

REDSTONE ESTATE STAGE 1 VILLAWOOD PROPERTIES

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 COORDINATES ARE TO MAP GRID OF AUSTRALIA 2020 (GDA 2020)
- 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 5.11-2003
- 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% 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 MULCHED
- HYDROMULCH AND SEED MIX TO BE:
 - 40KG/HA KIKUYU
 - 200KG/HA TURF TYPE PERENNIAL RYE
 - 100KG/HA CREEPING RED FESCUE
 - 1500KG/HA OF CELLULOSE FIBRE
 - 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 DWEL 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 ADCL 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 5.11-2003

- 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 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 SD202
- 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 SD408
- 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 DEGADUR 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
- 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 10m FROM THE LOW CORNER OF THE LOT 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

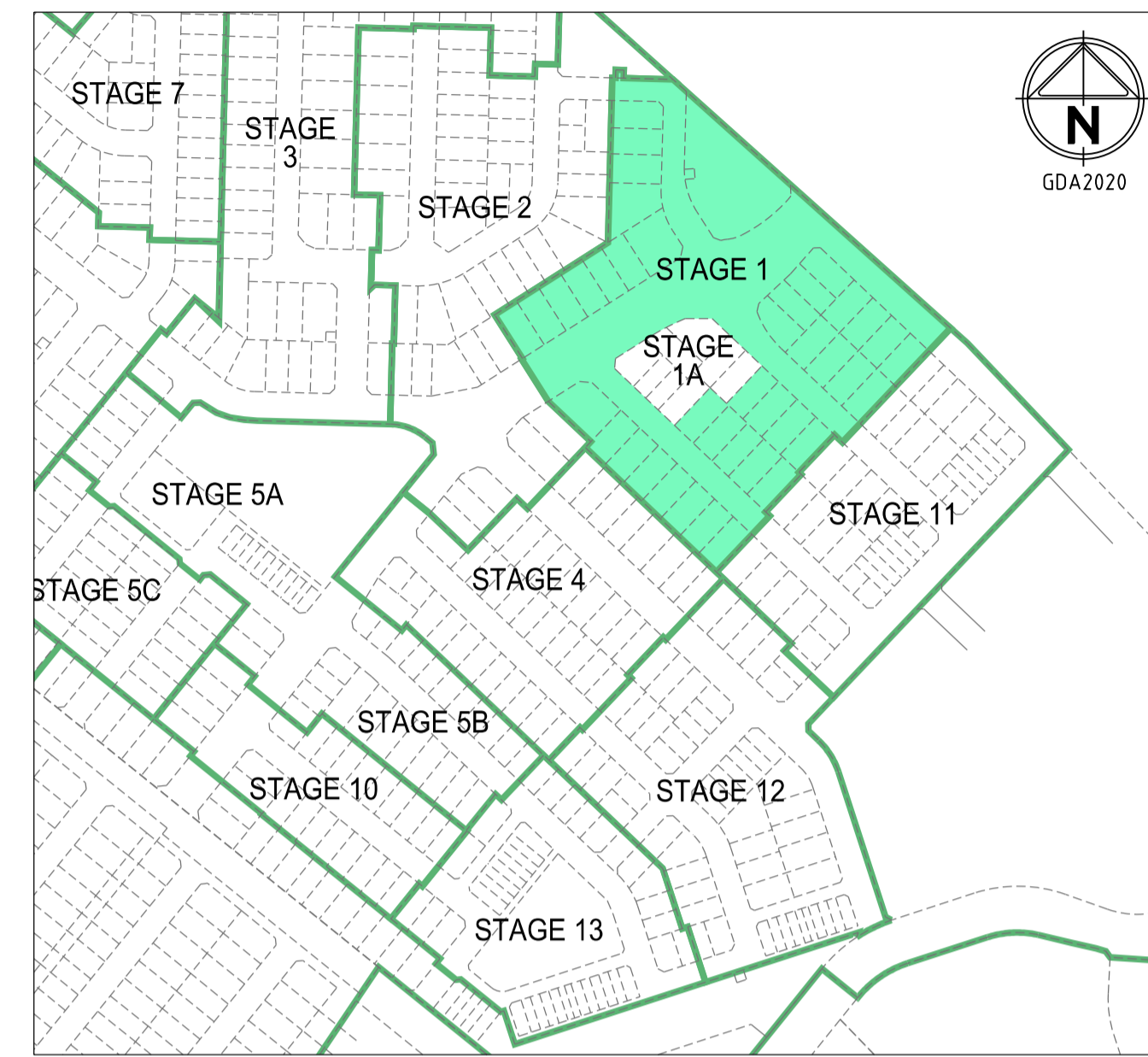
ADDITIONAL GENERAL NOTES:

- 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
- 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:
 - Ø50mm CLASS 12 P.V.C. - SINGLE SERVICE
 - Ø100mm 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
- 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
- WHERE PAVEMENT IS CONSTRUCTED ON FILLING, 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
- CONTRACTOR TO ENSURE SEWER MANHOLE COVERS ARE WHOLLY LOCATED IN PROPOSED FOOTPATHS
- 100mm HOUSE DRAIN CONNECTIONS TO BE LAID AT AN OFFSET OF 5.5m FROM THE LOW SIDE TITLE UNLESS DIMENSIONED OTHERWISE

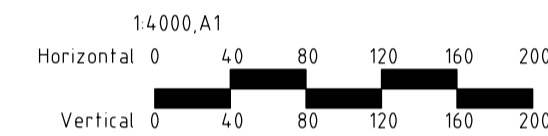
Future provision for gas only.
Gas supply not provided as part of these works.



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.



LOCALITY PLAN



DRAWING SCHEDULE

DRAWING	DESCRIPTION	SHEET No.	REVISION
305912R01	FACE SHEET	1	9
305912R02	ROAD & DRAINAGE FACEPLAN SHEET 1 OF 2	2	6
305912R03	ROAD & DRAINAGE FACEPLAN SHEET 2 OF 2	3	3
305912R04	ROAD & DRAINAGE SERVICES PLAN SHEET 1 OF 2	4	3
305912R05	ROAD & DRAINAGE SERVICES PLAN SHEET 2 OF 2	5	2
305912R06	LONGITUDINAL SECTION - ORIGIN DRIVE & PRESIDENT ROAD	6	1
305912R07	LONGITUDINAL SECTION - WANDERER RD, ALPACA DRIVE	7	1
305912R08	LONGITUDINAL & CROSS SECTIONS - NIRA DRIVE	8	1
305912R09	CROSS SECTIONS - ORIGIN DRIVE SHEET 1	9	2
305912R10	CROSS SECTIONS - ORIGIN DRIVE SHEET 2	10	2
305912R11	CROSS SECTIONS - ORIGIN DRIVE & PRESIDENT ROAD	11	1
305912R12	CROSS SECTIONS - WANDERER ROAD	12	1
305912R13	CROSS SECTIONS - ALPACA DRIVE	13	1
305912R14	INTERSECTION DETAIL - SHEET 1 OF 5	14	6
305912R15	INTERSECTION DETAIL - SHEET 2 OF 5	15	2
305912R16	INTERSECTION DETAIL - SHEET 3 OF 5	16	1
305912R17	INTERSECTION & ROCK RETAINING WALL DETAILS SHEET 4 OF 5	17	2
305912R18	INTERSECTION DETAIL - SHEET 5 OF 5	18	1
305912R19	DRAINAGE LONGSECTIONS - SHEET 1 OF 9	19	1
305912R20	DRAINAGE LONGSECTIONS - SHEET 2 OF 9	20	1
305912R21	DRAINAGE LONGSECTIONS - SHEET 3 OF 9	21	3
305912R22	DRAINAGE LONGSECTIONS - SHEET 4 OF 9	22	1
305912R23	DRAINAGE LONGSECTIONS - SHEET 5 OF 9	23	1
305912R24	DRAINAGE LONGSECTIONS - SHEET 6 OF 9	24	1
305912R25	DRAINAGE LONGSECTIONS - SHEET 7 OF 9	25	1
305912R26	DRAINAGE LONGSECTIONS - SHEET 8 OF 9	26	2
305912R27	DRAINAGE LONGSECTIONS - SHEET 9 OF 9	27	1
305912R28	PIT SCHEDULE	28	2
305912R29	TYPICAL CROSS SECTIONS	29	1
305912R30	PAVEMENT DETAILS	30	1
305912R31	TYPICAL DETAILS	31	1
305912R32	SIGNAGE, LINEMARKING & CARPARKING PLAN - SHEET 1 OF 2	32	2
305912R33	SIGNAGE, LINEMARKING & CARPARKING PLAN - SHEET 2 OF 2	33	1
305912R34	DRAINAGE OUTFALL PLAN	34	1

LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN, VALVE AND HYDRANT		
WATER RECYCLED		
UNDERGROUND ELECTRICITY		
OVERHEAD ELECTRICITY & POLE		
TELECOMMUNICATIONS & SERVICE PIT		
OPTIC FIBRE		
OVERHEAD TELECOMMUNICATIONS		
GAS MAIN		
BRANCH SEWER & MAINTENANCE STRUCTURE		
SEWER & MAINTENANCE STRUCTURE		
SEWER RISING MAIN		
CENTRAL INVERT		
COUNCIL STORMWATER DRAIN AND PIT		
STORM WATER DRAINAGE PROPERTY INLETS		
COUNCIL STORM WATER PITS		
HOUSE DRAIN		
AG DRAIN AND FLUSHER		
MWC STORM WATER DRAIN & PIT		
MWC STORM WATER PITS		
STORM WATER DRAINAGE PIT NUMBER		
GAS & WATER CONDUITS		
CONCRETE VEHICLE CROSSING		
PAVEMENT SAWCUT LINE		
RIDGE / CHANGE OF GRADE LINE		
SURFACE CONTOUR MINOR		
SURFACE CONTOUR MAJOR		
SURFACE LEVEL		
BATTER LEVEL (TOP / TOE)		
RETAINING WALL LEVEL (TOP/BOTTOM)		
EARTHWORKS GRADE		
SIGN AND POST		
LIGHT & POLE (BY OTHERS)		
STREET SIGN		
PERMANENT SURVEY MARK		
TEMPORARY BENCH MARK		
BOLLARD		
STREET LIGHT		
ROAD CHAINAGES		
LOT CHAINAGES		
SETOUT POINT		
LIMIT OF WORKS		
BATTER		
EXCAVATION GREATER THAN 0.20m		
FILLING GREATER THAN 0.20m		
ROCK BEACHING		
RETAINING WALL		
FENCE - TREE PROTECTION		
FENCE - VEHICLE EXCLUSION		
FENCES		
GUARD RAIL		
TREE (& SURVEYED CANOPY) TO BE RETAINED		
TREE TO BE PROTECTED		
TREE TO BE REMOVED		
VEGETATION LINE		
FOOTPATH		
TACTILE GROUND SURFACE INDICATOR		
KERB TRANSITION		

Rev	Amendments	Approved	Date
9	SHEET INDEX UPDATED. SHEETS 1, 2 & 14	M.L.	20/01/21
8	SHEET INDEX UPDATED. SHEETS 1, 2 & 3	M.L.	15/1/21
7	SHEET INDEX UPDATED. SHEETS 1, 2 & 14	M.L.	21/12/20
6	SHEET INDEX UPDATED. SHEETS 1, 2 & 3	M.L.	08/12/20
5	SHEET INDEX UPDATED. SHEETS 1 & 14	M.L.	20/10/20
4	SHEET INDEX UPDATED. SHEETS 1, 14 & 15	M.L.	16/10/20
3	SHEET INDEX UPDATED	M.L.	24/08/20
2	SHEET INDEX UPDATED	M.L.	10/08/20

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Designed
R. WEINBER
Authorised
M. LETSON

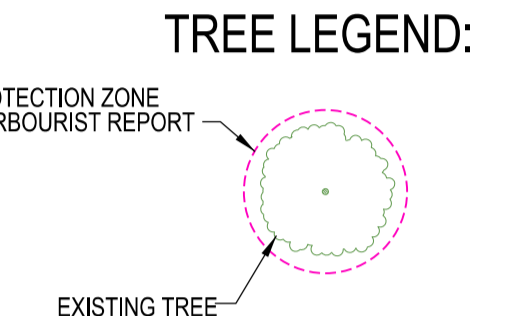
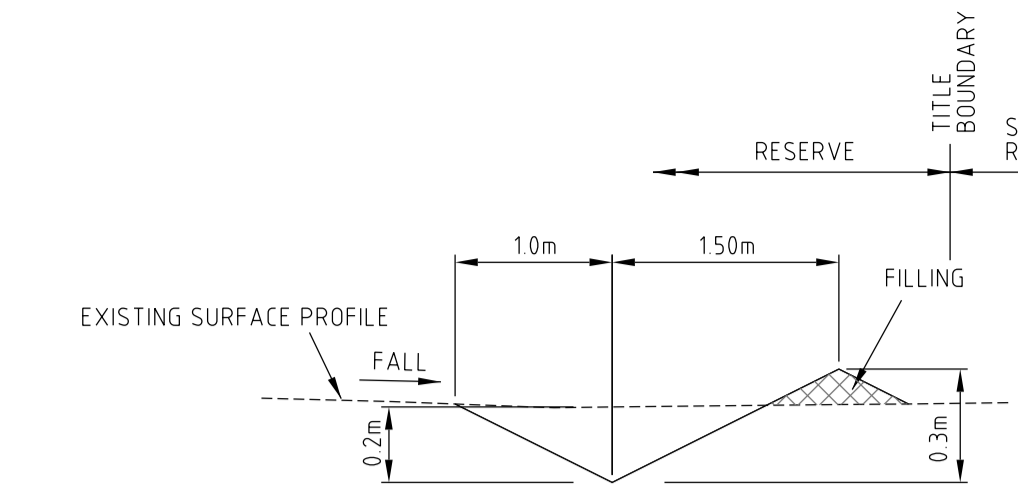
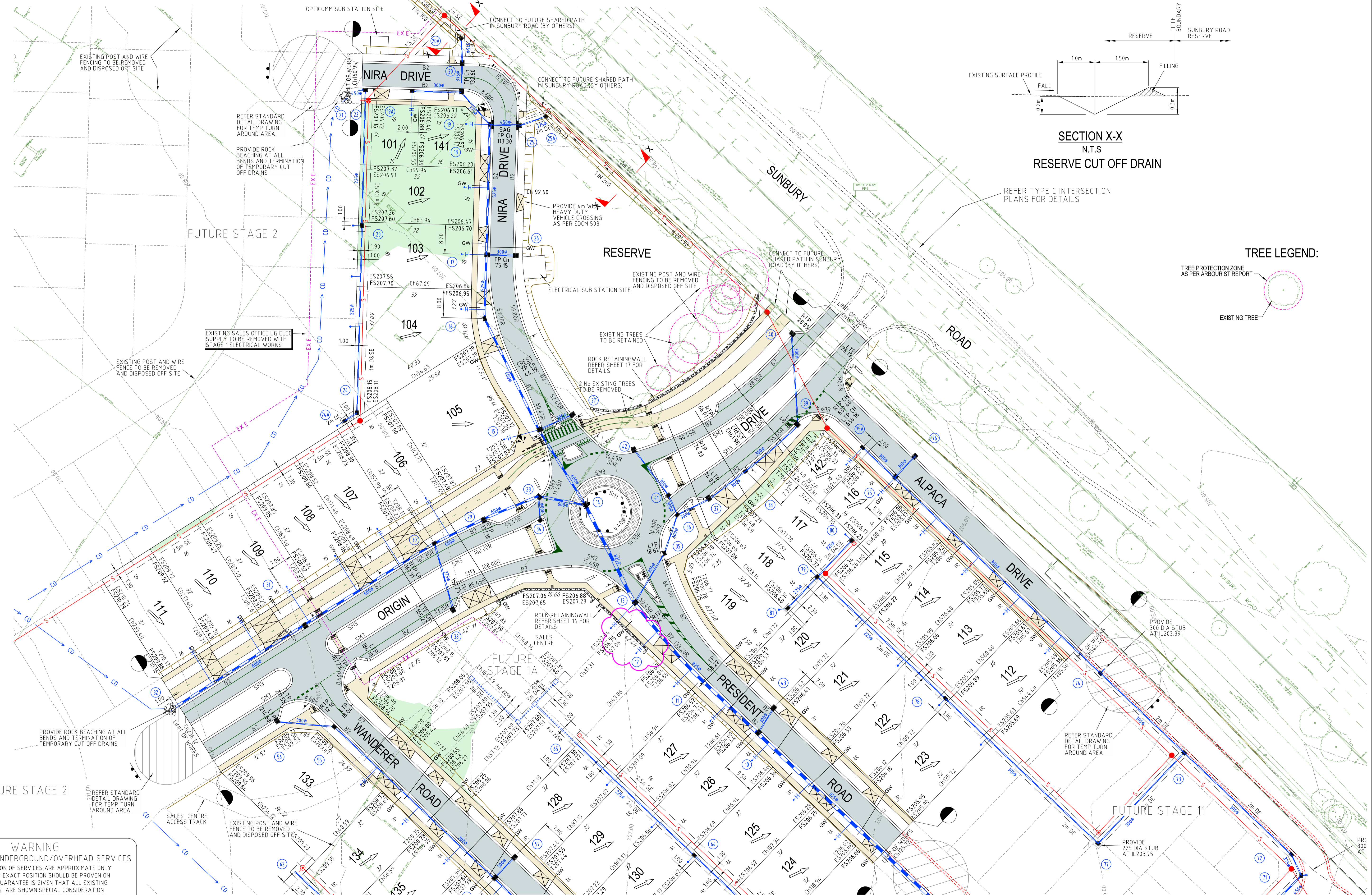


Checked
D. CAMERON
Date
10/04/19

REDSTONE ESTATE STAGE 1 FACE SHEET

VILLAWOOD PROPERTIES
HUME CITY COUNCIL

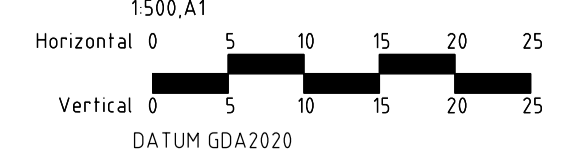
CONSTRUCTION Drg No **305912R01** Rev **9**



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.

FOR CONTINUATION REFER SHEET 3

6	ROCK RETAINING WALL ADDED EXTENDED - SALES CENTRE SITE	M.L.	20/01/21
5	LOT 126 DRIVEWAY COMBINED WITH LOT 127 AS DOUBLE, G/W CONDUIT ADJUSTED	M.L.	15/1/21
4	ROCK RETAINING WALL ADDED - SALES CENTRE SITE	M.L.	21/12/20
3	LOT 125 DRIVEWAY COMBINED WITH LOT 124 AS DOUBLE, G/W CONDUIT ADJUSTED	M.L.	08/12/20
2	LOT 142 ADDED, PIT 75A ADDED, PIT 19A MOVED. LOT 101 GW ADDED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
Rev	Amendments	Approved	Date



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Communities Designed for Living
Designed
R. WEINBER
Authorised
M. LETSON

Your world awaits
Checked
D. CAMERON
Date
10/04/19

REDSTONE ESTATE
STAGE 1
ROAD & DRAINAGE FACE PLAN
SHEET 1 OF 2
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R02** Rev **6**



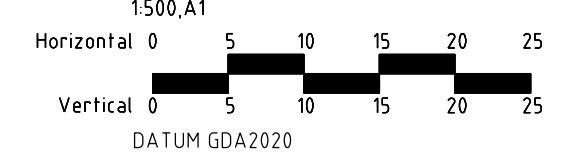
FOR CONTINUATION REFER SHEET 2



FOR CONTINUATION REFER SHEET 34

WARNING
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Rev	Amendments	Approved	Date
3	LOT 126 DRIVEWAY COMBINED WITH LOT 127 AS DOUBLE, G/W CONDUIT ADJUSTED	M.L.	15/1/21
2	LOT 125 DRIVEWAY COMBINED WITH LOT 124 AS DOUBLE, G/W CONDUIT ADJUSTED	M.L.	08/12/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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Designed
 R. WEINBER

Checked
 D. CAMERON

Authorised
 M. LETSON

Date
 10/04/19

REDSTONE ESTATE
STAGE 1
ROAD & DRAINAGE FACE PLAN
SHEET 2 OF 2
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

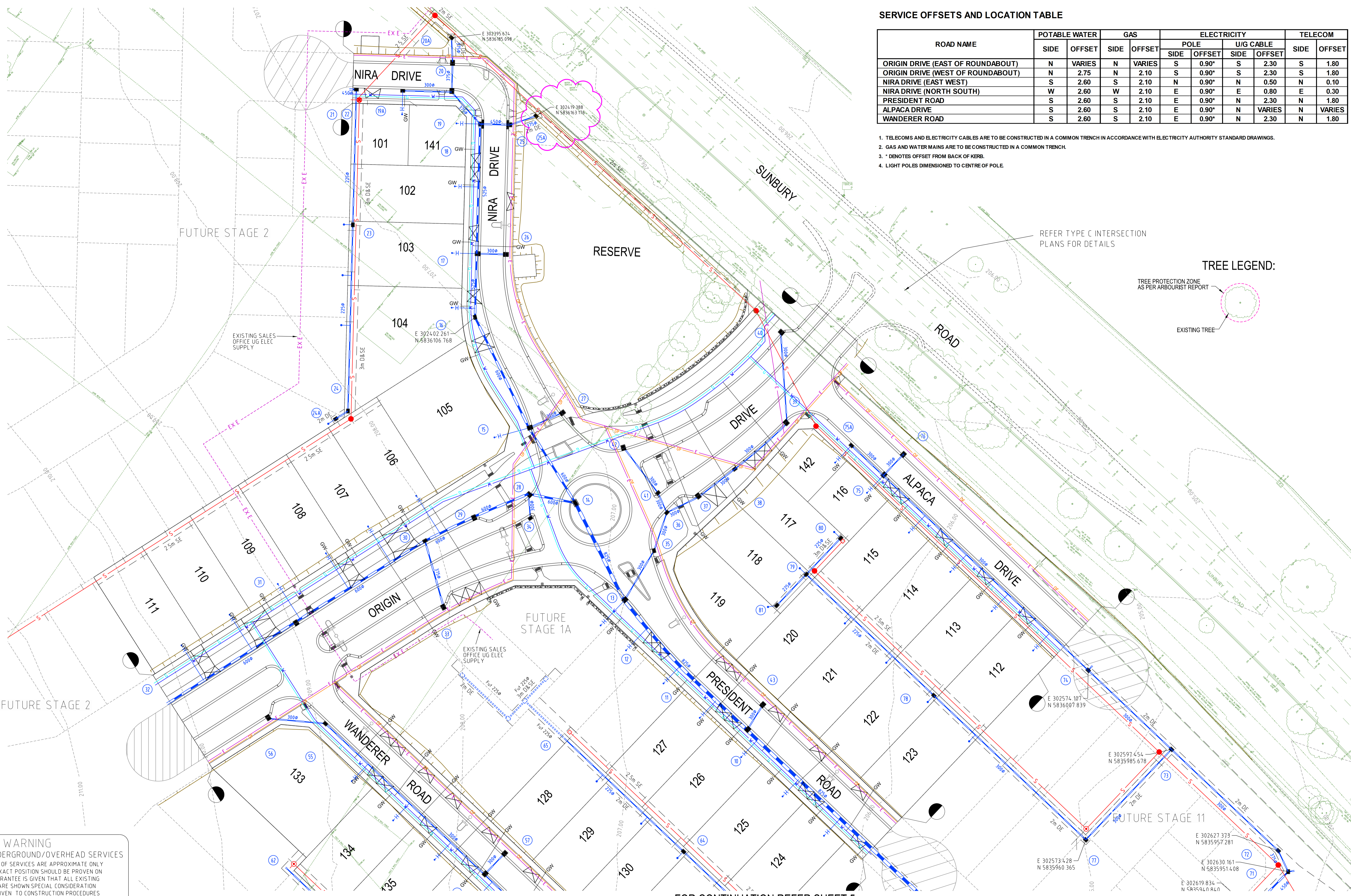
CONSTRUCTION Drg No 305912R03 Rev 3



SERVICE OFFSETS AND LOCATION TABLE

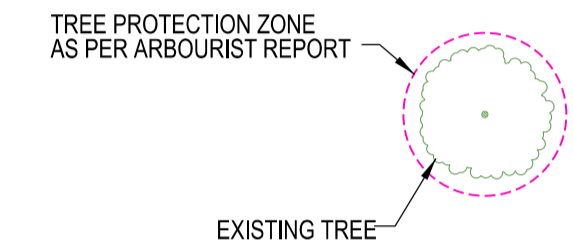
ROAD NAME	POTABLE WATER		GAS		ELECTRICITY				TELECOM	
	SIDE	OFFSET	SIDE	OFFSET	POLE SIDE	POLE OFFSET	U/G CABLE SIDE	U/G CABLE OFFSET	SIDE	OFFSET
ORIGIN DRIVE (EAST OF ROUNDABOUT)	N	VARIES	N	VARIES	S	0.90*	S	2.30	S	1.80
ORIGIN DRIVE (WEST OF ROUNDABOUT)	N	2.75	N	2.10	S	0.90*	S	2.30	S	1.80
NIRA DRIVE (EAST WEST)	S	2.60	S	2.10	N	0.90*	N	0.50	N	0.10
NIRA DRIVE (NORTH SOUTH)	W	2.60	W	2.10	E	0.90*	E	0.80	E	0.30
PRESIDENT ROAD	S	2.60	S	2.10	E	0.90*	N	2.30	N	1.80
ALPACA DRIVE	S	2.60	S	2.10	E	0.90*	N	VARIES	N	VARIES
WANDERER ROAD	S	2.60	S	2.10	E	0.90*	N	2.30	N	1.80

1. TELECOMS AND ELECTRICITY CABLES ARE TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRAWINGS.
2. GAS AND WATER MAINS ARE TO BE CONSTRUCTED IN A COMMON TRENCH.
3. * DENOTES OFFSET FROM BACK OF KERB.
4. LIGHT POLES DIMENSIONED TO CENTRE OF POLE.



REFER TYPE C INTERSECTION PLANS FOR DETAILS

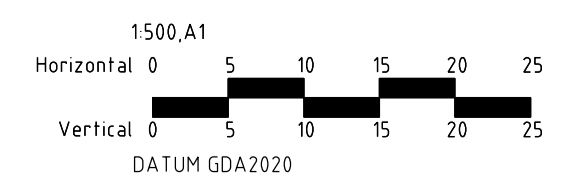
TREE LEGEND:



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.

FOR CONTINUATION REFER SHEET 5

Rev	Amendments	Approved	Date
3	PIT 25A MOVED CLEAR OF SEWER	M.L.	24/08/20
2	LOT 142 ADDED, PIT 75A ADDED, PIT 19A MOVED, LOT 101 GW ADDED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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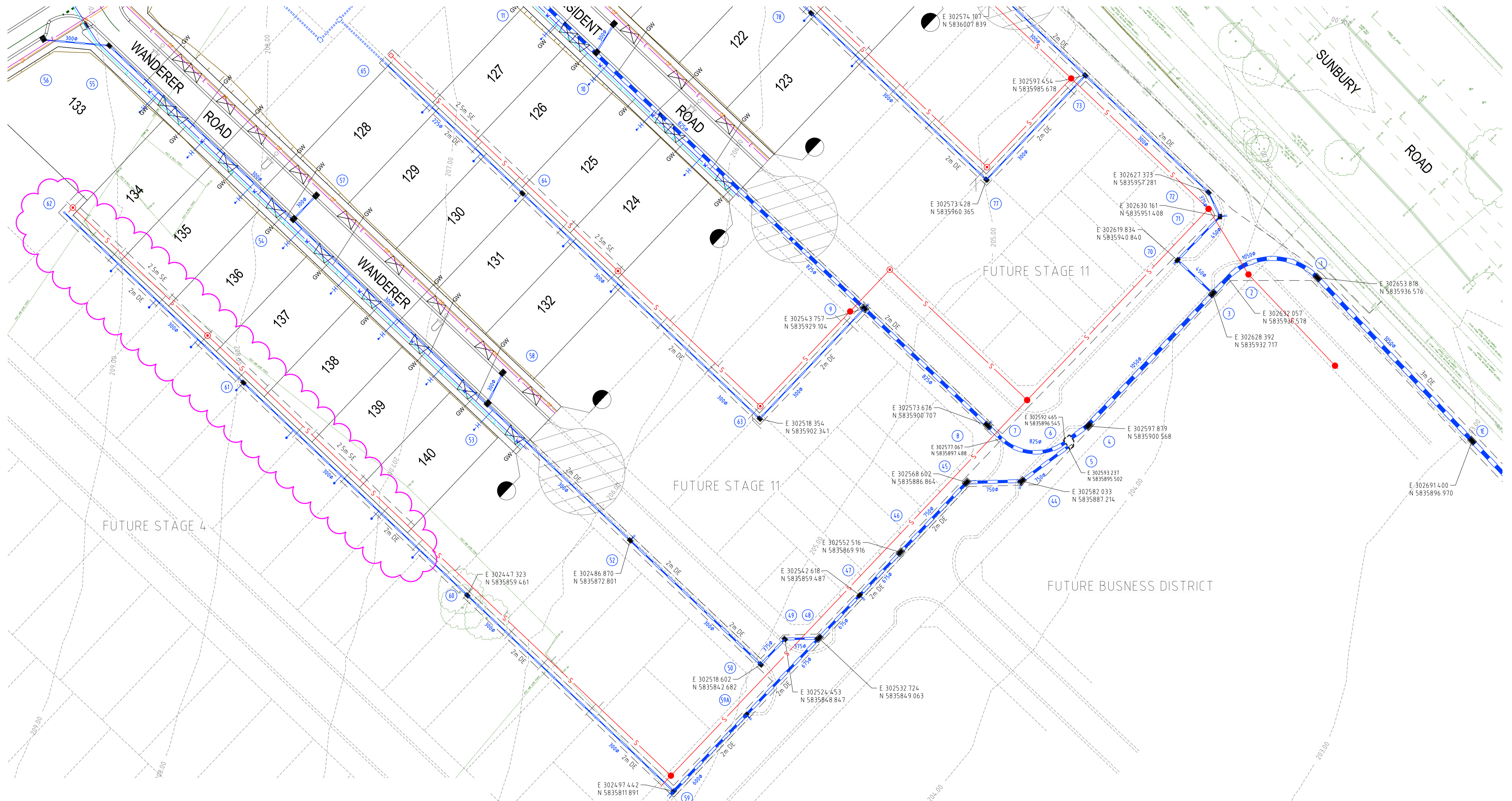
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Authorised by M. LETSON

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Date 10/04/19

REDSTONE ESTATE
STAGE 1
ROAD & DRAINAGE SERVICES PLAN
SHEET 1 OF 2
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R04** Rev **3**



FOR CONTINUATION REFER SHEET 4



FOR CONTINUATION REFER SHEET 34

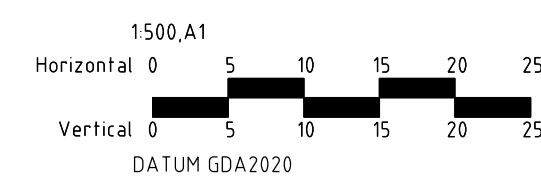
SERVICE OFFSETS AND LOCATION TABLE

ROAD NAME	POTABLE WATER		GAS		ELECTRICITY				TELECOM	
	SIDE	OFFSET	SIDE	OFFSET	POLE SIDE	POLE OFFSET	U/G CABLE SIDE	U/G CABLE OFFSET	SIDE	OFFSET
ORIGIN DRIVE (EAST OF ROUNDABOUT)	N	VARIES	N	VARIES	S	0.90*	S	2.30	S	1.80
ORIGIN DRIVE (WEST OF ROUNDABOUT)	N	2.75	N	2.10	S	0.90*	S	2.30	S	1.80
NIRA DRIVE (EAST WEST)	S	2.60	S	2.10	N	0.90*	N	0.50	N	0.10
NIRA DRIVE (NORTH SOUTH)	W	2.60	W	2.10	E	0.90*	E	0.80	E	0.30
PRESIDENT ROAD	S	2.60	S	2.10	E	0.90*	N	2.30	N	1.80
ALPACA DRIVE	S	2.60	S	2.10	E	0.90*	N	VARIES	N	VARIES
WANDERER ROAD	S	2.60	S	2.10	E	0.90*	N	2.30	N	1.80

- TELECOMS AND ELECTRICITY CABLES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRAWINGS.
- GAS AND WATER MAINS ARE TO BE CONSTRUCTED IN A COMMON TRENCH.
- * DENOTES OFFSET FROM BACK OF KERB.
- LIGHT POLES DIMENSIONED TO CENTRE OF POLE.

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
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Rev	Amendments	Approved	Date
2	DRAINAGE PROP INLETS ALIGNED TO FUTURE LOT LAYOUT REAR LOTS 134 TO 140	M.L.	24/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



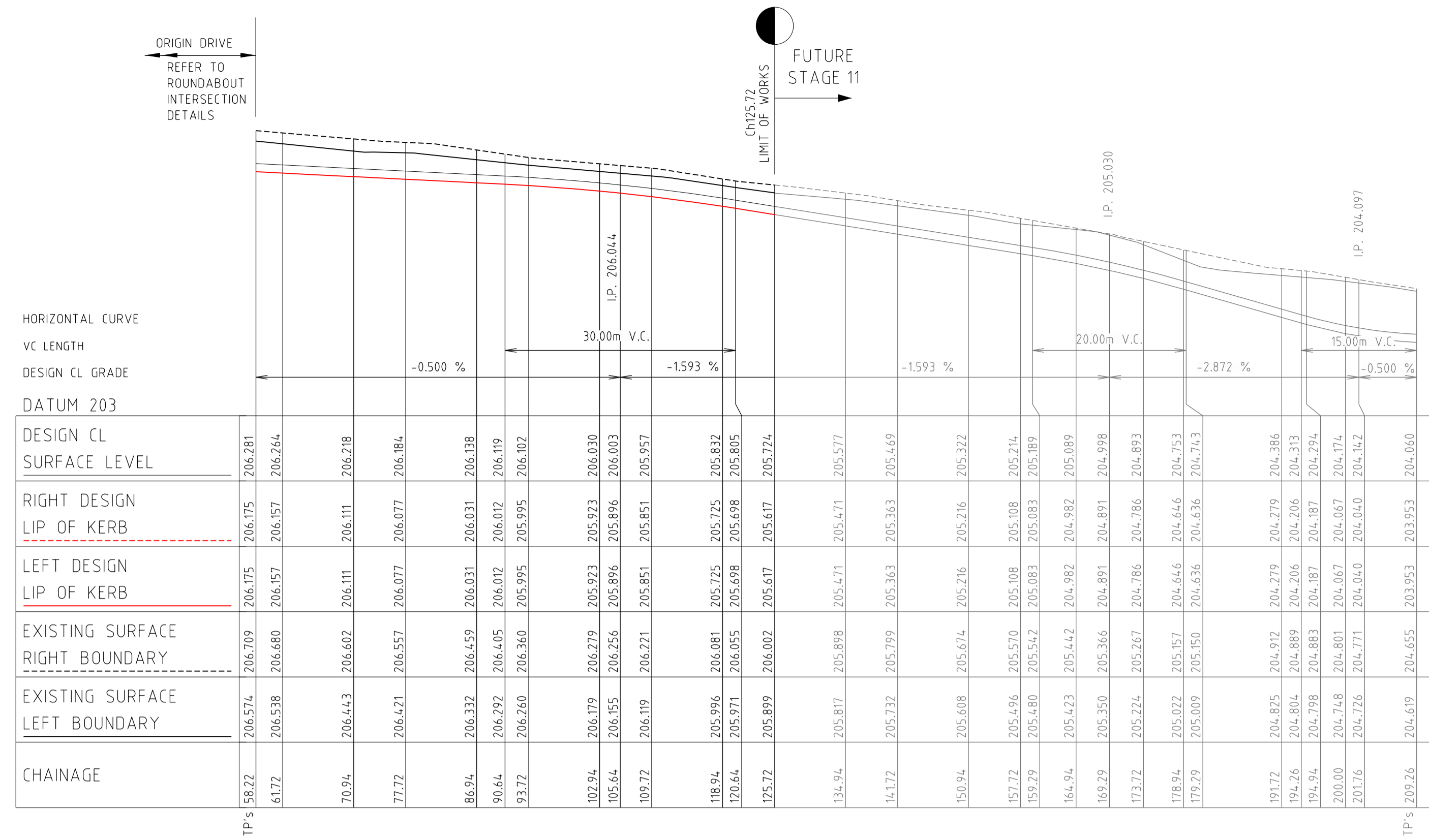
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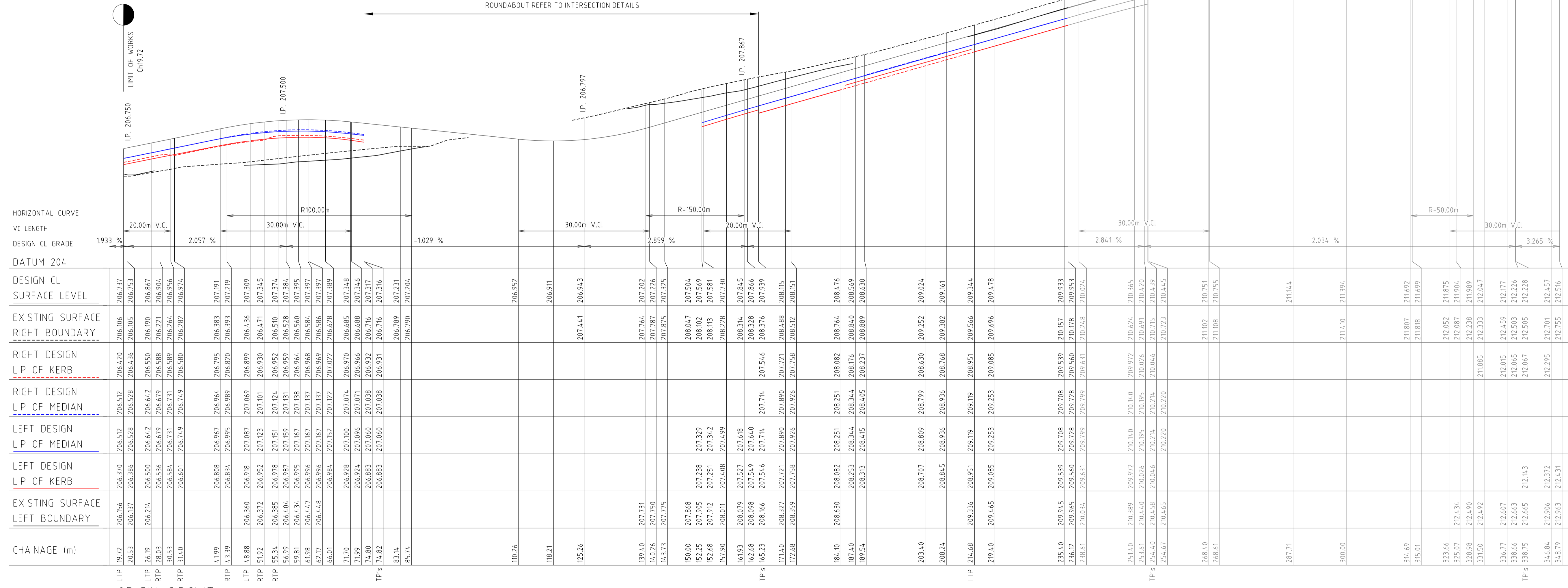
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Authorised by M. LETSON

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Date 10/04/19

REDSTONE ESTATE
STAGE 1
ROAD & DRAINAGE SERVICES PLAN
SHEET 2 OF 2
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R05** Rev **2**

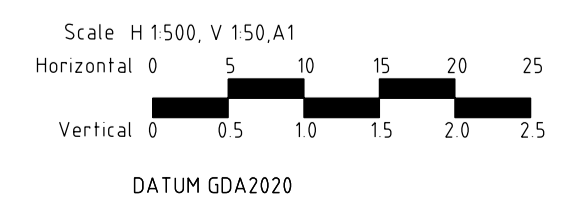


PRESIDENT ROAD



ORIGIN CIRCUIT

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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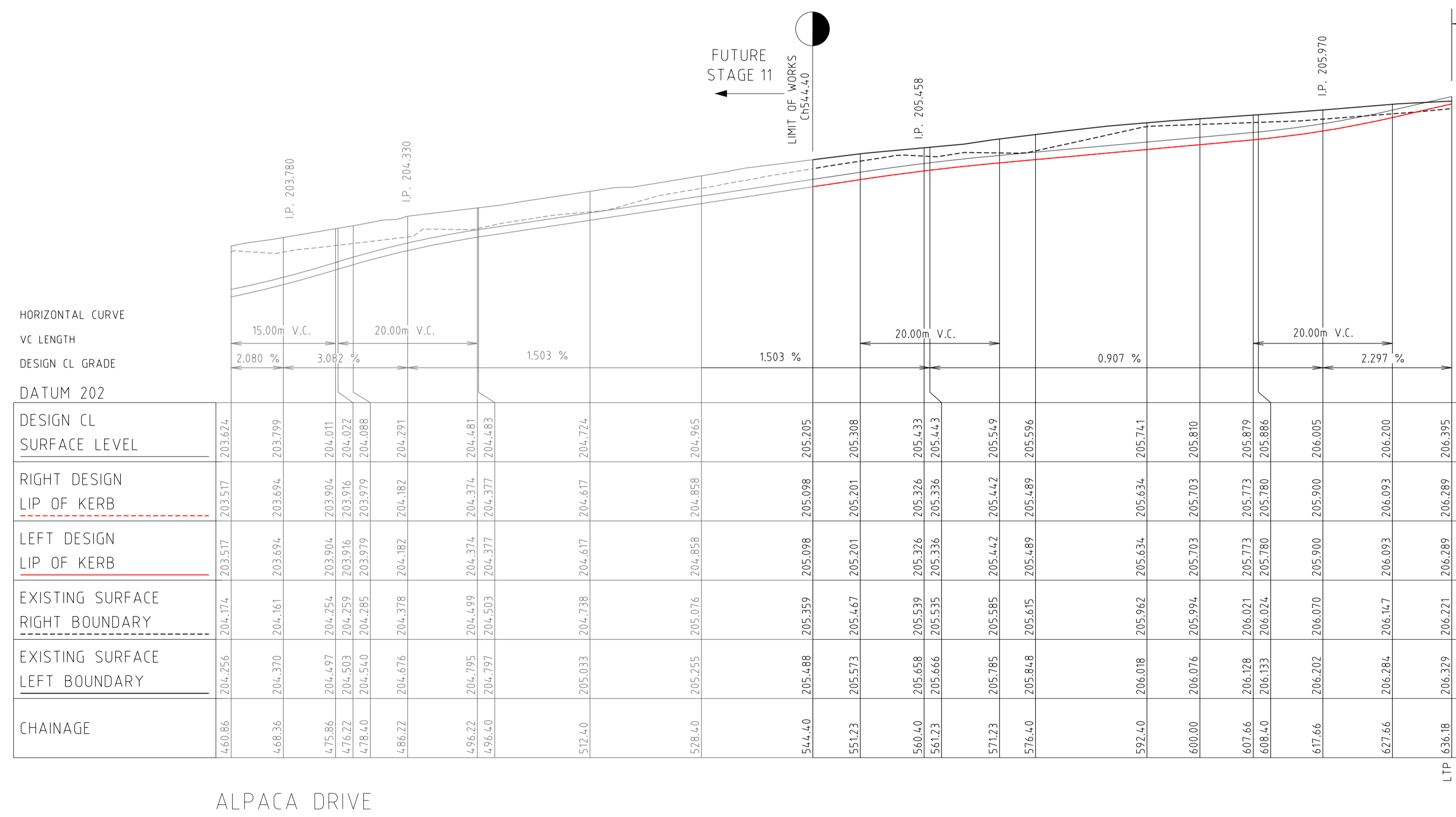
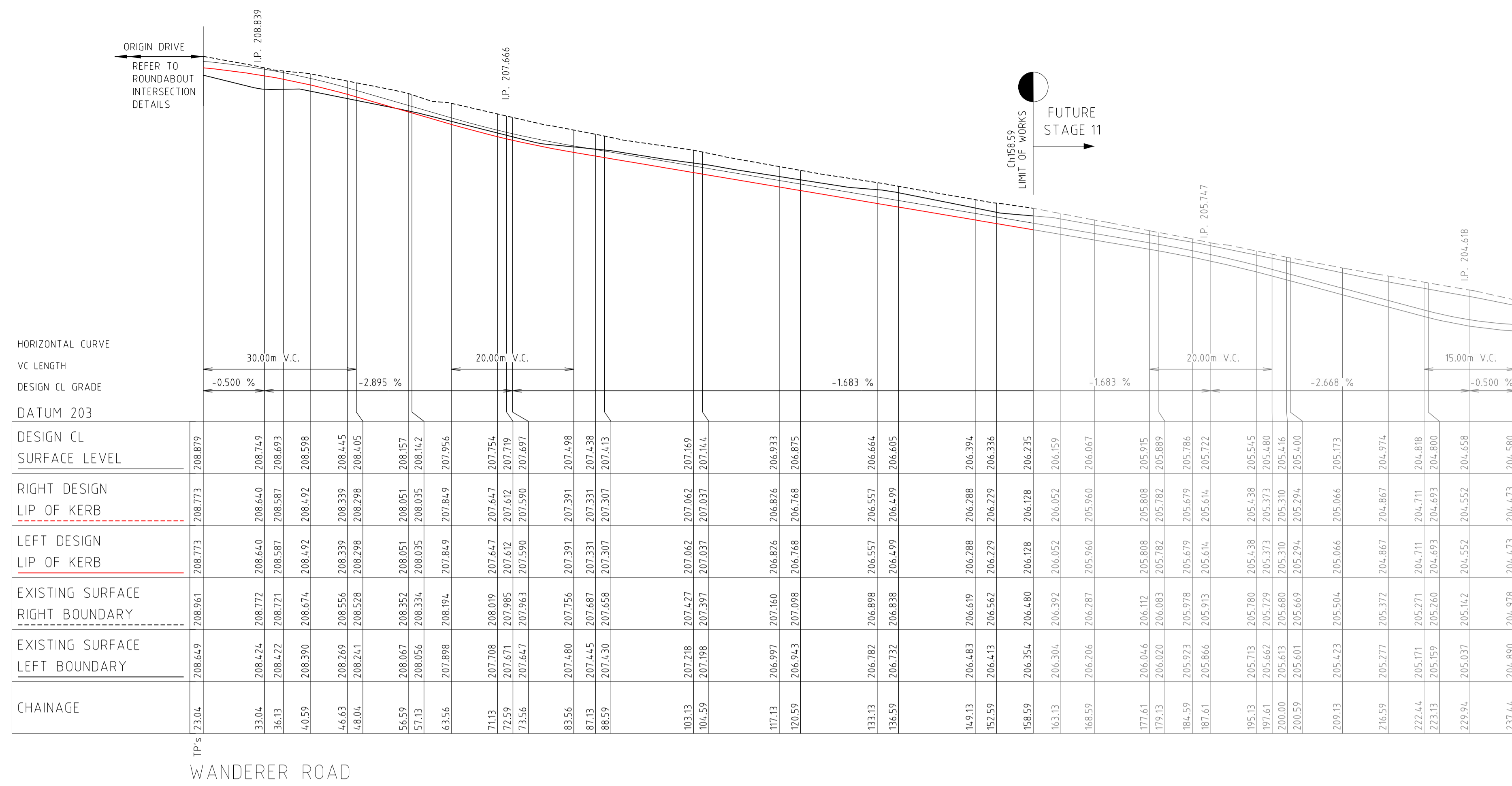
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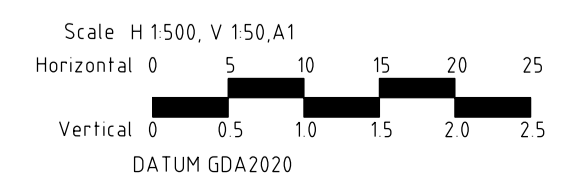
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REDSTONE ESTATE STAGE 1
LONGITUDINAL SECTION - ORIGIN DRIVE & PRESIDENT ROAD
VILLAWOOD PROPERTIES
HUME CITY COUNCIL

CONSTRUCTION Drg No 305912R06 Rev 1



1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
Rev	Amendments	Approved	Date



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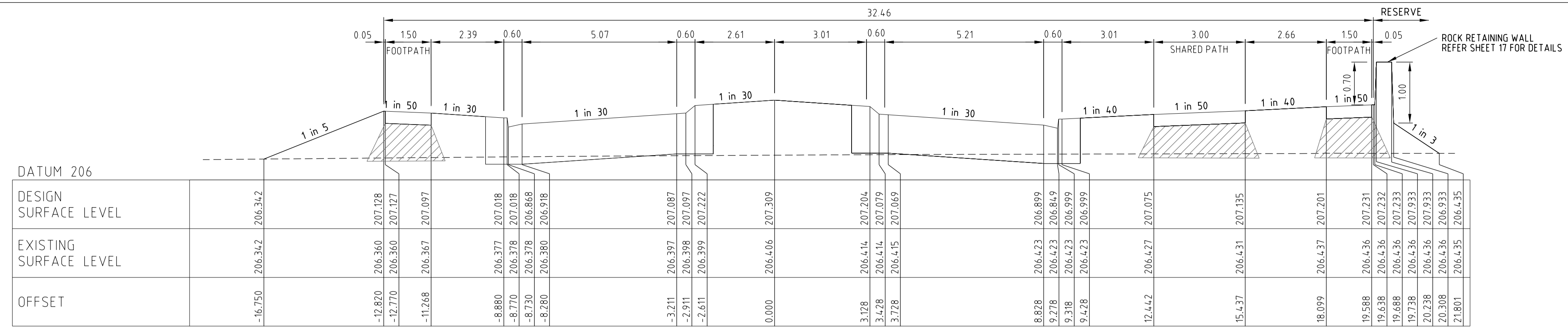
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Communities Designed for Living
Designed by R. WEINBER
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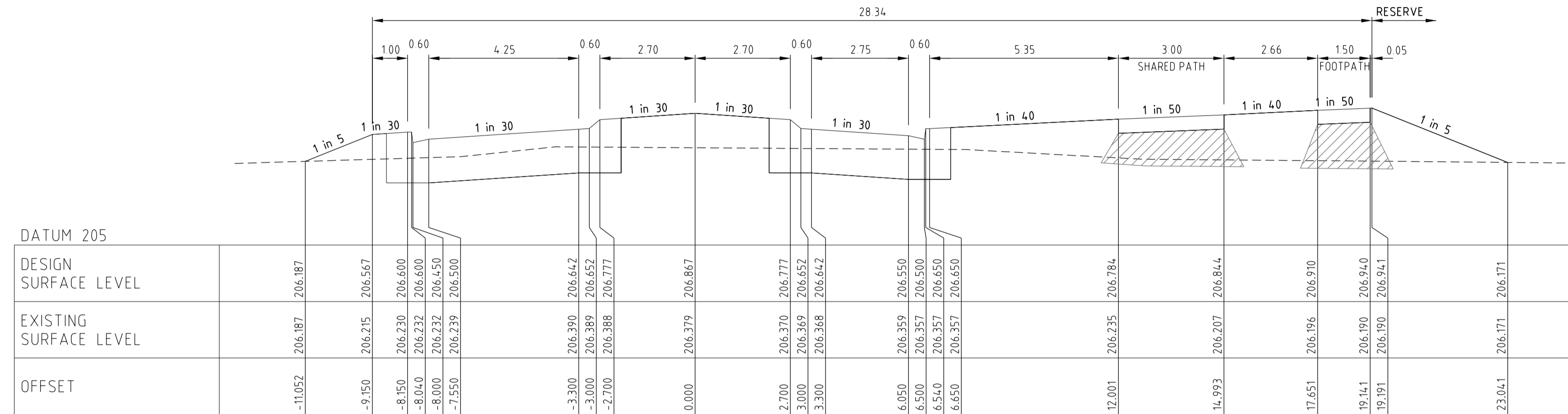
REDSTONE ESTATE
STAGE 1
LONGITUDINAL SECTION - WANDERER ROAD,
SPECKLE LANE
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION
Drg No 305912R07
Rev 1

STRUCTURAL FILL
IN ACCORDANCE
WITH AS3798-2007,
LEVEL 1.



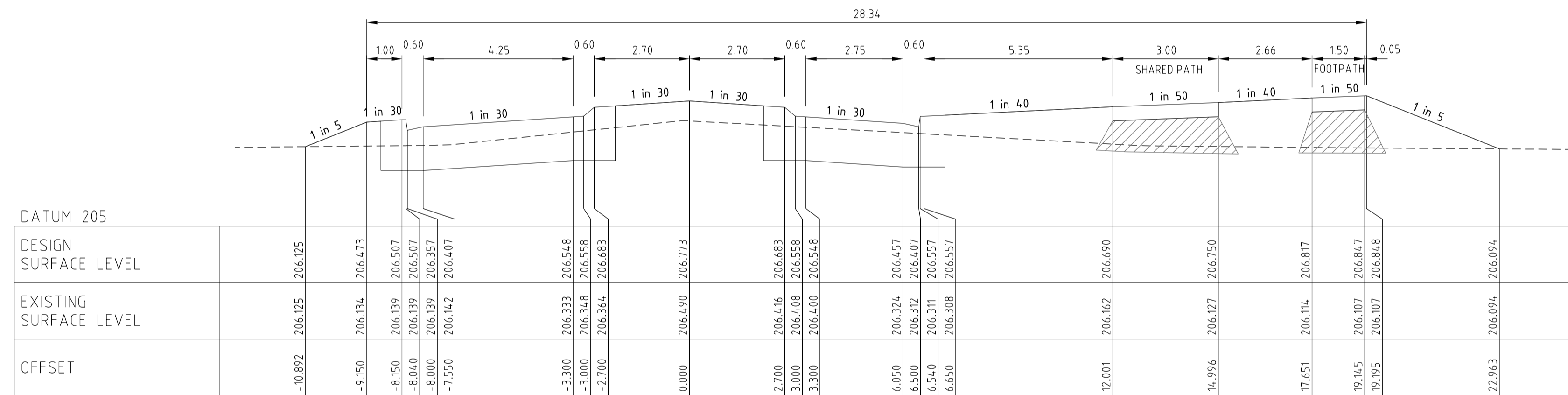
ORIGIN DRIVE

Ch 48.88



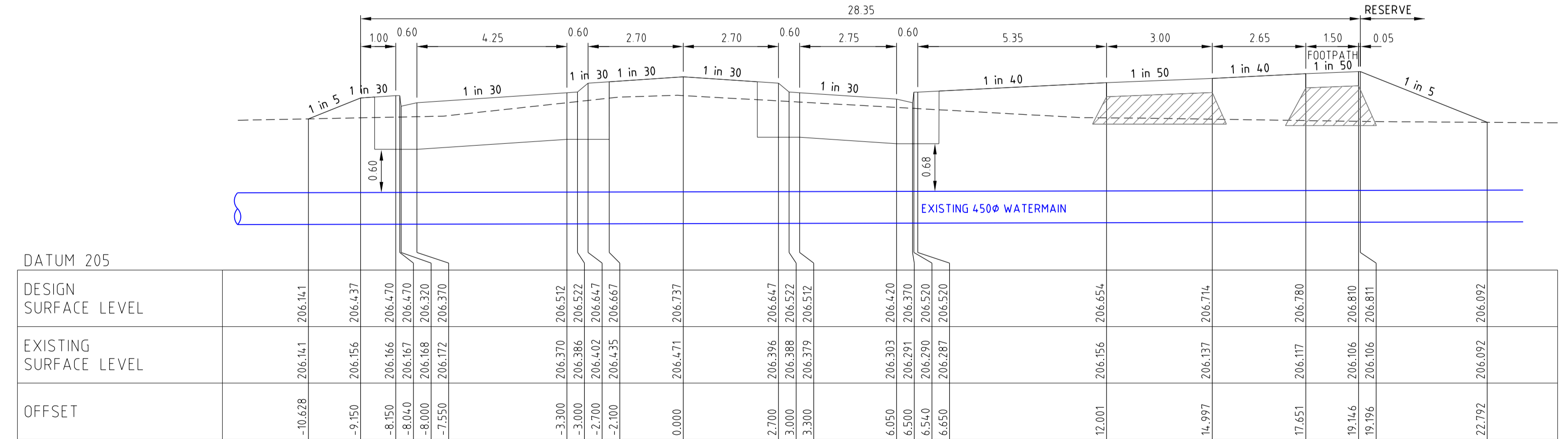
ORIGIN DRIVE

Ch 26.19



ORIGIN DRIVE

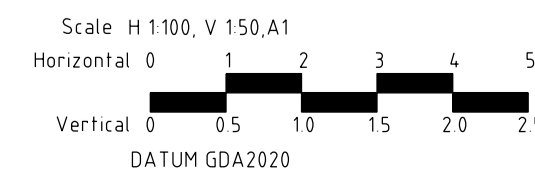
Ch 21.55



ORIGIN DRIVE

Ch 19.72

Rev	Description	Approved	Date
2	Ch 74.83 RETAINING WALL REAR FACE HEIGHT AMENDED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



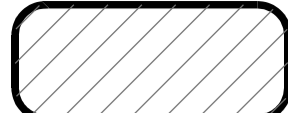
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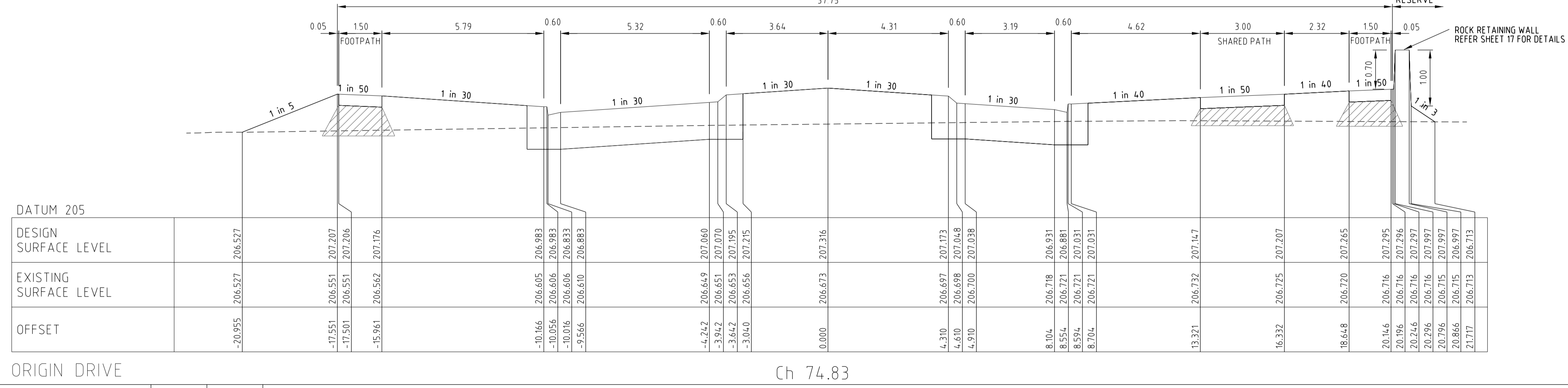
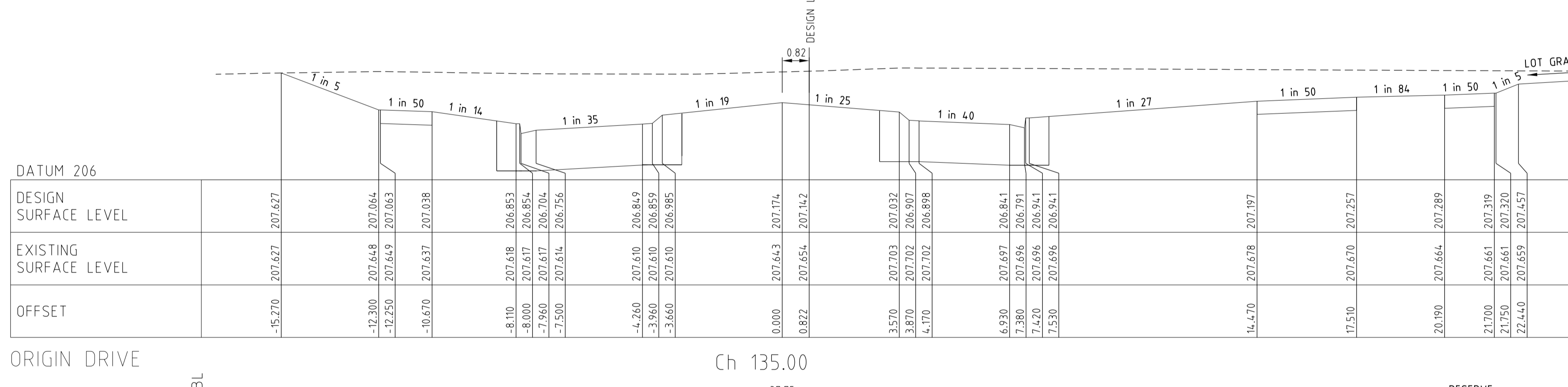
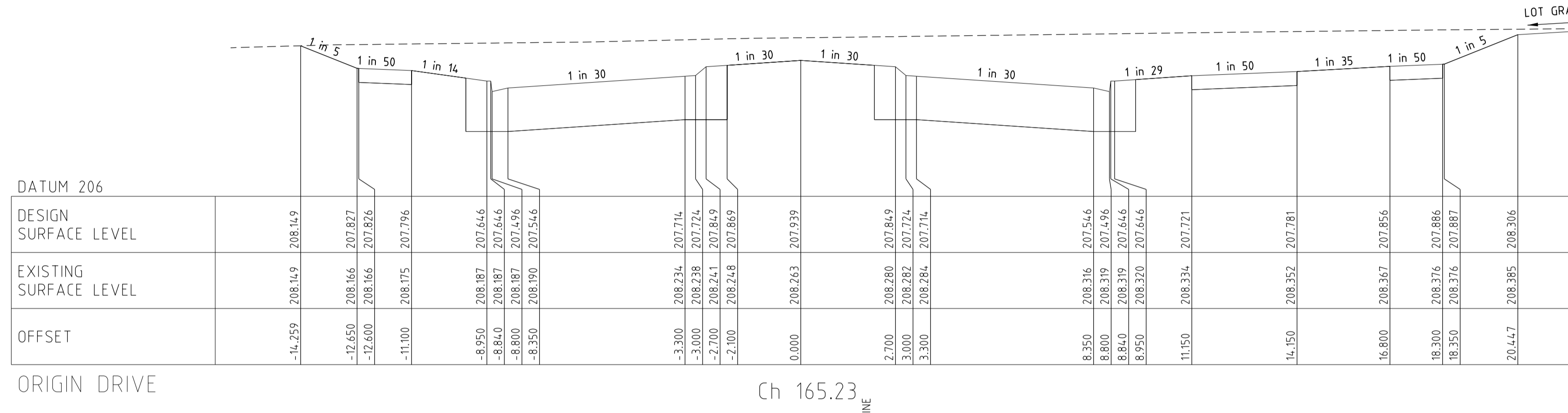
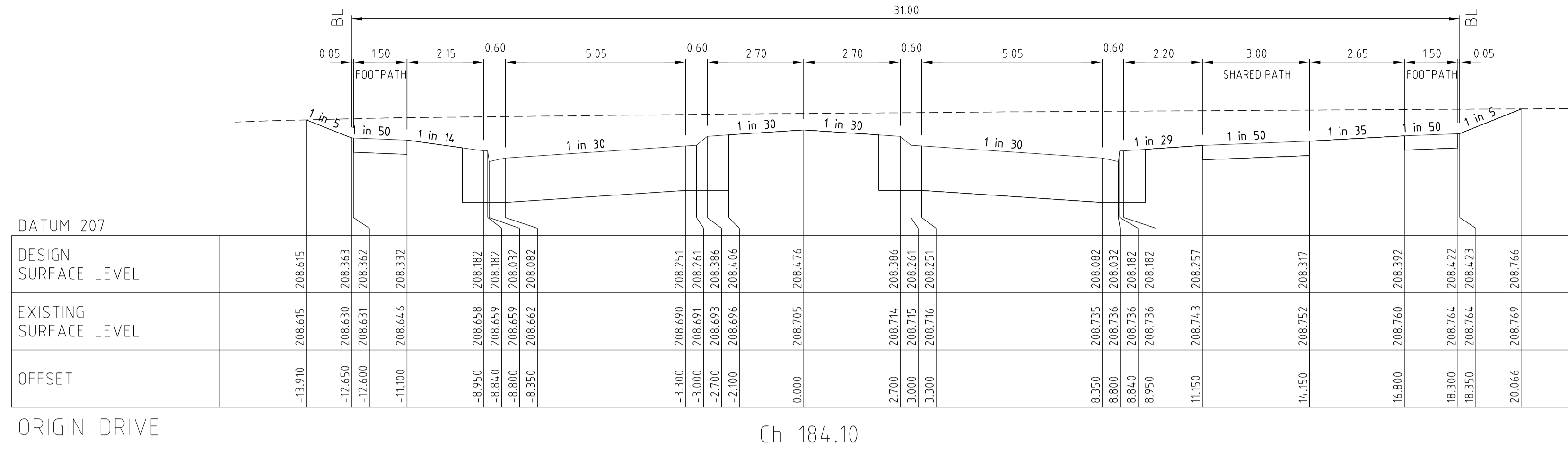
villawood properties
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M. LETSON

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D. CAMERON
Date
10/04/19

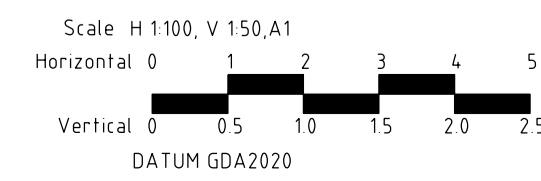
REDSTONE ESTATE
STAGE 1
CROSS SECTIONS - ORIGIN DRIVE
SHEET 1 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R09** Rev **2**



STRUCTURAL FILL
IN ACCORDANCE
WITH AS3798-2007,
LEVEL 1.



Rev	Description	Approved	Date
2	Ch 74.83 RETAINING WALL REAR FACE HEIGHT AMENDED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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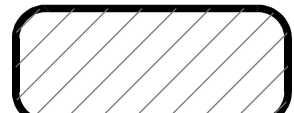
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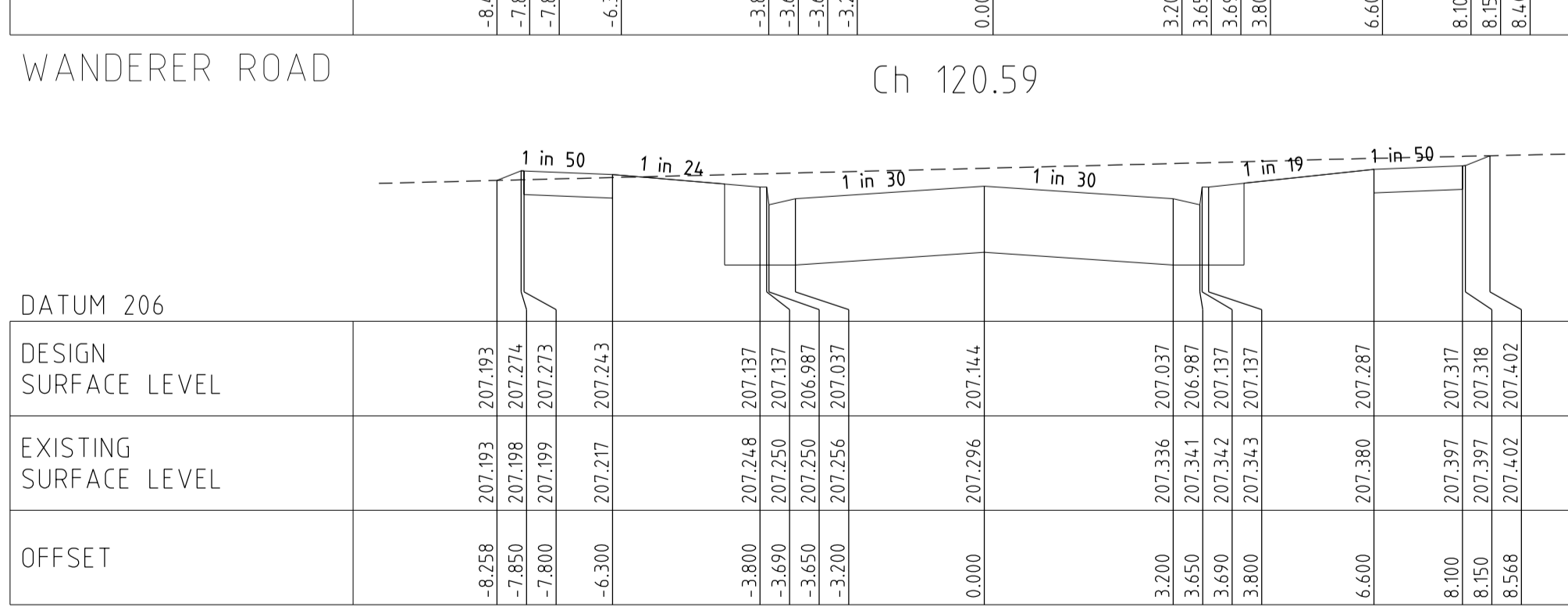
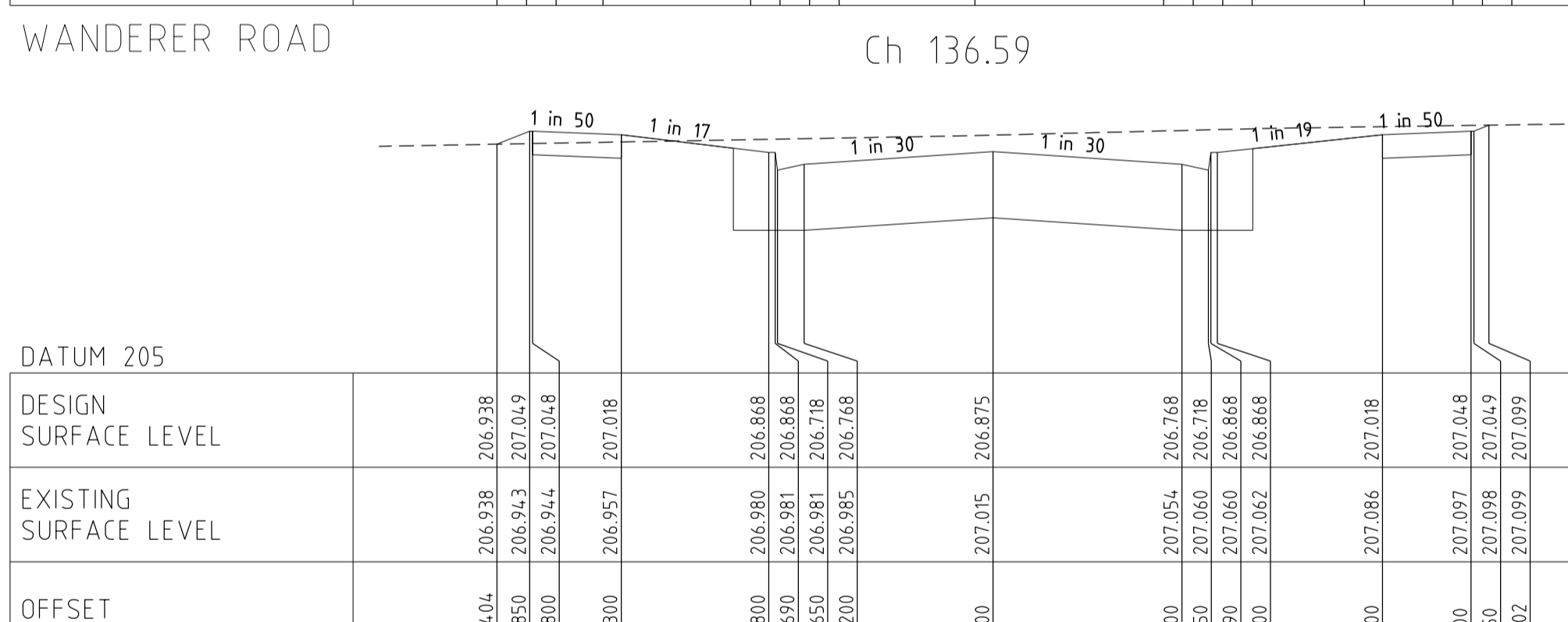
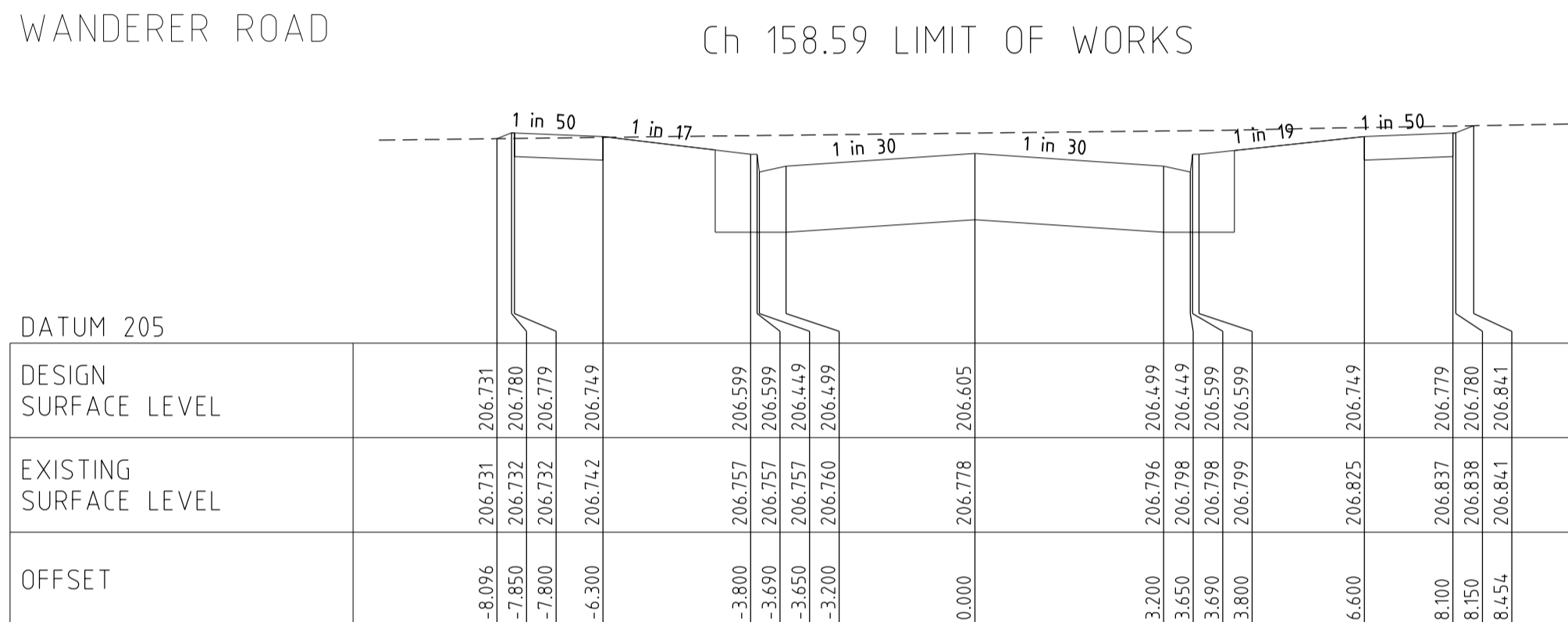
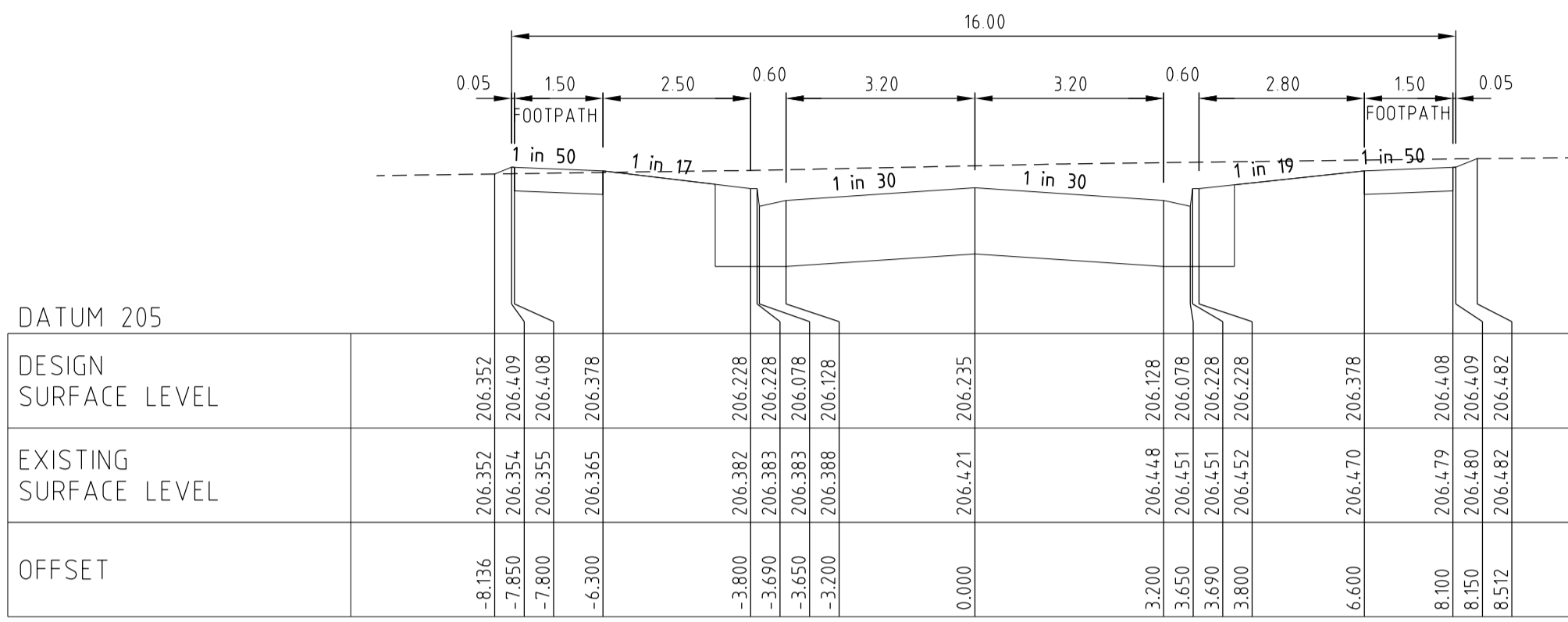
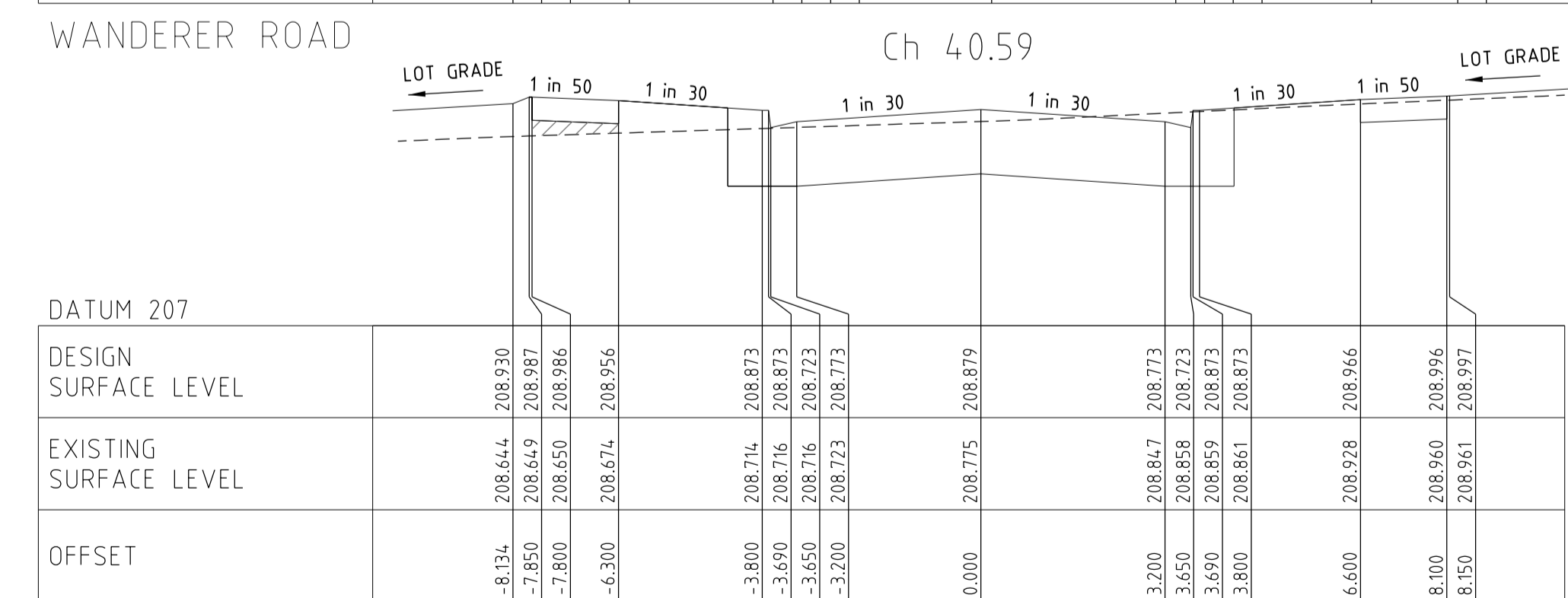
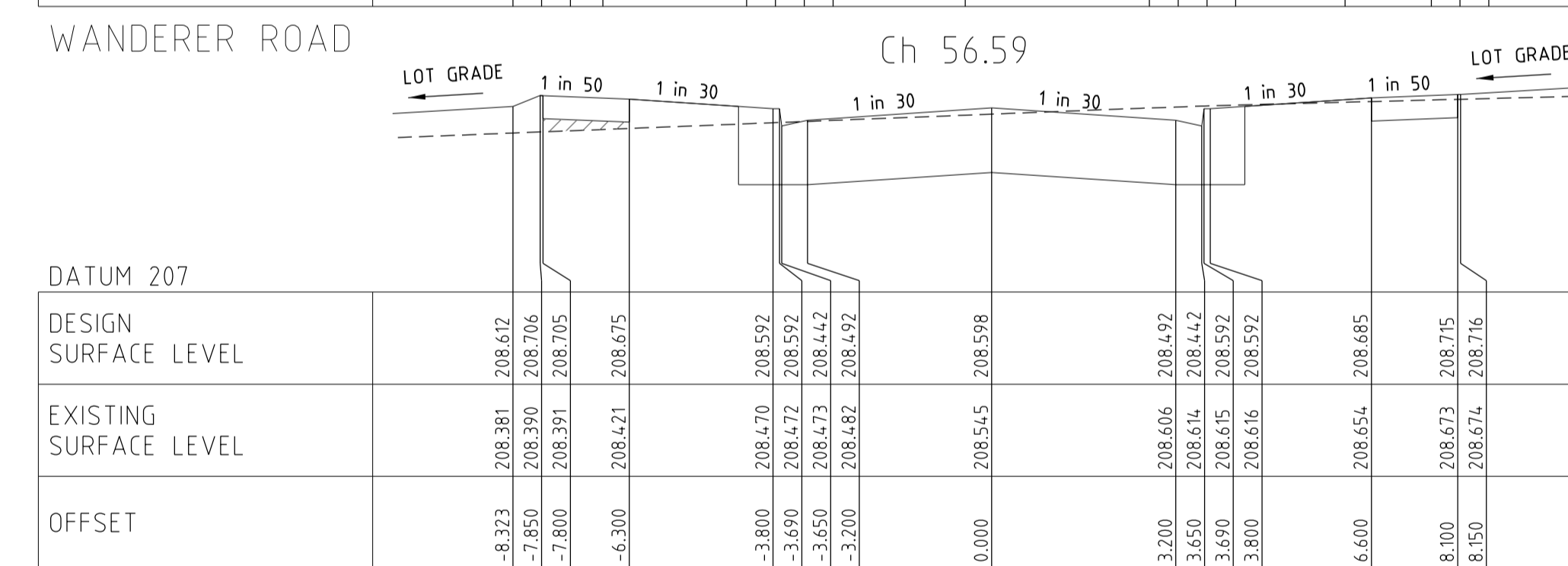
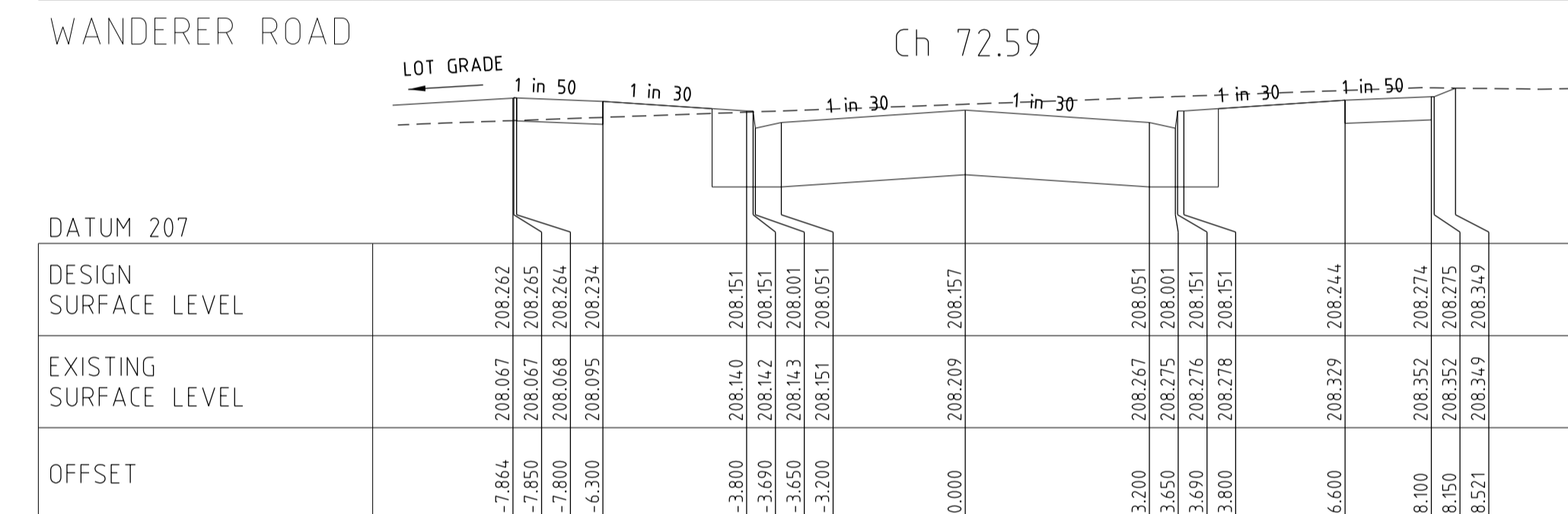
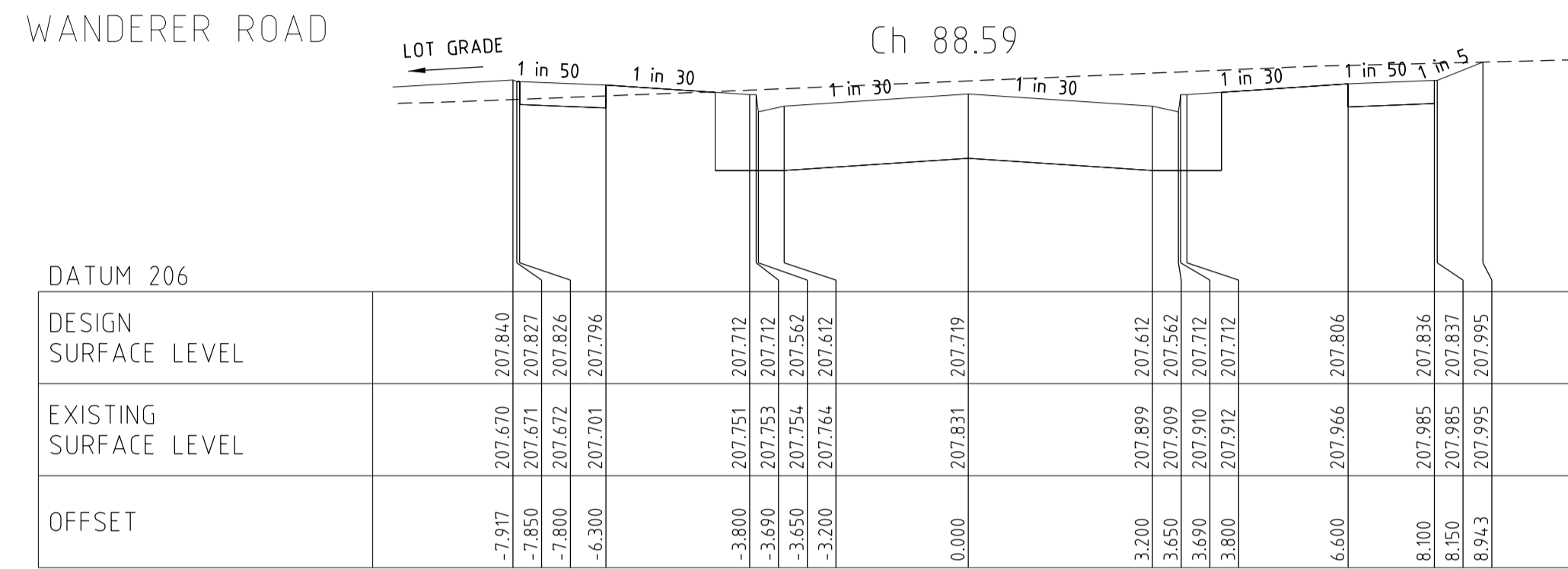
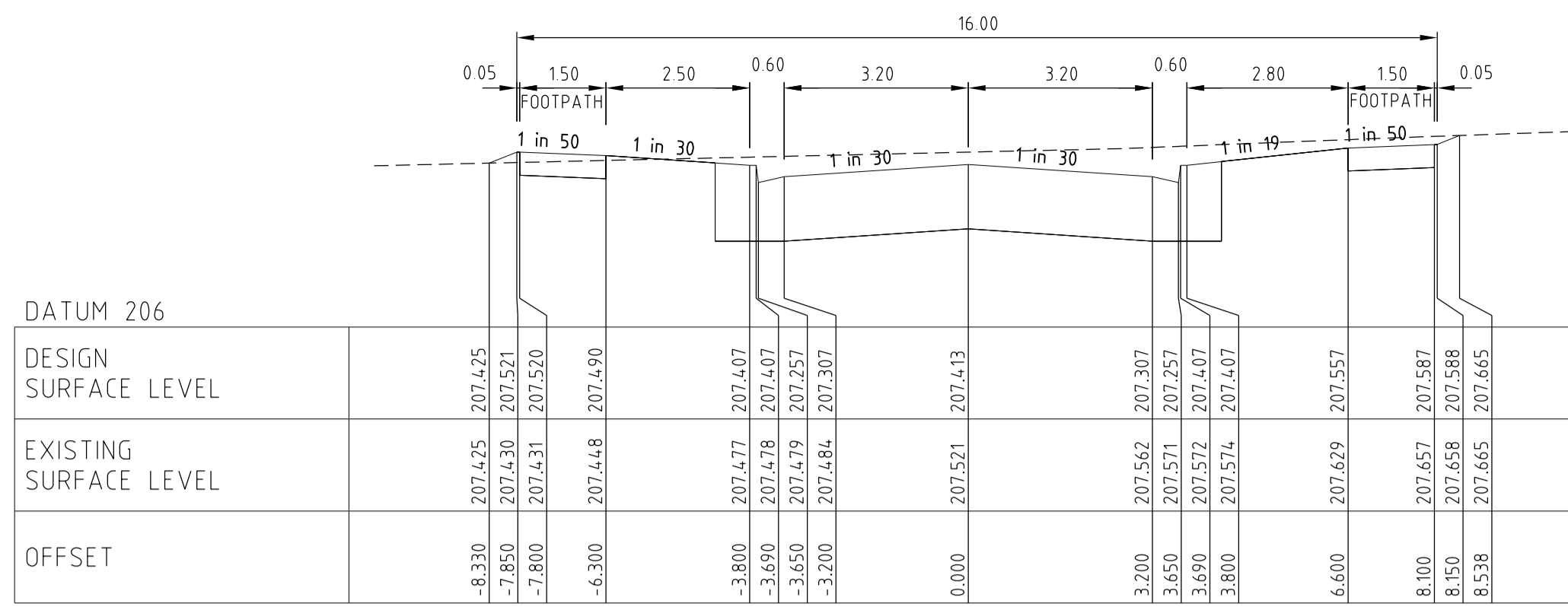
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REDSTONE ESTATE
STAGE 1
CROSS SECTIONS - ORIGIN DRIVE
SHEET 2 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL

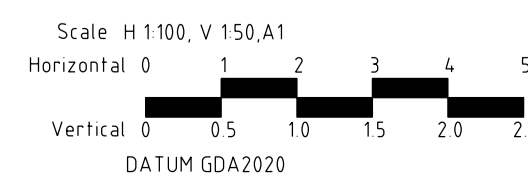
CONSTRUCTION Drg No 305912R10 Rev 2



STRUCTURAL FILL
IN ACCORDANCE
WITH AS3798-2007,
LEVEL 1.



Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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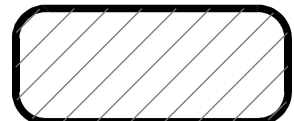
Designed
R. WEINBER
Authorised
M. LETSON



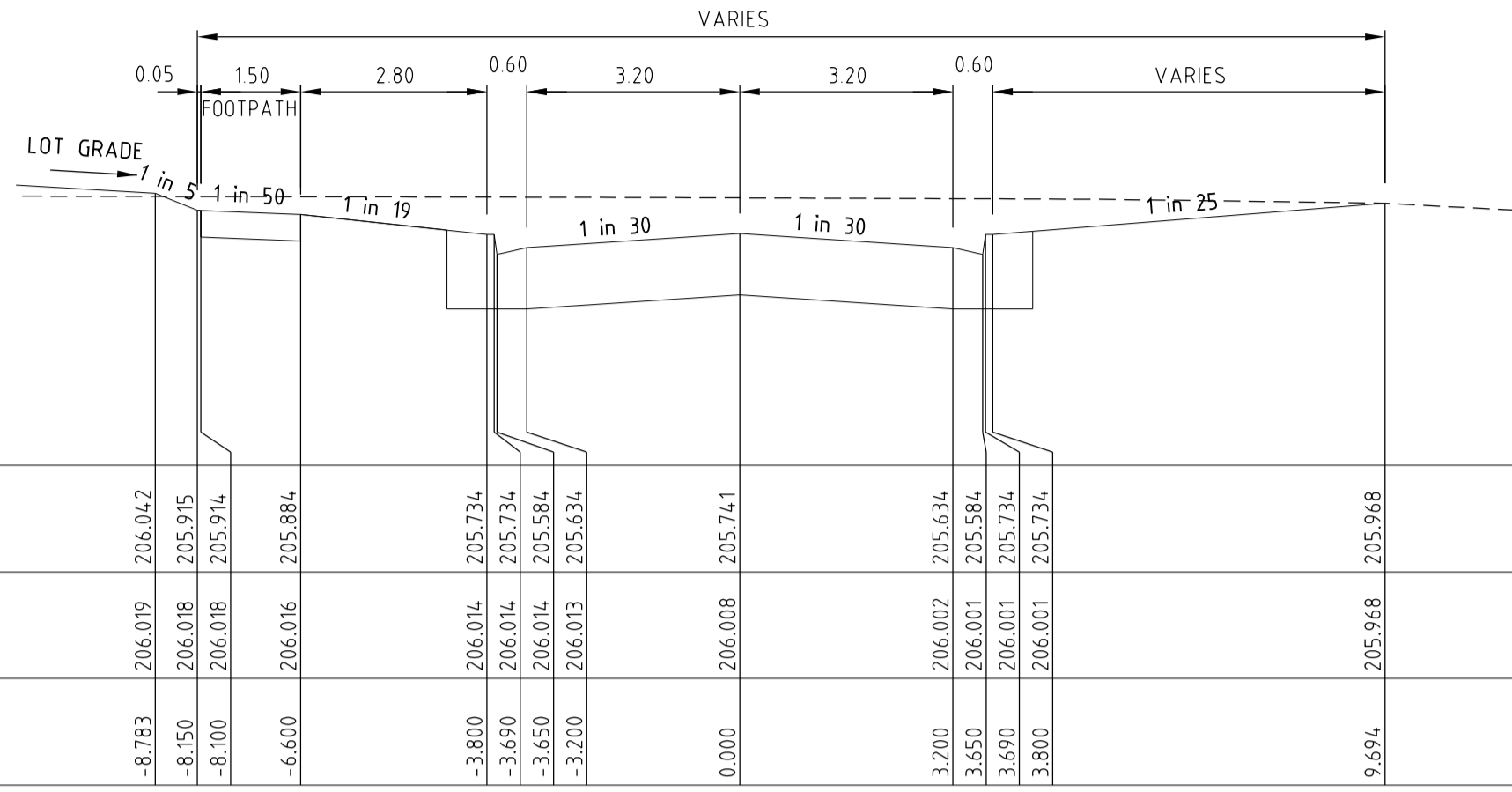
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D. CAMERON
Date
10/04/19

**REDSTONE ESTATE
STAGE 1
CROSS SECTIONS - WANDERER ROAD
SHEET 4 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL**

CONSTRUCTION Drg No **305912R12** Rev **1**



STRUCTURAL FILL
IN ACCORDANCE
WITH AS3798-2007,
LEVEL 1.

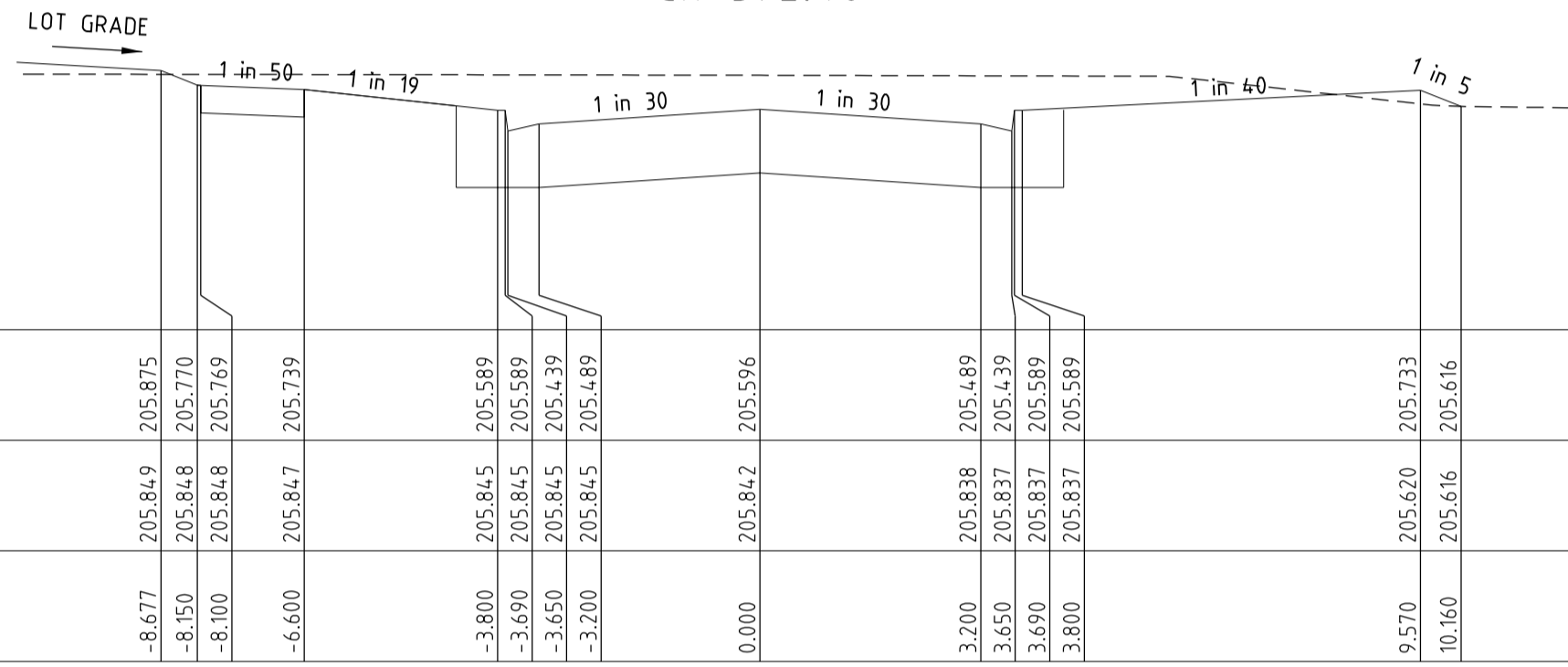


DATUM 204

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
206.042	206.019	-8.783
205.915	206.018	-8.150
205.914	206.018	-8.100
205.884	206.016	-6.600
205.734	206.014	-3.800
205.734	206.014	-3.650
205.584	206.014	-3.650
205.634	206.013	-3.200
205.741	206.008	0.000
205.634	206.002	3.200
205.584	206.001	3.650
205.734	206.001	3.650
205.734	206.001	3.800
205.968	205.968	9.694

ALPACA DRIVE

Ch 592.40

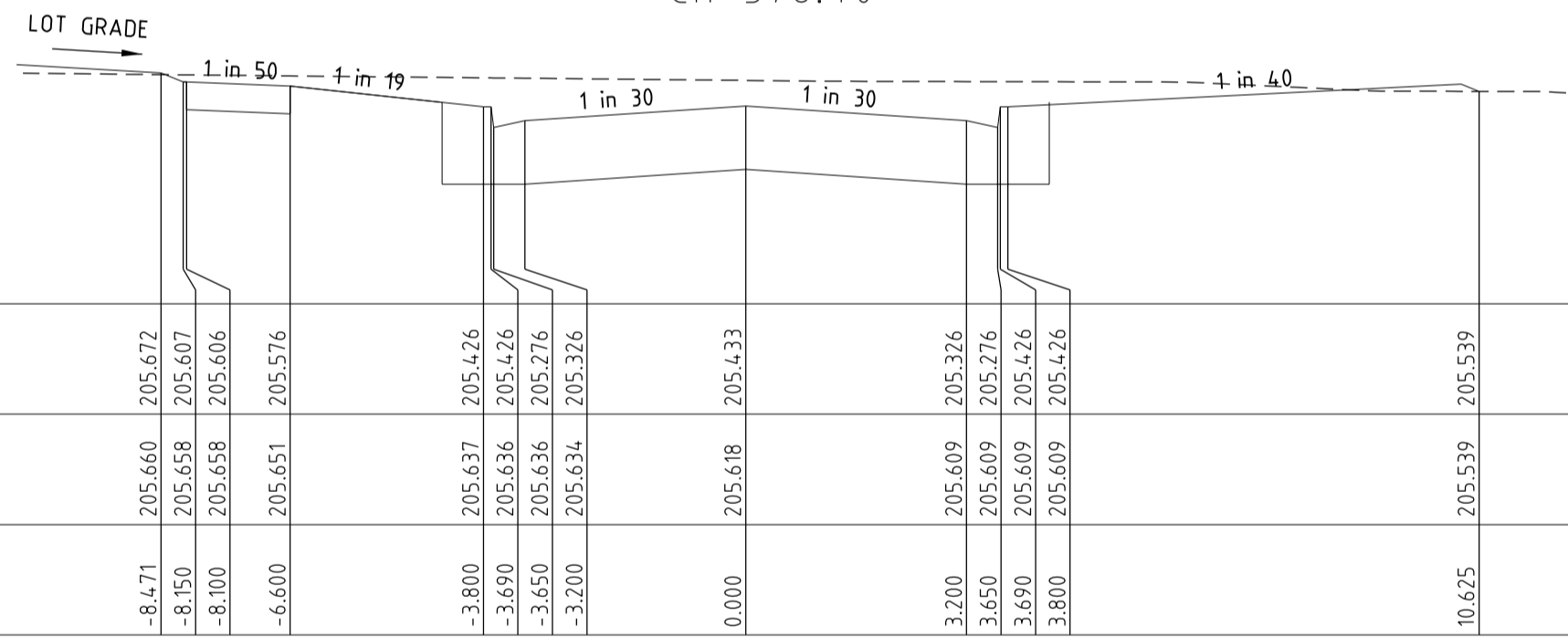


DATUM 204

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
205.875	205.849	-8.677
205.770	205.848	-8.150
205.769	205.848	-8.100
205.739	205.847	-6.600
205.589	205.845	-3.800
205.589	205.845	-3.650
205.439	205.845	-3.650
205.489	205.845	-3.200
205.596	205.842	0.000
205.489	205.838	3.700
205.439	205.837	3.650
205.589	205.837	3.650
205.589	205.837	3.800
205.733	205.670	9.570
205.616	205.616	10.160

ALPACA DRIVE

Ch 576.40

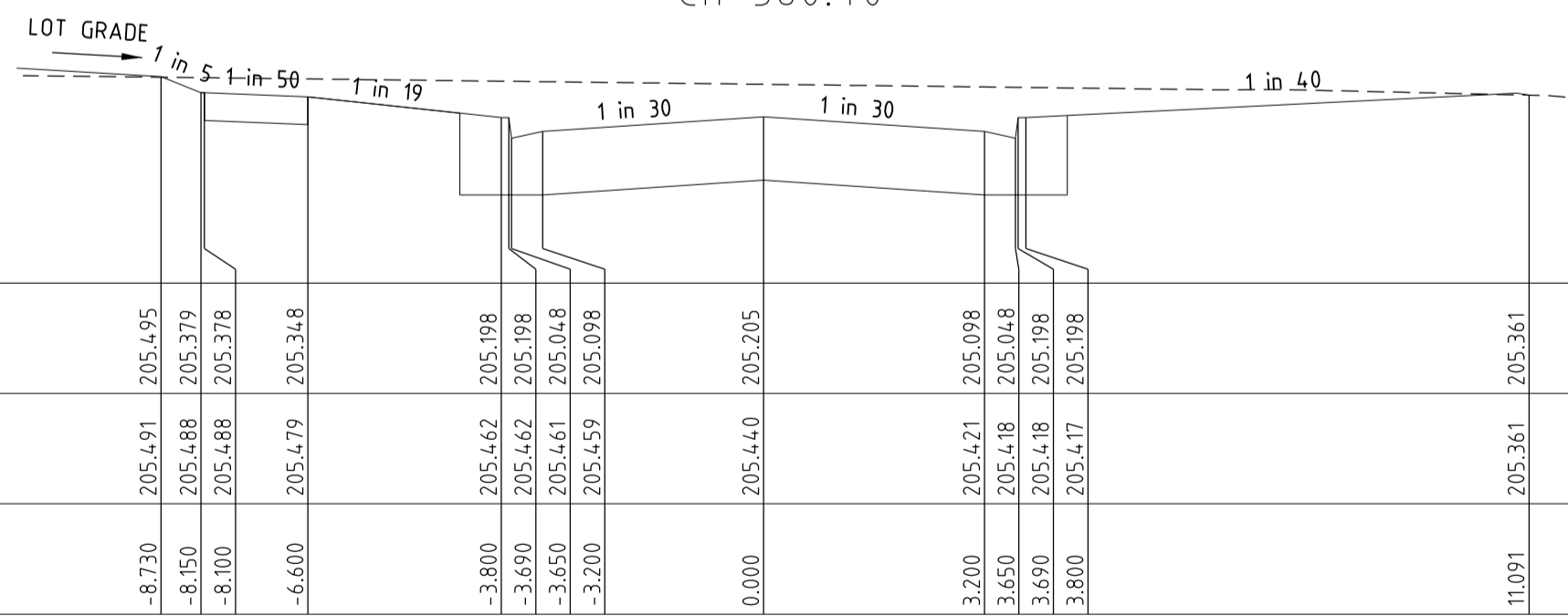


DATUM 204

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
205.672	205.660	-8.471
205.607	205.658	-8.150
205.606	205.658	-8.100
205.576	205.651	-6.600
205.426	205.637	-3.800
205.426	205.636	-3.650
205.276	205.636	-3.650
205.326	205.634	-3.200
205.433	205.618	0.000
205.326	205.609	3.200
205.276	205.609	3.650
205.426	205.609	3.650
205.426	205.609	3.800
205.539	205.539	10.625

ALPACA DRIVE

Ch 560.40

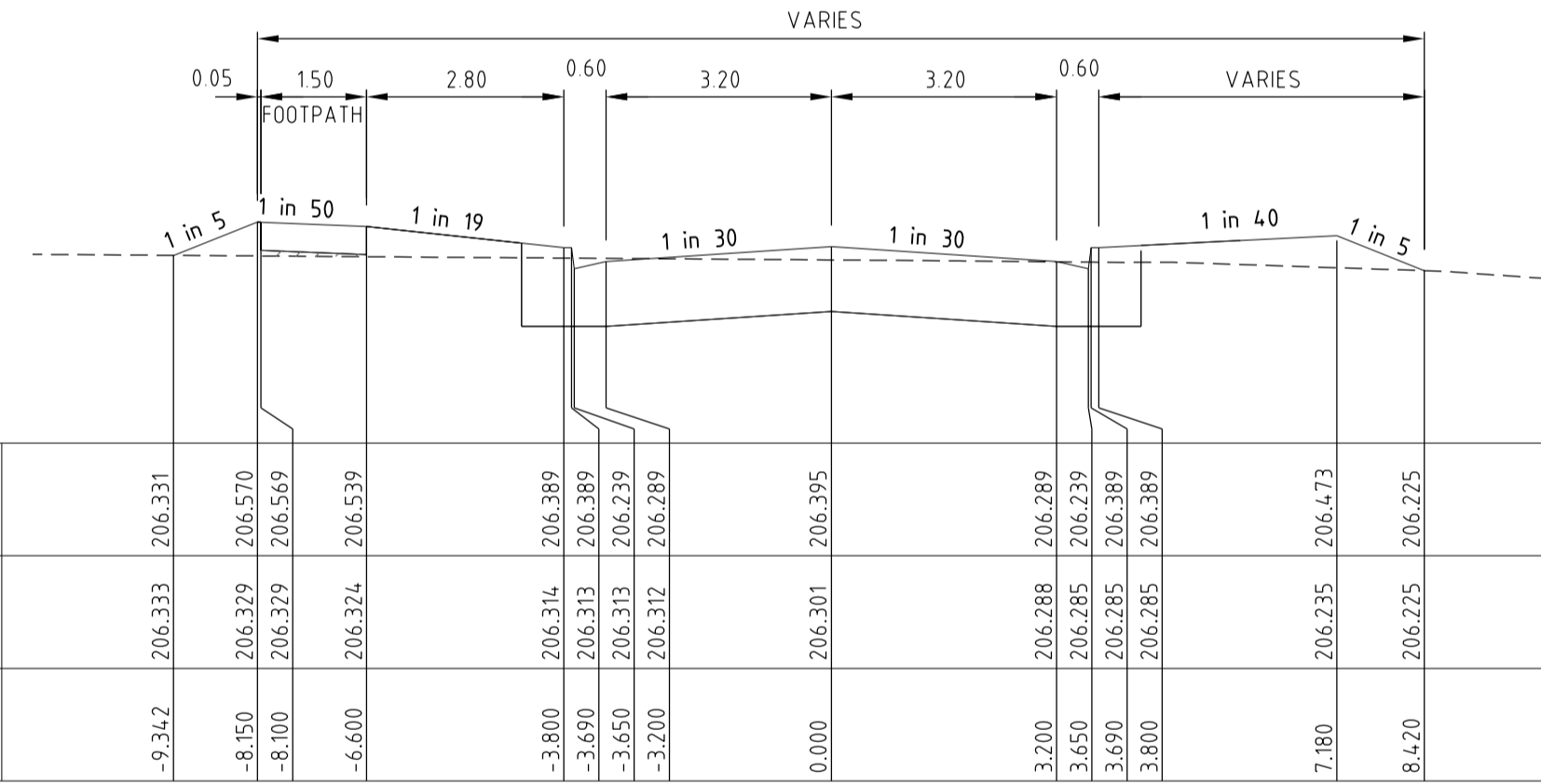


DATUM 204

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
205.495	205.491	-8.730
205.379	205.488	-8.150
205.378	205.488	-8.100
205.348	205.479	-6.600
205.198	205.462	-3.800
205.198	205.462	-3.650
205.048	205.461	-3.650
205.098	205.459	-3.200
205.205	205.440	0.000
205.098	205.421	3.200
205.048	205.418	3.650
205.198	205.418	3.650
205.198	205.417	3.800
205.361	205.361	11.091

ALPACA DRIVE

Ch 544.40

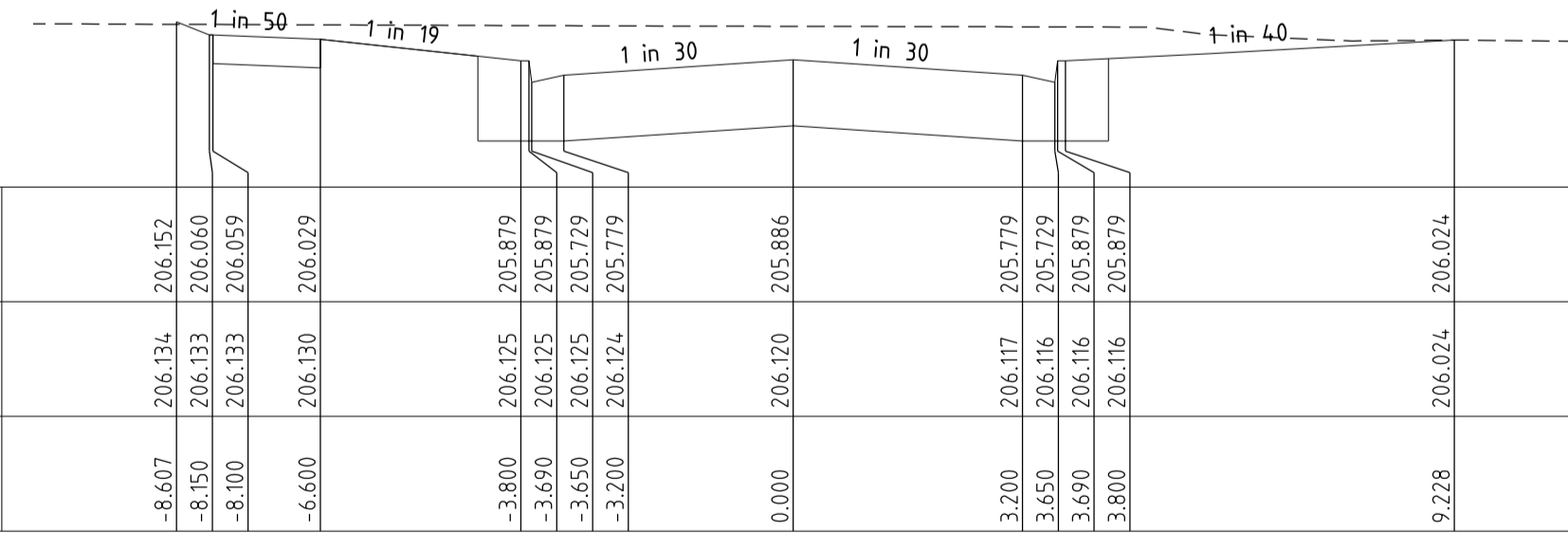


DATUM 205

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
206.331	206.333	-9.342
206.570	206.329	-8.150
206.569	206.329	-8.100
206.539	206.324	-6.600
206.389	206.314	-3.800
206.389	206.313	-3.650
206.239	206.313	-3.650
206.289	206.312	-3.200
206.395	206.301	0.000
206.289	206.288	3.200
206.239	206.285	3.650
206.389	206.285	3.650
206.389	206.285	3.800
206.473	206.473	7.180
206.225	206.225	8.420

ALPACA DRIVE

Ch 636.18



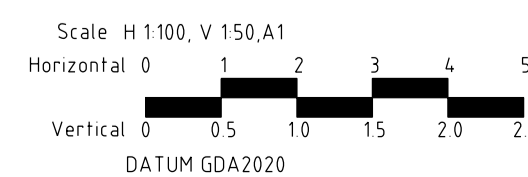
DATUM 205

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
206.152	206.134	-8.607
206.060	206.133	-8.150
206.059	206.133	-8.100
206.029	206.130	-6.000
205.879	206.125	-3.900
205.879	206.125	-3.650
205.729	206.125	-3.650
205.779	206.124	-3.200
205.886	206.120	0.000
205.779	206.117	3.200
205.729	206.116	3.650
205.879	206.116	3.650
205.879	206.116	3.800
206.074	206.074	9.228

ALPACA DRIVE

Ch 608.40

Ch 23.04



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Communities Designed for Living
Designed
R. WEINBER
Authorised
M. LETSON



Checked
D. CAMERON
Date
10/04/19

REDSTONE ESTATE
STAGE 1
CROSS SECTIONS - ALPACA DRIVE
SHEET 5 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL

CONSTRUCTION Drg No 305912R13 Rev 1

Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		

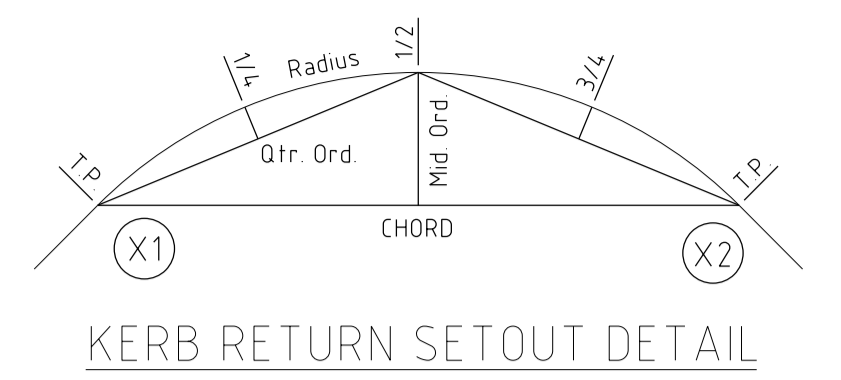
ALIGNMENT BB

POINT NO	EASTING	NORTHING	RL
BB1	302426.304	5836067.211	206.798
BB2	302424.704	5836067.934	206.768
BB3	302424.323	5836069.065	206.750
BB4	302423.841	5836070.493	206.776
BB5	302422.073	5836075.727	206.805
BB6	302421.591	5836077.155	206.775
BB7	302420.600	5836080.091	206.812
BB8	302421.125	5836080.370	206.817
BB9	302423.077	5836077.820	206.778
BB10	302424.014	5836076.596	206.809
BB11	302427.451	5836072.107	206.782
BB12	302428.388	5836070.883	206.762
BB13	302429.537	5836069.382	206.794
BB14	302429.293	5836068.464	206.813

ALIGNMENT AA

POINT NO	EASTING	NORTHING	RL
AA1	302379.860	5836031.914	207.714
AA2	302382.663	5836033.699	207.619
1/4	302389.275	5836037.691	207.403
1/2	302396.072	5836041.360	207.202
3/4	302403.038	5836044.697	207.002
AA3	302410.157	5836047.695	206.829
1/4	302412.124	5836048.530	206.797
1/2	302414.044	5836049.470	206.772
3/4	302415.910	5836050.512	206.752
AA4	302417.718	5836051.652	206.731
1/4	302418.104	5836051.797	206.727
1/2	302418.514	5836051.754	206.723
3/4	302418.863	5836051.533	206.718
AA5	302419.075	5836051.180	206.714
AA6	302421.662	5836043.127	206.621
1/4	302421.725	5836042.502	206.614
1/2	302421.526	5836041.906	206.611
3/4	302421.100	5836041.444	206.612
AA7	302420.523	5836041.196	206.618
1/4	302413.832	5836039.660	206.767
1/2	302407.253	5836037.700	206.927
3/4	302400.812	5836035.325	207.120
AA8	302394.535	5836032.544	207.329

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
AA2-AA3	160.300	30.899	30.851	0.744	0.186
AA3-AA4	39.700	8.551	8.534	0.230	-0.058
AA4-AA5	0.900	1.665	1.437	0.358	0.095
AA6-AA7	1.500	2.532	2.242	0.503	0.132
AA7-AA8	107.700	27.465	27.390	0.874	-0.219



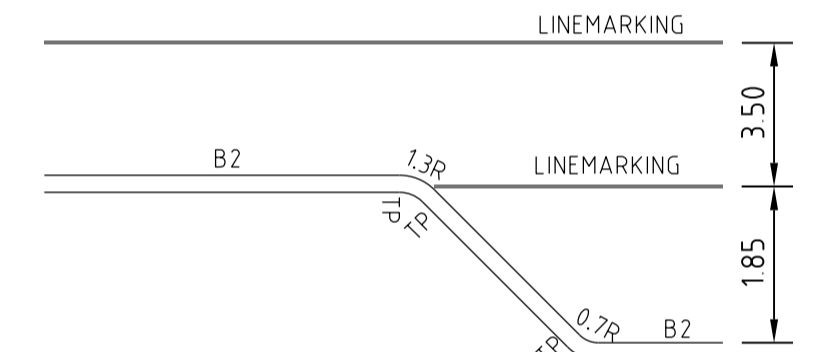
ALIGNMENT CC

POINT NO	EASTING	NORTHING	RL
CC1	302465.187	5836064.576	207.060
1/4	302464.136	5836063.857	207.045
1/2	302463.079	5836063.146	207.026
3/4	302462.016	5836062.444	207.003
CC2	302460.948	5836061.752	206.977
1/4	302459.082	5836060.503	206.922
1/2	302457.266	5836059.184	206.855
3/4	302455.502	5836057.796	206.778
CC3	302453.792	5836056.342	206.706
1/4	302453.425	5836056.146	206.702
1/2	302453.009	5836056.135	206.701
3/4	302452.633	5836056.313	206.705
CC4	302452.378	5836056.641	206.708
CC5	302448.689	5836064.681	206.788
1/4	302448.554	5836065.232	206.793
1/2	302448.633	5836065.793	206.798
3/4	302448.915	5836066.285	206.805
CC6	302449.359	5836066.637	206.812
CC7	302460.248	5836072.311	207.032
1/4	302460.331	5836072.354	207.033
1/2	302460.414	5836072.398	207.035
3/4	302460.498	5836072.441	207.036
CC8	302460.581	5836072.485	207.038

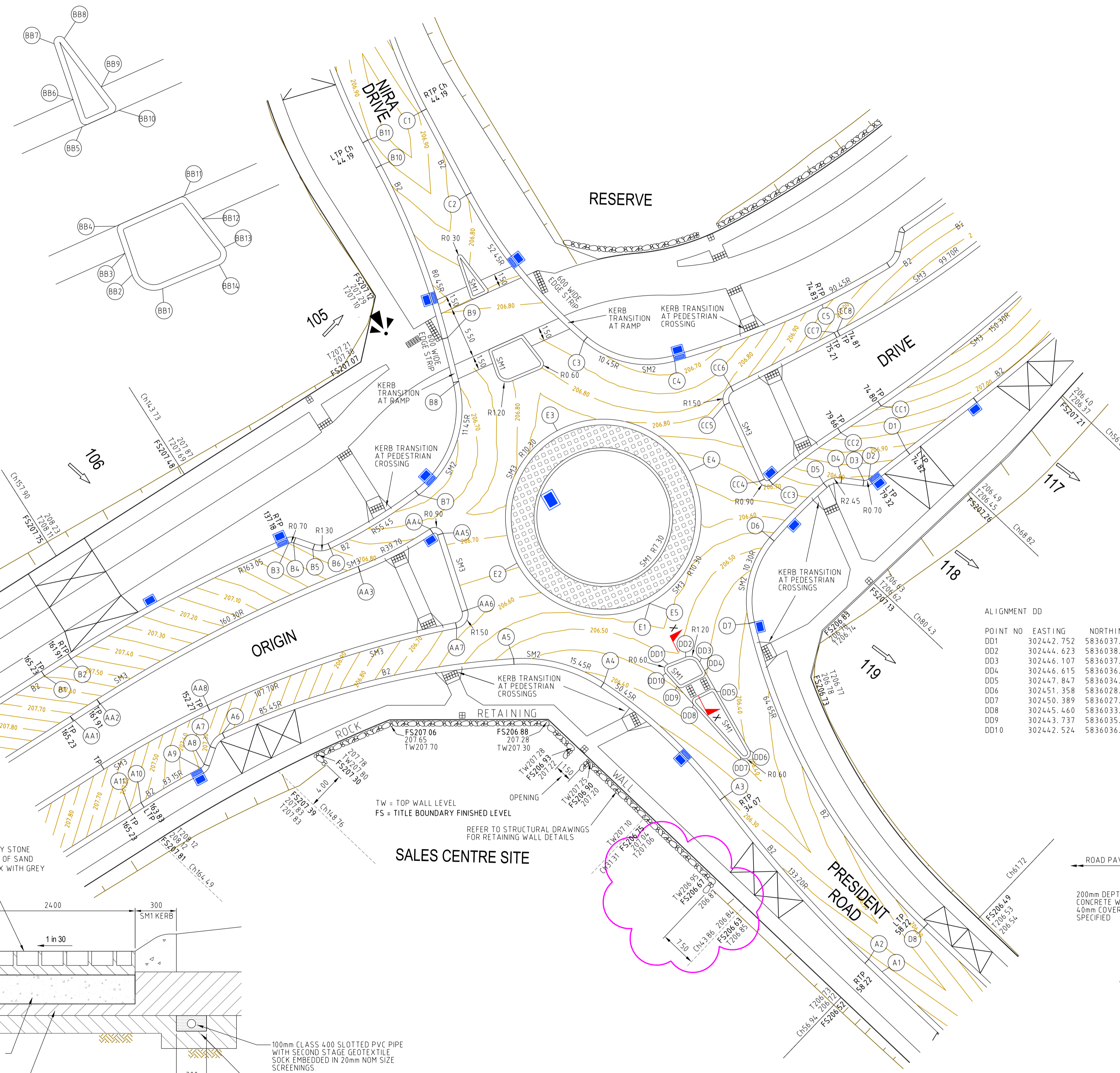
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
CC1-CC2	150.300	5.094	5.094	0.022	0.005
CC2-CC3	58.700	8.980	8.971	0.172	-0.043
CC3-CC4	0.900	1.678	1.445	0.364	0.096
CC5-CC6	1.500	2.281	2.067	0.413	0.107
CC7-CC8	99.698	0.376	0.376	0.000	-0.000

ALIGNMENT DD

POINT NO	EASTING	NORTHING	RL
DD1	302442.752	5836037.408	206.475
DD2	302444.623	5836038.114	206.483
DD3	302446.107	5836037.619	206.462
DD4	302446.615	5836036.720	206.454
DD5	302447.847	5836034.543	206.436
DD6	302451.358	5836028.336	206.395
DD7	302450.389	5836027.641	206.408
DD8	302445.460	5836033.161	206.443
DD9	302443.737	5836035.091	206.455
DD10	302442.524	5836036.449	206.464



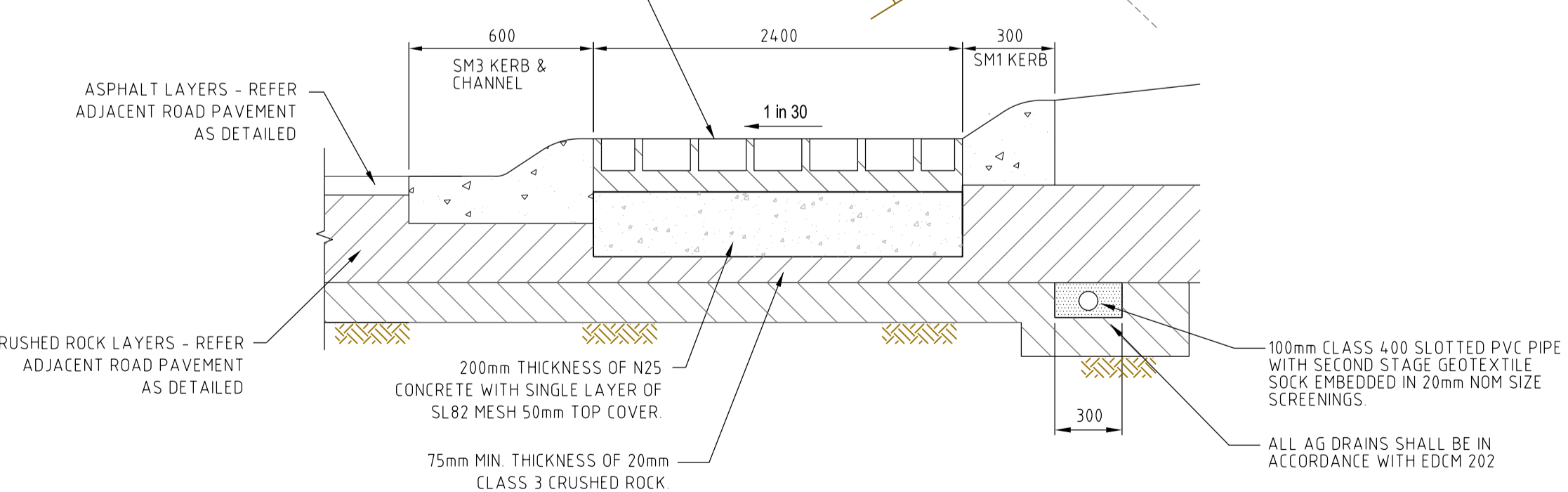
TYPICAL KERB INDENT DETAIL
N.T.S



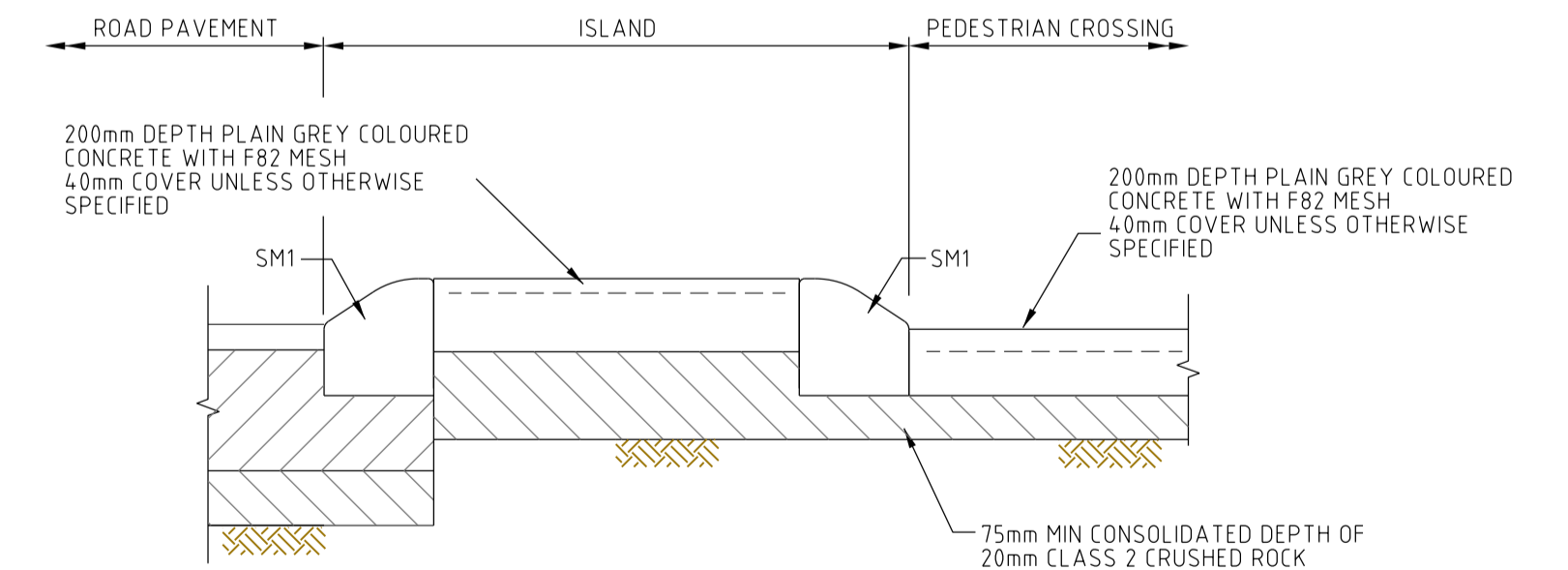
PORPHYRY STONE

ONCE LAID NO TRAFFIC IS TO BE ALLOWED ON THE STONE FOR A PERIOD OF 21 DAYS TO ALLOW FULL CURING OF THE MORTAR AND CONCRETE.

90 x 90 x 50mm PORPHYRY STONE ON 35mm MAX THICKNESS OF SAND AND CEMENT MORTAR MIX WITH GREY MORTAR JOINTING



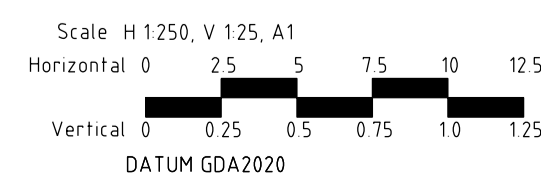
ROUNDABOUT PAVING DETAIL
N.T.S



SECTION X-X
N.T.S

SPLITTER ISLAND DETAIL - FLEXIBLE PAVEMENT

Rev	Description	Approved	Date
6	ROCK RETAINING WALL ADDED EXTENDED - SALES CENTRE SITE	M.L.	20/01/21
5	ROCK RETAINING WALL ADDED - SALES CENTRE SITE	M.L.	21/12/20
4	SPLITTER ISLAND BB SETOUT AND ALIGNMENT UPDATED	M.L.	20/10/20
3	ROUNDABOUT PAVING DETAIL PORPHYRY STONE 1 IN 30 SLOPE ADDED	M.L.	16/10/20
2	ROUNDABOUT PAVING DETAIL PORPHYRY STONE BEDDING NOTE AMMENDED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
Rev	Amendments	Approved	Date



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Designed
R. WEINBER
Authorised
M. LETSON

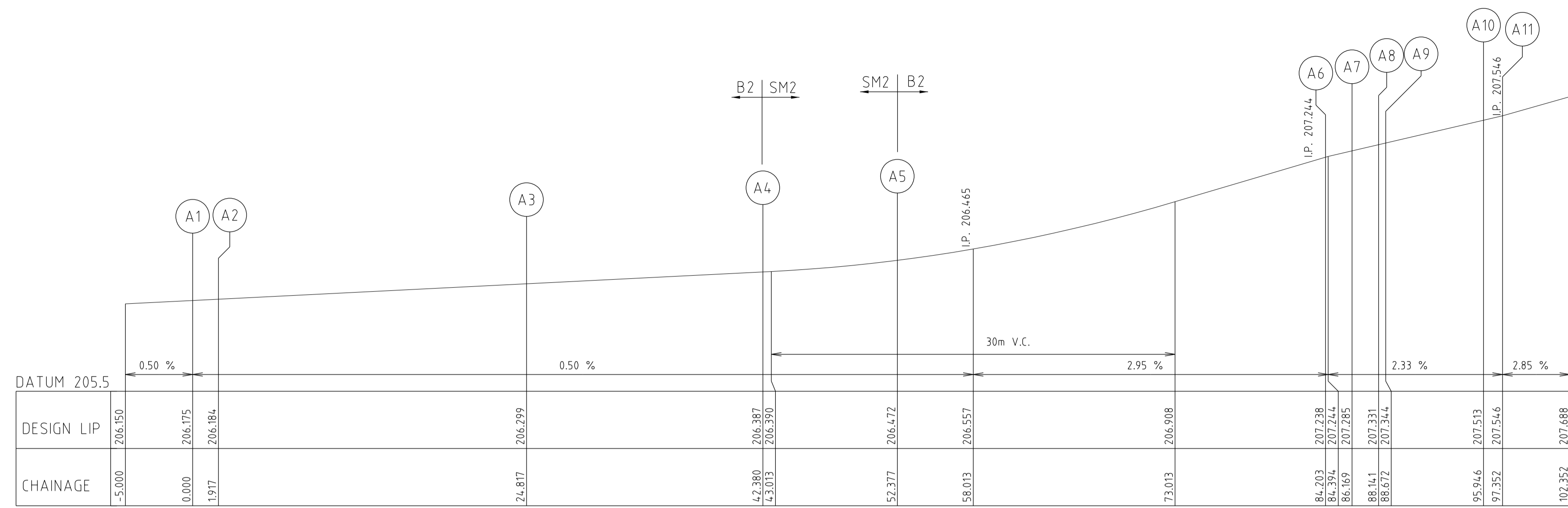


Checked
D. CAMERON
Date
10/04/19

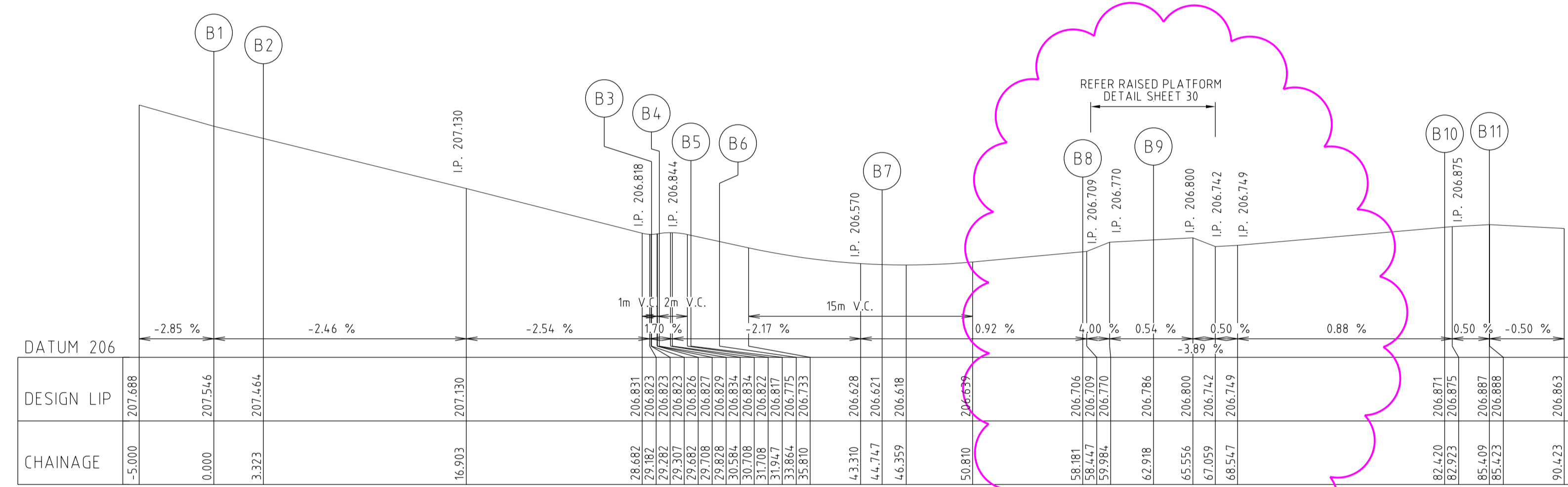
REDSTONE ESTATE
STAGE 1
INTERSECTION DETAILS
SHEET 1 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL

CONSTRUCTION Drg No 305912R14

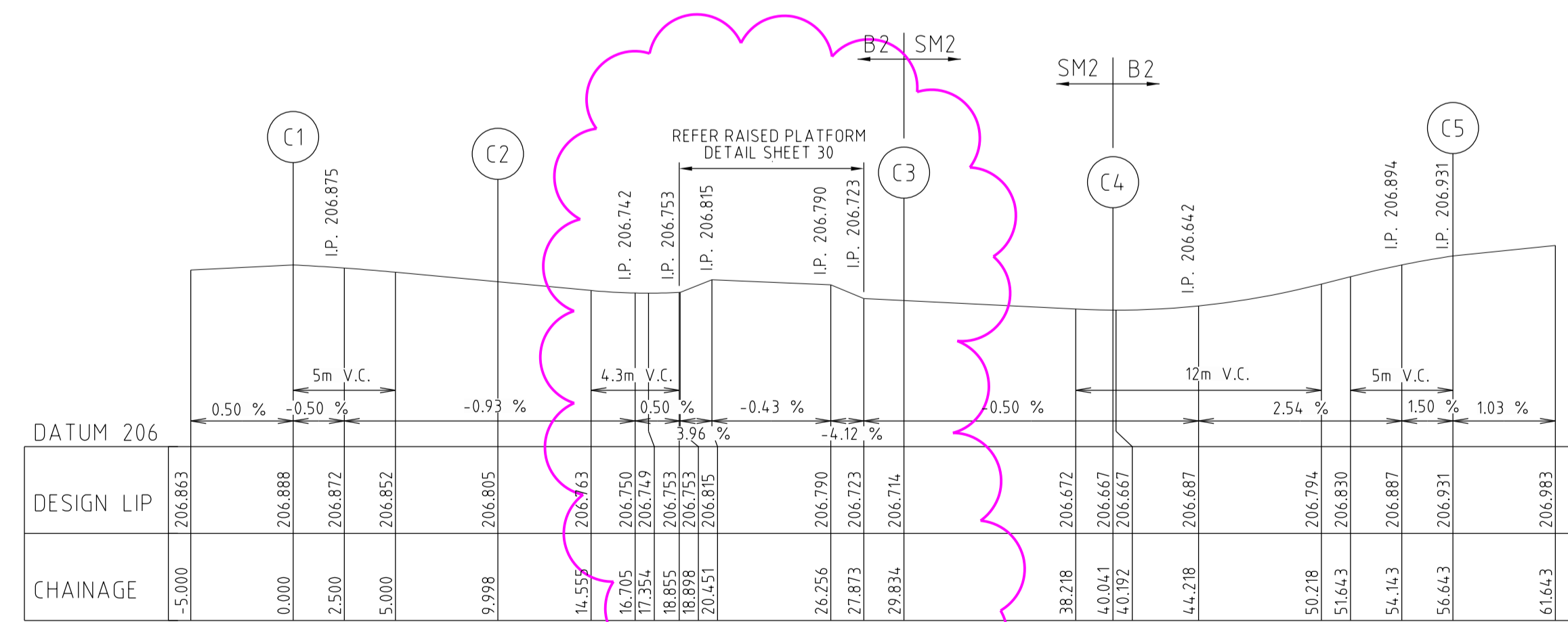
Rev 6



LIP LINE A
Hor250
Ver25



LIP LINE B
Hor250
Ver25



LIP LINE C
Hor250
Ver25

ALIGNMENT A

POINT NO	EASTING	NORTHING	RL
A1	302465.283	5836005.035	206.175
A2	302463.893	5836006.355	206.184
1/4	302459.827	5836010.384	206.213
1/2	302455.937	5836014.585	206.241
3/4	302452.232	5836018.948	206.270
A3	302448.717	5836023.467	206.299
1/4	302445.946	5836026.871	206.321
1/2	302442.890	5836030.022	206.343
3/4	302439.572	5836032.896	206.365
A4	302436.017	5836035.470	206.387
1/4	302433.828	5836036.671	206.401
1/2	302431.475	5836037.505	206.419
3/4	302429.019	5836037.949	206.443
A5	302426.523	5836037.991	206.472
1/4	302418.617	5836037.114	206.599
1/2	302410.828	5836035.506	206.777
3/4	302403.222	5836033.180	207.003
A6	302395.865	5836030.158	207.238
1/4	302395.443	5836029.907	207.251
1/2	302395.080	5836029.577	207.262
3/4	302394.790	5836029.182	207.274
A7	302394.584	5836028.736	207.285
A8	302393.942	5836026.872	207.331
1/4	302393.887	5836026.751	207.334
1/2	302393.810	5836026.643	207.337
3/4	302393.714	5836026.551	207.341
A9	302393.603	5836026.479	207.344
1/4	302391.999	5836025.622	207.386
1/2	302390.414	5836024.730	207.428
3/4	302388.849	5836023.804	207.471
A10	302387.305	5836022.844	207.513
A11	302386.119	5836022.088	207.546

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
A2-A3	133.200	22.900	22.872	0.492	0.123
A3-A4	50.450	17.563	17.475	0.762	-0.191
A4-A5	15.450	9.997	9.823	0.801	-0.202
A5-A6	85.450	31.826	31.642	1.477	-0.370
A6-A7	2.450	1.966	1.914	0.195	-0.049
A8-A9	0.700	0.531	0.519	0.050	0.013
A9-A10	83.150	7.274	7.272	0.080	-0.020

ALIGNMENT B

POINT NO	EASTING	NORTHING	RL
B1	302377.146	5836036.173	207.546
B2	302379.949	5836037.958	207.464
1/4	302385.495	5836041.340	207.304
1/2	302391.169	5836044.502	207.144
3/4	302396.964	5836047.438	206.980
B3	302402.869	5836050.144	206.823
1/4	302402.992	5836050.184	206.823
1/2	302403.121	5836050.201	206.825
3/4	302403.251	5836050.194	206.827
B4	302403.377	5836050.163	206.829
B5	302405.380	5836049.469	206.817
1/4	302405.845	5836049.357	206.806
1/2	302406.323	5836049.338	206.796
3/4	302406.795	5836049.412	206.786
B6	302407.245	5836049.577	206.775
1/4	302409.666	5836050.816	206.717
1/2	302412.024	5836052.173	206.669
3/4	302414.312	5836053.644	206.638
B7	302416.526	5836055.226	206.621
1/4	302418.878	5836057.607	206.621
1/2	302420.440	5836060.566	206.645
3/4	302421.081	5836063.850	206.675
B8	302420.745	5836067.180	206.706
B9	302419.585	5836071.773	206.786
1/4	302418.248	5836076.461	206.745
1/2	302416.631	5836081.059	206.785
3/4	302414.737	5836085.552	206.828
B10	302412.576	5836089.921	206.871
B11	302411.170	5836092.558	206.887

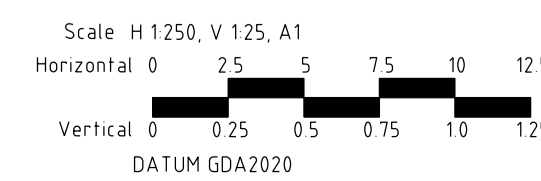
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
B2-B3	165.350	25.984	25.957	0.510	0.128
B3-B4	0.700	0.521	0.509	0.048	0.012
B5-B6	2.450	1.917	1.868	0.185	-0.047
B6-B7	55.450	10.883	10.865	0.267	-0.067
B7-B8	11.450	13.434	12.676	1.914	-0.489
B9-B10	80.450	19.502	19.454	0.590	-0.148

ALIGNMENT C

POINT NO	EASTING	NORTHING	RL
C1	302416.817	5836095.569	206.888
C2	302421.521	5836086.746	206.805
1/4	302424.057	5836082.487	206.760
1/2	302426.984	5836078.486	206.812
3/4	302430.275	5836074.779	206.832
C3	302433.902	5836071.400	206.714
1/4	302436.030	5836070.003	206.701
1/2	302438.433	5836069.163	206.688
3/4	302440.967	5836068.928	206.675
C4	302443.483	5836069.313	206.667
1/4	302447.452	5836070.527	206.687
1/2	302451.361	5836071.921	206.751
3/4	302455.201	5836073.494	206.851
C5	302458.966	5836075.241	206.931

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
C2-C3	52.450	19.836	19.718	0.935	-0.234
C3-C4	10.450	10.207	9.806	1.222	-0.310
C4-C5	90.450	16.602	16.579	0.381	-0.095

Rev	Description	Approved	Date
2	LIP LINE B & C UPDATED	M.L.	16/10/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



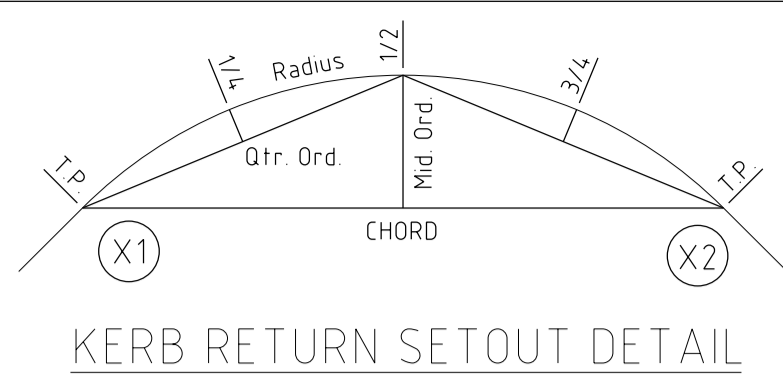
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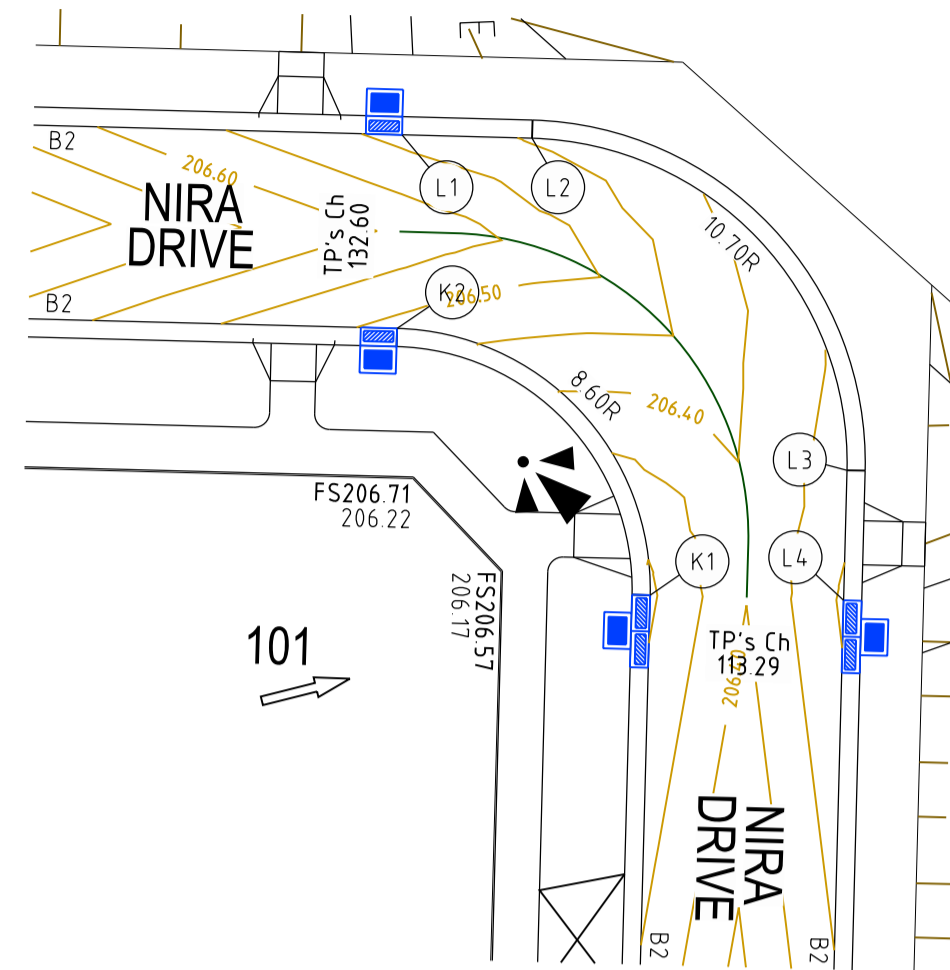
Communities Designed for Living
Designed
R. WEINBER
Authorised
M. LETSON

Your world awaits
Checked
D. CAMERON
Date
10/04/19

REDSTONE ESTATE
STAGE 1
INTERSECTION DETAILS
SHEET 2 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R15** Rev **2**

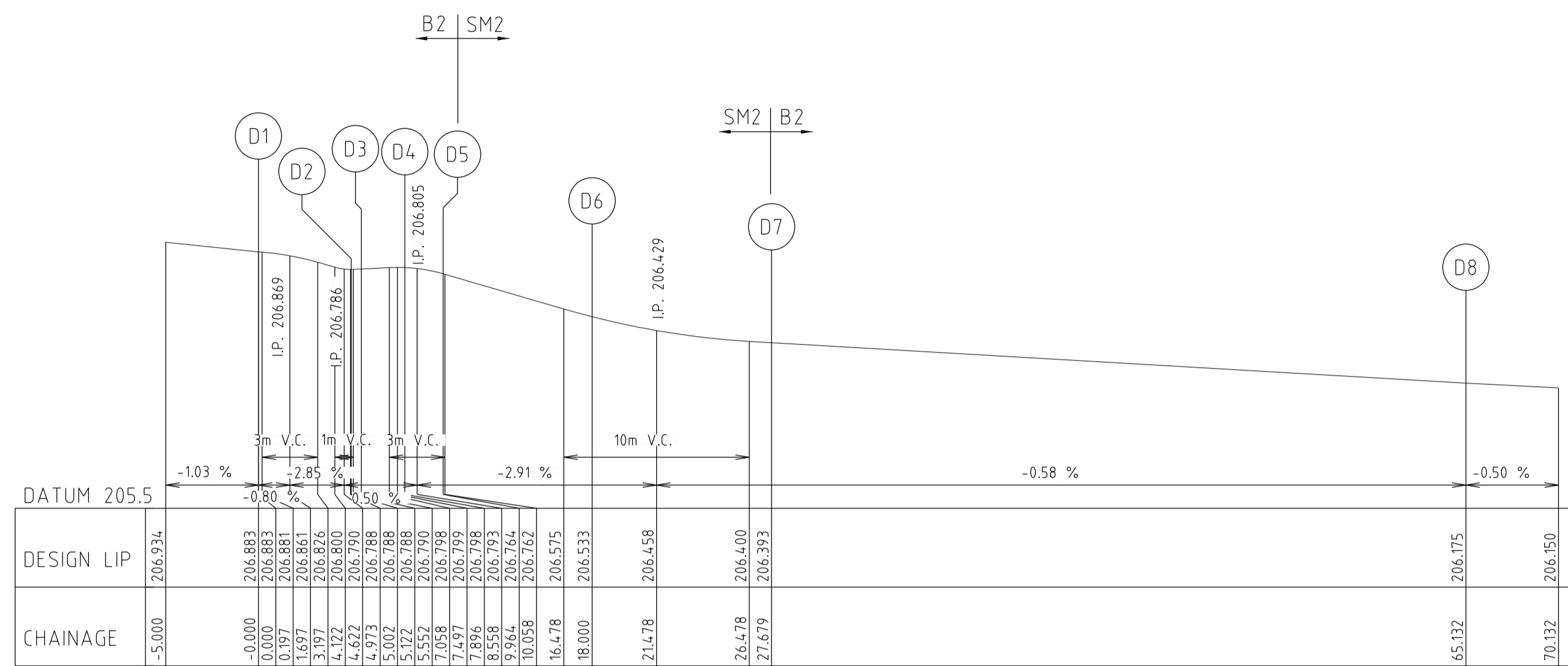


RESERVE



101

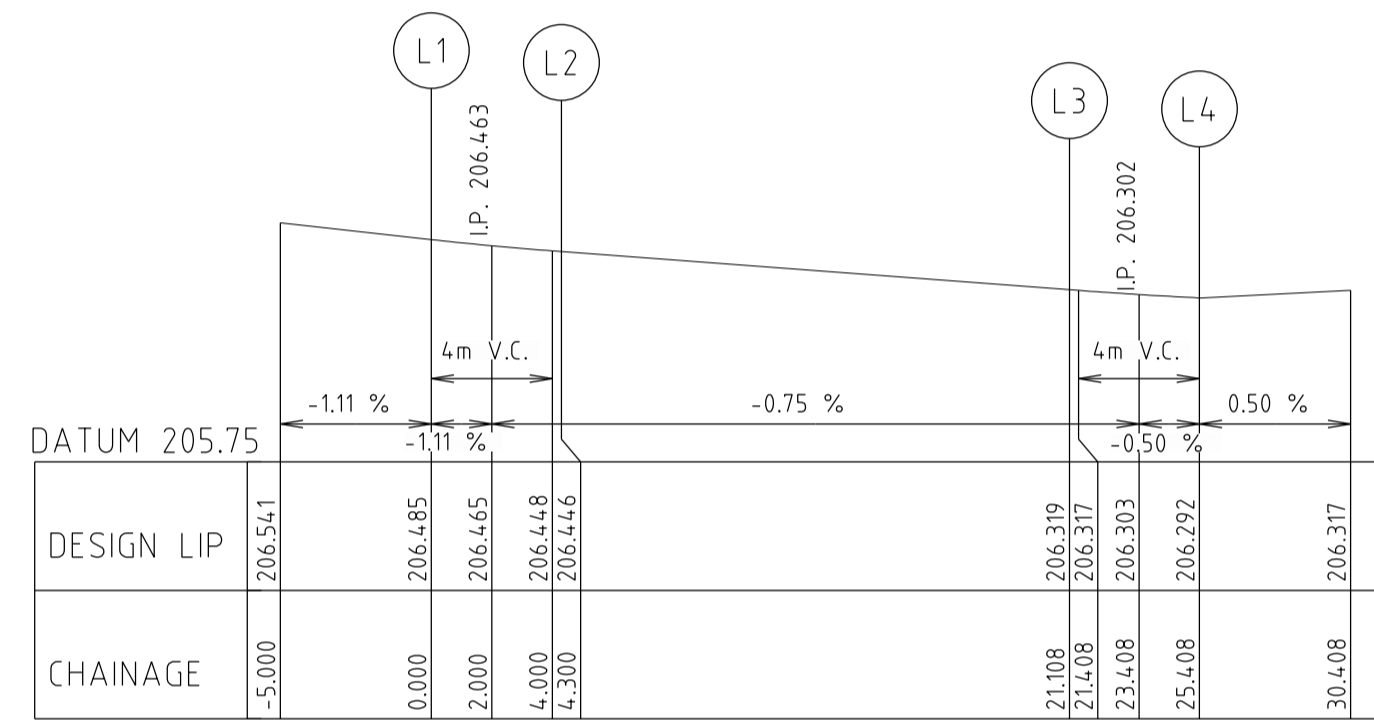
RESERVE



ALIGNMENT D

POINT NO	EASTING	NORTHING	RL
D1	302467.841	5836059.961	206.883
D2	302463.887	5836056.897	206.788
1/4	302463.771	5836056.824	206.788
1/2	302463.643	5836056.775	206.789
3/4	302463.508	5836056.752	206.790
D3	302463.370	5836056.755	206.790
D4	302461.045	5836057.050	206.798
1/4	302460.529	5836057.061	206.794
1/2	302460.022	5836056.963	206.787
3/4	302459.547	5836056.762	206.777
D5	302459.125	5836056.465	206.764
1/4	302457.636	5836055.116	206.706
1/2	302456.197	5836053.714	206.647
3/4	302454.810	5836052.261	206.589
D6	302453.477	5836050.759	206.533
1/4	302452.133	5836048.753	206.478
1/2	302451.294	5836046.489	206.437
3/4	302451.004	5836044.092	206.409
D7	302451.281	5836041.694	206.393
1/4	302454.086	5836032.769	206.338
1/2	302458.150	5836024.343	206.284
3/4	302463.388	5836016.592	206.229
D8	302469.689	5836009.677	206.175

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
D2-D3	0.700	0.550	0.536	0.053	0.013
D4-D5	2.450	2.068	2.007	0.215	-0.054
D5-D6	55.300	8.036	8.029	0.146	-0.036
D6-D7	10.300	9.680	9.327	1.116	-0.283
D7-D8	64.650	37.453	36.931	2.693	-0.677

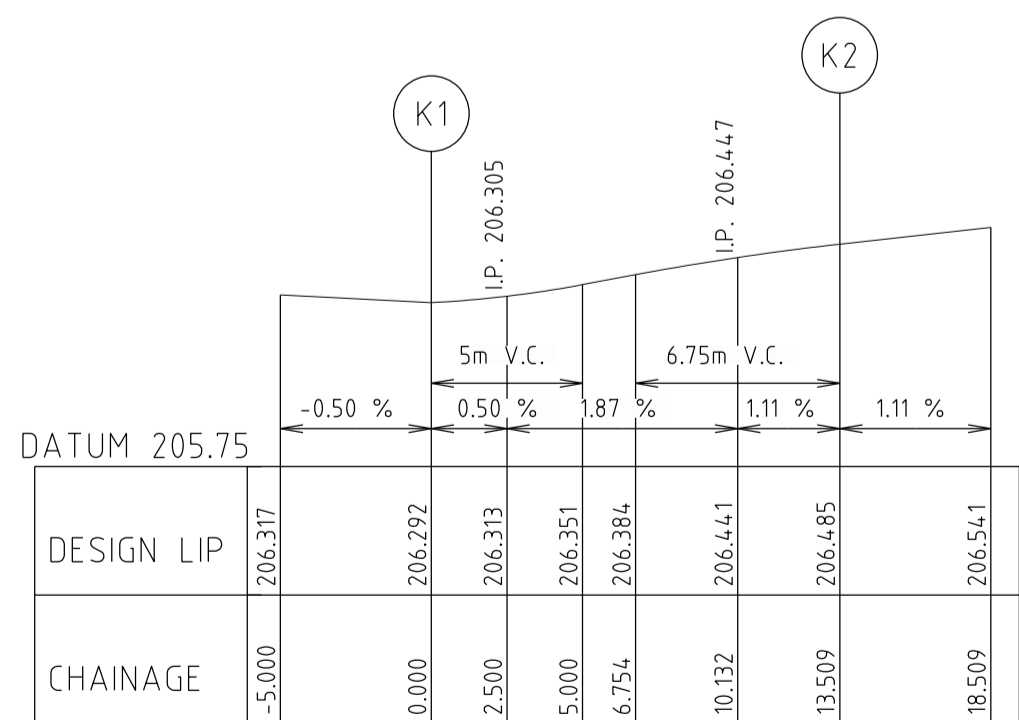


LIP LINE L
Hor250
Ver25

ALIGNMENT L

POINT NO	EASTING	NORTHING	RL
L1	302396.555	5836177.292	206.485
L2	302400.854	5836177.179	206.446
1/4	302404.926	5836176.258	206.414
1/2	302408.335	5836173.848	206.382
3/4	302410.563	5836170.317	206.351
L3	302411.270	5836166.203	206.319
L4	302411.158	5836161.904	206.292

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
L2-L3	10.700	16.808	15.132	3.134	0.814

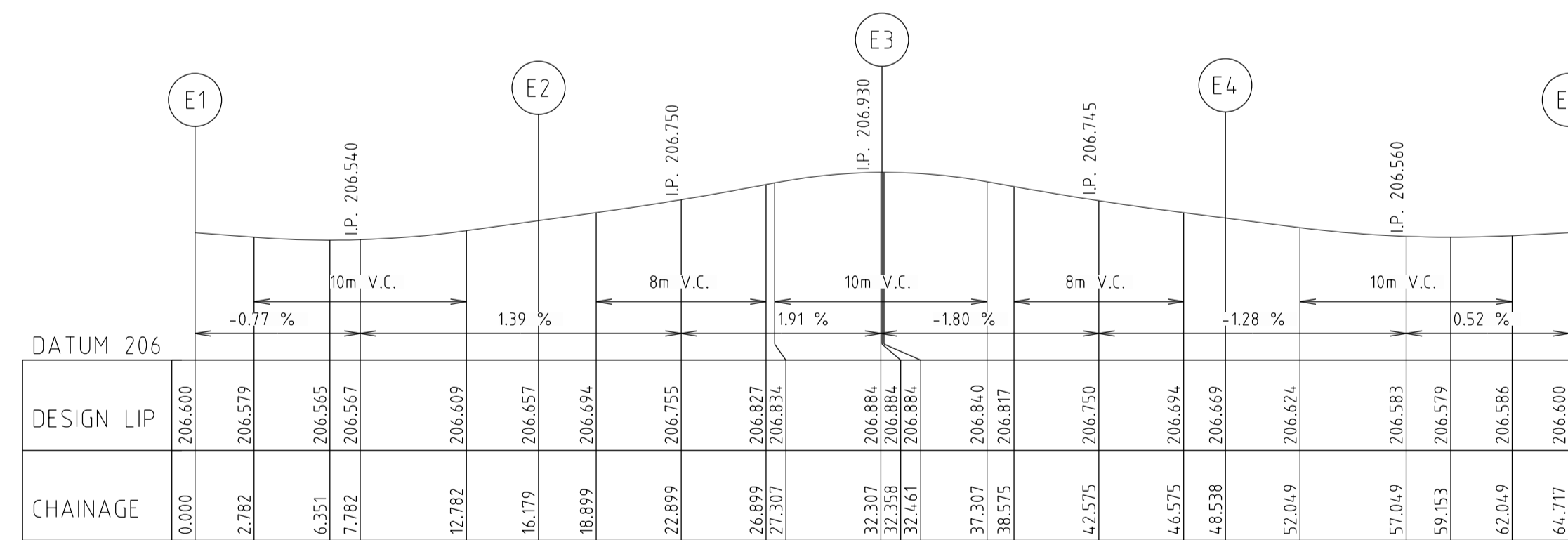


LIP LINE K
Hor250
Ver25

ALIGNMENT K

POINT NO	EASTING	NORTHING	RL
K1	302404.760	5836162.072	206.292
1/4	302404.192	5836165.379	206.325
1/2	302402.401	5836168.217	206.384
3/4	302399.661	5836170.153	206.441
K2	302396.388	5836170.894	206.485

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
K1-K2	8.600	13.509	12.162	2.519	-0.655



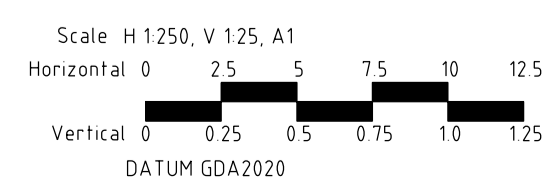
LIP LINE E
Hor250
Ver25

ALIGNMENT E

POINT NO	EASTING	NORTHING	RL
E1	302440.816	5836043.812	206.600
1/4	302436.971	5836042.644	206.571
1/2	302432.971	5836043.037	206.568
3/4	302429.426	5836044.930	206.601
E2	302426.876	5836048.035	206.657
1/4	302425.708	5836051.881	206.713
1/2	302426.100	5836055.881	206.778
3/4	302427.993	5836059.426	206.852
E3	302431.099	5836061.976	206.884
1/4	302434.945	5836063.144	206.855
1/2	302438.944	5836062.752	206.785
3/4	302442.489	5836060.858	206.722
E4	302445.040	5836057.753	206.669
1/4	302446.208	5836053.907	206.617
1/2	302445.815	5836049.908	206.584
3/4	302443.922	5836046.363	206.581
E5	302440.816	5836043.812	206.600

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
E1-E2	10.300	16.179	14.566	3.017	0.784
E2-E3	10.300	16.179	14.566	3.017	0.784
E3-E4	10.300	16.179	14.566	3.017	0.784
E4-E5	10.300	16.179	14.566	3.017	0.784

Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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Designed
R. WEINBER
Authorised
M. LETSON



Checked
D. CAMERON
Date
10/04/19

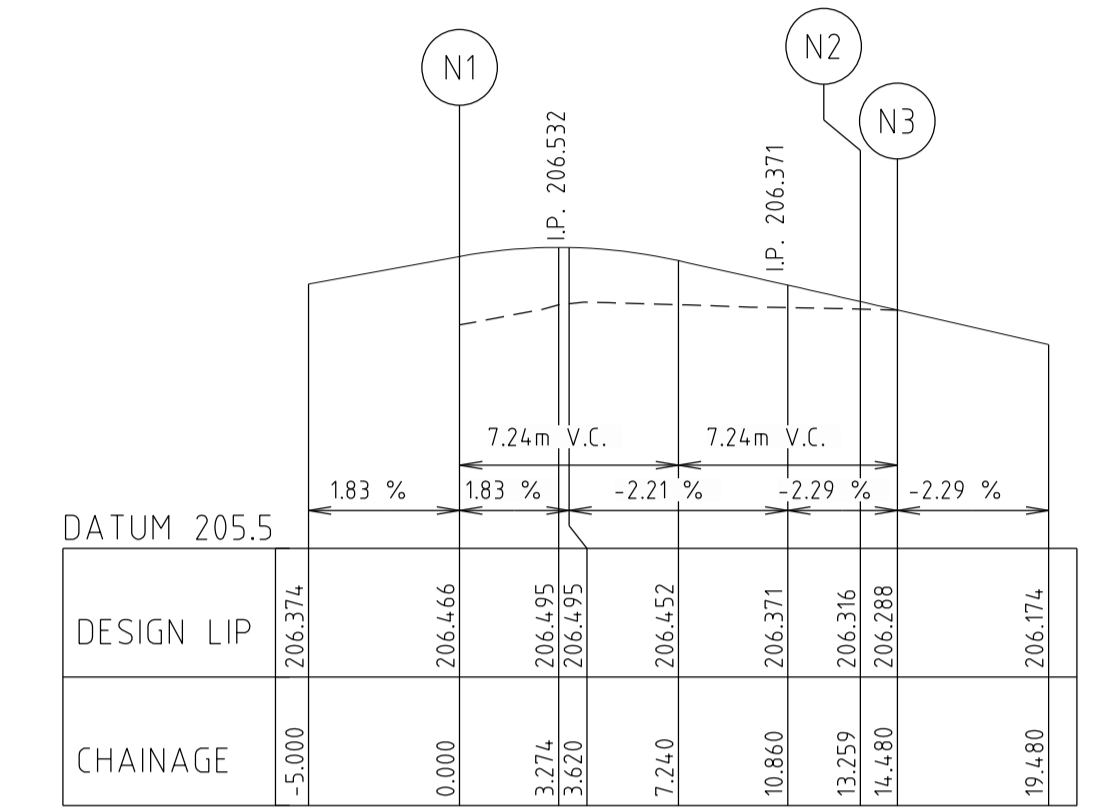
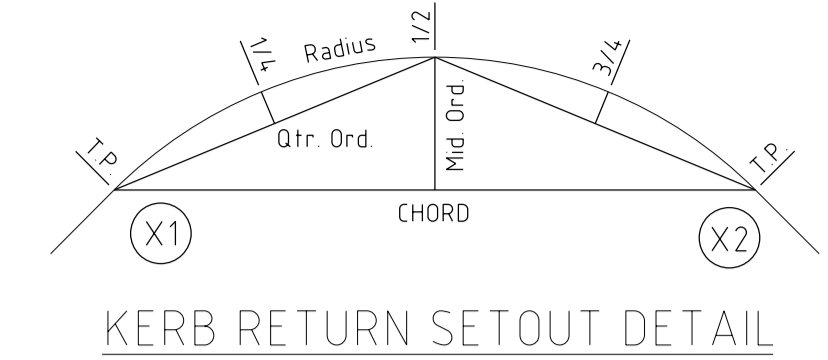
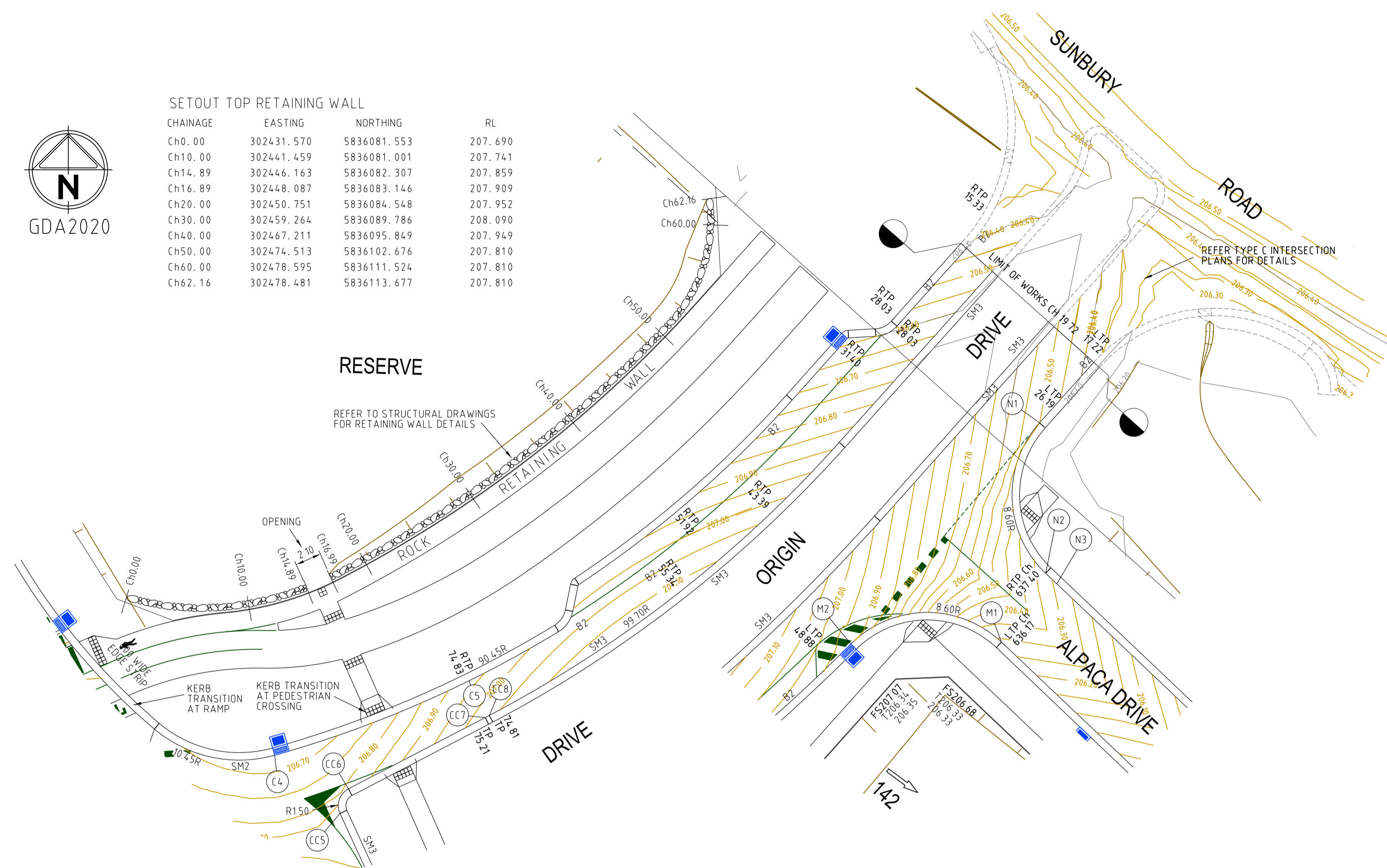
REDSTONE ESTATE
STAGE 1
INTERSECTION DETAILS
SHEET 3 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL

CONSTRUCTION Drg No 305912R16 Rev 1



SETOUT TOP RETAINING WALL

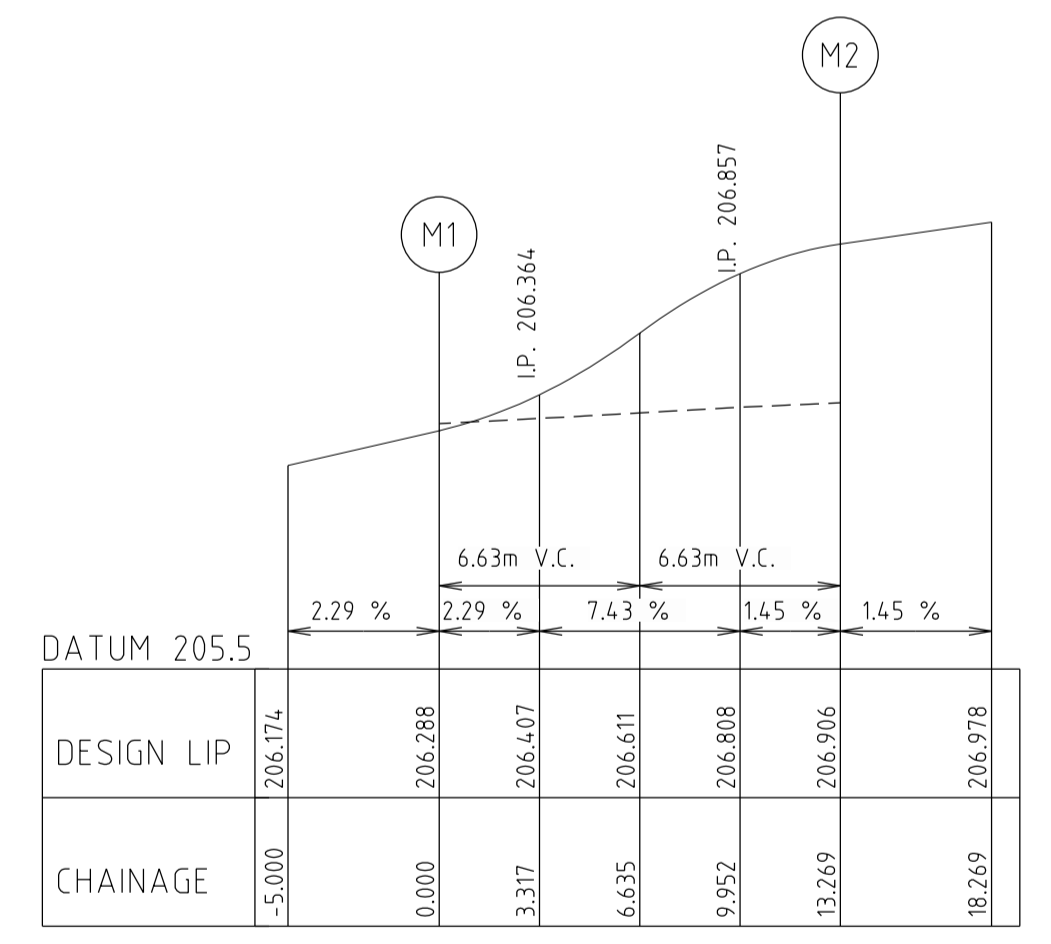
CHAINAGE	EASTING	NORTHING	RL
Ch0.00	302431.570	5836081.553	207.690
Ch10.00	302441.459	5836081.001	207.741
Ch14.89	302446.163	5836082.307	207.859
Ch16.89	302448.087	5836083.146	207.909
Ch20.00	302450.751	5836084.548	207.952
Ch30.00	302459.264	5836089.786	208.090
Ch40.00	302467.211	5836095.849	207.949
Ch50.00	302474.513	5836102.676	207.810
Ch60.00	302478.595	5836111.524	207.810
Ch62.16	302478.481	5836113.677	207.810



ALIGNMENT N

POINT NO	EASTING	NORTHING	RL
N1	302504.409	5836095.776	206.466
1/4	302502.722	5836092.947	206.495
1/2	302502.223	5836089.690	206.464
3/4	302502.985	5836086.485	206.391
N2	302504.896	5836083.802	206.316
N3	302505.781	5836082.961	206.288

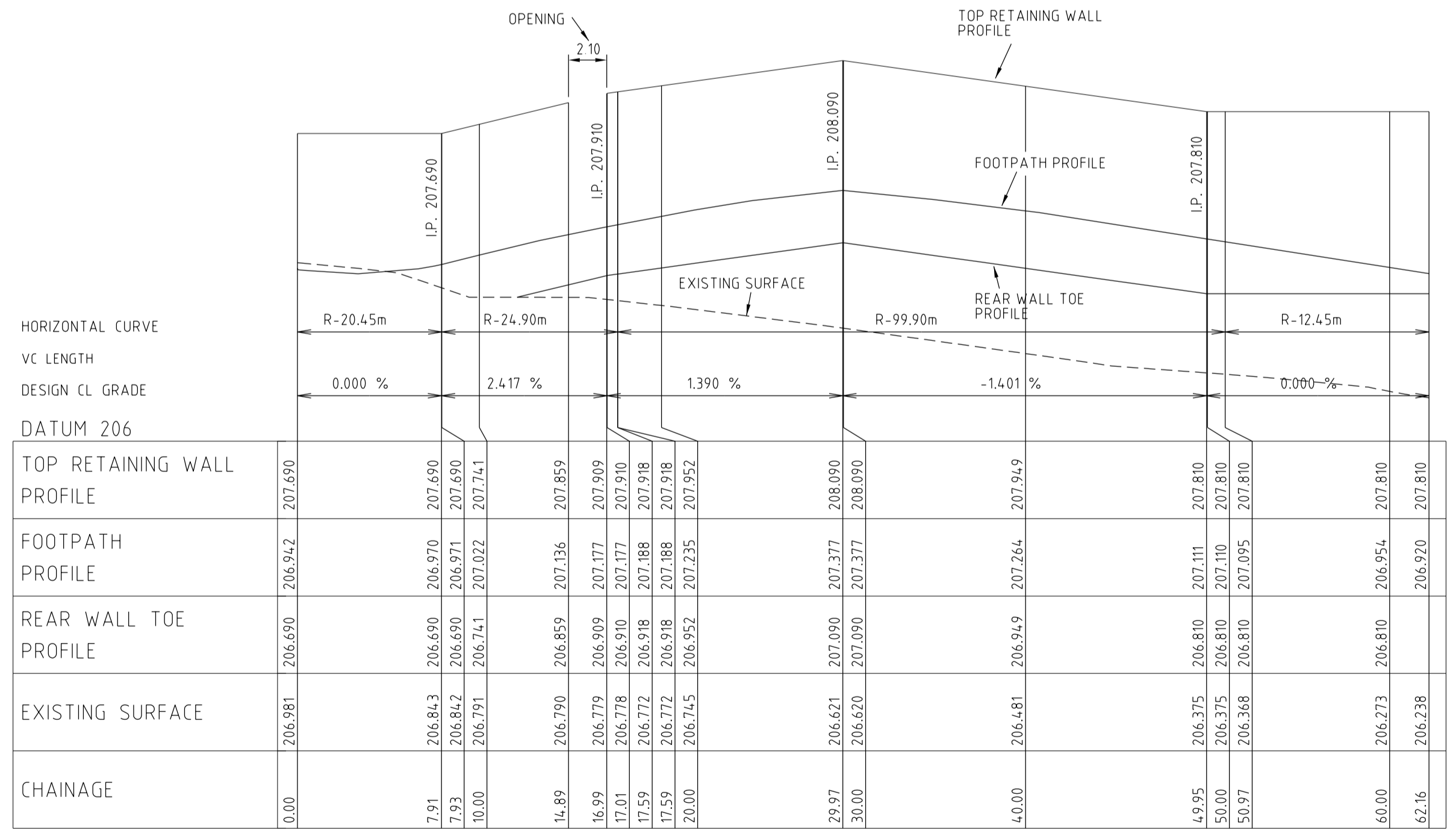
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
N1-N2	8.600	13.259	11.984	2.431	-0.631



ALIGNMENT M

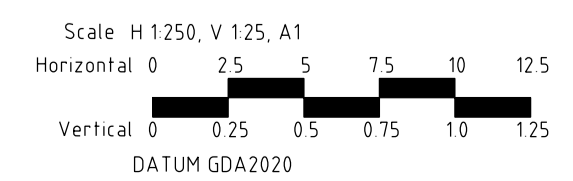
POINT NO	EASTING	NORTHING	RL
M1	302501.375	5836078.320	206.288
1/4	302498.593	5836080.089	206.407
1/2	302495.350	5836080.681	206.611
3/4	302492.123	5836080.010	206.808
M2	302489.385	5836078.174	206.906

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
M1-M2	8.600	13.269	11.992	2.435	-0.632



ROCK RETAINING WALL PROFILE
Hor250
Ver25

Rev	Description	Approved	Date
2	REAR WALL TOP PROFILE ADDED TO LONG SECTION, BATTER ADDED TO PLAN	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
Rev	Amendments	Approved	Date



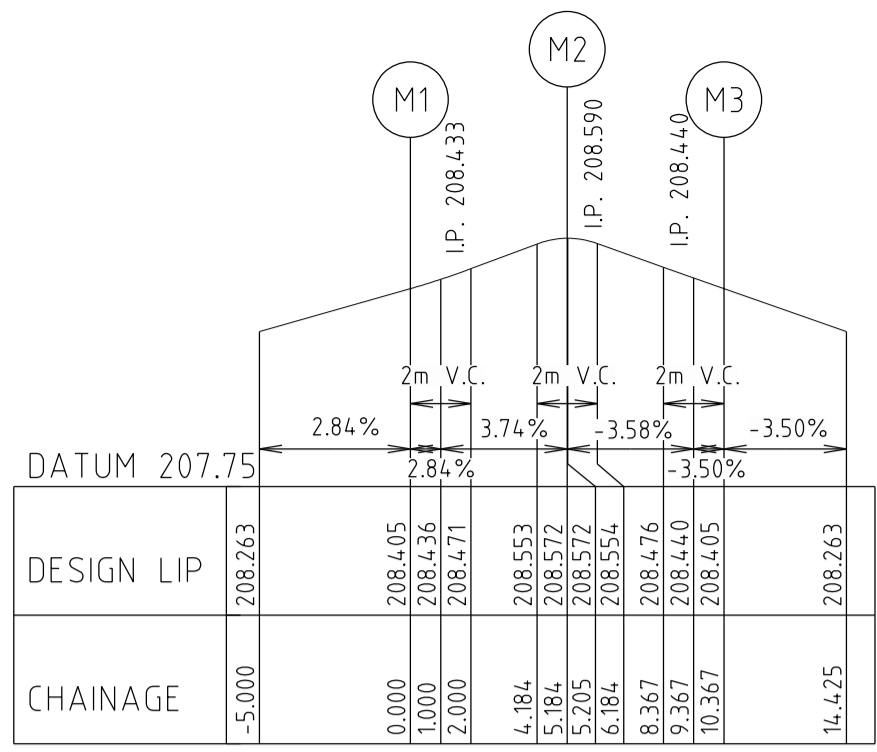
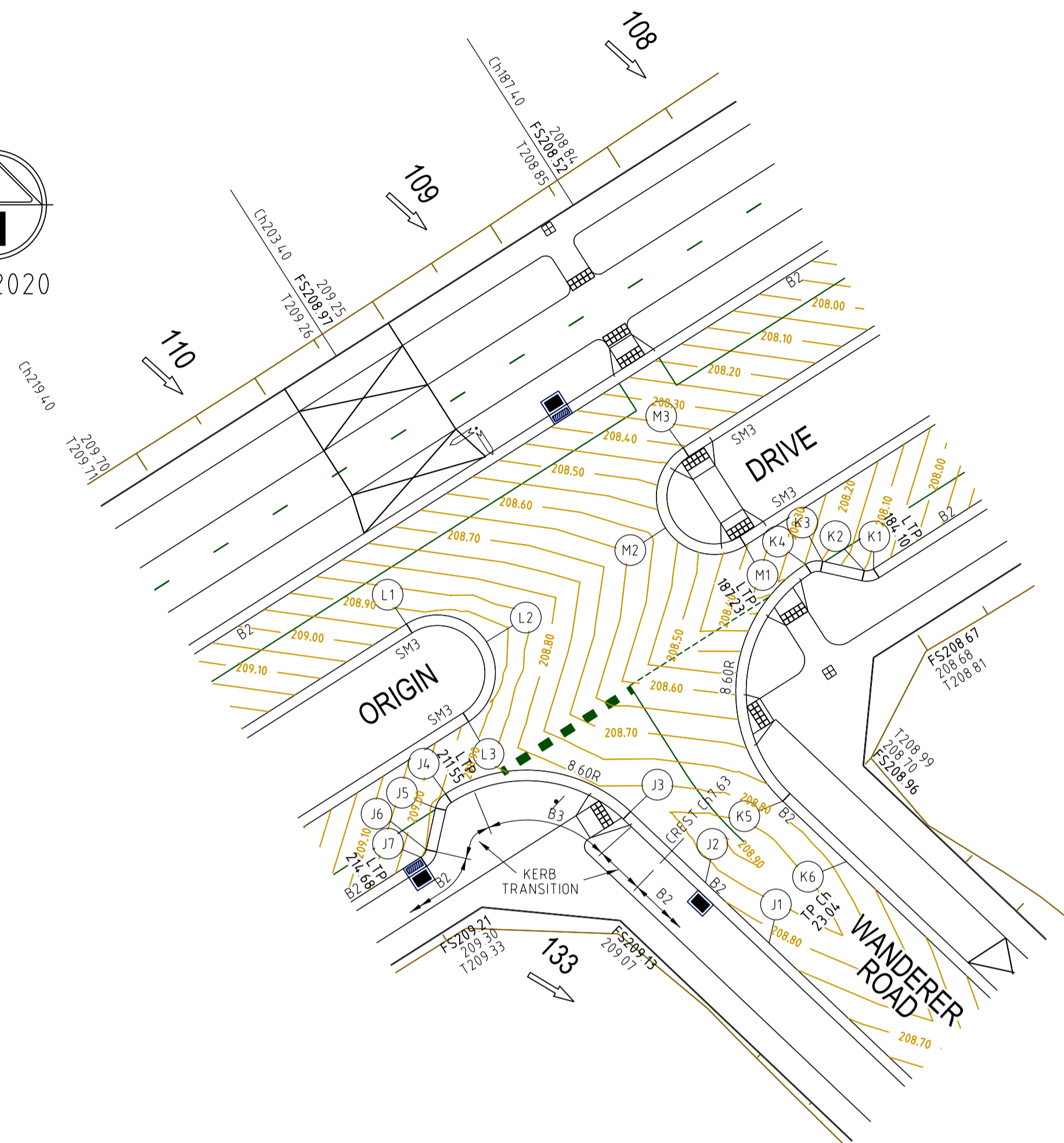
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Communities Designed for Living
Designed by
R. WEINBER
Authorised
M. LETSON

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Checked
D. CAMERON
Date
10/04/19

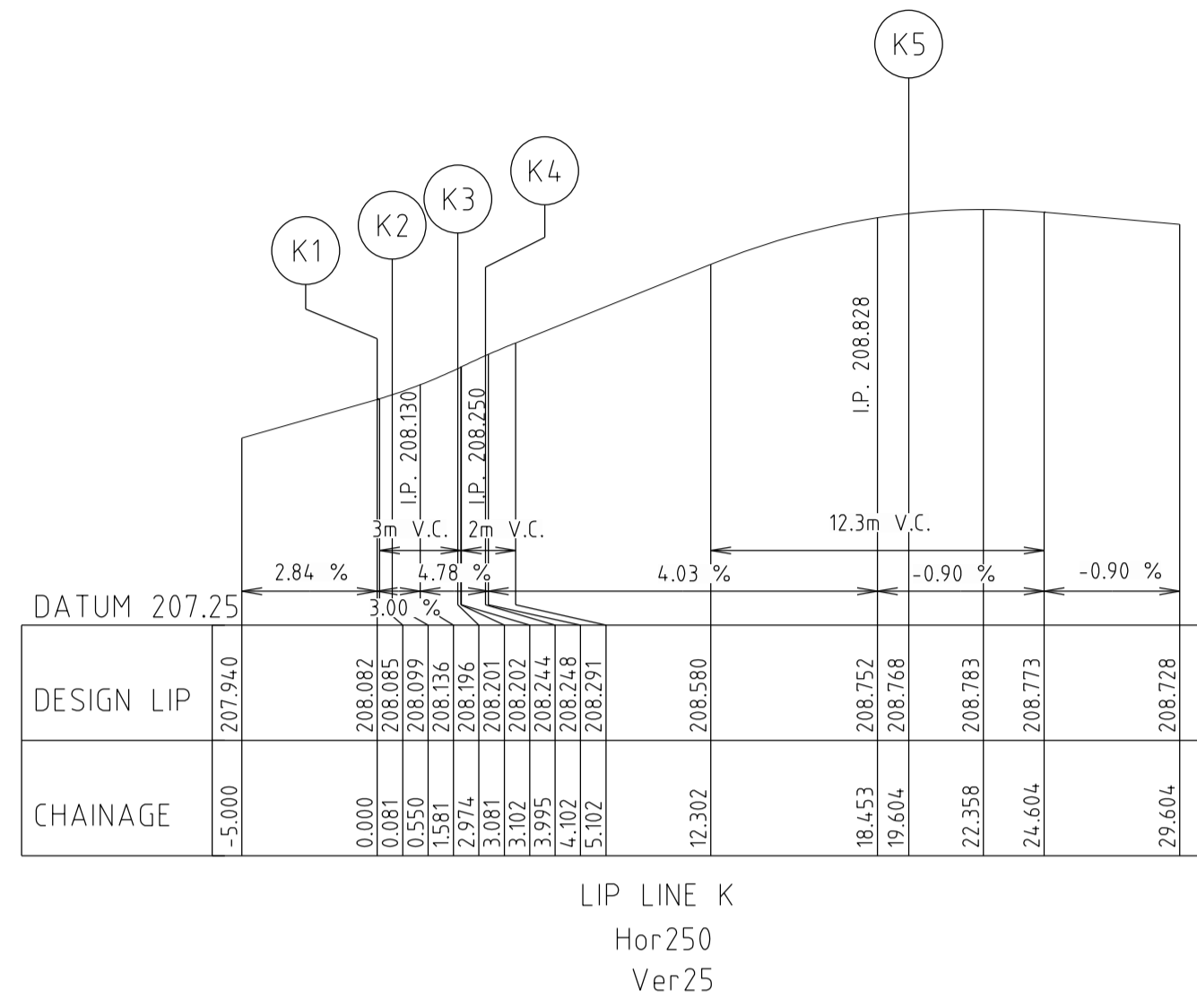
REDSTONE ESTATE
STAGE 1
INTERSECTION & RETAINING WALL DETAILS
SHEET 4 OF 5
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R17** Rev **2**



ALIGNMENT M

POINT NO	EASTING	NORTHING	RL
M1	302362.742	5836013.538	208.405
M2	302358.600	5836014.457	208.572
M3	302359.518	5836018.599	208.405

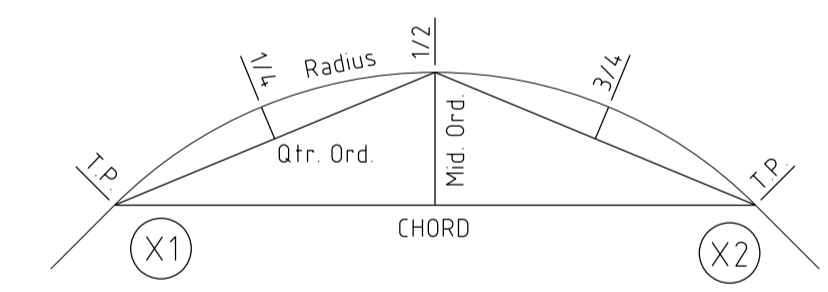
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
M1-M2	3.000	4.712	4.243	0.879	0.228
M2-M3	3.000	4.712	4.243	0.879	0.228



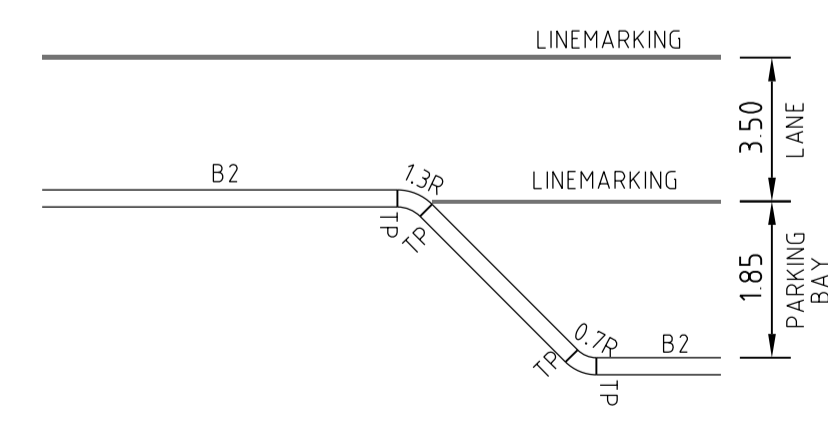
ALIGNMENT K

POINT NO	EASTING	NORTHING	RL
K1	302370.204	5836011.949	208.082
1/4	302370.081	5836011.887	208.086
1/2	302369.949	5836011.850	208.091
3/4	302369.812	5836011.839	208.095
K2	302369.676	5836011.856	208.099
K3	302367.309	5836012.381	208.196
1/4	302367.056	5836012.411	208.208
1/2	302366.802	5836012.392	208.220
3/4	302366.557	5836012.323	208.232
K4	302366.329	5836012.208	208.244
1/4	302363.618	5836009.448	208.403
1/2	302362.390	5836005.779	208.560
3/4	302362.895	5836001.943	208.694
K5	302365.030	5835998.717	208.768
K6	302368.656	5835995.275	208.773

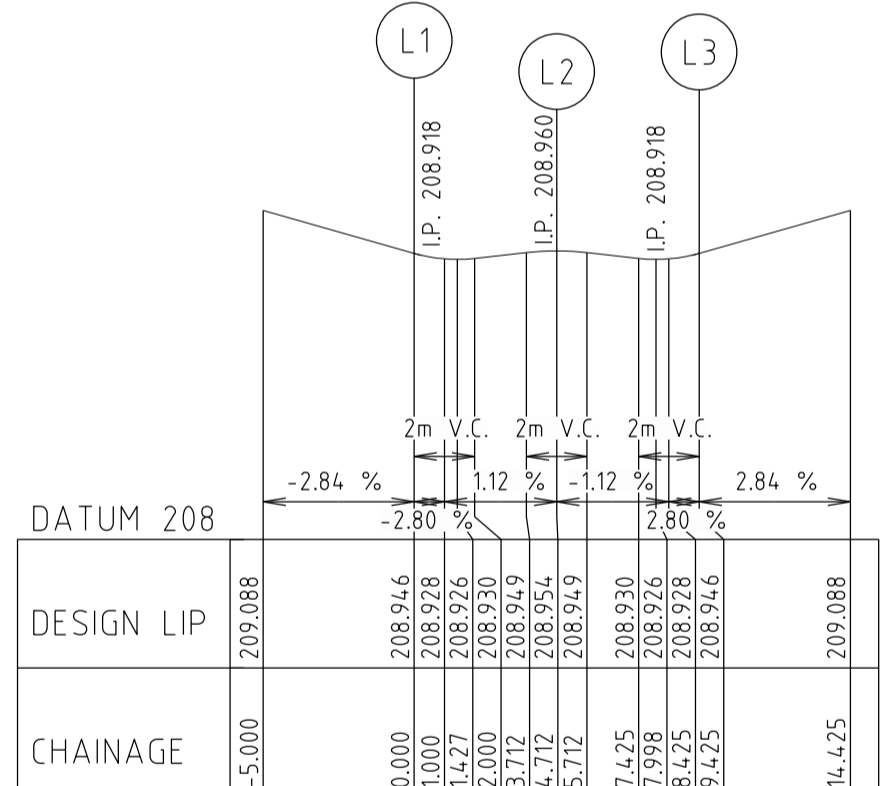
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
K1-K2	0.700	0.550	0.536	0.053	0.013
K3-K4	1.300	1.021	0.995	0.099	-0.025
K4-K5	8.600	15.609	13.553	3.305	-0.870



KERB RETURN SETOUT DETAIL



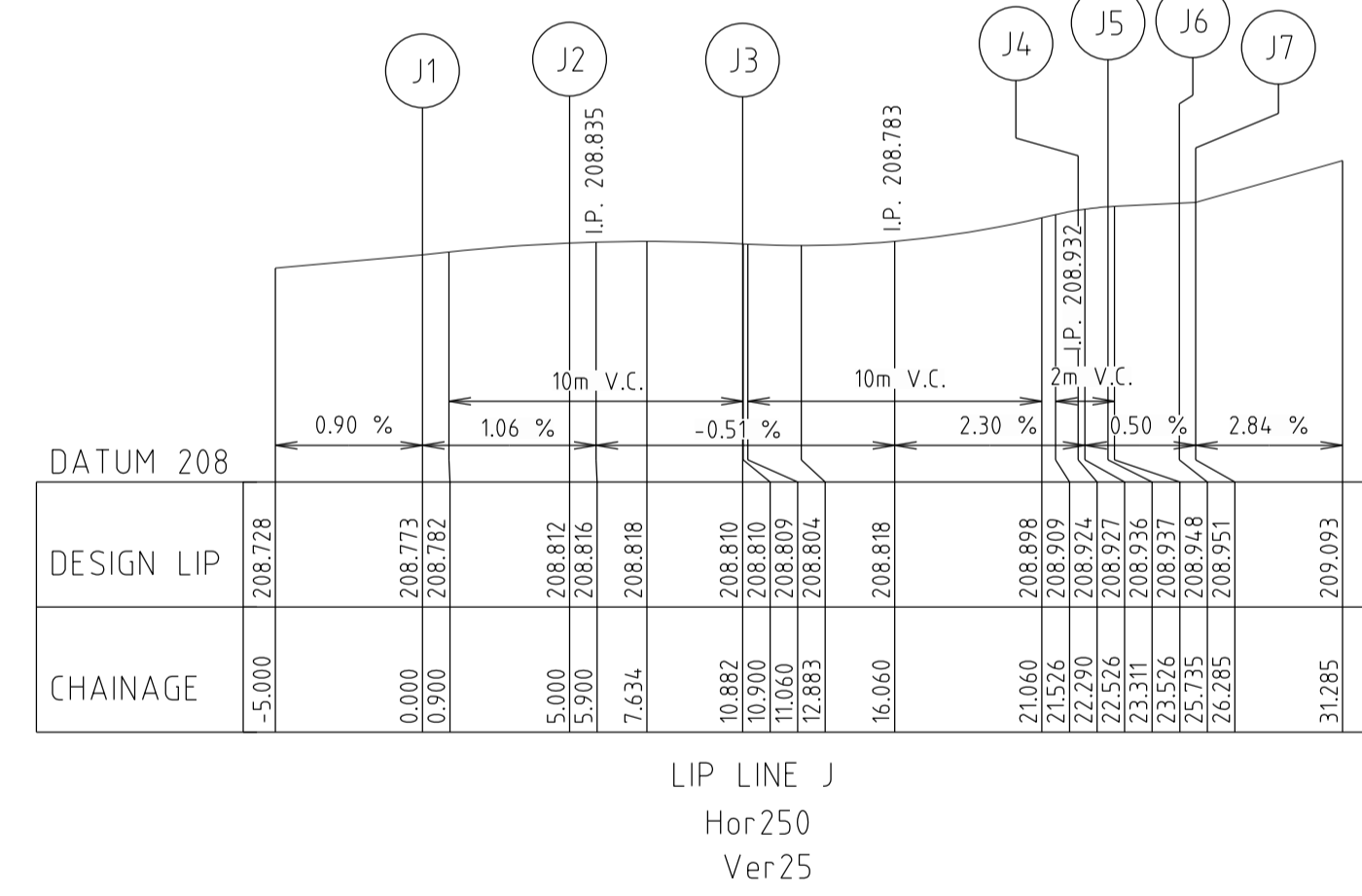
TYPICAL KERB INDENT DETAIL
N.T.S



ALIGNMENT L

POINT NO	EASTING	NORTHING	RL
L1	302343.746	5836008.551	208.946
1/4	302344.837	5836008.975	208.927
1/2	302346.008	5836008.950	208.934
3/4	302347.079	5836008.479	208.947
L2	302347.888	5836007.633	208.954
1/4	302348.313	5836006.542	208.947
1/2	302348.287	5836005.372	208.934
3/4	302347.816	5836004.300	208.927
L3	302346.970	5836003.491	208.946

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
L1-L2	3.000	4.712	4.243	0.879	0.228
L2-L3	3.000	4.712	4.243	0.879	0.228

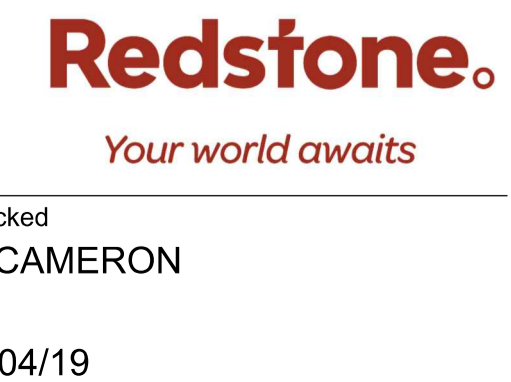
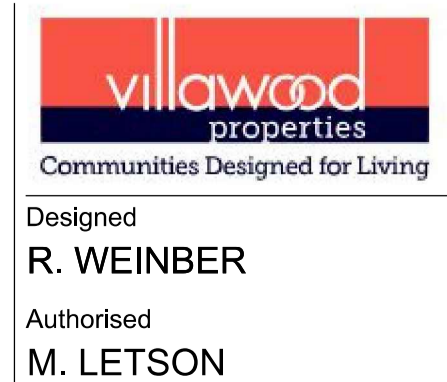
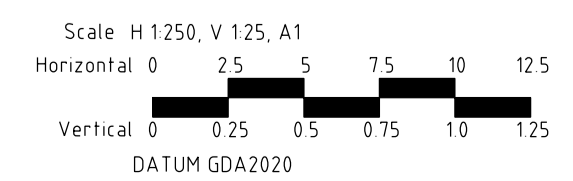


ALIGNMENT J

POINT NO	EASTING	NORTHING	RL
J1	302364.250	5835990.633	208.773
J2	302360.624	5835994.075	208.812
J3	302356.358	5835998.124	208.810
1/4	302354.004	5835999.712	208.805
1/2	302351.262	5836000.447	208.823
3/4	302348.430	5836000.249	208.865
J4	302345.817	5835999.140	208.924
1/4	302345.616	5835998.982	208.928
1/2	302345.450	5835998.789	208.931
3/4	302345.325	5835998.567	208.934
J5	302345.246	5835998.325	208.936
J6	302344.721	5835995.958	208.948
1/4	302344.678	5835995.827	208.949
1/2	302344.611	5835995.708	208.949
3/4	302344.522	5835995.604	208.950
J7	302344.414	5835995.519	208.951

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
J3-J4	8.600	11.408	10.590	1.823	-0.469
J4-J5	1.300	1.021	0.995	0.099	-0.025
J6-J7	0.700	0.550	0.536	0.053	0.013

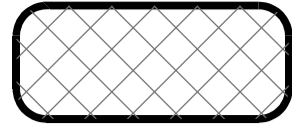
Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



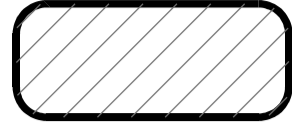
REDSTONE ESTATE
STAGE 1
INTERSECTION DETAILS
SHEET 5 OF 5

VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R18** Rev **1**



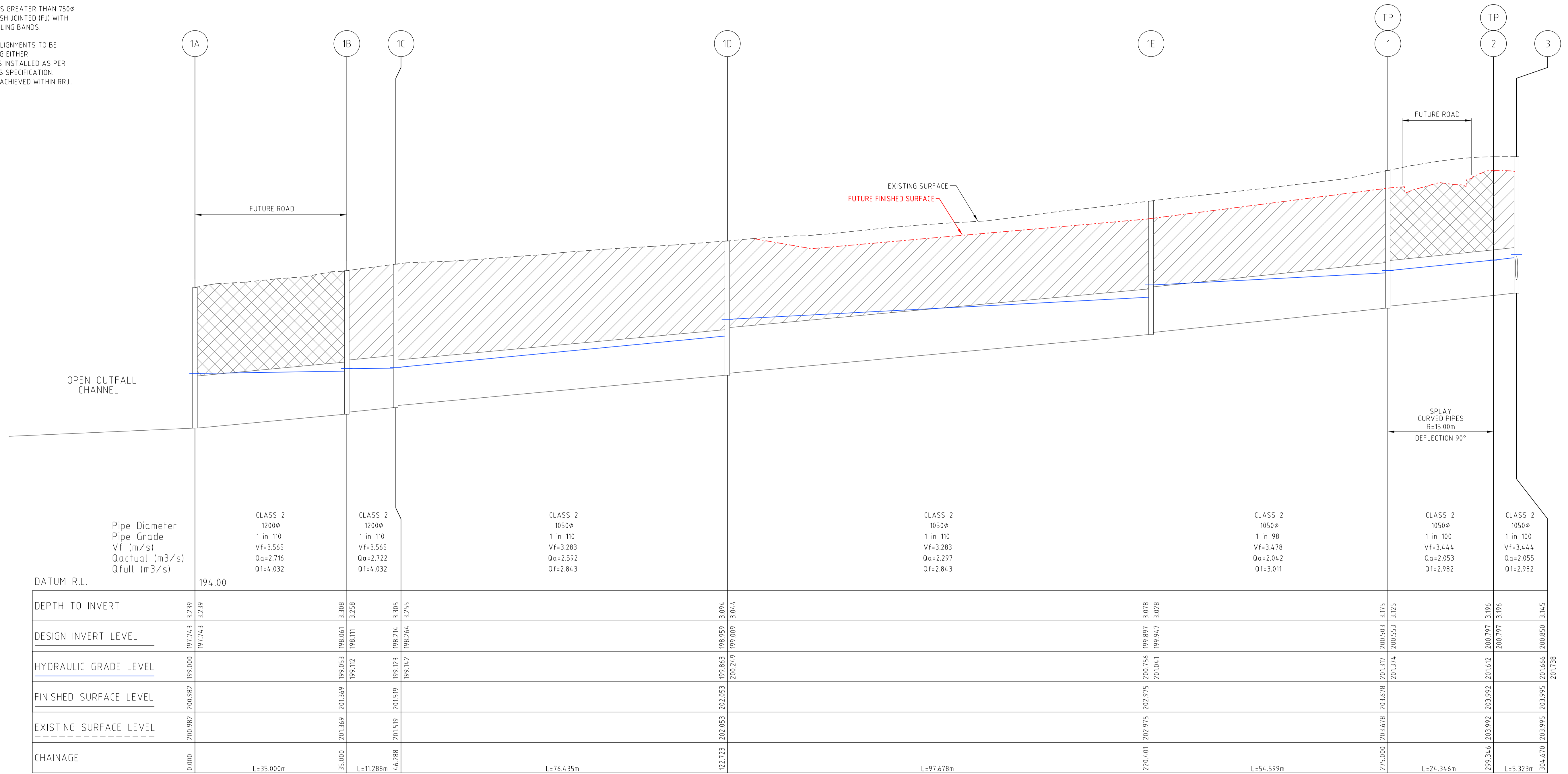
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

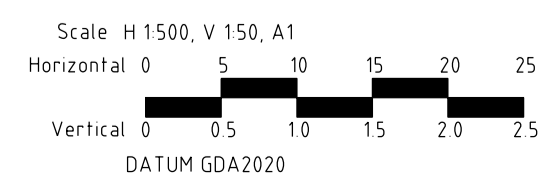
NOTE:

- 1. ALL PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS NOTED OTHERWISE.
- 2. DRAINAGE PIPES GREATER THAN 750Ø ARE TO BE FLUSH JOINTED (FJ) WITH EXTERNAL SEALING BANDS.
- 3. CURVED PIPE ALIGNMENTS TO BE ACHIEVED USING EITHER:
 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURES SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ.



	1A	1B	1C	1D	1E	TP 1	TP 2	TP 3
Pipe Diameter	1200Ø	1200Ø	1050Ø	1050Ø	1050Ø	1050Ø	1050Ø	1050Ø
Pipe Grade	1 in 110	1 in 110	1 in 110	1 in 110	1 in 98	1 in 100	1 in 100	1 in 100
Vf (m/s)	3.565	3.565	3.283	3.283	3.478	3.444	3.444	3.444
Q _{actual} (m ³ /s)	2.716	2.722	2.592	2.592	2.042	2.053	2.055	2.055
Q _{full} (m ³ /s)	4.032	4.032	2.843	2.843	3.011	2.982	2.982	2.982
DATUM R.L.	194.00							
DEPTH TO INVERT	3.239	3.208	3.305	3.094	3.078	3.175	3.196	3.145
DESIGN INVERT LEVEL	197.743	198.061	198.274	198.959	199.867	200.503	200.797	200.850
HYDRAULIC GRADE LEVEL	199.000	199.053	199.123	199.863	200.756	201.317	201.612	201.666
FINISHED SURFACE LEVEL	200.982	201.369	201.519	202.053	202.975	203.678	203.992	203.995
EXISTING SURFACE LEVEL	200.982	201.369	201.519	202.053	202.975	203.678	203.992	203.995
CHAINAGE	0.000	35.000	46.288	122.723	220.401	275.000	299.346	304.670
		L=35.000m	L=11.288m	L=76.435m	L=97.678m	L=54.599m	L=24.346m	L=5.323m

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



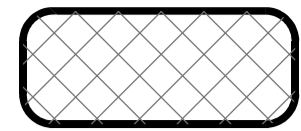
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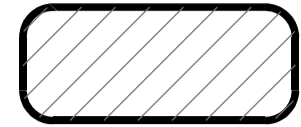
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 Checked
 D. CAMERON
 Date
 10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 1 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R19** Rev **1**



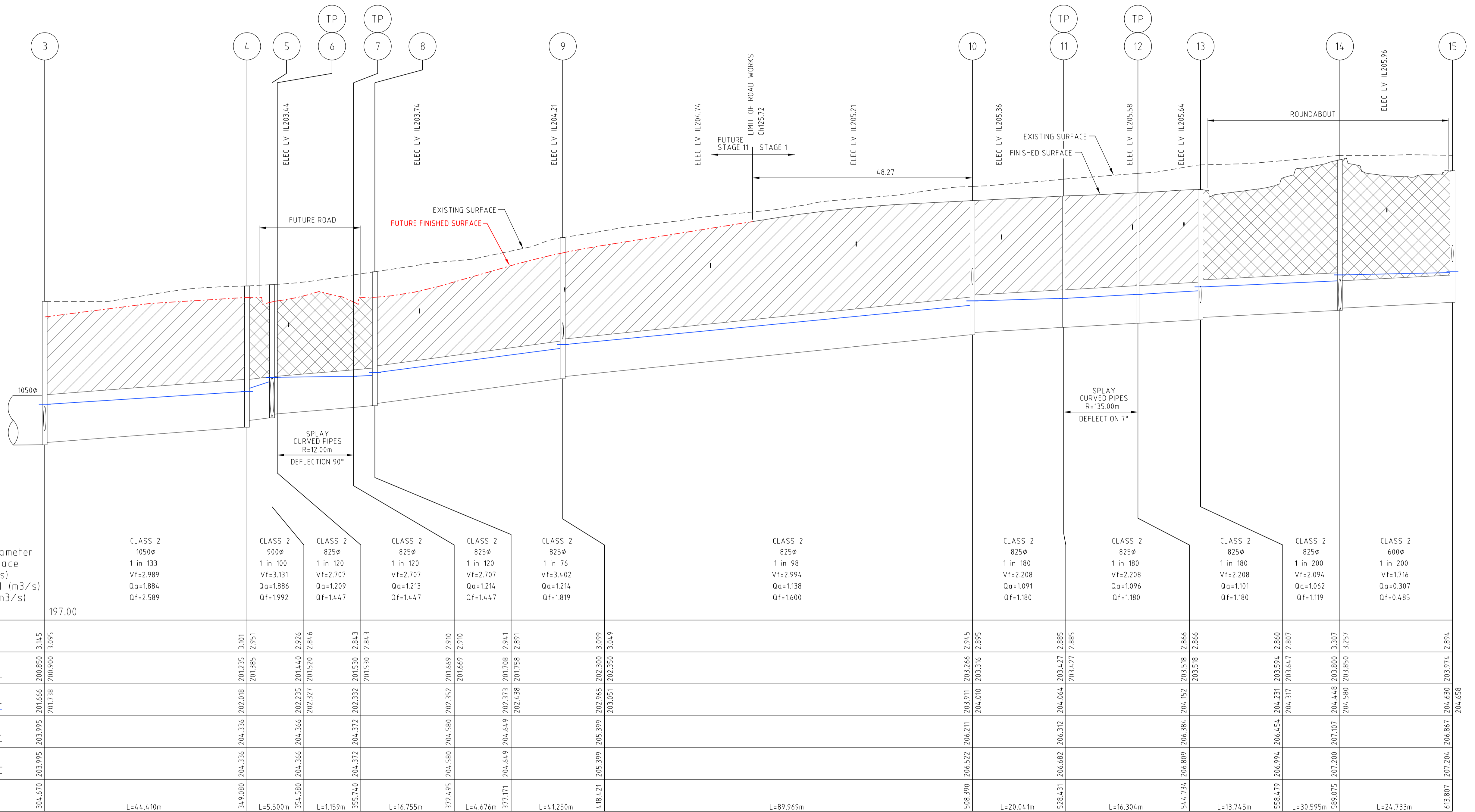
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

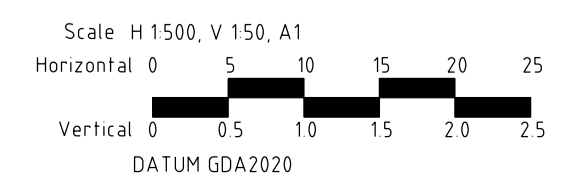
NOTE:

- 1 ALL PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS NOTED OTHERWISE
- 2 DRAINAGE PIPES GREATER THAN 750Ø ARE TO BE FLUSH JOINTED (FJ) WITH EXTERNAL SEALING BANDS
- 3 CURVED PIPE ALIGNMENTS TO BE ACHIEVED USING EITHER:
 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURES SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ



Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15										
Pipe Diameter	1050Ø	900Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	825Ø	600Ø										
Pipe Grade	1 in 133	1 in 100	1 in 120	1 in 120	1 in 120	1 in 120	1 in 120	1 in 120	1 in 98	1 in 180	1 in 180	1 in 180	1 in 180	1 in 200	1 in 200										
Vf (m/s)	2.989	3.131	2.707	2.707	2.707	2.707	2.707	2.707	2.994	2.208	2.208	2.208	2.208	2.094	1.716										
Qactual (m3/s)	1.884	1.886	1.209	1.213	1.214	1.214	1.214	1.214	1.138	1.091	1.096	1.101	1.062	1.062	0.307										
Qfull (m3/s)	2.589	1.992	1.447	1.447	1.447	1.447	1.447	1.447	1.600	1.180	1.180	1.180	1.119	1.119	0.485										
DATUM R.L.	197.00																								
DEPTH TO INVERT	314.5	314.5	310.1	295.1	297.6	284.6	284.3	284.3	291.0	291.0	294.1	289.1	289.5	286.6	286.6	289.4									
DESIGN INVERT LEVEL	200.850	200.900	201.385	201.385	201.440	201.520	201.530	201.530	201.669	201.669	201.708	201.758	203.266	203.266	203.266	203.266									
HYDRAULIC GRADE LEVEL	201.666	201.666	202.018	202.018	202.235	202.327	202.332	202.332	202.352	202.352	202.373	202.438	204.010	204.010	204.010	204.010									
FINISHED SURFACE LEVEL	203.995	203.995	204.336	204.336	204.366	204.366	204.372	204.372	204.580	204.580	204.649	204.649	206.312	206.312	206.312	206.312									
EXISTING SURFACE LEVEL	203.995	203.995	204.336	204.336	204.366	204.366	204.372	204.372	204.580	204.580	204.649	204.649	206.522	206.522	206.522	206.522									
CHAINAGE	304.670	L=4.410m	349.080	L=5.500m	354.580	L=1.159m	355.740	L=16.755m	372.495	L=4.676m	377.171	L=4.1250m	418.421	L=89.969m	508.390	L=20.041m	528.431	L=16.304m	544.734	L=13.745m	558.479	L=30.595m	589.075	L=24.733m	613.807

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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Designed
R. WEINBER

Authorised
M. LETSON

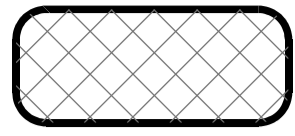
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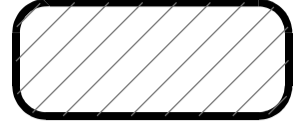
Date
10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 2 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R20** Rev **1**



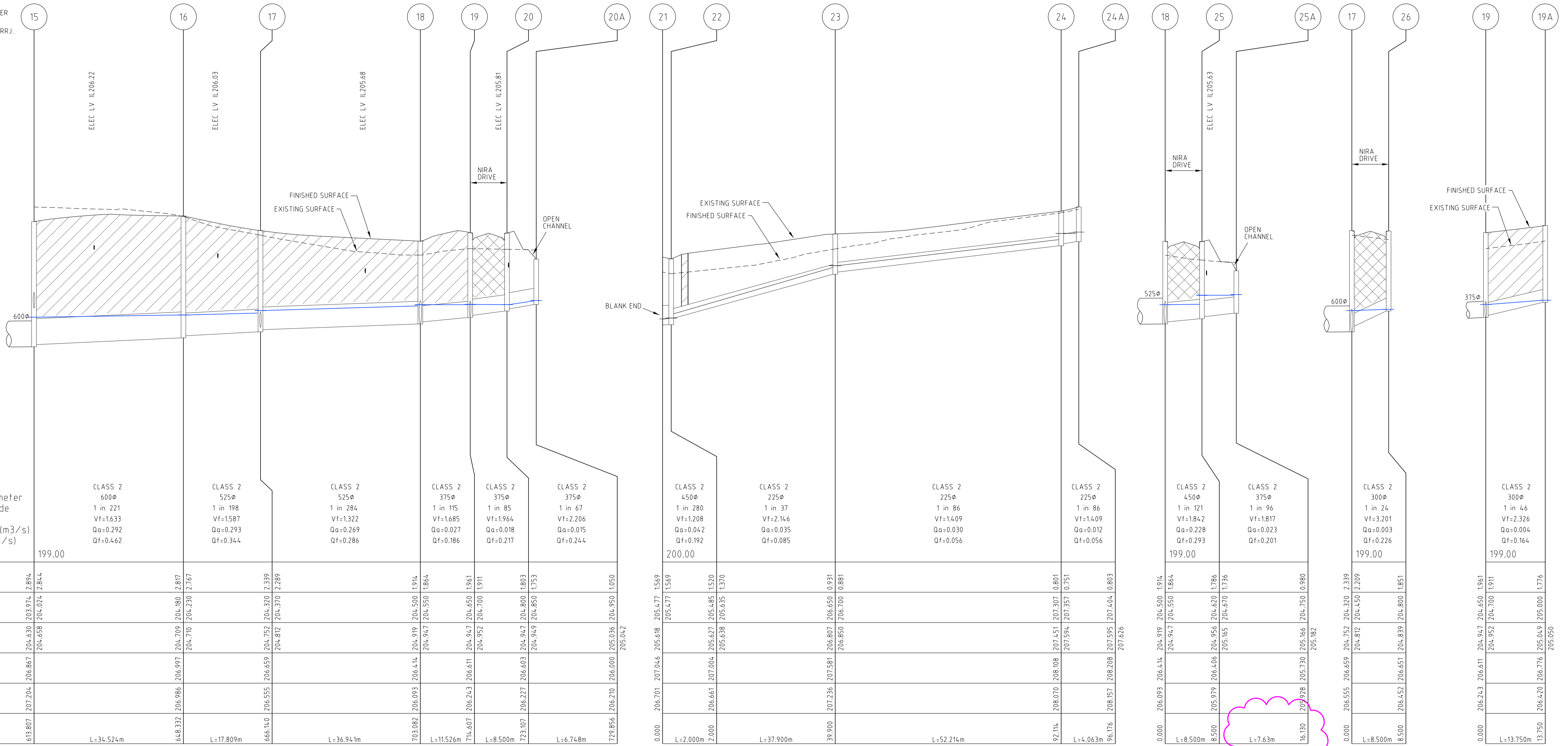
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

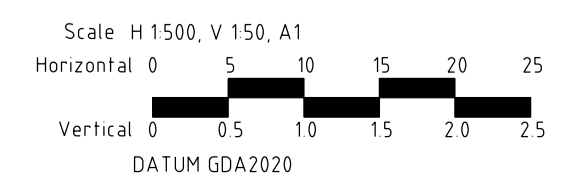
NOTE:

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 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURERS SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ



Station	Class	Diameter (Ø)	Grade (Vf)	Actual Q (m³/s)	Full Q (m³/s)	Datum R.L.	Depth to Invert	Design Invert Level	Hydraulic Grade Level	Finished Surface Level	Existing Surface Level	Chainage
15	CLASS 2	600Ø	1 in 221	Qa=0.292	Qf=0.462	199.00	2.894	204.630	204.658	206.867	207.204	613.807
16	CLASS 2	525Ø	1 in 198	Vf=1.587	Qa=0.293	204.710	2.339	204.709	204.812	206.997	207.204	648.332
17	CLASS 2	525Ø	1 in 198	Vf=1.587	Qa=0.293	204.710	2.339	204.709	204.812	206.997	207.204	666.140
18	CLASS 2	525Ø	1 in 198	Vf=1.587	Qa=0.293	204.710	2.339	204.709	204.812	206.997	207.204	703.082
19	CLASS 2	375Ø	1 in 115	Vf=1.685	Qa=0.027	204.947	1.961	204.919	204.952	206.611	206.213	714.607
20	CLASS 2	375Ø	1 in 85	Vf=1.964	Qa=0.018	204.947	1.803	204.947	204.949	206.603	206.227	723.107
20A	CLASS 2	375Ø	1 in 67	Vf=2.206	Qa=0.015	204.949	1.753	204.947	204.949	206.603	206.227	729.856
21	CLASS 2	450Ø	1 in 280	Vf=1.208	Qa=0.042	205.036	1.050	205.036	205.036	206.000	206.210	779.856
22	CLASS 2	225Ø	1 in 37	Vf=2.146	Qa=0.035	205.036	0.931	205.036	205.036	206.000	206.210	799.856
23	CLASS 2	450Ø	1 in 86	Vf=1.409	Qa=0.030	205.036	0.881	205.036	205.036	206.000	206.210	819.856
24	CLASS 2	225Ø	1 in 86	Vf=1.409	Qa=0.012	205.036	0.803	205.036	205.036	206.000	206.210	839.856
24A	CLASS 2	225Ø	1 in 86	Vf=1.409	Qa=0.012	205.036	0.803	205.036	205.036	206.000	206.210	859.856
18	CLASS 2	450Ø	1 in 121	Vf=1.842	Qa=0.228	199.00	1.786	204.947	205.165	206.406	206.651	879.856
25	CLASS 2	375Ø	1 in 96	Vf=1.817	Qa=0.023	199.00	1.736	204.947	205.165	206.406	206.651	899.856
25A	CLASS 2	300Ø	1 in 24	Vf=3.201	Qa=0.003	199.00	1.851	204.947	205.166	206.406	206.651	919.856
17	CLASS 2	300Ø	1 in 24	Vf=3.201	Qa=0.003	199.00	1.851	204.947	205.166	206.406	206.651	939.856
26	CLASS 2	300Ø	1 in 24	Vf=3.201	Qa=0.003	199.00	1.851	204.947	205.166	206.406	206.651	959.856
19	CLASS 2	300Ø	1 in 46	Vf=2.326	Qa=0.004	199.00	1.776	204.947	205.049	206.420	206.776	979.856
19A	CLASS 2	300Ø	1 in 46	Vf=2.326	Qa=0.004	199.00	1.776	204.947	205.049	206.420	206.776	999.856

Rev	Description	Approved	Date
3	PIT 25 TO 25A UPDATED. LENGTH REDUCED	M.L.	10/08/20
2	PIT 19 TO 19A UPDATED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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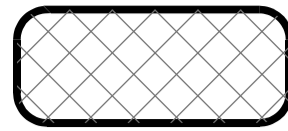
Checked
D. CAMERON

Authorised
M. LETSON

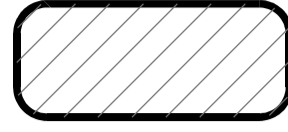
Date
10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 3 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R21** Rev **3**



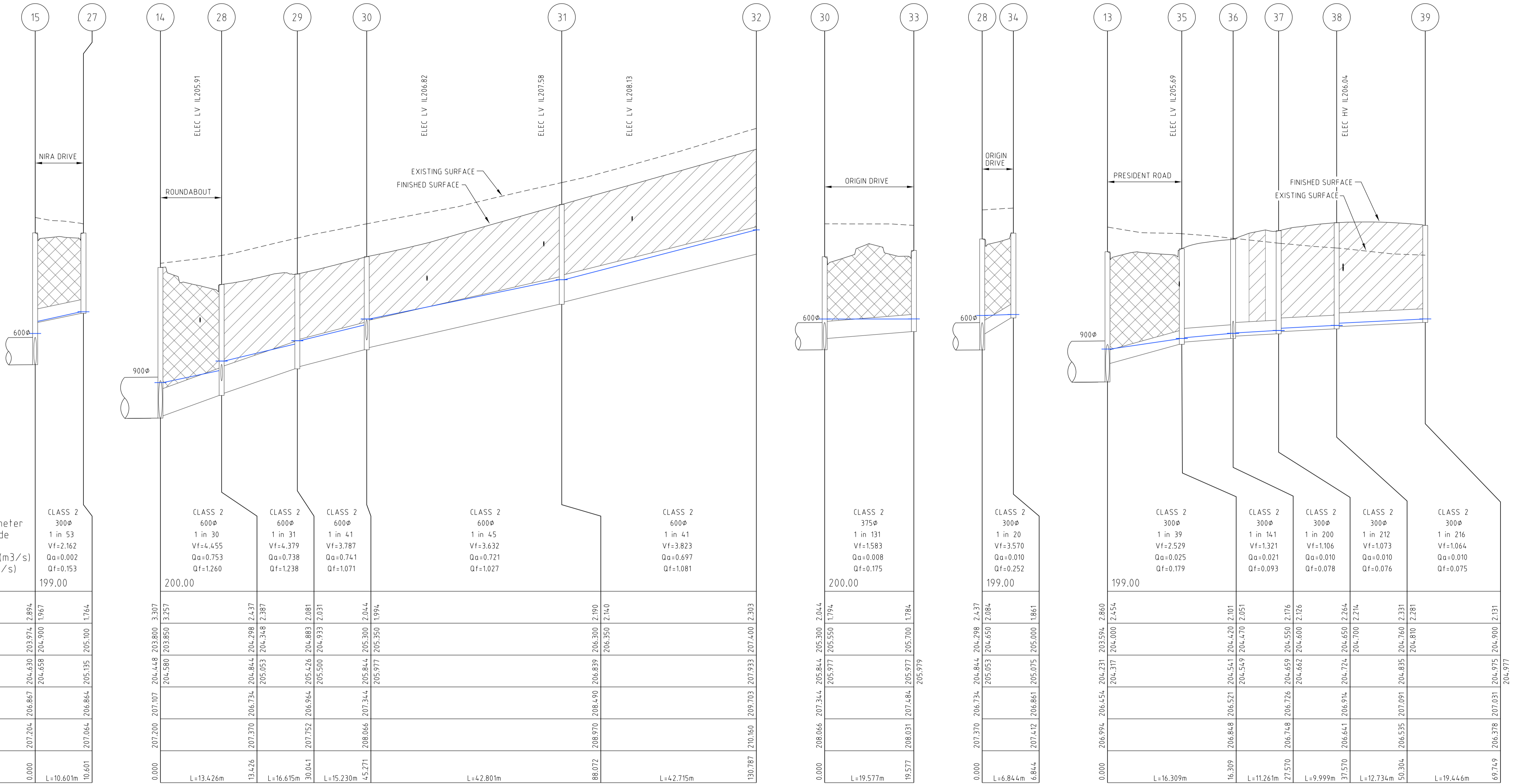
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

NOTE:

- 1 ALL PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS NOTED OTHERWISE
- 2 DRAINAGE PIPES GREATER THAN 750Ø ARE TO BE FLUSH JOINTED (FJ) WITH EXTERNAL SEALING BANDS.
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 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURERS SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ.



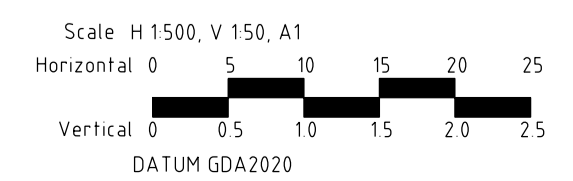
	15	27
Pipe Diameter	300Ø	300Ø
Pipe Grade	1 in 53	1 in 53
Vf (m/s)	Vf=2.162	Vf=2.162
Q _{actual} (m ³ /s)	Qa=0.002	Qa=0.002
Q _{full} (m ³ /s)	Qf=0.153	Qf=0.153
DATUM R.L.	199.00	199.00
DEPTH TO INVERT	207.200	207.200
DESIGN INVERT LEVEL	206.658	206.658
HYDRAULIC GRADE LEVEL	206.658	206.658
FINISHED SURFACE LEVEL	207.204	207.204
EXISTING SURFACE LEVEL	207.064	207.064
CHAINAGE	0.000	10.601
	L=10.601m	

	14	28	29	30	31	32
Pipe Diameter	900Ø	600Ø	600Ø	600Ø	600Ø	600Ø
Pipe Grade	1 in 30	1 in 31	1 in 31	1 in 41	1 in 45	1 in 41
Vf (m/s)	Vf=4.455	Vf=4.379	Vf=4.379	Vf=3.787	Vf=3.632	Vf=3.823
Q _{actual} (m ³ /s)	Qa=0.753	Qa=0.738	Qa=0.738	Qa=0.741	Qa=0.697	Qa=0.697
Q _{full} (m ³ /s)	Qf=1.260	Qf=1.238	Qf=1.238	Qf=1.071	Qf=1.027	Qf=1.081
DATUM R.L.	200.00	200.00	200.00	200.00	200.00	200.00
DEPTH TO INVERT	207.200	207.200	207.200	207.200	207.200	207.200
DESIGN INVERT LEVEL	206.590	206.734	206.734	206.839	206.839	206.839
HYDRAULIC GRADE LEVEL	206.590	206.734	206.734	206.839	206.839	206.839
FINISHED SURFACE LEVEL	207.200	207.200	207.200	207.344	207.344	207.344
EXISTING SURFACE LEVEL	207.200	207.200	207.200	208.066	208.066	208.066
CHAINAGE	0.000	13.426	16.615m	15.230m	4.5271	130.787
	L=13.426m	L=16.615m	L=15.230m	L=4.5271m	L=4.2.801m	L=4.2.715m

	30	33	28	34
Pipe Diameter	600Ø	600Ø	600Ø	600Ø
Pipe Grade	1 in 131	1 in 131	1 in 20	1 in 20
Vf (m/s)	Vf=1.583	Vf=1.583	Vf=3.570	Vf=3.570
Q _{actual} (m ³ /s)	Qa=0.008	Qa=0.008	Qa=0.010	Qa=0.010
Q _{full} (m ³ /s)	Qf=0.175	Qf=0.175	Qf=0.252	Qf=0.252
DATUM R.L.	200.00	200.00	199.00	199.00
DEPTH TO INVERT	208.066	208.066	207.370	207.370
DESIGN INVERT LEVEL	205.977	205.977	206.844	206.844
HYDRAULIC GRADE LEVEL	205.977	205.977	206.844	206.844
FINISHED SURFACE LEVEL	208.031	208.031	207.412	207.412
EXISTING SURFACE LEVEL	208.031	208.031	207.412	207.412
CHAINAGE	0.000	6.844	0.000	6.844
	L=19.577m	L=6.844m	L=6.844m	L=6.844m

	13	35	36	37	38	39
Pipe Diameter	900Ø	300Ø	300Ø	300Ø	300Ø	300Ø
Pipe Grade	1 in 39	1 in 141	1 in 141	1 in 200	1 in 212	1 in 216
Vf (m/s)	Vf=2.529	Vf=1.321	Vf=1.321	Vf=1.106	Vf=1.073	Vf=1.064
Q _{actual} (m ³ /s)	Qa=0.025	Qa=0.021	Qa=0.021	Qa=0.010	Qa=0.010	Qa=0.010
Q _{full} (m ³ /s)	Qf=0.179	Qf=0.093	Qf=0.093	Qf=0.078	Qf=0.076	Qf=0.075
DATUM R.L.	199.00	199.00	199.00	199.00	199.00	199.00
DEPTH TO INVERT	206.594	206.521	206.521	206.726	206.726	206.726
DESIGN INVERT LEVEL	204.317	204.541	204.541	204.659	204.659	204.659
HYDRAULIC GRADE LEVEL	204.317	204.541	204.541	204.659	204.659	204.659
FINISHED SURFACE LEVEL	206.594	206.844	206.844	206.914	206.914	206.914
EXISTING SURFACE LEVEL	206.594	206.844	206.844	206.914	206.914	206.914
CHAINAGE	0.000	16.309	11.261m	9.999m	12.734m	19.446m
	L=16.309m	L=11.261m	L=9.999m	L=12.734m	L=19.446m	L=19.446m

Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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Designed
R. WEINBER

Authorised
M. LETSON

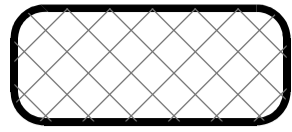
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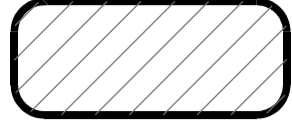
Date
10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 4 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R22** Rev **1**



CLASS 2 CRUSHED ROCK



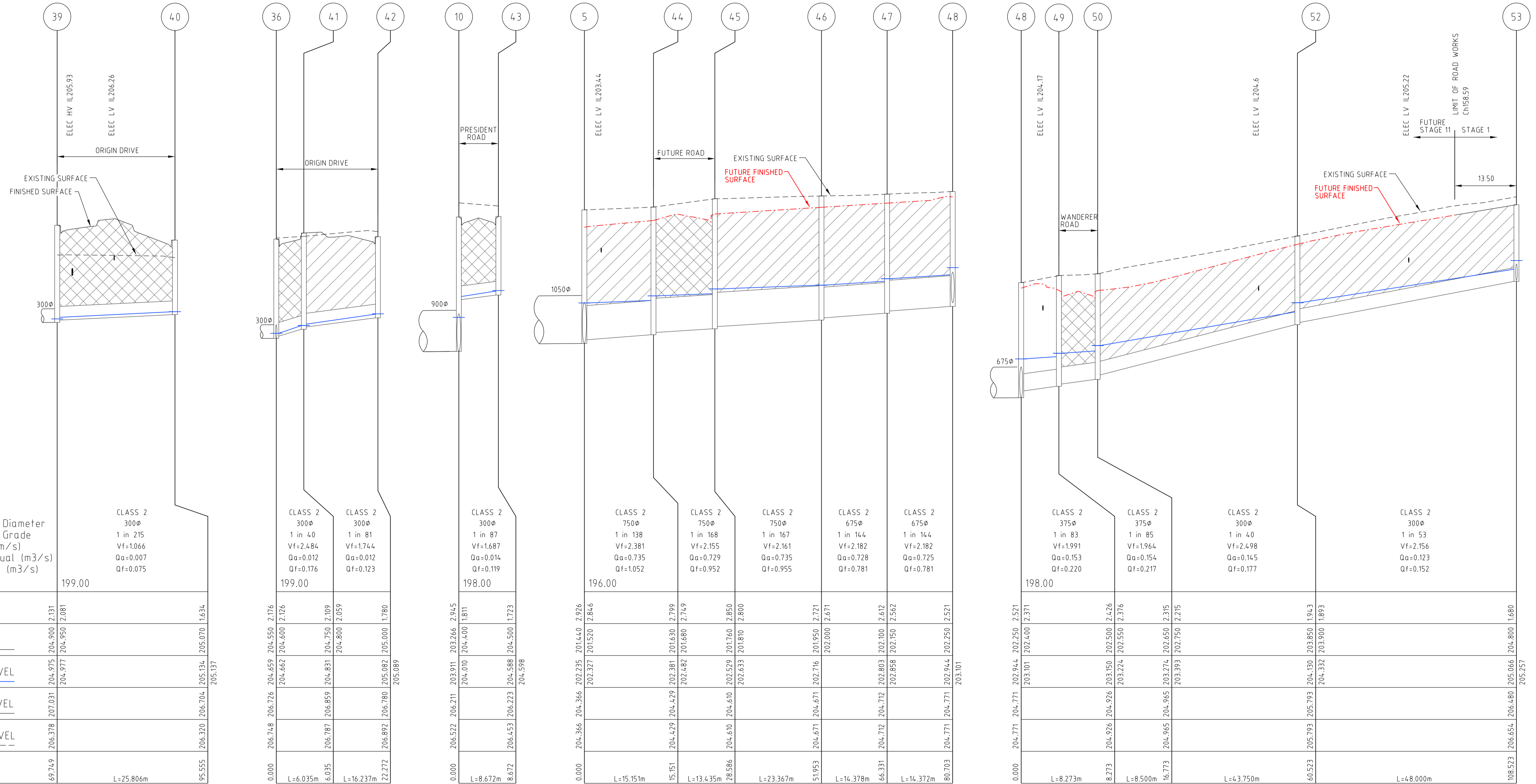
CLASS 3 CRUSHED ROCK

NOTE:

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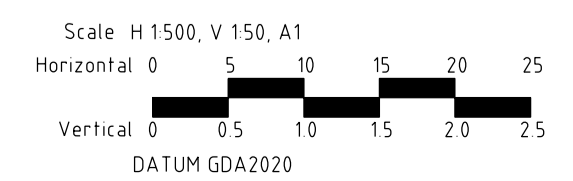
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b) DEFLECTION ACHIEVED WITHIN RRJ.



PIPE DIAMETER	PIPE GRADE	Vf (m/s)	Q _{actual} (m ³ /s)	Q _{full} (m ³ /s)
300φ	1 in 215	Vf=1.066	Q _a =0.007	Q _f =0.075
300φ	1 in 40	Vf=2.484	Q _a =0.012	Q _f =0.176
300φ	1 in 81	Vf=1.744	Q _a =0.012	Q _f =0.123
300φ	1 in 87	Vf=1.687	Q _a =0.014	Q _f =0.119
750φ	1 in 138	Vf=2.381	Q _a =0.735	Q _f =1.052
750φ	1 in 168	Vf=2.155	Q _a =0.729	Q _f =0.952
750φ	1 in 167	Vf=2.161	Q _a =0.735	Q _f =0.955
675φ	1 in 144	Vf=2.182	Q _a =0.728	Q _f =0.781
675φ	1 in 144	Vf=2.182	Q _a =0.725	Q _f =0.781
375φ	1 in 83	Vf=1.991	Q _a =0.153	Q _f =0.220
375φ	1 in 85	Vf=1.964	Q _a =0.154	Q _f =0.217
300φ	1 in 40	Vf=2.498	Q _a =0.145	Q _f =0.177
300φ	1 in 53	Vf=2.156	Q _a =0.123	Q _f =0.152

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



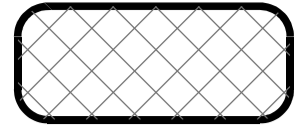
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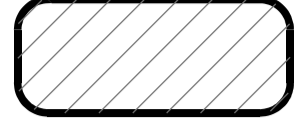
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Designed by R. WEINBER
Authorised by M. LETSON

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Date 10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 5 OF 9
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R23** Rev **1**



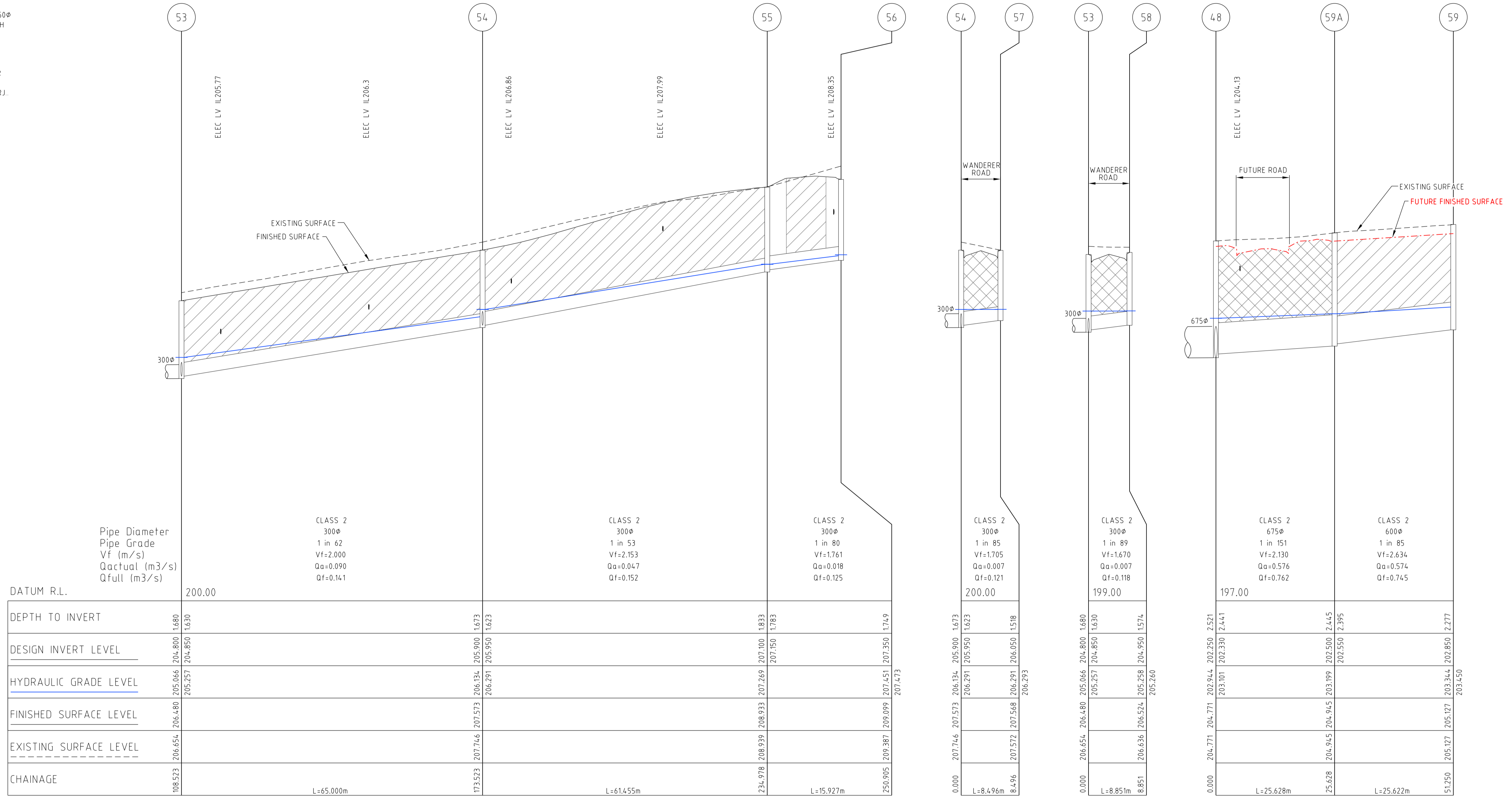
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

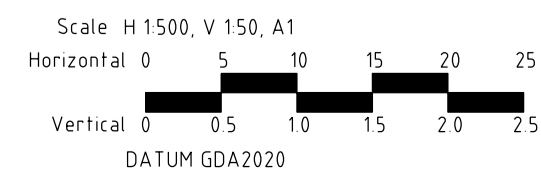
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DATUM R.L.	200.00	197.00	199.00	200.00
DEPTH TO INVERT	1.680 1.630	2.021 2.021	1.971 1.971	1.673 1.673
DESIGN INVERT LEVEL	204.800 204.850	202.330 202.330	202.330 202.330	207.350 207.350
HYDRAULIC GRADE LEVEL	205.066 205.257	206.134 206.291	207.269 207.451	208.099 208.273
FINISHED SURFACE LEVEL	206.654 206.654	207.746 207.746	208.933 208.933	209.987 209.987
EXISTING SURFACE LEVEL	206.654 206.654	207.746 207.746	208.933 208.933	209.987 209.987
CHAINAGE	108.523	173.523	234.978	250.905
	L=65.000m	L=61.455m	L=15.927m	L=8.496m

Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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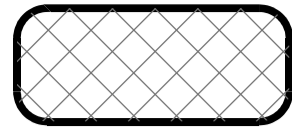
Designed by
R. WEINBER
 Authorised
M. LETSON



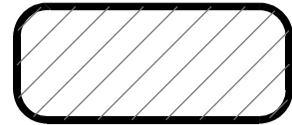
Checked
D. CAMERON
 Date
 10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 6 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R24** Rev **1**



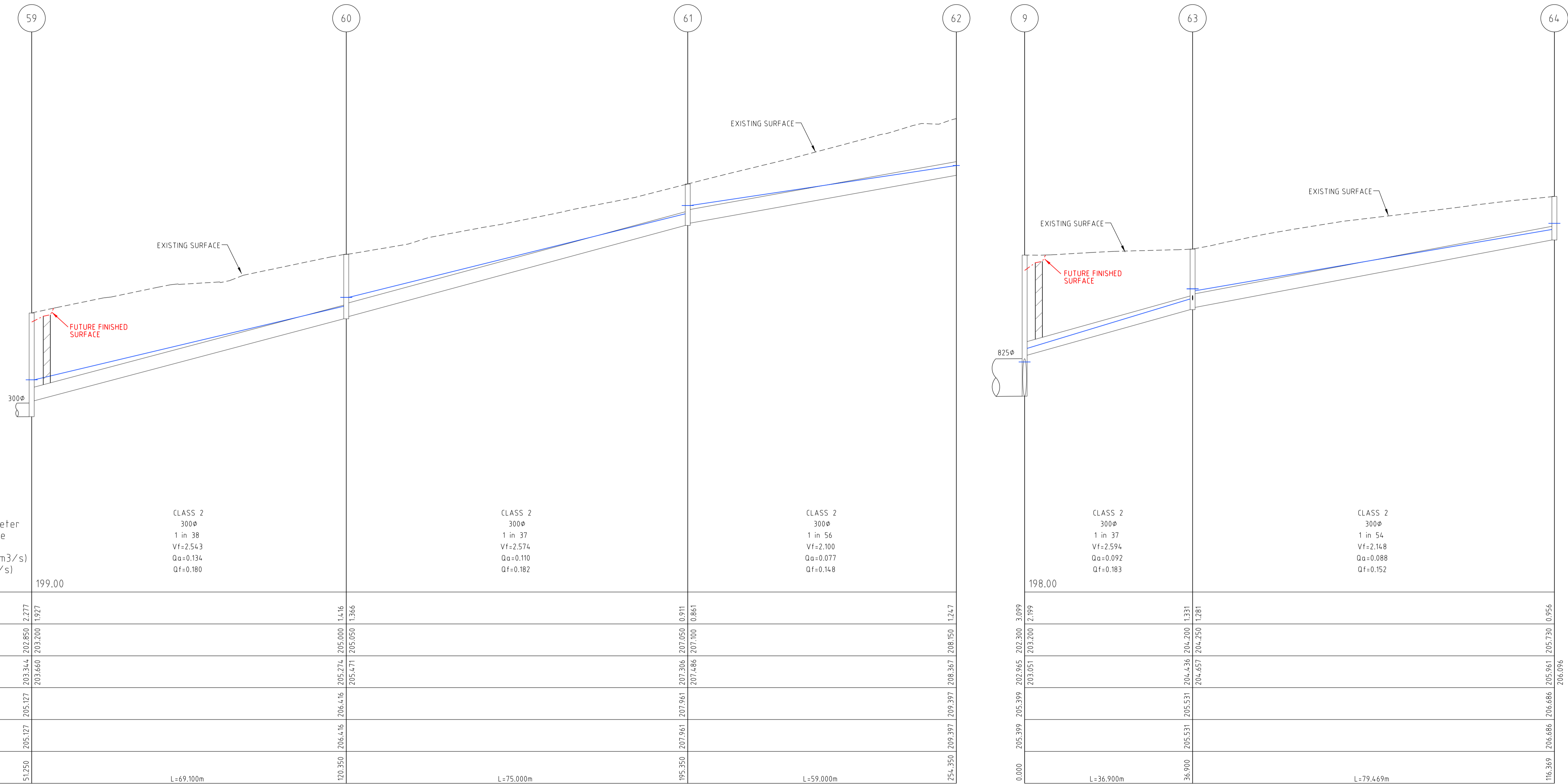
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

NOTE:

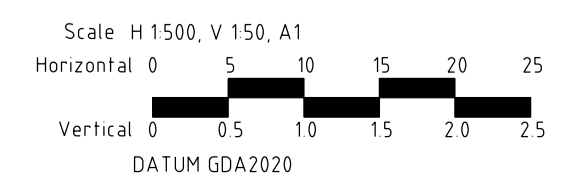
- 1. ALL PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS NOTED OTHERWISE.
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- 3. CURVED PIPE ALIGNMENTS TO BE ACHIEVED USING EITHER:
 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURES SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ.



PIPE DIAMETER	PIPE GRADE	Vf (m/s)	Qactual (m3/s)	Qfull (m3/s)
300 ϕ	1 in 38	2.574	0.134	0.180
300 ϕ	1 in 37	2.574	0.110	0.182
300 ϕ	1 in 56	2.100	0.077	0.148
300 ϕ	1 in 54	2.594	0.088	0.152

DATUM R.L.	199.00					198.00				
DEPTH TO INVERT	2.277		1.416		0.911	3.099		1.331		0.956
DESIGN INVERT LEVEL	202.850	205.000	207.050	208.150	209.397	202.300	204.200	205.730	206.886	208.096
HYDRAULIC GRADE LEVEL	203.344	205.471	207.506	208.567	209.897	203.051	204.436	205.531	206.686	207.941
FINISHED SURFACE LEVEL	203.360	205.471	207.506	208.567	209.897	203.051	204.436	205.531	206.686	207.941
EXISTING SURFACE LEVEL	205.127	206.416	207.961	209.397	209.397	205.399	205.531	206.686	206.686	206.686
CHAINAGE	51.250	120.350	195.350	254.350		0.000	36.900	116.369		
		L=69.100m	L=75.000m	L=59.000m			L=36.900m	L=79.669m		

Rev	Description	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 7 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

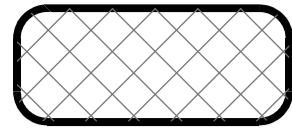
Designed
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Checked
D. CAMERON

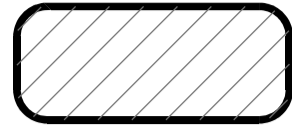
Authorised
M. LETSON

Date
10/04/19

CONSTRUCTION Drg No **305912R25** Rev **1**



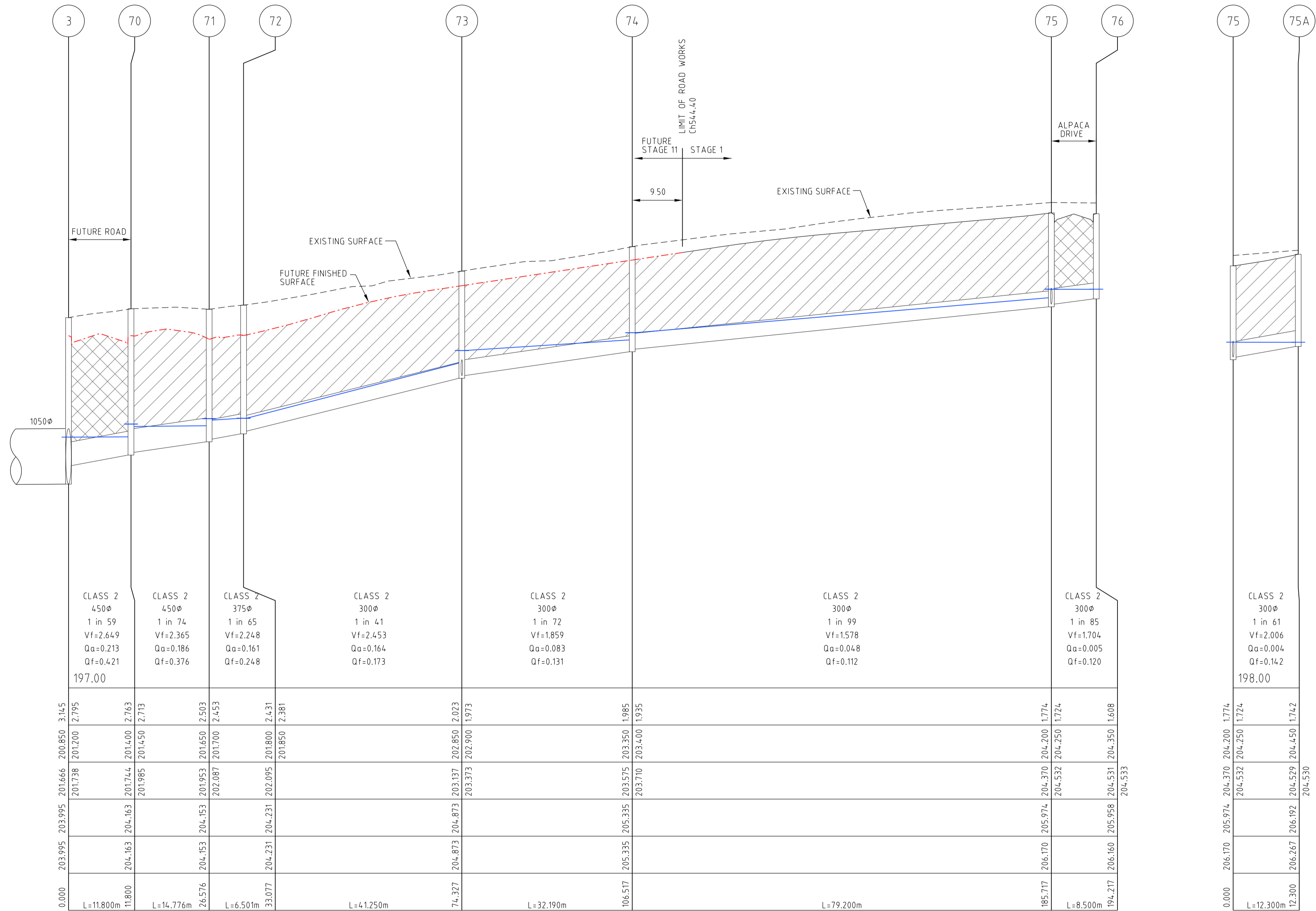
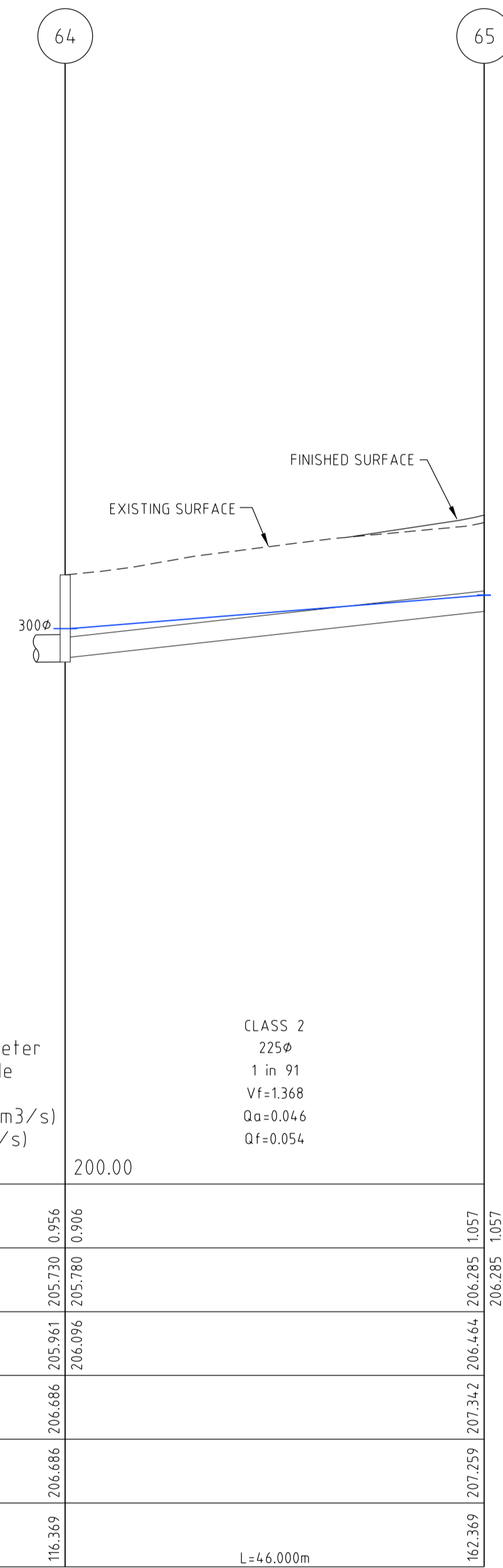
CLASS 2 CRUSHED ROCK



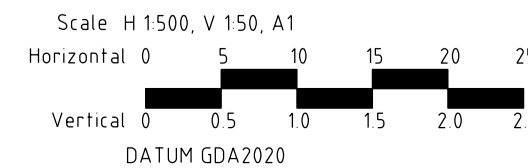
CLASS 3 CRUSHED ROCK

NOTE:

- 1. ALL PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS NOTED OTHERWISE.
- 2. DRAINAGE PIPES GREATER THAN 750φ ARE TO BE FLUSH JOINTED (FJ) WITH EXTERNAL SEALING BANDS.
- 3. CURVED PIPE ALIGNMENTS TO BE ACHIEVED USING EITHER:
 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURES SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ.



2	PIT 75 & 76 MOVED, PIT 75A ADDED	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
Rev	Amendments	Approved	Date



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Communities Designed for Living
 Designed
R. WEINBER
 Authorised
M. LETSON

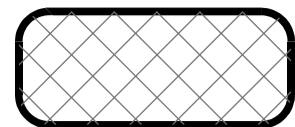


Checked
D. CAMERON
 Date
 10/04/19

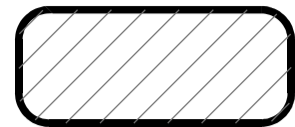
REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 8 OF 9
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R26**

Rev **2**



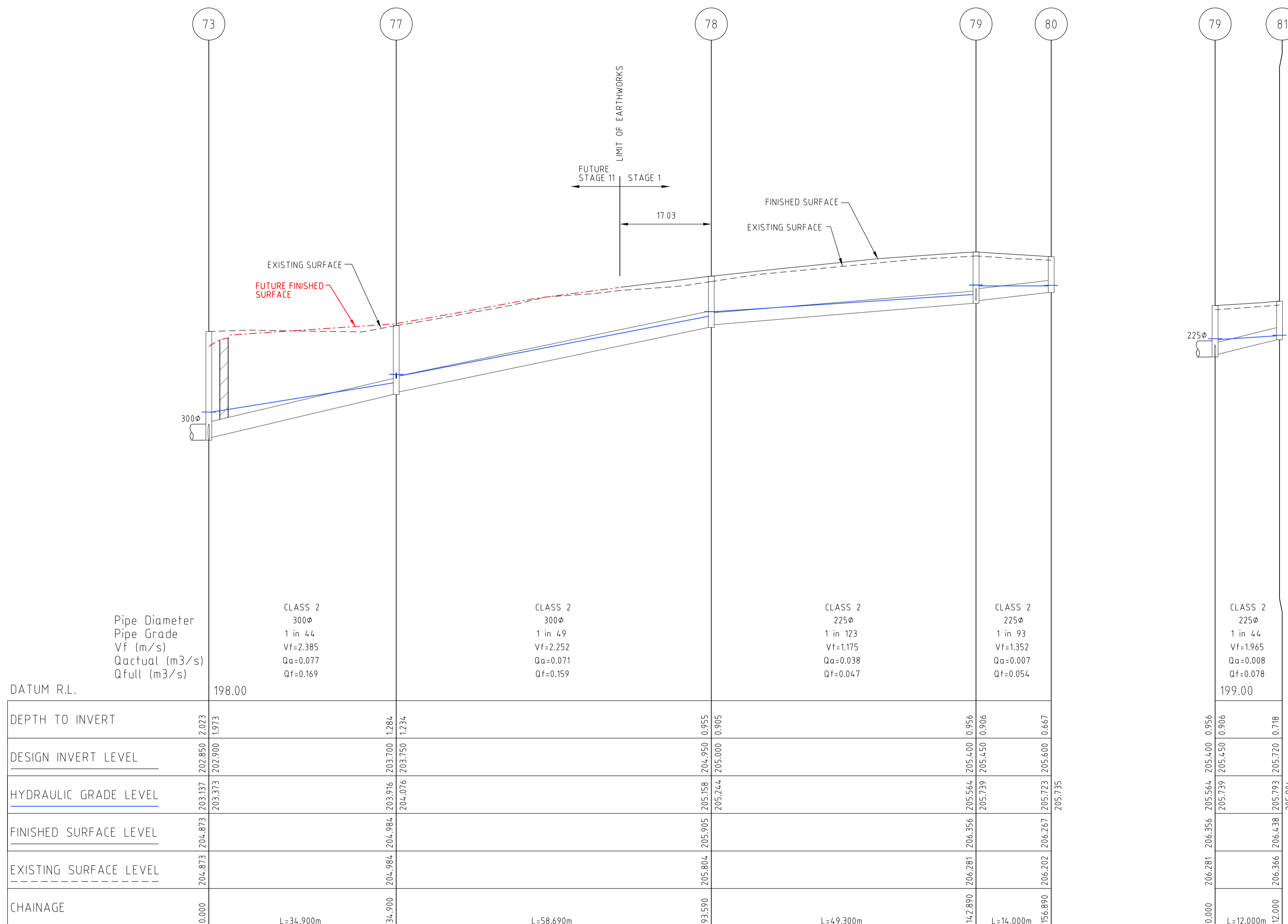
CLASS 2 CRUSHED ROCK



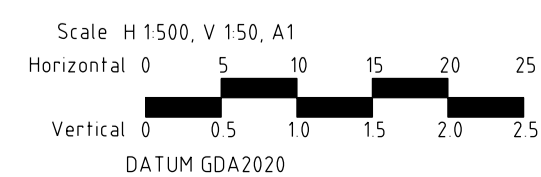
CLASS 3 CRUSHED ROCK

NOTE:

- 1 ALL PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS NOTED OTHERWISE
- 2 DRAINAGE PIPES GREATER THAN 750 ϕ ARE TO BE FLUSH JOINTED (FJ) WITH EXTERNAL SEALING BANDS
- 3 CURVED PIPE ALIGNMENTS TO BE ACHIEVED USING EITHER:
 - a) SPLAY PIPES INSTALLED AS PER MANUFACTURES SPECIFICATION
 - b) DEFLECTION ACHIEVED WITHIN RRJ.



Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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villawood properties
Communities Designed for Living
Designed R. WEINBER
Authorised M. LETSON

Redstone.
Your world awaits
Checked D. CAMERON
Date 10/04/19

REDSTONE ESTATE
STAGE 1
DRAINAGE LONG SECTION
SHEET 8 OF 9
VILLAWOOD PROPERTIES
HUME CITY COUNCIL
CONSTRUCTION Drg No 305912R27 Rev 1

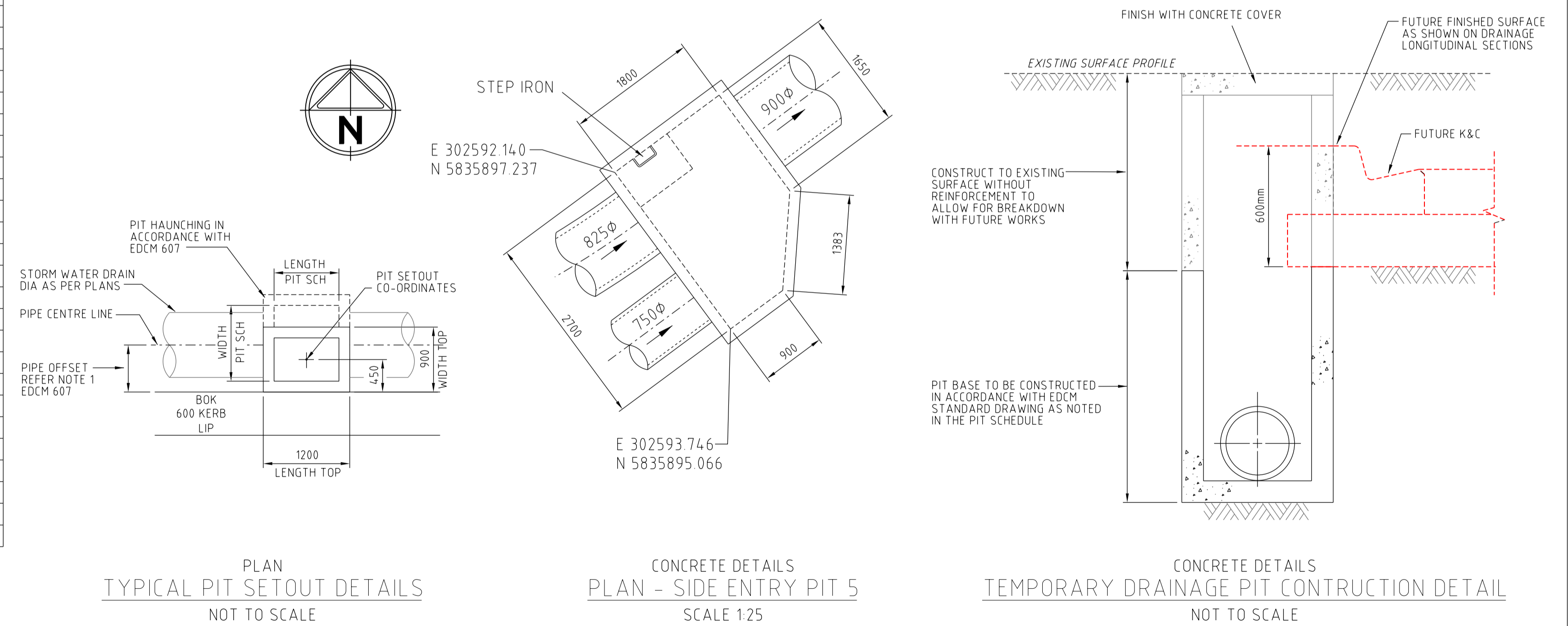
DRAINAGE PIT SCHEDULE

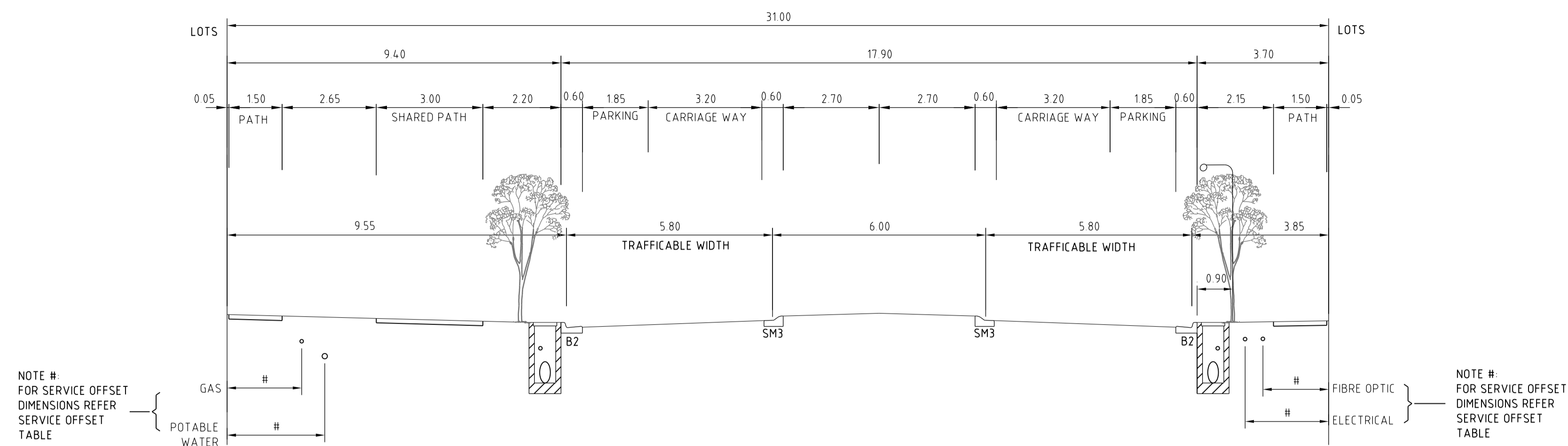
PIT		INTERNAL		INLET		OUTLET		PIT		REMARKS
NAME	TYPE	LENGTH	WIDTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH	
1A	CONCRETE HEADWALL	900	1500	1200	197.743			200.982	3.239	HEADWALL
# 1B	JUNCTION PIT	900	1500	1200	198.111	1200	198.061	201.369	3.308	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
1C	JUNCTION PIT	900	1350	1050	198.264	1200	198.214	201.519	3.305	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
1D	JUNCTION PIT	900	1350	1050	199.009	1050	198.959	202.053	3.094	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 1E	JUNCTION PIT	900	1350	1050	199.947	1050	199.897	202.975	3.078	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 1	JUNCTION PIT	900	1350	1050	200.553	1050	200.503	203.678	3.175	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 2	TANGENT POINT			1050	200.797	1050	200.797	203.992	3.196	PIPE TANGENT POINT
# 3	JUNCTION PIT	900	1350	1050	200.900	1050	200.850	203.995	3.145	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 4	JUNCTION PIT	900	1350	900	201.385	1050	201.235	204.336	3.101	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
5	JUNCTION CHAMBER			450	201.520	900	201.440	204.366	2.926	REFER DRAWING - REFER THIS DRAWING FOR BASE DETAIL (PROVIDE HAUNCHING AS PER EDM 607)
6	TANGENT POINT			825	201.530	825	201.530	204.372	2.843	PIPE TANGENT POINT
7	TANGENT POINT			825	201.669	825	201.669	204.580	2.910	PIPE TANGENT POINT
# 8	JUNCTION PIT	900	1200	825	201.758	825	201.708	204.649	2.941	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 9	JUNCTION PIT	900	1200	825	202.350	825	202.300	205.399	3.099	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
10	SIDE ENTRY PIT GRATED	900	1200	825	203.316	825	203.266	206.211	2.945	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
11	TANGENT POINT			825	203.427	825	203.427	206.312	2.885	PIPE TANGENT POINT
12	TANGENT POINT			825	203.518	825	203.518	206.384	2.866	PIPE TANGENT POINT
13	SIDE ENTRY PIT GRATED	900	1200	825	203.647	825	203.594	206.454	2.860	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
14	JUNCTION PIT	1200	1200	600	203.850	825	203.800	207.107	3.307	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
15	SIDE ENTRY PIT GRATED	900	900	600	204.024	600	203.974	206.867	2.894	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
16	JUNCTION PIT	900	900	525	204.230	600	204.180	206.997	2.817	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
17	SIDE ENTRY PIT GRATED	900	900	525	204.370	525	204.320	206.659	2.339	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
18	DOUBLE GRATED ENTRY PIT	900	900	375	204.550	525	204.500	206.414	1.914	REFER DRAWING - EDM 602
19	SIDE ENTRY PIT GRATED	900	600	375	204.700	375	204.650	206.611	1.961	REFER DRAWING - EDM 601
19A	JUNCTION PIT	900	600	300	204.700	300	205.000	206.776	1.776	REFER DRAWING - EDM 605
20	SIDE ENTRY PIT GRATED	900	600	375	204.850	375	204.800	206.603	1.803	REFER DRAWING - EDM 601
20A	GRATED PIT	1000	750			375	204.950	206.000	1.050	REFER VIC ROADS STANDARD DRAWING - SD 1411
21	END PIPE			450	205.477			207.046	1.569	END PIPE BLANK END WITH MARINE PLY
22	JUNCTION PIT	900	600	225	205.635	450	205.485	207.004	1.520	REFER DRAWING - EDM 605
23	JUNCTION PIT	900	600	225	206.700	225	206.650	207.581	0.931	REFER DRAWING - EDM 605
24	JUNCTION PIT	900	600	225	207.357	225	207.307	208.108	0.801	REFER DRAWING - EDM 605
24A	JUNCTION PIT	900	600			225	207.404	208.208	0.803	REFER DRAWING - EDM 605
25	DOUBLE GRATED ENTRY PIT	900	600	375	204.670	450	204.620	206.406	1.786	REFER DRAWING - EDM 602
25A	GRATED PIT	1000	750			375	204.750	205.730	0.980	REFER VIC ROADS STANDARD DRAWING - SD 1411
26	SIDE ENTRY PIT GRATED	900	600			300	204.800	206.651	1.851	REFER DRAWING - EDM 601
27	SIDE ENTRY PIT GRATED	900	600			300	205.100	206.864	1.764	REFER DRAWING - EDM 601
28	SIDE ENTRY PIT GRATED	900	1050	600	204.348	600	204.298	206.734	2.437	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
29	SIDE ENTRY PIT GRATED	900	900	600	204.933	600	204.883	206.964	2.081	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
30	JUNCTION PIT	900	900	600	205.350	600	205.300	207.344	2.044	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
31	SIDE ENTRY PIT GRATED	900	900	600	206.350	600	206.300	208.490	2.190	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
32	END PIPE			600	207.400			209.703	2.303	END PIPE BLANK END WITH MARINE PLY
33	SIDE ENTRY PIT GRATED	900	600			375	205.700	207.484	1.784	REFER DRAWING - EDM 601
34	JUNCTION PIT	900	600			300	205.000	206.861	1.861	REFER DRAWING - EDM 605
35	JUNCTION PIT	900	900	300	204.470	300	204.420	206.521	2.101	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
36	JUNCTION PIT	900	900	300	204.600	300	204.550	206.726	2.176	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
37	SIDE ENTRY PIT GRATED	900	900	300	204.700	300	204.650	206.914	2.264	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
38	JUNCTION PIT	900	900	300	204.810	300	204.760	207.091	2.331	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
39	SIDE ENTRY PIT GRATED	900	900	300	204.950	300	204.900	207.031	2.131	REFER DRAWING - EDM 601 (PROVIDE HAUNCHING AS PER EDM 607)
40	SIDE ENTRY PIT GRATED	900	600			300	205.070	206.704	1.634	REFER DRAWING - EDM 601
41	JUNCTION PIT	900	900	300	204.800	300	204.750	206.859	2.109	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
42	SIDE ENTRY PIT GRATED	900	600			300	205.000	206.780	1.780	REFER DRAWING - EDM 601
43	SIDE ENTRY PIT GRATED	900	600			300	206.223	1.723	REFER DRAWING - EDM 601	
# 44	JUNCTION PIT	900	1050	750	201.680	750	201.630	204.429	2.799	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 45	JUNCTION PIT	900	1050	750	201.810	750	201.760	204.610	2.850	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 46	JUNCTION PIT	900	1050	675	202.000	750	201.950	204.671	2.721	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 47	JUNCTION PIT	900	1050	675	202.150	675	202.100	204.712	2.612	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)

DRAINAGE PIT SCHEDULE

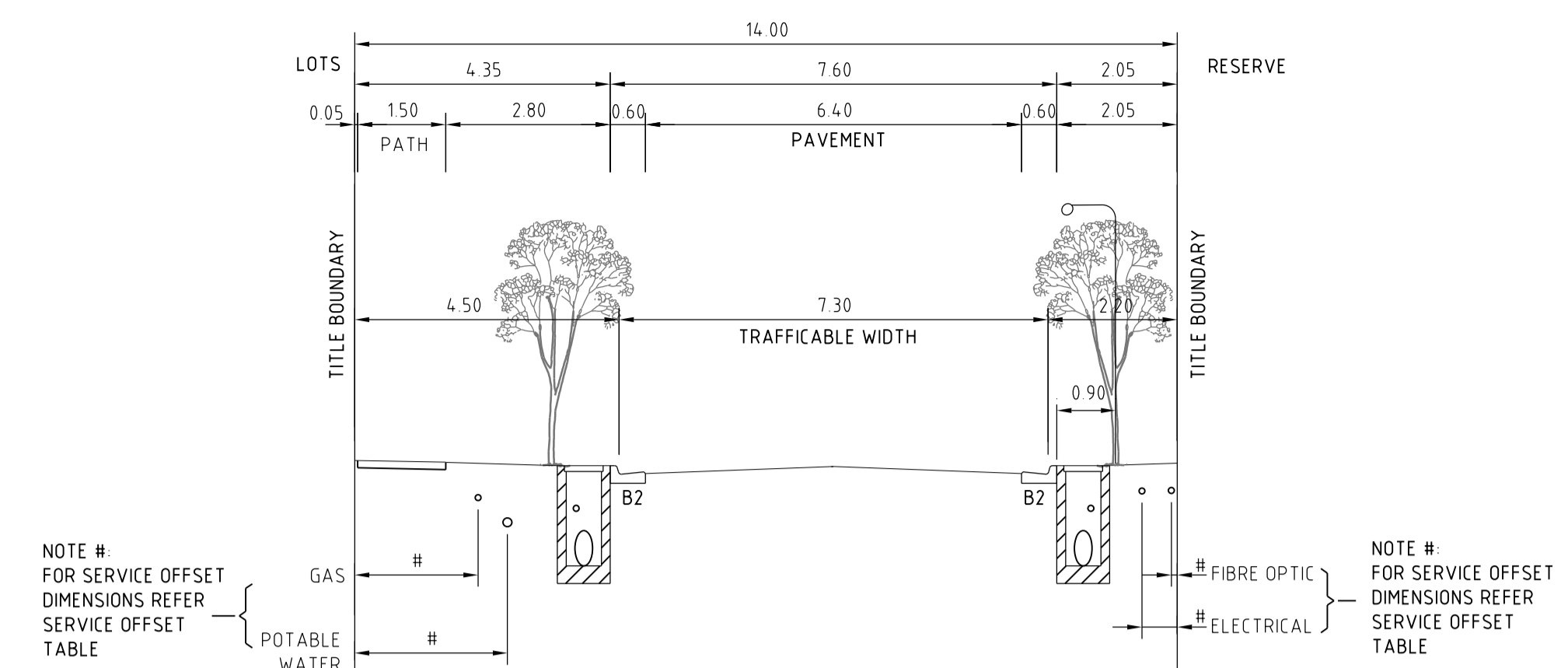
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NAME	TYPE	LENGTH	WIDTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH	
# 48	JUNCTION PIT	900	1050	375	202.400	675	202.250	204.771	2.521	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 49	JUNCTION PIT	900	1050	375	202.550	375	202.500	204.926	2.426	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 50	JUNCTION PIT	900	600	300	202.750	375	202.650	204.965	2.315	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 52	JUNCTION PIT	900	600	300	203.900	300	203.850	205.793	1.943	REFER DRAWING - EDM 605 TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
53	SIDE ENTRY PIT GRATED	900	600	300	204.850	300	204.800	206.480	1.680	REFER DRAWING - EDM 601
54	SIDE ENTRY PIT GRATED	900	600	300	205.950	300	205.900	207.573	1.673	REFER DRAWING - EDM 601
55	JUNCTION PIT	900	600	300	207.150	300	207.100	208.933	1.833	REFER DRAWING - EDM 605
56	SIDE ENTRY PIT GRATED	900	600			300	207.350	209.099	1.749	REFER DRAWING - EDM 601
57	SIDE ENTRY PIT GRATED	900	600			300	206.050	207.568	1.518	REFER DRAWING - EDM 601
58	SIDE ENTRY PIT GRATED	900	600			300	204.950	206.524	1.574	REFER DRAWING - EDM 601
# 59	JUNCTION PIT	900	900	300	203.200	600	202.850	205.127	2.277	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 59A	JUNCTION PIT	900	900	600	202.550	675	202.500	204.945	2.445	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
60	JUNCTION PIT	900	600	300	205.050	300	205.000	206.416	1.416	REFER DRAWING - EDM 605
61	JUNCTION PIT	900	600	300	207.100	300	207.050	207.961	0.911	REFER DRAWING - EDM 605
62	END PIPE					300	208.150	209.397	1.247	END PIPE BLANK END WITH MARINE PLY
63	JUNCTION PIT	900	600	300	204.250	300	204.200	205.531	1.331	REFER DRAWING - EDM 605
64	JUNCTION PIT	900	600	225	205.780	300	205.730	206.686	0.956	REFER DRAWING - EDM 605
65	END PIPE			225	206.285	225	206.285	207.342	1.057	END PIPE BLANK END WITH MARINE PLY
# 70	JUNCTION PIT	900	900	450	201.450	450	201.400	204.163	2.763	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 71	JUNCTION PIT	900	900	375	201.700	450	201.650	204.153	2.503	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607) TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 72	JUNCTION PIT	900	900	300	201.850	375	201.800	204.231	2.431	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 73	JUNCTION PIT	900	900	300	202.900	300	202.850	204.873	2.023	REFER DRAWING - EDM 605 (PROVIDE HAUNCHING AS PER EDM 607)
# 74	JUNCTION PIT	900	600	300	203.400	300	203.350	205.335	1.985	REFER DRAWING - EDM 605 TO BE CONVERTED TO GRATED SIDE ENTRY PIT WITH FUTURE WORKS
75	SIDE ENTRY PIT GRATED	900	600	300	204.250	300	204.200	205.974	1.774	REFER DRAWING - EDM 601
75A	JUNCTION PIT	900	600			300	204.450	206.192	1.742	REFER DRAWING - EDM 605
76	SIDE ENTRY PIT GRATED	900	600			300	204.350	205.958	1.608	REFER DRAWING - EDM 601
77	JUNCTION PIT	900	600	300	203.750	300	203.700	204.984	1.284	REFER DRAWING - EDM 605
78	JUNCTION PIT	900	600	225	205.000	300	204.950	205.905	0.955	REFER DRAWING - EDM 605
79	JUNCTION PIT	900	600	225	205.450	225	205.400	206.356	0.956	REFER DRAWING - EDM 605
80	JUNCTION PIT	900	600			225	205.600	206.267	0.667	REFER DRAWING - EDM 605
81	JUNCTION PIT	900	600			225	205.720	206.438	0.718	REFER DRAWING - EDM 605

NOTE: ALL PITS DE NOTED THUS "# " TO BE CONSTRUCTED AS PER TEMPORARY DRAINAGE PIT CONSTRUCTION DETAIL BELOW

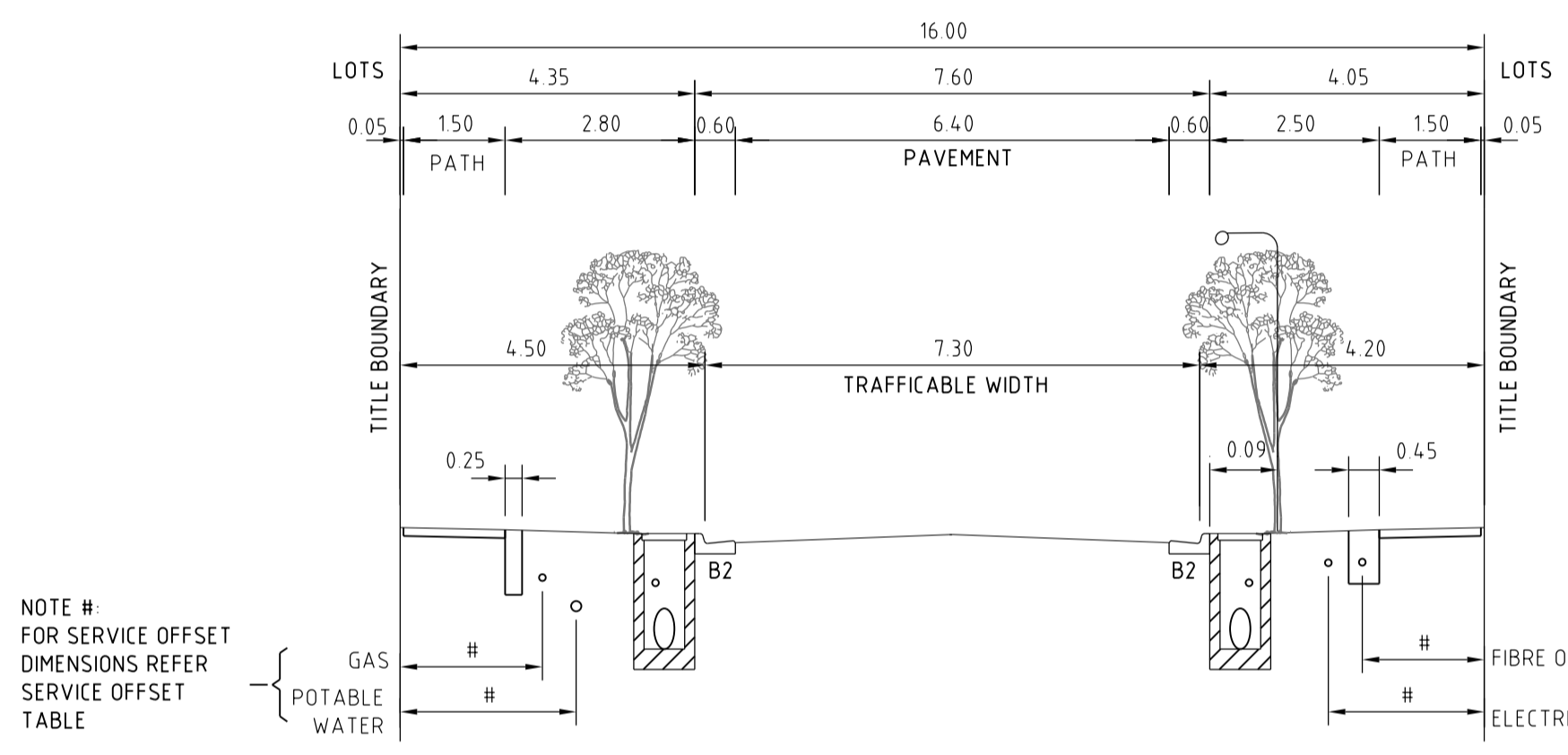




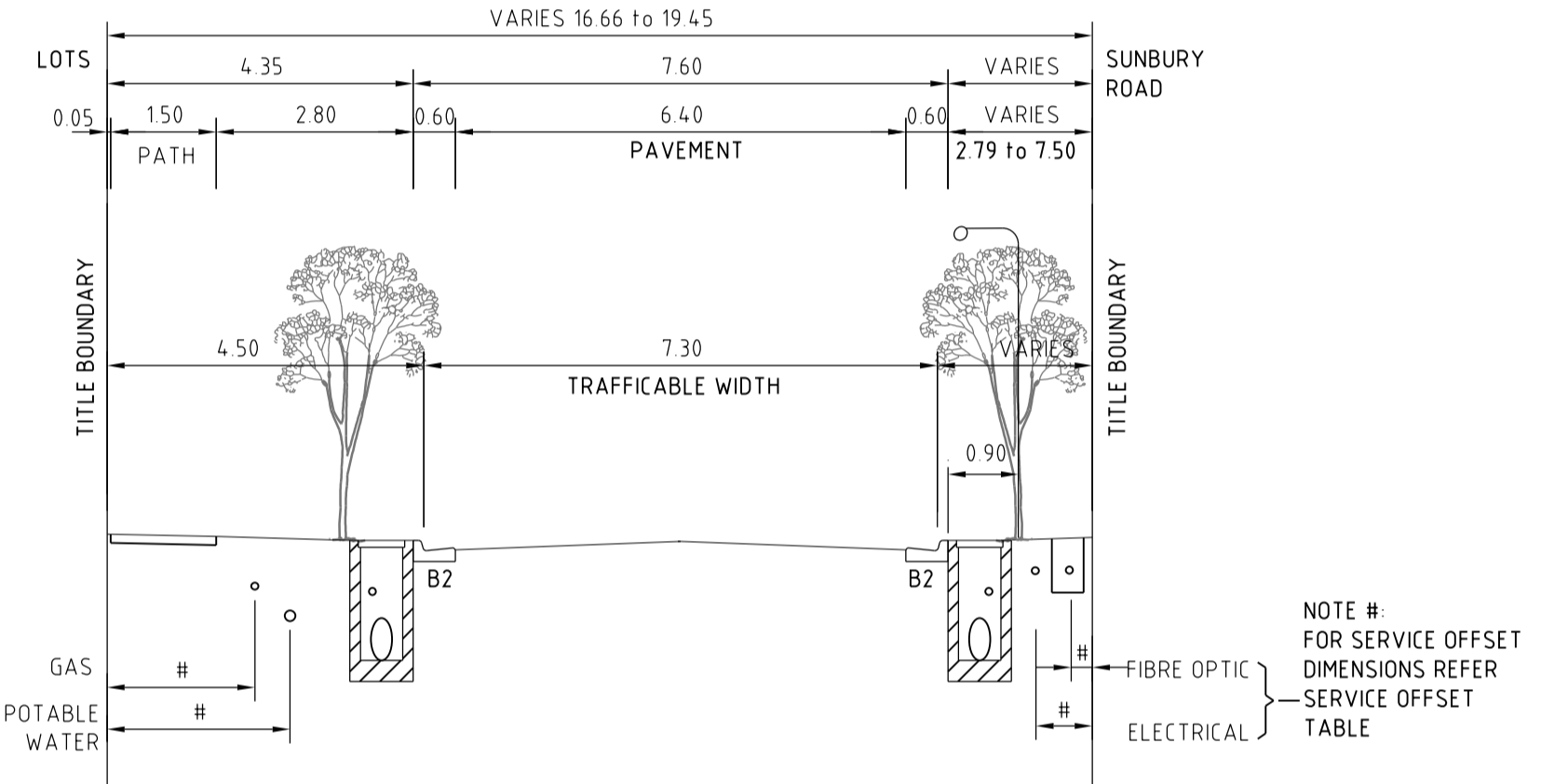
SECTION A - A
TYPICAL 31.00m ROAD RESERVE
ORIGIN DRIVE



SECTION B - B
TYPICAL 14.00m ROAD RESERVE
NIRA DRIVE



SECTION C - C
TYPICAL 16.00m ROAD RESERVE
PRESIDENT ROAD & WANDERER ROAD




SECTION D - D
TYPICAL ROAD RESERVE
ALPACA DRIVE




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 Communities Designed for Living


 Your world awaits
 Designed
 R. WEINBER
 Authorised
 M. LETSON

REDSTONE ESTATE
STAGE 1
TYPICAL CROSS SECTIONS
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R29** Rev **1**

DESIGN PAVEMENT PROFILE FOR ROUNDABOUT A

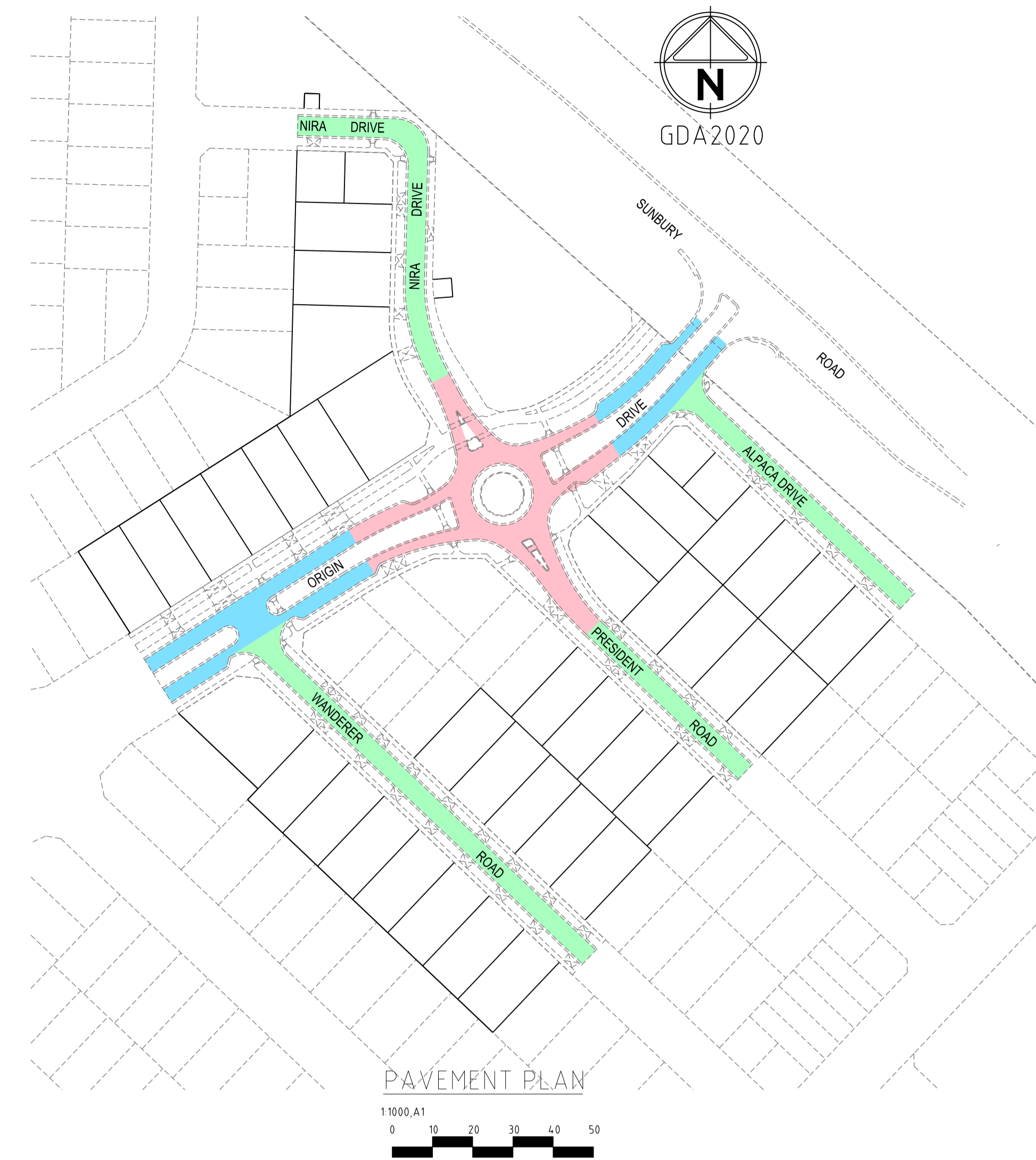
PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)
		ROUND ABOUT A
WEARING COURSE	Size 14mm Type V Asphalt with a C320 binder	40
UPPER STRUCTURAL COURSE	Size 20mm Type SI Asphalt with a C320 binder	75
LOWER STRUCTURAL COURSE	Size 20mm Type SF Asphalt with a Class 320 binder	75
UPPER PAVEMENT TOTAL		190
UPPER SUB-BASE COURSE	20mm nominal size Class 2 CR, compacted to at least 98% Modified Dry Density Ratio with a mean value of at least 100% Modified Dry Density Ratio and within 1% of the Modified Optimum Moisture Content	100
SELECT SUB-BASE COURSE	Select granular material with a minimum soaked CBR of 10% compacted to 98% Standard Dry Density Ratio with a mean value of at least 100% Standard Dry Density Ratio and within 1% of the Standard Optimum Moisture Content and a percentage swell of less than 15%	320
TOTAL PAVEMENT DEPTH		610
SUBGRADE	Natural Silty CLAY tested to confirm an in-situ CBR of at least 2.0% OR approved FILL compacted to at least 100% Standard Dry Density ratio (soaked CBR ≥ 2.0%) within 2% of the Standard Optimum Moisture Content	

DESIGN PAVEMENT PROFILE FOR AREA 2

PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)
		AREA 2
WEARING COURSE	Size 10mm Type N Asphalt with a C170 binder	30
STRUCTURAL COURSE	Size 10mm Type N Asphalt with a C170 binder	30
WATER-PROOFING COURSE	SAMI seal with Class S18RF binder and bituminous prime	10
BASE COURSE	20mm nominal size Class 2 FCR, compacted to at least 98% Modified Dry Density Ratio with a mean value of at least 100% Modified Dry Density Ratio and within 1% of the Modified Optimum Moisture Content	130
UPPER PAVEMENT TOTAL		200
SUB-BASE COURSE	20mm nominal size Class 3 FCR, compacted to at least 95% Modified Dry Density Ratio with a mean value of at least 98% Modified Dry Density Ratio and within 1% of the modified Optimum Moisture Content	100
LOWER SUB-BASE COURSE	20mm nominal size Class 4 CR, compacted to at least 95% Modified Dry Density Ratio with a mean value of at least 98% Modified Dry Density Ratio and within 1% of the Modified Optimum Moisture Content	100
SELECT SUB-BASE COURSE	Select granular material with a minimum soaked CBR of 10% compacted to 98% Standard Dry Density Ratio with a mean value of at least 100% Standard Dry Density Ratio and within 1% of the Standard Optimum Moisture Content and a percentage swell of less than 15%	190
TOTAL PAVEMENT DEPTH		600
SUBGRADE	Natural Silty CLAY tested to confirm an in-situ CBR of at least 2.0% OR approved FILL compacted to at least 100% Standard Dry Density ratio (soaked CBR ≥ 2.0%) within 2% of the Standard Optimum Moisture Content	

DESIGN PAVEMENT PROFILE FOR AREA 4

PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)
		AREA 4
WEARING COURSE	Size 14mm Type N Asphalt with a C170 binder	40
STRUCTURAL COURSE	Size 14mm Type HP Asphalt with a A10E binder	40
WATER-PROOFING COURSE	SAMI seal with Class S18RF binder and bituminous prime	10
BASE COURSE	20mm nominal size Class 2 FCR, compacted to at least 100% Characteristic Modified Dry Density Ratio within 1% of the Modified Optimum Moisture Content	110
UPPER PAVEMENT TOTAL		200
UPPER SUB-BASE COURSE	20mm nominal size Class 3 FCR, compacted to at least 98% Characteristic Modified Dry Density Ratio within 1% of the Modified Optimum Moisture Content	100
LOWER SUB-BASE COURSE	20mm nominal size Class 4 FCR, compacted to at least 98% Characteristic Modified Dry Density Ratio within 1% of the Modified Optimum Moisture Content	170
SELECT SUB-BASE COURSE	Select granular material with a minimum soaked CBR of 10% compacted to 98% Standard Dry Density Ratio with a mean value of at least 100% Standard Dry Density Ratio and within 1% of the Standard Optimum Moisture Content and a percentage swell of less than 15%	190
TOTAL PAVEMENT DEPTH		660
SUBGRADE	Natural Silty CLAY tested to confirm an in-situ CBR of at least 2.0% OR approved FILL compacted to at least 100% Standard Dry Density ratio (soaked CBR ≥ 2.0%) within 2% of the Standard Optimum Moisture Content	

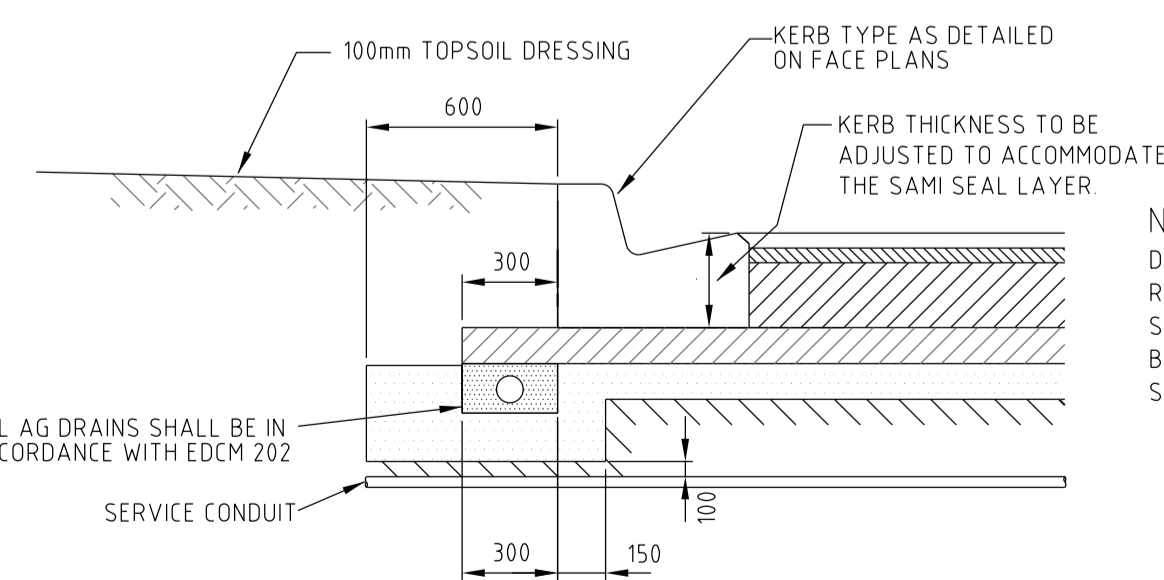


PAVEMENT DETAILS

THE PAVEMENT DESIGNS SHOWN HERE HAVE BEEN DESIGNED/PROVIDED BY CARDNO VICTORIA PTY LTD WHO ARE RESPONSIBLE FOR THE GEOTECHNICAL WORK ON THIS PROJECT. SPIIRE IS NOT RESPONSIBLE FOR THE WORK OF CARDNO VICTORIA PTY LTD.

THE DESIGN HAS BEEN EXTRACTED FROM THE CARDNO VICTORIA PTY LTD REPORT TITLED "GEOTECHNICAL INVESTIGATION FOR PROPOSED RESIDENTIAL SUBDIVISION REDSTONE HILL SUNBURY SOUTH" V180556 REPORT 012. THIS DOCUMENT SHOULD BE REVIEWED TO ENSURE THAT THE DESIGN HAS BEEN ACCURATELY REPRODUCED. A COPY OF THE DOCUMENT WILL BE PROVIDED TO YOU ON REQUEST.

SPIIRE DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY, ADEQUACY OR APPROPRIATENESS OF THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS. ANY QUERIES IN RESPECT TO THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS SHOULD BE ADDRESSED TO CARDNO VICTORIA PTY LTD AND SENT TO SPIIRE.



NOTE FOR SAMI TREATMENT
DESIGN AND APPLICATION OF SAMI, INCLUDING MATERIAL REQUIREMENTS, SHOULD COMPLY WITH VICROADS STANDARD SPECIFICATION FOR ROADWORKS AND BRIDGEWORKS SECTION 408 AND THE CURRENT AUSTRROADS SPRAYED SEAL DESIGN METHOD.

NEW CONSTRUCTION
N.T.S

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20

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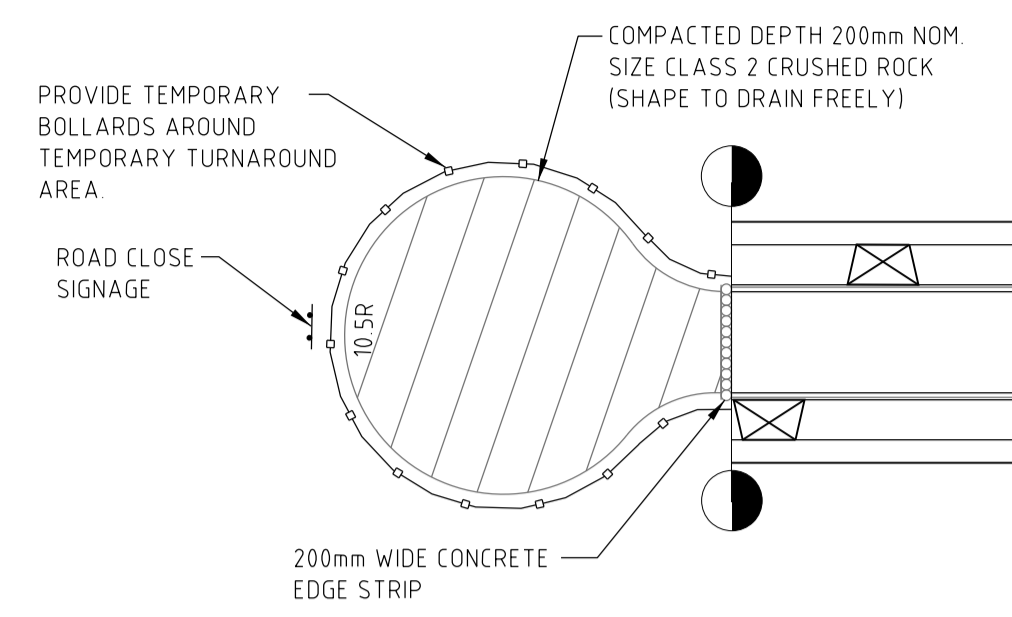


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Date
10/04/19

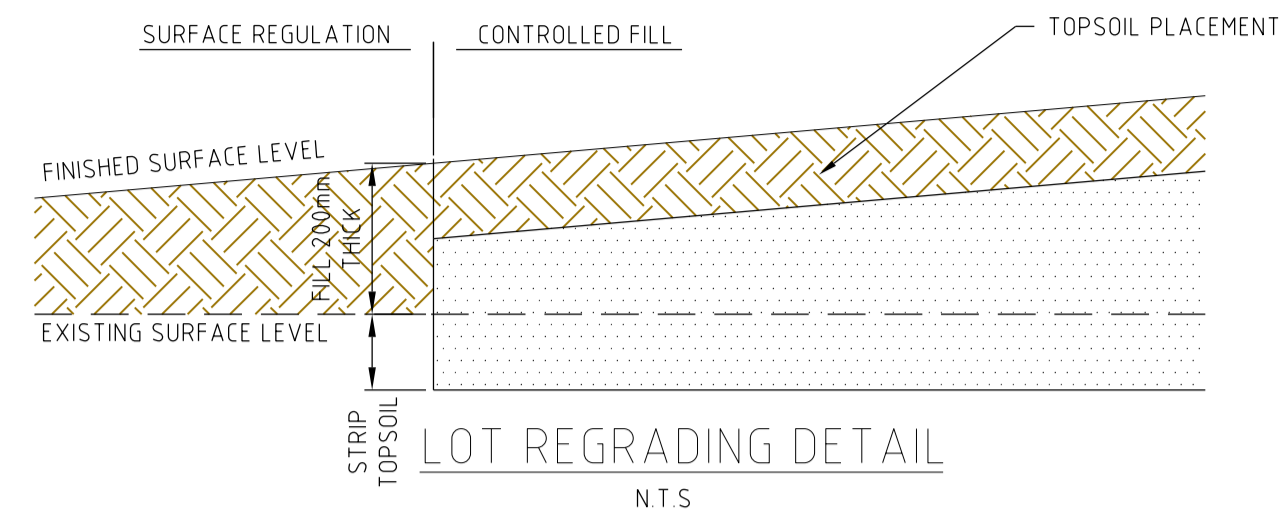
REDSTONE ESTATE
STAGE 1
PAVEMENT DETAILS

VILLAWOOD PROPERTIES
HUME CITY COUNCIL

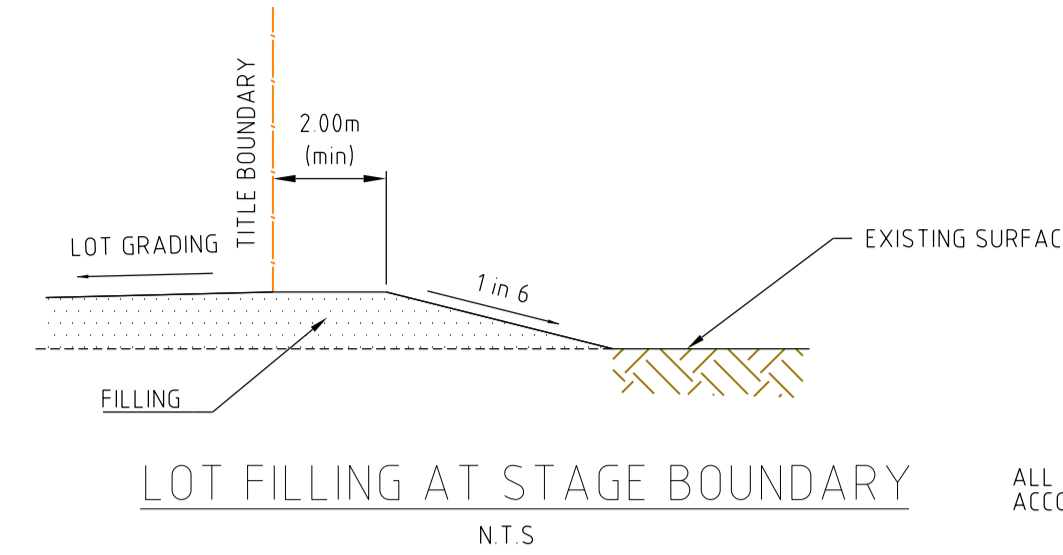
CONSTRUCTION Drg No 305912R30 Rev 1



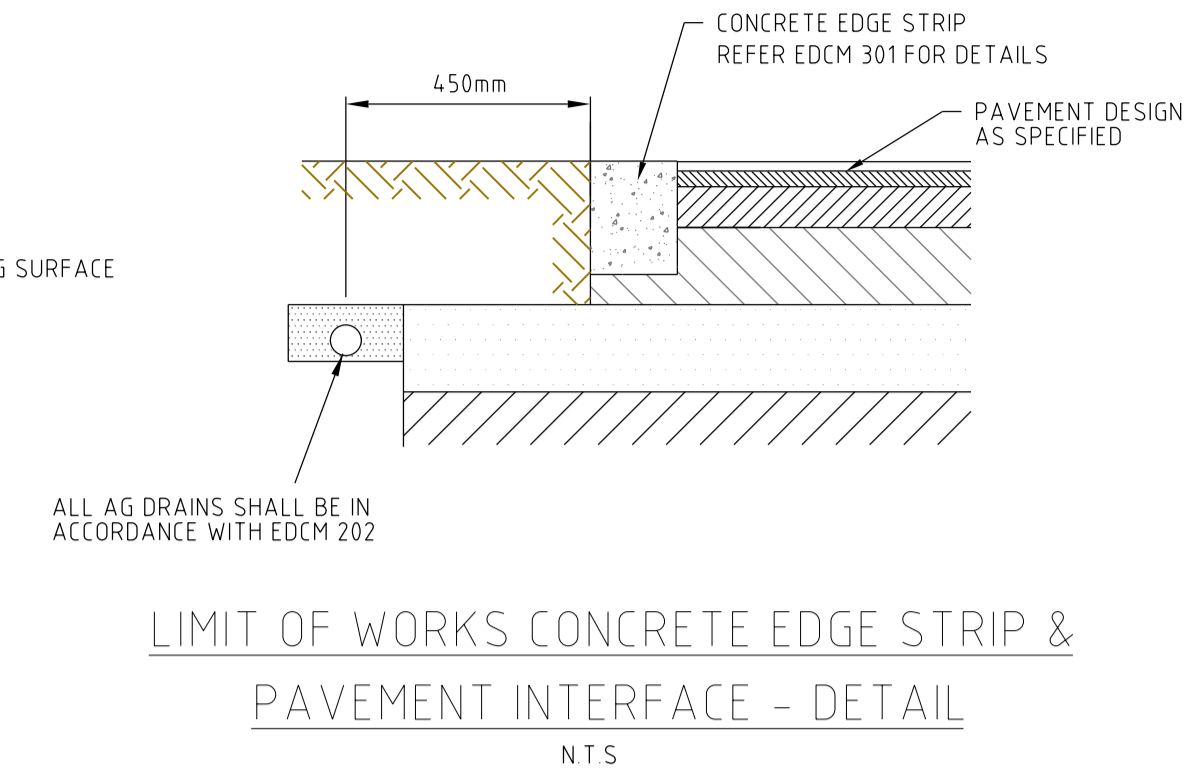
TEMPORARY TURNING AREA DETAIL



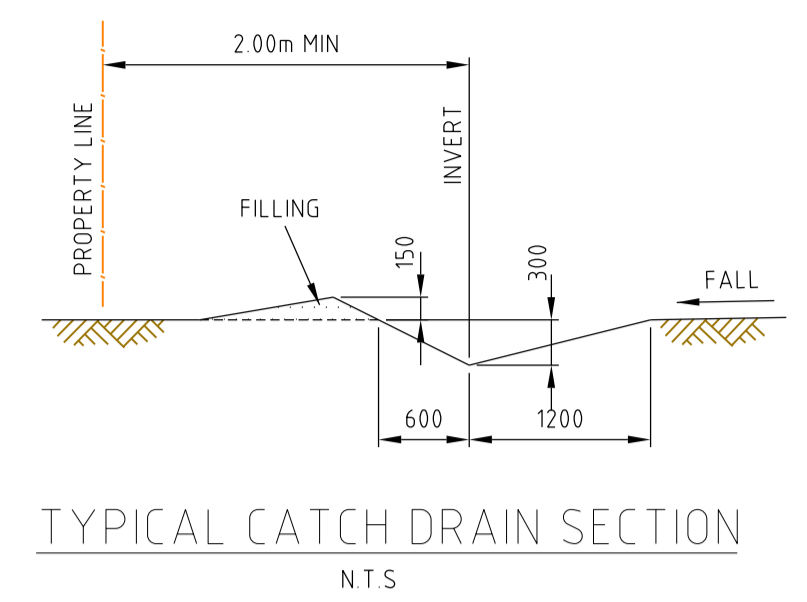
LOT REGRADING DETAIL
NTS



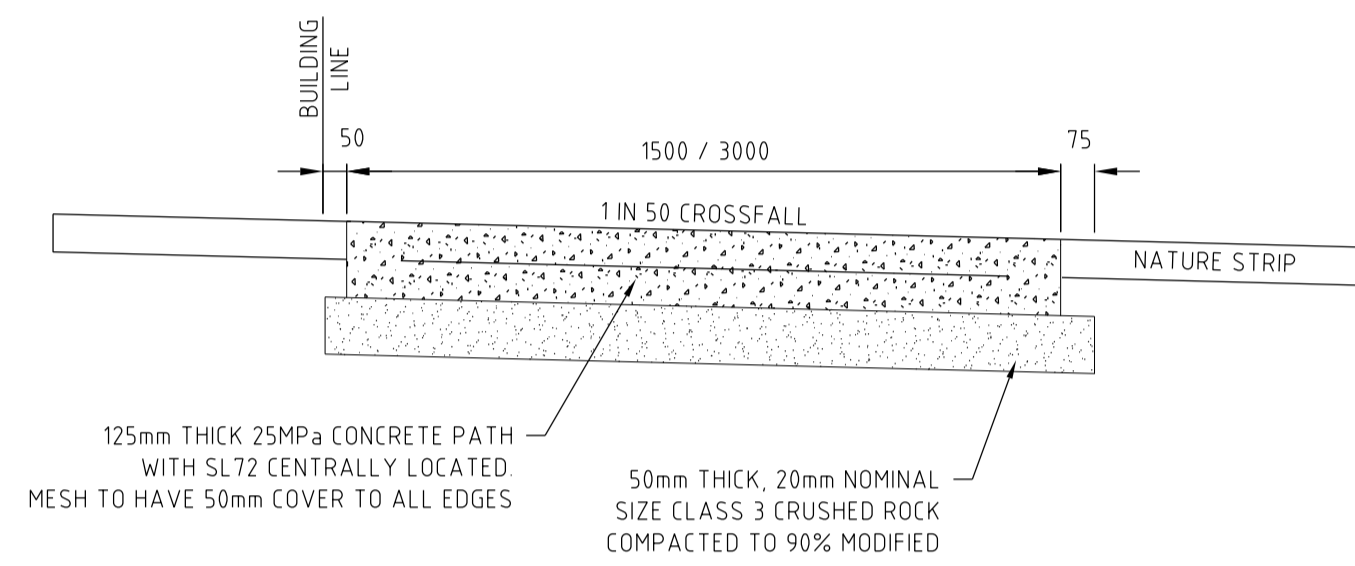
LOT FILLING AT STAGE BOUNDARY
NTS



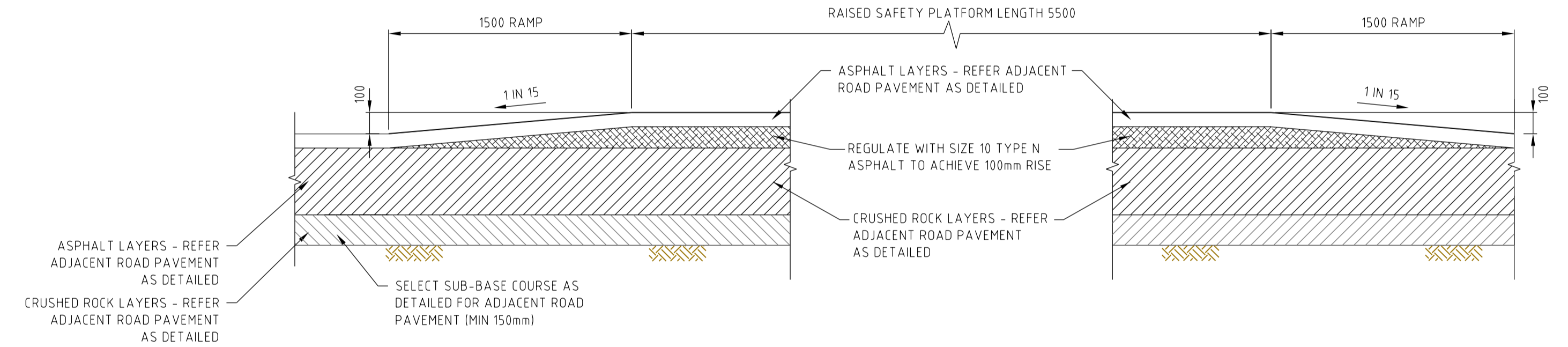
LIMIT OF WORKS CONCRETE EDGE STRIP & PAVEMENT INTERFACE - DETAIL
NTS



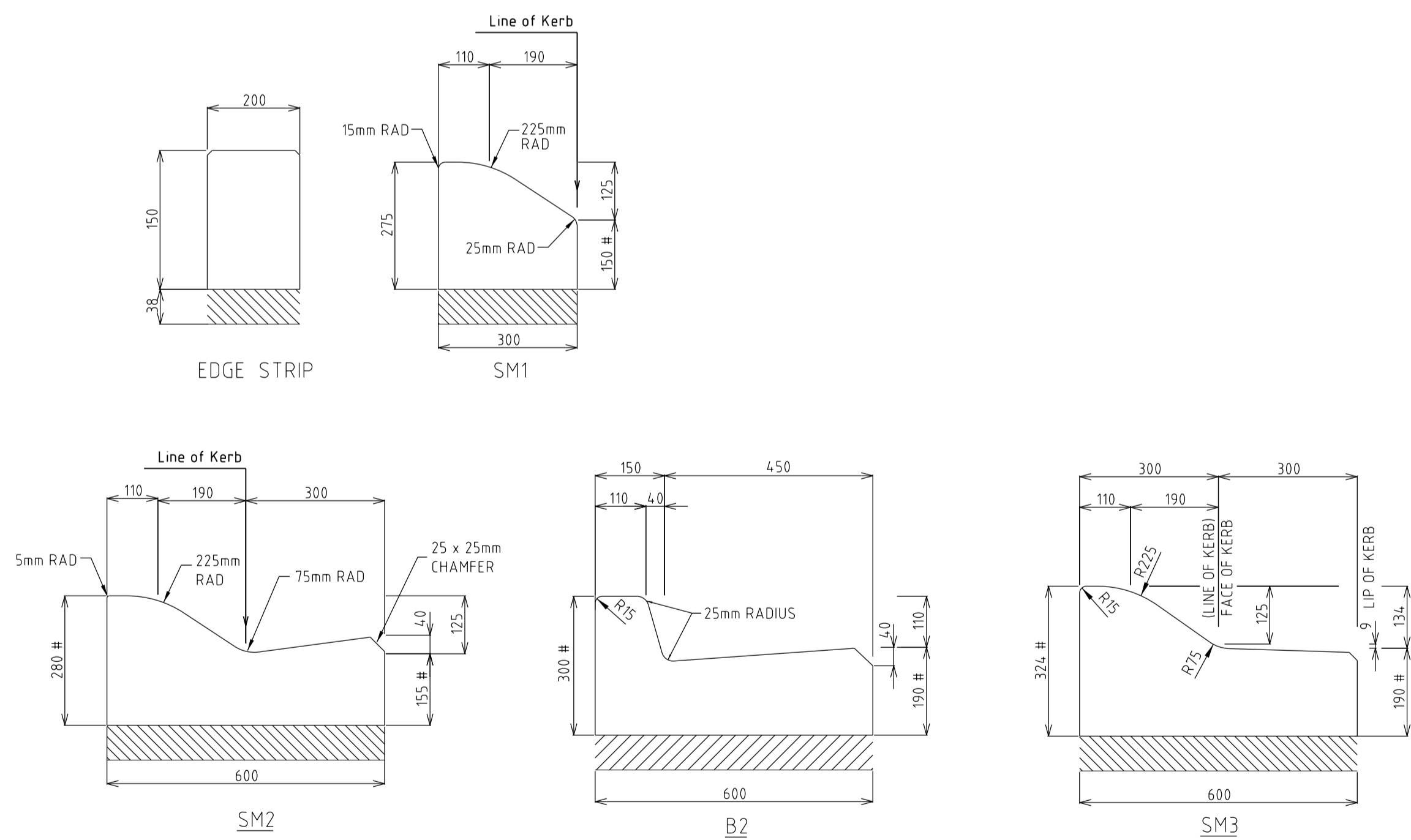
TYPICAL CATCH DRAIN SECTION
NTS



TYPICAL RESIDENTIAL FOOTPATH CROSS SECTION

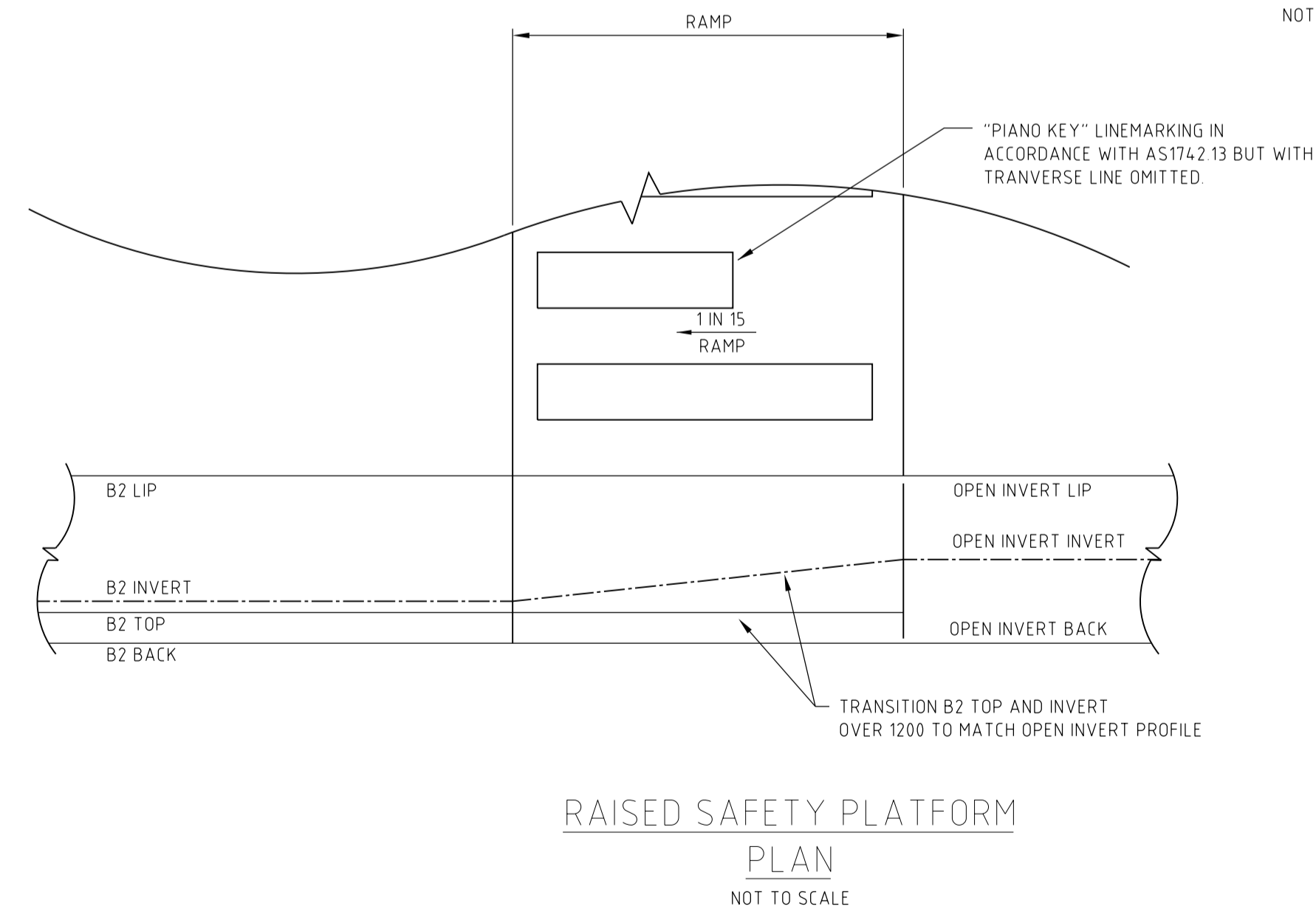


RAISED SAFETY PLATFORM SECTION
NOT TO SCALE



STANDARD KERB PROFILES
NOT TO SCALE

- NOTES:
1. ALL KERBS AND KERB & CHANNEL TO BE REINFORCED IN ACCORDANCE WITH MUNICIPALITY STD DRAWINGS.
 2. ALL KERBS AND KERB & CHANNEL TO HAVE 190mm DEPTH OF CONCRETE BELOW TOP OF PAVEMENT LEVEL.
 3. DIMENSION SHOWN # DEPTH TO TO BE ADJUSTED TO ACCOMMODATE SAMI SEAL LAYER.



RAISED SAFETY PLATFORM PLAN
NOT TO SCALE

- GENERAL NOTES:
1. ALL WORKS TO BE COMPLETED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS AND CCA LITERATURE, OR VIC ROADS STANDARDS FOR NON RESIDENTIAL STREETS.
 2. ALL CONCRETE TO BE MINIMUM 32MPa COMPRESSIVE STRENGTH.
 3. CONCRETE TO BE THOROUGHLY COMPACTED USING EITHER SURFACE AND/OR IMMERSION VIBRATORS, PARTICULARLY AROUND REINFORCEMENT AND IN CORNERS OF FORMS.
 4. PRIOR TO CASTING, THE UNBOUND GRANULAR SUBBASE MUST BE DAMP TO ENSURE NO EARLY "DRYING OUT" OF THE CONCRETE.
 5. CURING OF CONCRETE IS ESSENTIAL - IDEALLY BY MAINTAINING WET HESSIAN OR SEALING WITH PLASTIC SHEETING.
 6. SAW CUTTING OF CONCRETE SHOULD BE COMMENCED AS SOON AS CONCRETE PERMITS BY EXPERIENCED CONTRACTORS, BUT NO LATER THAN 12 HOURS AFTER POUR.
 7. ALL DOWELS TO BE GRADE 250R STEEL BARS, 450mm LONG AND PLACED AT 300mm CENTRES. REFER CCAA - "CONCRETE PAVEMENT DESIGN FOR RESIDENTIAL STREETS" FOR DOWEL DIAMETERS. DOWELS MUST BE ACCURATELY PLACED TO ENSURE THE JOINT DOES NOT "LOCK". INSERTION OF DOWELS DURING THE PLACING OF CONCRETE IS NOT ACCEPTABLE. DOWELS MUST BE SAWN AND NOT CROPPED.
 8. ALL JOINTS TO BE APPROPRIATELY SEALED TO RESIST THE INTRUSION OF SAND AND GRAVEL AND TO MINIMISE THE INGRESS OF WATER.

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20

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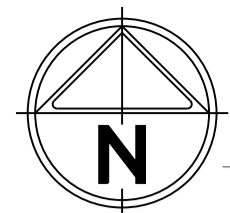
Checked
D. CAMERON
Date
10/04/19

REDSTONE ESTATE
STAGE 1
TYPICAL DETAILS

VILLAWOOD PROPERTIES
HUME CITY COUNCIL

CONSTRUCTION Drg No 305912R31

Rev 1



GDA2020

FUTURE STAGE 2

RESERVE

SUNBURY ROAD

ROAD

FUTURE STAGE 1A

PROPOSED STAGE 11

FUTURE STAGE 2

FOR CONTINUATION REFER SHEET 32

LEGEND

- 1 STREET NAME PLATES TO BE IN ACCORDANCE WITH HCC SD4.08 & SD4.12, INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE
- 2 ROAD CLOSED G9-20
- 3 D4-5
- 4 R1-2A
- 5 R3-1
- 6 W6-8A
- 7 W6-9 7A W6-9
- 8 W6-9 W6-9
- 9 W8-23 W8-23
- 10 W8-3A W8-3A
- 11 W8-3A W8-3A
- 12 R1-3A
- 13 W2-7
- 14 R2-3(L)
- 15 D4-V102
- 16 D4-1-2 (L) D4-1-2 (R)
- 17 G9-57A 18 TO

BIKE PATH CONTRASTING SURFACE COLOUR
 FOR ENHANCED VISIBILITY AT ALL ROAD CROSSINGS AND DRIVEWAY CROSSINGS AS SHOWN
 USE GREEN EPOXY MODIFIED ACRYLIC COATING WITH A NON SLIP SURFACE.

TGSi KERB RAMP } HAZARD / DIRECTIONAL TGSi'S SHOW INDICATIVELY. FOOTPATH RAMP SHALL BE CONSTRUCTED IN ACCORDANCE WITH EDM 4.03. TGSi'S SHALL CONFORM TO AS1428.4

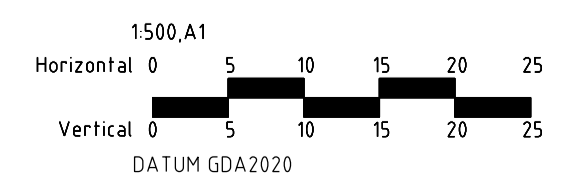
TGSi DIRECTIONAL

1-WAY RRPM (5m SPACING)

NOTE
 1. 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.

NOTIONAL CARPARKING SPACES

Rev	Amendments	Approved	Date
2	LOTS 141 & 142 ADDED, SIGN 10 ADDED NIRA DRIVE OPPOSITE LOT 104.	M.L.	10/08/20
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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Designed
R. WEINBER

Authorised
M. LETSON

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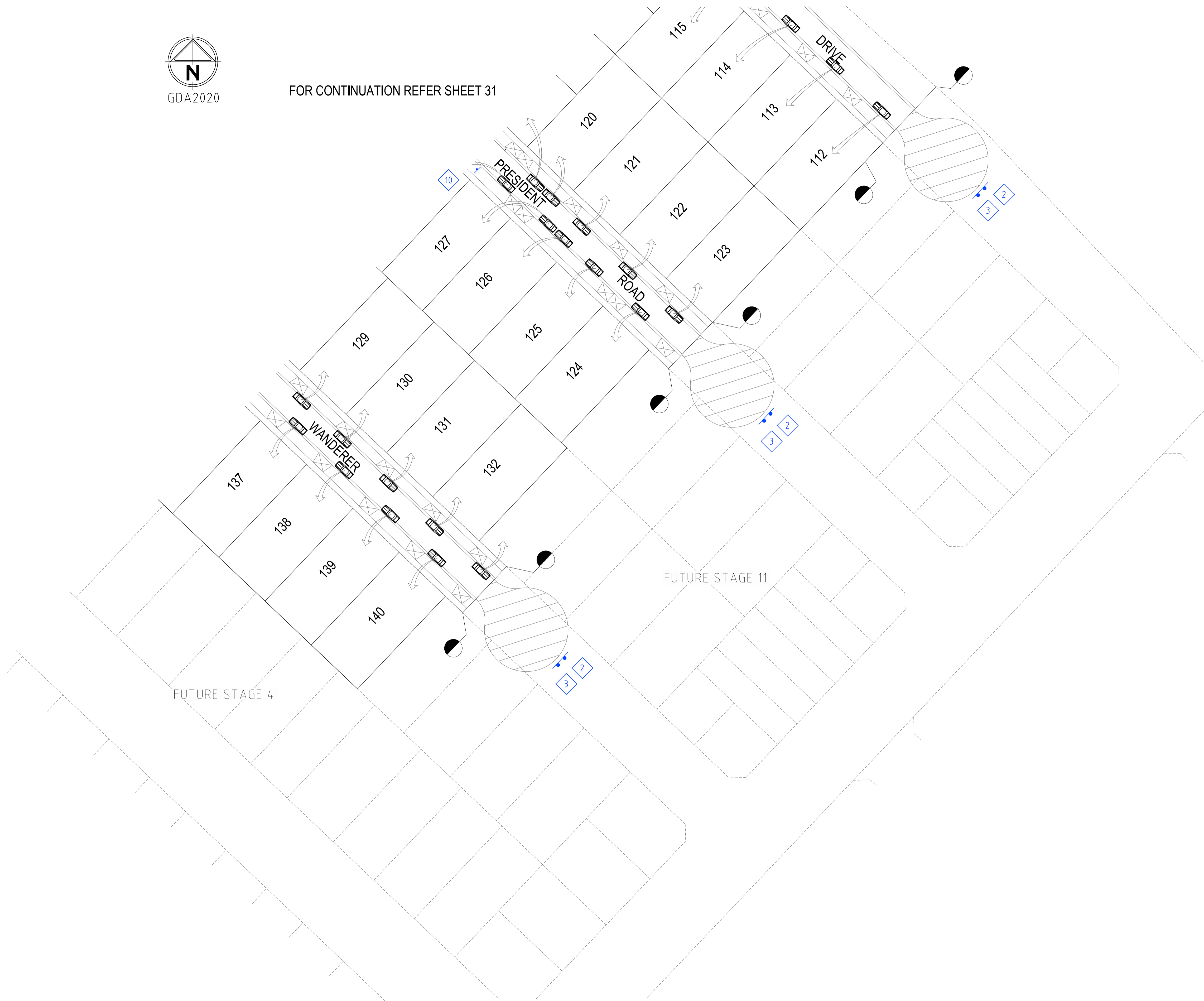
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REDSTONE ESTATE
STAGE 1
SIGNAGE, LINEMARKING & CARPARKING PLAN
SHEET 1 OF 2
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R32** Rev **2**



FOR CONTINUATION REFER SHEET 31



LEGEND

- 1 STREET NAME STREET NAME PLATES TO BE IN ACCORDANCE WITH HCC SD4-08 & SD4-12, INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE
- 2 ROAD CLOSED G9-20
- 3 D4-5
- 4 GIVE WAY R1-2A
- 5 ROAD AHEAD R3-1
- 6 ROAD AHEAD W6-8A
- 7 W6-9
- 8 W6-9
- 9 W6-9
- 10 W6-9
- 11 KEEP LEFT R2-3(L)
- 12 D4-V102
- 13 D4-1-2 (L)
- 14 D4-1-2 (R)

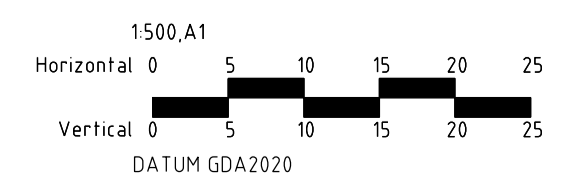
BIKE PATH CONTRASTING SURFACE COLOUR
 FOR ENHANCED VISIBILITY AT ALL ROAD CROSSINGS AND DRIVEWAY CROSSINGS AS SHOWN USE GREEN EPOXY MODIFIED ACRYLIC COATING WITH A NON SLIP SURFACE.

- TGSi KERB RAMP
 - TGSi DIRECTIONAL
 - 1-WAY RRPm (5m SPACING)
- HAZARD / DIRECTIONAL TGSi'S SHOW INDICATIVELY. FOOTPATH RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH EDM 4-03. TGSi'S SHALL CONFORM TO AS1428.4

NOTE
 1. 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

NOTIONAL CARPARKING SPACES

Rev	Amendments	Approved	Date
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20



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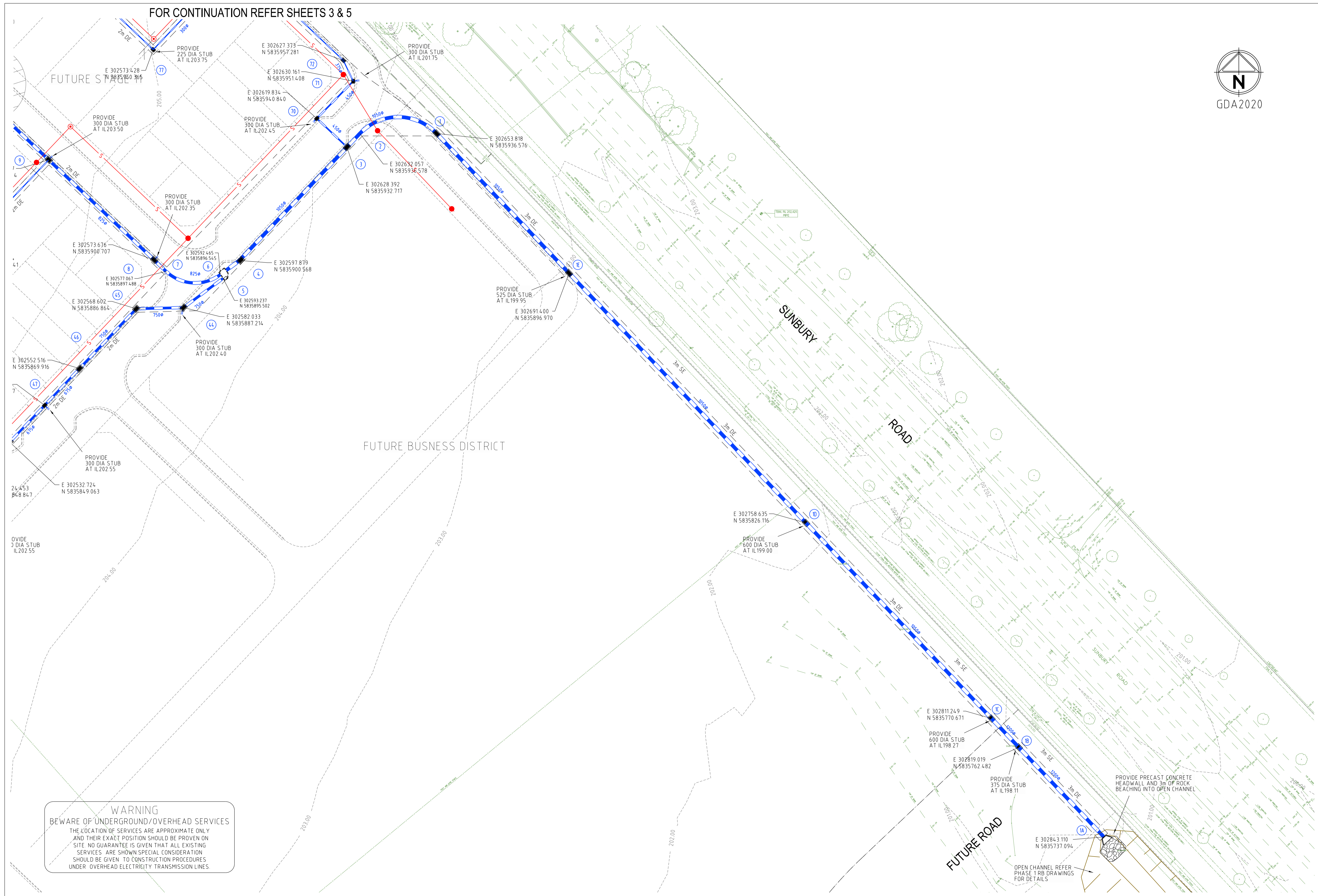
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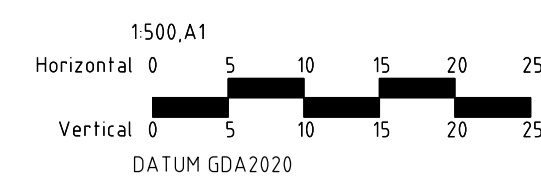
REDSTONE ESTATE
STAGE 1
SIGNAGE, LINEMARKING & CARPARKING PLAN
SHEET 2 OF 2
 VILLAWOOD PROPERTIES
 HUME CITY COUNCIL
CONSTRUCTION Drg No **305912R33** Rev **1**

FOR CONTINUATION REFER SHEETS 3 & 5



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
1	CONSTRUCTION ISSUE	M.L.	16/07/20
0	CONSTRUCTION ISSUE	M.L.	22/06/20
	Amendments		



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REDSTONE ESTATE
STAGE 1
OUTFALL DRAIN PLAN

VILLAWOOD PROPERTIES
 HUME CITY COUNCIL

CONSTRUCTION Drg No **305912R34** Rev **1**