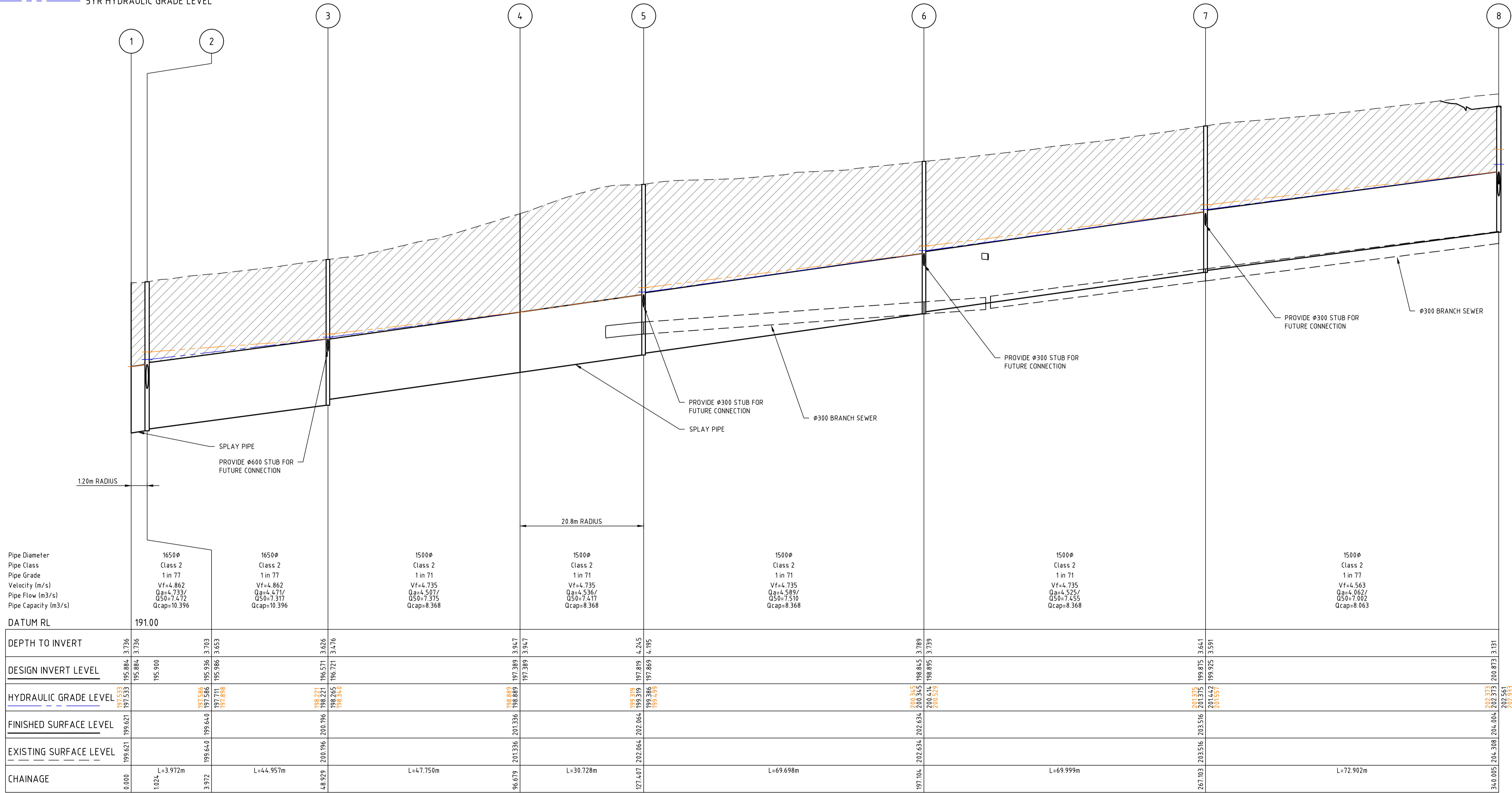
Drg No: **31066CR509** Rev: **0**

CONSTRUCTION

CLASS 2 CRUSHED ROCK BACKFILL

50YR HYDRAULIC GRADE LEVEL

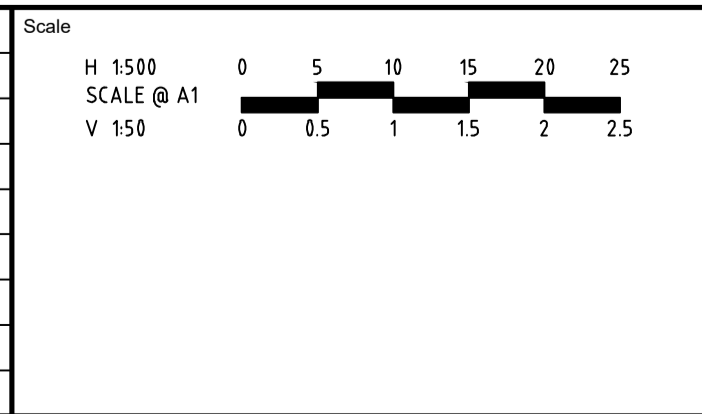
5YR HYDRAULIC GRADE LEVEL



Pipe Diameter	1650Ø	1650Ø	1500Ø	1500Ø	1500Ø	1500Ø	1500Ø
Pipe Class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2
Pipe Grade	1 in 77	1 in 77	1 in 71	1 in 71	1 in 71	1 in 71	1 in 77
Velocity (m/s)	Vf=4.862	Vf=4.862	Vf=4.735	Vf=4.735	Vf=4.735	Vf=4.735	Vf=4.563
Pipe Flow (m³/s)	Qa=4.733/ Q50=7.472	Qa=4.731/ Q50=7.317	Qa=4.536/ Q50=7.417	Qa=4.589/ Q50=7.510	Qa=4.536/ Q50=7.417	Qa=4.525/ Q50=7.455	Qa=4.022/ Q50=7.002
Pipe Capacity (m³/s)	Qcap=10.396	Qcap=10.396	Qcap=8.368	Qcap=8.368	Qcap=8.368	Qcap=8.368	Qcap=8.063
DATUM RL	191.00						
DEPTH TO INVERT	3.736	3.703	3.626	4.245	3.789	3.739	3.131
DESIGN INVERT LEVEL	195.884	195.900	195.571	197.819	197.389	198.845	200.873
HYDRAULIC GRADE LEVEL	191.533	191.586	198.221	199.318	198.889	200.345	202.373
FINISHED SURFACE LEVEL	199.621	199.640	200.196	202.064	201.336	202.634	204.004
EXISTING SURFACE LEVEL	199.621	199.640	200.196	202.064	201.336	202.634	204.004
CHAINAGE	0.000	3.972	48.923	96.679	127.407	197.104	267.103
	L=3.972m	L=44.957m	L=47.750m	L=30.728m	L=69.698m	L=69.999m	L=72.902m

file name: 31066CR600.dwg, layout: rans: CR600, plotted by: Luke Pinesell, file location: G:\31066CR600\31066CR600.dwg, plot date: 11/03/2025 11:42 AM, Sheet: 43 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 1
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

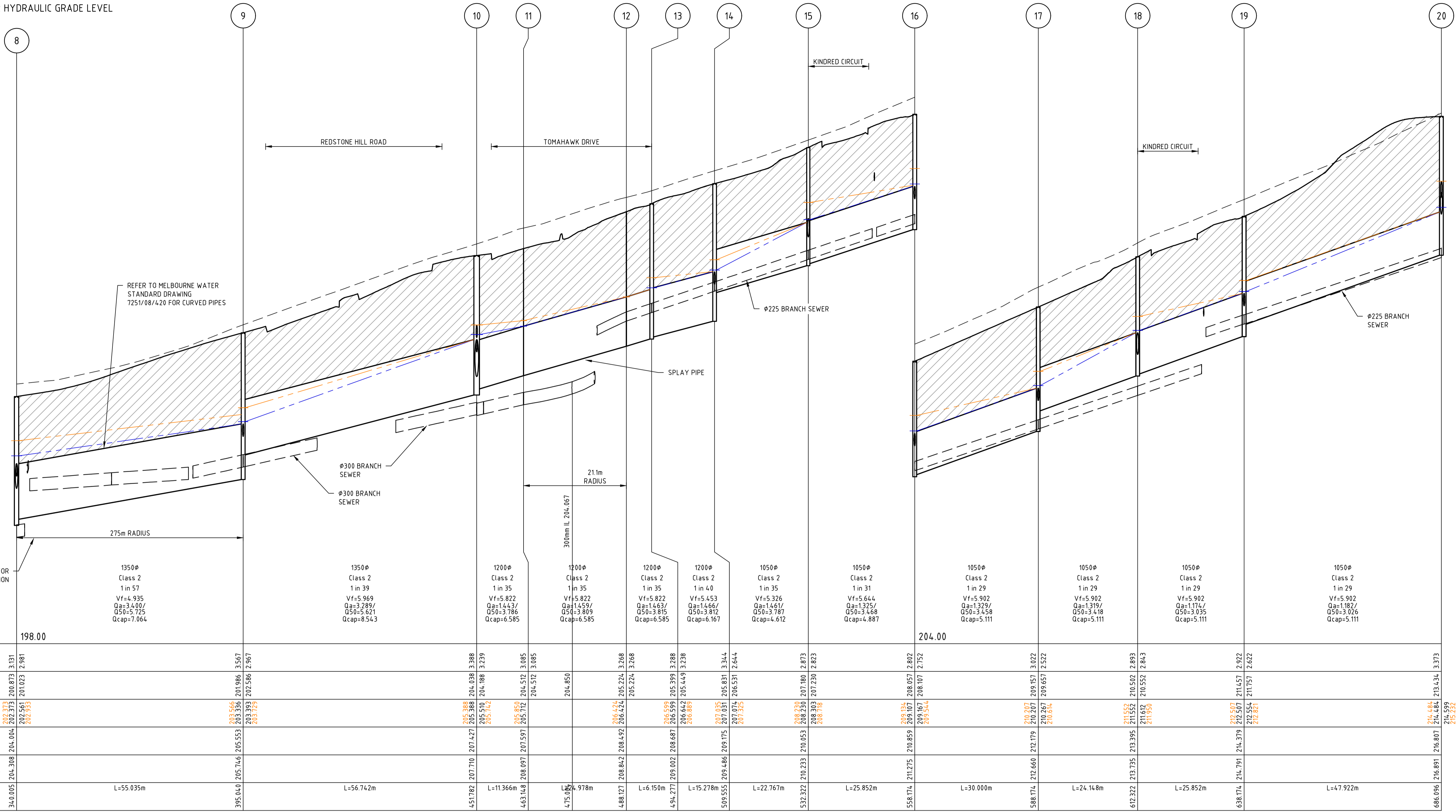
CONSTRUCTION

Drg No **31066CR600** Rev **0**

CLASS 2 CRUSHED ROCK BACKFILL

50YR HYDRAULIC GRADE LEVEL

5YR HYDRAULIC GRADE LEVEL

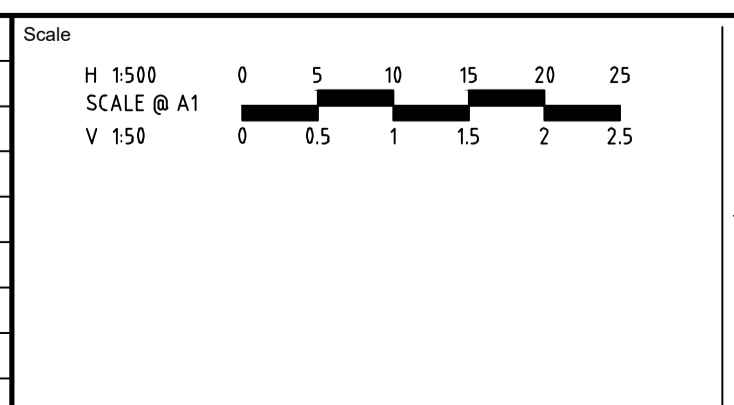


Pipe Diameter	PROVIDE Ø300 STUB FOR FUTURE CONNECTION	1350Ø	1350Ø	1200Ø	1200Ø	1200Ø	1200Ø	1050Ø	1050Ø	1050Ø	1050Ø	1050Ø	1050Ø
Pipe Class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2
Pipe Grade	1 in 57	1 in 39	1 in 35	1 in 35	1 in 35	1 in 40	1 in 31	1 in 29	1 in 29	1 in 29	1 in 29	1 in 29	
Velocity (m/s)	Vf=4.935	Vf=5.969	Vf=5.822	Vf=5.822	Vf=5.822	Vf=5.453	Vf=5.326	Vf=5.644	Vf=5.902	Vf=5.902	Vf=5.902	Vf=5.902	
Pipe Flow (m ³ /s)	Qa=3.400/ Q50=5.725	Qa=3.289/ Q50=5.621	Qa=1.443/ Q50=3.786	Qa=1.443/ Q50=3.786	Qa=1.443/ Q50=3.786	Qa=1.461/ Q50=3.812	Qa=1.325/ Q50=3.468	Qa=1.319/ Q50=3.418	Qa=1.174/ Q50=3.035	Qa=1.174/ Q50=3.035	Qa=1.174/ Q50=3.035	Qa=1.174/ Q50=3.035	
Pipe Capacity (m ³ /s)	Qcap=7.064	Qcap=8.543	Qcap=6.585	Qcap=6.585	Qcap=6.585	Qcap=6.167	Qcap=4.612	Qcap=4.887	Qcap=5.111	Qcap=5.111	Qcap=5.111	Qcap=5.111	

DATUM RL	198.00								204.00															
DEPTH TO INVERT	31.31	3.67	3.88	3.23	3.085	3.085	3.268	3.268	2.802	2.52	2.893	2.893	3.373											
DESIGN INVERT LEVEL	200.873	201.986	201.986	201.986	201.986	201.986	201.986	201.986	201.986	201.986	201.986	201.986	201.986											
HYDRAULIC GRADE LEVEL	202.373	203.536	203.536	203.536	203.536	203.536	203.536	203.536	203.536	203.536	203.536	203.536	203.536											
FINISHED SURFACE LEVEL	204.004	205.553	205.553	205.553	205.553	205.553	205.553	205.553	205.553	205.553	205.553	205.553	205.553											
EXISTING SURFACE LEVEL	204.308	205.746	205.746	205.746	205.746	205.746	205.746	205.746	205.746	205.746	205.746	205.746	205.746											
CHAINAGE	34+0.005	L=55.035m	395+0.40	L=56.742m	451+782	L=11.366m	463+148	L=24.978m	488+127	L=6.150m	494+277	L=15.278m	509+553	L=22.767m	532+322	L=25.852m	558+174	L=30.000m	588+174	L=24.148m	612+322	L=25.852m	638+174	L=47.922m

file name: 31066CR601.dwg, layout: name: CR601, plotted by: Luke Russell, file location: G:\31066CR601\31066CR601.dwg, plot date: 14/03/2025 11:46 AM, Sheet 44 of 71 Sheets

0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22
Rev	Amendments	Approved	Date



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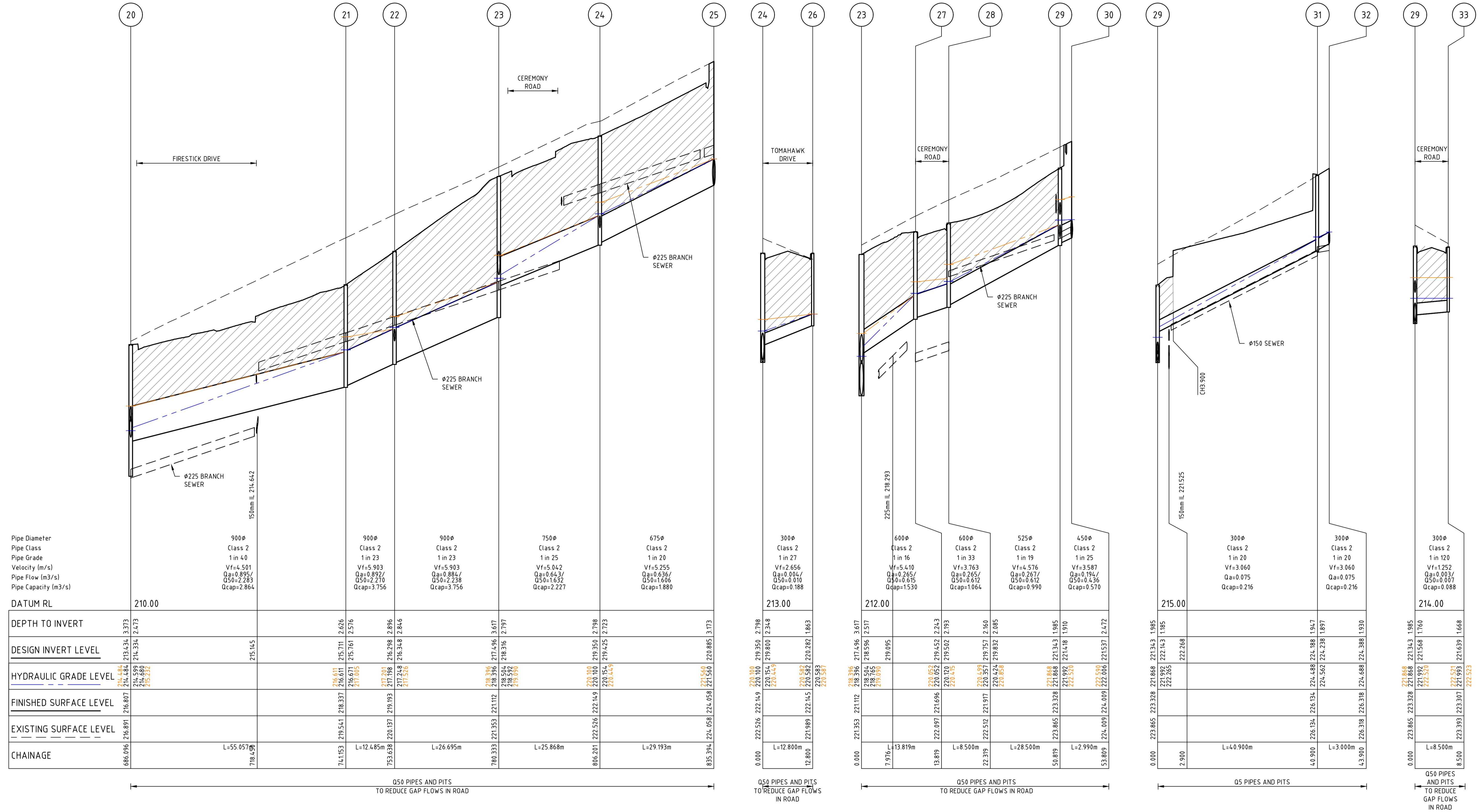
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 J.POYNER

 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 2
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

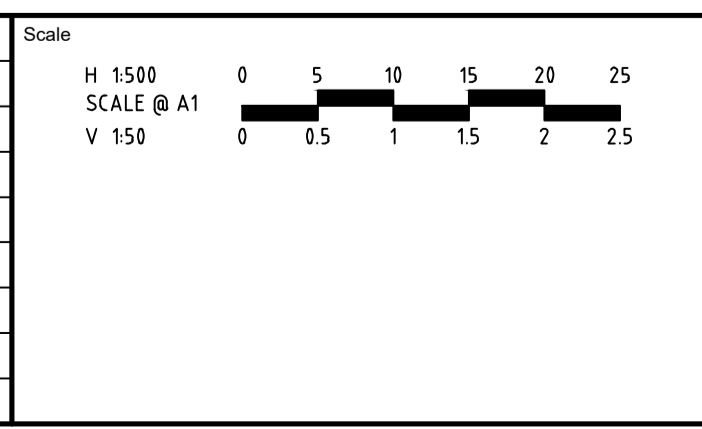
 Drg No 31066CR601 Rev 0


 CLASS 2 CRUSHED ROCK BACKFILL
 50YR HYDRAULIC GRADE LEVEL
 5YR HYDRAULIC GRADE LEVEL




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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
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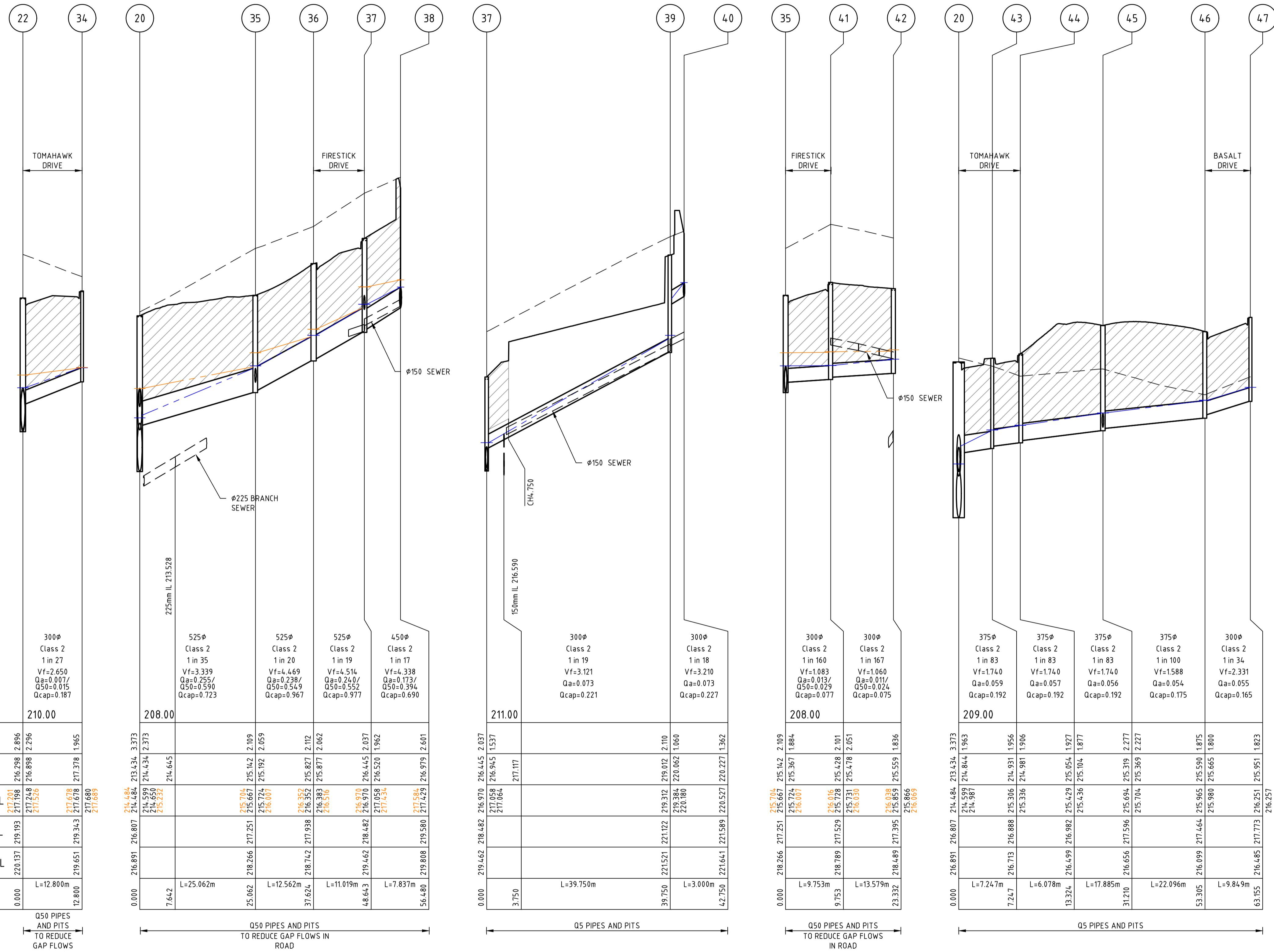

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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 3
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION 31066CR602
 Drg No 31066CR602 Rev 0

CLASS 2 CRUSHED ROCK BACKFILL

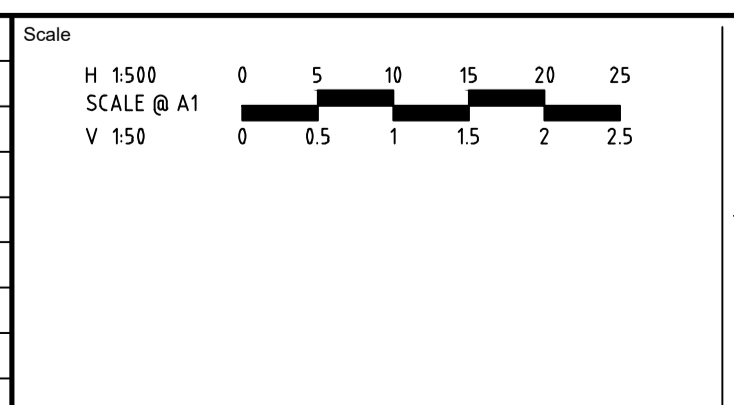
50YR HYDRAULIC GRADE LEVEL

5YR HYDRAULIC GRADE LEVEL



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Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
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Rev	Amendments	Approved	Date



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 Date: APRIL 2024

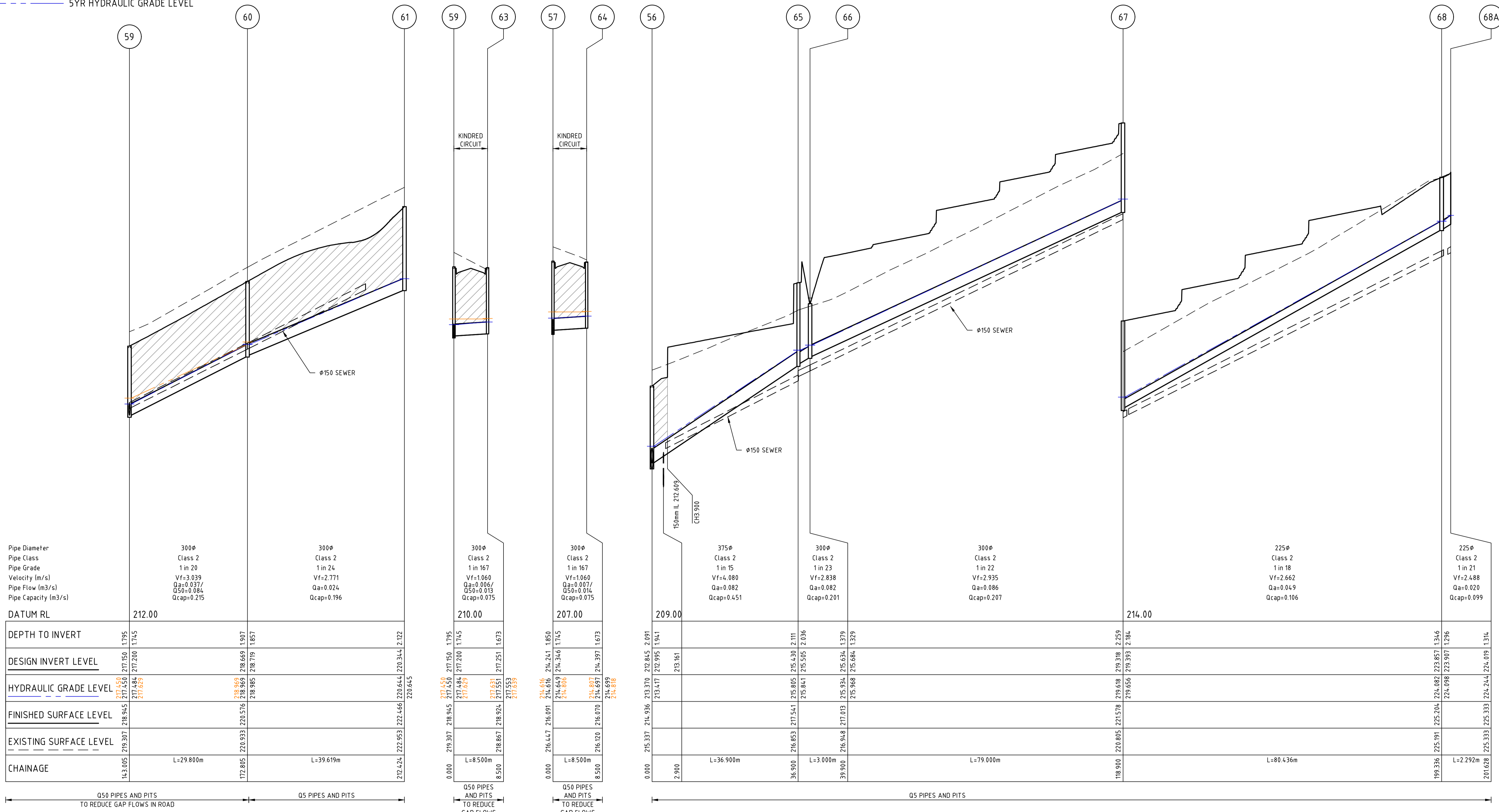
REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 4
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

Drg No: **31066CR603** Rev: **0**

CLASS 2 CRUSHED ROCK BACKFILL

50YR HYDRAULIC GRADE LEVEL

5YR HYDRAULIC GRADE LEVEL

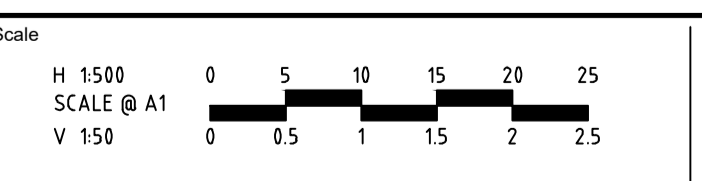


Pipe Diameter	300φ	300φ	300φ	300φ	375φ	300φ	300φ	225φ	225φ
Pipe Class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2
Pipe Grade	1 in 20	1 in 24	1 in 167	1 in 167	1 in 15	1 in 23	1 in 22	1 in 18	1 in 21
Velocity (m/s)	Vf=3.039	Vf=2.771	Vf=1.060	Vf=1.060	Vf=4.080	Vf=2.838	Vf=2.935	Vf=2.662	Vf=2.488
Pipe Flow (m3/s)	Qa=0.037/ Q50=0.084	Qa=0.024	Qa=0.006/ Q50=0.013	Qa=0.007/ Q50=0.014	Qa=0.082	Qa=0.082	Qa=0.086	Qa=0.049	Qa=0.020
Pipe Capacity (m3/s)	Qcap=0.215	Qcap=0.196	Qcap=0.075	Qcap=0.075	Qcap=0.451	Qcap=0.201	Qcap=0.207	Qcap=0.106	Qcap=0.099

DATUM RL	212.00		210.00		207.00		209.00		214.00	
DEPTH TO INVERT	1.795	1.745	1.795	1.745	1.850	1.745	1.941	1.941	2.259	1.314
DESIGN INVERT LEVEL	217.50	217.20	217.20	217.20	214.24	214.24	212.29	212.29	213.38	223.97
HYDRAULIC GRADE LEVEL	217.50	217.20	217.20	217.20	214.24	214.24	212.29	212.29	213.38	223.97
FINISHED SURFACE LEVEL	218.94	218.94	218.94	218.94	216.07	216.07	217.03	217.03	219.68	224.98
EXISTING SURFACE LEVEL	219.30	219.30	219.30	219.30	216.20	216.20	217.03	217.03	219.68	224.98
CHAINAGE	16.305	29.800m	172.805	220.576	218.869	218.869	218.869	218.869	218.869	218.869

file name: 31066CR605.dwg, layout: name: CR605, plotted by: Luke Russell, file location: G:\31066CR605\WALKAD\plot date: 16/03/2025 11:46 AM Sheet 48 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
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 Authorised by J.POYNER

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REDSTONE ESTATE

STAGE 16

ROAD AND DRAINAGE

DRAINAGE LONG SECTIONS - SHEET 6

 HUME CITY COUNCIL

 VILLAWOOD PROPERTIES

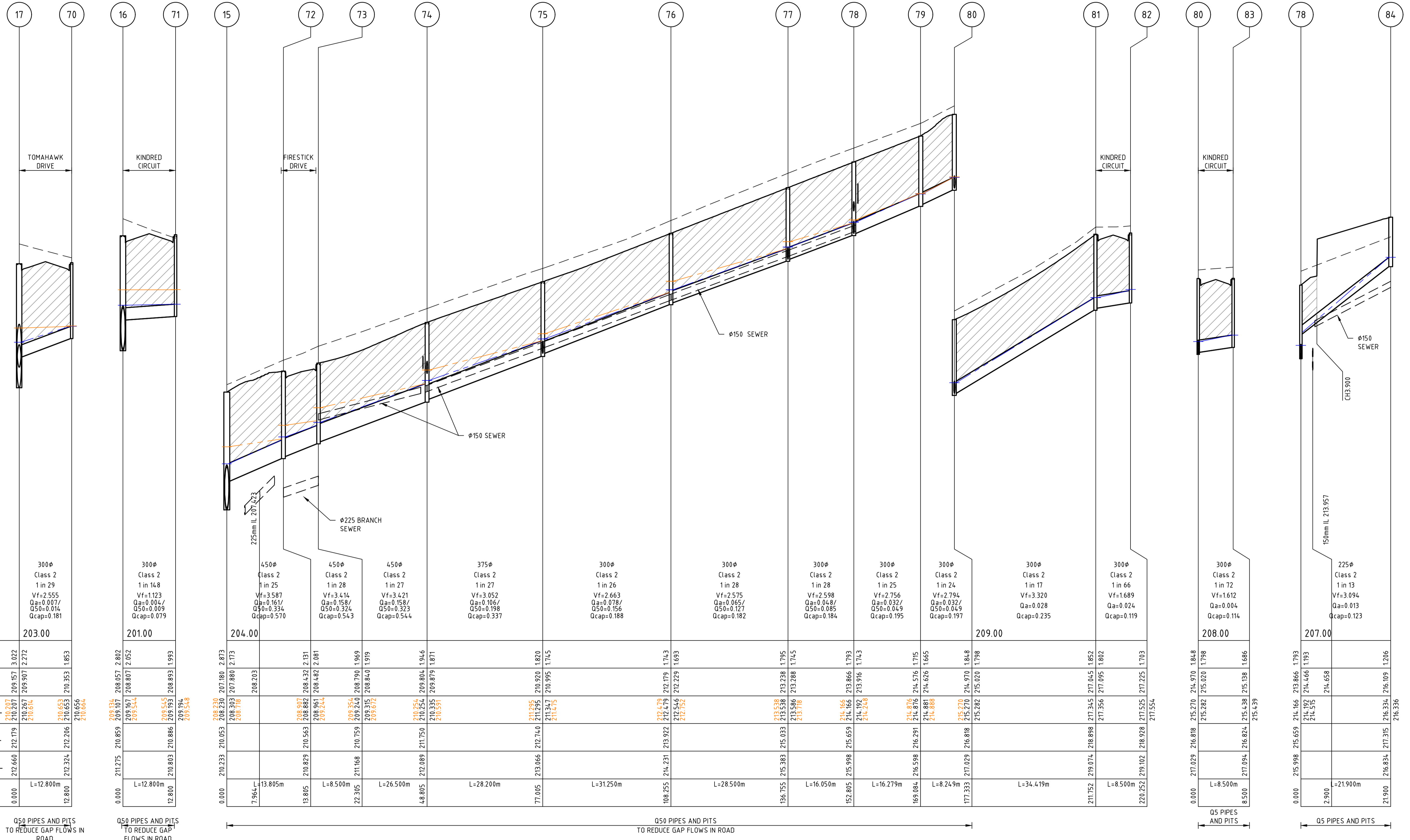
CONSTRUCTION

 Drg No: 31066CR605 Rev: 0

CLASS 2 CRUSHED ROCK BACKFILL

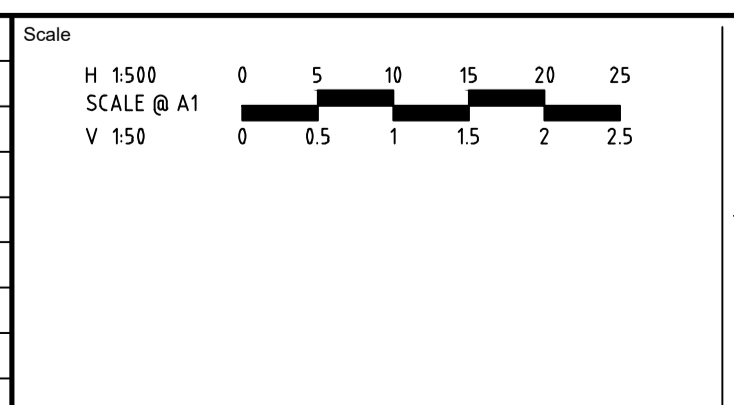
50YR HYDRAULIC GRADE LEVEL

5YR HYDRAULIC GRADE LEVEL



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Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
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H.HOGGARD

Authorised
J.POYNER

Checked
J.POYNER

Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 7
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

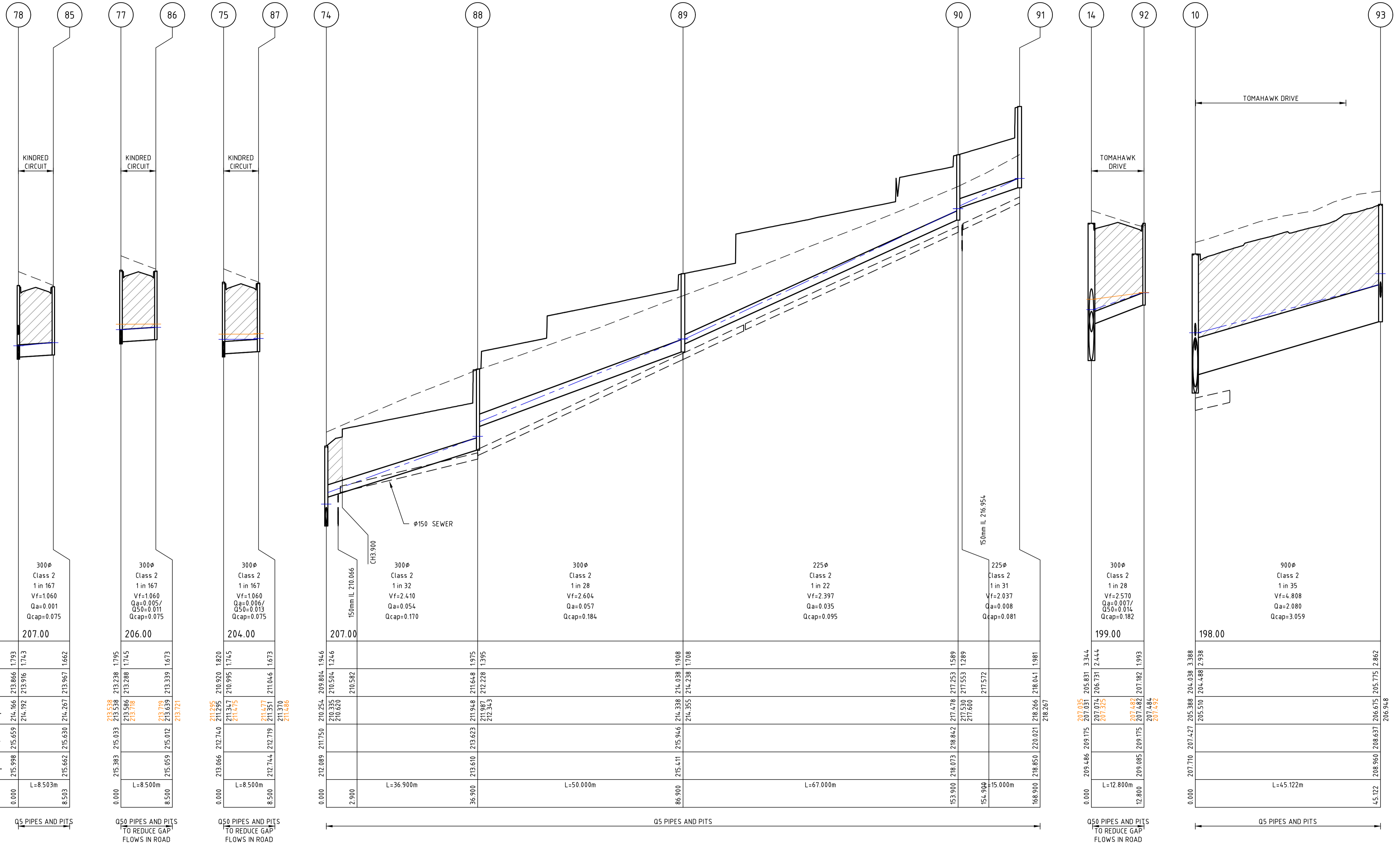
Drg No
CONSTRUCTION 31066CR606

Rev
0

CLASS 2 CRUSHED ROCK BACKFILL

50YR HYDRAULIC GRADE LEVEL

5YR HYDRAULIC GRADE LEVEL



Pipe Diameter 300φ
 Pipe Class Class 2
 Pipe Grade 1 in 167
 Velocity (m/s) Vf=1.060
 Pipe Flow (m3/s) Qa=0.001
 Pipe Capacity (m3/s) Qcap=0.075

DATUM RL	207.00
DEPTH TO INVERT	1.793
DESIGN INVERT LEVEL	205.207
HYDRAULIC GRADE LEVEL	205.207
FINISHED SURFACE LEVEL	205.207
EXISTING SURFACE LEVEL	205.207
CHAINAGE	L=8.503m

Pipe Diameter 300φ
 Pipe Class Class 2
 Pipe Grade 1 in 167
 Velocity (m/s) Vf=1.060
 Pipe Flow (m3/s) Qa=0.005/
 Q50=0.011
 Pipe Capacity (m3/s) Qcap=0.075

DATUM RL	206.00
DEPTH TO INVERT	1.745
DESIGN INVERT LEVEL	204.255
HYDRAULIC GRADE LEVEL	204.255
FINISHED SURFACE LEVEL	204.255
EXISTING SURFACE LEVEL	204.255
CHAINAGE	L=8.500m

Pipe Diameter 300φ
 Pipe Class Class 2
 Pipe Grade 1 in 167
 Velocity (m/s) Vf=1.060
 Pipe Flow (m3/s) Qa=0.006/
 Q50=0.013
 Pipe Capacity (m3/s) Qcap=0.075

DATUM RL	204.00
DEPTH TO INVERT	1.673
DESIGN INVERT LEVEL	202.327
HYDRAULIC GRADE LEVEL	202.327
FINISHED SURFACE LEVEL	202.327
EXISTING SURFACE LEVEL	202.327
CHAINAGE	L=8.500m

Pipe Diameter 300φ
 Pipe Class Class 2
 Pipe Grade 1 in 32
 Velocity (m/s) Vf=2.410
 Pipe Flow (m3/s) Qa=0.054
 Pipe Capacity (m3/s) Qcap=0.170

DATUM RL	207.00
DEPTH TO INVERT	1.975
DESIGN INVERT LEVEL	205.025
HYDRAULIC GRADE LEVEL	205.025
FINISHED SURFACE LEVEL	205.025
EXISTING SURFACE LEVEL	205.025
CHAINAGE	L=36.900m

Pipe Diameter 300φ
 Pipe Class Class 2
 Pipe Grade 1 in 28
 Velocity (m/s) Vf=2.604
 Pipe Flow (m3/s) Qa=0.057
 Pipe Capacity (m3/s) Qcap=0.184

DATUM RL	207.00
DEPTH TO INVERT	1.708
DESIGN INVERT LEVEL	205.292
HYDRAULIC GRADE LEVEL	205.292
FINISHED SURFACE LEVEL	205.292
EXISTING SURFACE LEVEL	205.292
CHAINAGE	L=50.000m

Pipe Diameter 225φ
 Pipe Class Class 2
 Pipe Grade 1 in 22
 Velocity (m/s) Vf=2.397
 Pipe Flow (m3/s) Qa=0.035
 Pipe Capacity (m3/s) Qcap=0.095

DATUM RL	199.00
DEPTH TO INVERT	1.981
DESIGN INVERT LEVEL	197.019
HYDRAULIC GRADE LEVEL	197.019
FINISHED SURFACE LEVEL	197.019
EXISTING SURFACE LEVEL	197.019
CHAINAGE	L=67.000m

Pipe Diameter 225φ
 Pipe Class Class 2
 Pipe Grade 1 in 31
 Velocity (m/s) Vf=2.037
 Pipe Flow (m3/s) Qa=0.008
 Pipe Capacity (m3/s) Qcap=0.081

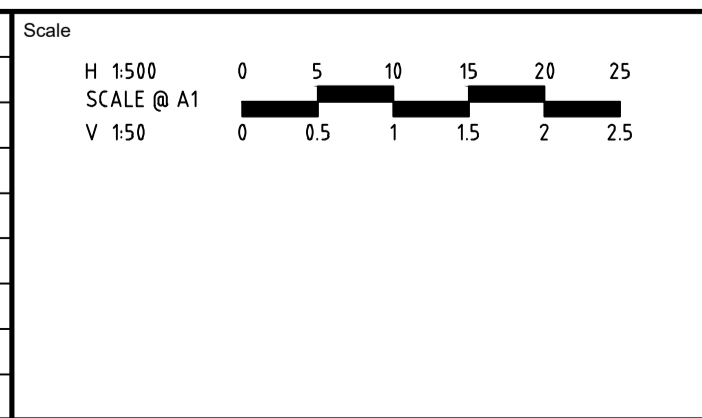
DATUM RL	199.00
DEPTH TO INVERT	1.993
DESIGN INVERT LEVEL	197.007
HYDRAULIC GRADE LEVEL	197.007
FINISHED SURFACE LEVEL	197.007
EXISTING SURFACE LEVEL	197.007
CHAINAGE	L=12.800m

Pipe Diameter 900φ
 Pipe Class Class 2
 Pipe Grade 1 in 35
 Velocity (m/s) Vf=4.808
 Pipe Flow (m3/s) Qa=2.080
 Pipe Capacity (m3/s) Qcap=3.059

DATUM RL	198.00
DEPTH TO INVERT	2.862
DESIGN INVERT LEVEL	195.138
HYDRAULIC GRADE LEVEL	195.138
FINISHED SURFACE LEVEL	195.138
EXISTING SURFACE LEVEL	195.138
CHAINAGE	L=45.122m

file name: 31066CR607.dwg, layout: name: CR607, created by: Luke Russell, date: 11/03/2025, 11:46 AM, sheet: 50 of 71, sheets: 31066CR607.dwg, plot date: 11/03/2025, 11:46 AM, sheet: 50 of 71, sheets: 31066CR607.dwg

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
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Designed
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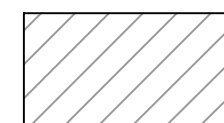


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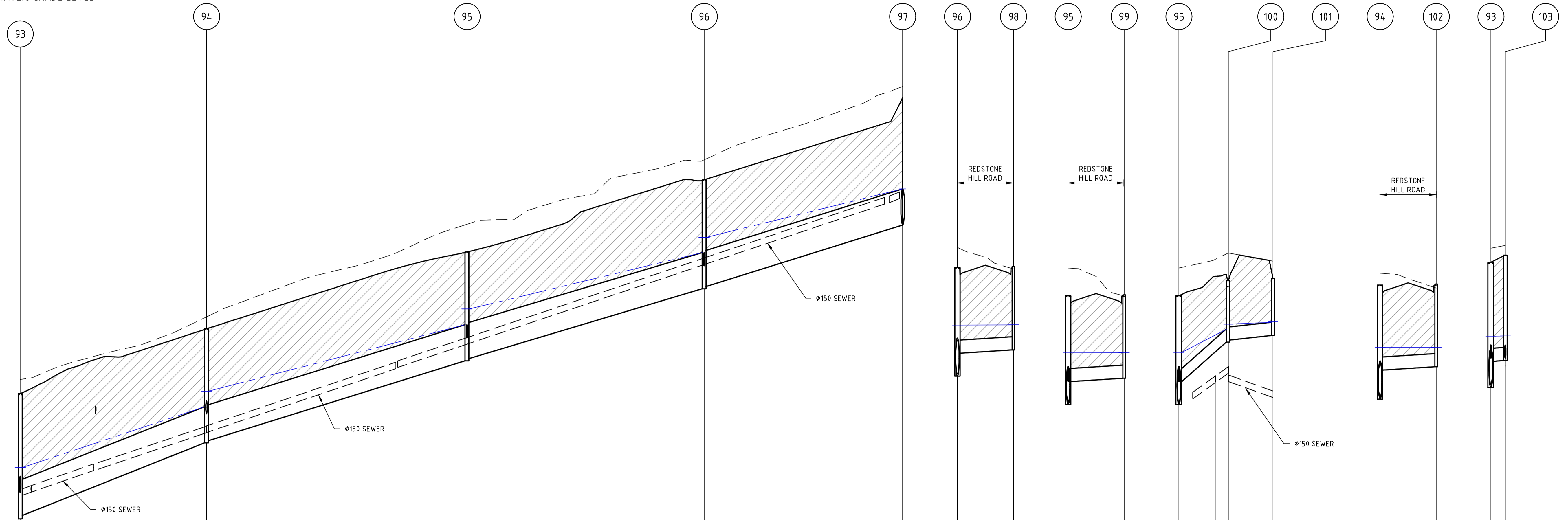
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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 8
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

Drg No
CONSTRUCTION 31066CR607

Rev
0

 CLASS 2 CRUSHED ROCK BACKFILL
 50YR HYDRAULIC GRADE LEVEL
 5YR HYDRAULIC GRADE LEVEL



Pipe Diameter	825 ϕ	825 ϕ	825 ϕ	825 ϕ	300 ϕ	300 ϕ	300 ϕ	300 ϕ	300 ϕ	300 ϕ
Pipe Class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2
Pipe Grade	1 in 26	1 in 33	1 in 34	1 in 32	1 in 167	1 in 167	1 in 13	1 in 96	1 in 167	1 in 167
Velocity (m/s)	Vf=5.305	Vf=4.706	Vf=4.613	Vf=4.730	Vf=1.060	Vf=1.060	Vf=3.871	Vf=1.394	Vf=1.060	Vf=1.060
Pipe Flow (m ³ /s)	Qa=1.996	Qa=2.006	Qa=1.970	Qa=1.969	Qa=0.010	Qa=0.009	Qa=0.046	Qa=0.024	Qa=0.008	Qa=0.040
Pipe Capacity (m ³ /s)	Qcap=2.836	Qcap=2.515	Qcap=2.466	Qcap=2.528	Qcap=0.075	Qcap=0.075	Qcap=0.274	Qcap=0.099	Qcap=0.075	Qcap=0.075

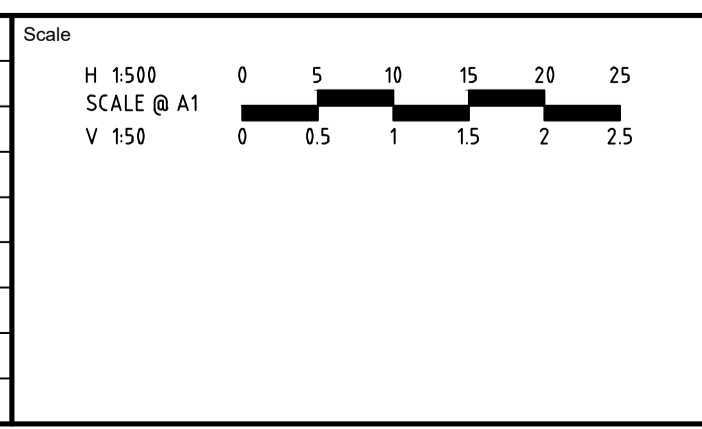
DATUM RL	202.00										
DEPTH TO INVERT	206.637	206.615	205.715	2.862	206.948	205.850	2.787	206.637	206.615	205.715	2.862
DESIGN INVERT LEVEL	206.948	205.850	205.850	2.787	206.948	205.850	2.787	206.637	206.615	205.715	2.862
HYDRAULIC GRADE LEVEL	206.948	205.850	205.850	2.787	206.948	205.850	2.787	206.637	206.615	205.715	2.862
FINISHED SURFACE LEVEL	208.960	208.637	208.637	2.862	208.960	208.637	2.862	208.960	208.637	208.637	2.862
EXISTING SURFACE LEVEL	208.960	208.637	208.637	2.862	208.960	208.637	2.862	208.960	208.637	208.637	2.862
CHAINAGE	45.122	87.610	147.191	201.367	246.734	291.900	329.933	367.966	405.999	444.032	482.065


Q5 PIPES AND PITS

Q5 PIPES AND PITS


file name: 31066CR608.dwg, layout: name: CR608, plotted by: Luke Russell, plot date: 11/13/2025 11:42 AM, sheet: 51 of 71 sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22





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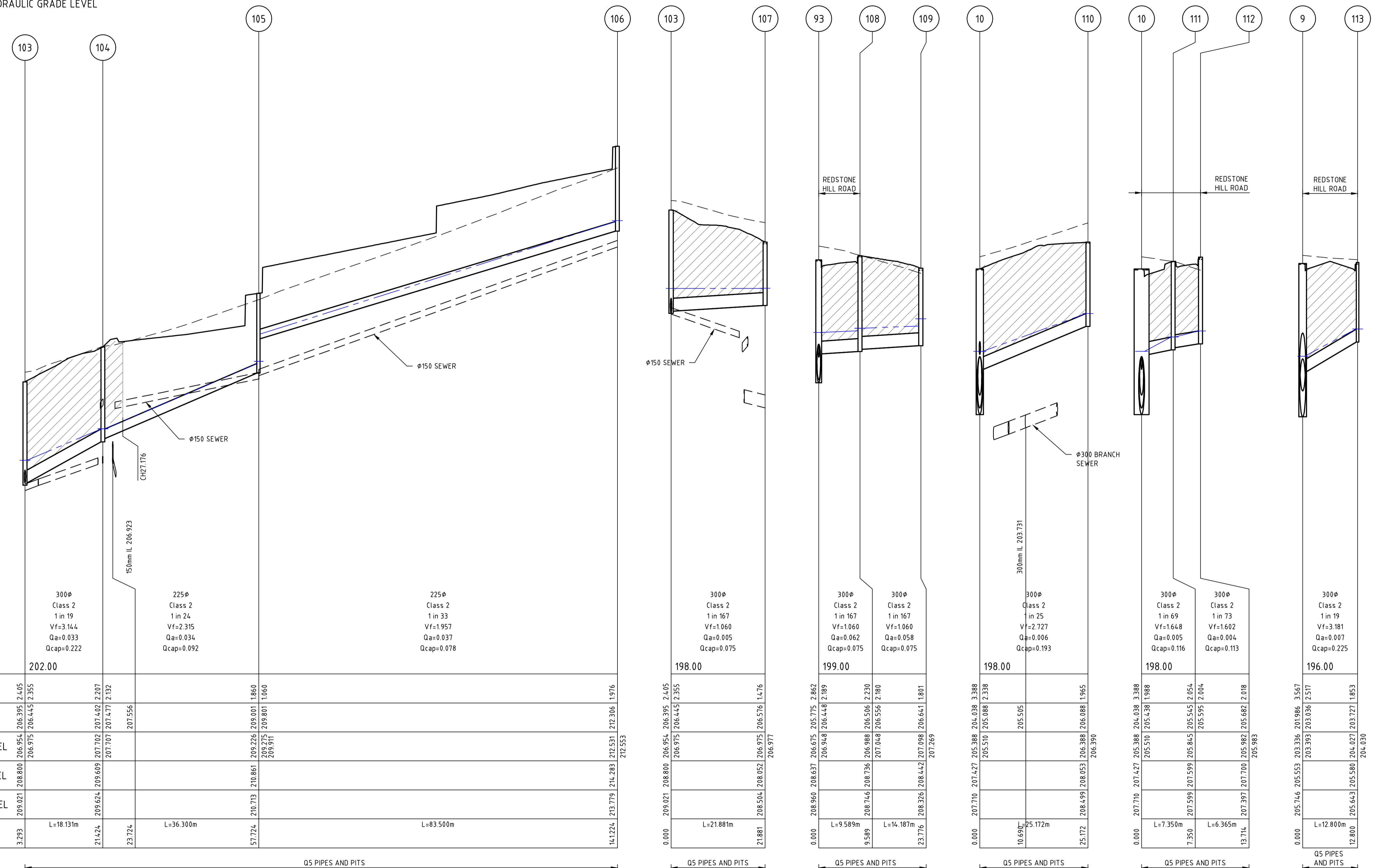
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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 9
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

Drg No
CONSTRUCTION 31066CR608
 Rev
0

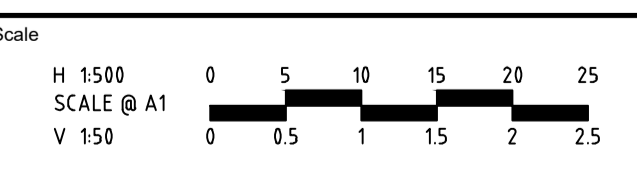
CLASS 2 CRUSHED ROCK BACKFILL
 50YR HYDRAULIC GRADE LEVEL
 5YR HYDRAULIC GRADE LEVEL



Pipe Diameter	300Ø	225Ø	300Ø	300Ø	300Ø	300Ø	300Ø	
Pipe Class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	
Pipe Grade	1 in 19	1 in 24	1 in 167	1 in 167	1 in 25	1 in 69	1 in 73	
Velocity (m/s)	Vf=3.144	Vf=2.315	Vf=1.060	Vf=1.060	Vf=2.727	Vf=1.648	Vf=1.602	
Pipe Flow (m³/s)	Qa=0.033	Qa=0.034	Qa=0.062	Qa=0.058	Qa=0.006	Qa=0.005	Qa=0.004	
Pipe Capacity (m³/s)	Qcap=0.222	Qcap=0.092	Qcap=0.075	Qcap=0.075	Qcap=0.193	Qcap=0.116	Qcap=0.113	
DATUM RL	202.00		198.00	199.00	198.00	198.00	196.00	
DEPTH TO INVERT	206.554 206.395 2.405 206.975 206.445 2.355	209.001 1.860 209.275 209.801 1.060 209.311	206.554 206.395 2.405 206.975 206.445 2.355	205.775 2.862 206.348 206.448 2.189	205.505 205.510 205.688 2.338	205.388 3.388 205.510 205.438 1.988	205.545 2.054 205.595 2.004	203.336 3.567 203.393 2.517
DESIGN INVERT LEVEL	207.102 207.402 2.207 207.107 207.477 2.132 207.556	209.226 209.001 1.860 209.275 209.801 1.060 209.311	206.575 206.575 206.576 1.476 206.977	206.675 205.775 2.862 206.348 206.448 2.189	205.506 2.230 207.448 206.556 2.180 207.699 206.641 1.801 207.699	204.038 3.388 205.510 205.438 1.988	205.545 2.054 205.595 2.004	204.027 203.727 1.853 204.030
HYDRAULIC GRADE LEVEL	206.975 206.445 2.355	209.226 209.001 1.860 209.275 209.801 1.060 209.311	206.575 206.575 206.576 1.476 206.977	206.675 205.775 2.862 206.348 206.448 2.189	205.505 205.510 205.688 2.338	205.388 3.388 205.510 205.438 1.988	205.545 2.054 205.595 2.004	203.336 3.567 203.393 2.517
FINISHED SURFACE LEVEL	208.800 208.800	210.713 210.861	208.504 208.52	208.960 208.637	207.427 205.388 204.038 3.388 205.510 205.688 2.338	207.427 205.388 204.038 3.388 205.510 205.438 1.988	207.599 207.599	205.533 201.986 3.567 203.393 203.036 2.517
EXISTING SURFACE LEVEL	209.021 209.624 209.609	210.713 210.861	208.504 208.52	208.960 208.637	207.427 205.388 204.038 3.388 205.510 205.688 2.338	207.427 205.388 204.038 3.388 205.510 205.438 1.988	207.599 207.599	205.533 201.986 3.567 203.393 203.036 2.517
CHAINAGE	3.293 L=18.131m	21.424 209.624 209.609 23.724 L=36.300m	16.1224 213.779 214.283 212.306 1.976 212.553	0.000 209.021 208.800 206.554 206.395 2.405 206.975 206.445 2.355	0.000 208.960 208.637 206.675 205.775 2.862 206.348 206.448 2.189 L=9.589m L=14.187m	0.000 207.710 207.427 205.388 204.038 3.388 205.510 205.688 2.338 10.69m 25.172m 25.172 208.699 208.653 206.388 206.688 1.965 206.390	0.000 207.710 207.427 205.388 204.038 3.388 205.510 205.438 1.988 L=7.350m L=6.365m	0.000 205.716 205.533 203.336 3.567 203.393 203.036 2.517 L=12.800m

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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	DRAINAGE UPDATED	M.T-S	26/04/24
B	AMENDED AS PER COUNCIL COMMENTS	M.T-S	20/12/23
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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 10
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

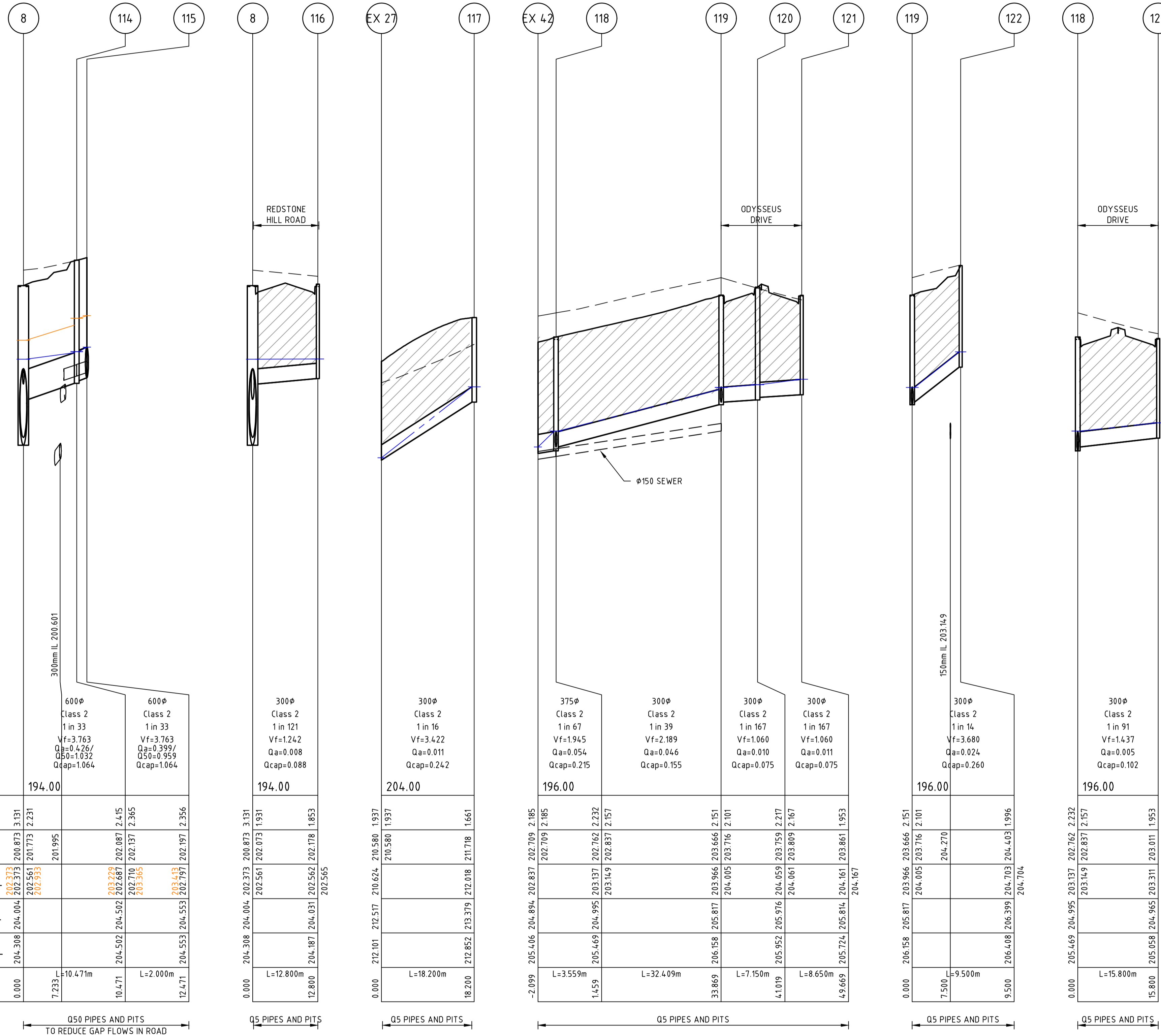
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CONSTRUCTION 31066CR609

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CLASS 2 CRUSHED ROCK BACKFILL

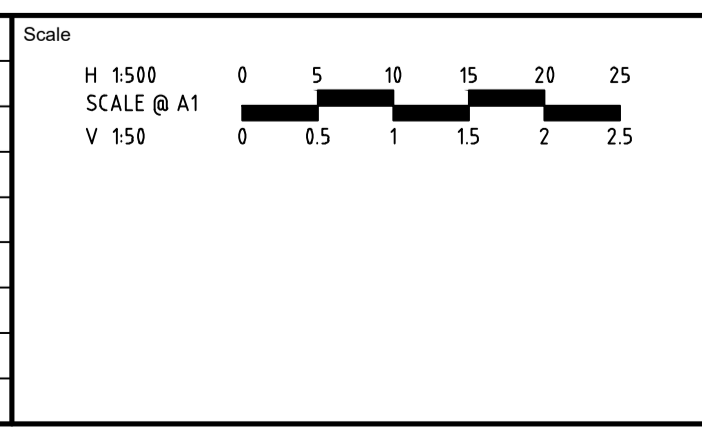
50YR HYDRAULIC GRADE LEVEL

5YR HYDRAULIC GRADE LEVEL



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Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
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**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - SHEET 11
HUME CITY COUNCIL
VILLAWOOD PROPERTIES**

CONSTRUCTION 31066CR610

Drg No
31066CR610

Rev
0

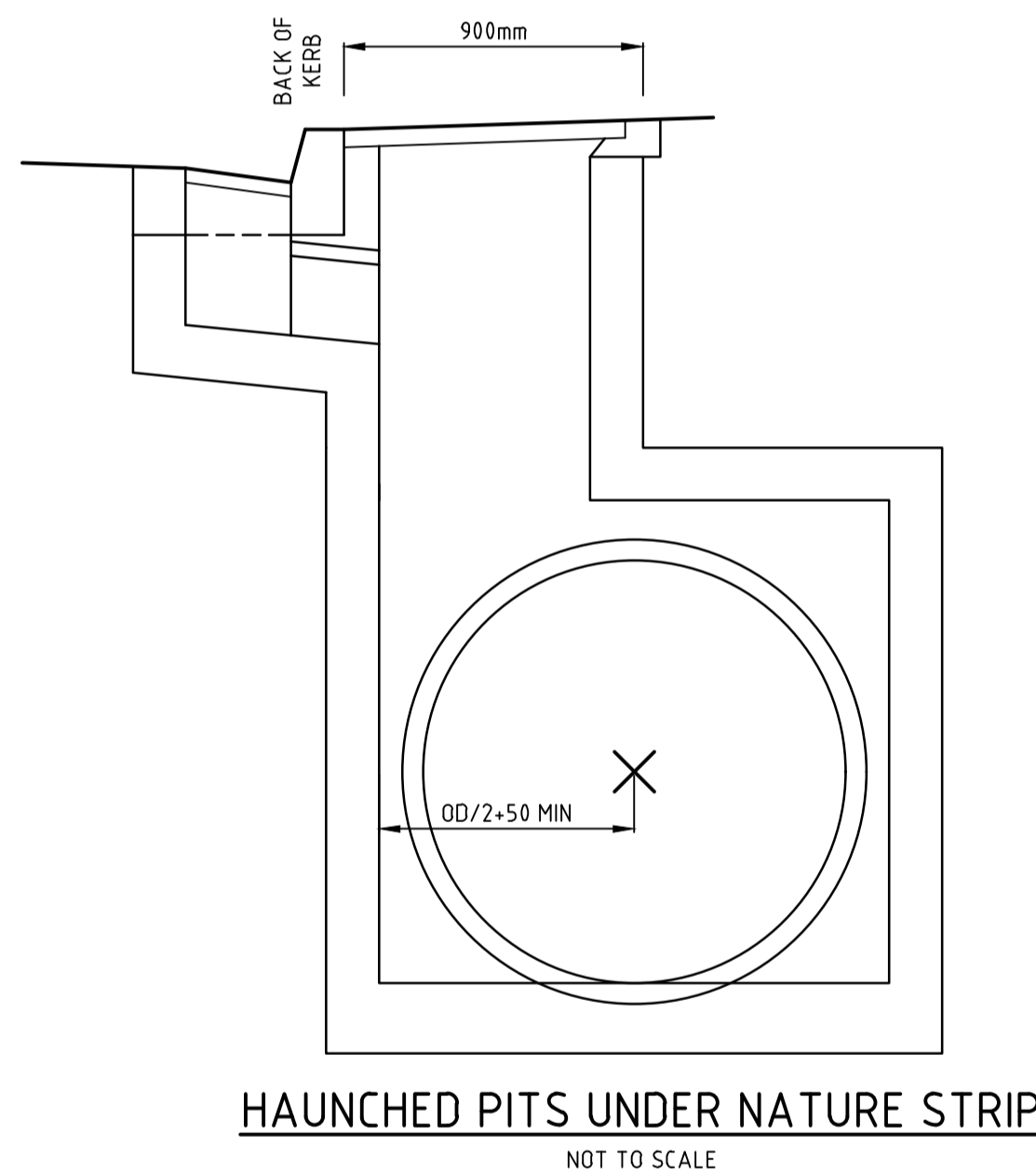
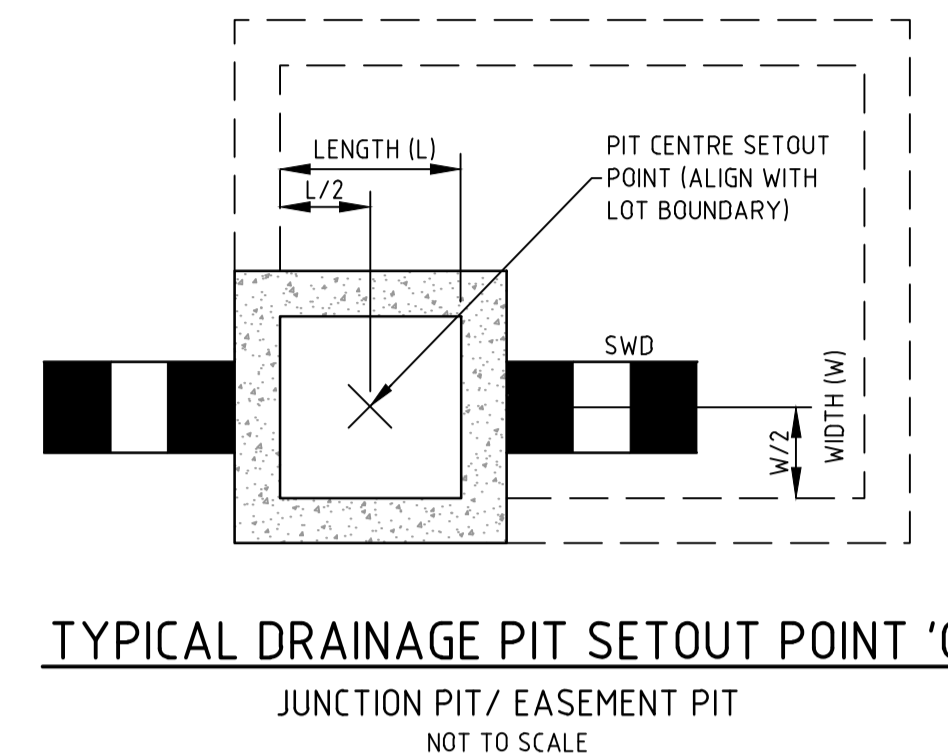
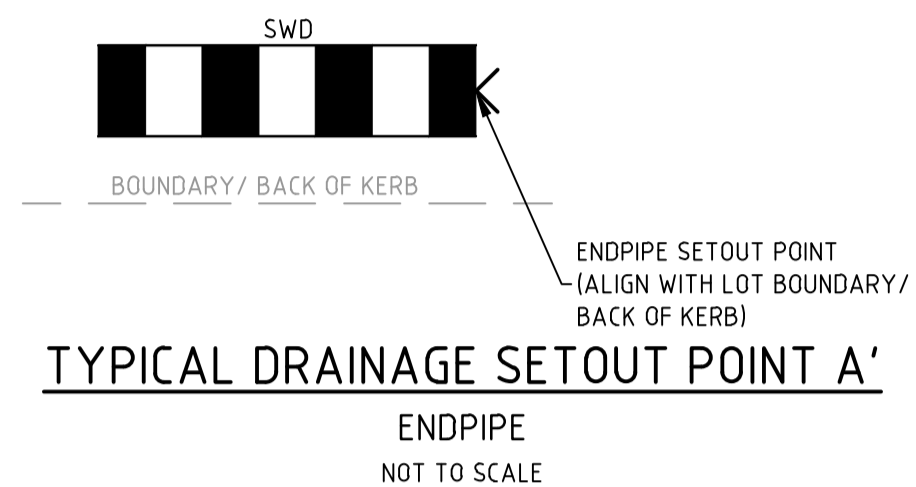
DRAINAGE PIT SCHEDULE

PIT NAME	PIT TYPE	INTERNAL		INLET		OUTLET		PIT		REMARKS
		WIDTH	LENGTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH	
TP1	TANGENT POINT	0	0	1650	195.884			199.621	3.736	
2	JUNCTION PIT	2250	1050	1650	195.986	1650	195.936	199.640	3.703	REFER TO EDMC STD FIG 608
3	JUNCTION PIT	2250	900	1500	196.721	1650	196.571	200.196	3.626	REFER TO EDMC STD FIG 608. FUTURE GSEP
TP4	TANGENT POINT	0	0	1500	197.389	1500	197.389	201.336	3.947	
5	JUNCTION PIT	2100	900	1500	197.869	1500	197.819	202.064	4.245	REFER TO EDMC STD FIG 608. FUTURE GSEP
6	JUNCTION PIT	2100	900	1500	198.985	1500	198.845	202.634	3.789	REFER TO EDMC STD FIG 608. FUTURE GSEP
7	JUNCTION PIT	2100	900	1500	199.925	1500	199.875	203.516	3.641	REFER TO EDMC STD FIG 608. FUTURE GSEP
8	GRADED SIDE ENTRY PIT	2100	1050	1350	201.023	1500	200.873	204.004	3.131	REFER TO EDMC STD FIG 601 AND 607. HEAVY DUTY LID
9	GRADED SIDE ENTRY PIT	1800	900	1350	202.586	1350	201.986	205.553	3.567	REFER TO EDMC STD FIG 601 AND 607
10	GRADED SIDE ENTRY PIT	3300	1350	1200	204.188	1350	204.038	207.427	3.388	REFER TO EDMC STD FIG 603 AND 607
TP11	TANGENT POINT	0	0	1200	204.512	1200	204.512	207.597	3.085	
TP12	TANGENT POINT	0	0	1200	205.224	1200	205.224	208.492	3.268	
13	GRADED SIDE ENTRY PIT	1650	900	1200	205.449	1200	205.399	208.687	3.288	REFER TO EDMC STD FIG 601 AND 607
14	DOUBLE SIDE ENTRY PIT	1650	900	1050	206.531	1200	205.831	209.175	3.344	REFER TO EDMC STD FIG 602 AND 607
15	JUNCTION PIT	1350	900	1050	207.230	1050	207.180	210.053	2.873	REFER TO EDMC STD FIG 607
16	DOUBLE SIDE ENTRY PIT	1350	900	1050	208.107	1050	208.057	210.859	2.802	REFER TO EDMC STD FIG 602 AND 607
17	DOUBLE SIDE ENTRY PIT	1350	900	1050	209.657	1050	209.157	212.179	3.022	REFER TO EDMC STD FIG 602 AND 607
18	JUNCTION PIT	1350	900	1050	210.552	1050	210.502	213.395	2.893	REFER TO EDMC STD FIG 607
19	DOUBLE SIDE ENTRY PIT	1350	900	1050	211.757	1050	211.457	214.379	2.922	REFER TO EDMC STD FIG 602 AND 607
20	DOUBLE SIDE ENTRY PIT	2400	900	900	214.334	1050	213.434	216.807	3.373	REFER TO EDMC STD FIG 604 AND 607
21	DOUBLE SIDE ENTRY PIT	1200	900	900	215.761	900	215.711	218.337	2.626	REFER TO EDMC STD FIG 602 AND 607
22	DOUBLE SIDE ENTRY PIT	1200	900	900	216.348	900	216.298	219.193	2.896	REFER TO EDMC STD FIG 602 AND 607
23	JUNCTION PIT	1200	900	750	218.316	900	217.496	221.112	3.617	REFER TO EDMC STD FIG 608
24	DOUBLE SIDE ENTRY PIT	1050	900	675	219.425	750	219.350	222.149	2.798	REFER TO EDMC STD FIG 602 AND 607
25	ENDPIPE	0	0	675	220.885	675	220.885	224.058	3.173	BLANK END WITH MARINE PLY
26	DOUBLE SIDE ENTRY PIT	600	900	300	220.282	300	220.282	222.145	1.863	REFER TO EDMC STD FIG 602 AND 605
27	DOUBLE SIDE ENTRY PIT	900	900	600	219.502	600	219.452	221.696	2.243	REFER TO EDMC STD FIG 602 AND 607
28	GRADED SIDE ENTRY PIT	900	900	525	219.832	600	219.757	221.917	2.160	REFER TO EDMC STD FIG 601 AND 607
29	DOUBLE SIDE ENTRY PIT	900	900	450	221.418	525	221.343	223.328	1.985	REFER TO EDMC STD FIG 602 AND 605
30	ENDPIPE	0	0	450	221.537	450	221.537	224.009	2.472	BLANK END WITH MARINE PLY
31	JUNCTION PIT	600	900	300	224.238	300	224.188	226.134	1.947	REFER TO EDMC STD FIG 605
32	ENDPIPE	0	0	300	224.388	300	224.388	226.318	1.930	BLANK END WITH MARINE PLY
33	GRADED SIDE ENTRY PIT	600	900	300	221.639	300	221.639	223.307	1.668	REFER TO EDMC STD FIG 601 AND 605
34	DOUBLE SIDE ENTRY PIT	600	900	300	217.378	300	217.378	219.343	1.965	REFER TO EDMC STD FIG 602 AND 605
35	DOUBLE SIDE ENTRY PIT	1050	900	525	215.192	525	215.142	217.251	2.109	REFER TO EDMC STD FIG 602 AND 607
36	JUNCTION PIT	900	1050	525	215.877	525	215.827	217.938	2.112	REFER TO EDMC STD FIG 607. HEAVY DUTY LID
37	DOUBLE SIDE ENTRY PIT	900	1050	450	216.520	525	216.445	218.482	2.037	REFER TO EDMC STD FIG 602 AND 607
38	ENDPIPE	0	0	450	216.979	450	216.979	219.580	2.601	BLANK END WITH MARINE PLY
39	JUNCTION PIT	600	900	300	220.062	300	219.012	221.122	2.110	REFER TO EDMC STD FIG 607
40	ENDPIPE	0	0	300	220.227	300	220.227	221.589	1.362	BLANK END WITH MARINE PLY
41	GRADED SIDE ENTRY PIT	900	900	300	215.478	300	215.428	217.529	2.101	REFER TO EDMC STD FIG 601 AND 607
42	GRADED SIDE ENTRY PIT	600	900	300	215.559	300	215.559	217.395	1.836	REFER TO EDMC STD FIG 603 AND 605
43	GRADED SIDE ENTRY PIT	600	900	375	214.981	375	214.931	216.888	1.956	REFER TO EDMC STD FIG 603 AND 605
44	GRADED SIDE ENTRY PIT	600	900	375	215.104	375	215.054	216.982	1.927	REFER TO EDMC STD FIG 603 AND 605
45	JUNCTION PIT	900	900	375	215.369	375	215.319	217.596	2.277	REFER TO EDMC STD FIG 607
46	JUNCTION PIT	750	900	300	215.665	375	215.590	217.464	1.875	REFER TO EDMC STD FIG 607
47	JUNCTION PIT	600	900	300	216.001	300	215.951	217.773	1.823	REFER TO EDMC STD FIG 605
48	JUNCTION PIT	600	900	225	219.083	300	219.008	220.974	1.966	REFER TO EDMC STD FIG 605
49	GRADED JUNCTION PIT	600	900	225	220.288	225	220.238	221.800	1.562	REFER TO EDMC STD FIG 605 AND HUME STD FIG 225
50	ENDPIPE	0	0	225	220.323	225	220.323	221.831	1.508	BLANK END WITH MARINE PLY
51	JUNCTION PIT	600	900	300	215.846	300	215.796	217.796	1.998	REFER TO EDMC STD FIG 605
52	GRADED SIDE ENTRY PIT	600	900	300	215.910	300	215.910	217.743	1.833	REFER TO EDMC STD FIG 603 AND 605
53	DOUBLE SIDE ENTRY PIT	600	900	300	212.468	300	212.468	214.407	1.939	REFER TO EDMC STD FIG 602 AND 605
54	DOUBLE SIDE ENTRY PIT	900	900	525	211.768	525	211.718	213.992	2.275	REFER TO EDMC STD FIG 602 AND 607

55	GRADED SIDE ENTRY PIT	900	900	525	212.235	525	212.185	214.183	2.000	REFER TO EDMC STD FIG 601 AND 607
56	DOUBLE SIDE ENTRY PIT	900	900	375	212.995	525	212.845	214.936	2.091	REFER TO EDMC STD FIG 602 AND 607
57	DOUBLE SIDE ENTRY PIT	600	900	300	214.316	375	214.241	216.091	1.850	REFER TO EDMC STD FIG 602 AND 605
58	DOUBLE SIDE ENTRY PIT	600	900	300	215.652	300	215.602	217.351	1.749	REFER TO EDMC STD FIG 602 AND 605
59	DOUBLE SIDE ENTRY PIT	600	900	300	217.200	300	217.150	218.945	1.795	REFER TO EDMC STD FIG 602 AND 605
60	DOUBLE SIDE ENTRY PIT	600	900	300	218.719	300	218.669	220.576	1.907	REFER TO EDMC STD FIG 602 AND 605
61	JUNCTION PIT	900	900	300	220.344	300	220.294	222.466	2.122	REFER TO EDMC STD FIG 607
63	GRADED SIDE ENTRY PIT	600	900	300	217.251	300	217.201	218.924	1.673	REFER TO EDMC STD FIG 601 AND 605
64	GRADED SIDE ENTRY PIT	600	900	300	214.397	300	214.347	216.070	1.673	REFER TO EDMC STD FIG 601 AND 605
65	JUNCTION PIT	900	900	300	215.505	375	215.430	217.541	2.111	REFER TO EDMC STD FIG 607
66	GRADED JUNCTION PIT	600	900	300	215.684	300	215.634	217.013	1.379	REFER TO EDMC STD FIG 605 AND HUME STD FIG 225
67	JUNCTION PIT	900	900	225	219.393	300	219.318	221.578	2.259	REFER TO EDMC STD FIG 607
68	JUNCTION PIT	600	900	225	223.907	225	223.857	225.204	1.346	REFER TO EDMC STD FIG 605
68A	ENDPIPE	0	0	225	224.019	225	224.019	225.333	1.314	BLANK END WITH MARINE PLY
70	DOUBLE SIDE ENTRY PIT	600	900	300	210.995	300	210.945	212.206	1.853	REFER TO EDMC STD FIG 602 AND 605
71	DOUBLE SIDE ENTRY PIT	600	900	300	208.893	300	208.843	210.886	1.993	REFER TO EDMC STD FIG 602 AND 605
72	DOUBLE SIDE ENTRY PIT	900	900	450	208.482	450	208.432	210.563	2.131	REFER TO EDMC STD FIG 602 AND 607
73	GRADED SIDE ENTRY PIT	750	900	450	208.840	450	208.790	210.759	1.969	REFER TO EDMC STD FIG 601 AND 607
74	DOUBLE SIDE ENTRY PIT	750	900	375	209.879	450	209.804	211.750	1.946	REFER TO EDMC STD FIG 602 AND 607
75	DOUBLE SIDE ENTRY PIT	600	900	300	210.995	375	210.920	212.740	1.820	REFER TO EDMC STD FIG 602 AND 605
76	DOUBLE SIDE ENTRY PIT	600	900	300	212.229	300	212.179	213.922	1.743	REFER TO EDMC STD FIG 602 AND 605
77	DOUBLE SIDE ENTRY PIT	600	900	300	213.288	300	213.238	215.033	1.795	REFER TO EDMC STD FIG 602 AND 605. HEAVY DUTY LID
78	JUNCTION PIT	600	900	300	213.916	300	213.866	215.659	1.793	REFER TO EDMC STD FIG 605
79	JUNCTION PIT	600	900	300	214.626	300	214.576	216.291	1.715	REFER TO EDMC STD FIG 605
80	JUNCTION PIT	600	900	300	215.020	300	214.970	216.818	1.848	REFER TO EDMC STD FIG 605
81	GRADED SIDE ENTRY PIT	600	900	300	217.095	300	217.045	218.898	1.852	REFER TO EDMC STD FIG 601 AND 605
82	GRADED SIDE ENTRY PIT	600	900	300	217.225	300	217.175	218.928	1.703	REFER TO EDMC STD FIG 601 AND 605
83	GRADED SIDE ENTRY PIT	600	900	300	215.138	300	215.088	216.824	1.686	REFER TO EDMC STD FIG 601 AND 605
84	JUNCTION PIT	600	900	225	216.109	300	216.059	217.315	1.206	REFER TO EDMC STD FIG 605
85	JUNCTION PIT	600	900	300	213.967	300	213.917	215.630	1.662	REFER TO EDMC STD FIG 605
86	GRADED SIDE ENTRY PIT	600	900	300	213.339	300	213.289	215.012	1.673	REFER TO EDMC STD FIG 601 AND 605. HEAVY DUTY LID
87	GRADED SIDE ENTRY PIT	600	900	300	211.046	300	210.996	212.719	1.673	REFER TO EDMC STD FIG 601 AND 605. HEAVY DUTY LID
88	JUNCTION PIT	600	900	300	212.228	300	212.178	213.623	1.975	REFER TO EDMC STD FIG 605
89	JUNCTION PIT	600	900	225	214.238	300	214.188	215.946	1.908	REFER TO EDMC STD FIG 605
90	JUNCTION PIT	600	900	225	217.553	225	217.503	218.842	1.589	REFER TO EDMC STD FIG 605
91	JUNCTION PIT	600	900	225	218.041	225	217.991	220.021	1.981	REFER TO EDMC STD FIG 605
92	DOUBLE SIDE ENTRY PIT	600	900	300	207.182	300	207.132	209.175	1.993	REFER TO EDMC STD FIG 602 AND 605
93	GRADED SIDE ENTRY PIT	1350	900	825	205.850	900	205.775	208.637	2.862	REFER TO EDMC STD FIG 601 AND 607
94	GRADED SIDE ENTRY PIT	1200	900	825	207.560	825	207.510	210.117	2.607	REFER TO EDMC STD FIG 601 AND 607
95	GRADED SIDE ENTRY PIT	1200	900	825	20					

PIT SETOUT CO-ORDINATES

NAME	POINT	EASTING	NORTHING
EP1	A	302760.036	5835355.962
2	C	302756.480	5835353.918
3	C	302728.245	5835318.933
TP4	A	302698.899	5835281.257
5	C	302670.508	5835280.204
6	C	302616.270	5835233.976
7	C	302561.798	5835367.939
10	C	302405.227	5835462.999
15	C	302343.928	5835425.157
18	C	302293.750	5835362.850
20	C	302246.412	5835306.078
23	C	302188.456	5835231.958
35	C	302221.458	5835308.183
36	C	302211.669	5835316.080
41	C	302215.216	5835300.679
42	C	302223.589	5835289.982
43	C	302251.810	5835301.240
44	C	302257.025	5835298.116
45	C	302259.894	5835280.464
46	C	302276.912	5835266.371
47	C	302270.726	5835258.707
49	C	302194.930	5835164.790
50	C	302194.298	5835164.007
51	C	302252.297	5835271.222
52	C	302241.710	5835272.124
61	C	302127.422	5835480.194
66	C	302229.144	5835350.487
68	C	302105.074	5835450.619
68A	A	302103.290	5835452.059
97	A	302212.498	5835617.323
100	C	302279.773	5835550.573
101	C	302284.935	5835541.809
103	C	302367.968	5835489.184
104	C	302355.251	5835498.248
107	C	302380.207	5835471.064
109	C	302389.237	5835493.316
110	C	302381.871	5835453.179
111	C	302408.941	5835469.284

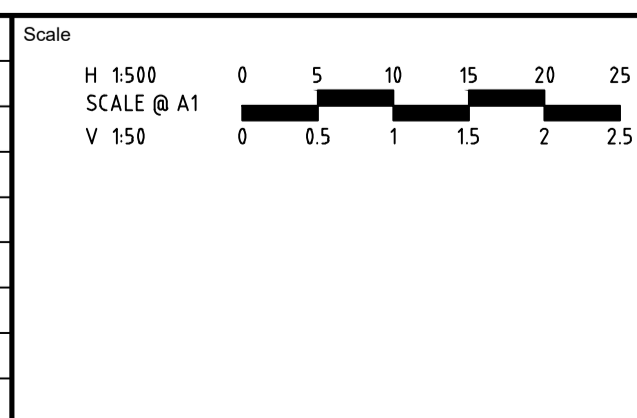


PROPERTY INLET NOTES

- REFER GAA EDM STD DRG FIG 701 FOR PROPERTY INLET TYPE A DETAIL. INLET CONNECTION TO EASEMENT OR STREET DRAIN OUTSIDE PROPERTY TITLE
- REFER GAA EDM STD DRG FIG 702 FOR PROPERTY INLET TYPE B DETAIL. INLET CONNECTION TO EASEMENT DRAIN CONTAINED WITHIN PROPERTY TITLE
- REFER GAA EDM STD DRG FIG 703 FOR PROPERTY INLET TYPE C DETAIL. INLET CONNECTION TO DRAINAGE PIT WITHIN AND OUTSIDE PROPERTY TITLE

file name: 31066CR612.dwg, layout name: CR612, plotted by: Luke Pines, plot date: 14/03/2025 11:46 AM, sheet 15 of 71 sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	DRAINAGE UPDATED	M.R	20/09/24
C	PIT SET OUT UPDATED	M.T-S	26/04/24
B	UPDATED COORDINATES, SETOUT UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



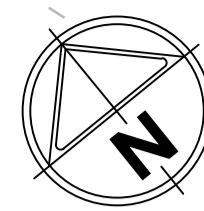
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villawood properties
Communities Designed for Living
Designed
H.HOGGARD
Authorised
J.POYNTER

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Checked
J.POYNTER
Date
APRIL 2024

**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
PIT SETOUT CO-ORDINATES TABLE & DETAILS - SHEET 13**
HUME CITY COUNCIL
VILLAWOOD PROPERTIES
CONSTRUCTION 31066CR612
Rev 0



MGA 2020
ZONE 55

STAGE 14

SWALE TO WETLAND TO BE CONSTRUCTED
AS PART OF WETLAND WORKS.

PROVIDE ROCK BEACHING ON SWALE BEND

GAP FLOW WATER LEVEL

DATUM R.L. 203.0

DESIGN SURFACE LEVEL	204.070	203.534	203.534	203.534	204.222
EXISTING SURFACE LEVEL	204.070	204.123	204.135	204.148	204.222
OFFSET	-6.610	-1.250	0.000	1.250	8.129

CH 0.00

GAP FLOW WATER LEVEL

DATUM R.L. 201.0

DESIGN SURFACE LEVEL	202.848	202.334	202.334	202.334	202.977
EXISTING SURFACE LEVEL	202.848	202.890	202.907	202.924	202.977
OFFSET	-4.334	-1.250	0.000	1.250	5.110

CH 100.00

GAP FLOW WATER LEVEL

DATUM R.L. 200.0

DESIGN SURFACE LEVEL	201.042	200.502	200.502	200.502	200.985
EXISTING SURFACE LEVEL	201.042	201.015	201.008	201.000	200.985
OFFSET	-4.488	-1.250	0.000	1.250	4.147

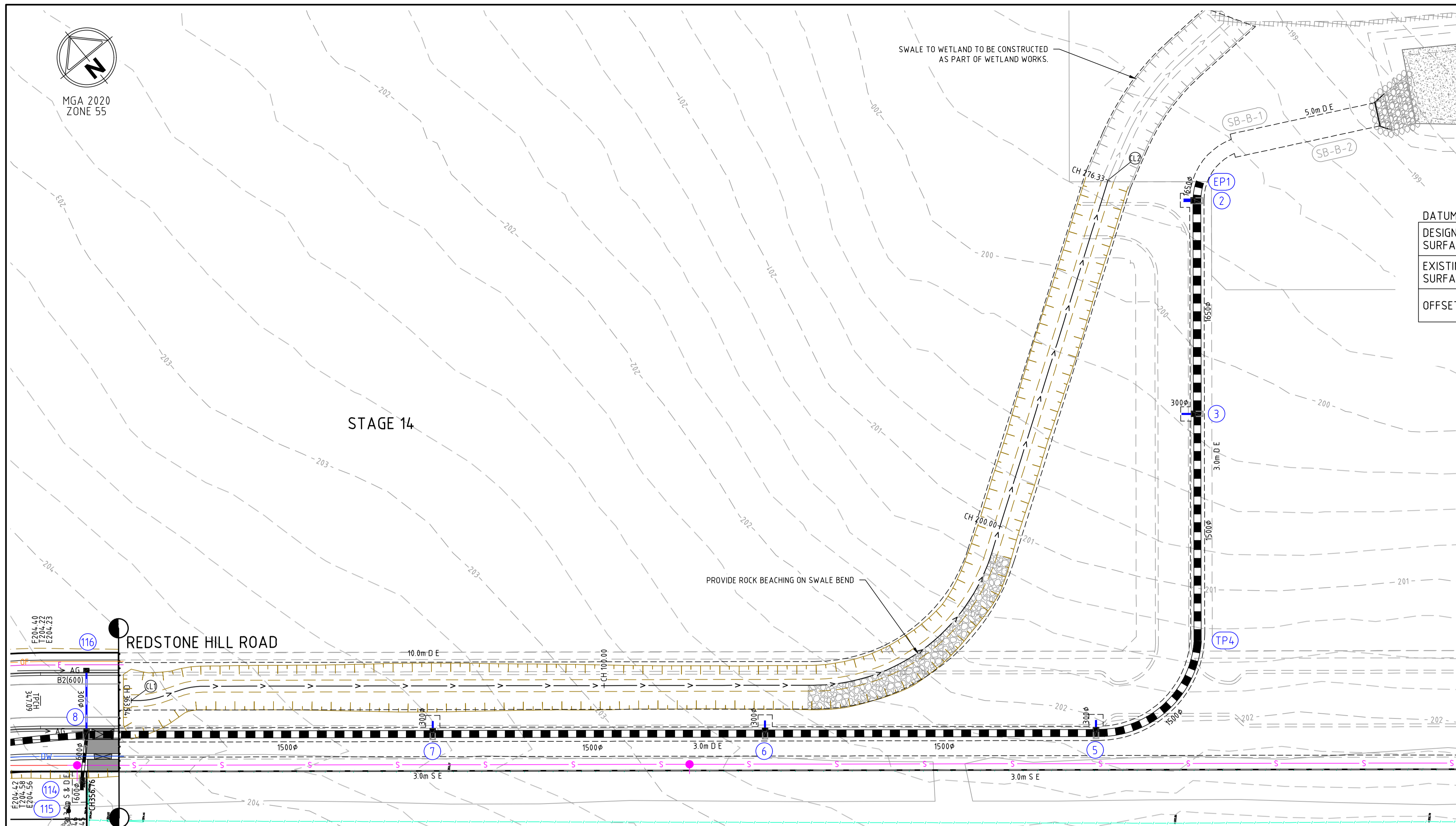
CH 200.00

GAP FLOW WATER LEVEL

DATUM R.L. 198.0

DESIGN SURFACE LEVEL	199.700	199.136	199.136	199.136	199.669
EXISTING SURFACE LEVEL	199.700	199.689	199.684	199.680	199.669
OFFSET	-4.635	-1.250	0.000	1.250	4.452

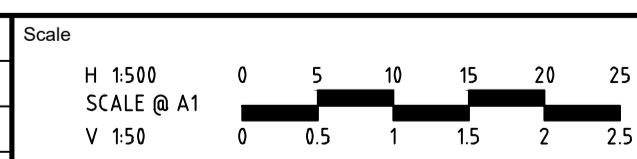
CH 276.33



CHAINAGE	EXISTING SURFACE	DESIGN CENTRELINE	DATUM RL 195.0	DESIGN GRADELINE	VERTICAL GEOMETRY
0.000	204.135	203.534			
1.479	204.111	203.516			
6.479	204.026	203.556			
10.536	203.962	203.407			
15.536	203.900	203.347			
20.000	203.856	203.294			
40.000	203.632	203.054			
60.000	203.459	202.814			
80.000	203.183	202.574		-1.20%	
100.000	202.907	202.334			
120.000	202.635	202.094			
139.220	202.417	201.863			30.00m VC
140.000	202.408	201.853			
143.984	202.352	201.801			
154.220	202.207	201.631			
160.000	202.084	201.514			
169.220	201.867	201.296		-2.58%	
180.000	201.519	201.018			
193.984	201.193	200.657			
200.000	201.008	200.502			
208.952	200.798	200.271			30.00m VC
220.000	200.530	200.010			
223.952	200.468	199.928			
238.952	200.245	199.670			
240.000	200.231	199.655			
260.000	199.919	199.369			
276.327	199.684	199.136		-1.43%	

file name: 31066CR613.dwg, layout: rns: CR613, plotted by: Luke Pinesell, file location: G:\31066CR613\31066CR613.dwg, plot date: 14/03/2025 11:46 AM, Sheet: 56 of 71, Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
B	SWALE AMENDED FROM LOW CHANGE	M.T-S	26/04/24
C	SWALE EXTENDED, GAP FLOW LEVELS SHOWN, ROCK BEACHING SHOWN	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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Communities Designed for Living
Designed by
H.HOGGARD
Authorised
J.POYNER

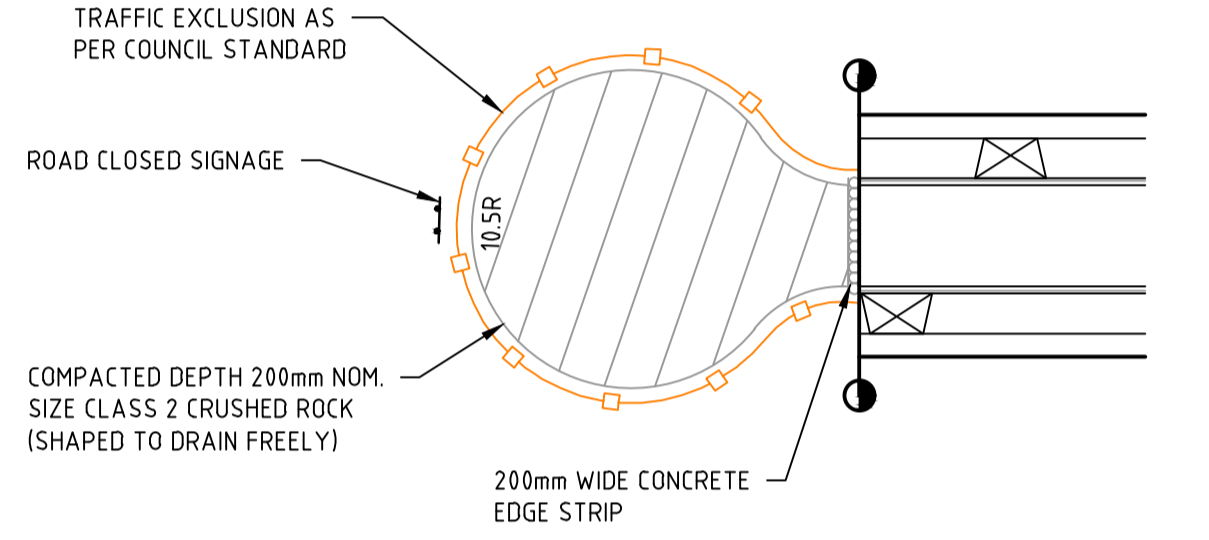
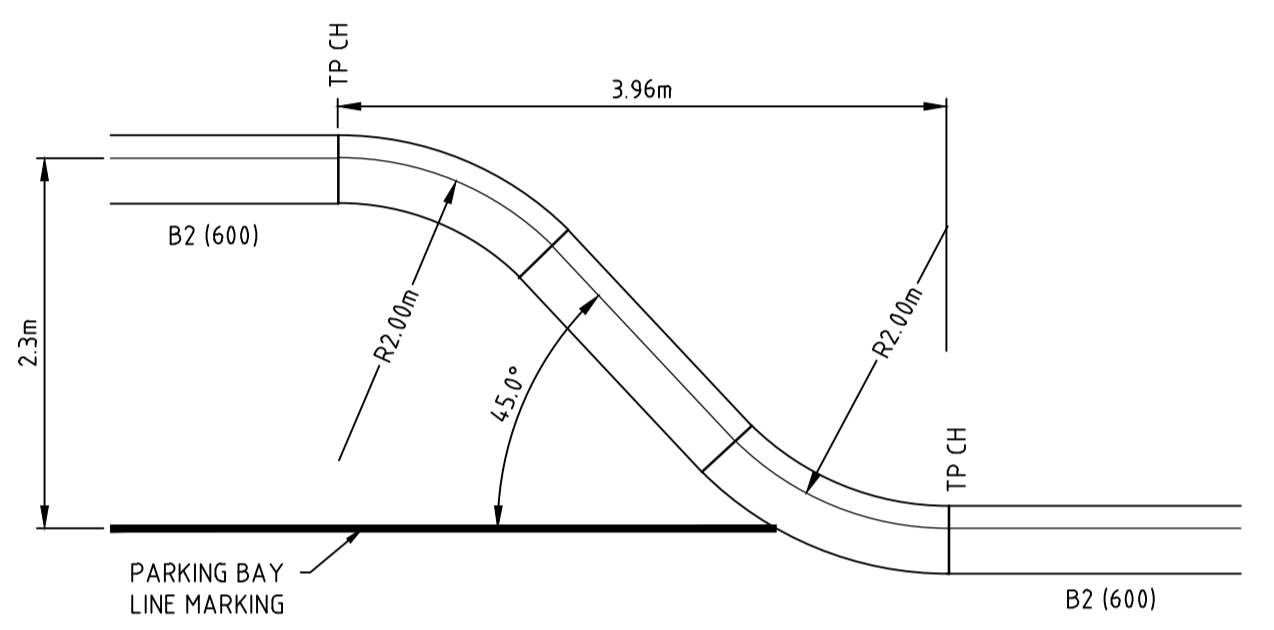
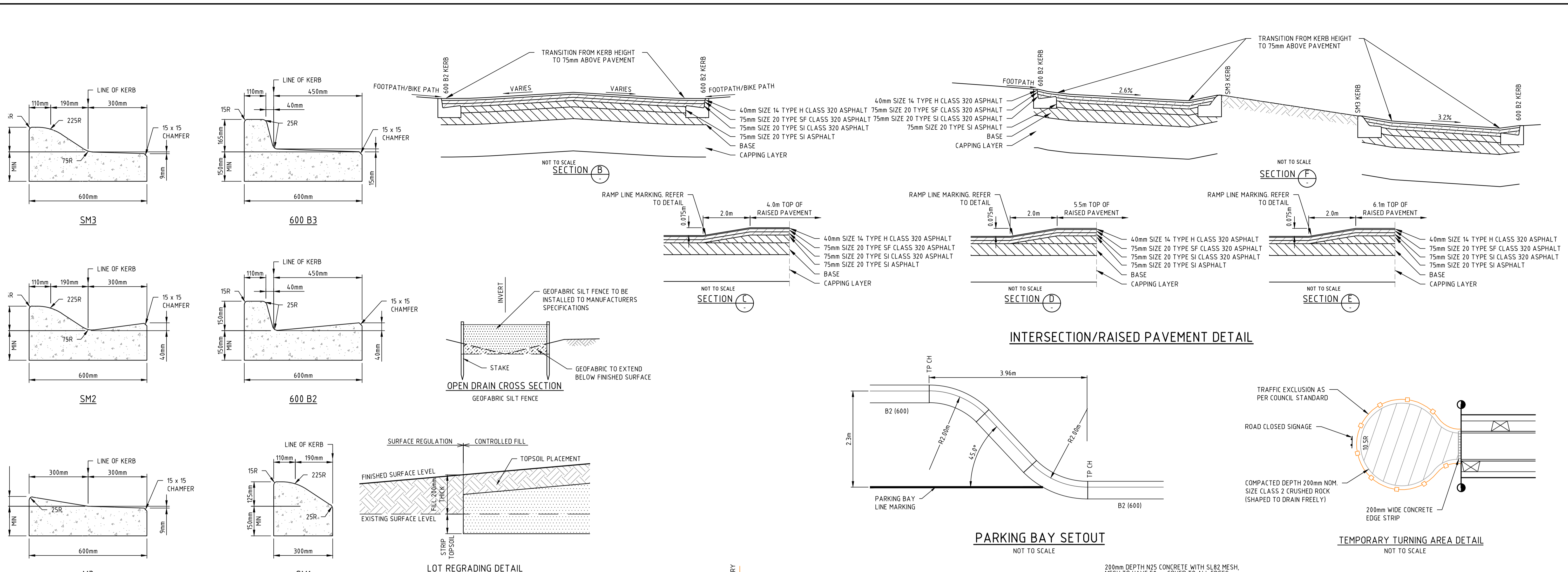


Checked
J.POYNER
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
SWALE DETAILS - SHEET 14
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

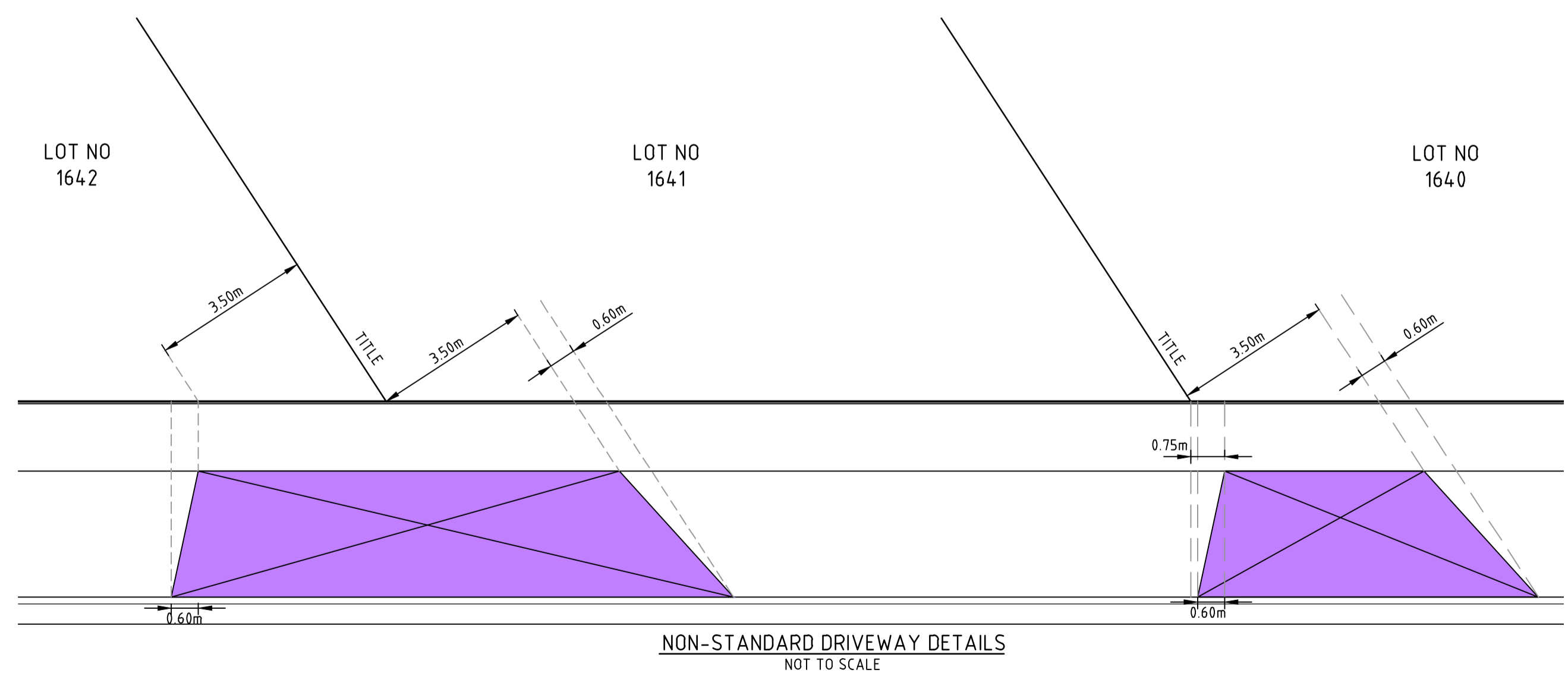
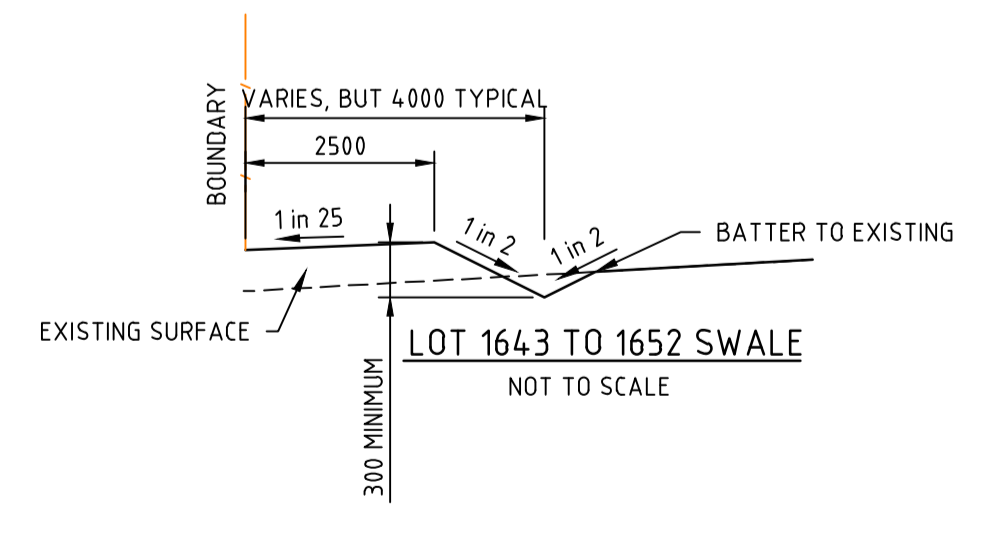
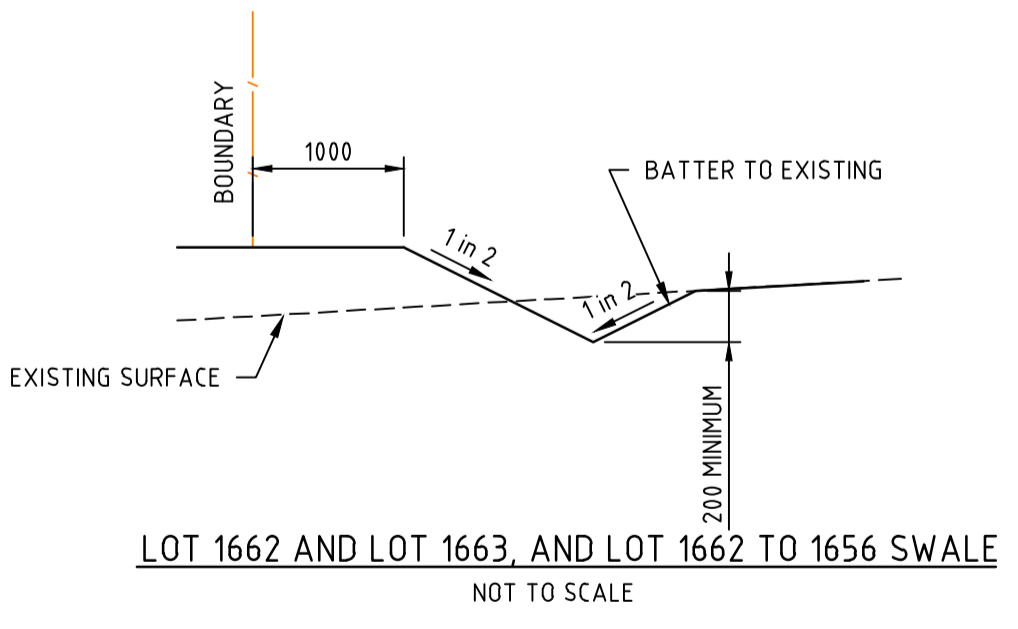
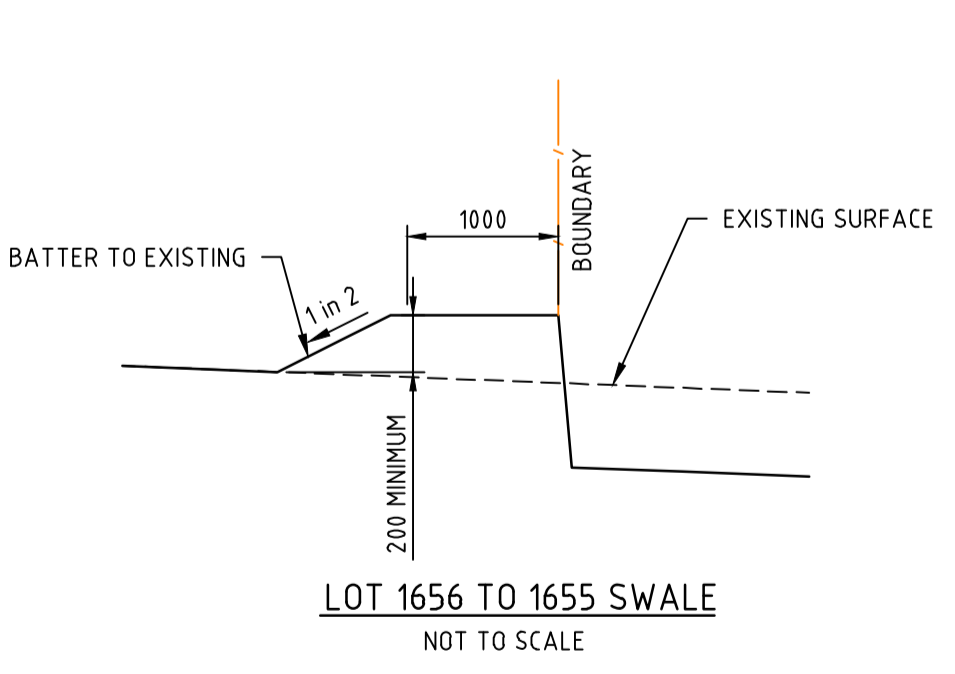
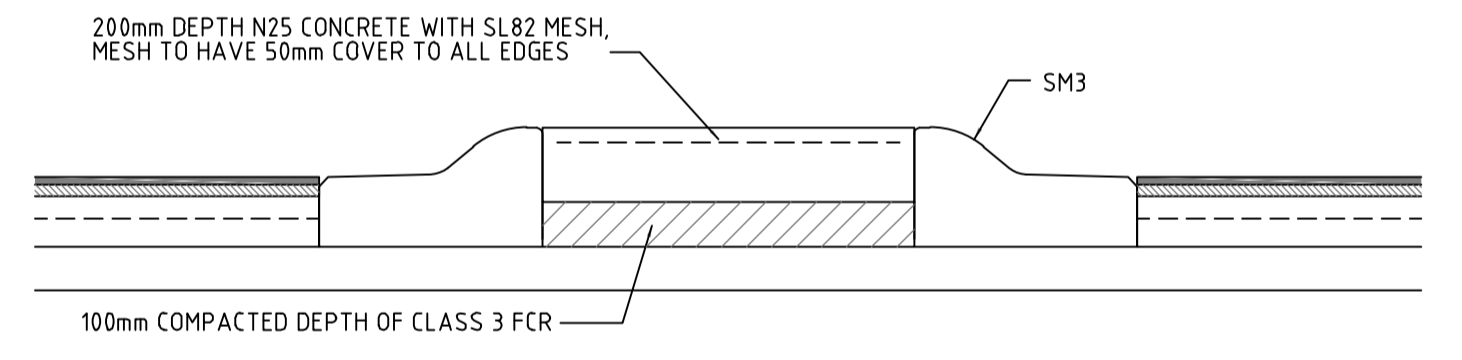
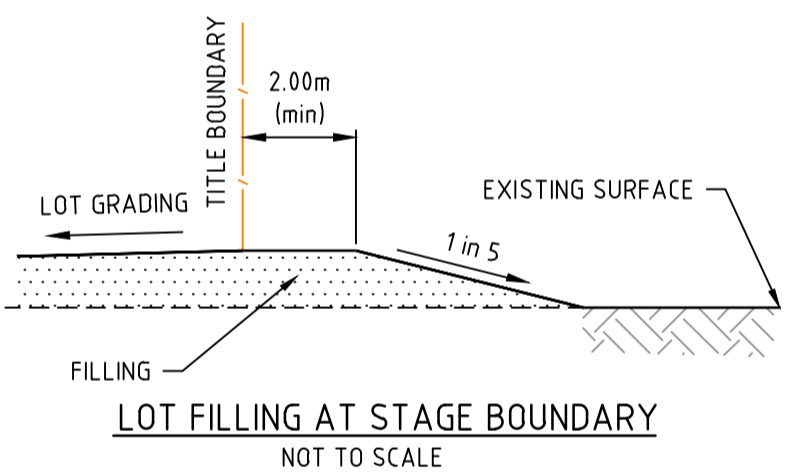
CONSTRUCTION 31066CR613

Drg No 31066CR613 Rev 0



- NOTES:**
1. ALL KERBS AND KERB & CHANNEL TO BE REINFORCED IN ACCORDANCE WITH EDM STD DRAWINGS.
 2. ALL KERBS AND KERB & CHANNEL TO HAVE 150mm MIN DEPTH OF CONCRETE BELOW TOP OF PAVEMENT LEVEL. DEPTH TO BE INCREASED TO MATCH PAVEMENT LAYERS WHERE APPROPRIATE.
 3. THE 190mm FACE DIMENSION TO BE INCREASED TO 200mm WHERE A SAMI SEAL IS USED.

STANDARD KERB PROFILES
NOT TO SCALE



file name: 31066CR701.dwg, layout: rans: CD701, plotted by: Luke Dwyer, file location: \\spire\media\31066\31066.dwg, plot date: 14/03/2025 11:47 AM, sheet: 58 of 71 sheets

Rev	Description	Author	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	LOT 1643 SWALE DETAIL REMOVED, LOT 1643 TO 1652 DETAIL AMENDED	M.T-S	20/09/24
C	SWALES AMENDED, SM2 AND SPLITTER ISLAND DETAILS ADDED	M.T-S	26/04/24
B	DRIVEWAY, SWALE, RAISED PLATFORM DETAILS ADDED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22
Rev	Amendments	Approved	Date

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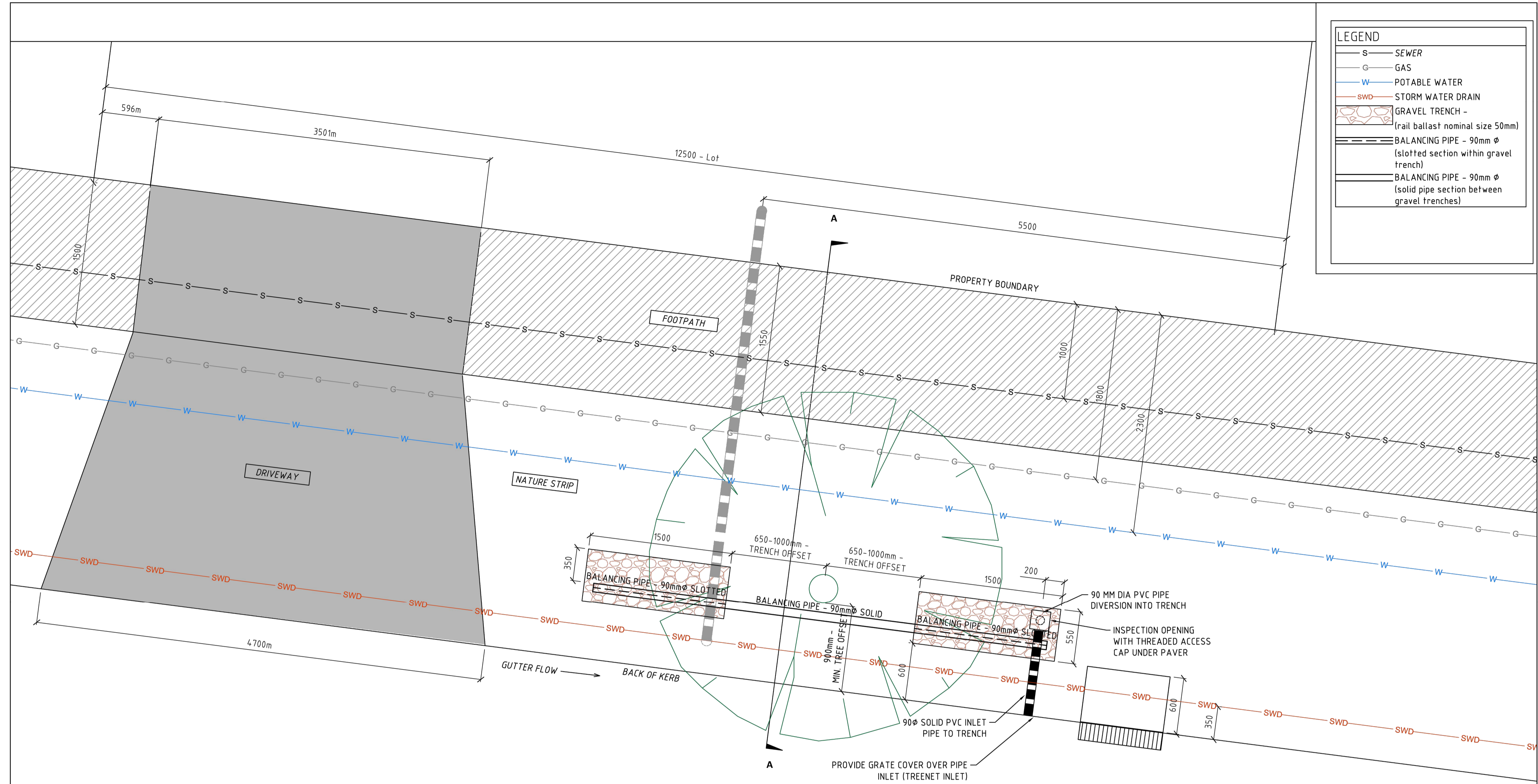
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Communities Designed for Living
 Designed
 H.HOGGARD
 Authorised
 J.POYNER

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 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
PAVEMENT AND TYPICAL DETAILS - SHEET 2
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION

Drg No: 31066CR701
 Rev: 0



LEGEND	
S	SEWER
G	GAS
W	POTABLE WATER
SWD	STORM WATER DRAIN
	GRAVEL TRENCH - (rail ballast nominal size 50mm)
	BALANCING PIPE - 90mm ϕ (slotted section within gravel trench)
	BALANCING PIPE - 90mm ϕ (solid pipe section between gravel trenches)

GENERAL NOTES:
 1 AT HIGHLY CONSTRAINED SITES, GRAVEL TRENCHES CAN BE MODIFIED IN THE FOLLOWING WAYS:
 - REDUCED OFFSET OF 0.75 M FROM TREE CENTRELINE
 - DIMENSION 1.0 M LONG \times 0.6 M WIDE \times 0.75 M DEEP

REV	DESCRIPTION	APP'D	DATE
F	UPDATED DESIGN - REISSUE	L.S	29.04.20
D	REVISED DESIGN - REISSUE	JMcL	01.03.19
C	REVISED DESIGN - REISSUE	JMcL	31.10.18
B	REVISED DESIGN	JMcL	09.10.18
A	PRELIMINARY ISSUE	HV	27.09.18



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 ABN 76 151 119 792
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 Cremorne Vic 3121
 T 61 3 9421 2532
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MELTON CITY COUNCIL
 PASSIVE STREET TREE IRRIGATION
 GRAVEL TRENCH (KERB INLET DIVERSION)
 PLAN

DESIGNED: H. VIRHASAWMY	DRAWN: K. STANHOPE	CHECKED: J. MCLEAN	APPROVED:	PROJECT No: P118105
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REVISION: F	SHEET No.: 4	ORIGINAL SIZE: A1	SCALE: 1:20 (A1) or 1:40 (A3)
		DATUM: m AHD (MGA 255)	

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
A	ISSUED TO COUNCIL	M.T-S	20/12/23

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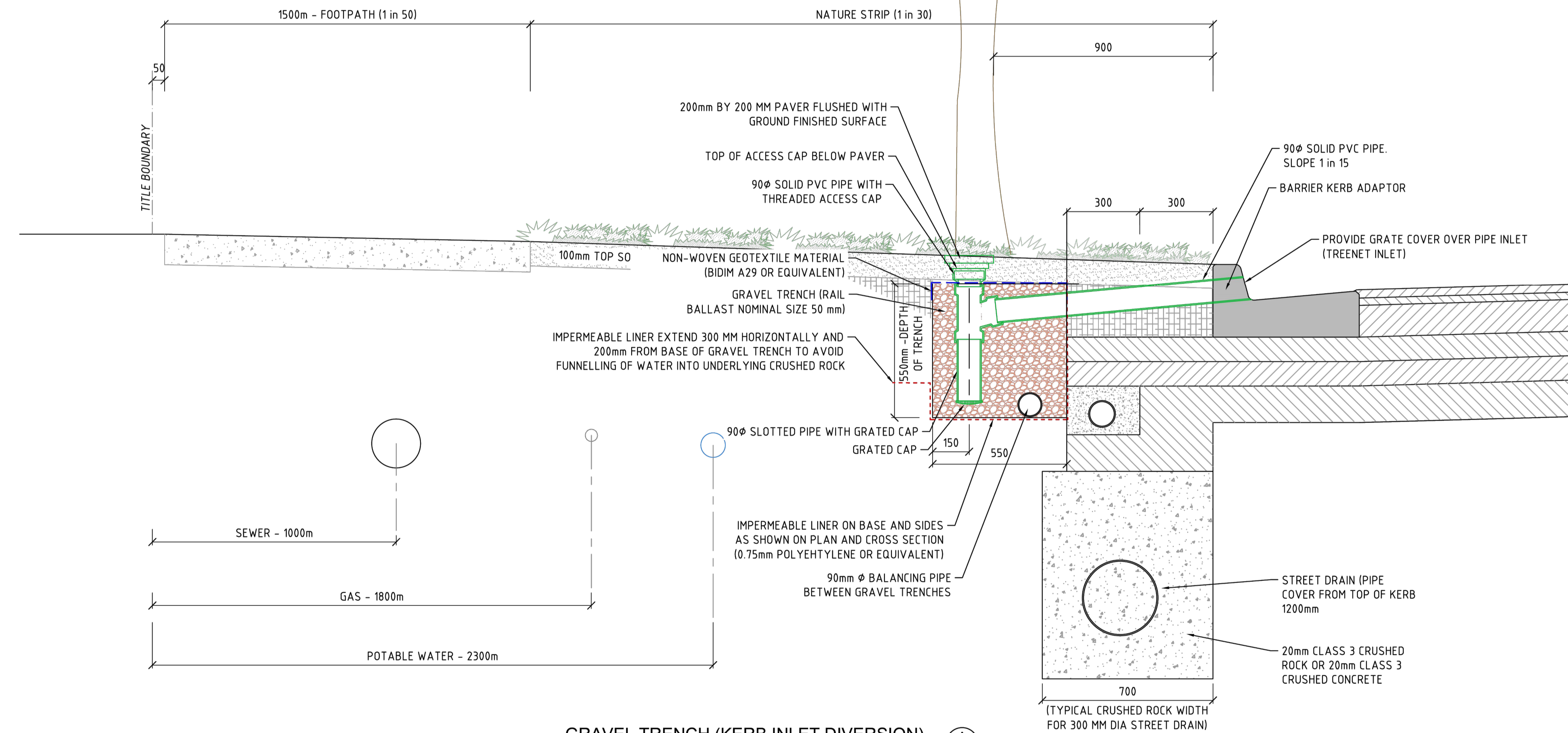
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villawood properties
 Communities Designed for Living
 Designed H.HOGGARD
 Authorised J.POYNER
 Checked J.POYNER
 Date APRIL 2024

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 REDSTONE ESTATE
 STAGE 16
 ROAD AND DRAINAGE
 PAVEMENT AND TYPICAL DETAILS - SHEET 4
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES
CONSTRUCTION 310066CR703

file name: 310066CR703.dwg, layout: name: CD703, plotted by: Luke Russell, file location: G:\310066\310066.dwg, plot date: 11/12/2025 11:42 AM, Sheet: 60 of 71 Sheets

NOTES:
 TOP OF GRAVEL TRENCH TO BE LINED WITH NON-WOVEN GEOTEXTILE MATERIAL AS SHOWN TO PREVENT FINE MIGRATION INTO THE TRENCH
 PASSIVE IRRIGATION PIPES AND FITTINGS TO BE 90 MM DIAMETER PVC SEWER CLASS
 ALL PVC JOINTS TO BE SEALED WITH SOLVENT CEMENT
 ALL GRASSED AREAS TO BE TOP DRESSED WITH 100 MM TOPSOIL AND SEEDED AS SPECIFIED
 SERVICE DEPTHS AND LOCATIONS ARE INDICATIVE ONLY
 WHERE THE VERGE IS LESS THAN 4.2m (TYPICAL) A SPECIFIC DETAIL SHALL BE SHOWN ON THE ENGINEERING DRAWINGS THAT RETAINS THE PRINCIPALS AND



GRAVEL TRENCH (KERB INLET DIVERSION) A 3
 1:10 (A1)

REV	DESCRIPTION	APP'D	DATE
F	UPDATED DESIGN	L.S	29.04.20
D	REVISED DESIGN - REISSUE	JMcL	30.11.18
C	REVISED DESIGN - REISSUE	JMcL	31.10.18
B	REVISED DESIGN	JMcL	09.10.18
A	PRELIMINARY ISSUE	HV	27.09.18



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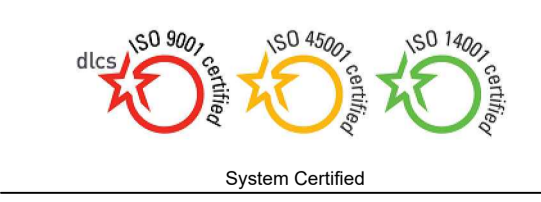
MELTON CITY COUNCIL
 PASSIVE STREET TREE IRRIGATION
 GRAVEL TRENCH (KERB INLET DIVERSION)
 CROSS SECTION

DESIGNED: H. VIRASAWMY	DRAWN: K. STANHOPE	CHECKED: J. MCLEAN	APPROVED:	PROJECT No: P118105
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REVISION: F	SHEET No.: 5	ORIGINAL SIZE: A1	SCALE: 1:10 (A1) or 1:20 (A3)
DATUM: m AHD (MGA z55)		0 0.2 0.4 0.6m	

file name: 31066CR704.dwg, layout: name: CD704, plot date: 11/03/2025 11:43 AM, sheet: 61 of 71 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
A	ISSUED TO COUNCIL	M.T-S	20/12/23



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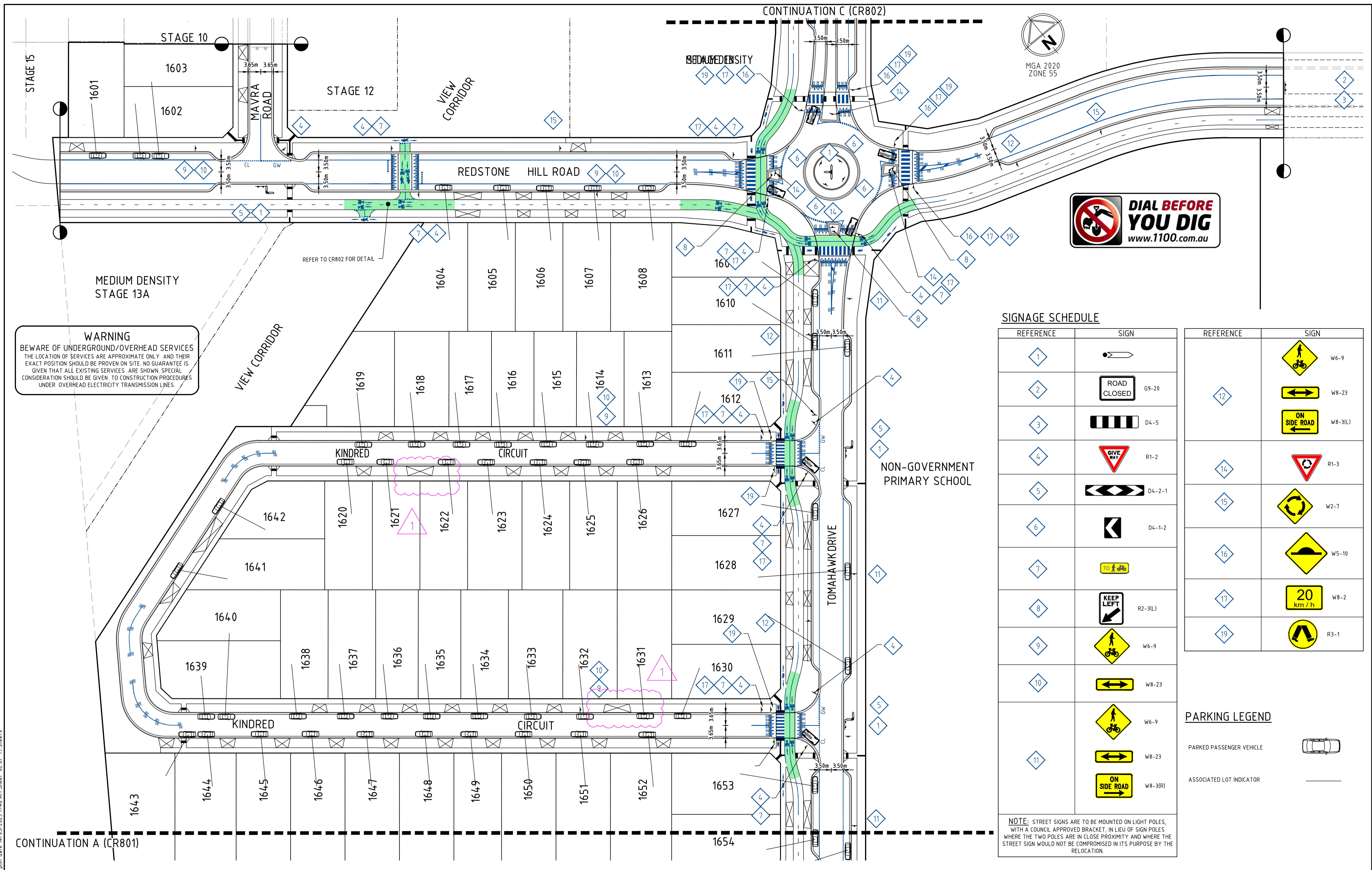
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 Authorised
 J.POYNER



Checked
 J.POYNER
 Date
 APRIL 2024

REDSTONE ESTATE
 STAGE 16
 ROAD AND DRAINAGE
 PAVEMENT AND TYPICAL DETAILS - SHEET 5
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

CONSTRUCTION 31066CR704 Rev 0

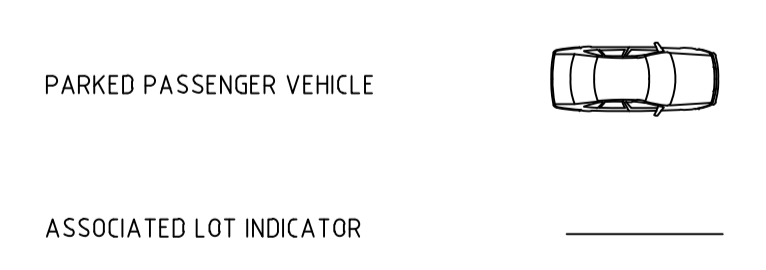


WARNING
 BEWARE OF UNDERGROUND/OVERHEAD SERVICES
 THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

SIGNAGE SCHEDULE

REFERENCE	SIGN	REFERENCE	SIGN
1		12	W6-9
2	G9-20	14	R1-3
3	D4-5	15	W2-7
4	R1-2	16	W5-10
5	D4-2-1	17	W8-2
6	D4-1-2	19	R3-1
7			
8	R2-3(L)		
9	W6-9		
10	W8-23		
11	W6-9		
	W8-23		
	W8-3(R)		

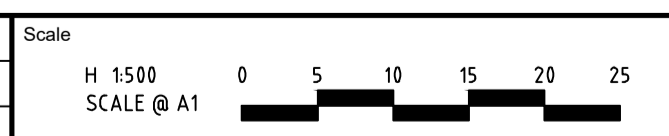
PARKING LEGEND



NOTE: STREET SIGNS ARE TO BE MOUNTED ON LIGHT POLES, WITH A COUNCIL APPROVED BRACKET, IN LIEU OF SIGN POLES WHERE THE TWO POLES ARE IN CLOSE PROXIMITY AND WHERE THE STREET SIGN WOULD NOT BE COMPROMISED IN ITS PURPOSE BY THE RELOCATION.

file name: 31066CR800.dwg, layout: name: CR800, plotted by: Luke Russell, file location: G:\31066CR800\WILLAWOOD\WILLAWOOD\plot date: 14/03/2025 11:42 AM Sheet: 62 of 71 Sheets

Rev	Description	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	MINOR CARPARKING AND SIGNAGE LOCATION AMENDMENTS	M.T-S	24/04/24
B	LINEMARKING AND SIGNAGE UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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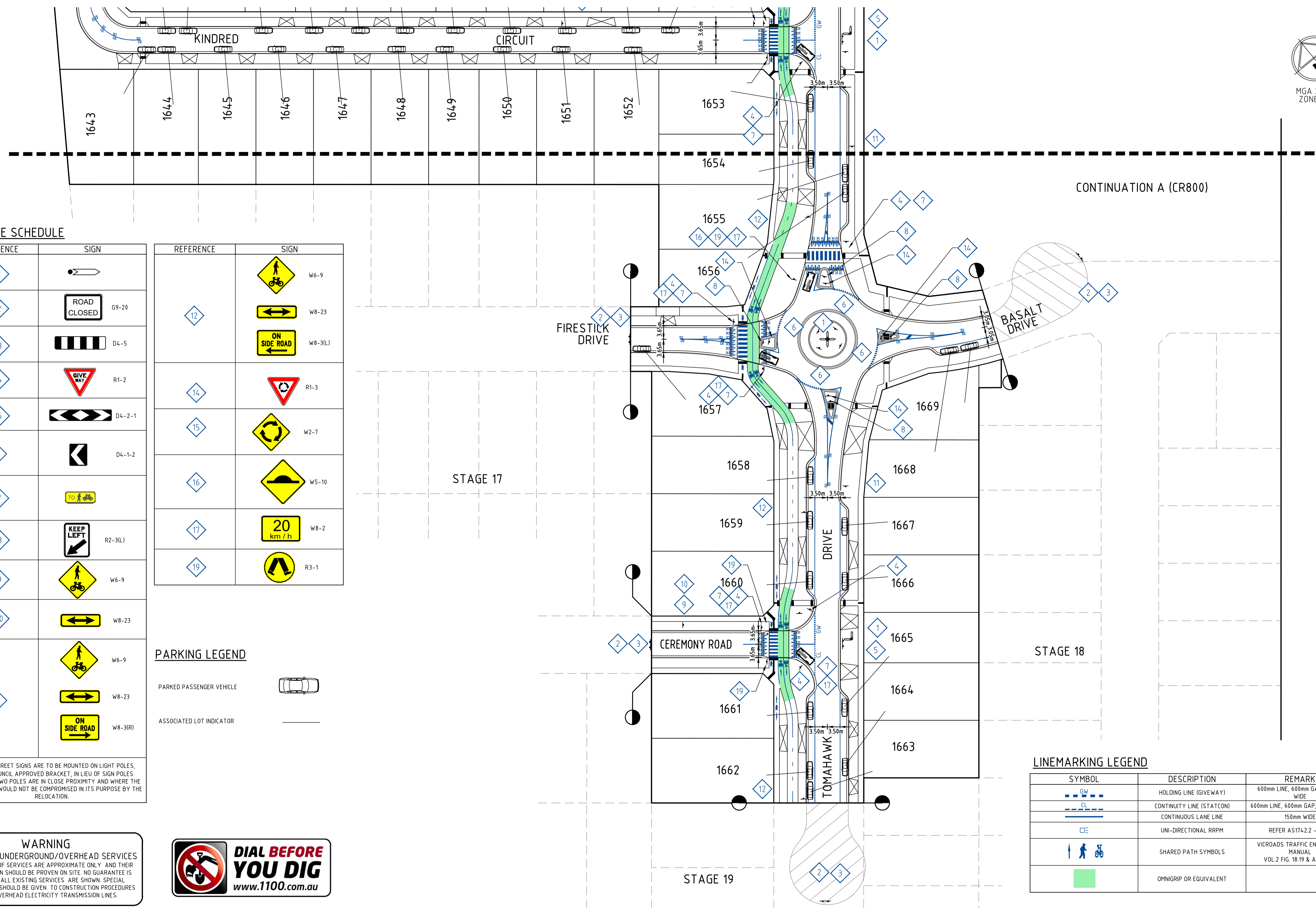
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 Authorised
 J.POYNER



Checked
 J.POYNER
 Date
 APRIL 2024

**REDSTONE ESTATE
 STAGE 16
 ROAD AND DRAINAGE
 SIGNAGE AND LINEMARKING - SHEET 1**
 HUME CITY COUNCIL
 VILLAWOOD PROPERTIES

CONSTRUCTION Drg No: 31066CR800 Rev: 1



SIGNAGE SCHEDULE

REFERENCE	SIGN	REFERENCE	SIGN
1		12	
2		13	
3		14	
4		15	
5		16	
6		17	
7		18	
8		19	
9			
10			
11			

PARKING LEGEND

PARKED PASSENGER VEHICLE	
ASSOCIATED LOT INDICATOR	

LINEMARKING LEGEND

SYMBOL	DESCRIPTION	REMARK
	HOLDING LINE (GIVEWAY)	600mm LINE, 600mm GAP, 300mm WIDE
	CONTINUITY LINE (STATCON)	600mm LINE, 600mm GAP, 150mm WIDE
	CONTINUOUS LANE LINE	150mm WIDE
	UNI-DIRECTIONAL RRRPM	REFER AS1742.2 - 2009
	SHARED PATH SYMBOLS	VICROADS TRAFFIC ENGINEERING MANUAL VOL.2 FIG. 18.19 & AS1742.9
	OMNIGRIP OR EQUIVALENT	

WARNING
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file name: 31066CR801.dwg, layout: name: CR801, plotted by: Luke Poyner, plot date: 12/13/2025, 11:46 AM, sheet: 63 of 71, sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	MINOR CARPARKING LOCATION AMENDMENTS	M.T-S	24/04/24
B	LINEMARKING AND SIGNAGE UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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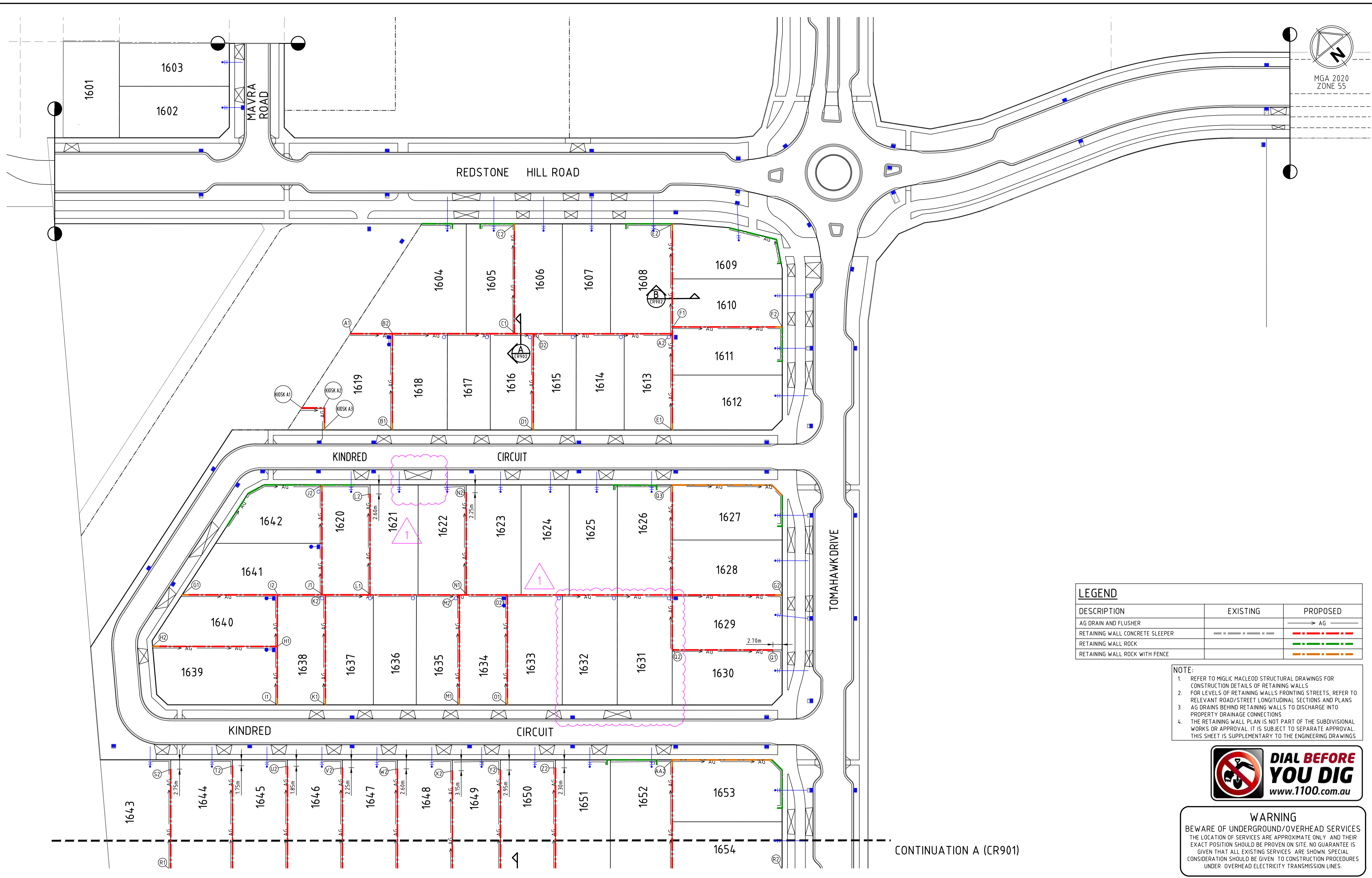
Designed
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Date
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REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
SIGNAGE AND LINEMARKING - SHEET 2
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION Drg No **31066CR801** Rev **0**



DESCRIPTION	EXISTING	PROPOSED
AG DRAIN AND FLUSHER		→ AG
RETAINING WALL CONCRETE SLEEPER	---	--- ---
RETAINING WALL ROCK		--- ---
RETAINING WALL ROCK WITH FENCE		--- ---

NOTE:

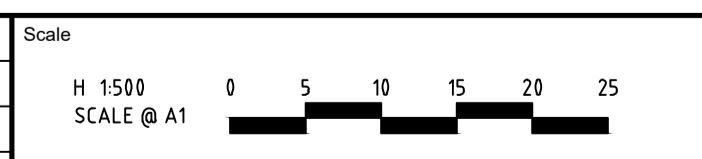
- REFER TO MGLIC MACLEOD STRUCTURAL DRAWINGS FOR CONSTRUCTION DETAILS OF RETAINING WALLS
- FOR LEVELS OF RETAINING WALLS FRONTING STREETS, REFER TO RELEVANT ROAD/STREET LONGITUDINAL SECTIONS AND PLANS
- AG DRAINS BEHIND RETAINING WALLS TO DISCHARGE INTO PROPERTY DRAINAGE CONNECTIONS
- THE RETAINING WALL PLAN IS NOT PART OF THE SUBDIVISIONAL WORKS OR APPROVAL. IT IS SUBJECT TO SEPARATE APPROVAL. THIS SHEET IS SUPPLEMENTARY TO THE ENGINEERING DRAWINGS



WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

file name: 31066CR900.dwg, layout: rns, c: 6800, plotted by: Luke Dinesell, file location: \\spire\media\Draws\310666A\310666A\310666A\310666A.dwg, plot date: 14/03/2025 11:48 AM, sheet: 65 of 71, sheets

Rev	Description	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	SECTIONS RE-ADDED	M.T-S	20/09/24
D	STONE RETAINING RETURN AMENDED, NOTE ADDED	M.T-S	17/07/24
C	MINOR AMENDMENTS	M.T-S	24/04/24
B	RETAINING UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



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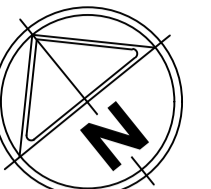
Communities Designed for Living
Designed
H.HOGGARD
Authorised
J.POYNER



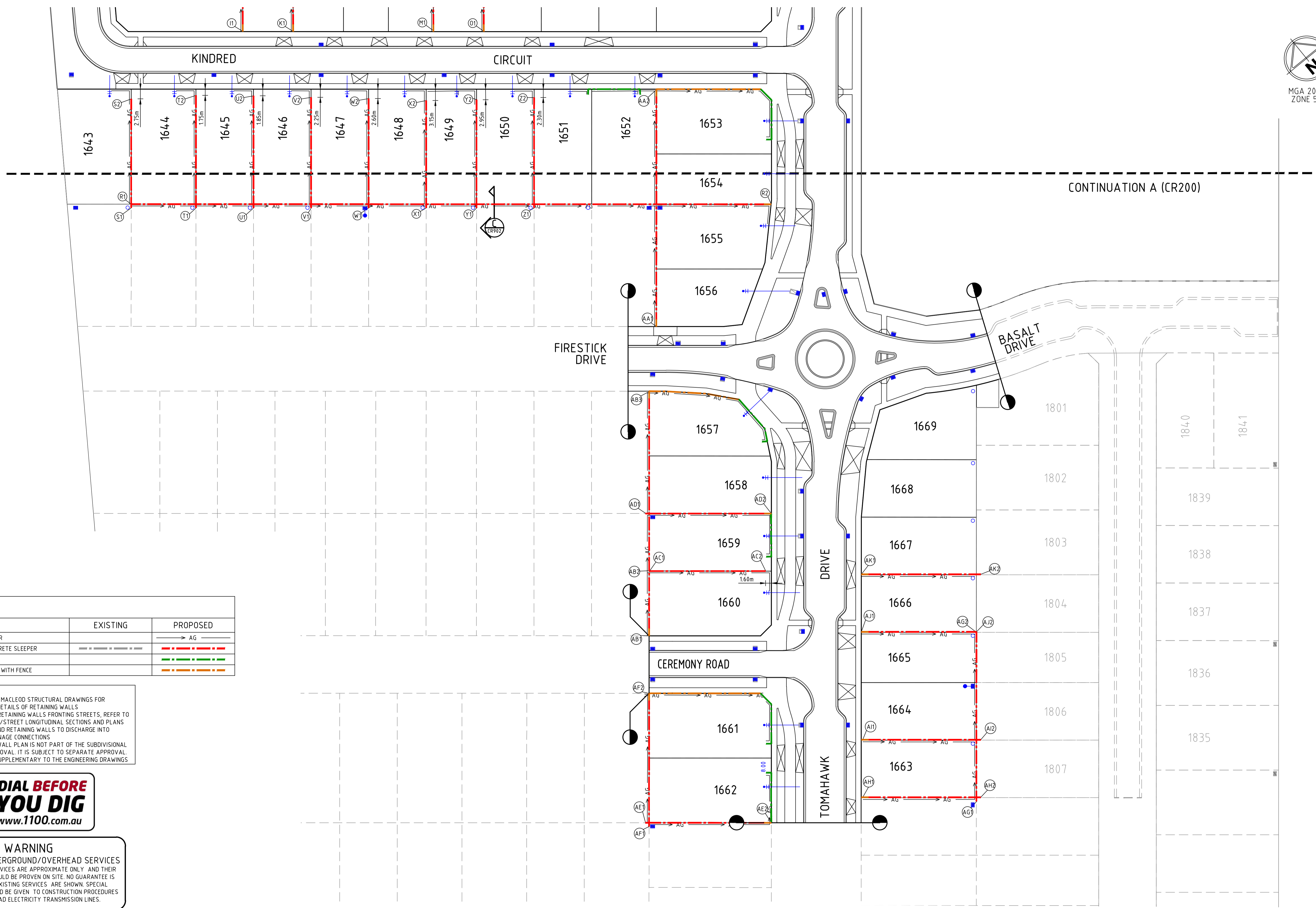
Checked
J.POYNER
Date
APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
RETAINING WALL - SHEET 1
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION Drg No **31066CR900** Rev **1**



MGA 2020
ZONE 55



DESCRIPTION	EXISTING	PROPOSED
AG DRAIN AND FLUSHER		→ AG
RETAINING WALL CONCRETE SLEEPER	---	---
RETAINING WALL ROCK	---	---
RETAINING WALL ROCK WITH FENCE	---	---

NOTE:

- REFER TO MIGLIC MACLEOD STRUCTURAL DRAWINGS FOR CONSTRUCTION DETAILS OF RETAINING WALLS
- FOR LEVELS OF RETAINING WALLS FRONTING STREETS, REFER TO RELEVANT ROAD/STREET LONGITUDINAL SECTIONS AND PLANS
- AG DRAINS BEHIND RETAINING WALLS TO DISCHARGE INTO PROPERTY DRAINAGE CONNECTIONS
- THE RETAINING WALL PLAN IS NOT PART OF THE SUBDIVISIONAL WORKS OR APPROVAL IT IS SUBJECT TO SEPARATE APPROVAL THIS SHEET IS SUPPLEMENTARY TO THE ENGINEERING DRAWINGS



WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	RETAINING WALLS REMOVED, SECTIONS RE-ADDED	M.T-S	20/09/24
D	STONE RETAINING RETURN AMENDED, NOTE ADDED. LOT 1643 RETAINING REMOVED	M.T-S	17/07/24
C	MINOR AMENDMENTS	M.T-S	24/04/24
B	RETAINING UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22

Scale
NOT TO SCALE

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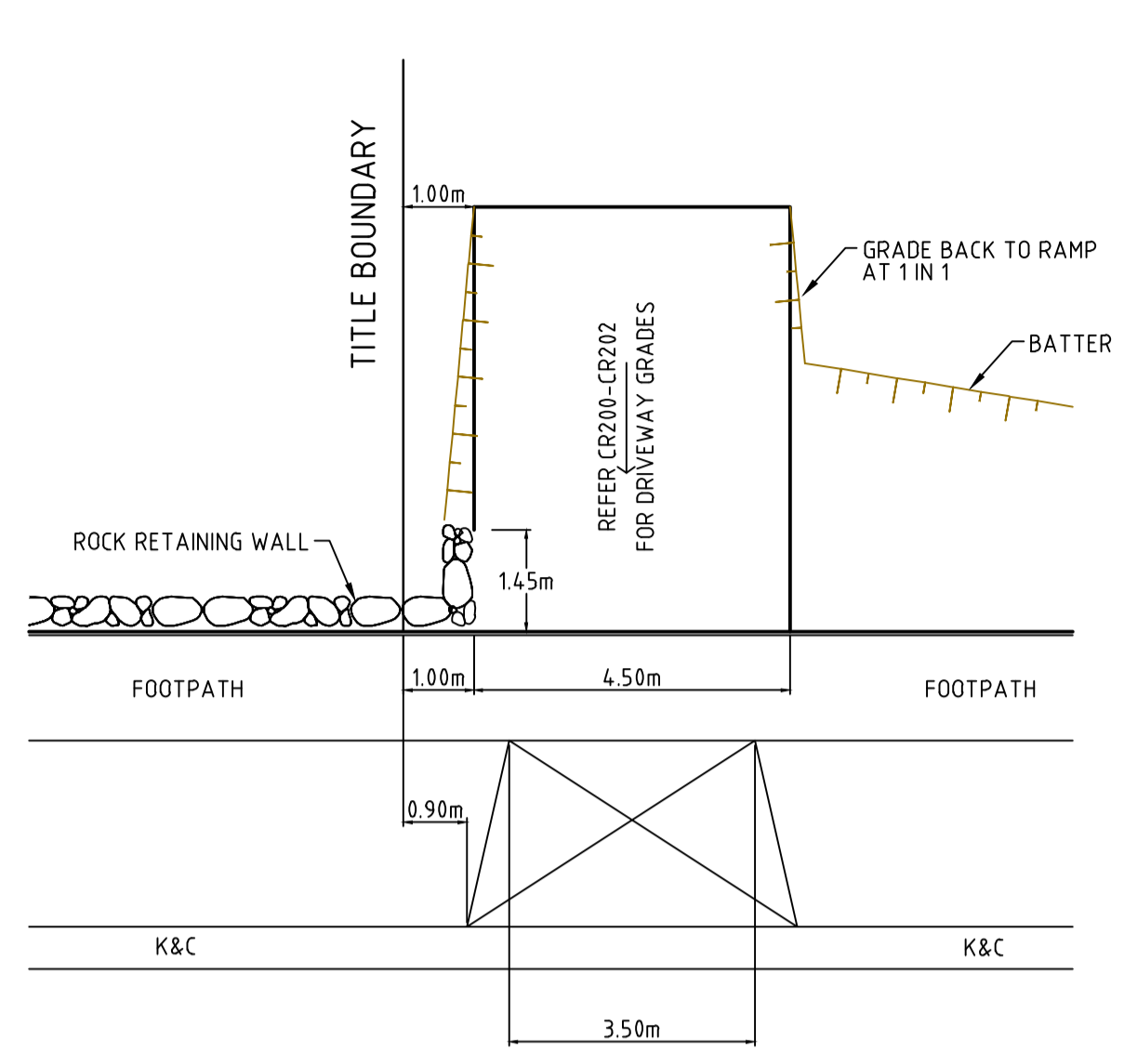
Redstone.
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Checked
J.POYNER
Date
APRIL 2024

**REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
RETAINING WALL - SHEET 2**
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

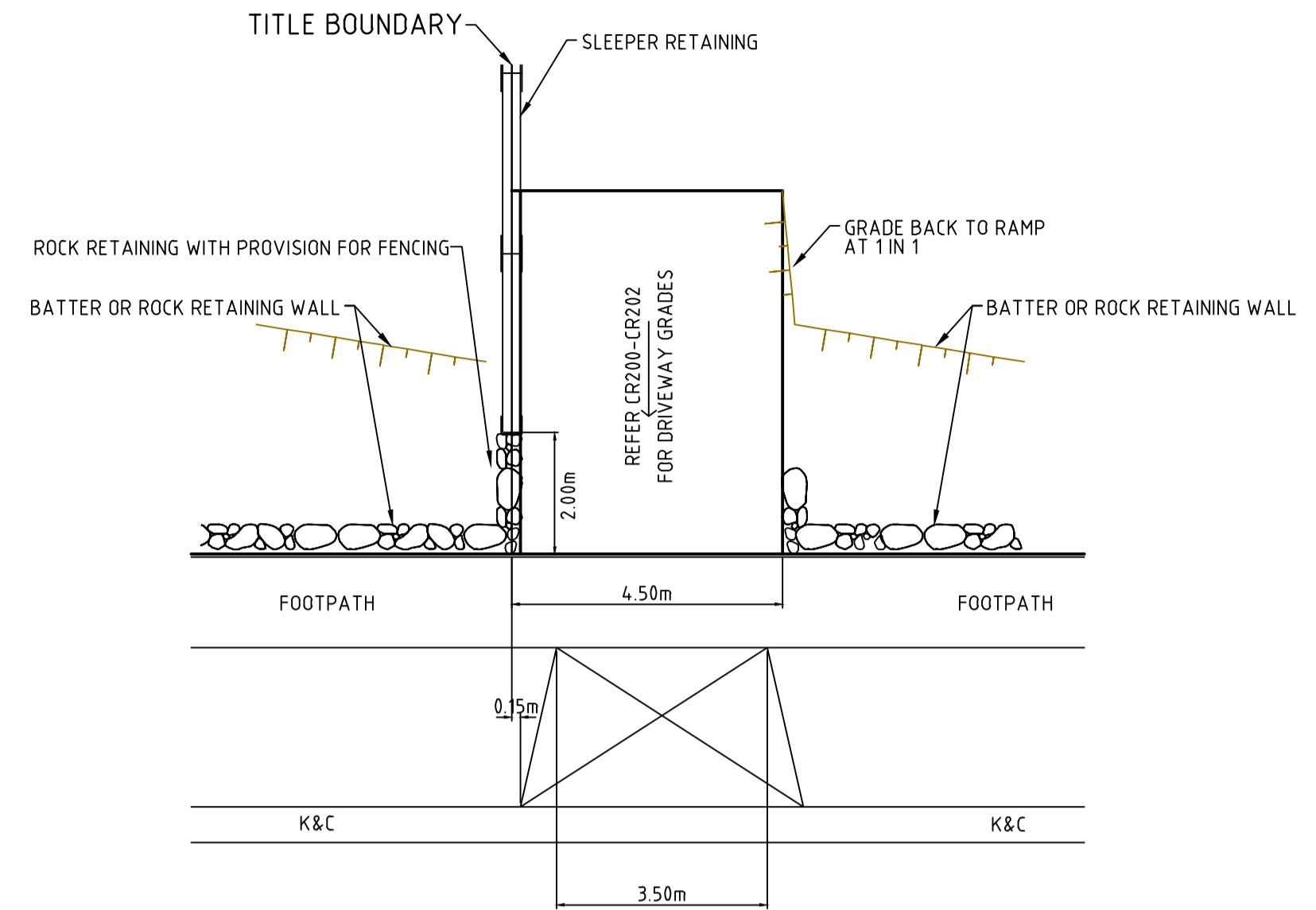
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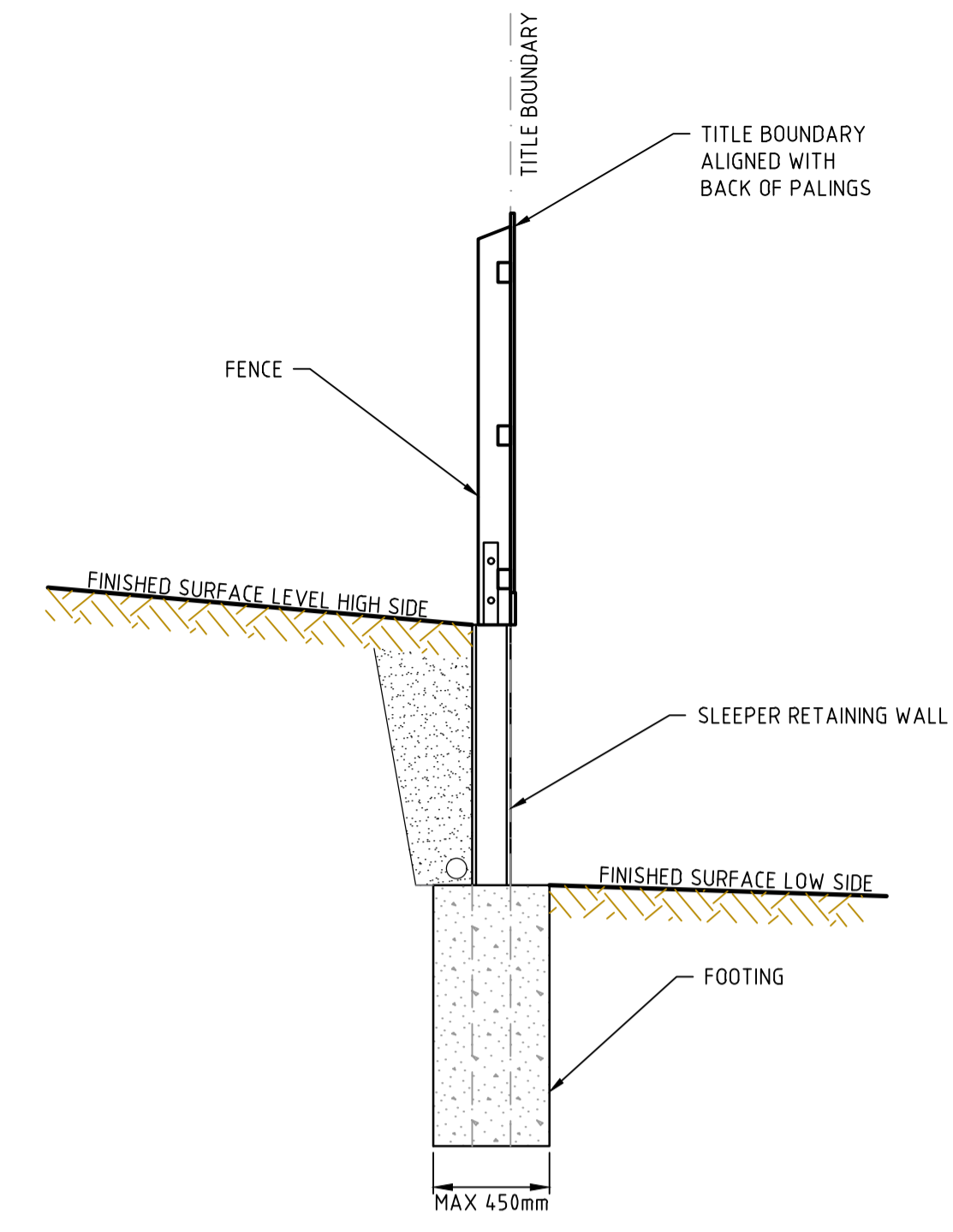
NOTE:
 1. REFER TO MIGLIC MACLEOD STRUCTURAL DRAWINGS FOR CONSTRUCTION DETAILS OF RETAINING WALLS
 2. DEPTH OF SERVICES MUST BE ABOVE ANGLE OF REPOSE OF RETAINING WALL FOOTING



SINGLE DRIVEWAY WHERE ROCK RETAINING PRESENT

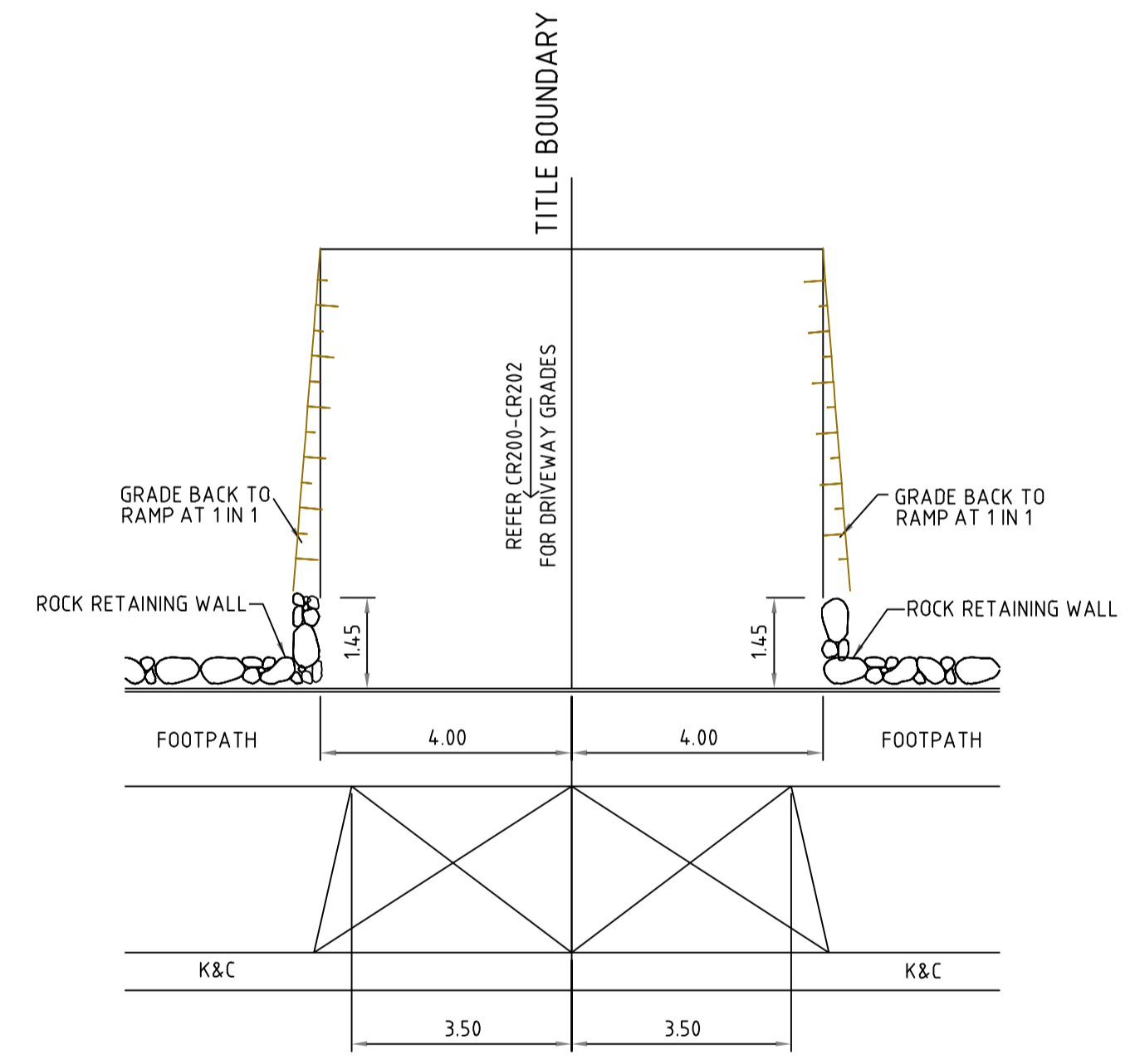


SINGLE DRIVEWAY WHERE ROCK OR BATTER AND SLEEPER RETAINING PRESENT

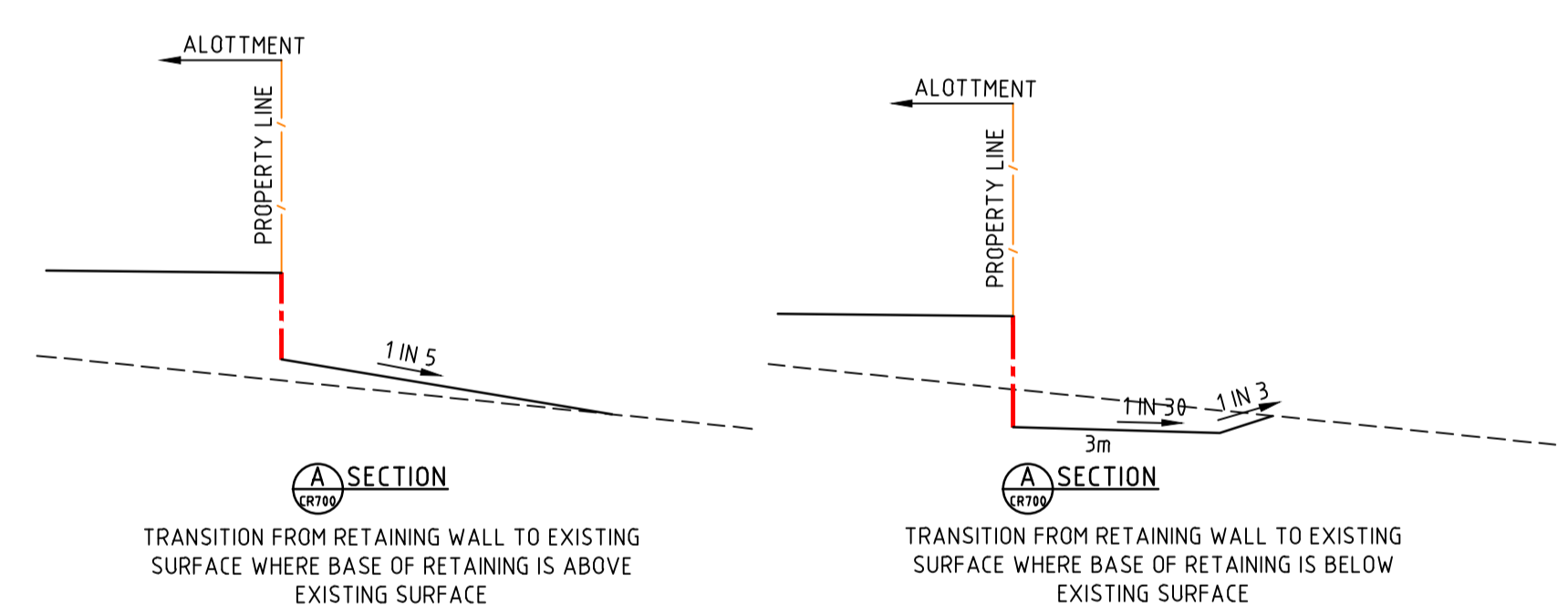


SLEEPER RETAINING WALL TYPICAL DETAIL

NOT TO SCALE

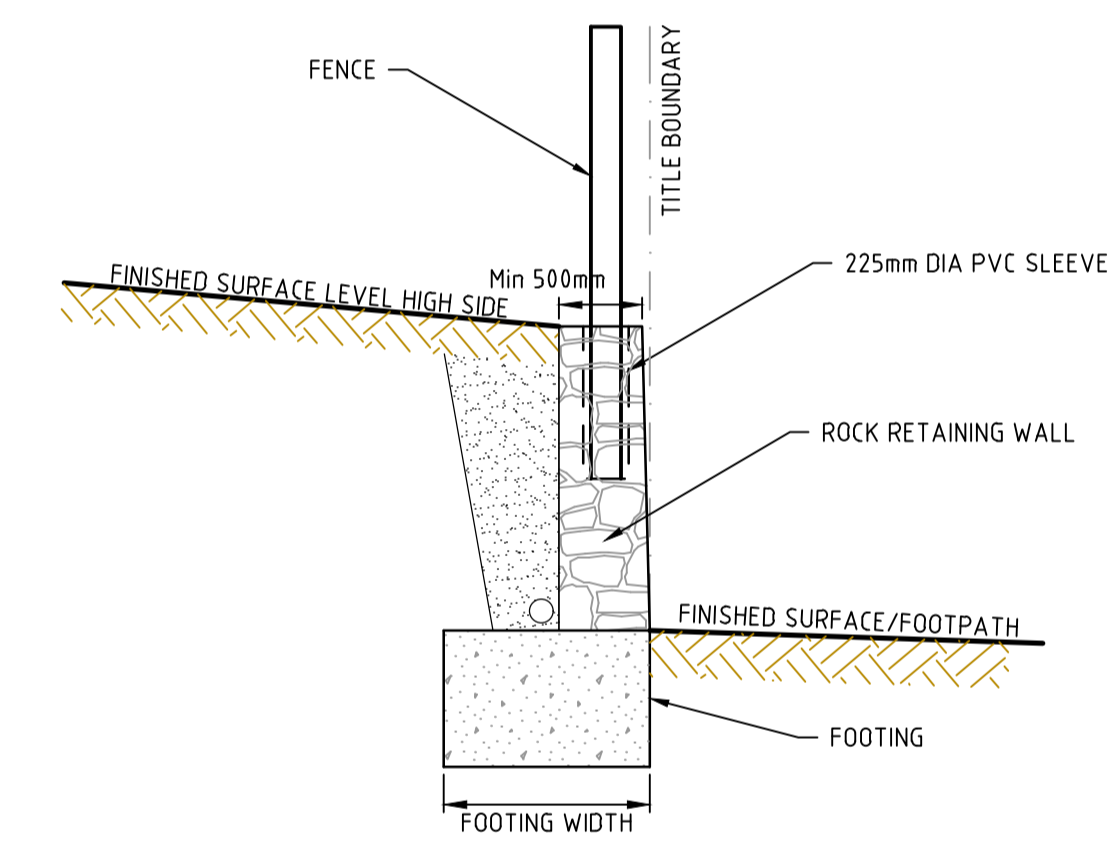


DOUBLE DRIVEWAY WHERE ROCK RETAINING PRESENT



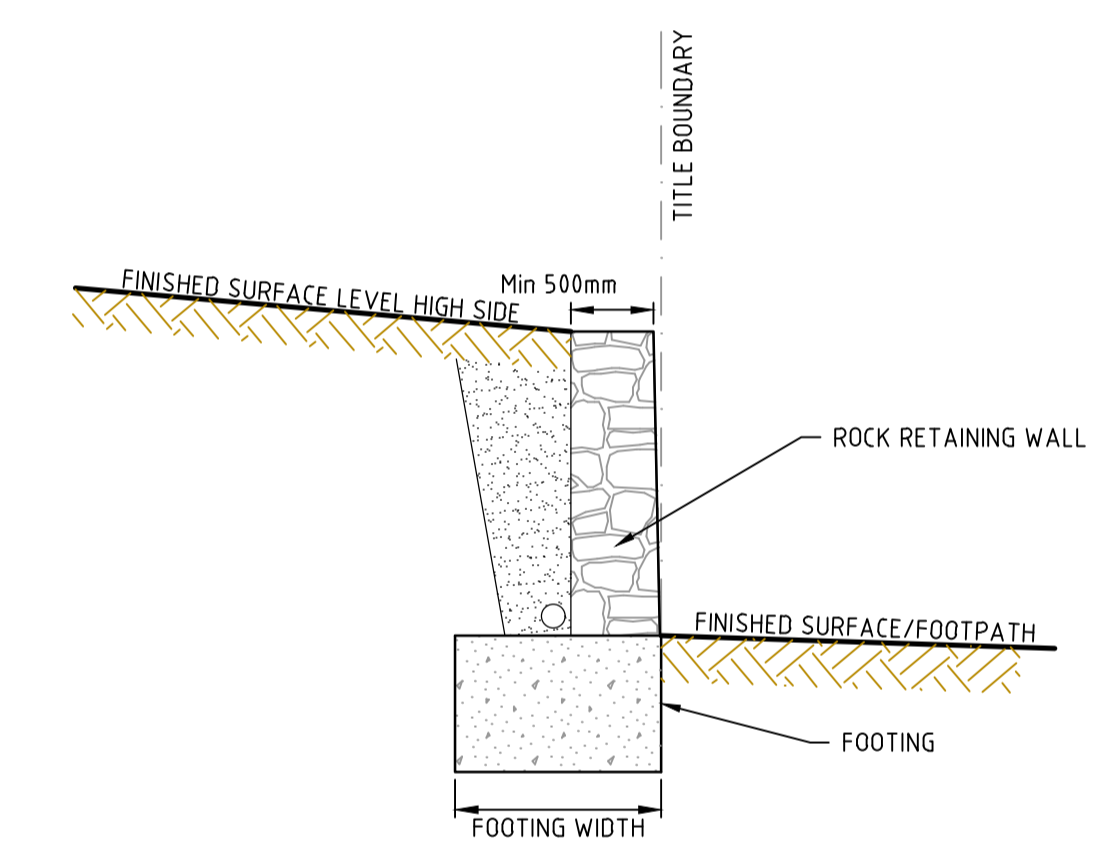
TRANSITION FROM RETAINING WALL TO EXISTING SURFACE WHERE BASE OF RETAINING IS ABOVE EXISTING SURFACE

TRANSITION FROM RETAINING WALL TO EXISTING SURFACE WHERE BASE OF RETAINING IS BELOW EXISTING SURFACE



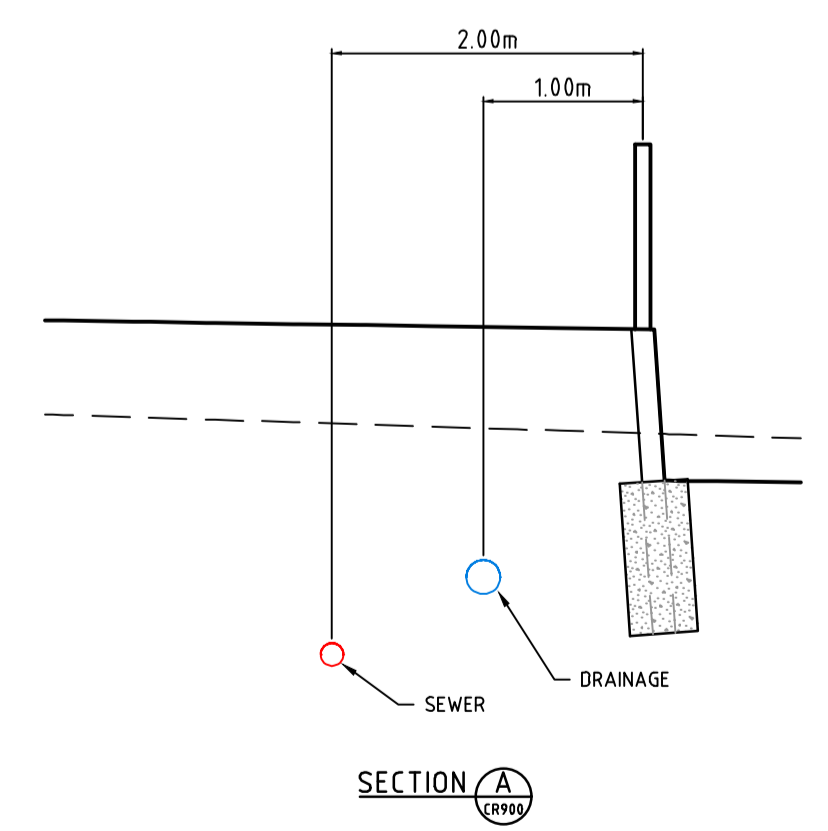
ROCK RETAINING WALL (WITH PROVISION FOR FENCING) TYPICAL DETAIL

NOT TO SCALE

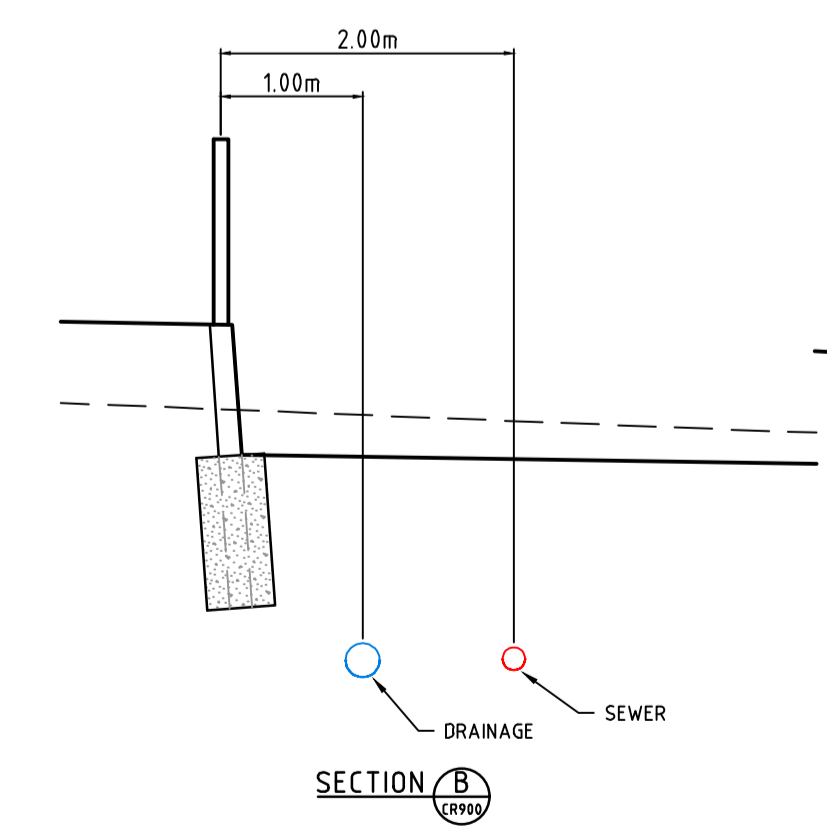


ROCK RETAINING WALL TYPICAL DETAIL

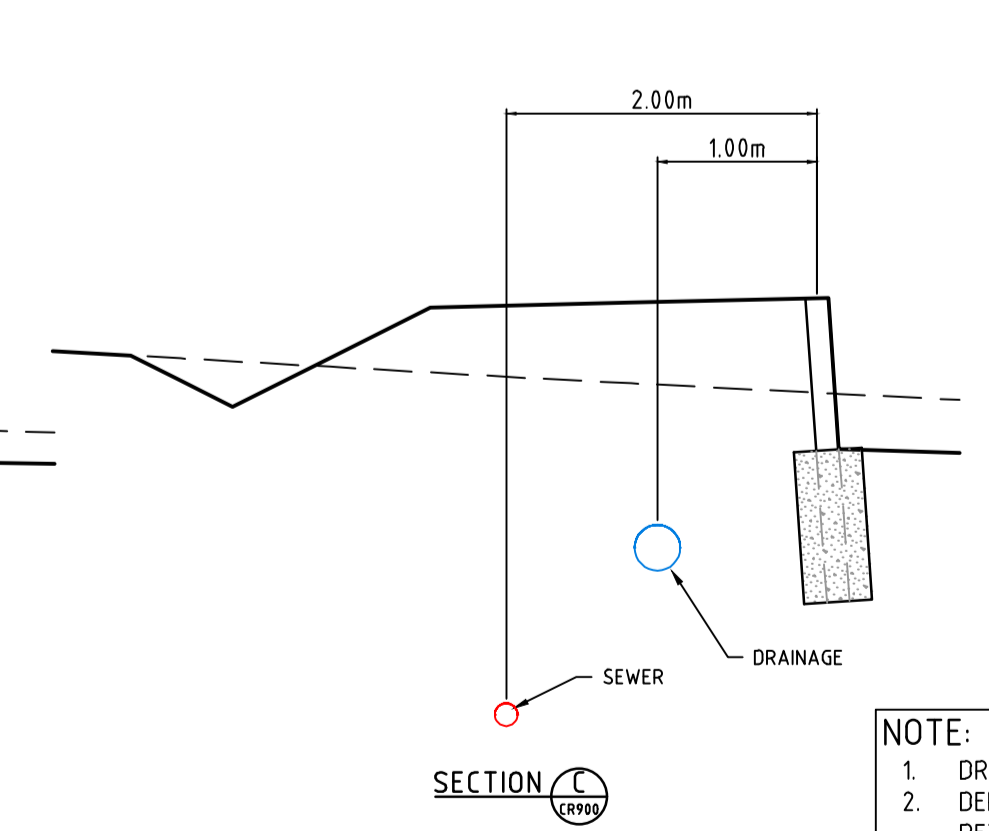
NOT TO SCALE



SECTION A



SECTION B



SECTION C

NOTE:
 1. DRAIN AND SEWER DEPTH VARIES ACROSS SITE
 2. DEPTH OF SERVICE MUST BE ABOVE ANGLE OF REPOSE OF RETAINING WALL FOOTING
 3. MINIMUM COVER TO SERVICES IS 450mm
 3. AG DRAINS BEHIND RETAINING WALLS TO DISCHARGE INTO PROPERTY DRAINAGE CONNECTIONS

file name: 31066CR902.dwg, layout: rnsd, name: CR902, plotted by: Luke Dinesell, file location: V:\spire\media\31066\31066A\civil\ACAD\p\31066A.dwg, plot date: 14/03/2025 11:48 AM, sheet: 67 of 71 sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	SLEEPER RETAINING TO BOUNDARY DETAIL AMENDED, OFFSETS ADDED	M.T-S	20/09/24
D	RETAINING WALL SECTIONS RE-ADDED	M.T-S	17/07/24
C	RETAINING DETAILS AMENDED	M.T-S	26/04/24
B	RETAINING ON BOUNDARY	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22

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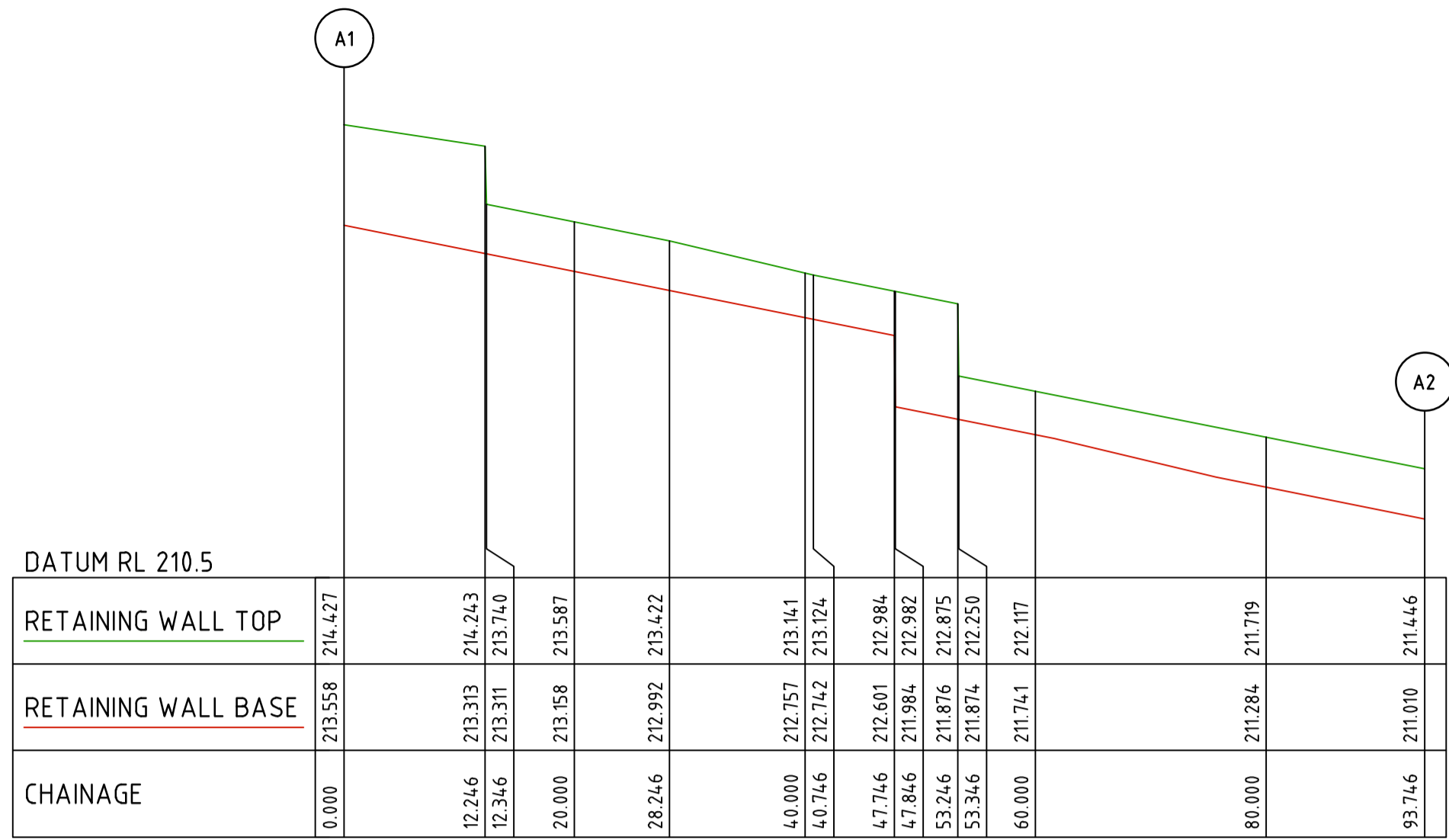
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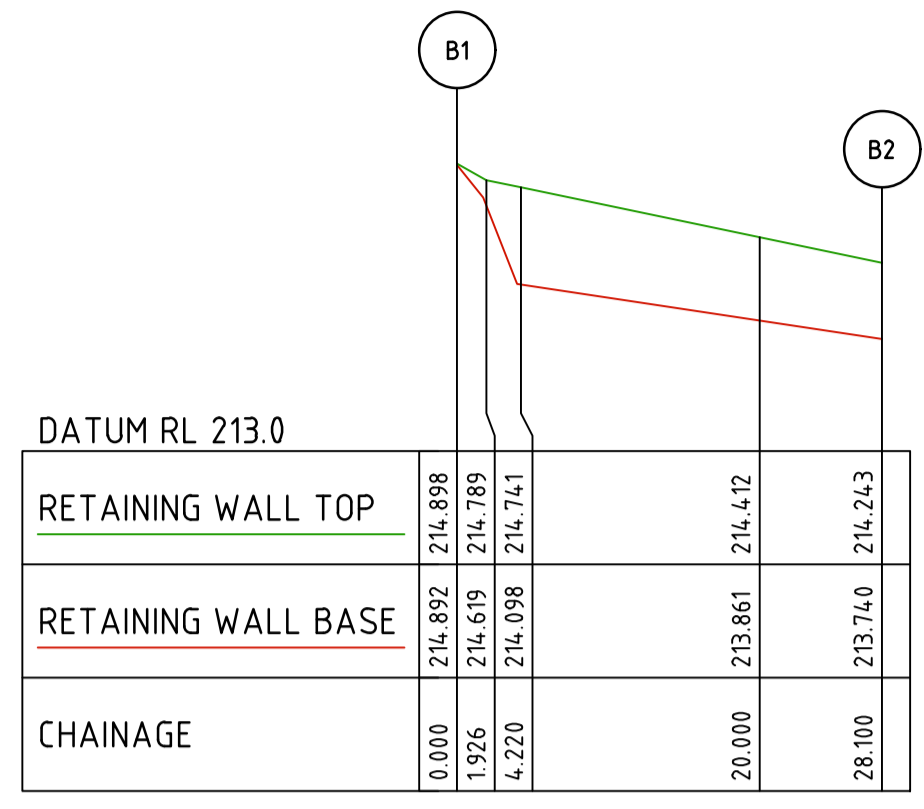
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 J.POYNER
 Date
 APRIL 2024

REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
RETAINING WALL - SHEET 3
HUME CITY COUNCIL
VILLAWOOD PROPERTIES
CONSTRUCTION

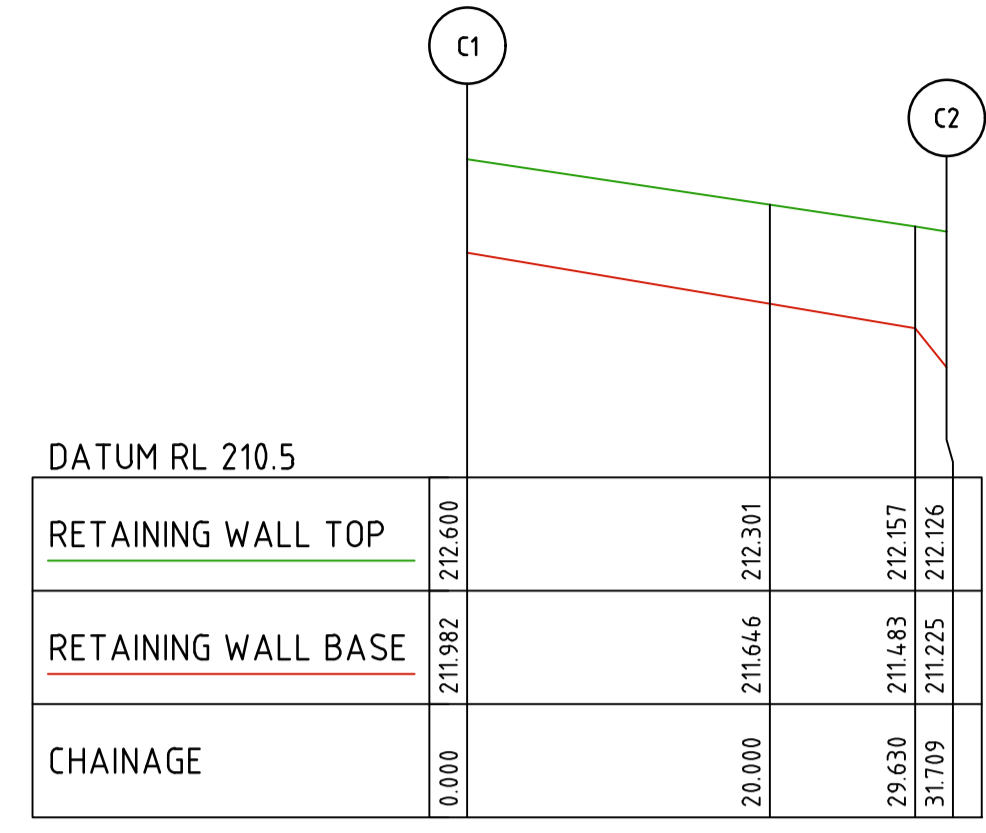
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 Rev: 0



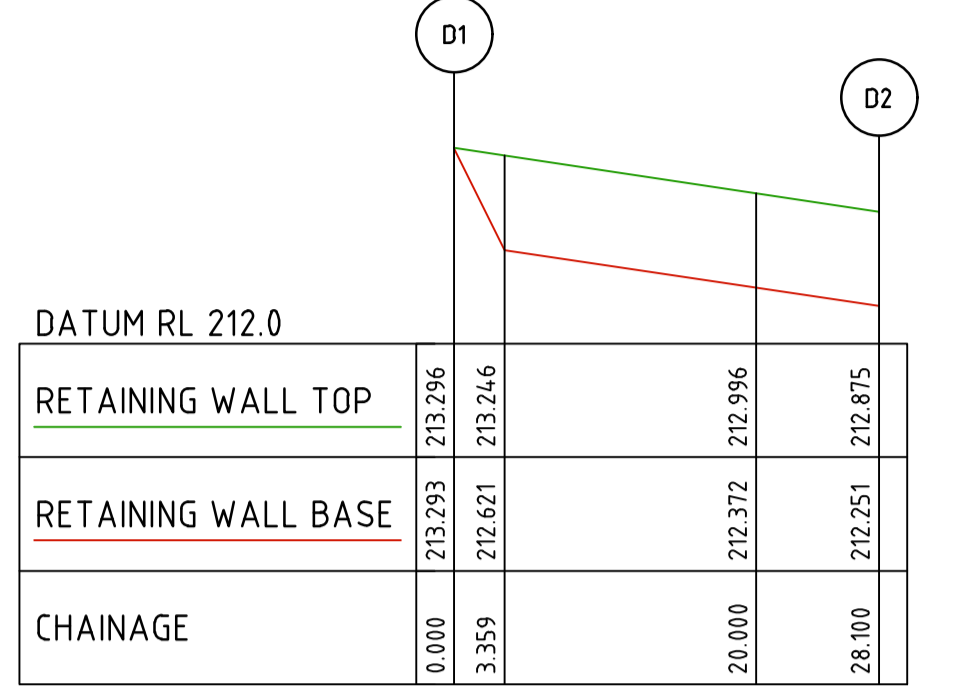
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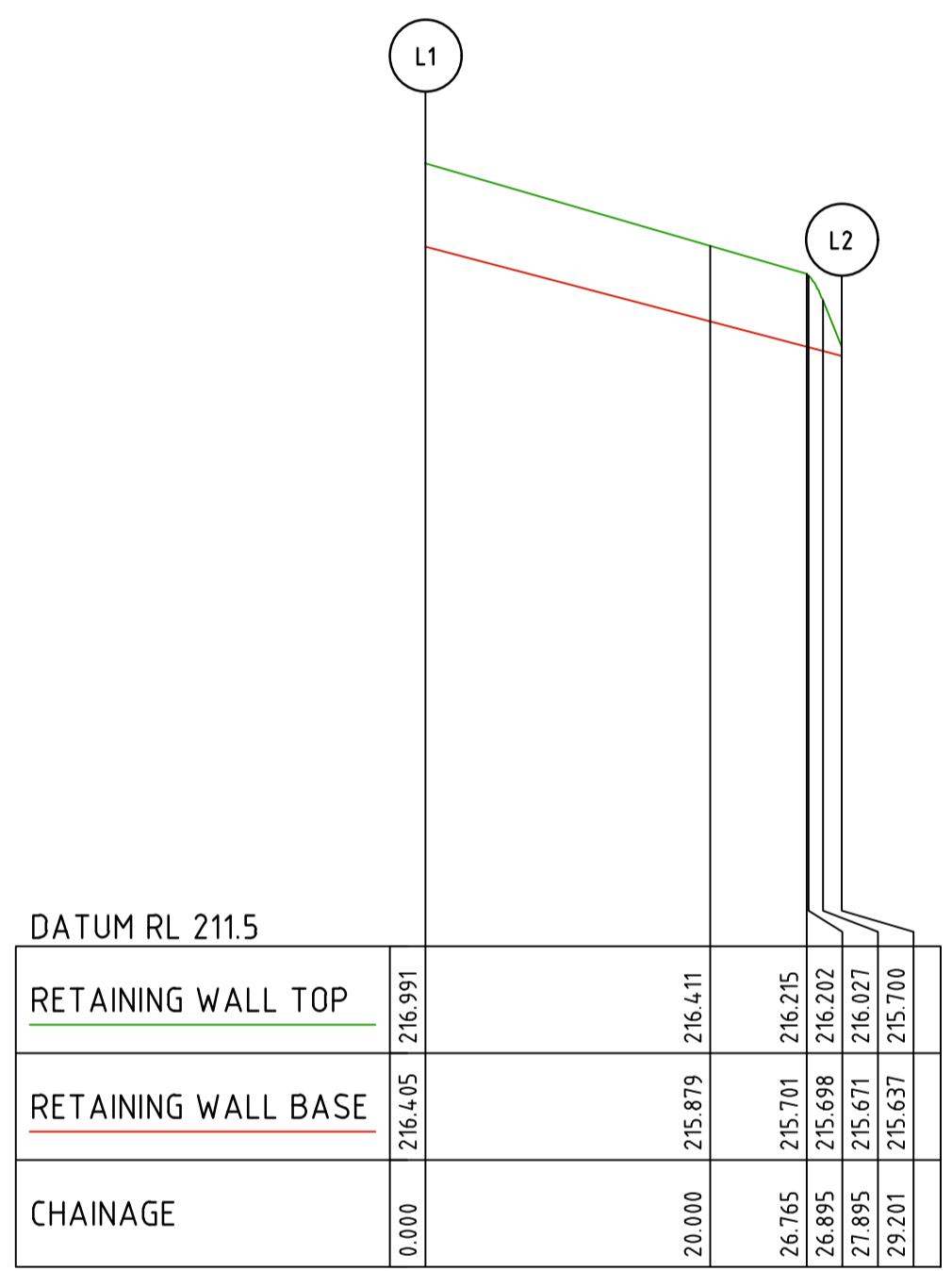
RETAINING WALL B



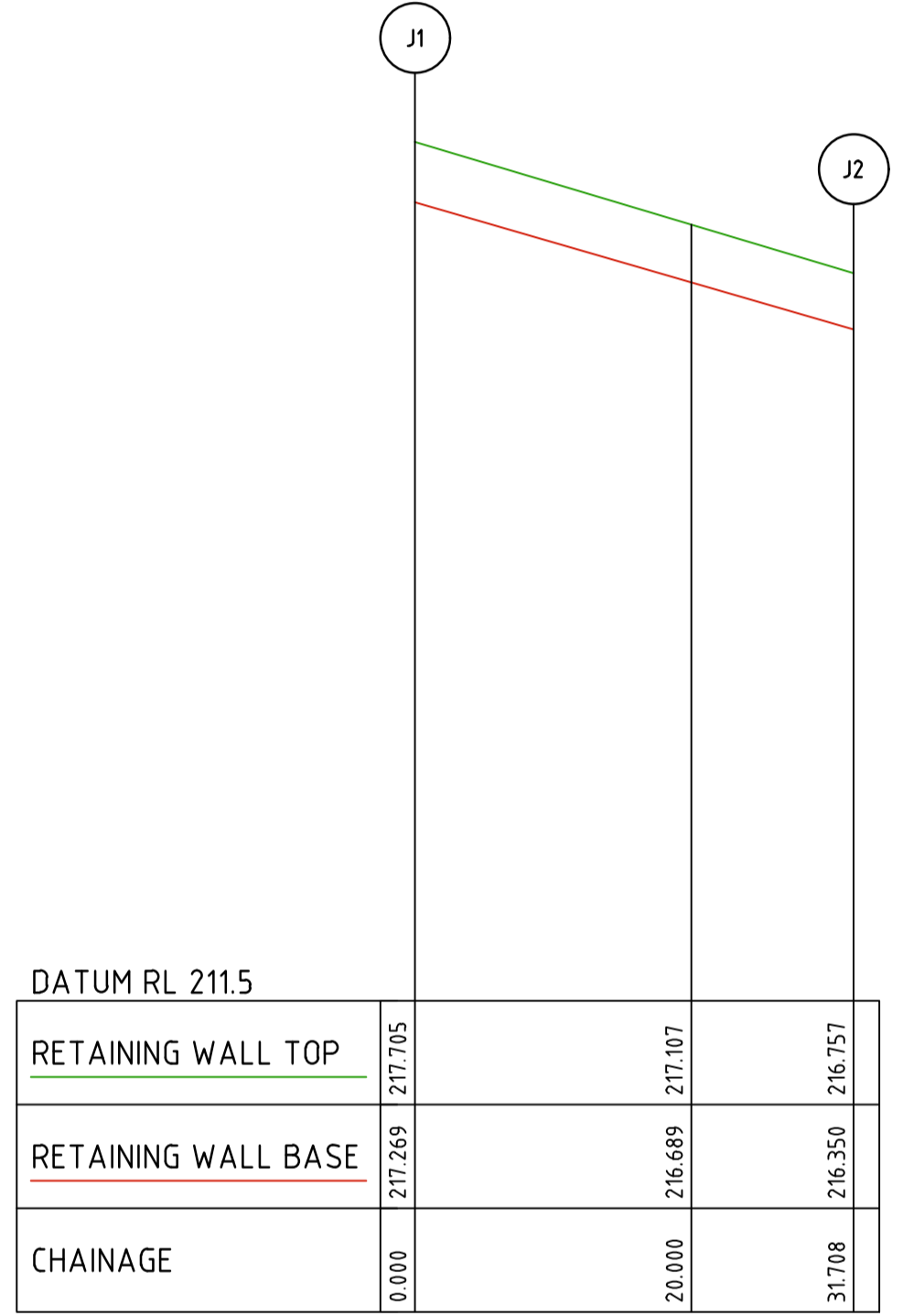
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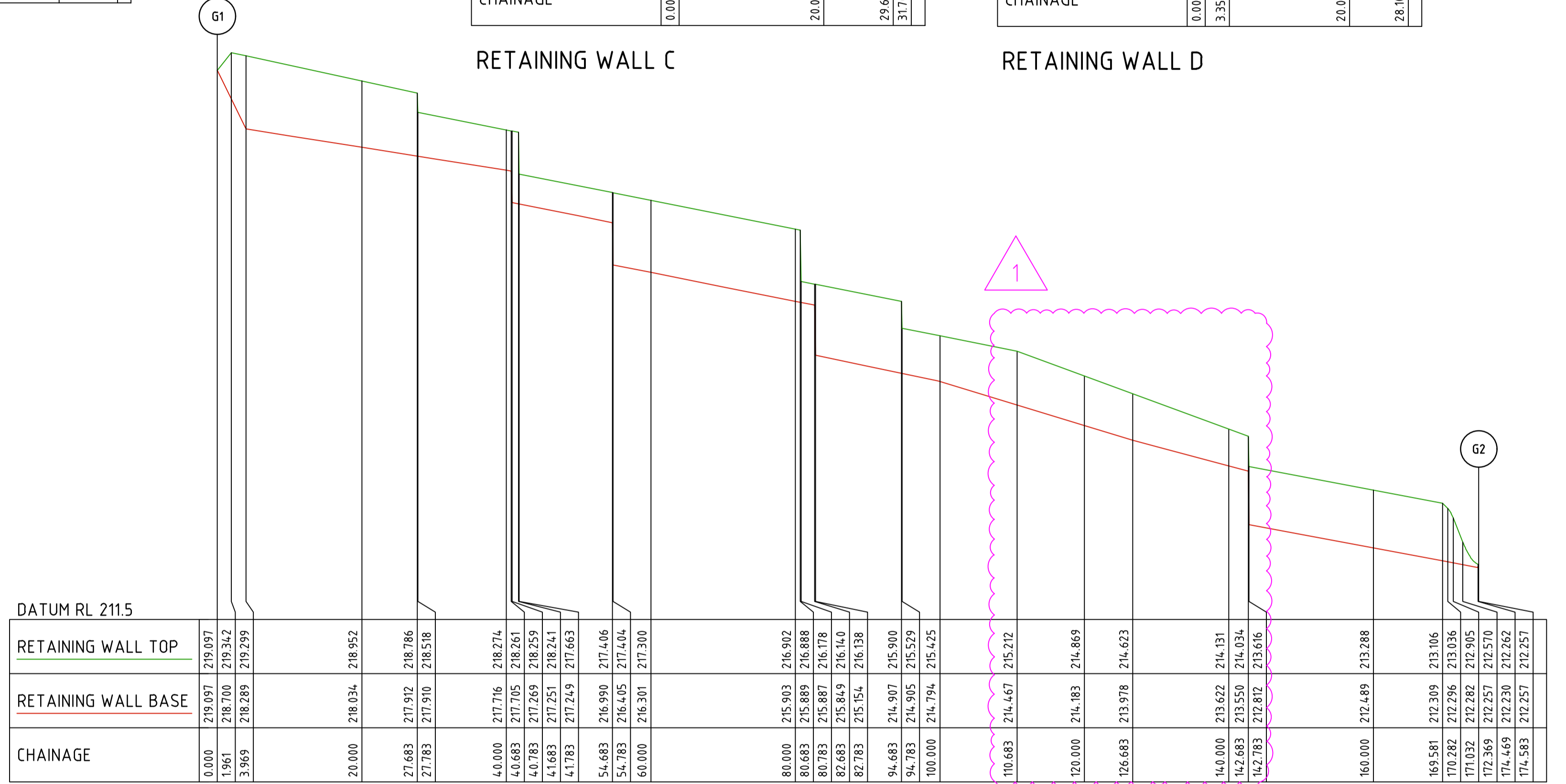
RETAINING WALL D



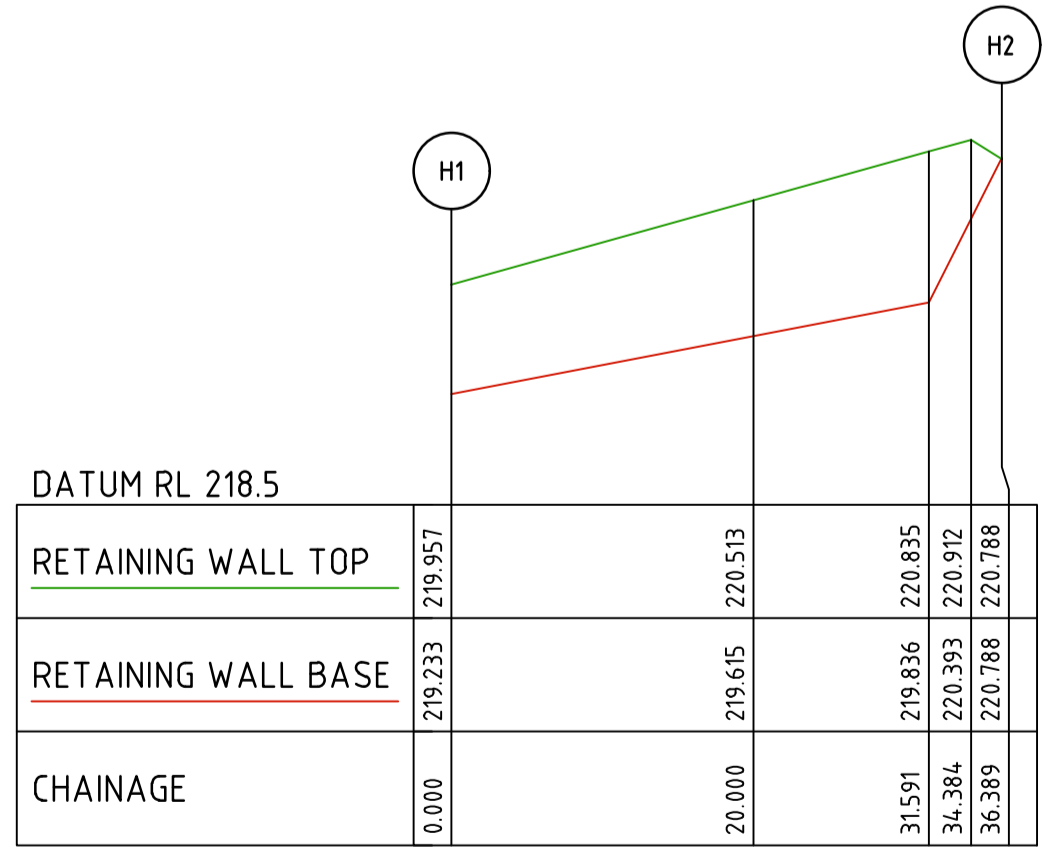
RETAINING WALL L



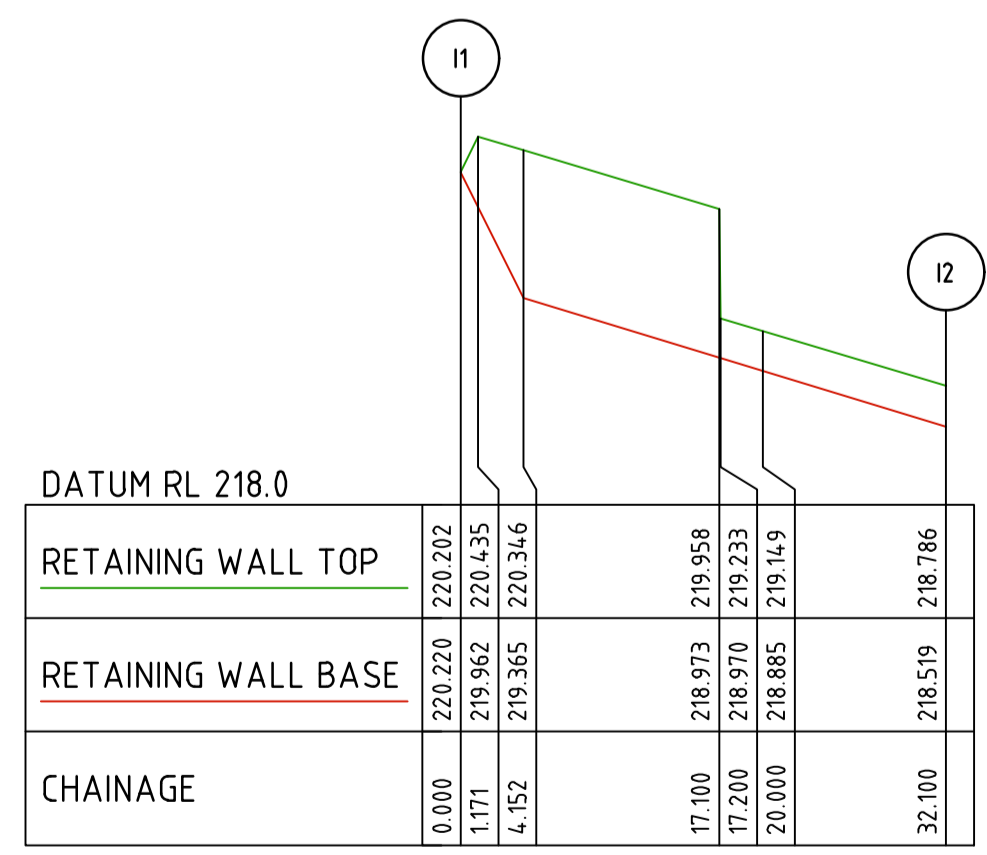
RETAINING WALL J



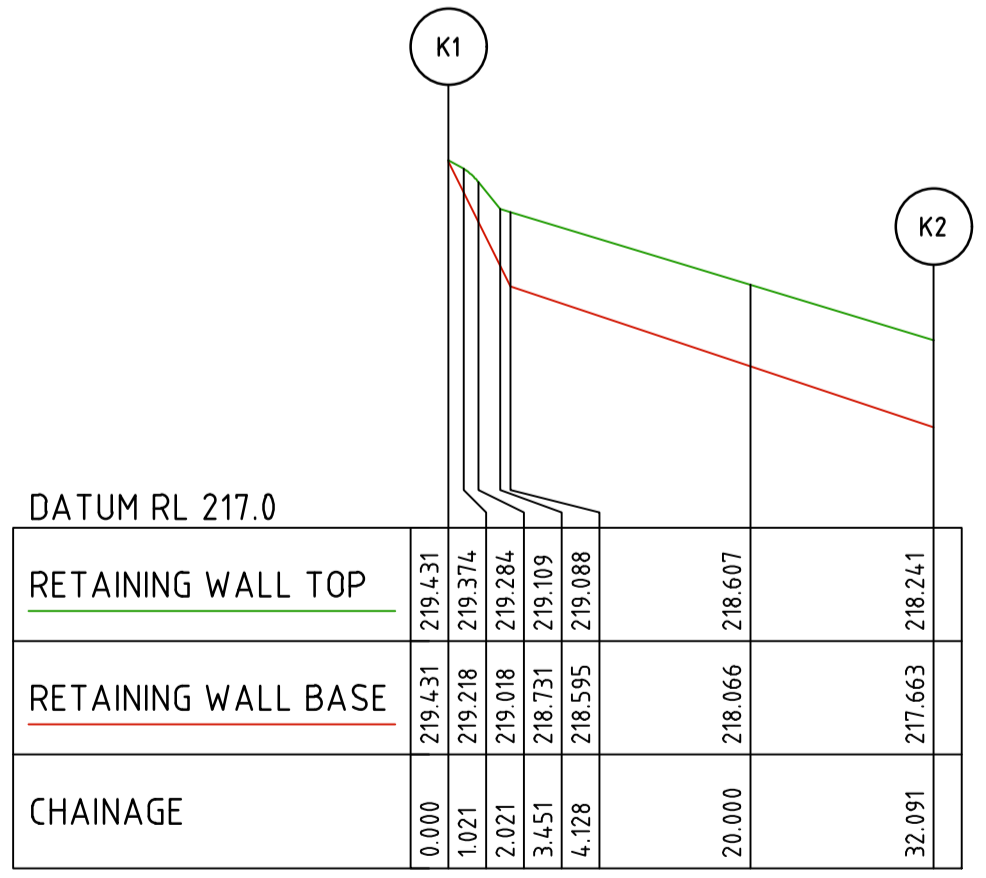
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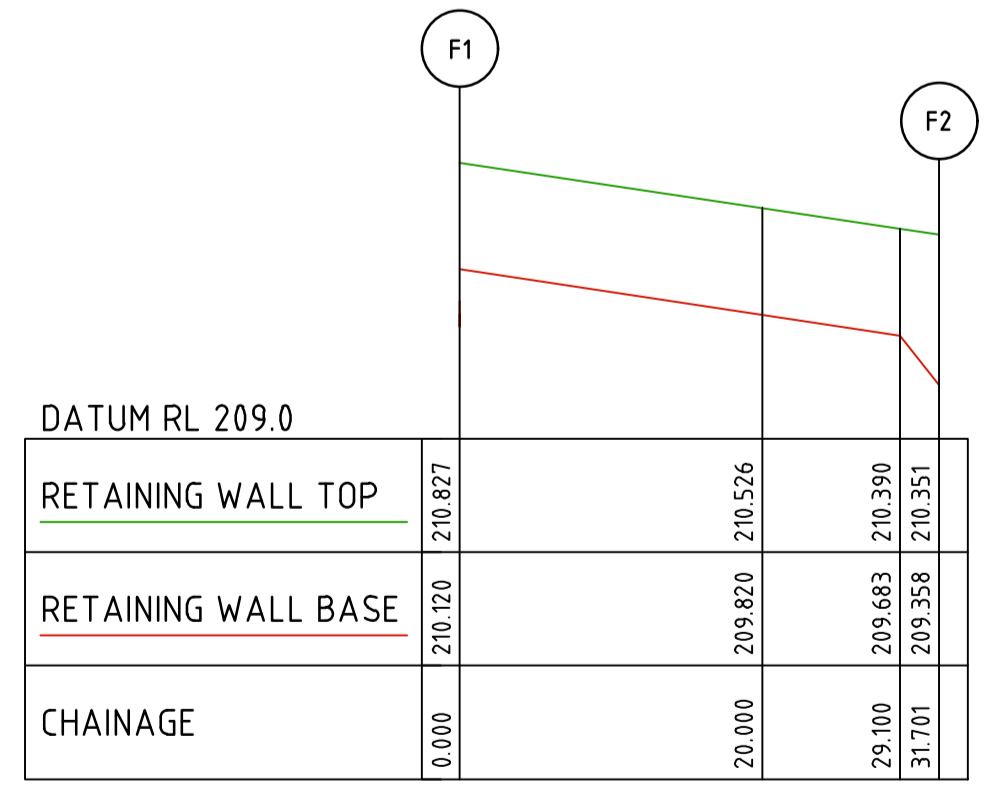
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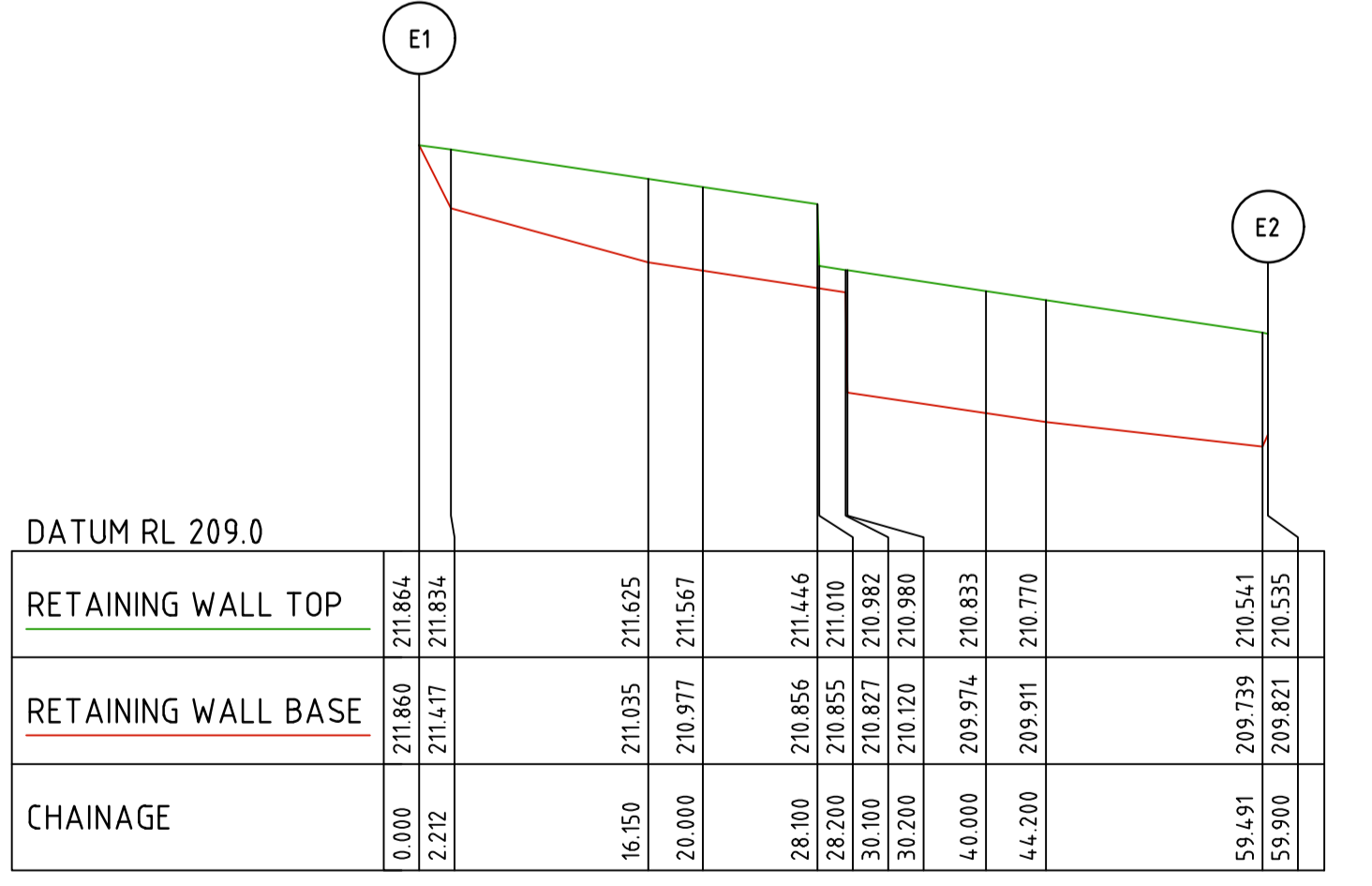
RETAINING WALL I



RETAINING WALL K



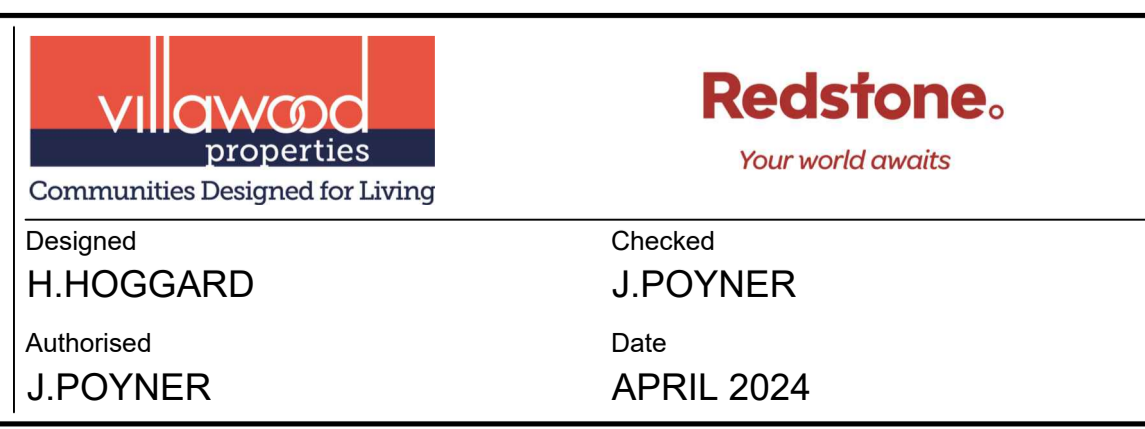
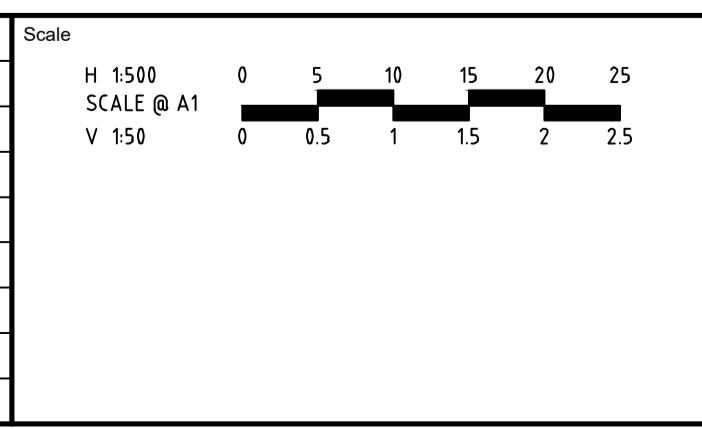
RETAINING WALL F



RETAINING WALL E

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Rev	Description	Approved	Date
1	DRIVEWAY & RETAINING WALL AMENDMENTS FOR LOTS 1621/1622 & 1631/1632	M.R	14/03/25
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	RETAINING H HEIGHT CHANGED TO LESS THAN 1M	M.T-S	20/09/24
C	RETAINING UPDATED	M.T-S	26/04/24
B	RETAINING UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22

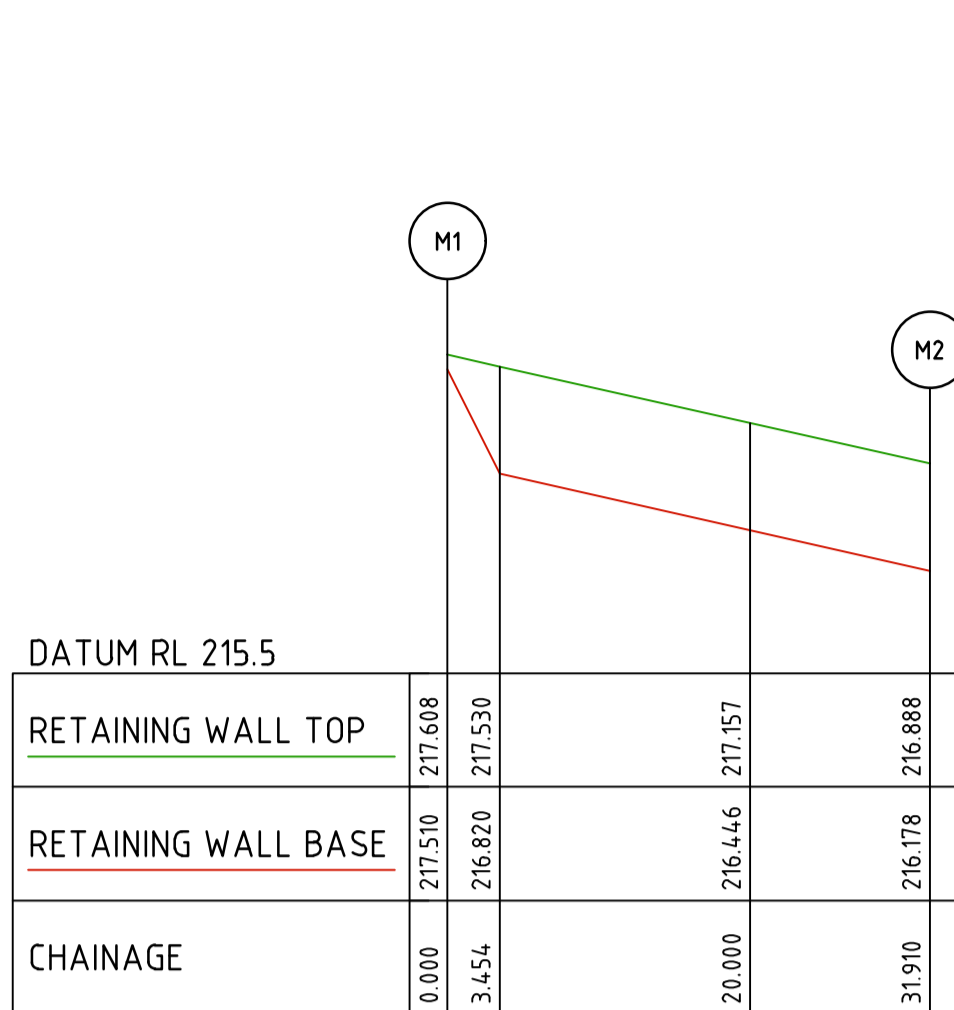


REDSTONE ESTATE
STAGE 16
ROAD AND DRAINAGE
RETAINING WALL - SHEET 4
HUME CITY COUNCIL
VILLAWOOD PROPERTIES

CONSTRUCTION 310066CR903

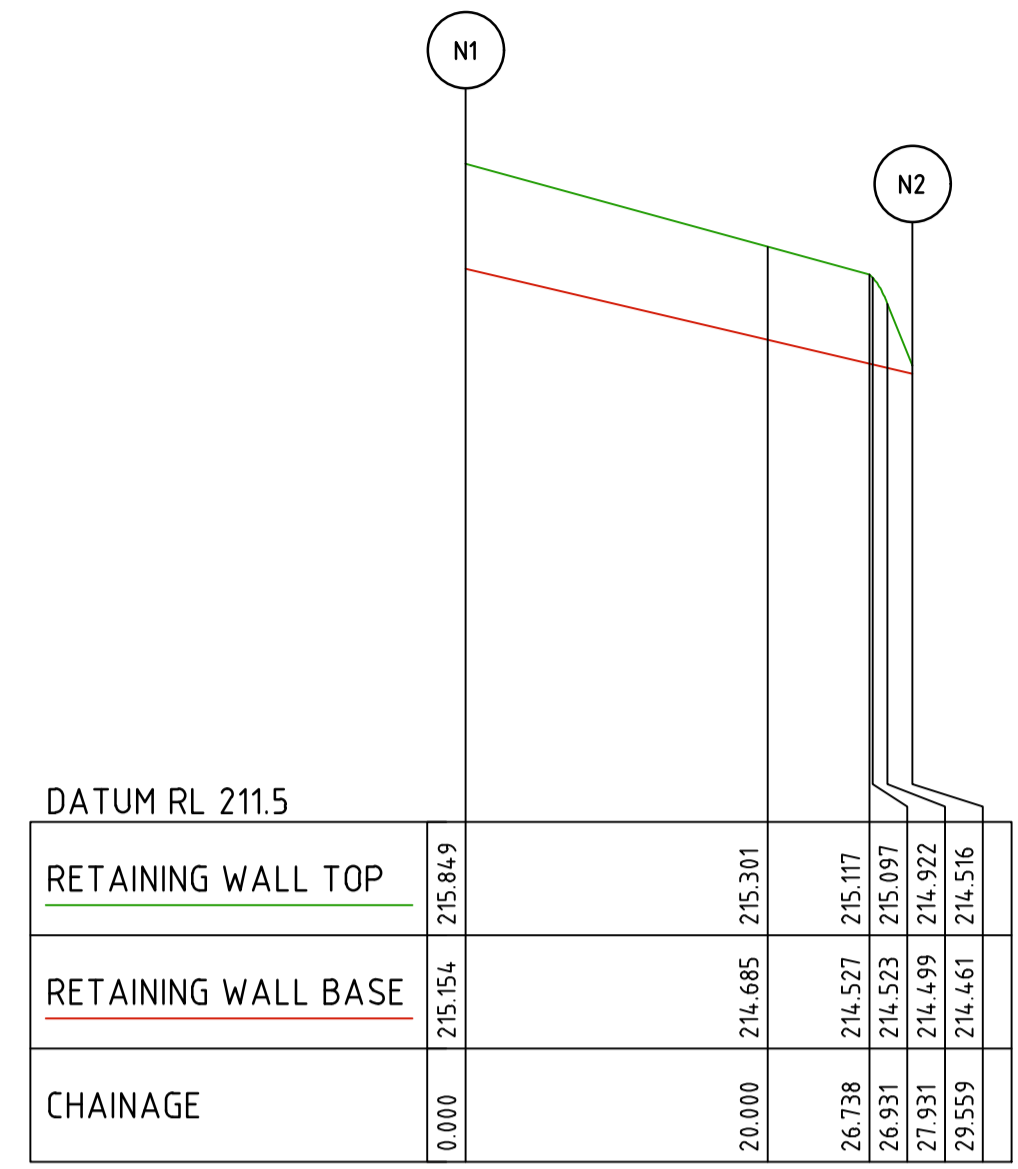
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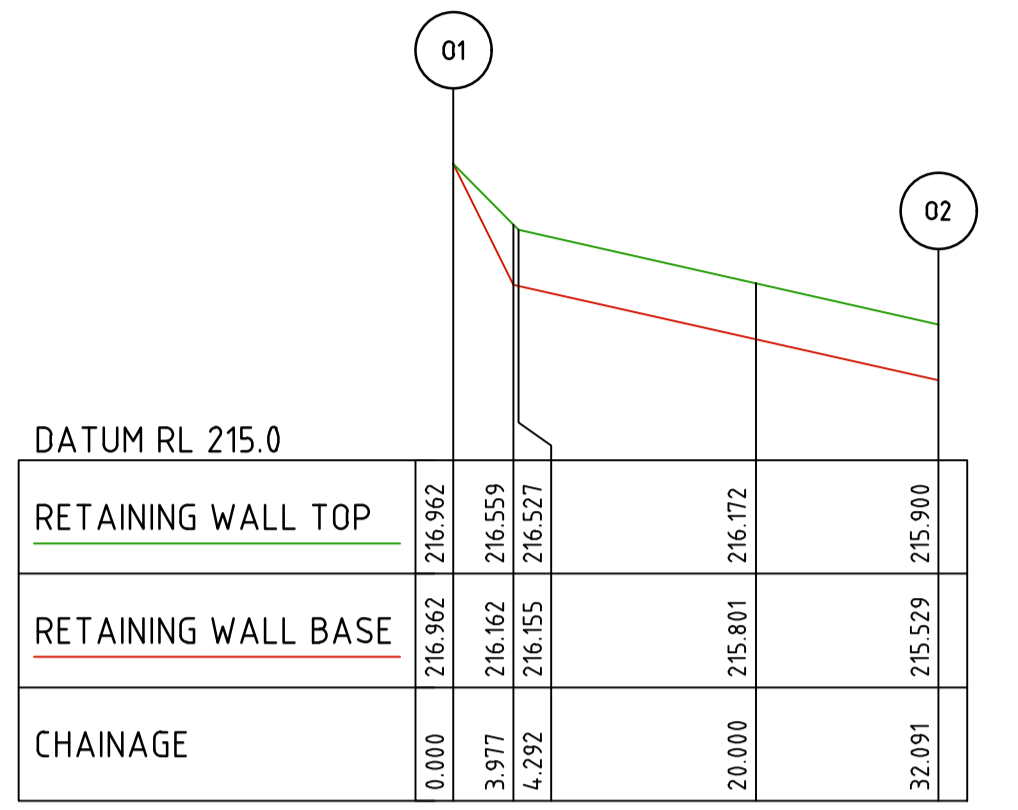
DATUM RL 215.5		
RETAINING WALL TOP	217.510	217.530
RETAINING WALL BASE	216.820	216.888
CHAINAGE	0.000	31.910

RETAINING WALL M



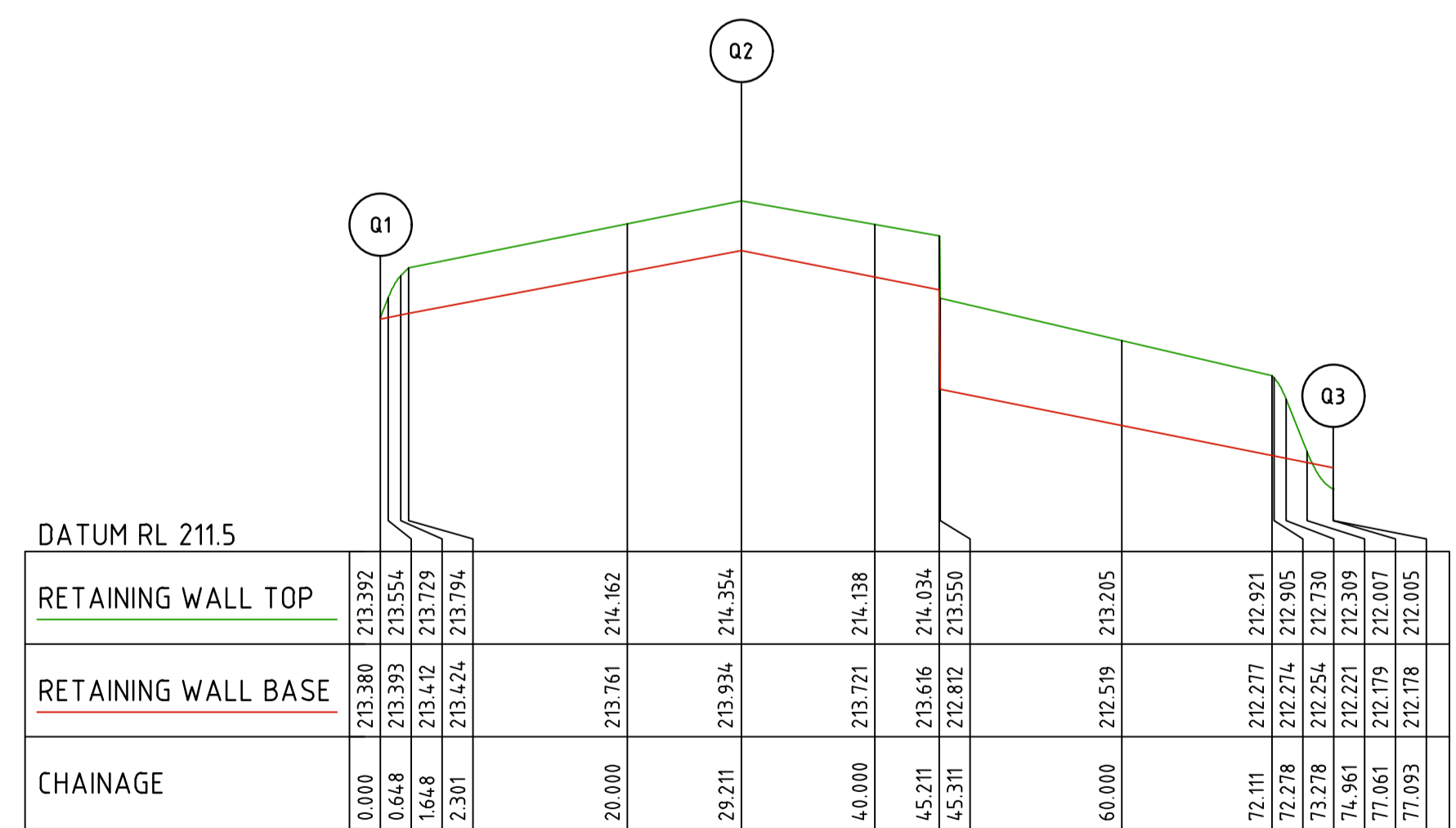
DATUM RL 211.5		
RETAINING WALL TOP	215.849	215.301
RETAINING WALL BASE	215.154	214.461
CHAINAGE	0.000	29.559

RETAINING WALL N



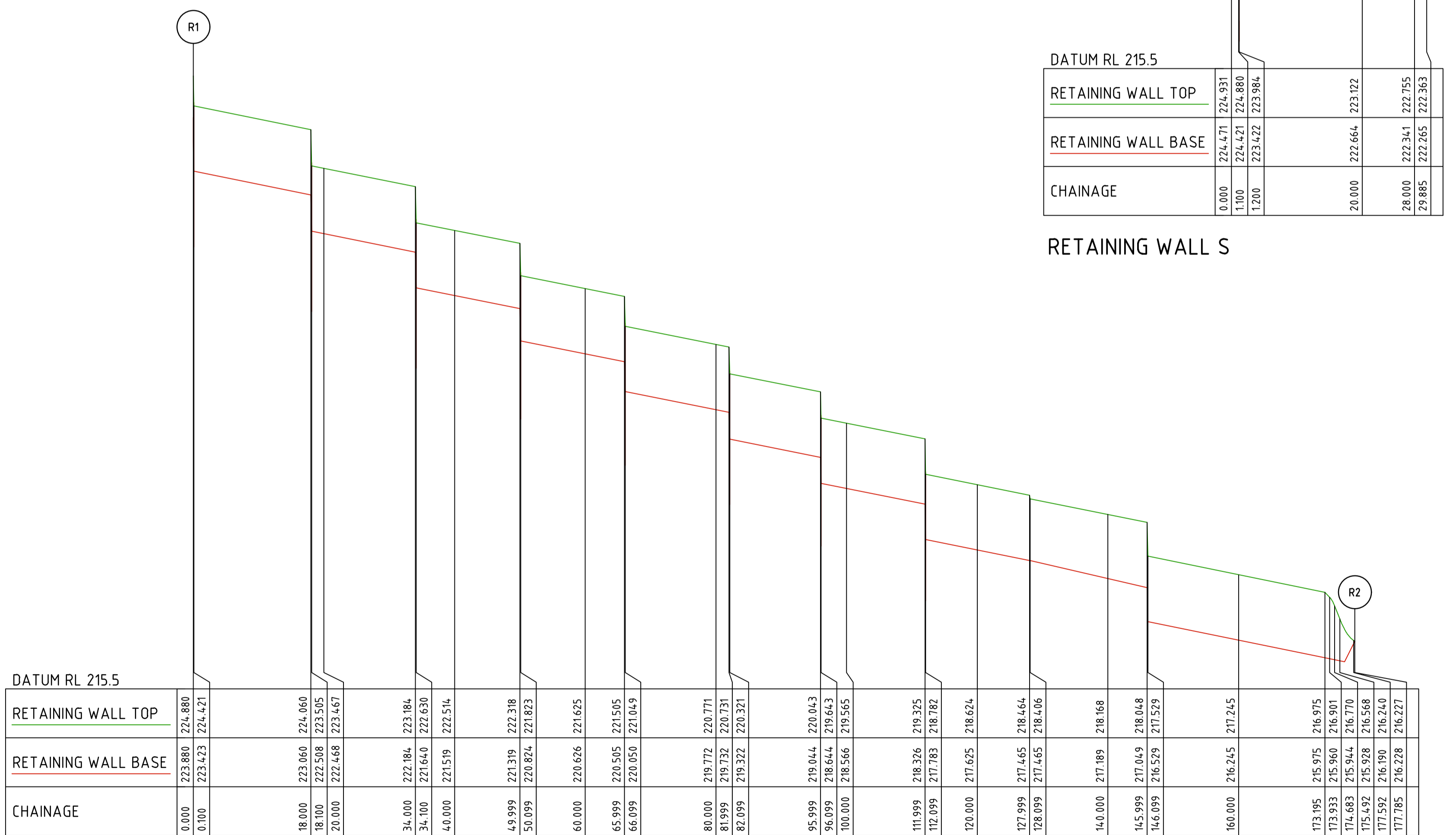
DATUM RL 215.0		
RETAINING WALL TOP	216.962	216.172
RETAINING WALL BASE	216.162	215.529
CHAINAGE	0.000	32.091

RETAINING WALL O



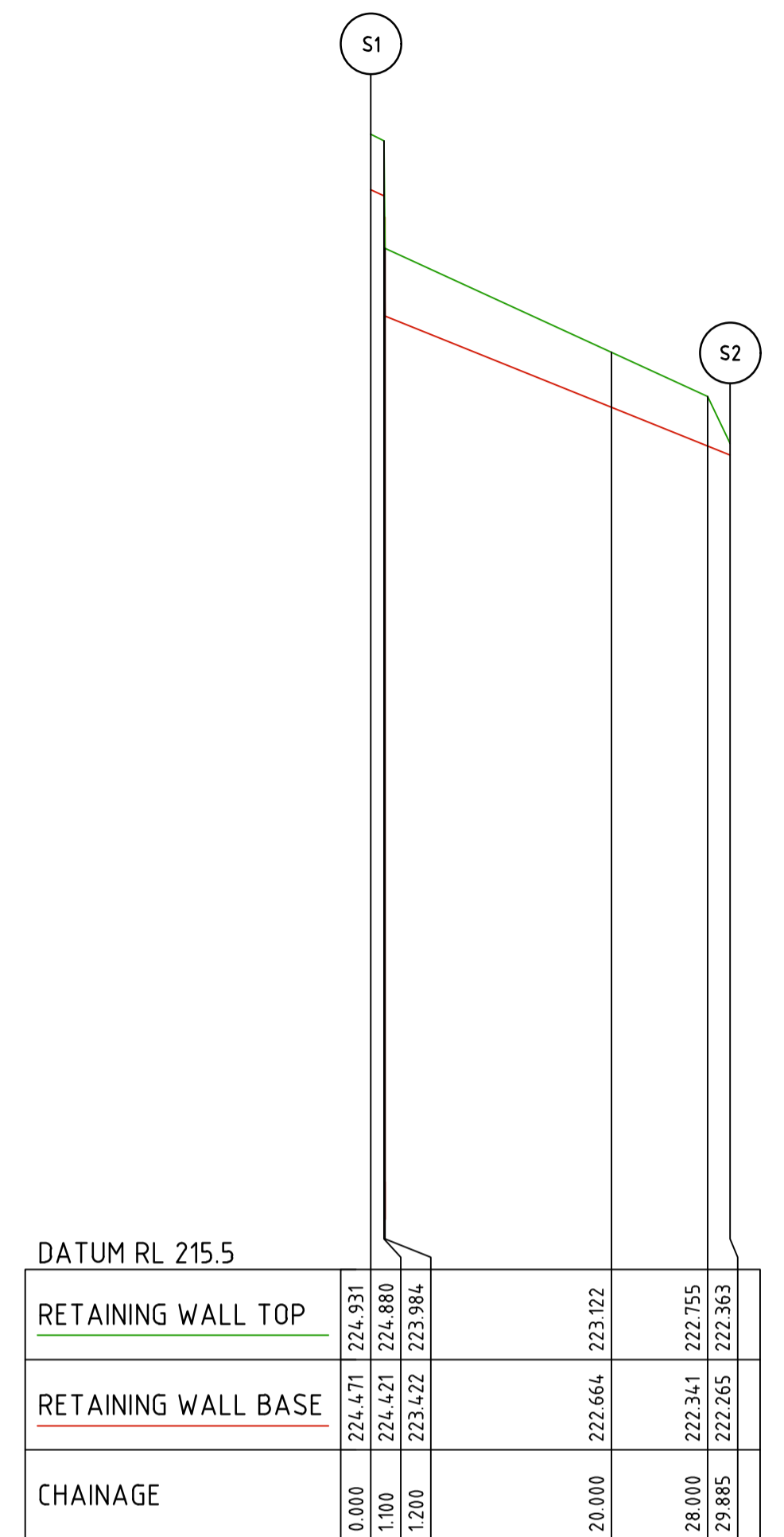
DATUM RL 211.5		
RETAINING WALL TOP	213.380	213.392
RETAINING WALL BASE	213.393	213.550
CHAINAGE	0.000	71.093

RETAINING WALL Q



DATUM RL 215.5		
RETAINING WALL TOP	223.880	224.880
RETAINING WALL BASE	223.423	224.421
CHAINAGE	0.000	177.785

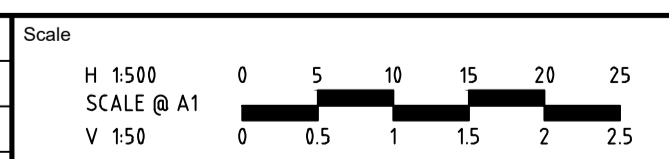
RETAINING WALL R



DATUM RL 215.5		
RETAINING WALL TOP	222.471	222.931
RETAINING WALL BASE	222.421	222.880
CHAINAGE	0.000	28.000

RETAINING WALL S

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
D	RETAINING KIOSK S AND R AMENDED	M.T.S	17/07/24
C	RETAINING UPDATED	M.T.S	24/04/24
B	RETAINING UPDATED	M.T.S	20/12/23
A	ISSUED TO COUNCIL	M.T.S	22/12/22



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Communities Designed for Living

 Designed by

H.HOGGARD

 Authorised

J.POYNER

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 Checked

J.POYNER

 Date

APRIL 2024

REDSTONE ESTATE

STAGE 16

ROAD AND DRAINAGE

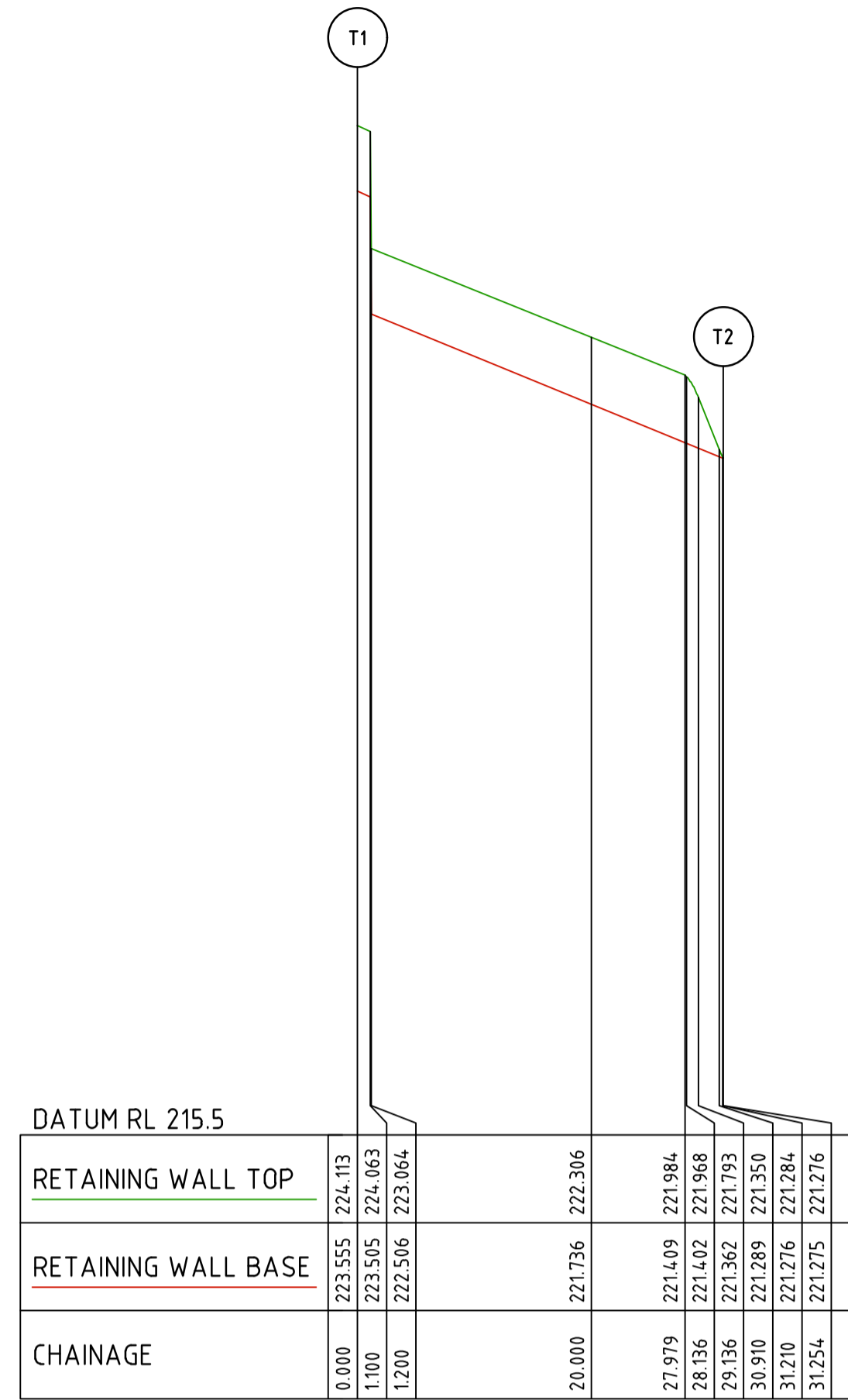
RETAINING WALL - SHEET 5

HUME CITY COUNCIL

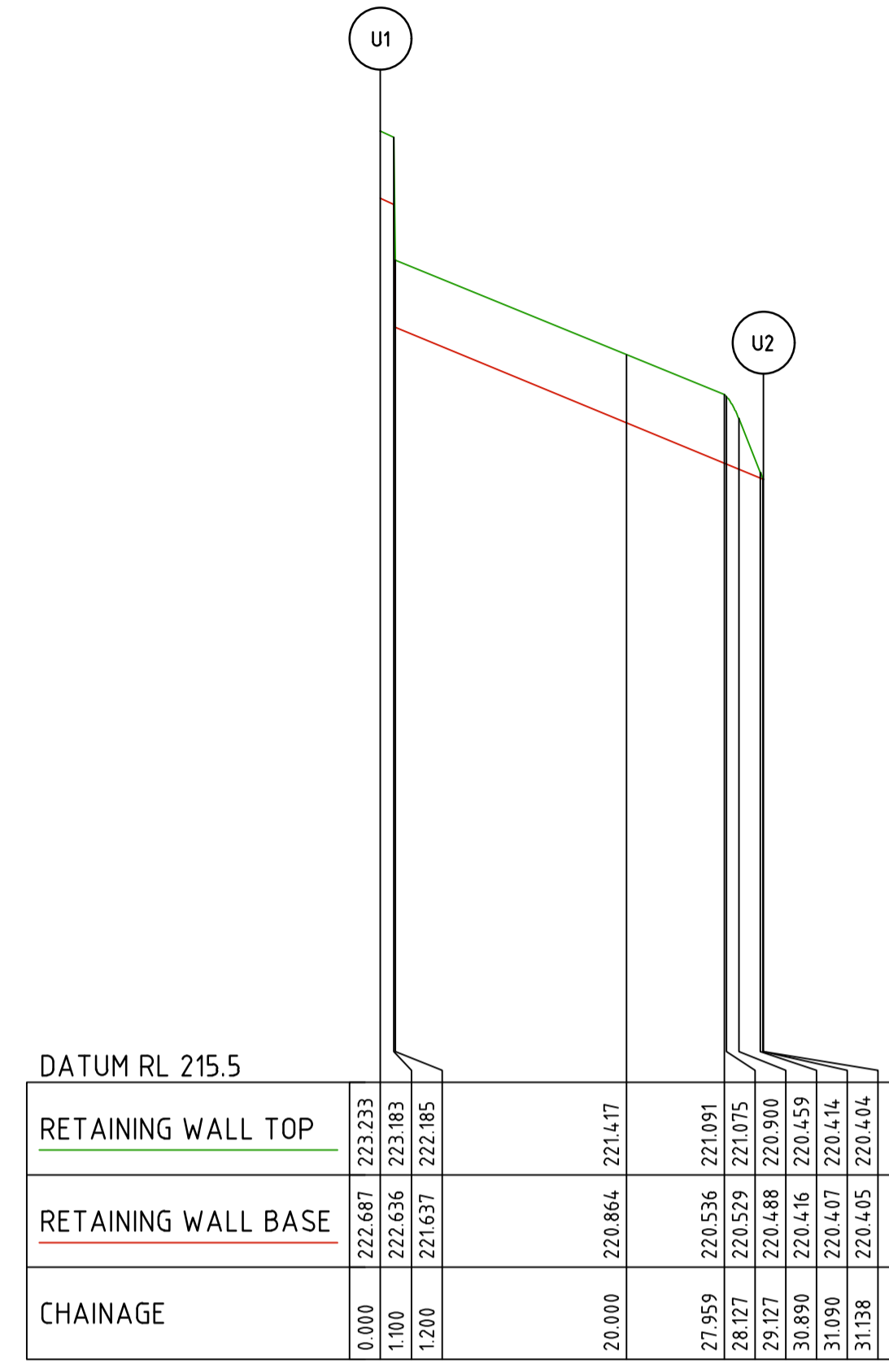
VILLAWOOD PROPERTIES

 Drg No
31066CR904

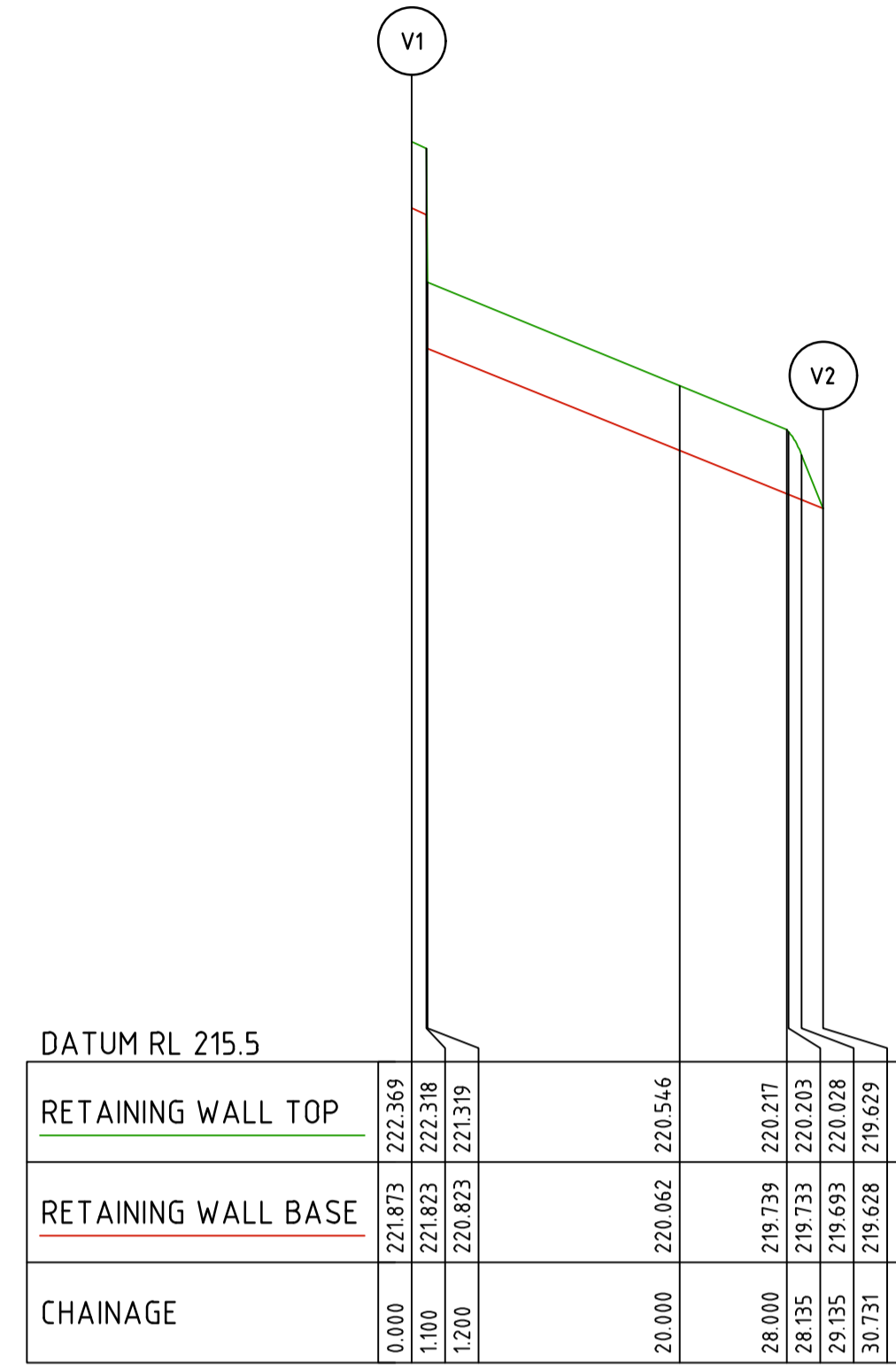
 Rev
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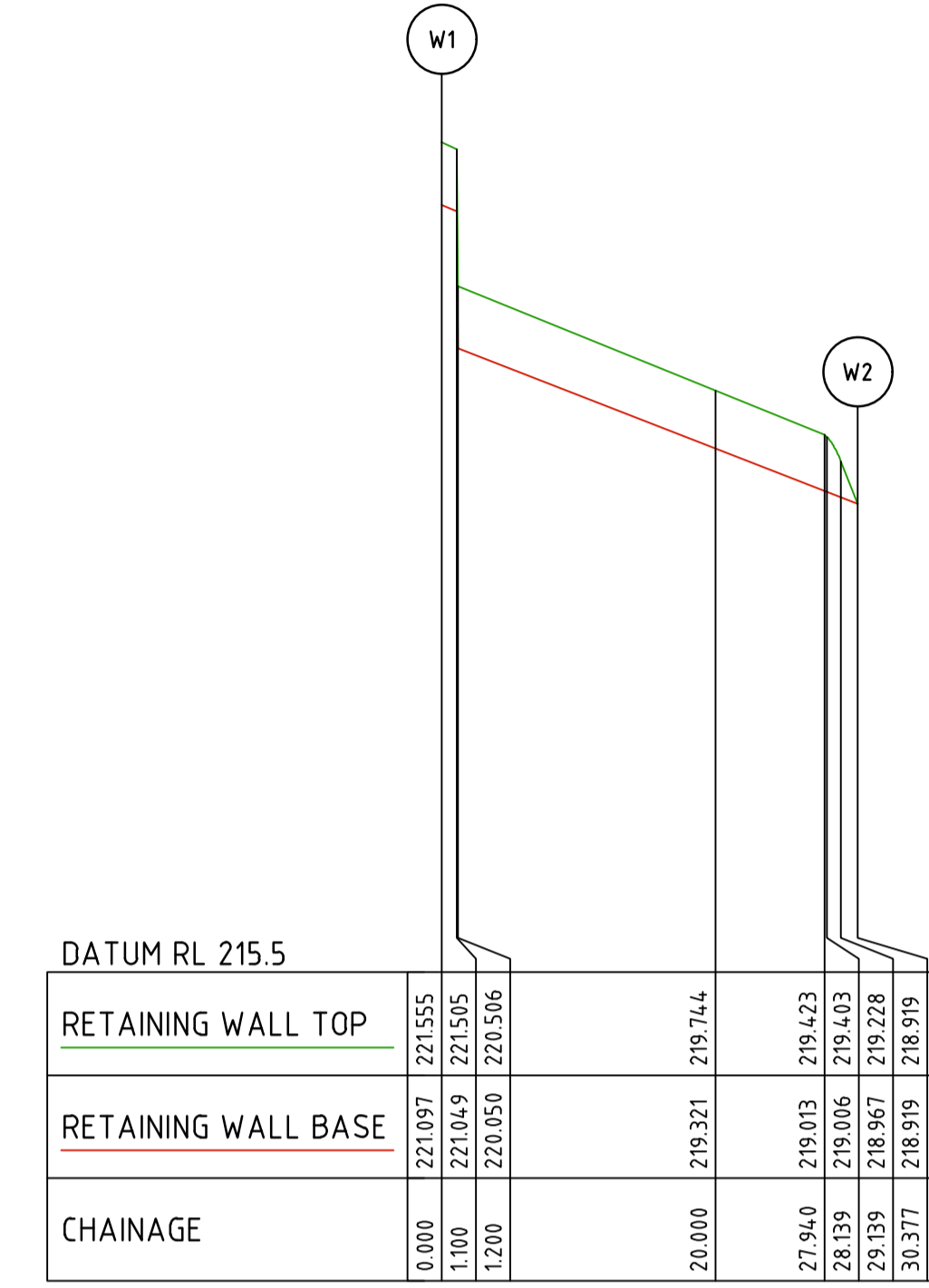
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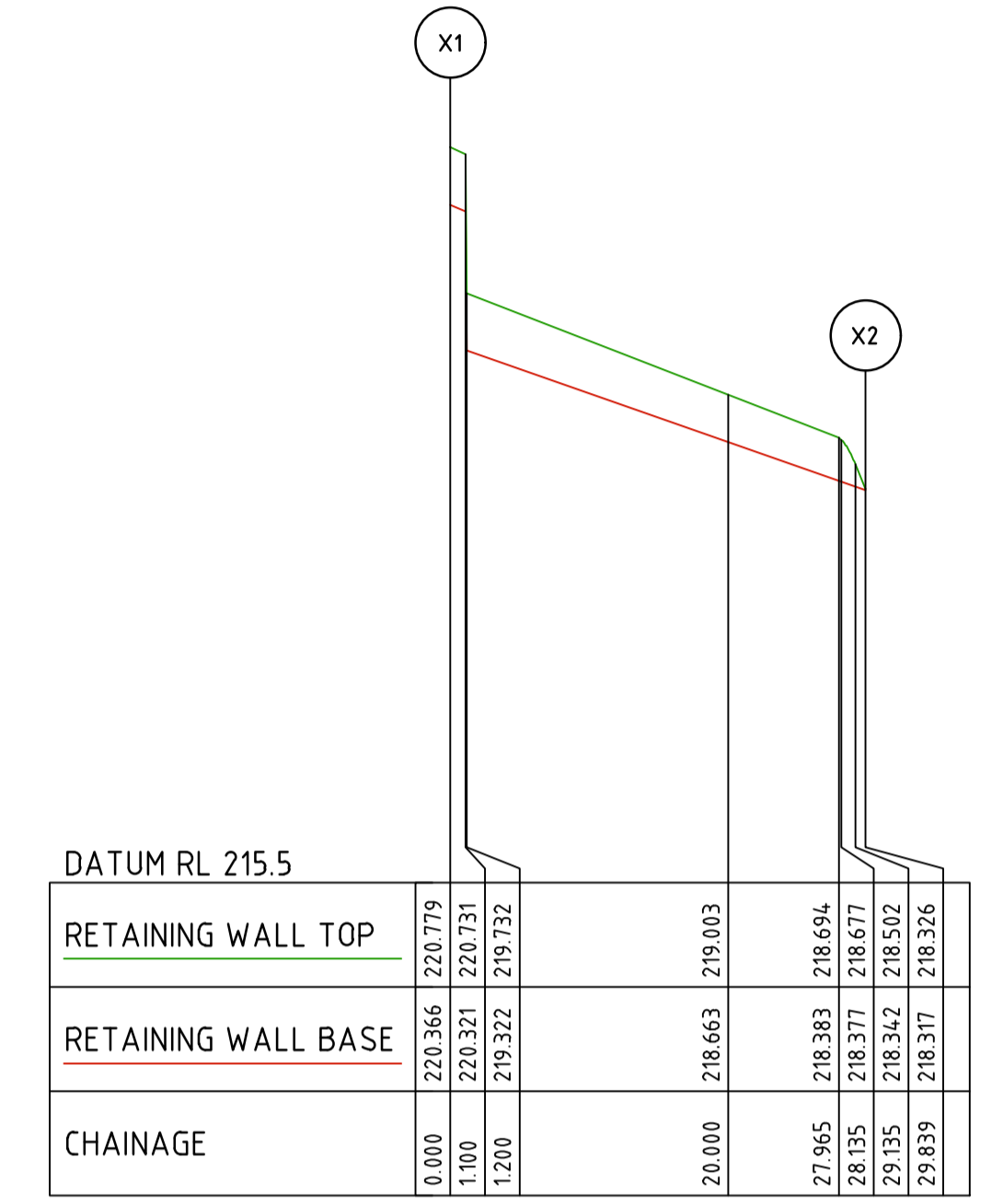
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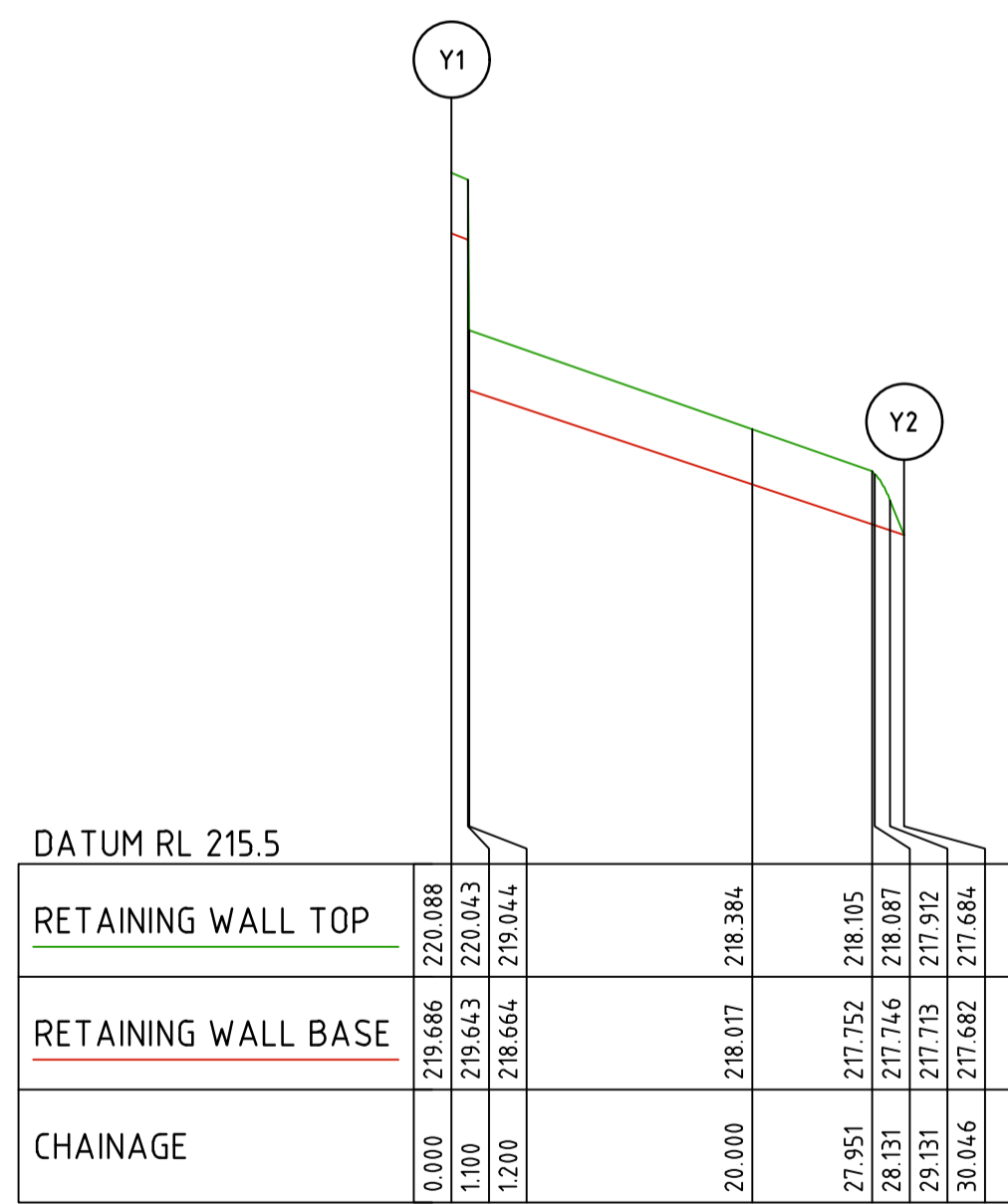
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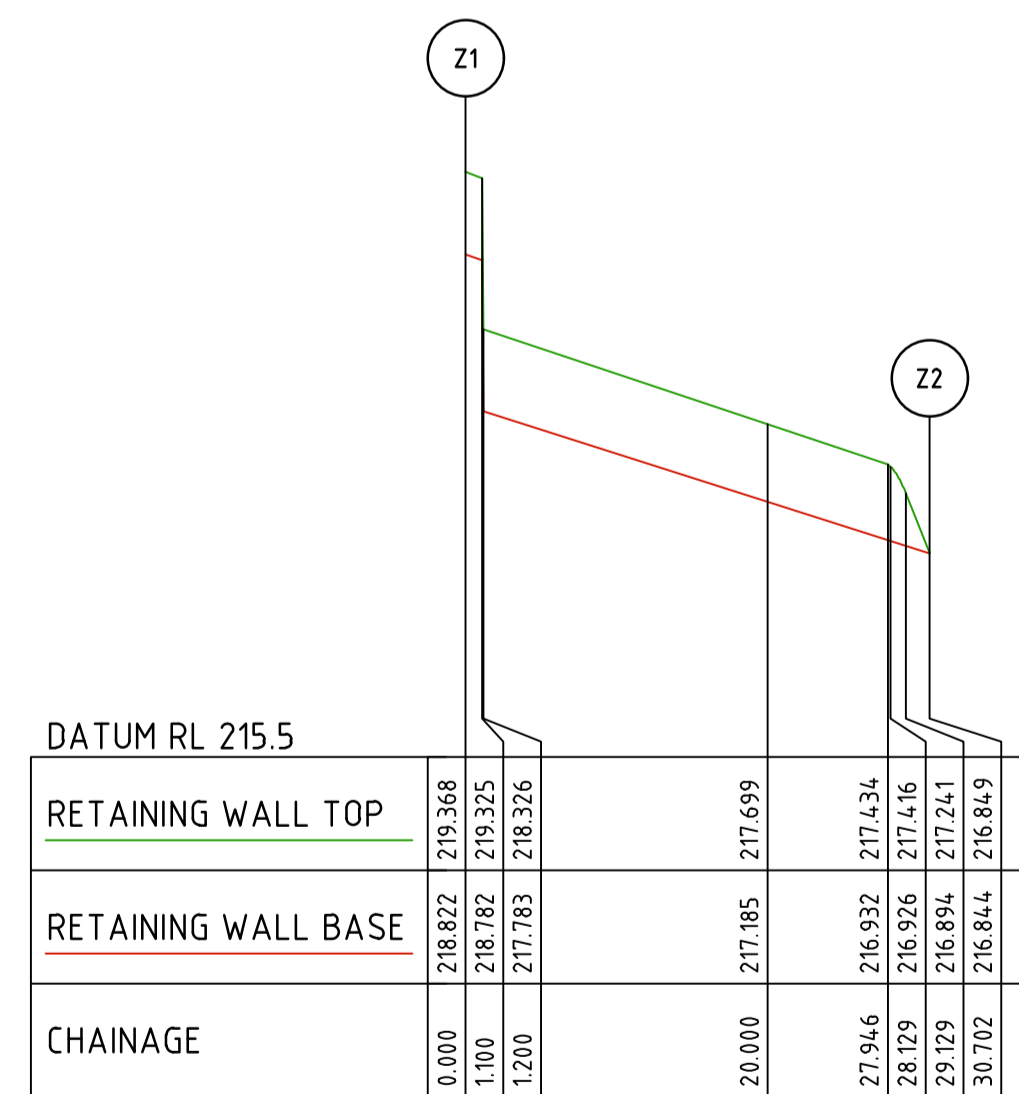
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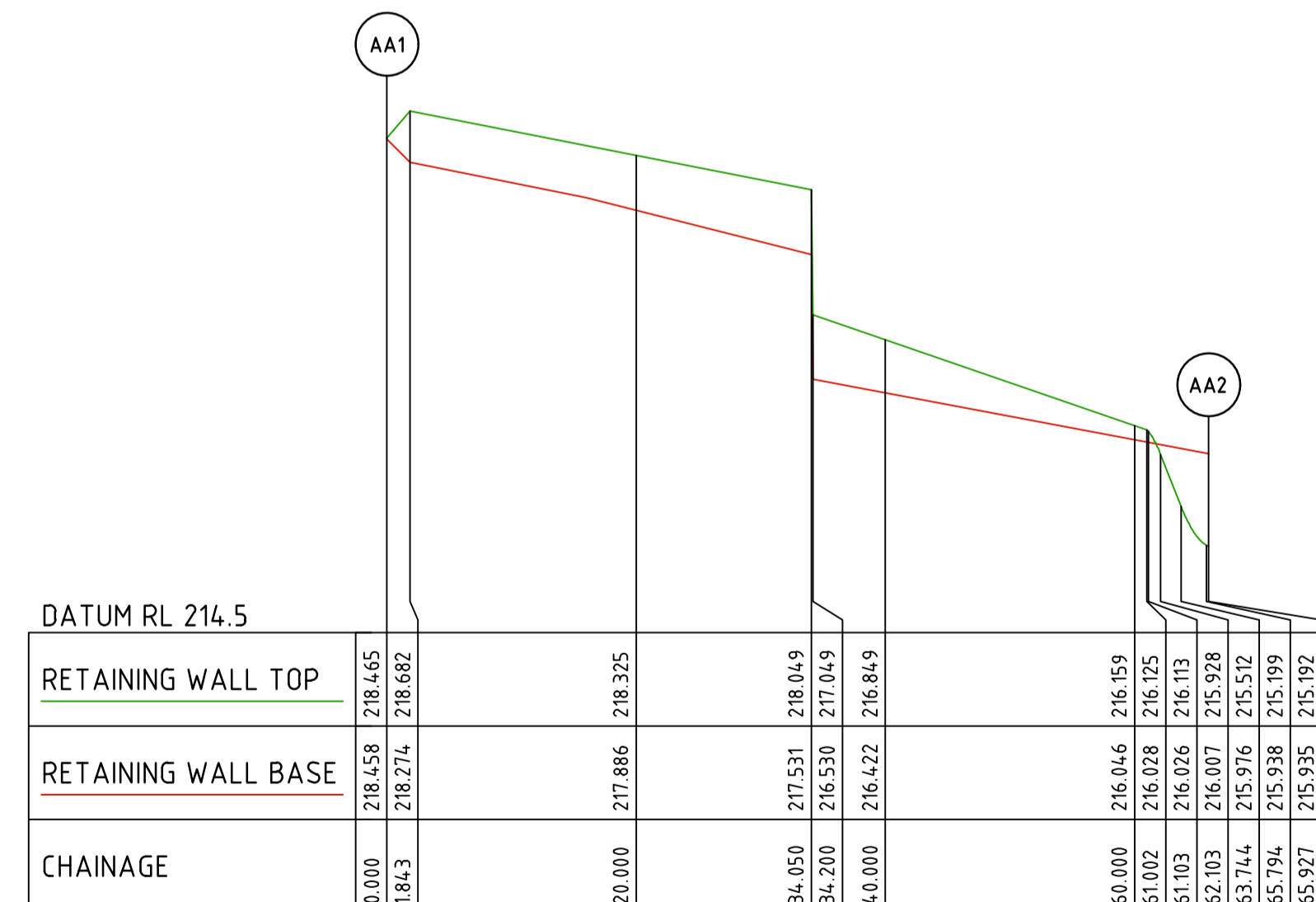
RETAINING WALL X



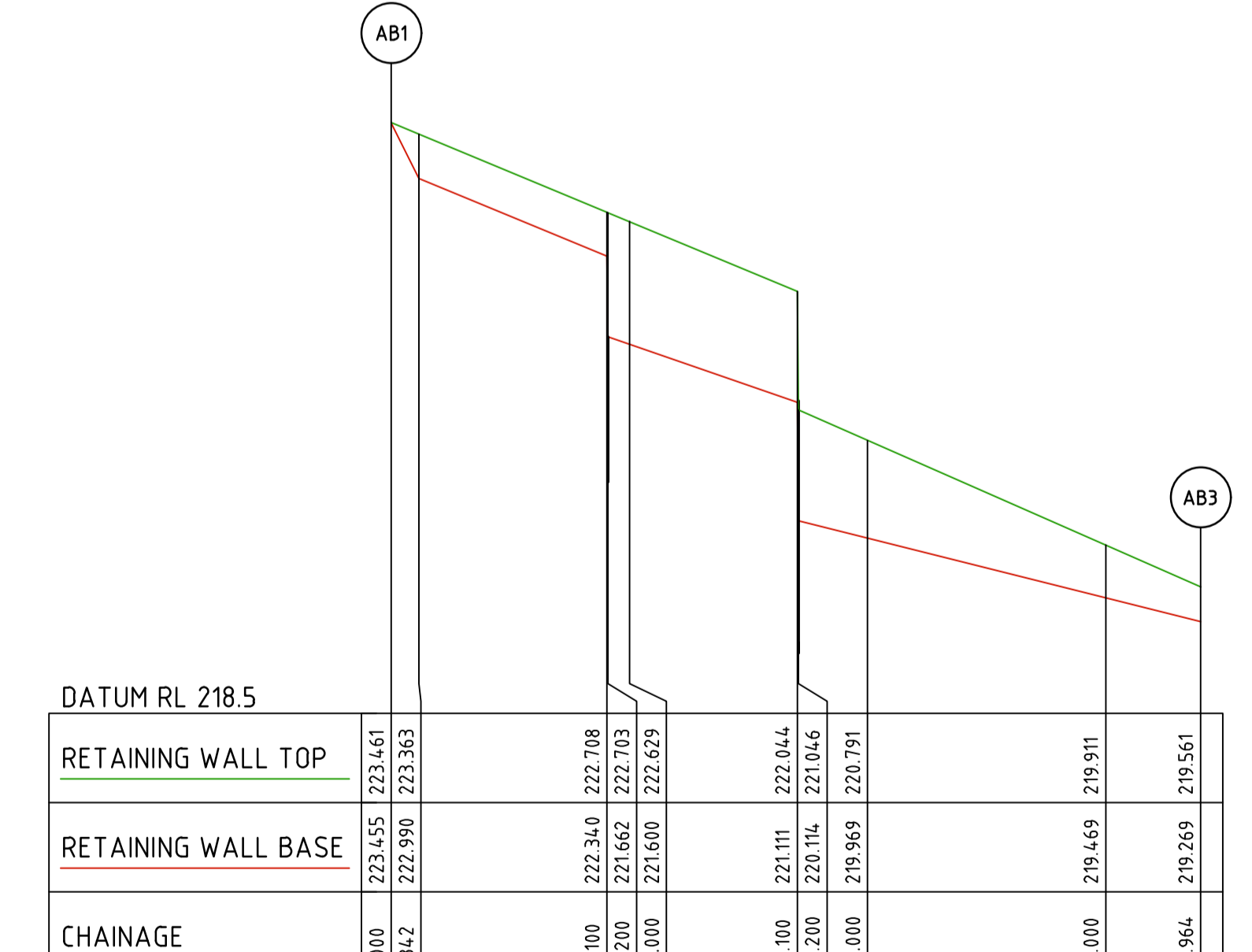
RETAINING WALL Y



RETAINING WALL Z



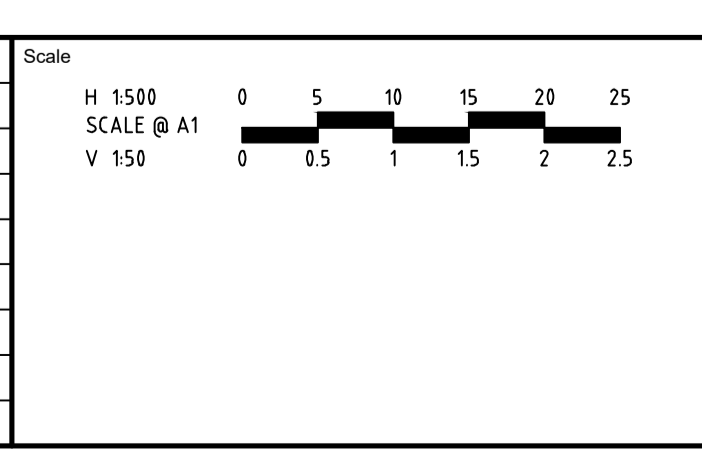
RETAINING WALL AA



RETAINING WALL AB

file name: 31066CR905.dwg, layout: name: CR905, plotted by: Luke Russell, file location: G:\310666\310666\WALL\AA1.dwg, plot date: 11/13/2025 11:45 AM, Sheet: 70 of 71, Sheets

0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
C	RETAINING UPDATED	M.T.S	26/04/24
B	RETAINING UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22
Rev	Amendments	Approved	Date



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 Designed

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 J.POYNER

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 J.POYNER

 Date

 APRIL 2024

REDSTONE ESTATE

STAGE 16

ROAD AND DRAINAGE

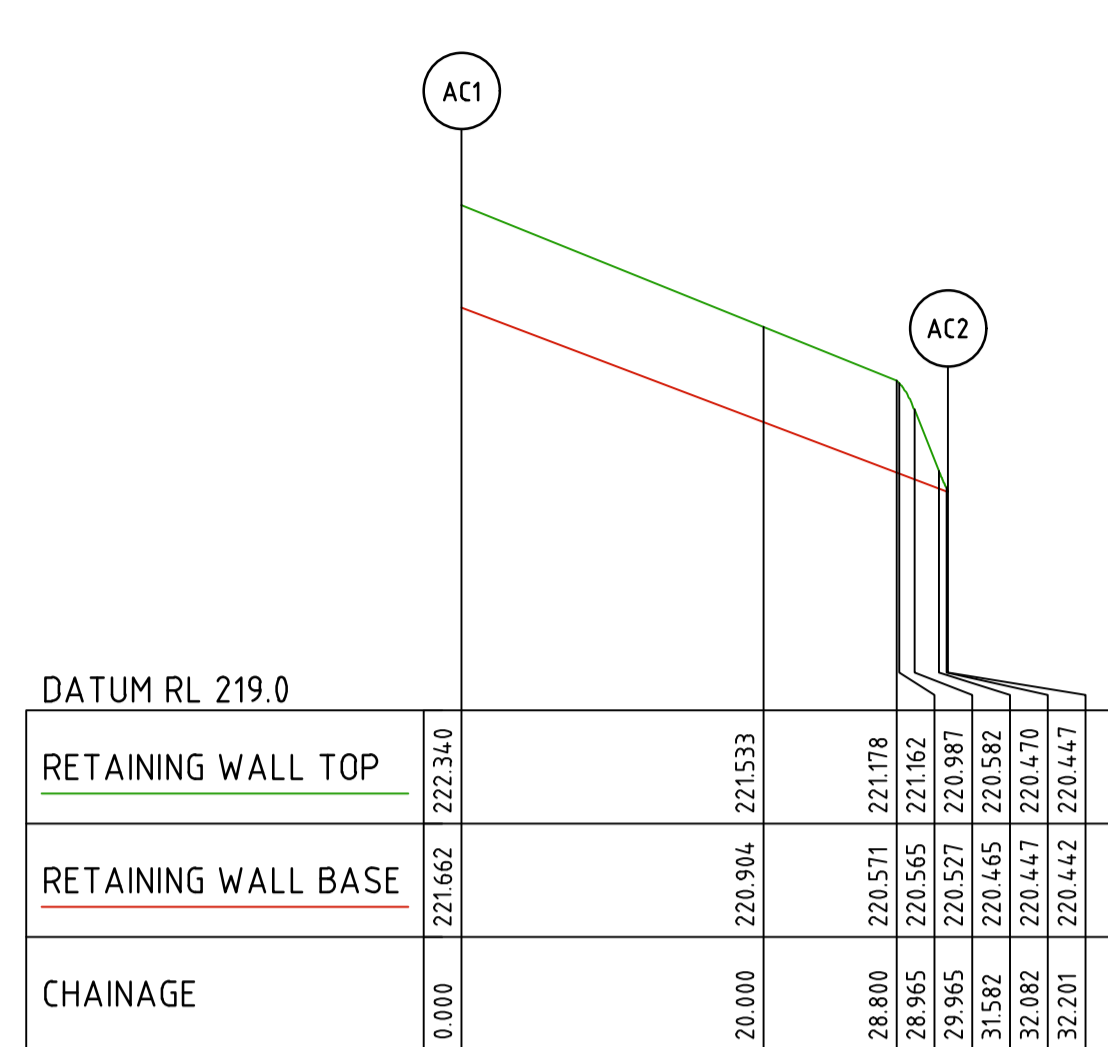
RETAINING WALL - SHEET 6

 HUME CITY COUNCIL

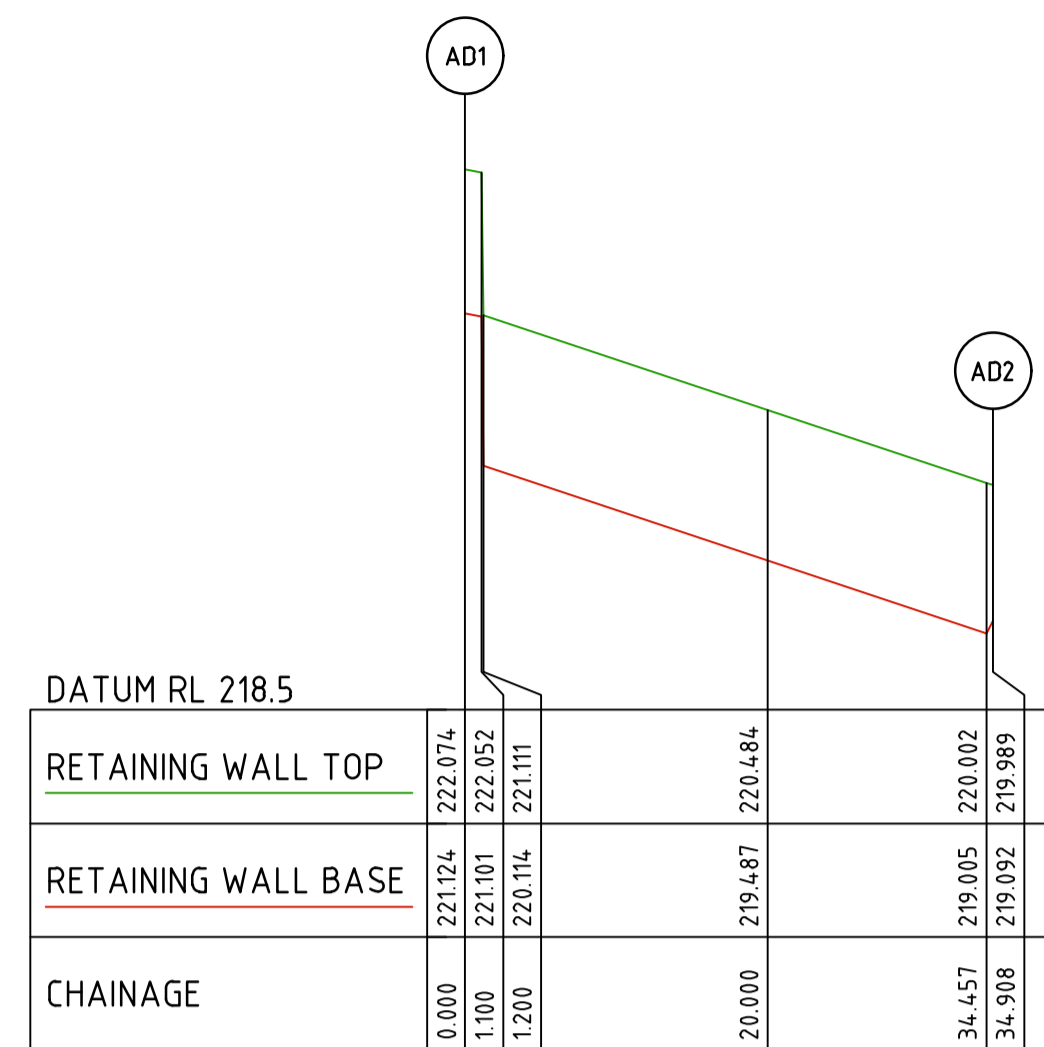
 VILLAWOOD PROPERTIES

CONSTRUCTION

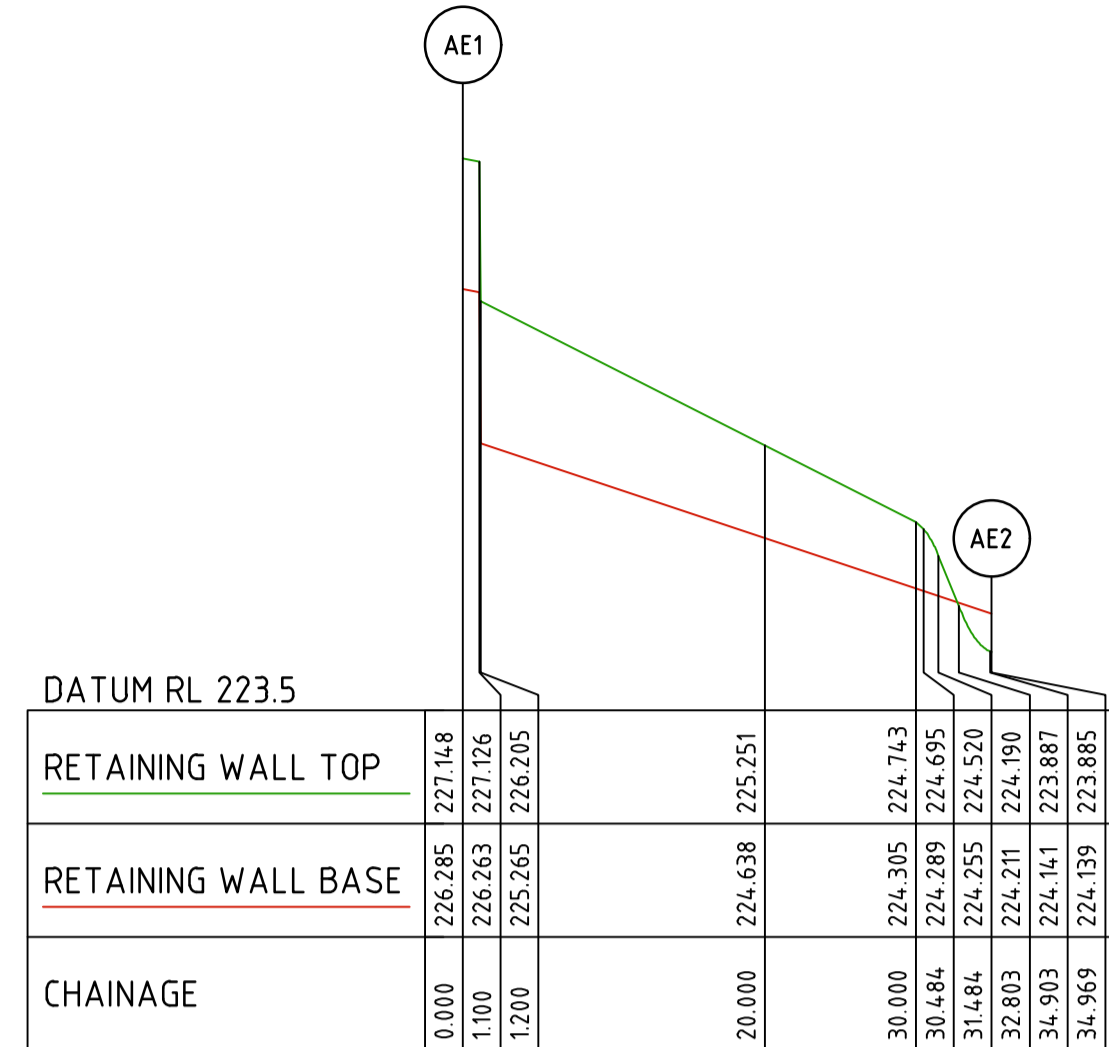
 Drg No: 31066CR905 Rev: 0



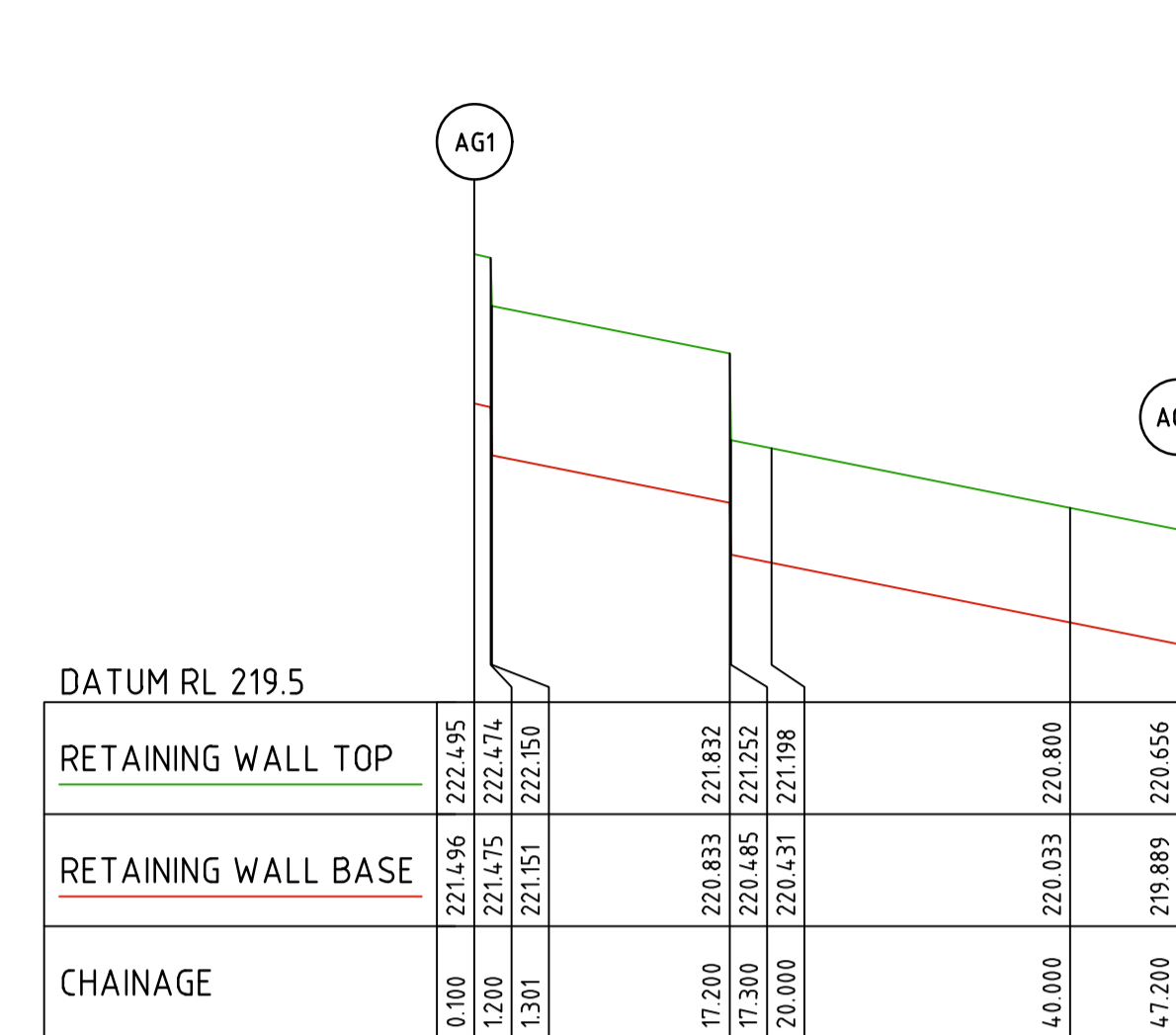
RETAINING WALL AC



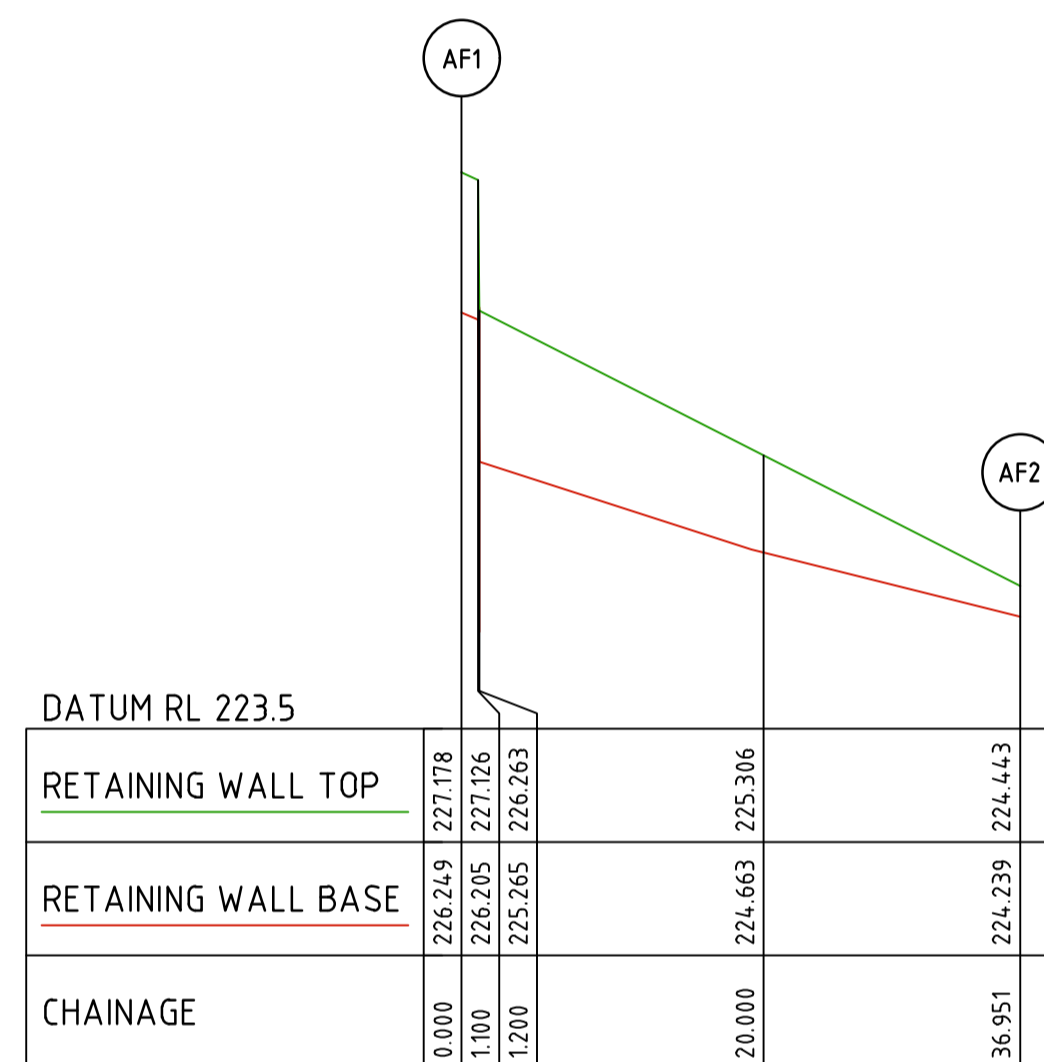
RETAINING WALL AD



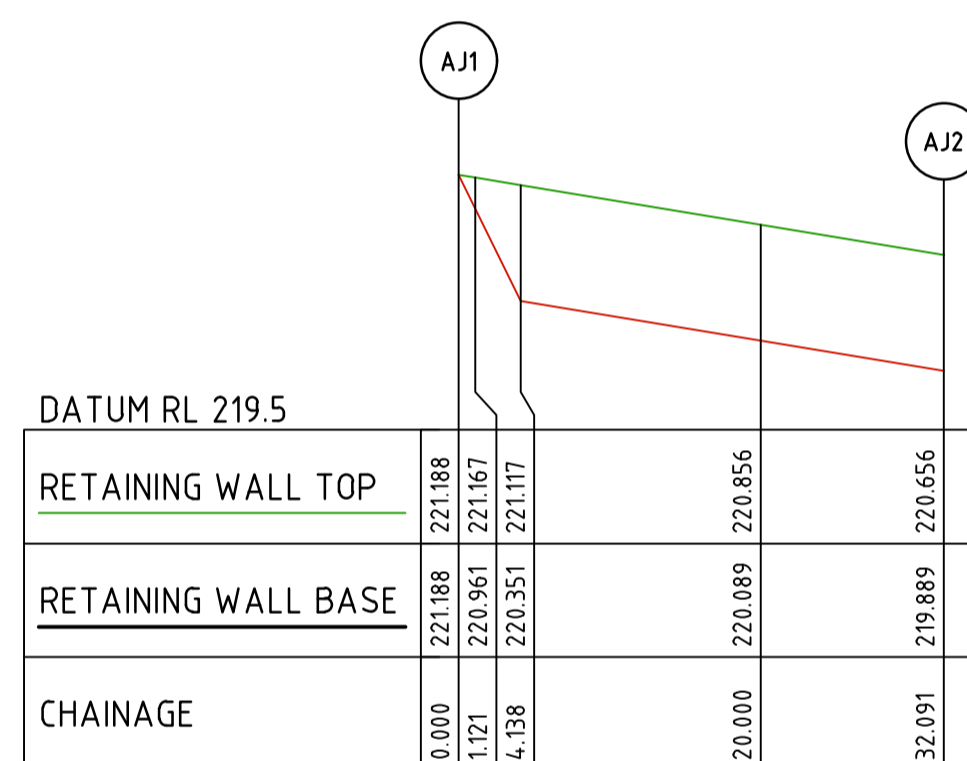
RETAINING WALL AE



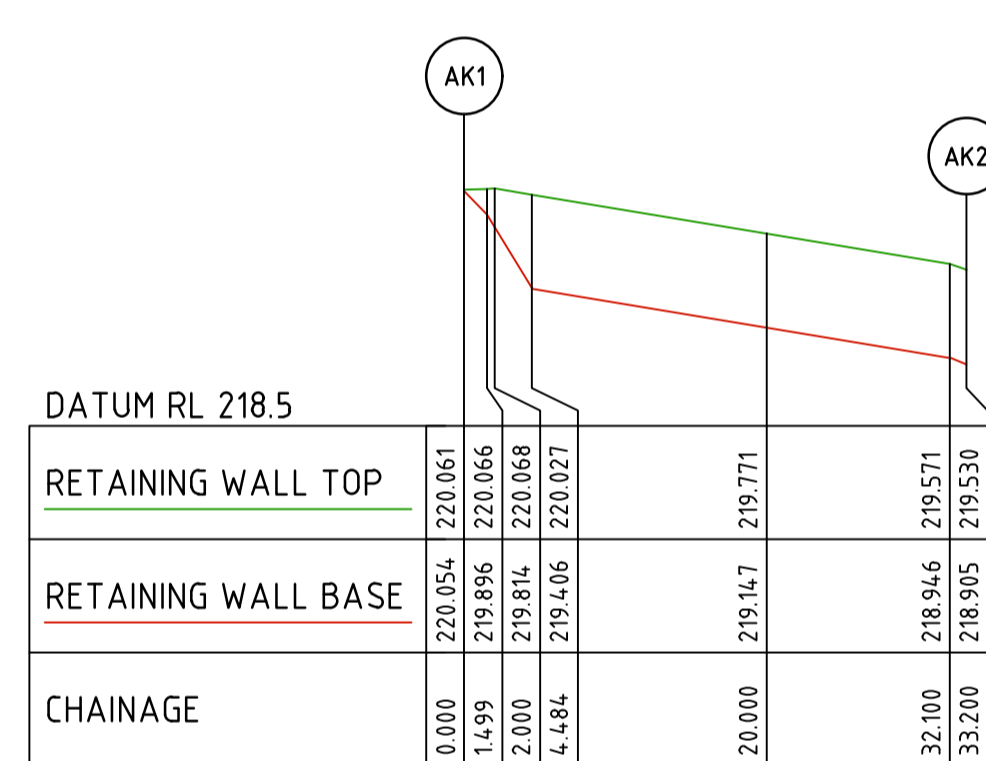
RETAINING WALL AG



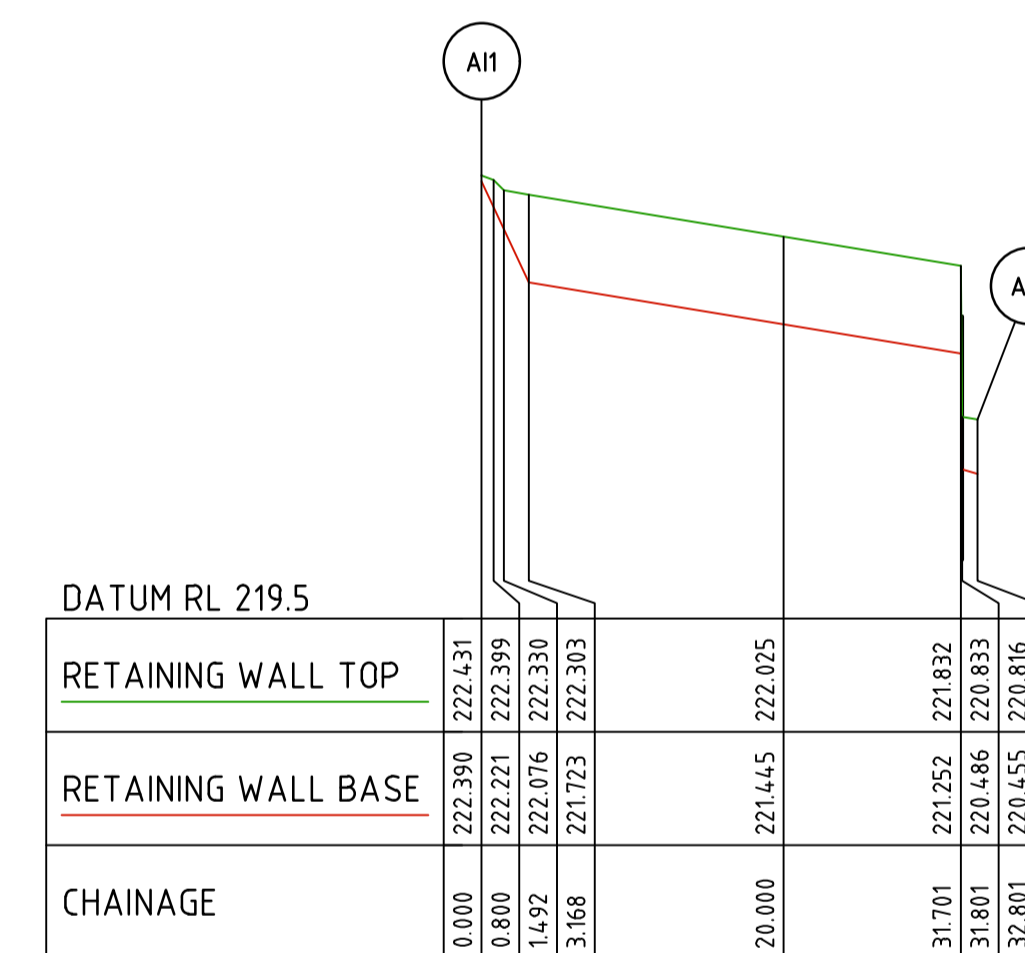
RETAINING WALL AF



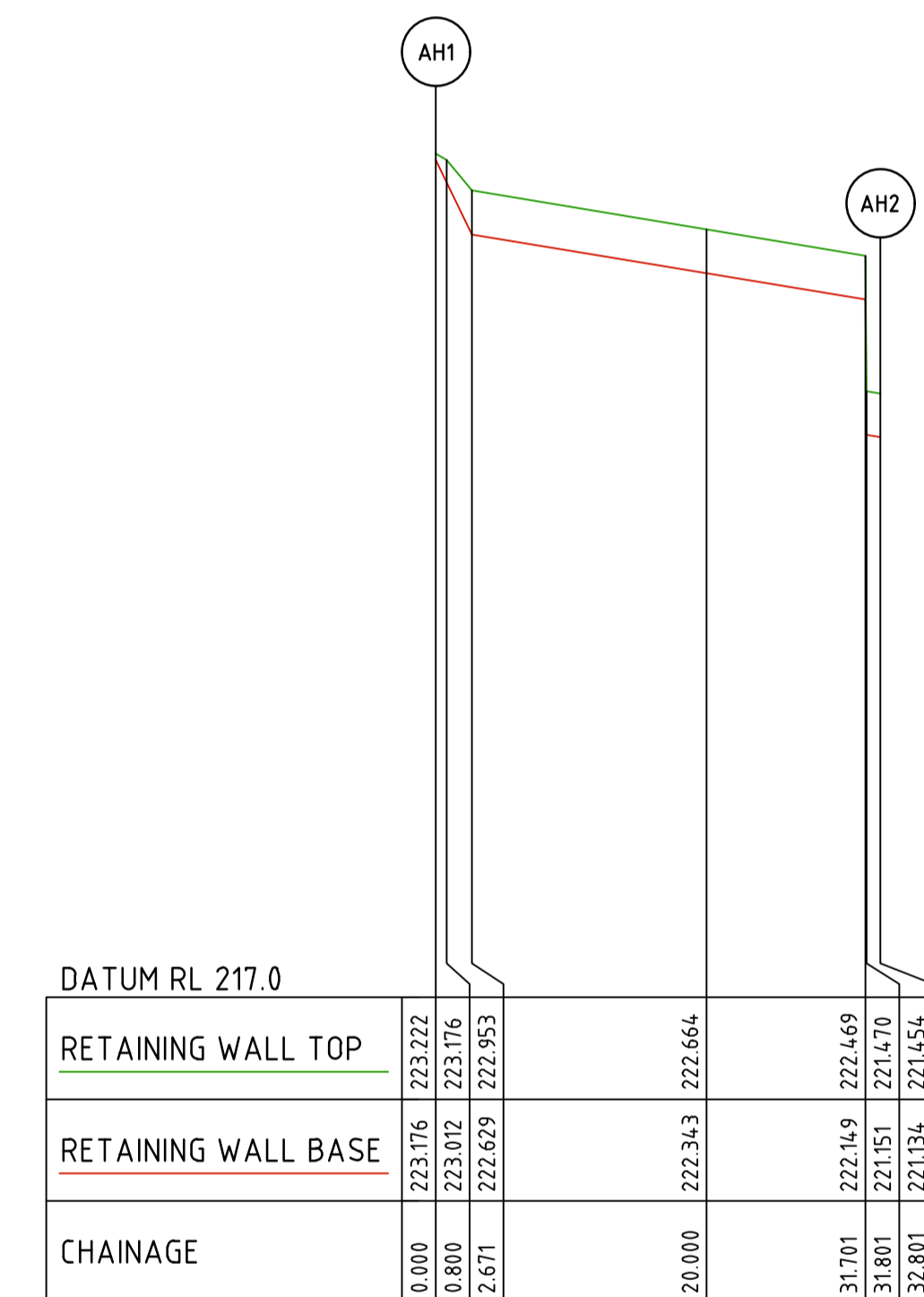
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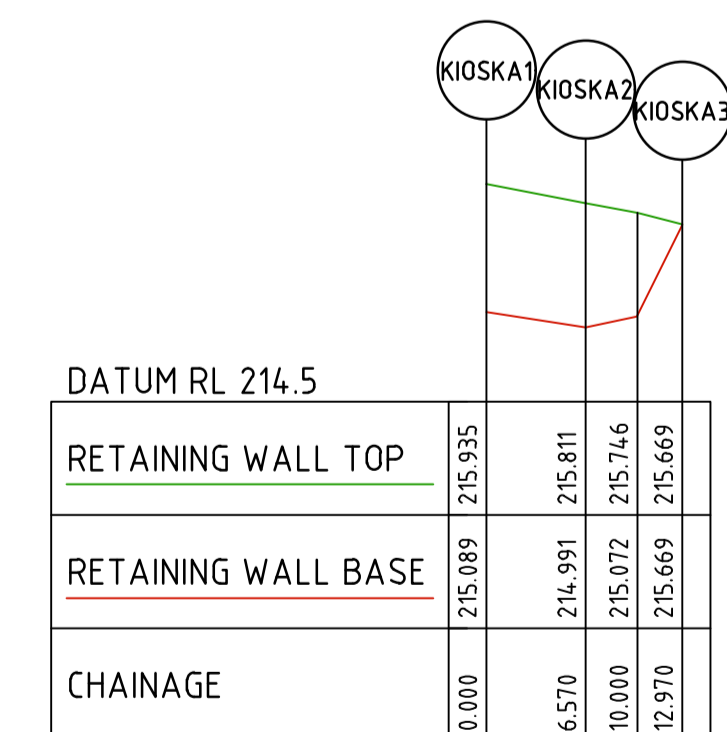
RETAINING WALL AK



RETAINING WALL AI



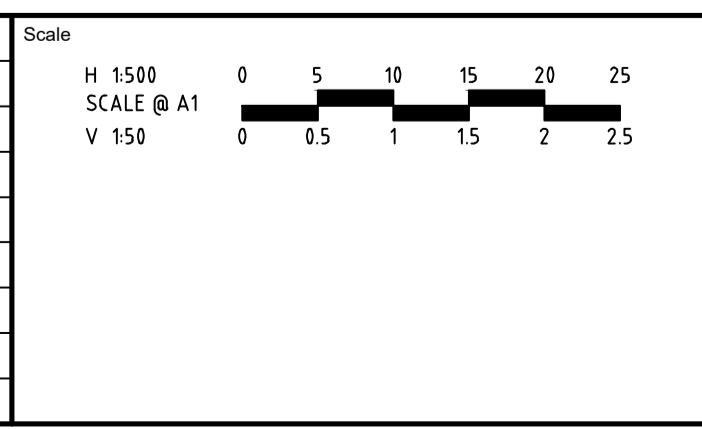
RETAINING WALL AH



RETAINING WALL KIOSKA

file name: 31066CR906.dwg, layout: name: CR906, plotted by: Luke Russell, file location: G:\31066CR906\work\AKAD\plot date: 11/13/2025 11:42 AM Sheet 71 of 71 Sheets

Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	M.R	28/10/24
E	RETAINING WALL KIOSK B REMOVED, OTHER RETAINING WALLS AMENDED	M.T-S	20/09/24
D	RETAINING KIOSK B AND AG AMENDED	M.T-S	17/07/24
C	RETAINING UPDATED	M.T-S	26/04/24
B	RETAINING UPDATED	M.T-S	20/12/23
A	ISSUED TO COUNCIL	M.T-S	22/12/22



System Certified

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L6 414 LA TROBE STREET PO BOX 16084 MELBOURNE

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 Date

 APRIL 2024

REDSTONE ESTATE

STAGE 16

ROAD AND DRAINAGE

RETAINING WALL - SHEET 7

 HUME CITY COUNCIL

 VILLAWOOD PROPERTIES

Drg No **31066CR906**

 Rev **0**