

# REDSTONE ESTATE STAGE 2 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 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 BEING 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 1.0m 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

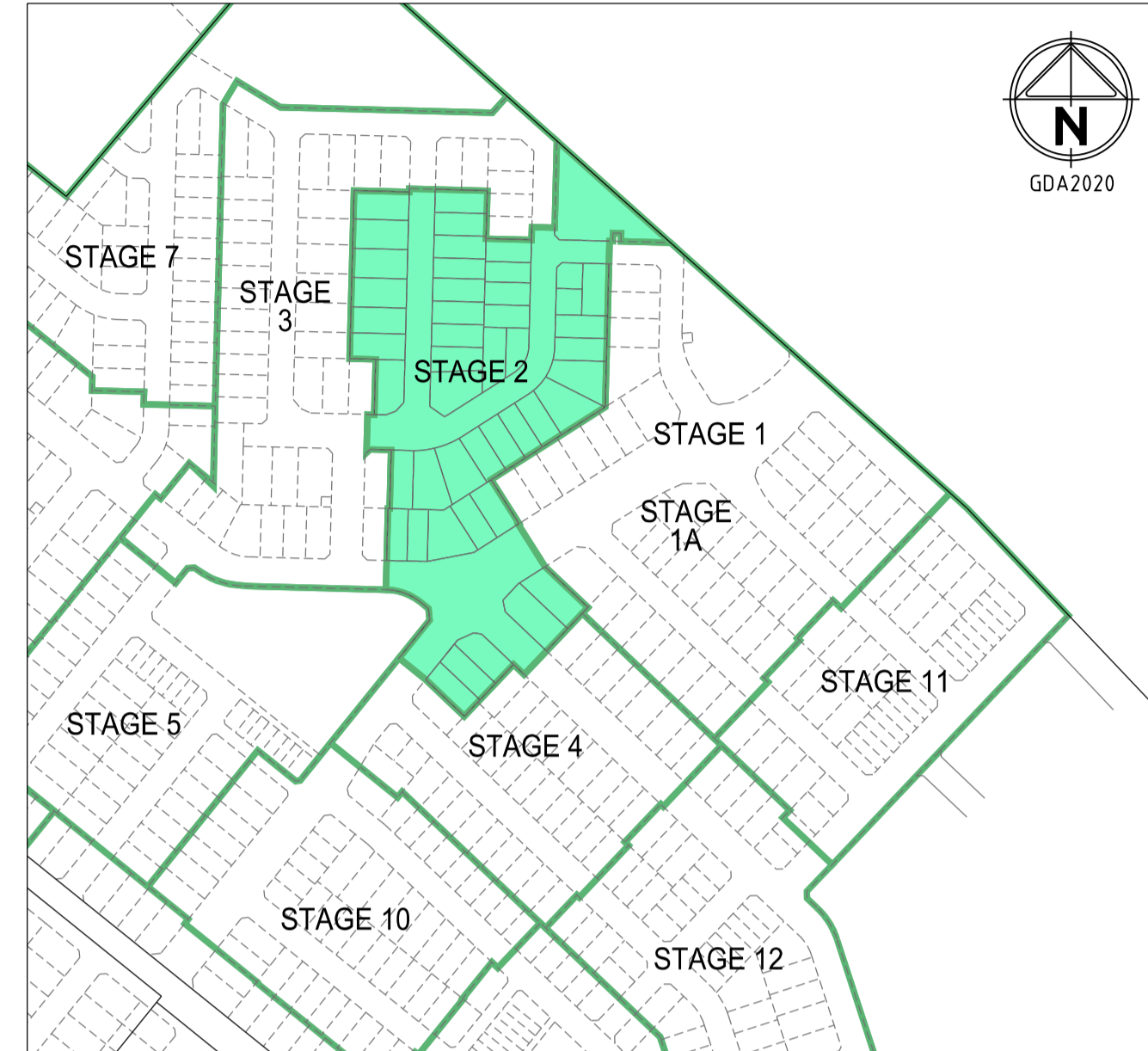
## ADDITIONAL GENERAL NOTES:

- 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
- 1.8M'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 1.8M'S THEREAFTER
- WHERE REQUIRED, ALL EXISTING DAMS, DEPRESSIONS AND DRAINS ARE TO BE BREACHED, DRAINED, DE-SLUGGED 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:
  - 850mm CLASS 12 P.V.C. - SINGLE SERVICE
  - 810mm 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
- TGS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1428.4.1 2009

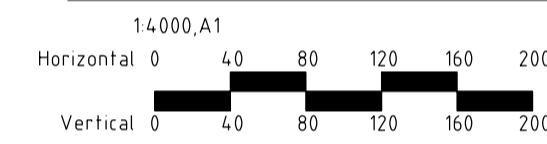
Future provision for gas only.  
Gas supply not provided as part of these works.



**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
305913R01	FACE SHEET	1	5
305913R02	ROAD & DRAINAGE FACE PLAN SHEET 1	2	4
305913R03	ROAD & DRAINAGE FACE PLAN SHEET 2	3	1
305913R04	LONGITUDINAL SECTION - ORIGIN DRIVE, FLYCATCHER ROAD & SACRED DRIVE	4	1
305913R05	LONGITUDINAL SECTION - LORY CIRCUIT, NIRA DRIVE & EAGLEHAWK STREET	5	2
305913R06	CROSS SECTIONS - ORIGIN DRIVE, FLYCATCHER ROAD & SACRED DRIVE	6	1
305913R07	CROSS SECTIONS - LORY CIRCUIT	7	2
305913R08	CROSS SECTIONS - NIRA DRIVE & EAGLEHAWK STREET	8	1
305913R09	INTERSECTION DETAIL - SHEET 1 OF 4	9	2
305913R10	INTERSECTION DETAIL - SHEET 2 OF 4	10	1
305913R11	INTERSECTION DETAIL - SHEET 3 OF 4	11	1
305913R12	INTERSECTION DETAIL - SHEET 4 OF 4	12	1
305913R13	DRAINAGE LONGSECTIONS - SHEET 1 OF 5	13	1
305913R14	DRAINAGE LONGSECTIONS - SHEET 2 OF 5	14	1
305913R15	DRAINAGE LONGSECTIONS - SHEET 3 OF 5	15	1
305913R16	DRAINAGE LONGSECTIONS - SHEET 4 OF 5	16	1
305913R17	DRAINAGE LONGSECTIONS - SHEET 5 OF 5	17	2
305913R18	PIT SCHEDULE & DETAILS	18	2
305913R19	TYPICAL CROSS SECTIONS	19	1
305913R20	PAVEMENT DETAILS	20	1
305913R21	TYPICAL DETAILS	21	1
305913R22	SIGNAGE, LINEMARKING & CARPARKING PLAN	22	3

## 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 TO BE PROTECTED		
TREES TO BE REMOVED		
VEGETATION LINE		
FOOTPATH		
TACTILE GROUND SURFACE INDICATOR		
KERB TRANSITION		

Rev	Amendments	Approved	Date
5	DRAWING SCHEDULE UPDATED SHEETS 1 & 9	M.L.	30/10/20
4	DRAWING SCHEDULE UPDATED SHEETS 1, 2, 5, 7 & 22	M.L.	28/09/20
3	DRAWING SCHEDULE UPDATED SHEETS 1 & 2	M.L.	21/09/20
2	DRAWING SCHEDULE UPDATED SHEETS 1, 2, 17, 18 & 22	M.L.	18/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20

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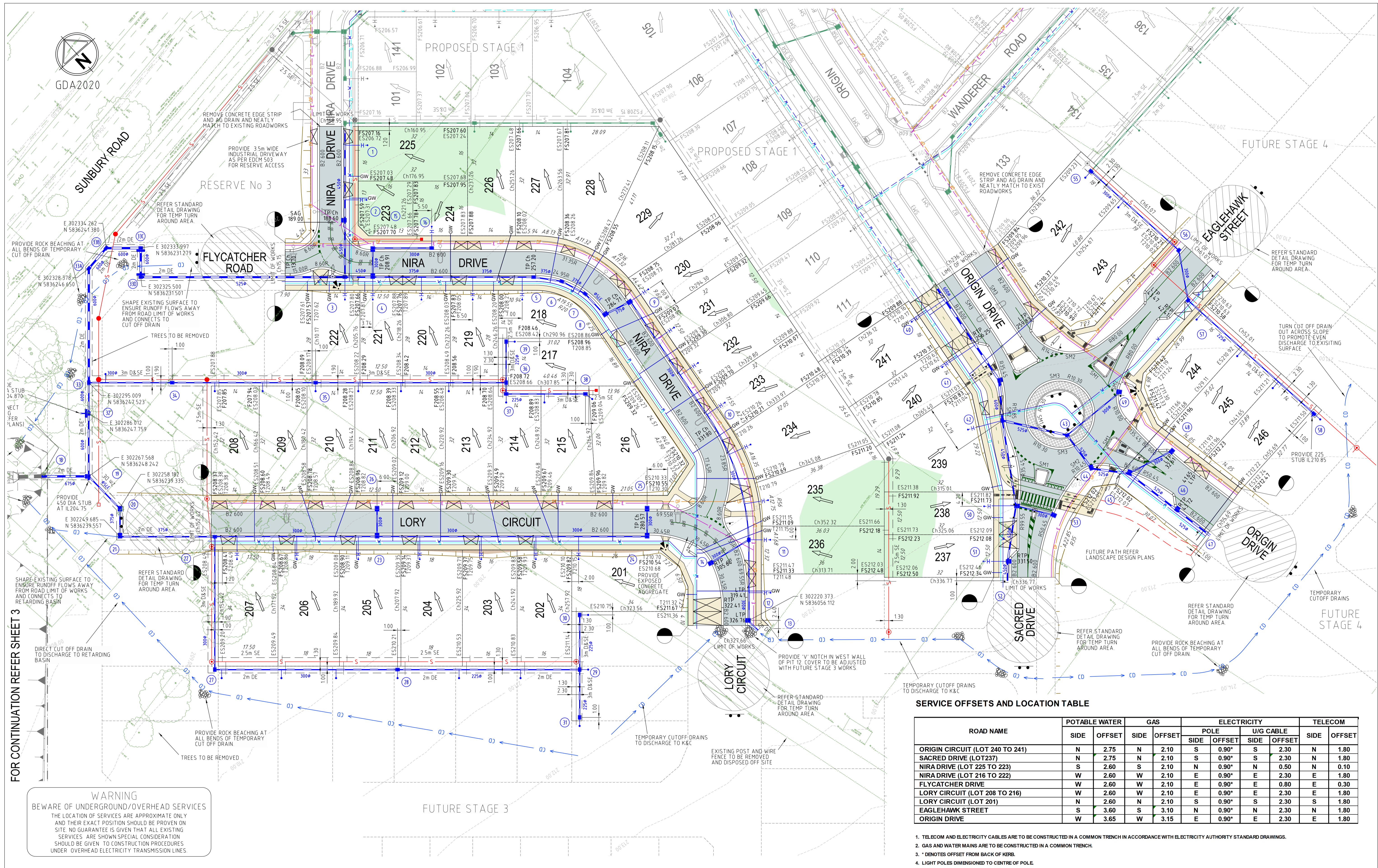
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**villawood properties**  
Communities Designed for Living

**Redstone.**  
Your world awaits

**REDSTONE ESTATE STAGE 2 FACE SHEET**  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No **305913R01** Rev **5**





FOR CONTINUATION REFER SHEET 3

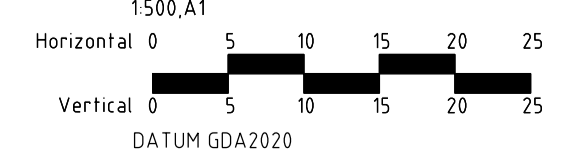
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**SERVICE OFFSETS AND LOCATION TABLE**

ROAD NAME	POTABLE WATER		GAS		ELECTRICITY		TELECOM	
	SIDE	OFFSET	SIDE	OFFSET	POLE SIDE	U/G CABLE OFFSET	SIDE	OFFSET
ORIGIN CIRCUIT (LOT 240 TO 241)	N	2.75	N	2.10	S	0.90*	S	1.80
SACRED DRIVE (LOT 237)	N	2.75	N	2.10	S	0.90*	S	1.80
NIRRA DRIVE (LOT 225 TO 223)	S	2.60	S	2.10	N	0.90*	N	0.10
NIRRA DRIVE (LOT 216 TO 222)	W	2.60	W	2.10	E	0.90*	E	1.80
FLYCATCHER DRIVE	W	2.60	W	2.10	E	0.90*	E	0.30
LORY CIRCUIT (LOT 208 TO 216)	W	2.60	W	2.10	E	0.90*	E	1.80
LORY CIRCUIT (LOT 201)	N	2.60	N	2.10	S	0.90*	S	1.80
EAGLEHAWK STREET	S	3.60	S	3.10	N	0.90*	N	1.80
ORIGIN DRIVE	W	3.65	W	3.15	E	0.90*	E	1.80

- TELECOM AND ELECTRICITY CABLES ARE TO BE CONSTRUCTED IN A COMMON TRENCH 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.

Rev	Amendments	Approved	Date
4	NIRRA / LORY INTERSECTION LINEMARKING AND GIVEWAY SIGN ADDED	M.L.	28/09/20
3	FS LEVELS & FILL ZONE UPDATED LOTS 235 TO 239	M.L.	21/09/20
2	DRAINAGE SEWER REAR LOTS 246 TO 242 REALIGNED. (DRAIN / SEWER SWAPPED) PIT 58 STUB ADDED NORTH WALL. DRAIN PINLETS ADJUSTED LOTS 208 TO 215	M.L.	18/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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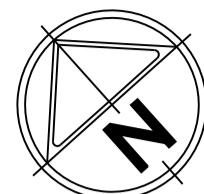
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**villawood properties**  
Communities Designed for Living  
Designed by R. WEINBER  
Authorised by M. LETSON

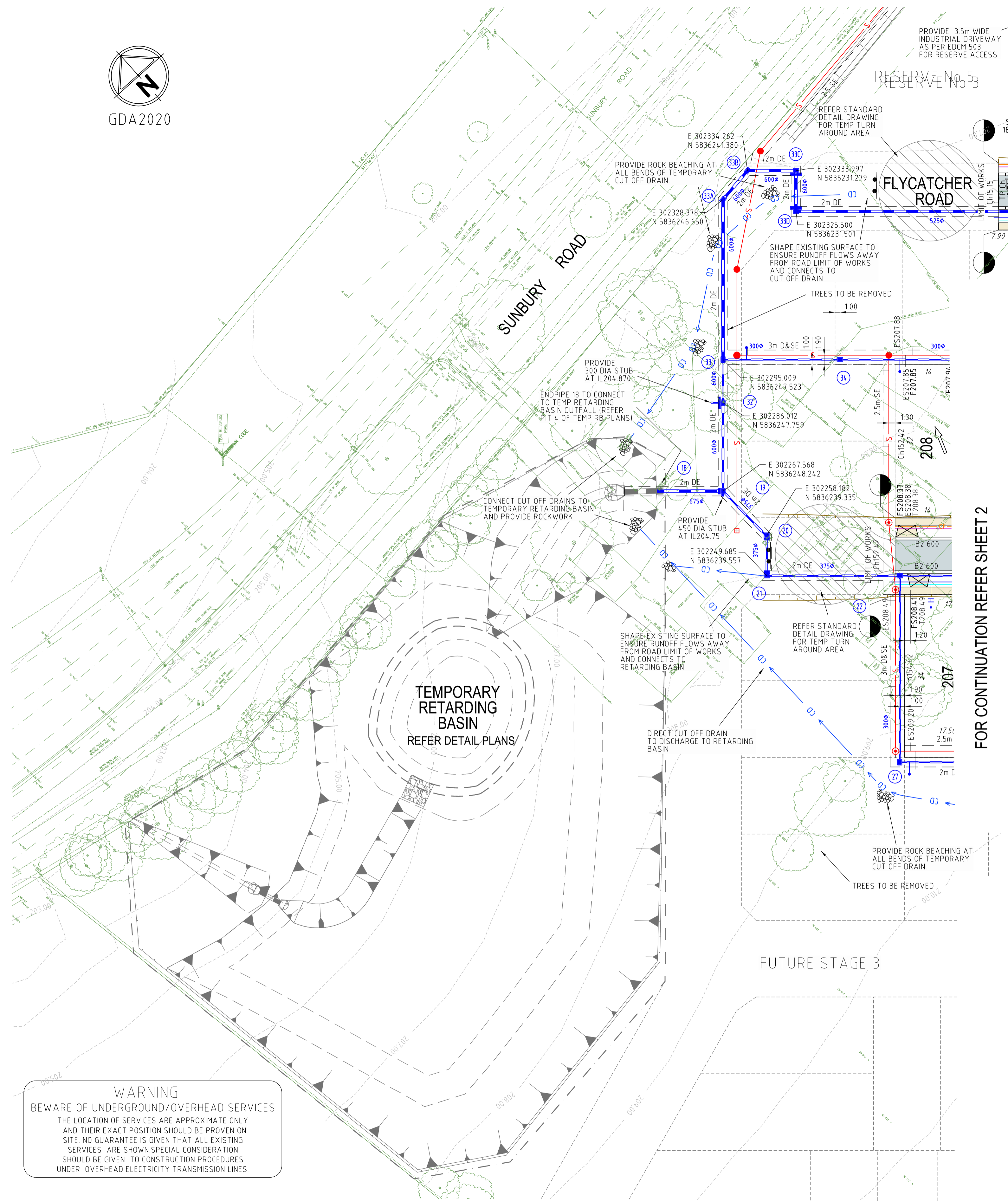
**Redstone.**  
Your world awaits  
Checked by D. CAMERON  
Date 23/04/19

**REDSTONE ESTATE STAGE 2**  
ROAD & DRAINAGE FACE PLAN SHEET 1  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No 305913R02 Rev 4



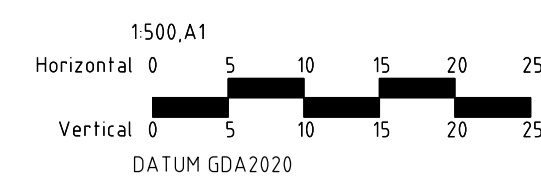


GDA2020



**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	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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villawood properties  
 Communities Designed for Living

Redstone.  
 Your world awaits

Designed  
 R. WEINBER

Checked  
 D. CAMERON

Authorised  
 M. LETSON

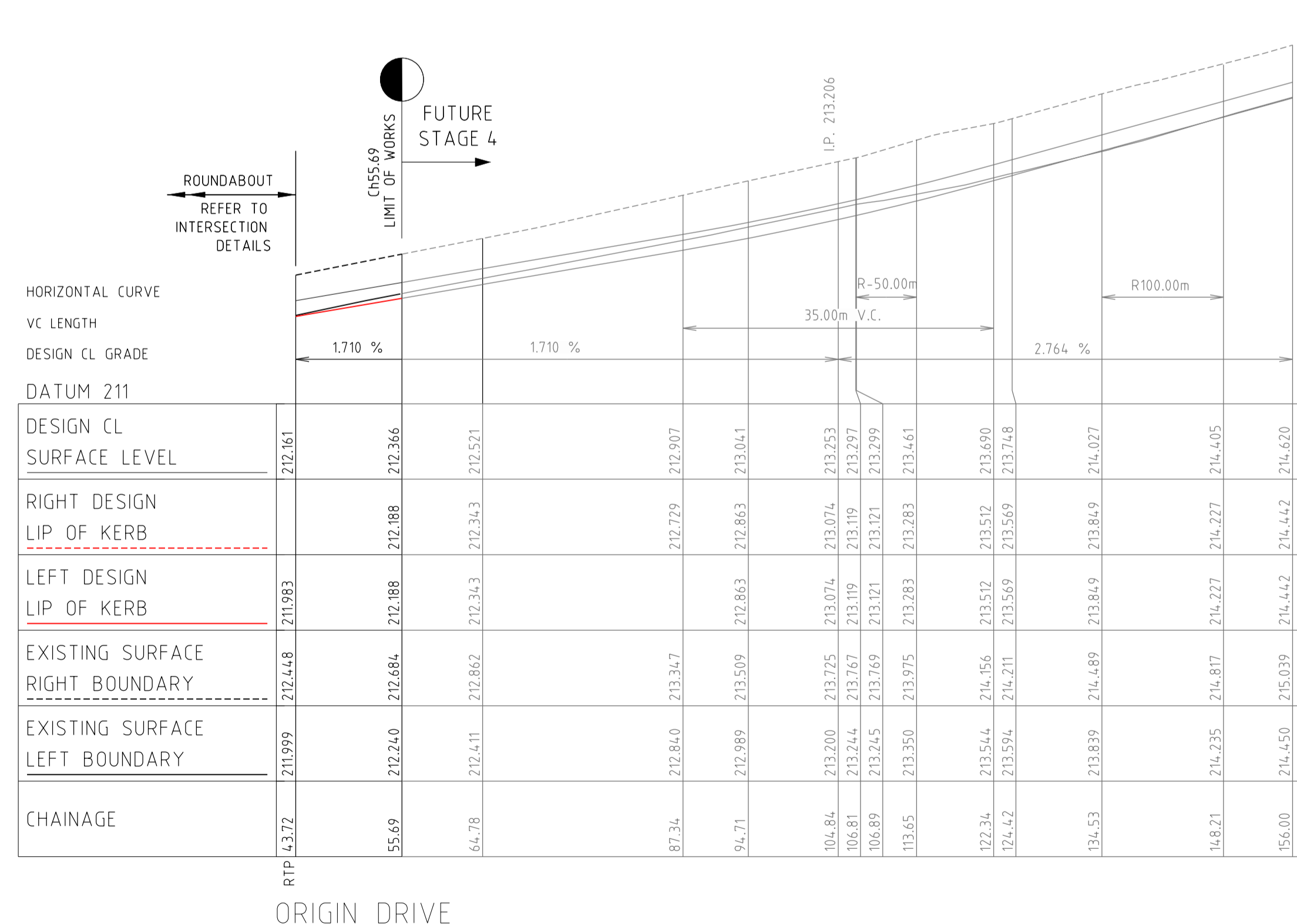
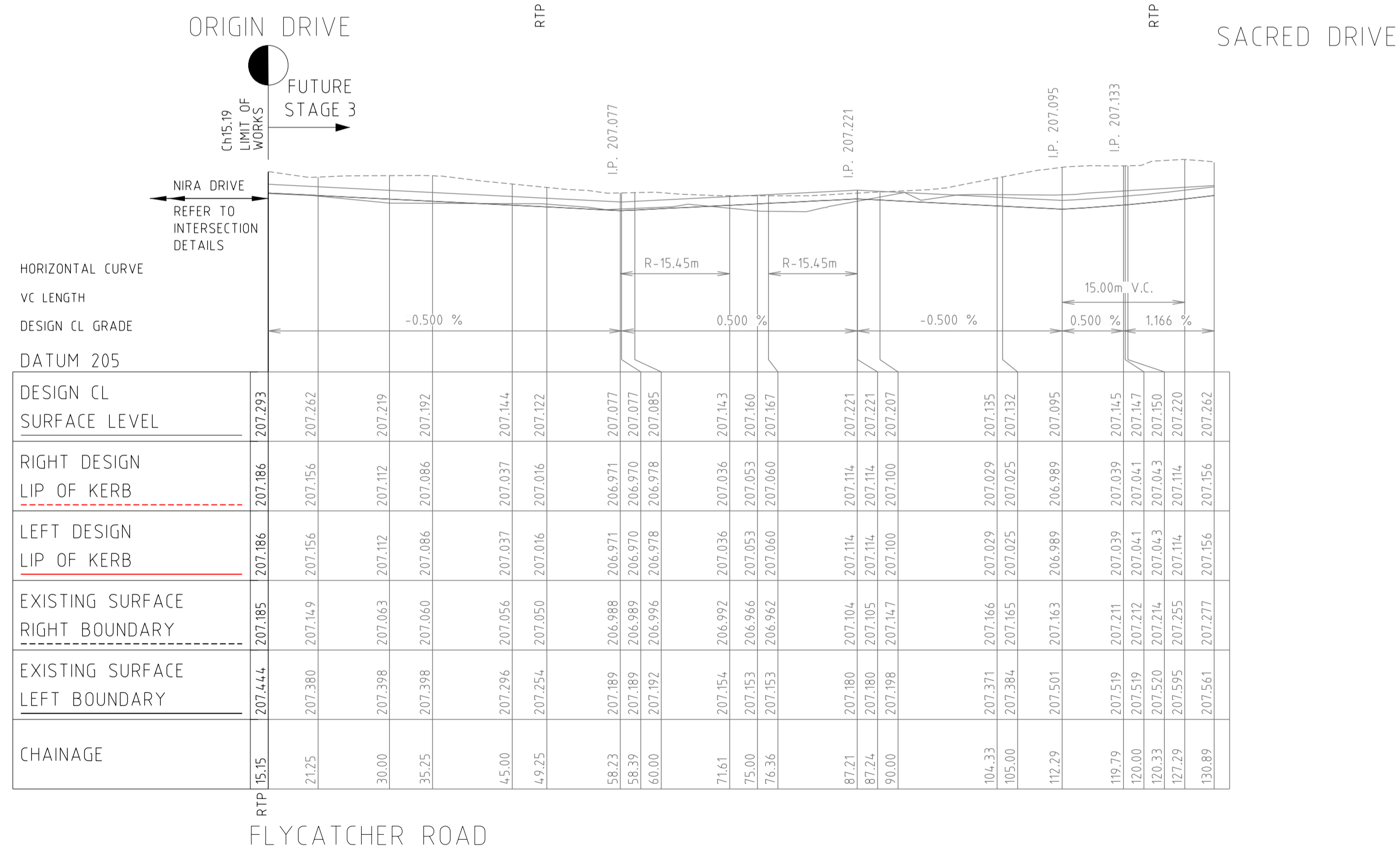
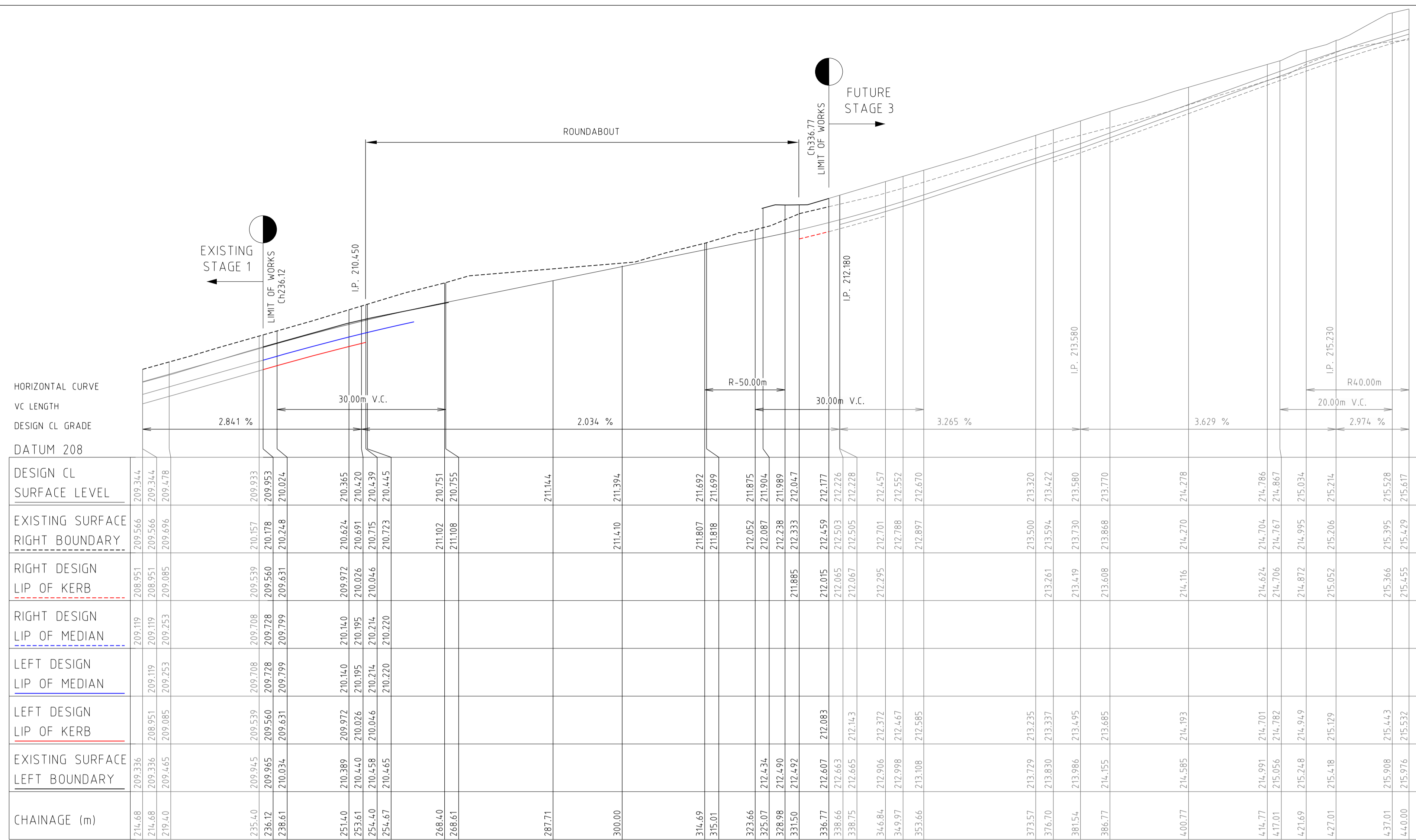
Date  
 23/04/19

**REDSTONE ESTATE**  
**STAGE 2**  
**ROAD & DRAINAGE FACE PLAN**  
**SHEET 2**

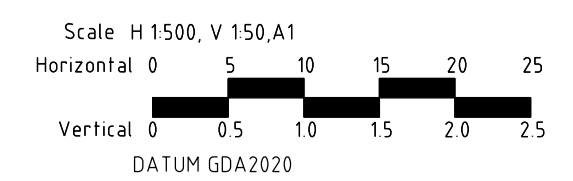
VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL

**CONSTRUCTION** Drg No **305913R03** Rev **1**





Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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Designed by **R. WEINBER**

Authorised by **M. LETSON**

**Redstone.**

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Checked by **D. CAMERON**

Date **23/04/19**

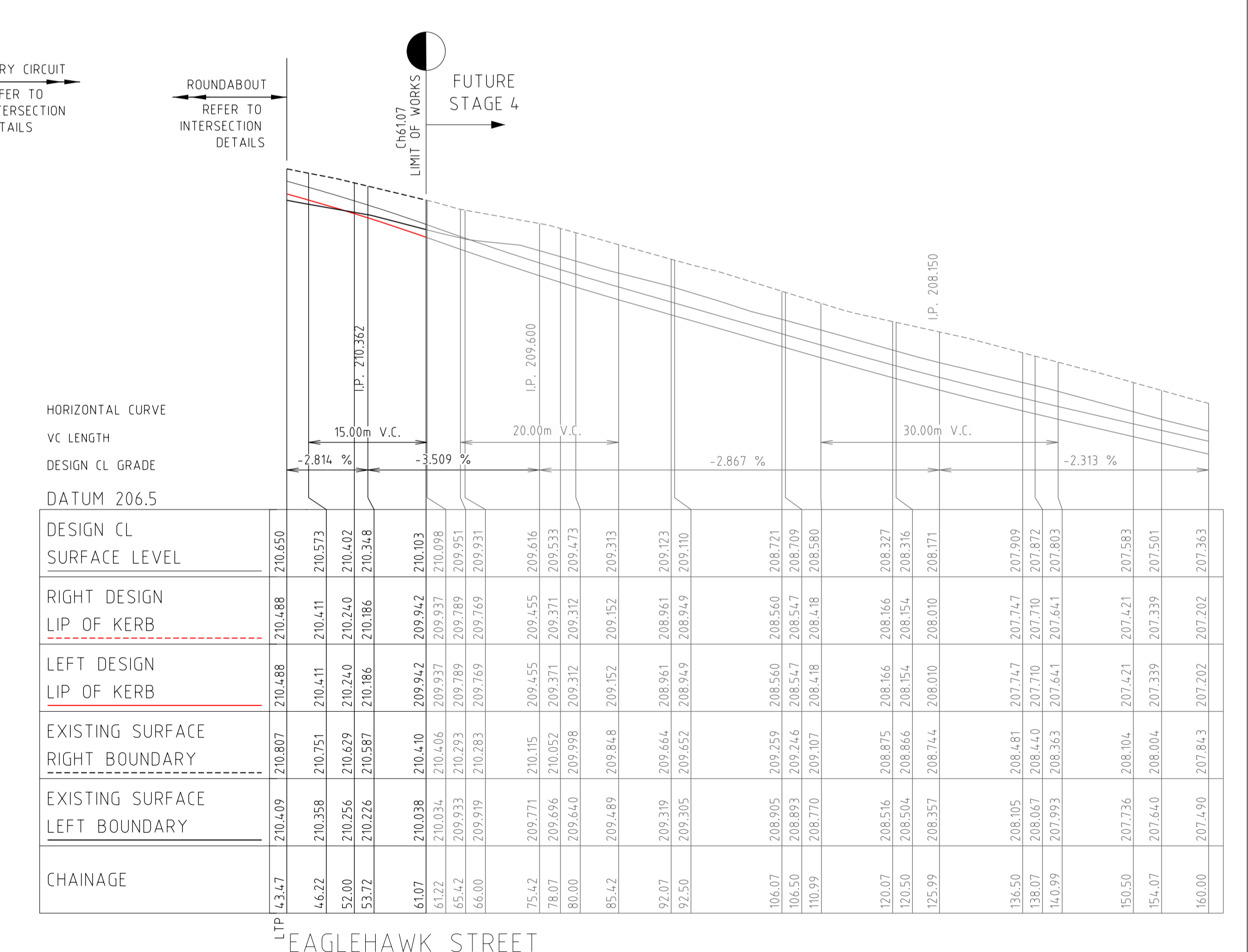
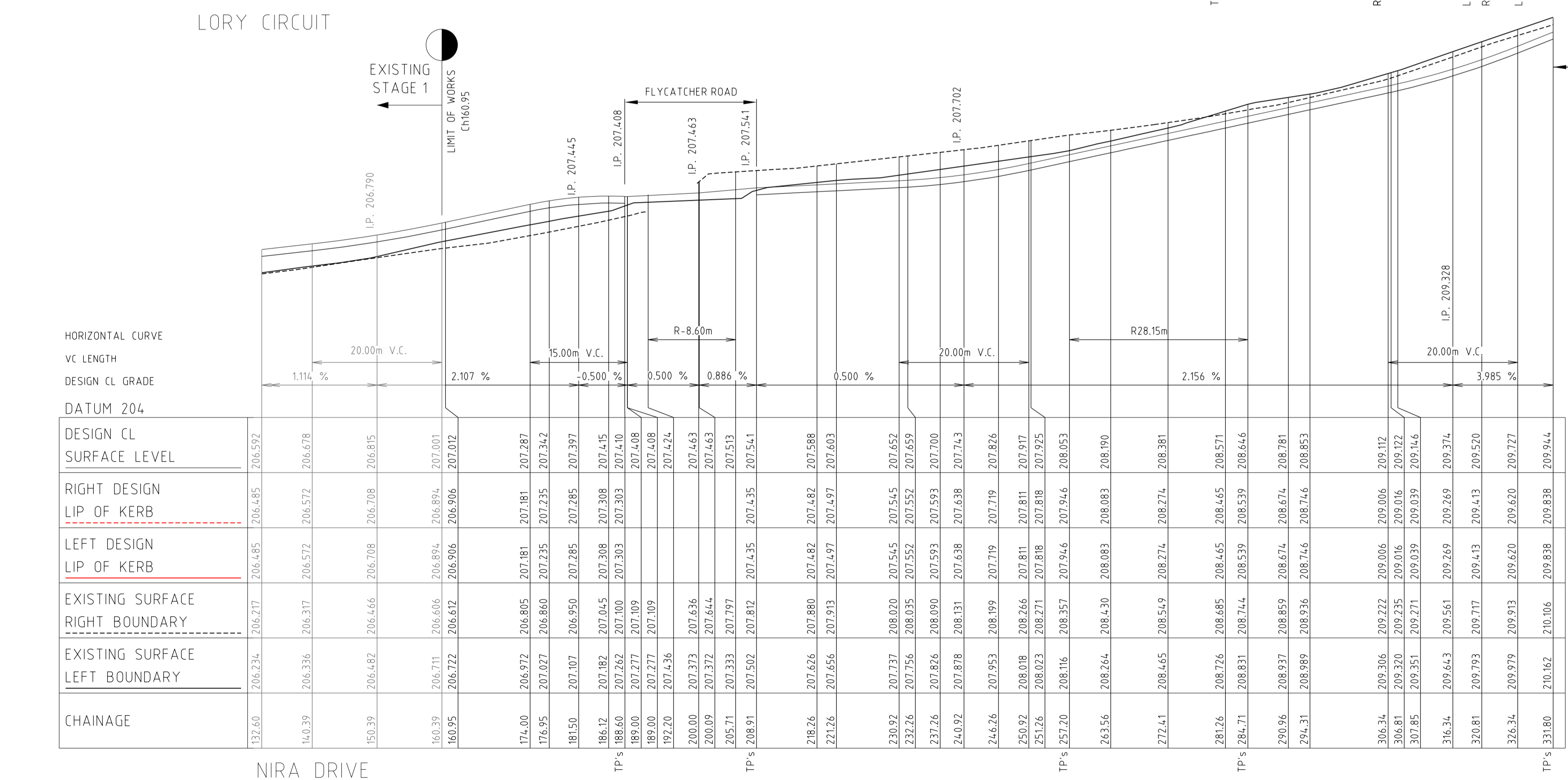
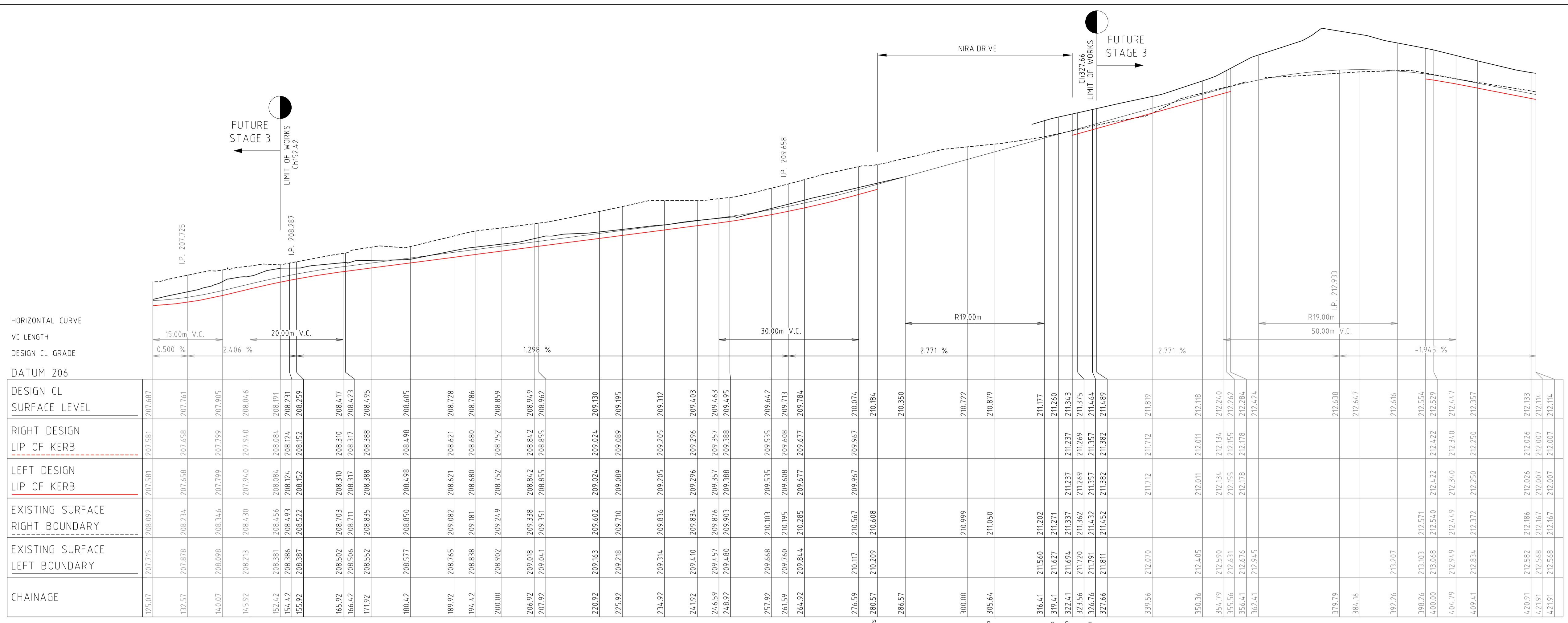
**REDSTONE ESTATE STAGE 2**

LONGITUDINAL SECTION - ORIGIN DRIVE, FLYCATCHER ROAD & SACRED DRIVE

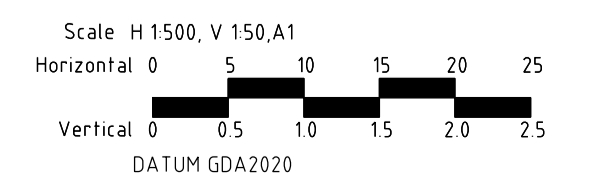
VILLAWOOD PROPERTIES HUME CITY COUNCIL

**CONSTRUCTION** Drg No **305913R04** Rev **1**

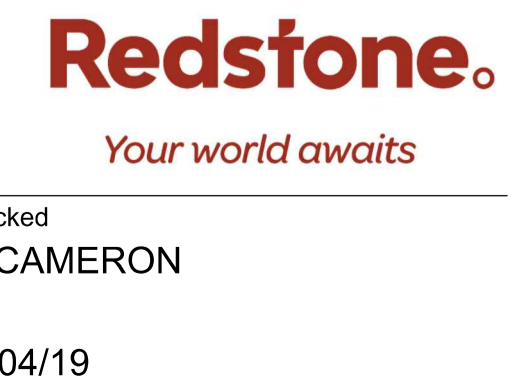
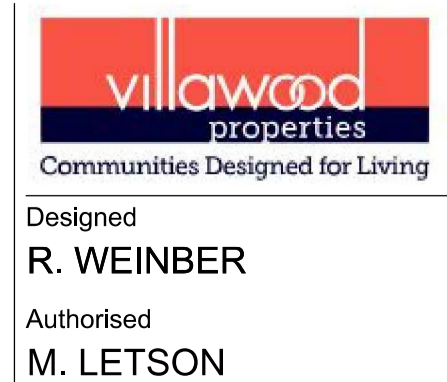




Rev	Amendments	Approved	Date
2	LORY CIRCUIT REGRADED CH125.07 TO CH154.42	M.L.	28/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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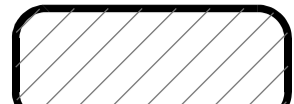
**Redstone ESTATE STAGE 2**  
**LONGITUDINAL SECTION - LORY CIRCUIT, NIRA DRIVE & EAGLEHAWK STREET**  
 VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL  
**CONSTRUCTION** Drg No **305913R05** Rev **2**

Designed  
**R. WEINBER**  
 Authorised  
**M. LETSON**

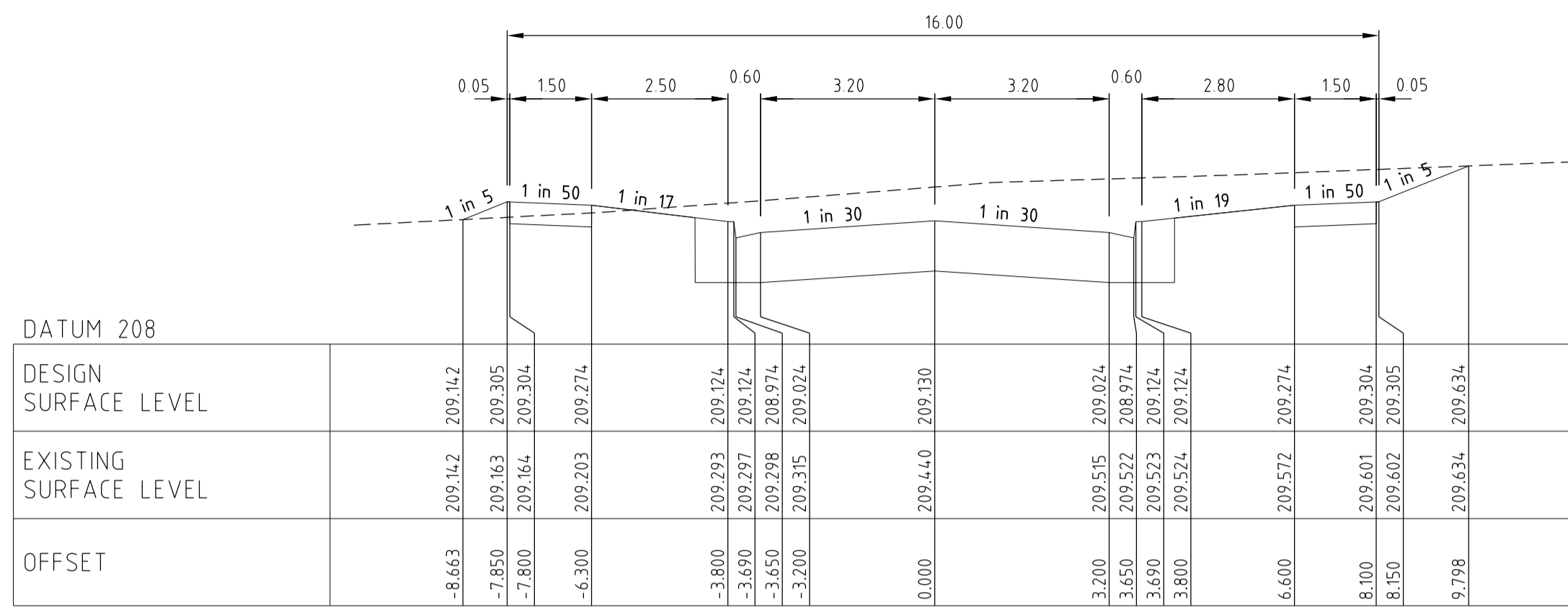
Checked  
**D. CAMERON**  
 Date  
**23/04/19**



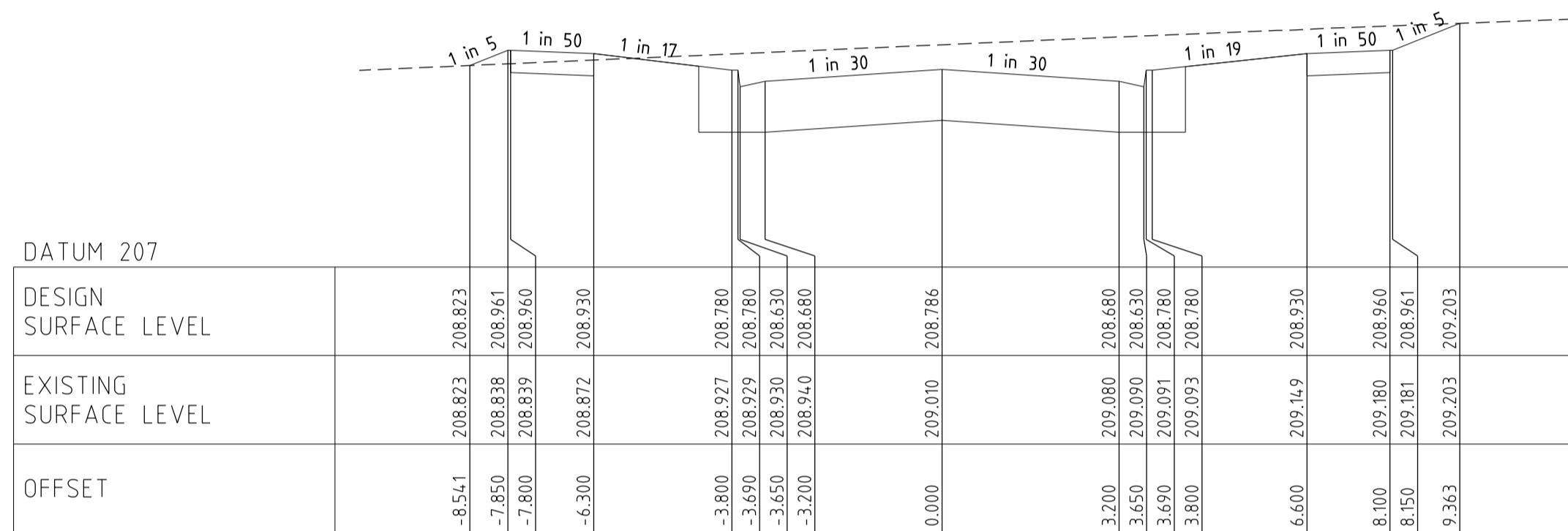




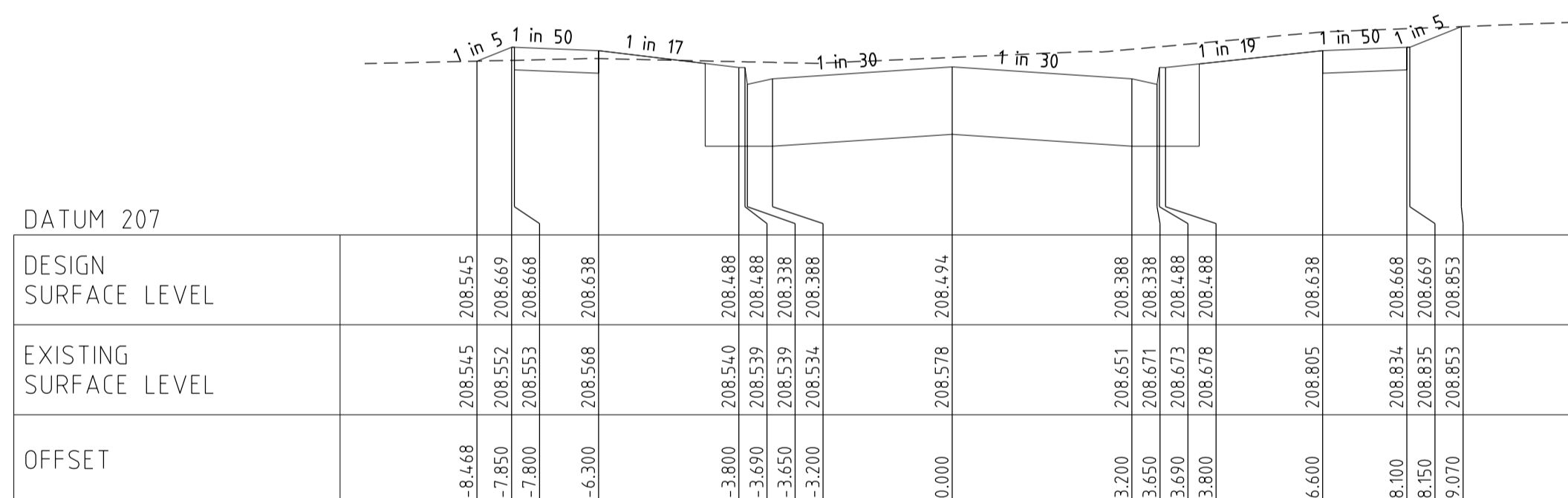
STRUCTURAL FILL  
IN ACCORDANCE  
WITH AS3798-2007,  
LEVEL 1.



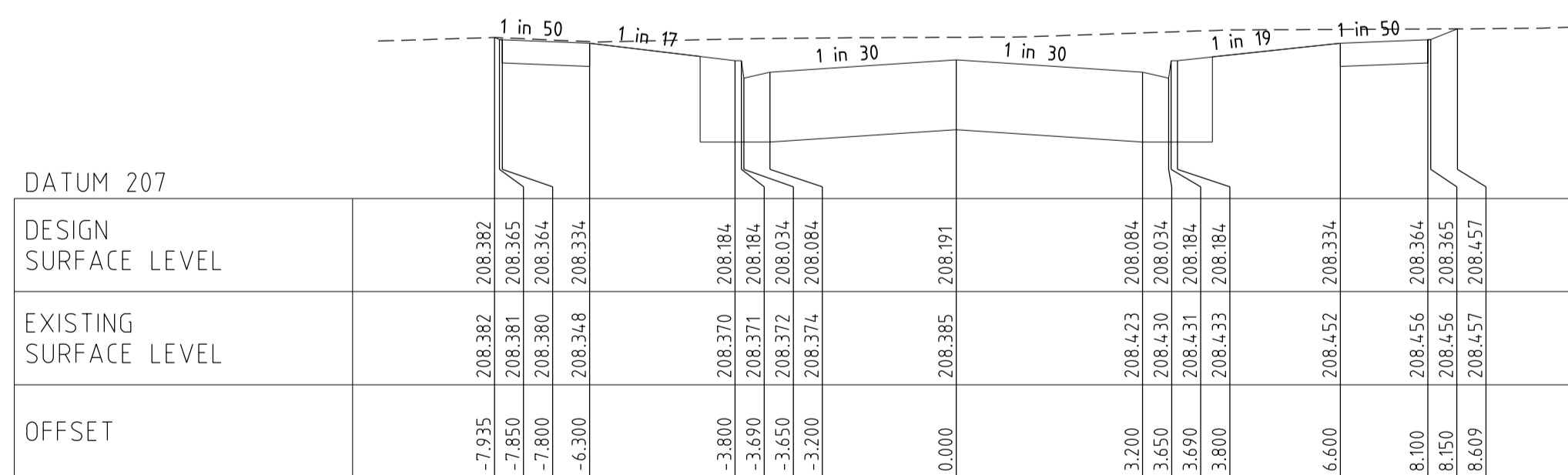
LORY CIRCUIT Ch 220.92



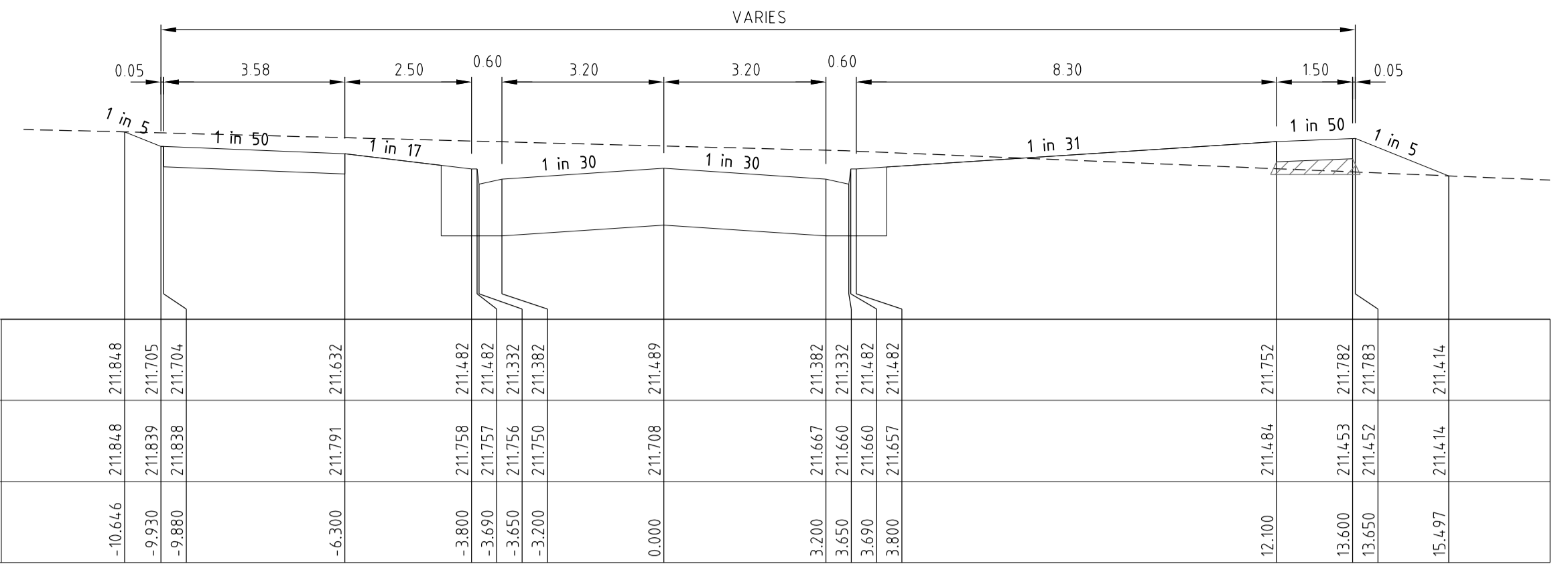
LORY CIRCUIT Ch 194.42



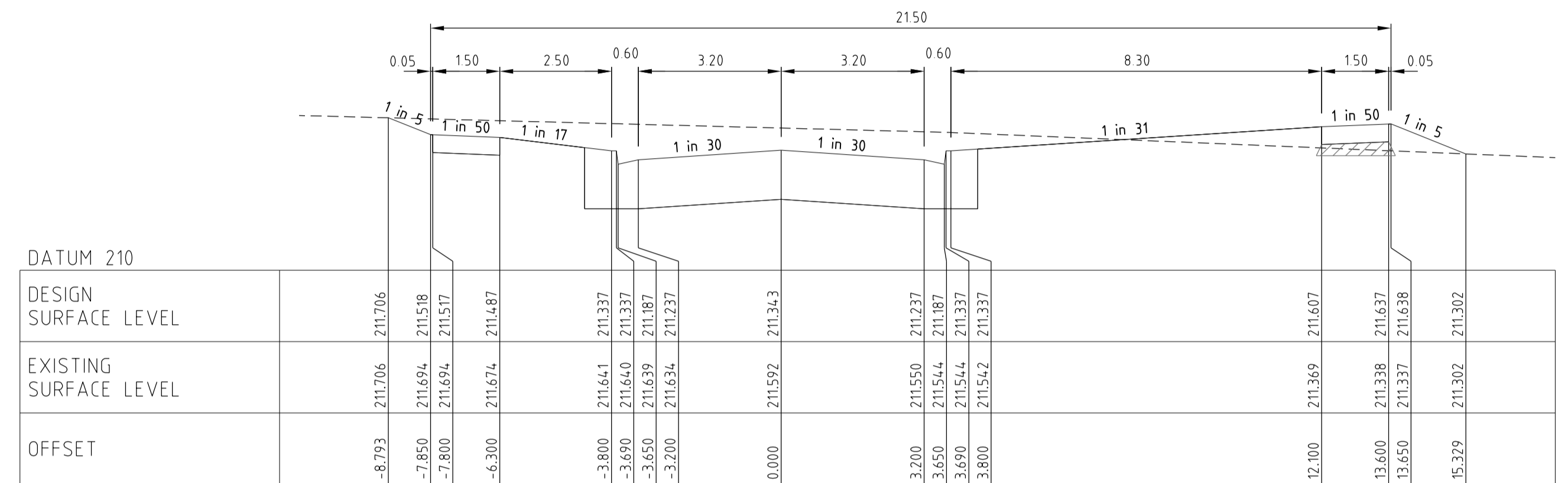
LORY CIRCUIT Ch 171.92



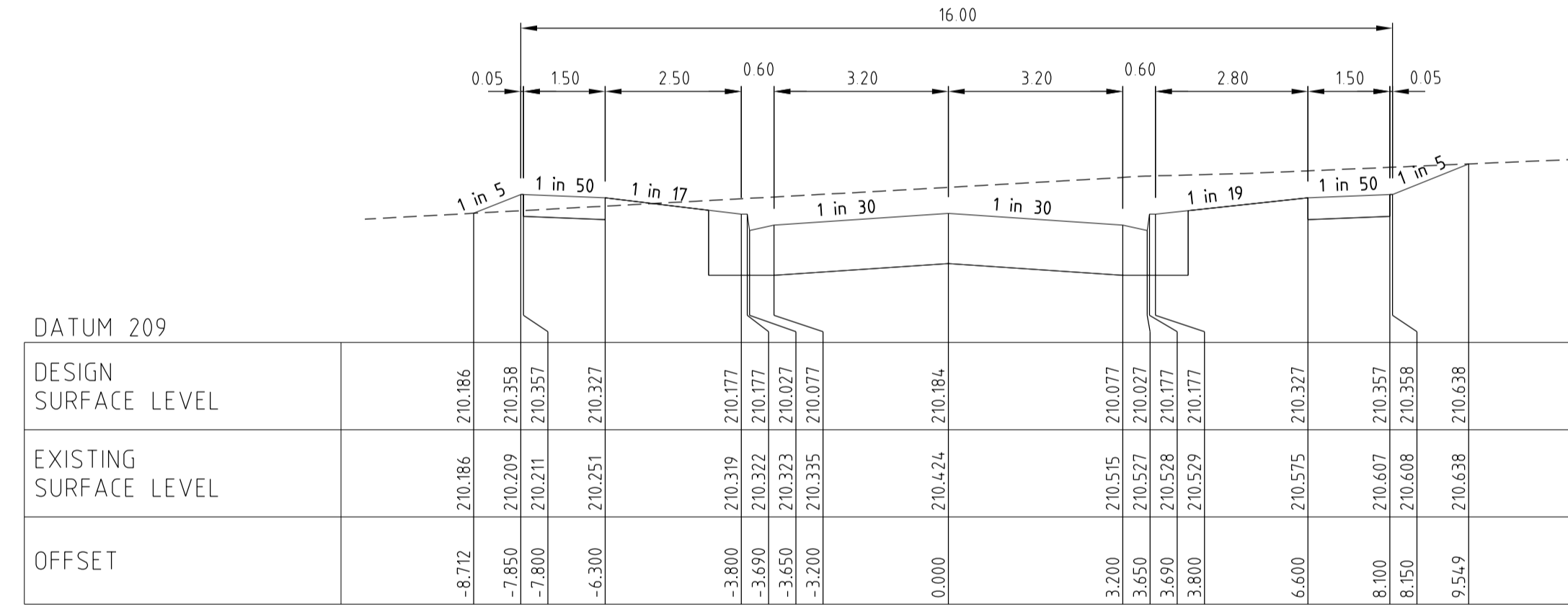
LORY CIRCUIT Ch 152.42



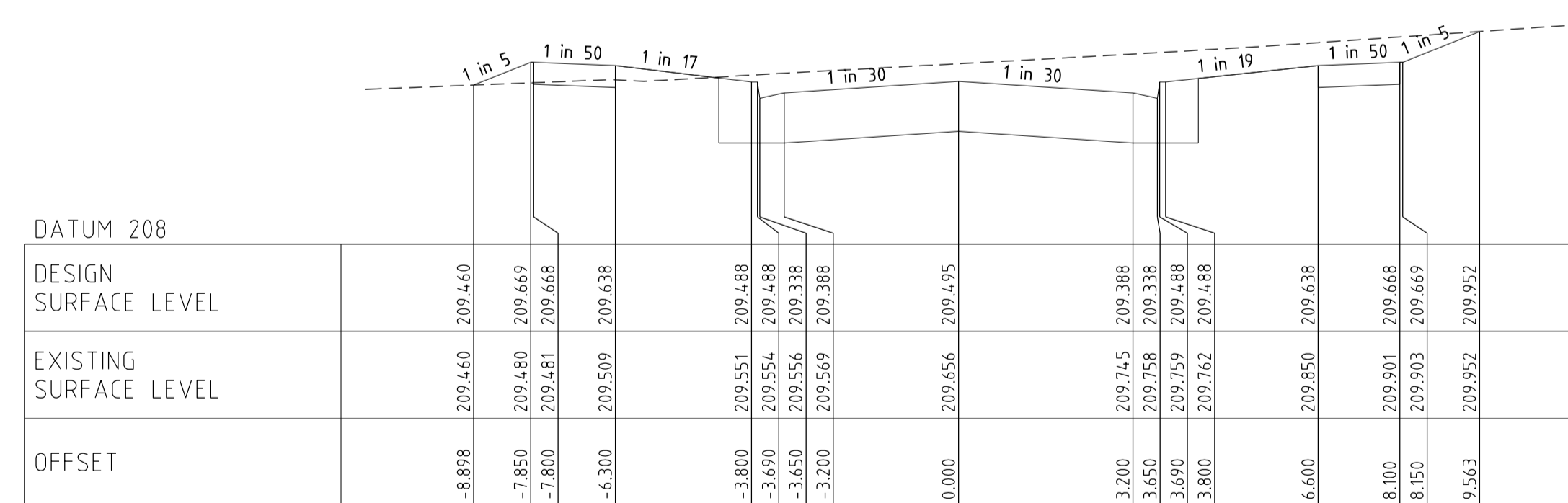
LORY CIRCUIT Ch 327.66



LORY CIRCUIT Ch 322.41

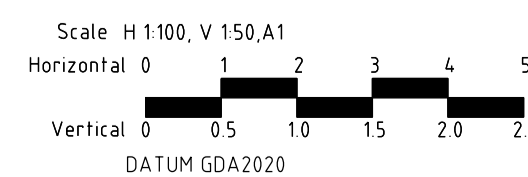


LORY CIRCUIT Ch 280.57



LORY CIRCUIT Ch 248.92

Rev	Amendments	Approved	Date
2	CH152.42 UPDATED	M.L.	28/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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Date 23/04/19

REDSTONE ESTATE  
STAGE 2  
CROSS SECTIONS - LORY CIRCUIT

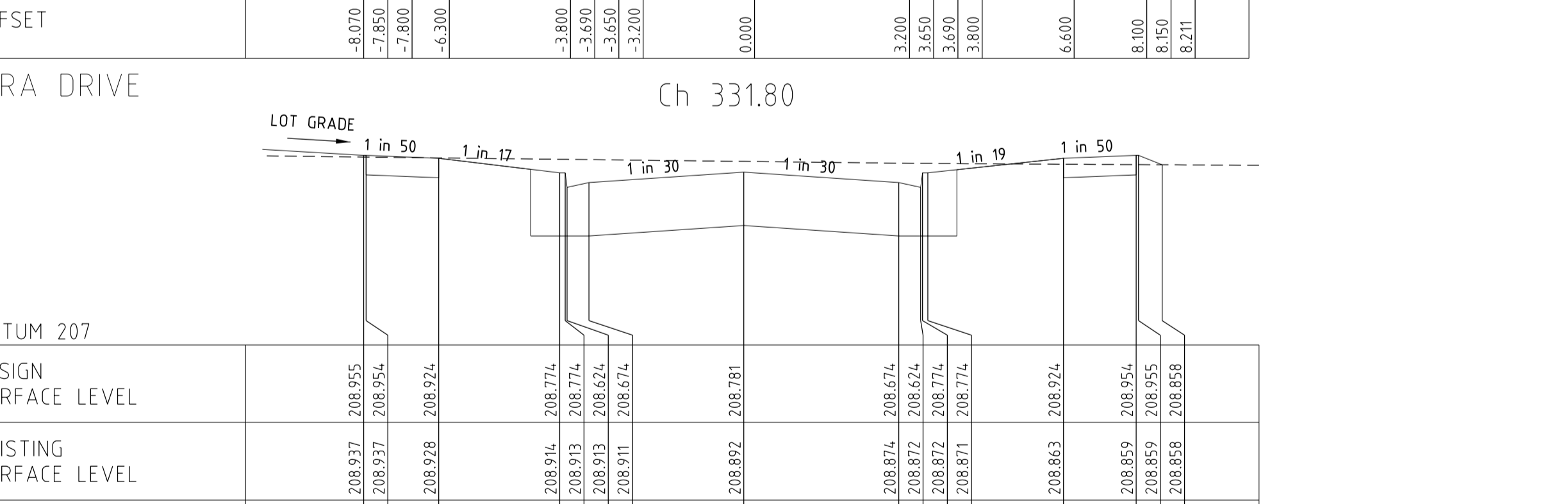
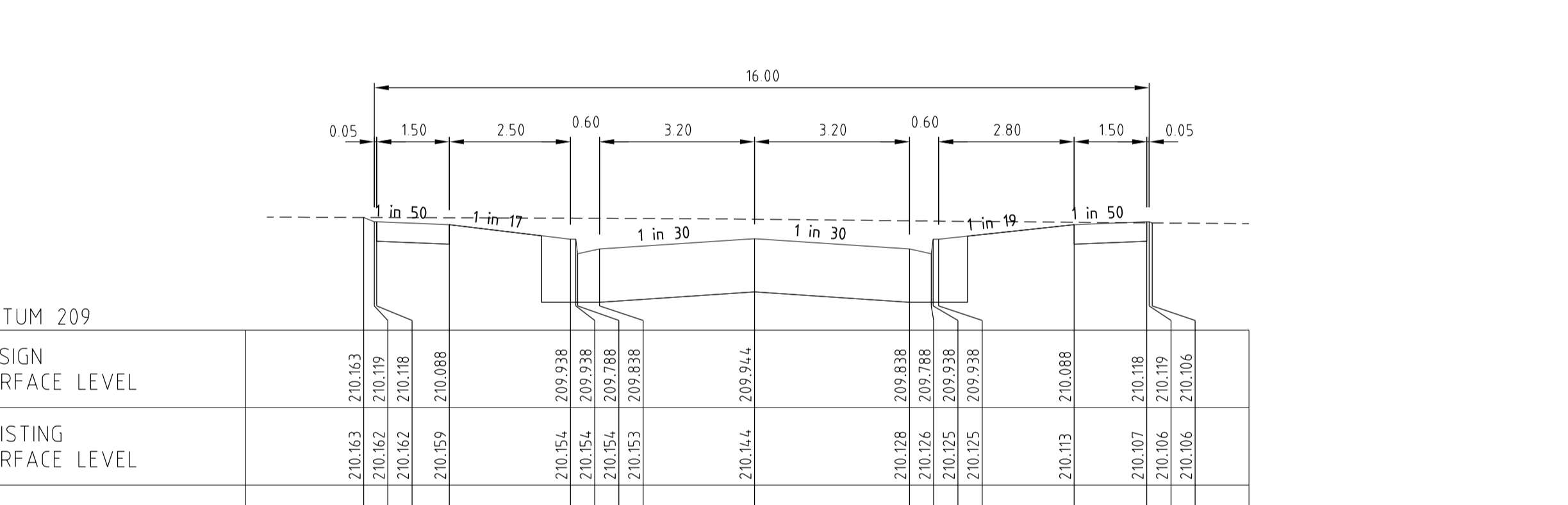
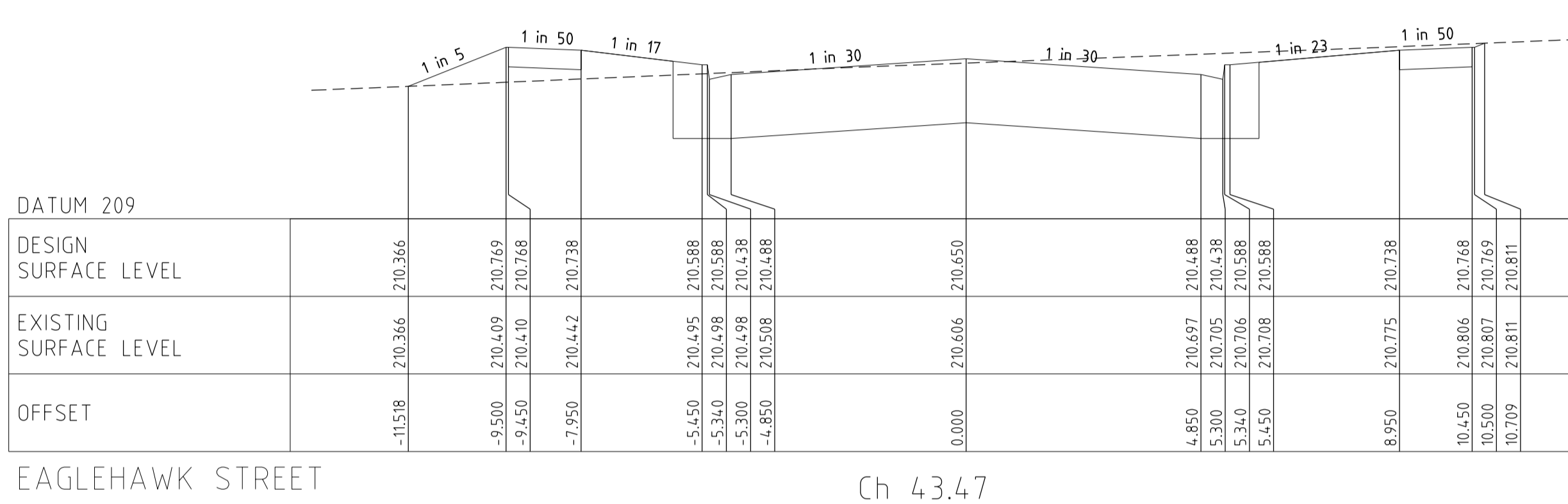
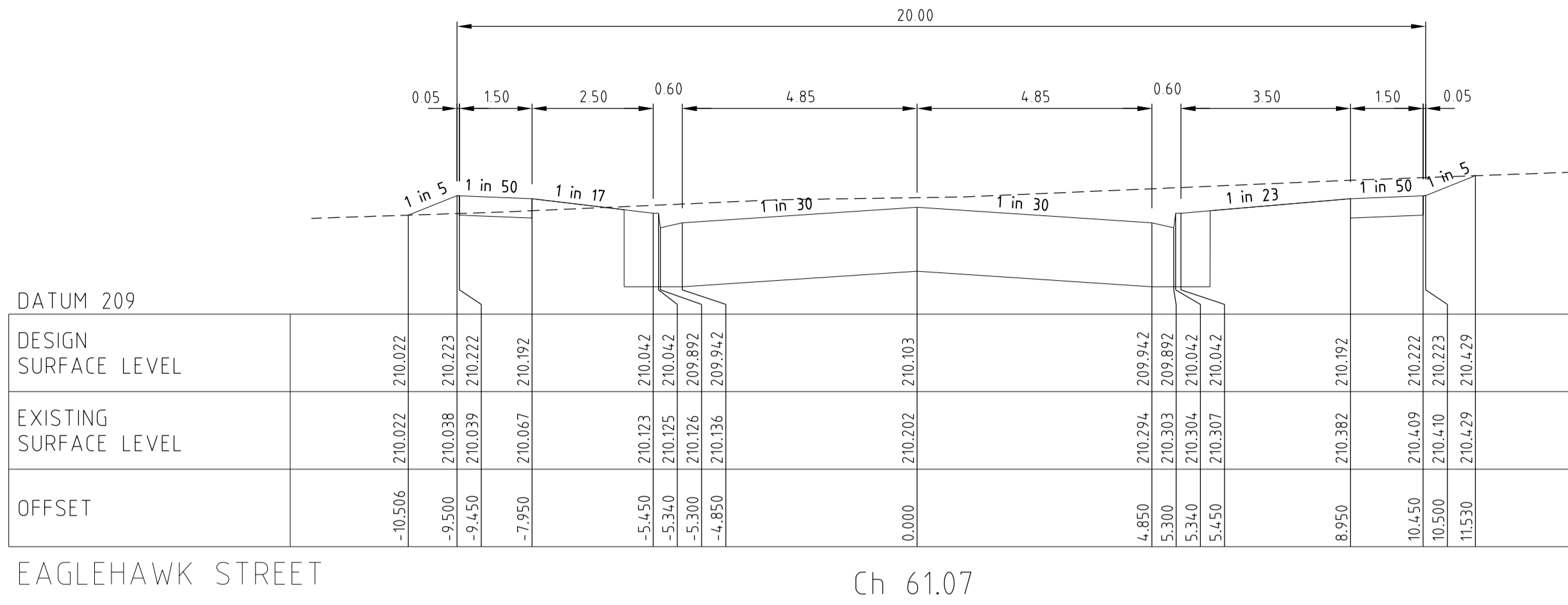
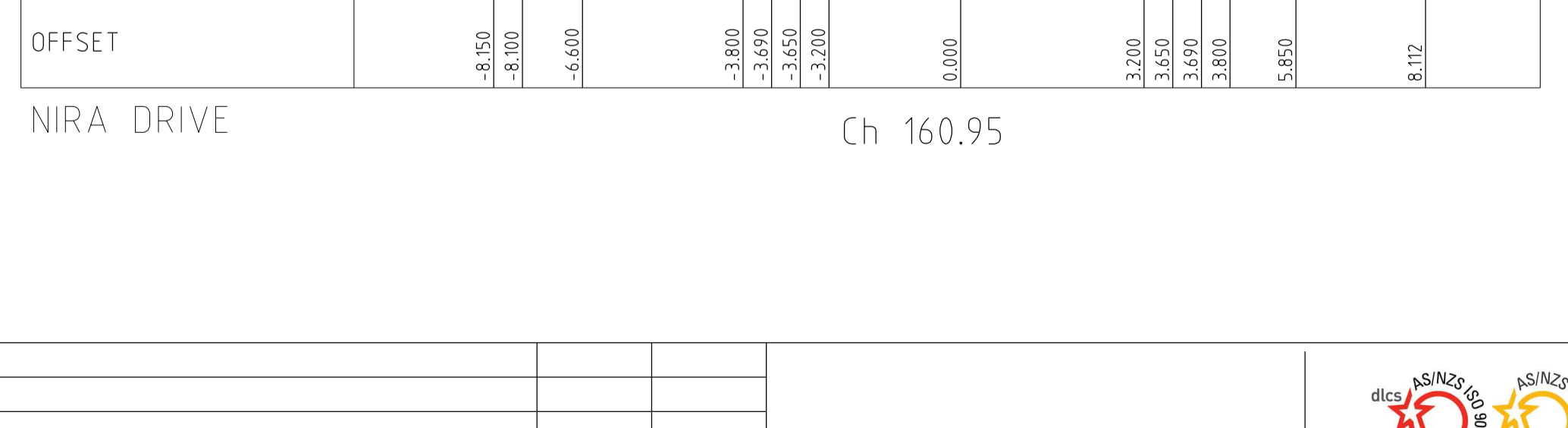
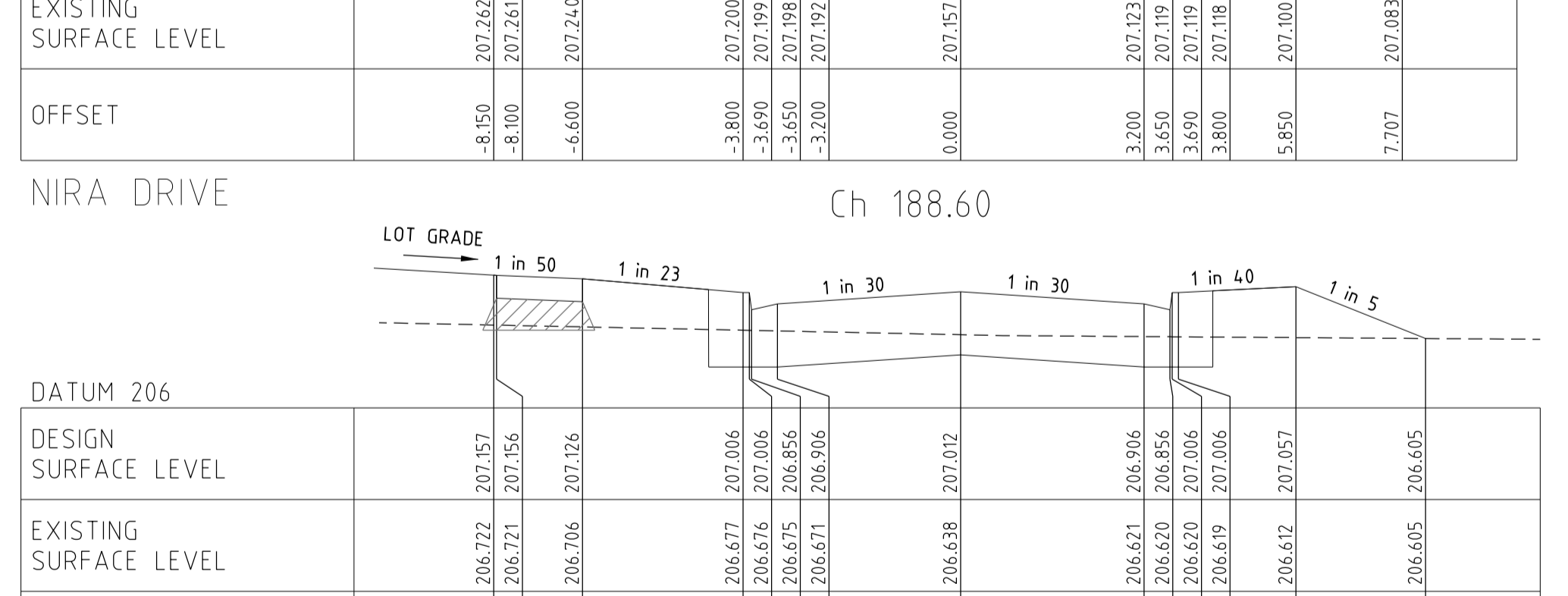
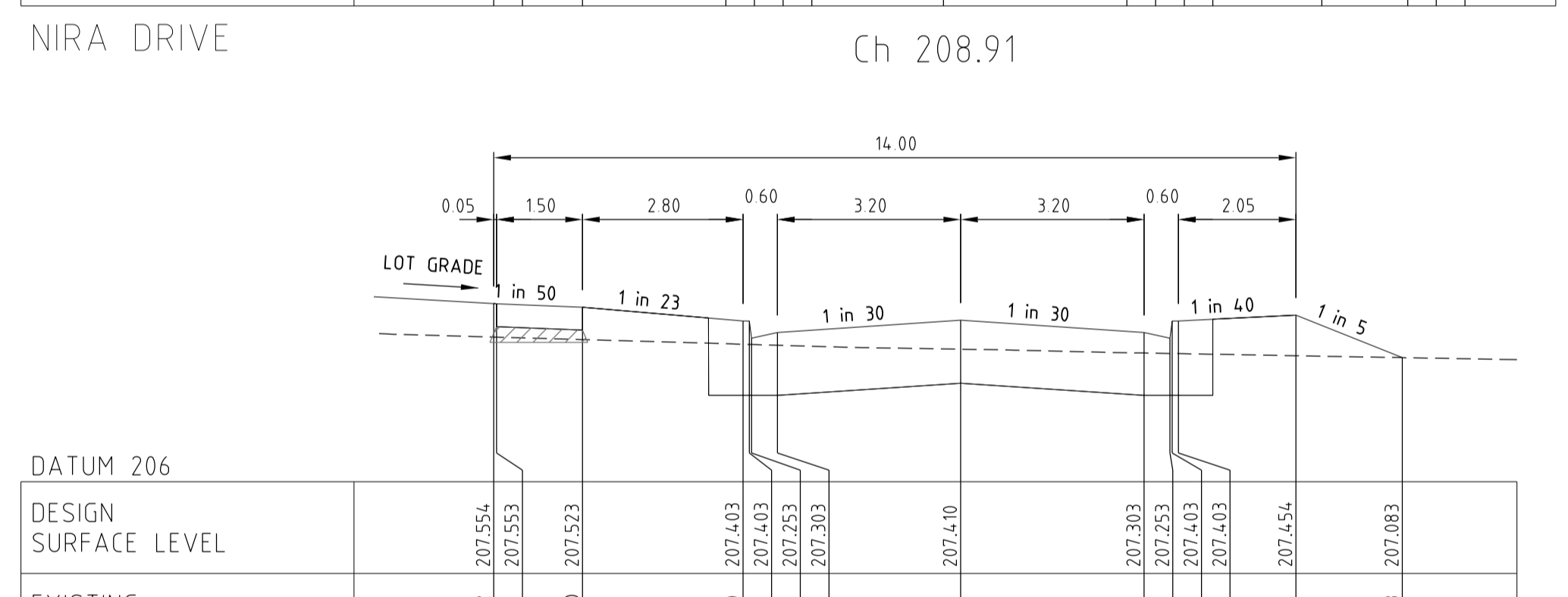
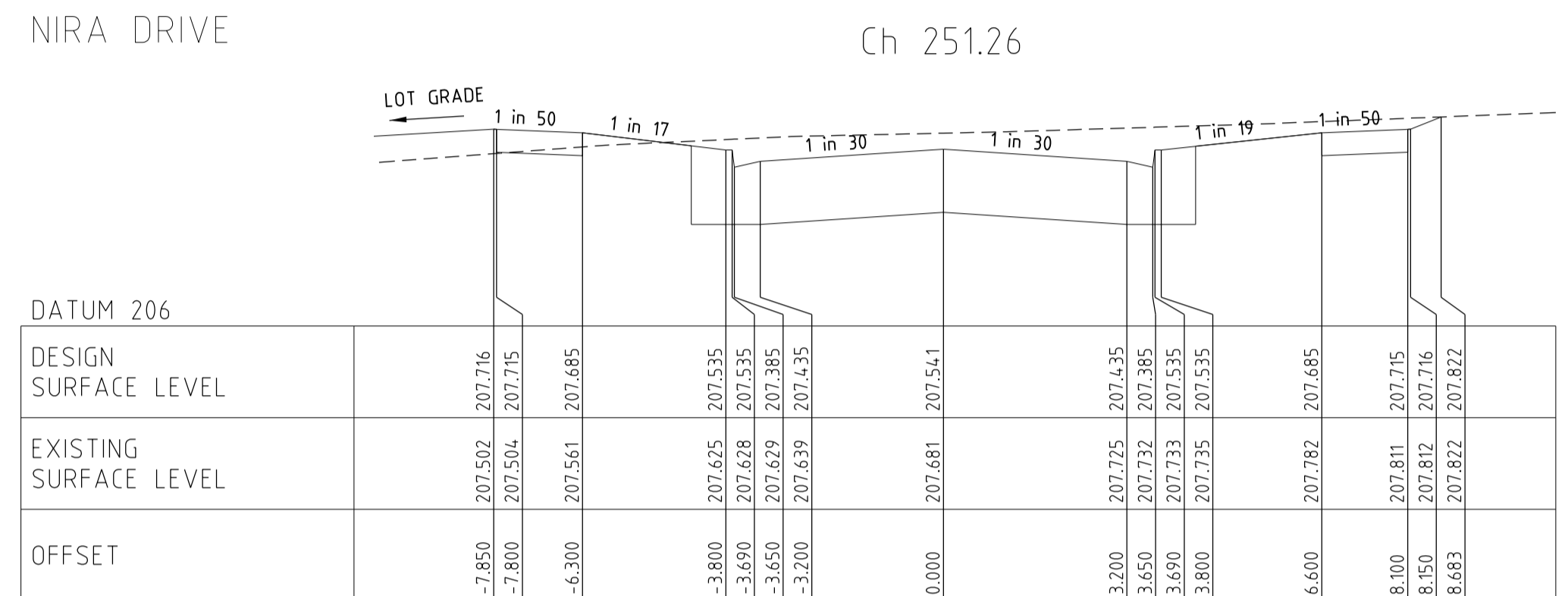
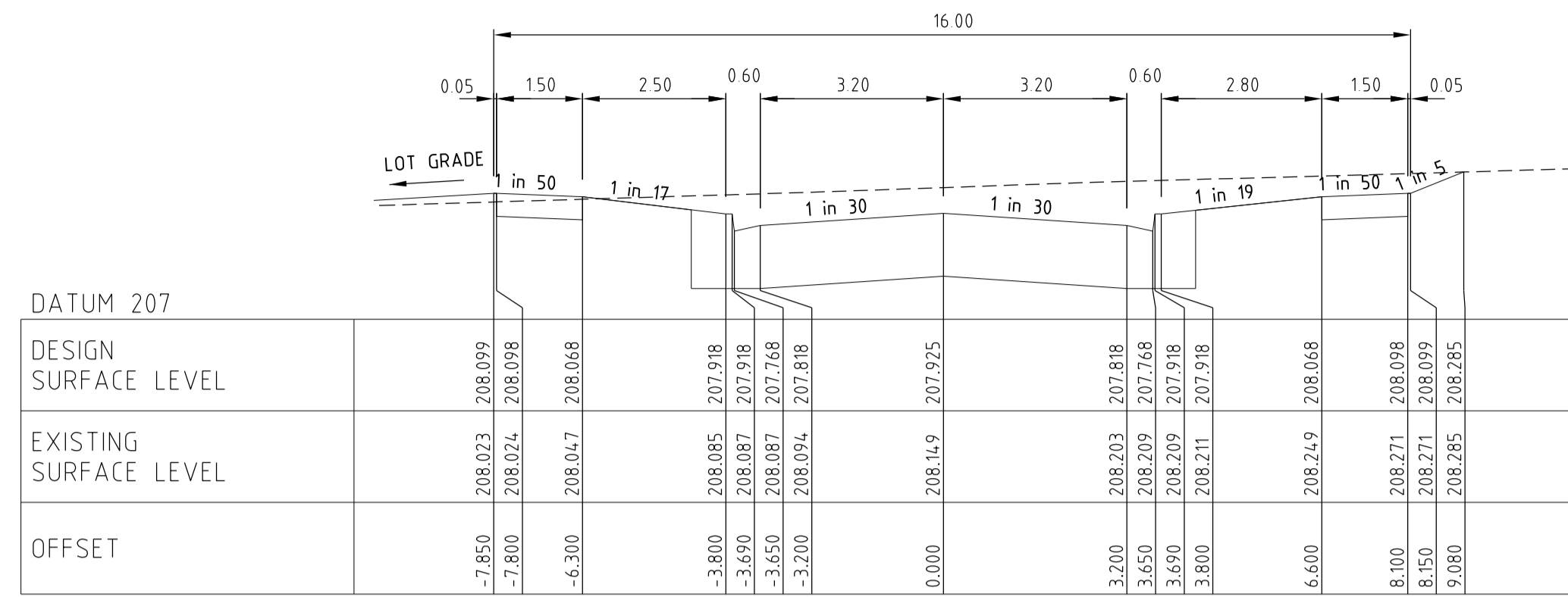
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL

**CONSTRUCTION** Drg No 305913R07

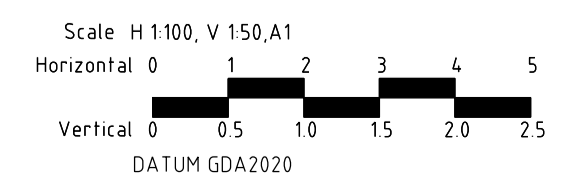
Rev 2



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





Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20




  
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**REDSTONE ESTATE**  
**STAGE 2**  
**CROSS SECTIONS - NIRA DRIVE & EAGLEHAWK STREET**

Designed  
**R. WEINBER**

Authorised  
**M. LETSON**

Checked  
**D. CAMERON**

Date  
**23/04/19**

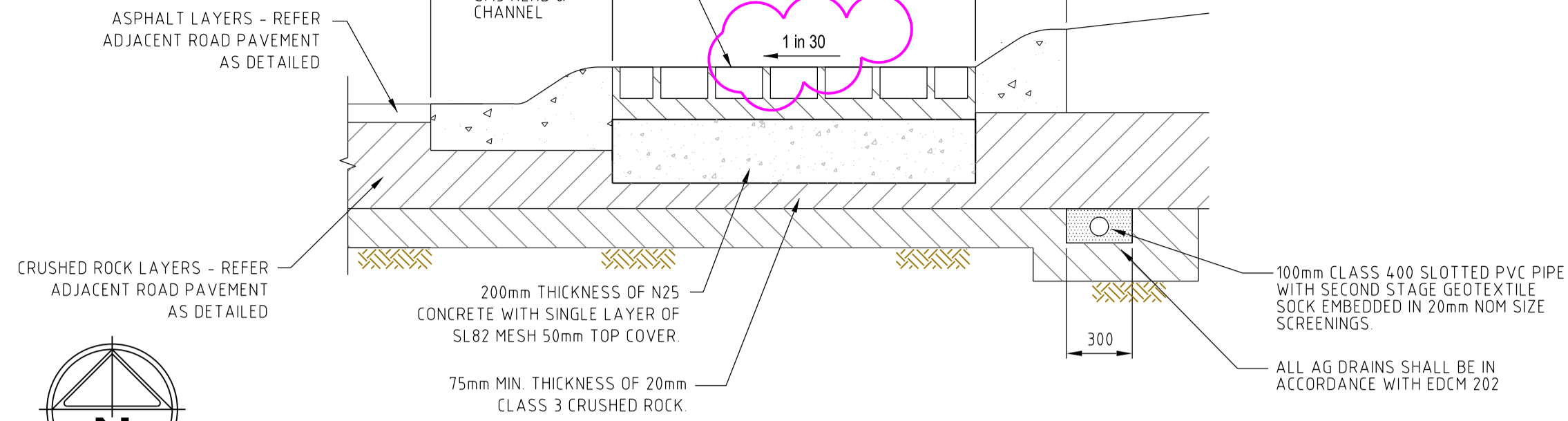
VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL

**CONSTRUCTION**      Drg No **305913R08**      Rev **1**

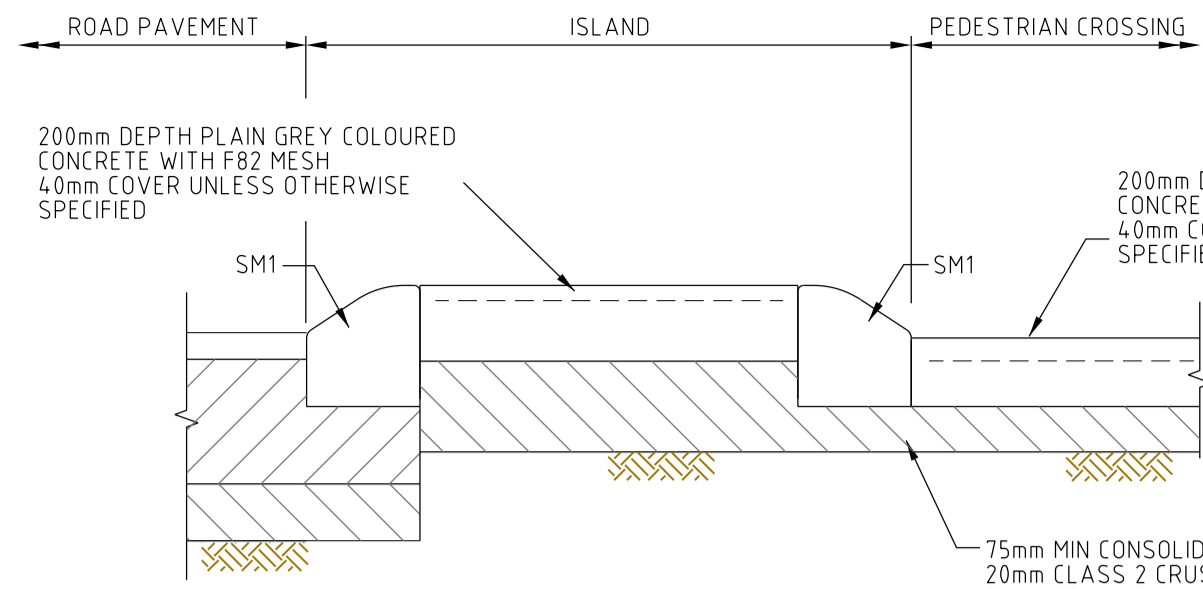


**PORPHYREY STONE**  
 ONCE LAID NO TRAFFIC IS TO BE ALLOWED ON THE STONE FOR A PERIOD OF 21 DAYS TO ALLOW FULL CURING OF THE MORTAR AND CONCRETE.

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

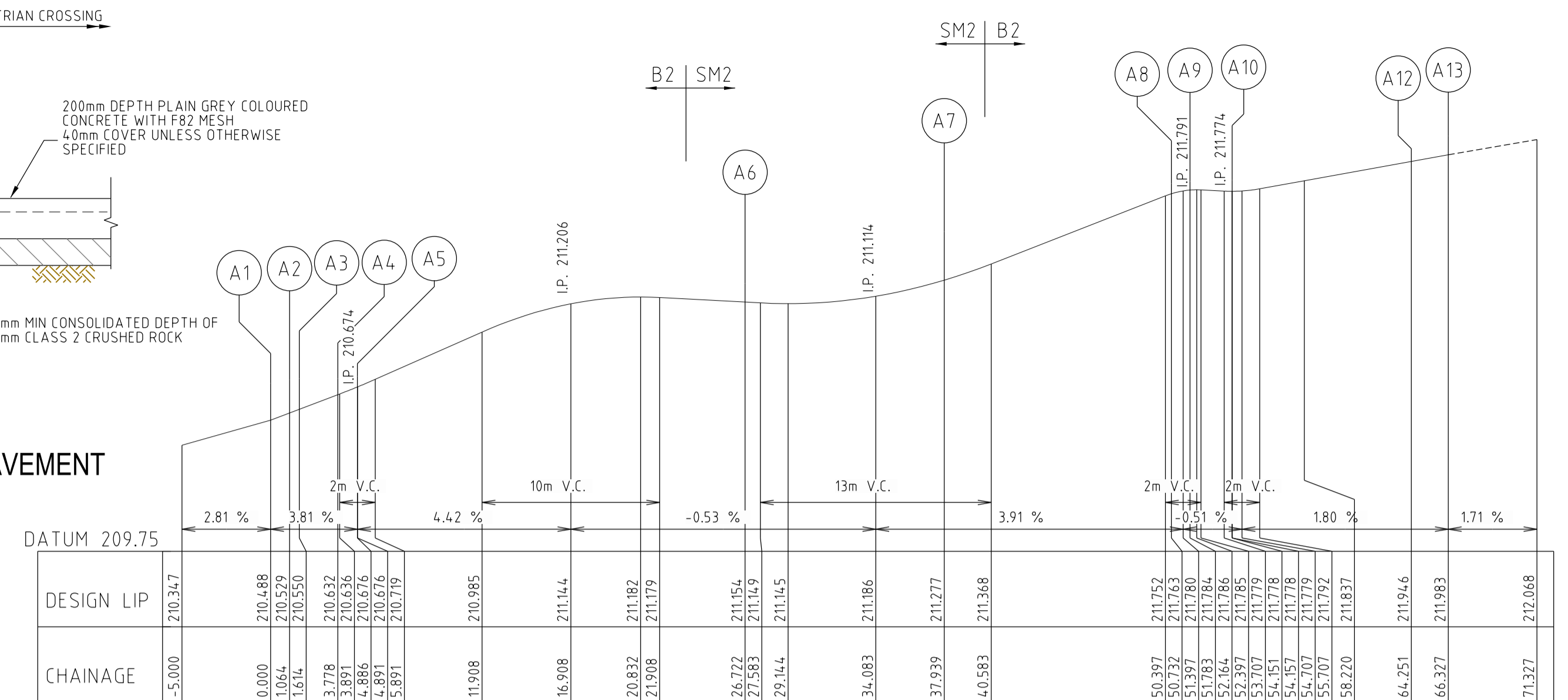


**ROUNDABOUT PAVING DETAIL**  
N.T.S.



**SECTION X-X**  
N.T.S.  
**SPLITTER ISLAND DETAIL - FLEXIBLE PAVEMENT**

SPLITTER ISLAND			
POINT NO	EASTING	NORTHING	RL
EE1	302308.201	5835978.436	210.214
EE2	302300.980	5835973.833	210.411
EE3	302294.902	5835969.305	210.586
EE4	302293.523	5835969.591	210.619
EE5	302290.868	5835974.799	210.627
EE6	302291.600	5835976.849	210.580
EE7	302303.092	5835983.013	210.256



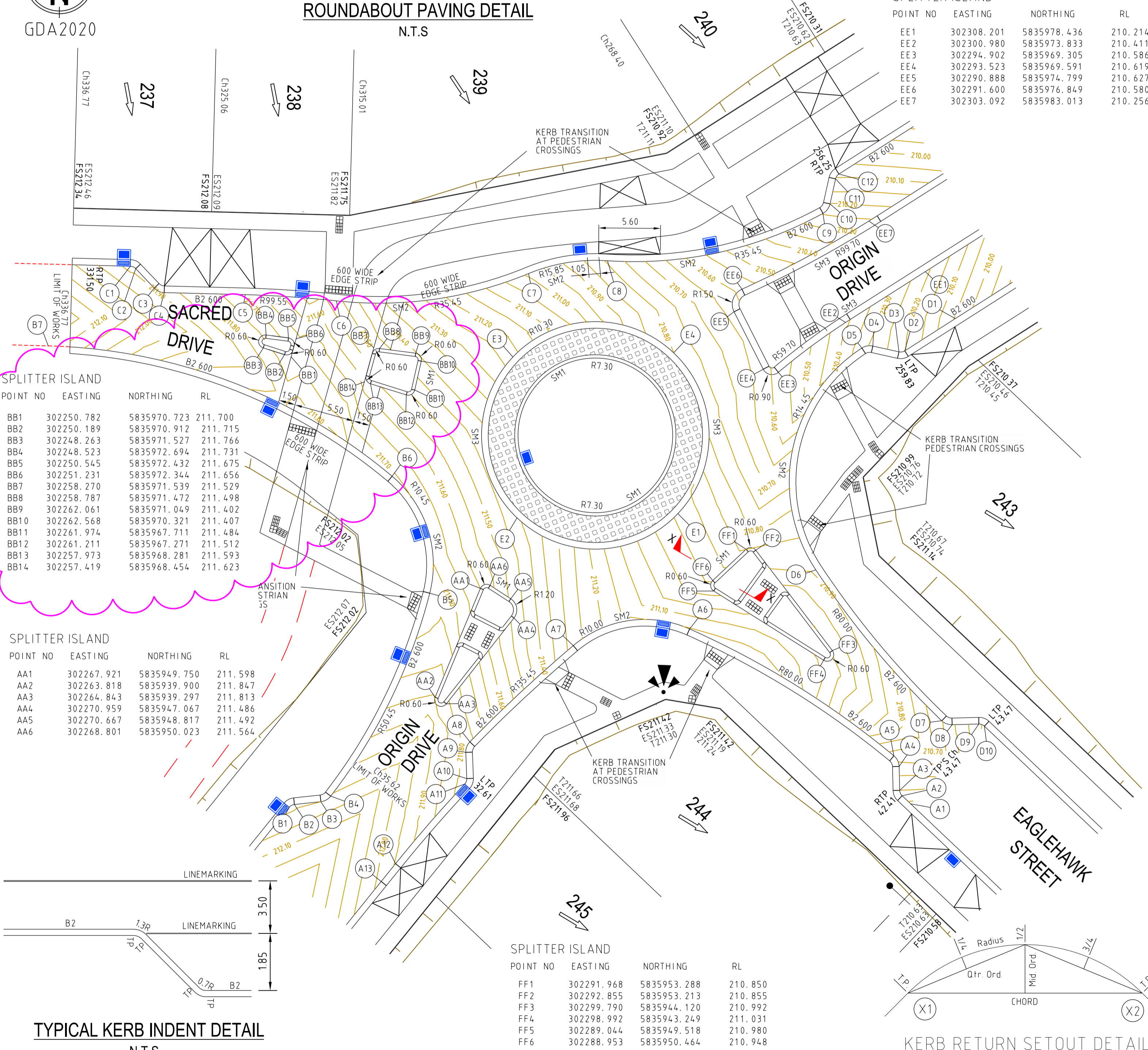
ALIGNMENT A			
POINT NO	EASTING	NORTHING	RL
A1	302306.872	5835930.246	210.505
A2	302306.100	5835930.978	210.545
1/4	302306.011	5835931.082	210.551
1/2	302305.943	5835931.201	210.556
3/4	302305.900	5835931.331	210.561
A3	302305.826	5835931.467	210.566
AL	302305.826	5835933.631	210.649
1/4	302305.790	5835933.905	210.659
1/2	302305.696	5835934.165	210.670
3/4	302305.549	5835934.400	210.680
A5	302305.356	5835934.598	210.691
1/4	302301.038	5835937.935	210.925
1/2	302296.502	5835940.971	211.122
3/4	302291.769	5835943.690	211.182
A6	302286.862	5835946.079	211.154
1/4	302284.175	5835946.849	211.145
1/2	302281.380	5835946.845	211.162
3/4	302278.696	5835946.067	211.206
A7	302276.331	5835944.577	211.277
1/4	302273.915	5835942.481	211.390
1/2	302271.548	5835940.330	211.515
3/4	302269.234	5835938.122	211.640
A8	302266.972	5835935.861	211.763
1/4	302266.808	5835935.656	211.771
1/2	302266.689	5835935.422	211.777
3/4	302266.620	5835935.169	211.781
A9	302266.602	5835934.908	211.784
A10	302266.685	5835932.535	211.778
1/4	302266.676	5835932.398	211.778
1/2	302266.641	5835932.266	211.778
3/4	302266.580	5835932.143	211.779
A11	302266.497	5835932.034	211.779
1/4	302264.985	5835930.274	211.817
1/2	302263.305	5835928.487	211.860
3/4	302261.757	5835926.671	211.903
A12	302260.242	5835924.828	211.946
A13	302258.939	5835923.212	211.983

ALIGNMENT B			
POINT NO	EASTING	NORTHING	RL
B1	302250.612	5835929.932	211.983
1/4	302250.708	5835930.030	211.984
1/2	302250.822	5835930.107	211.985
3/4	302250.948	5835930.161	211.985
B2	302251.082	5835930.189	211.986
B3	302253.478	5835930.445	212.000
1/4	302253.734	5835930.498	212.001
1/2	302253.974	5835930.602	212.003
3/4	302254.188	5835930.753	212.004
B4	302305.549	5835934.400	210.680
1/4	302254.368	5835930.942	212.006
1/2	302254.808	5835935.169	211.921
3/4	302256.791	5835939.673	211.835
B5	302261.808	5835944.407	211.759
1/4	302263.332	5835949.321	211.711
1/2	302263.651	5835952.225	211.697
3/4	302263.154	5835955.103	211.693
B6	302261.680	5835957.731	211.698
1/4	302259.928	5835959.904	211.712
1/2	302253.006	5835964.791	211.815
3/4	302245.363	5835968.451	211.813
B7	302237.216	5835970.780	211.932
1/4	302228.794	5835971.712	212.132
1/2	302266.808	5835935.656	211.771

POINT NO	EASTING	NORTHING	RL
E1	302285.798	5835956.519	210.940
1/4	302282.516	5835954.200	211.038
1/2	302278.696	5835953.314	211.169
3/4	302274.536	5835953.995	211.313
E2	302271.237	5835959.139	211.409
1/4	302268.918	5835959.422	211.445
1/2	302268.031	5835963.341	211.421
3/4	302268.712	5835967.302	211.338
E3	302270.857	5835970.701	211.219
1/4	302274.139	5835973.020	211.100
1/2	302278.059	5835973.907	210.981
3/4	302282.020	5835973.226	210.870
E4	302285.419	5835971.081	210.800
1/4	302287.738	5835967.799	210.775
1/2	302278.059	5835973.907	210.981

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
D2-D3	0.700	0.550	0.536	0.053	0.013
D4-D5	1.300	1.033	1.006	0.101	-0.026
D5-D6	14.450	22.814	20.518	4.274	-1.111
D6-D7	80.000	17.833	17.796	0.496	-0.124
D7-D8	1.300	1.026	1.000	0.100	-0.025
D9-D10	0.700	0.550	0.536	0.053	0.013

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
B1-B2	0.700	0.550	0.536	0.053	0.013
B3-B4	1.300	1.049	1.020	0.104	-0.026
B4-B5	50.450	20.591	20.448	1.047	-0.262
B5-B6	10.450	11.721	11.117	1.601	-0.408
B6-B7	50.450	33.935	33.299	2.826	-0.712



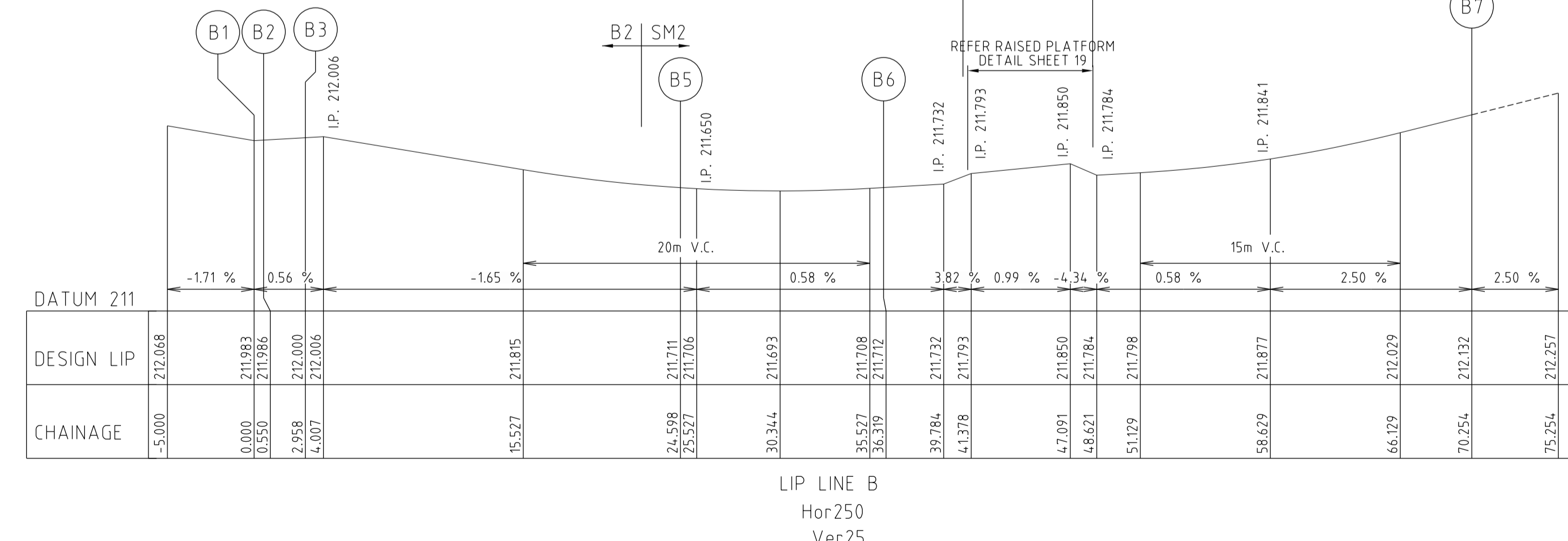
SPLITTER ISLAND			
POINT NO	EASTING	NORTHING	RL
BB1	302250.782	5835970.723	211.700
BB2	302250.189	5835970.912	211.715
BB3	302248.263	5835971.527	211.766
BB4	302248.523	5835972.694	211.731
BB5	302250.545	5835972.432	211.675
BB6	302251.231	5835972.344	211.656
BB7	302258.270	5835971.539	211.529
BB8	302258.787	5835971.472	211.498
BB9	302262.061	5835971.049	211.402
BB10	302262.568	5835970.321	211.407
BB11	302261.974	5835967.711	211.484
BB12	302261.211	5835967.271	211.512
BB13	302257.973	5835968.281	211.593
BB14	302257.419	5835968.454	211.623

SPLITTER ISLAND			
POINT NO	EASTING	NORTHING	RL
AA1	302267.921	5835949.750	211.598
AA2	302263.818	5835939.900	211.847
AA3	302264.843	5835939.297	211.813
AA4	302270.959	5835947.067	211.486
AA5	302270.667	5835948.817	211.492
AA6	302268.801	5835950.023	211.564

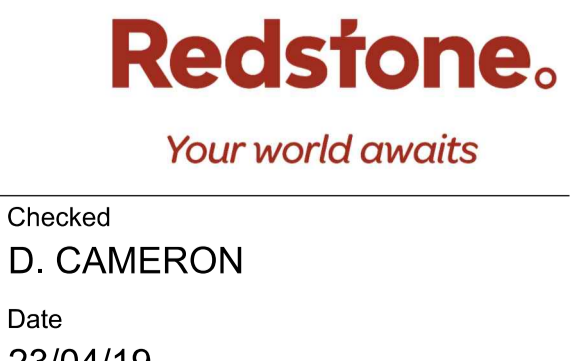
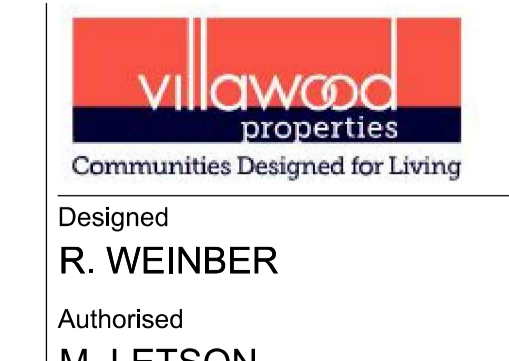
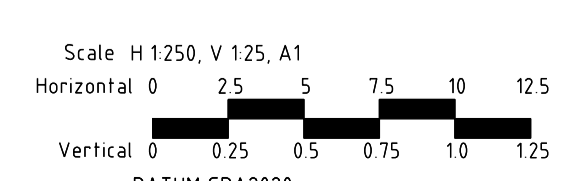
SPLITTER ISLAND			
POINT NO	EASTING	NORTHING	RL
FF1	302291.968	5835953.288	210.850
FF2	302292.855	5835953.213	210.855
FF3	302299.790	5835944.120	210.992
FF4	302298.992	5835943.249	211.031
FF5	302289.044	5835949.518	210.980
FF6	302288.953	5835950.464	210.948

**TYPICAL KERB INDENT DETAIL**  
N.T.S.

**KERB RETURN SET OUT DETAIL**



Rev	Amendments	Approved	Date
2	SPLITTER ISLAND BB UPDATED. GRADE ADDED TO APRRON	M.L.	30/10/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



**REDSTONE ESTATE**  
**STAGE 2**  
**INTERSECTION DETAILS**  
**SHEET 1 OF 4**

VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL

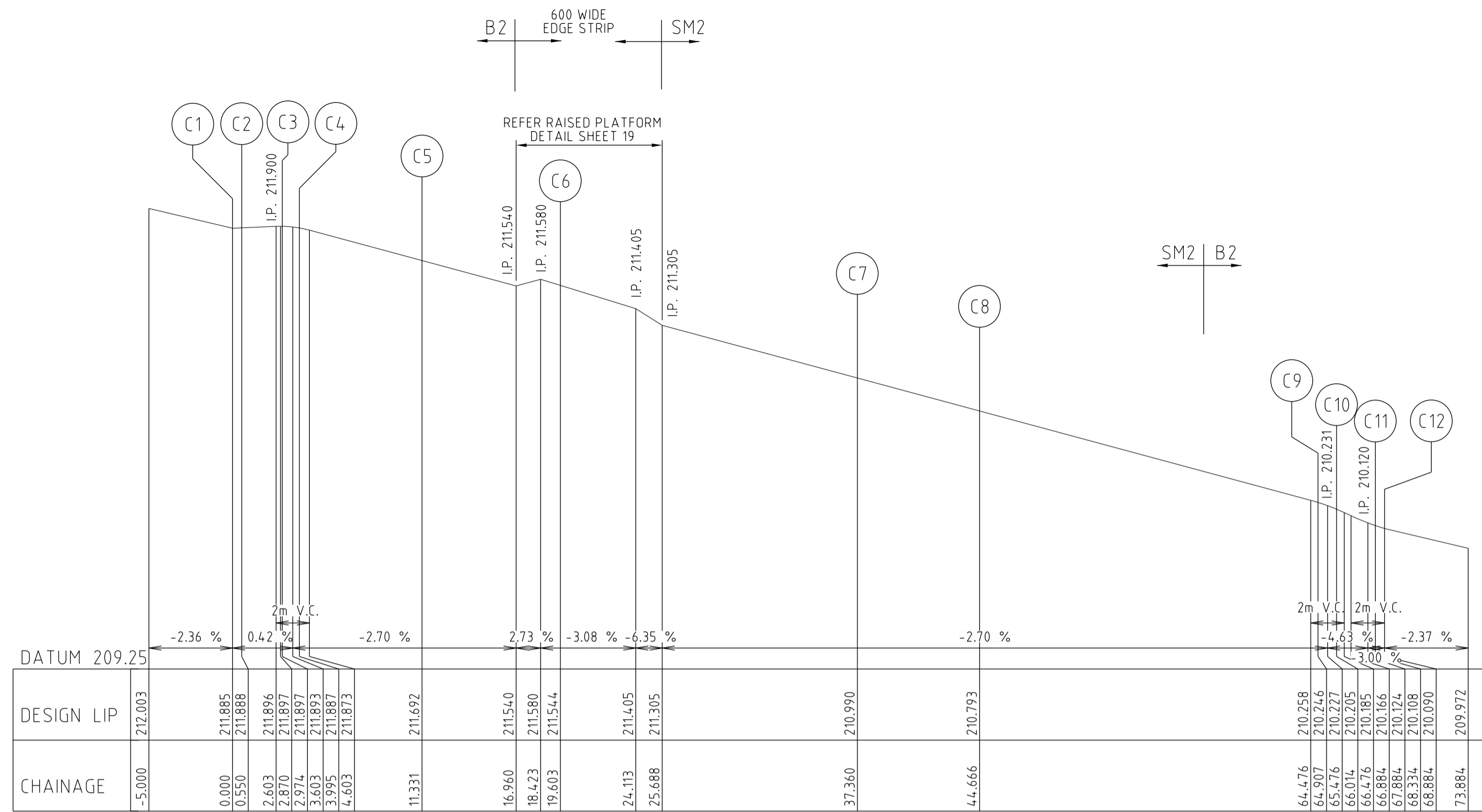
**CONSTRUCTION** Drg No **305913R09** Rev **2**

Designed  
**R. WEINBER**  
 Authorised  
**M. LETSON**

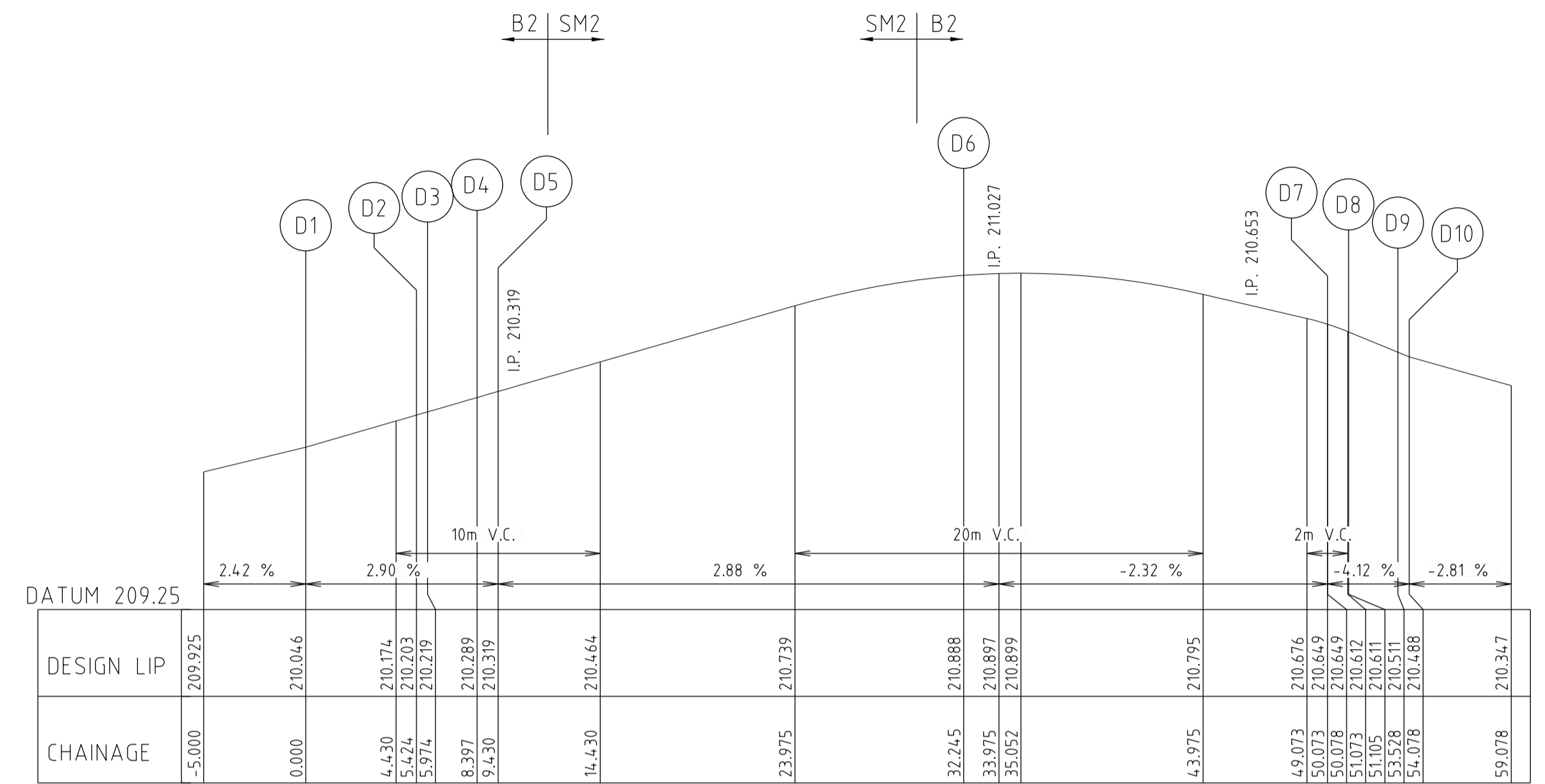
Checked  
**D. CAMERON**  
 Date  
**23/04/19**

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LIP LINE C  
Hor250  
Ver25



LIP LINE D  
Hor250  
Ver25

ALIGNMENT C

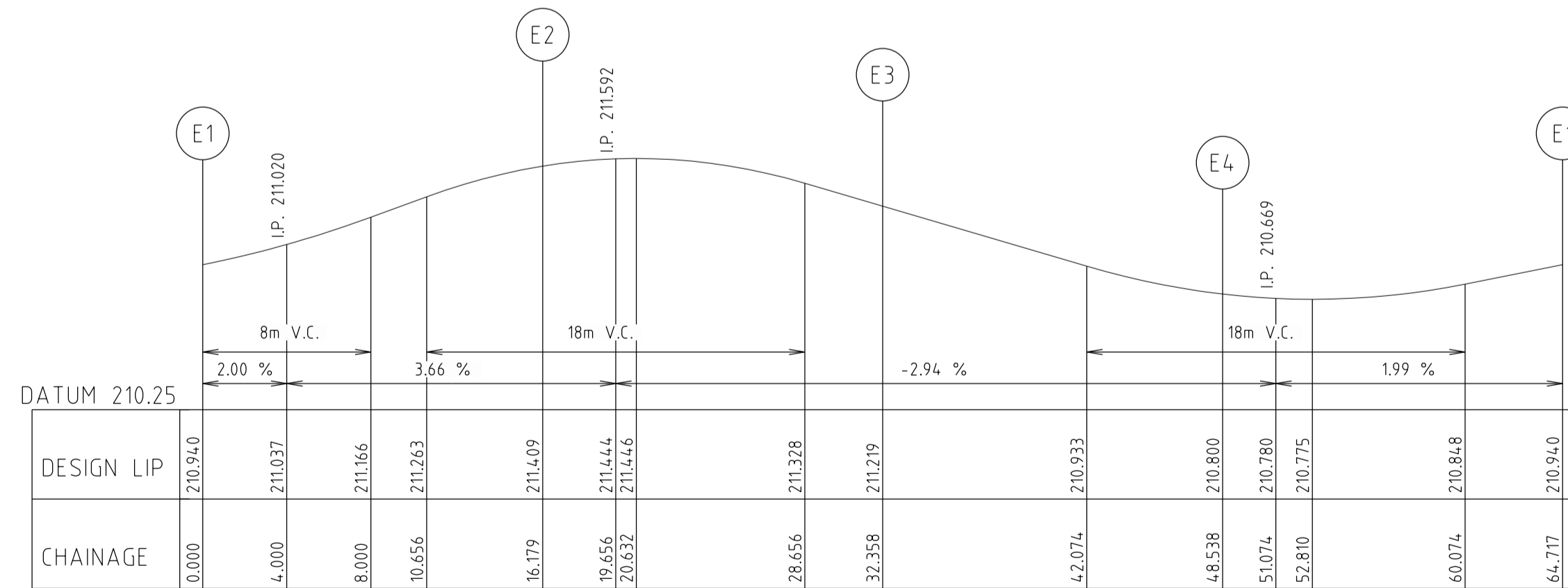
POINT NO	EASTING	NORTHING	RL
C1	302236.229	5835978.920	211.885
1/4	302236.365	5835978.903	211.886
1/2	302236.496	5835978.860	211.886
3/4	302236.615	5835978.792	211.887
C2	302236.719	5835978.702	211.888
C3	302238.387	5835976.944	211.897
1/4	302238.580	5835976.777	211.896
1/2	302238.802	5835976.651	211.894
3/4	302239.044	5835976.571	211.891
C4	302239.296	5835976.539	211.887
C5	302246.630	5835976.347	211.692
1/4	302248.697	5835976.271	211.630
1/2	302250.761	5835976.153	211.586
3/4	302252.823	5835975.991	211.538
C6	302254.880	5835975.787	211.544
1/4	302259.312	5835975.580	211.355
1/2	302263.735	5835975.929	211.229
3/4	302268.079	5835976.026	211.110
C7	302272.278	5835978.260	210.990
1/4	302274.002	5835978.858	210.941
1/2	302275.784	5835979.255	210.891
3/4	302277.600	5835979.443	210.842
C8	302279.425	5835979.422	210.793
1/4	302284.481	5835979.433	210.656
1/2	302289.484	5835980.162	210.520
3/4	302294.333	5835981.596	210.383
C9	302298.928	5835983.705	210.246
1/4	302299.155	5835983.863	210.237
1/2	302299.343	5835984.065	210.227
3/4	302299.484	5835984.302	210.217
C10	302299.572	5835984.564	210.205
C11	302300.074	5835986.829	210.108
1/4	302300.117	5835986.940	210.103
1/2	302300.184	5835987.079	210.098
3/4	302300.274	5835987.184	210.094
C12	302300.382	5835987.268	210.090

ALIGNMENT E

POINT NO	EASTING	NORTHING	RL
E1	302285.798	5835956.519	210.940
1/4	302282.516	5835954.200	211.038
1/2	302278.596	5835953.314	211.169
3/4	302274.636	5835953.995	211.313
E2	302271.237	5835956.139	211.409
1/4	302268.918	5835959.422	211.445
1/2	302268.031	5835963.341	211.421
3/4	302268.712	5835967.302	211.338
E3	302270.857	5835970.701	211.219
1/4	302274.139	5835973.020	211.100
1/2	302278.059	5835973.907	210.981
3/4	302282.020	5835973.226	210.870
E4	302285.419	5835971.081	210.800

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-E1	10.300	-48.538	-14.566	17.583	6.358

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
C1-C2	0.700	0.550	0.536	0.053	0.013
C3-C4	1.300	1.021	0.995	0.099	-0.025
C5-C6	99.550	8.272	8.269	0.086	0.021
C6-C7	35.450	17.757	17.572	1.106	-0.278
C7-C8	15.850	7.306	7.241	0.419	0.105
C8-C9	35.450	20.242	19.968	1.435	-0.361
C9-C10	1.300	1.104	1.073	0.116	-0.029
C11-C12	0.700	0.550	0.536	0.053	0.013



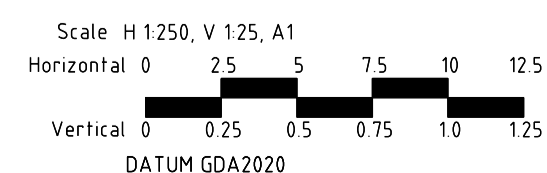
LIP LINE E  
Hor250  
Ver25

ALIGNMENT D

POINT NO	EASTING	NORTHING	RL
D1	302310.915	5835974.178	210.046
D2	302306.340	5835971.263	210.203
1/4	302306.218	5835971.201	210.207
1/2	302306.086	5835971.164	210.211
3/4	302305.949	5835971.154	210.215
D3	302305.812	5835971.170	210.219
D4	302303.446	5835971.695	210.289
1/4	302303.190	5835971.725	210.297
1/2	302302.933	5835971.705	210.304
3/4	302302.685	5835971.634	210.312
D5	302302.456	5835971.515	210.319
1/4	302298.404	5835967.555	210.484
1/2	302296.186	5835962.340	210.648
3/4	302296.143	5835956.674	210.804
D6	302298.283	5835951.427	210.886
1/4	302300.846	5835947.779	210.891
1/2	302303.608	5835944.280	210.842
3/4	302306.560	5835940.940	210.744
D7	302309.694	5835937.770	210.636
1/4	302309.896	5835937.612	210.628
1/2	302310.125	5835937.497	210.617
3/4	302310.372	5835937.429	210.607
D8	302310.627	5835937.410	210.596
D9	302313.050	5835937.473	210.495
1/4	302313.186	5835937.463	210.489
1/2	302313.319	5835937.427	210.483
3/4	302313.441	5835937.365	210.477
D10	302313.550	5835937.281	210.472
1/2	302300.902	5835984.989	210.177

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
D2-D3	0.700	0.550	0.536	0.053	0.013
D4-D5	1.300	1.033	1.006	0.101	-0.026
D5-D6	14.450	22.814	20.518	4.274	-1.111
D6-D7	80.000	17.833	17.796	0.496	-0.124
D7-D8	1.300	1.026	1.000	0.100	-0.025
D9-D10	0.700	0.550	0.536	0.053	0.013

Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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Designed  
R. WEINBER  
Authorised  
M. LETSON

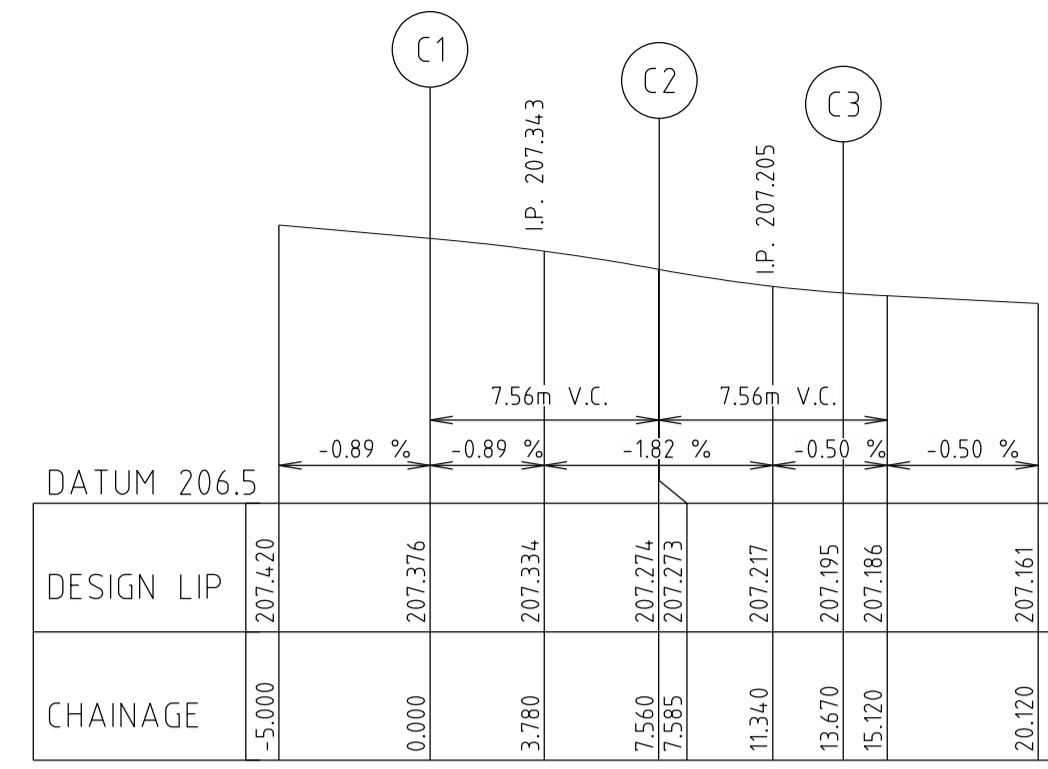


Checked  
D. CAMERON  
Date  
23/04/19

**REDSTONE ESTATE**  
**STAGE 2**  
**INTERSECTION DETAILS**  
**SHEET 2 OF 4**  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL

**CONSTRUCTION** Drg No **305913R10** Rev **1**



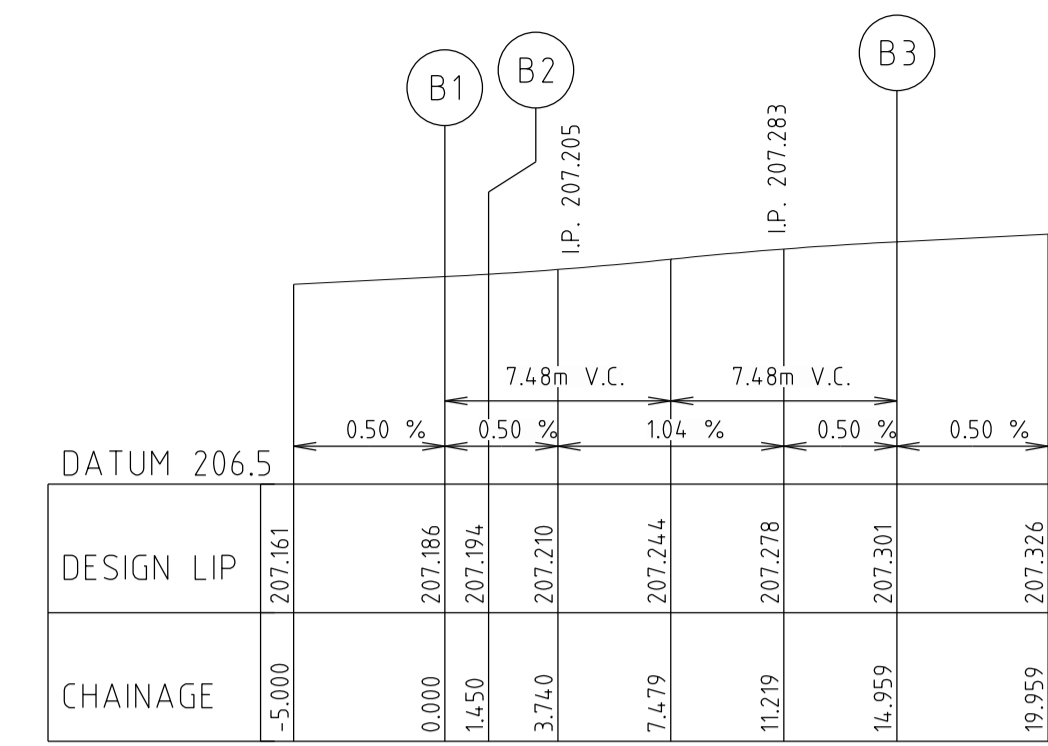
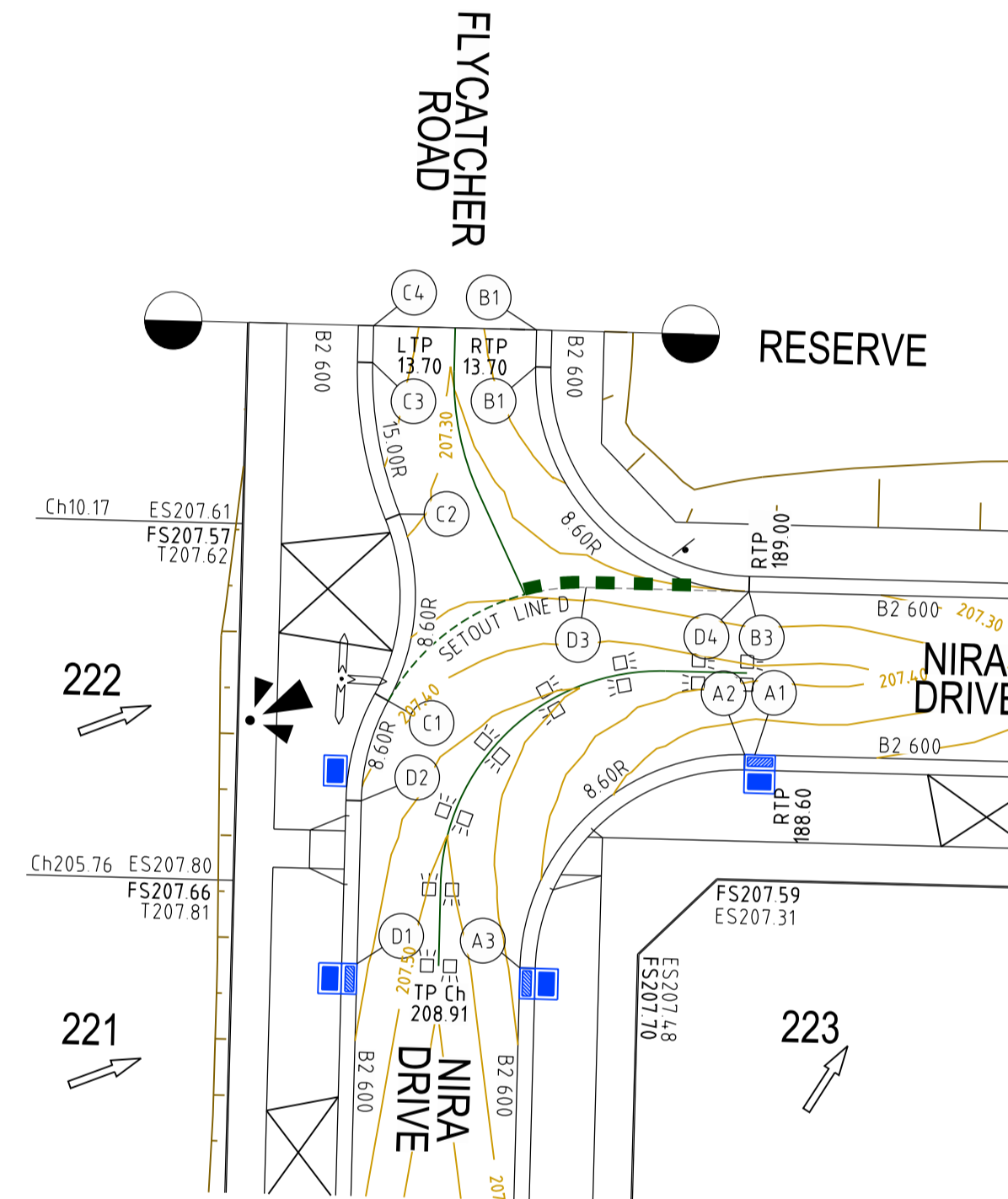


LIP LINE C  
Hor250  
Ver25

ALIGNMENT C

POINT NO	EASTING	NORTHING	RL
C1	302326.015	5836174.481	207.376
1/4	302326.739	5836176.230	207.357
1/2	302327.062	5836178.094	207.334
3/4	302326.970	5836179.985	207.306
C2	302326.467	5836181.809	207.273
1/4	302325.976	5836183.248	207.248
1/2	302325.633	5836184.729	207.226
3/4	302325.442	5836186.238	207.209
C3	302325.405	5836187.758	207.195
C4	302325.443	5836189.207	207.186

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
C1-C2	8.600	7.585	7.342	0.823	-0.208
C2-C3	15.000	6.085	6.043	0.307	0.077



LIP LINE B  
Hor250  
Ver25

ALIGNMENT B

POINT NO	EASTING	NORTHING	RL
B1	302331.841	5836189.040	207.186
B2	302331.803	5836187.590	207.194
1/4	302332.371	5836184.283	207.219
1/2	302334.162	5836181.445	207.251
3/4	302336.902	5836179.509	207.280
B3	302340.175	5836178.768	207.301

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
B2-B3	8.600	13.509	12.162	2.519	-0.655

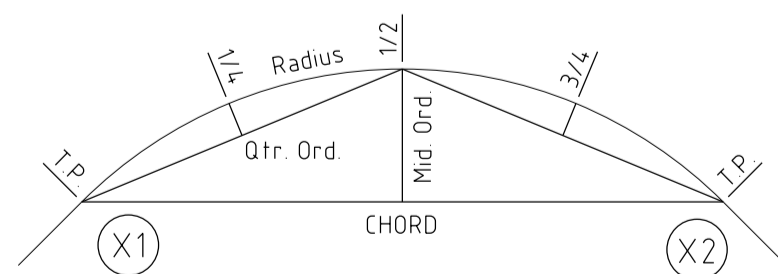


LIP LINE D  
Hor250  
Ver25

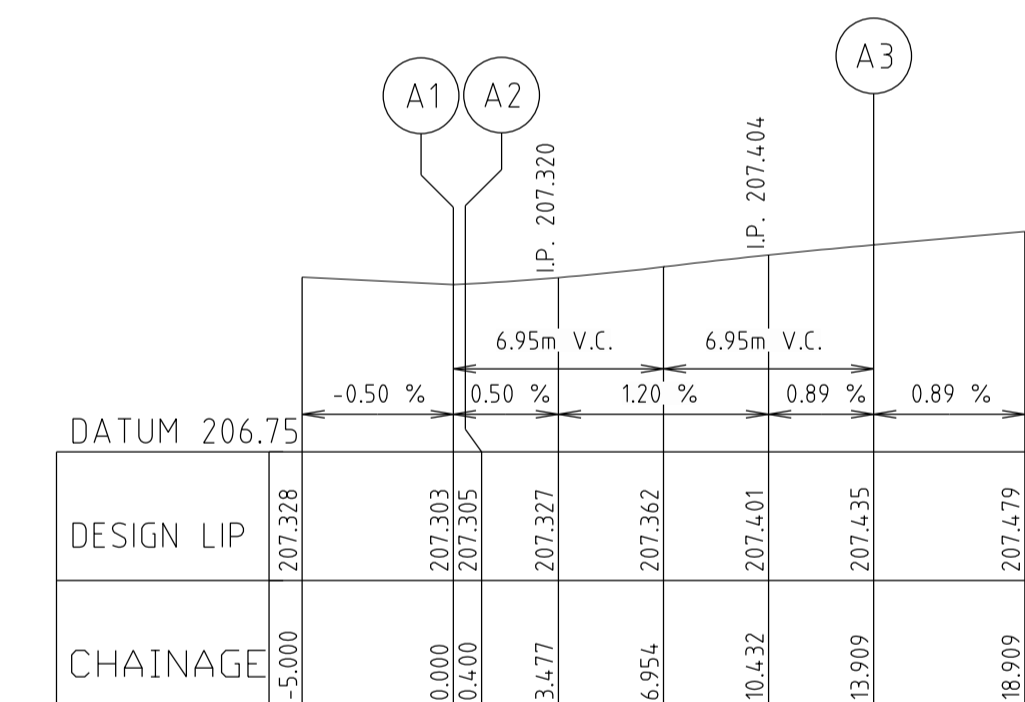
ALIGNMENT D

POINT NO	EASTING	NORTHING	RL
D1	302324.787	5836164.166	207.435
D2	302324.955	5836170.564	207.402
1/4	302325.695	5836173.837	207.384
1/2	302327.632	5836176.577	207.367
3/4	302330.470	5836178.367	207.350
D3	302333.777	5836178.936	207.333
D4	302340.175	5836178.768	207.301

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
D2-D3	8.600	13.509	12.162	2.519	0.655



KERB RETURN SETOUT DETAIL



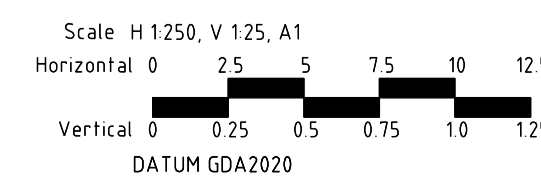
LIP LINE A  
Hor250  
Ver25

ALIGNMENT A

POINT NO	EASTING	NORTHING	RL
A1	302340.407	5836172.360	207.303
A2	302340.007	5836172.370	207.305
1/4	302336.700	5836171.802	207.329
1/2	302333.862	5836170.012	207.365
3/4	302331.926	5836167.271	207.402
A3	302331.185	5836163.998	207.435

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
A2-A3	8.600	13.509	12.162	2.519	-0.655

Rev	Description	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20
	Amendments		



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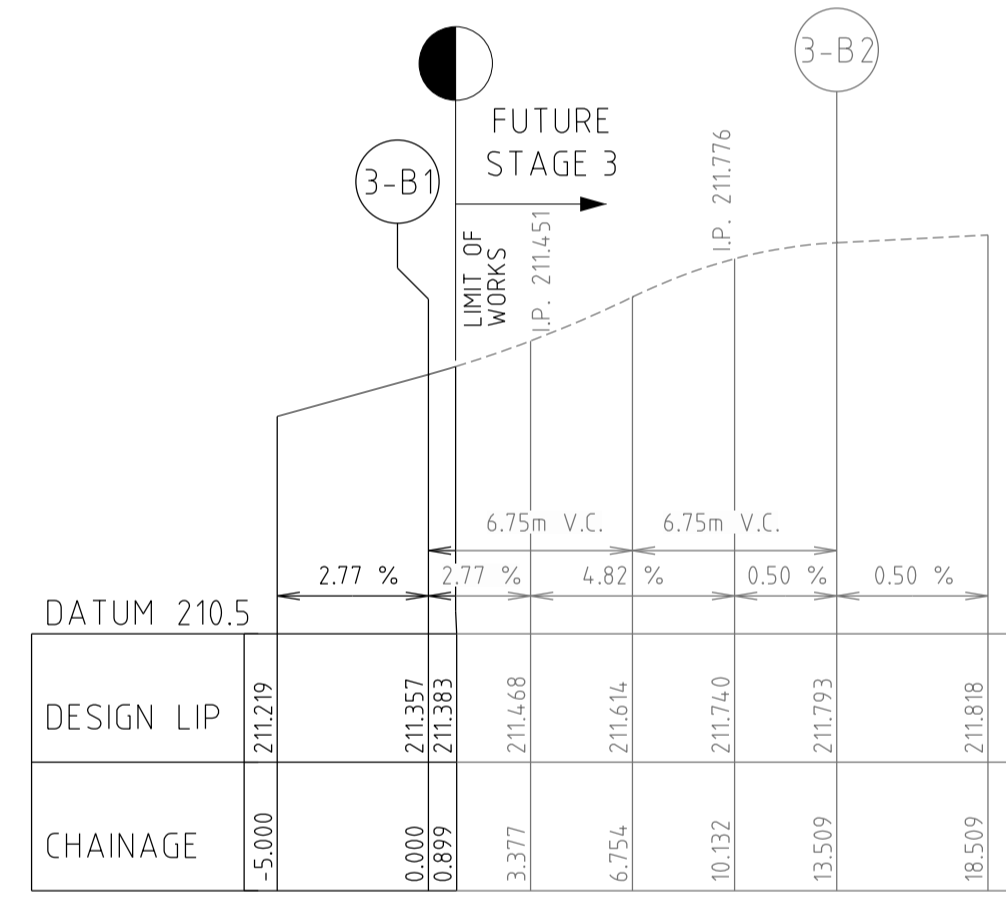
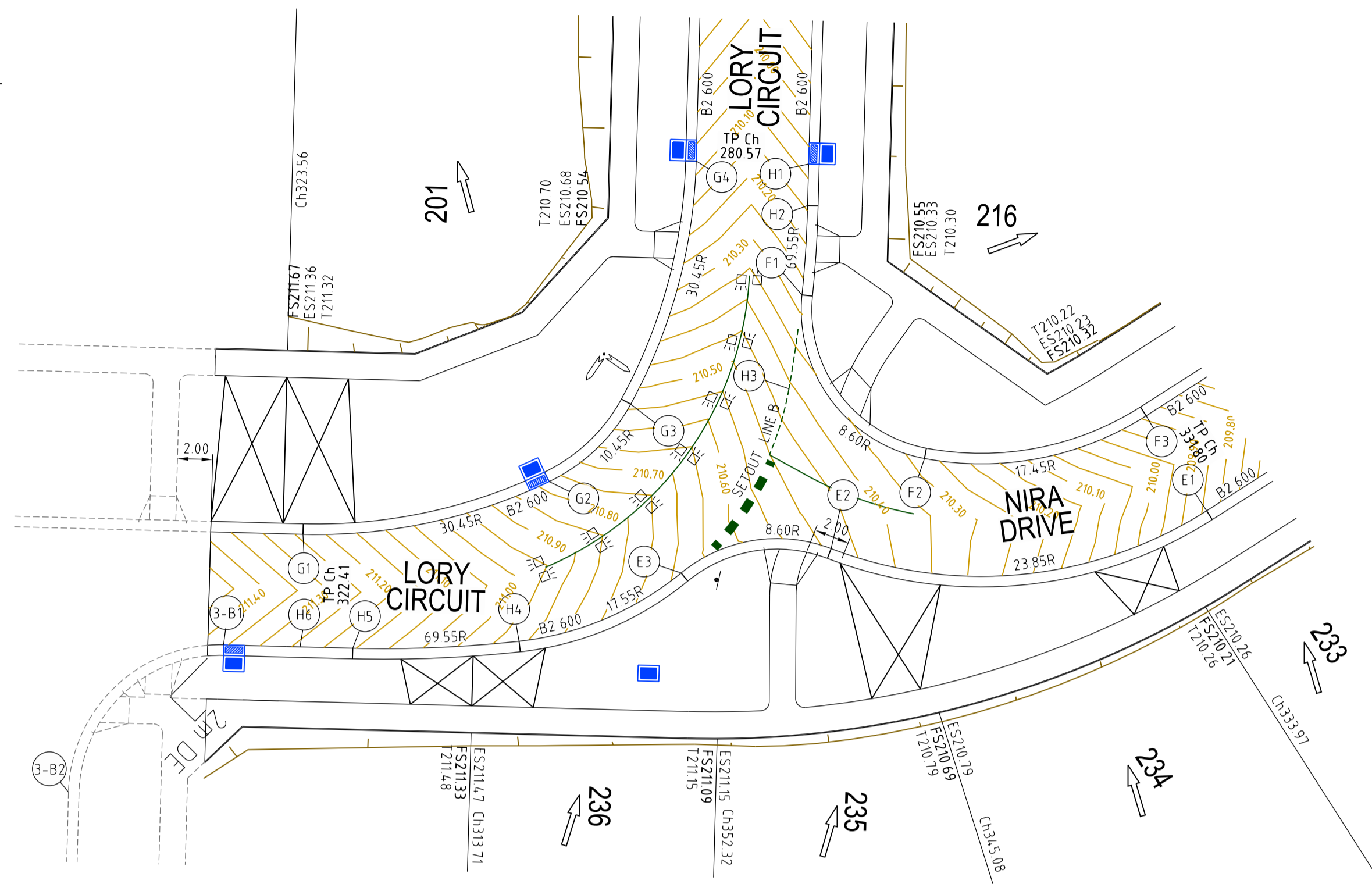
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Communities Designed for Living  
Designed  
R. WEINBER  
Authorised  
M. LETSON

Your world awaits  
Checked  
D. CAMERON  
Date  
23/04/19

**REDSTONE ESTATE**  
STAGE 2  
INTERSECTION DETAILS  
SHEET 3 OF 4  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No 305913R11 Rev 1



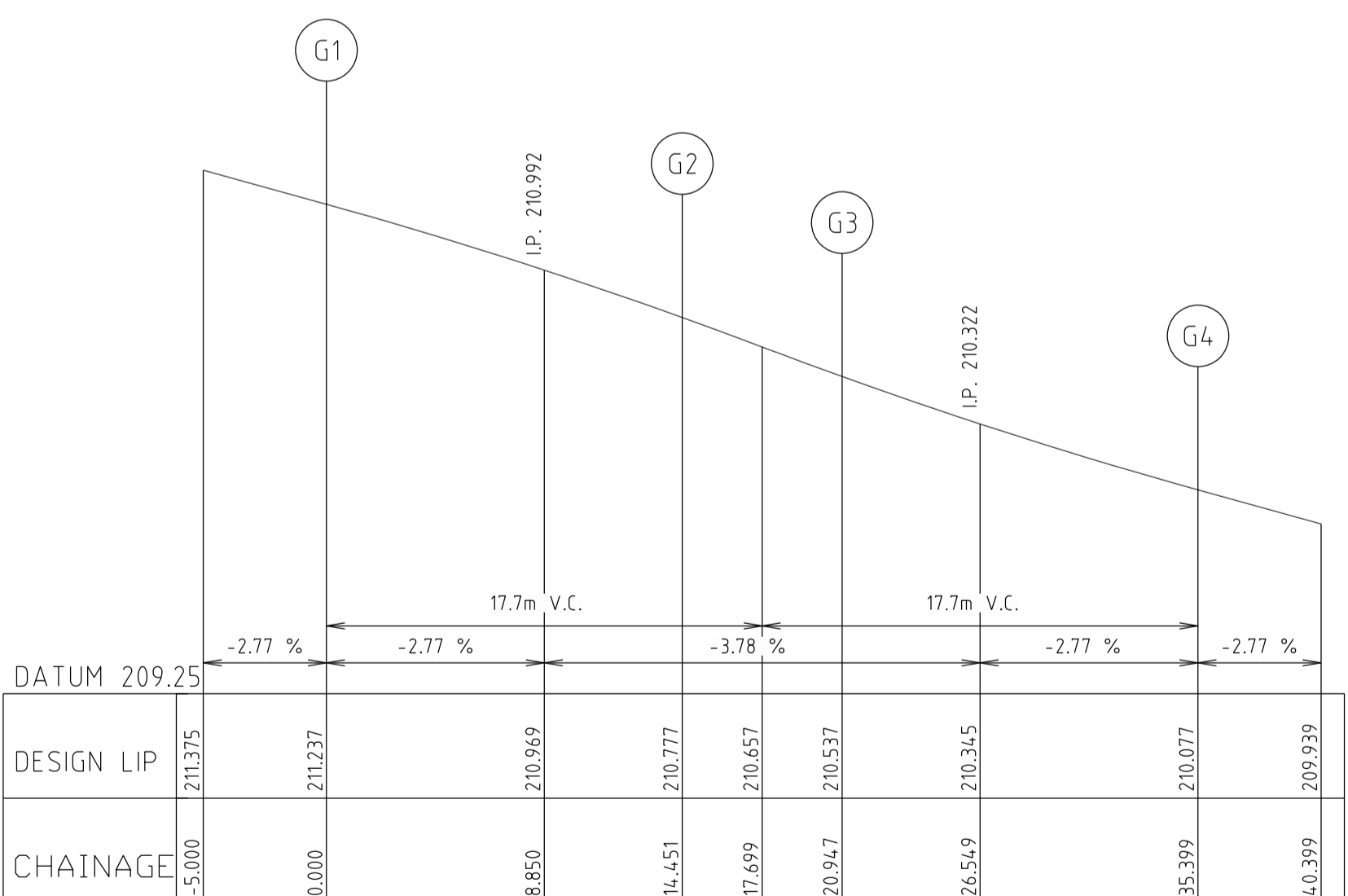


ALIGNMENT 3-B

POINT NO	EASTING	NORTHING	RL
3-B1	302219.800	5836057.177	211.357
1/4	302216.494	5836056.609	211.468
1/2	302213.656	5836054.818	211.614
3/4	302211.719	5836052.077	211.740
3-B2	302210.978	5836048.806	211.793

LIP LINE 3-B  
Hor250  
Ver25

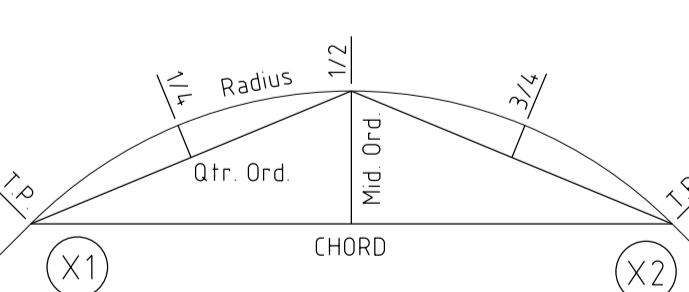
DESIGN LIP	CHAINAGE
211.219	-5.000
211.357	0.000
211.383	0.899
211.468	3.377
211.614	7.579
211.740	10.132
211.793	13.509
211.818	18.509



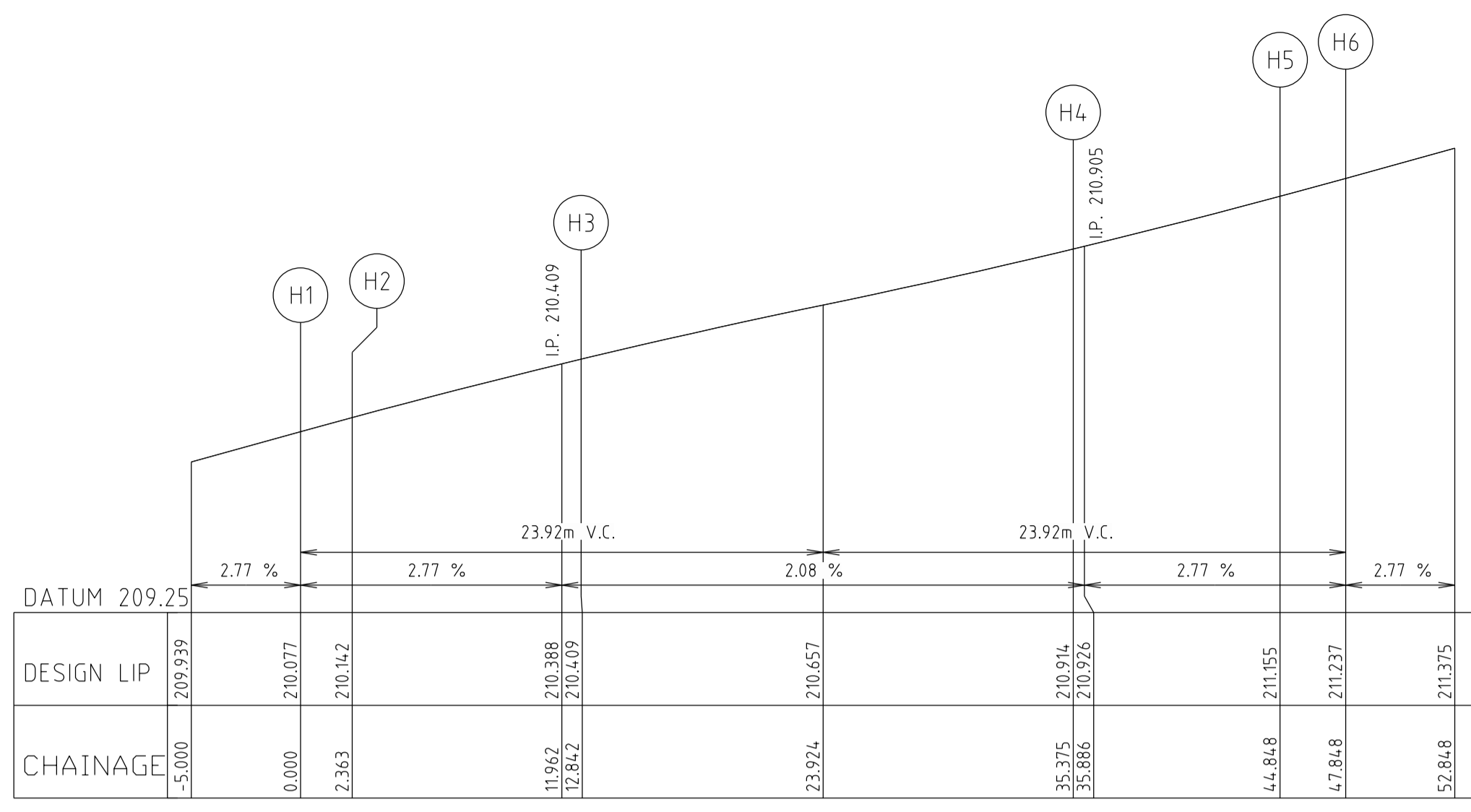
ALIGNMENT G

POINT NO	EASTING	NORTHING	RL
G1	302224.317	5836063.461	211.237
1/4	302227.925	5836063.581	211.133
1/2	302231.495	5836064.126	211.022
3/4	302234.974	5836065.091	210.903
G2	302238.315	5836066.461	210.777
1/4	302239.718	5836067.276	210.718
1/2	302240.978	5836068.298	210.657
3/4	302242.064	5836069.502	210.596
G3	302242.951	5836070.861	210.537
1/4	302244.494	5836074.125	210.411
1/2	302245.639	5836077.549	210.292
3/4	302246.371	5836081.085	210.181
G4	302246.680	5836084.683	210.077

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
G1-G2	30.450	14.451	14.316	0.853	-0.214
G2-G3	10.450	6.496	6.392	0.501	-0.126
G3-G4	30.450	14.451	14.316	0.853	-0.214



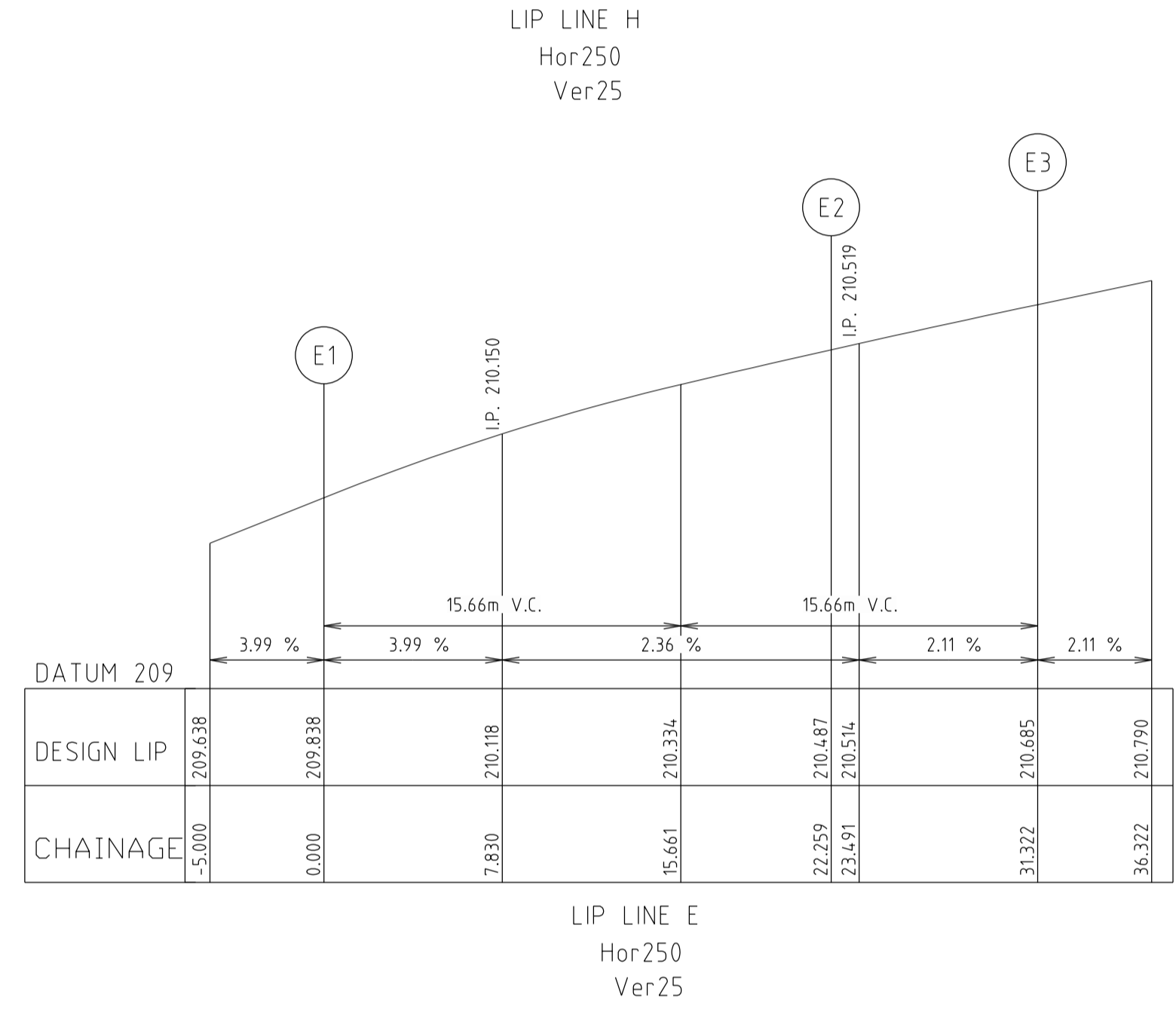
KERB RETURN SETOUT DETAIL



ALIGNMENT H

POINT NO	EASTING	NORTHING	RL
H1	302253.078	5836084.515	210.077
H2	302253.016	5836082.153	210.142
1/4	302252.898	5836079.536	210.212
1/2	302252.682	5836076.925	210.280
3/4	302252.367	5836074.325	210.345
H3	302251.955	5836071.738	210.409
1/4	302250.098	5836066.445	210.540
1/2	302246.667	5836062.008	210.661
3/4	302242.011	5836058.880	210.783
H4	302236.606	5836057.381	210.914
1/4	302234.248	5836057.161	210.972
1/2	302231.884	5836057.022	211.031
3/4	302229.516	5836056.963	211.092
H5	302227.148	5836056.985	211.155
H6	302224.149	5836057.063	211.237

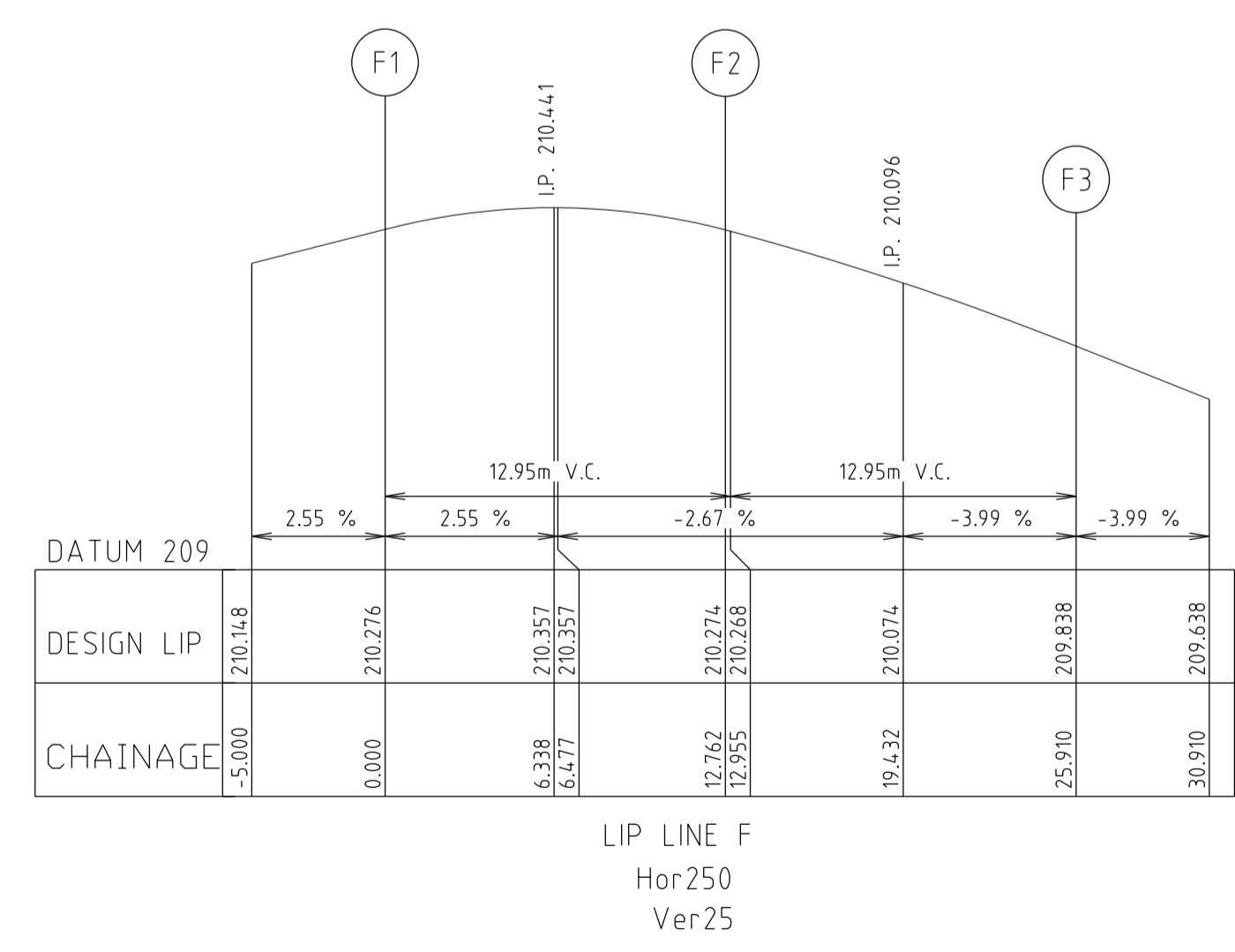
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
H2-H3	69.550	10.479	10.469	0.197	0.049
H3-H4	17.550	22.533	21.017	3.494	0.896
H4-H5	69.550	9.473	9.466	0.161	0.040



ALIGNMENT E

POINT NO	EASTING	NORTHING	RL
E1	302275.708	5836064.804	209.838
1/4	302270.710	5836062.386	210.043
1/2	302265.288	5836061.189	210.217
3/4	302259.736	5836061.278	210.359
E2	302254.356	5836062.649	210.487
1/4	302252.159	5836063.173	210.537
1/2	302249.900	5836063.108	210.587
3/4	302247.737	5836062.456	210.636
E3	302245.819	5836061.264	210.685

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
E1-E2	23.850	22.259	21.460	2.550	0.646
E2-E3	8.600	9.062	8.649	1.166	-0.297

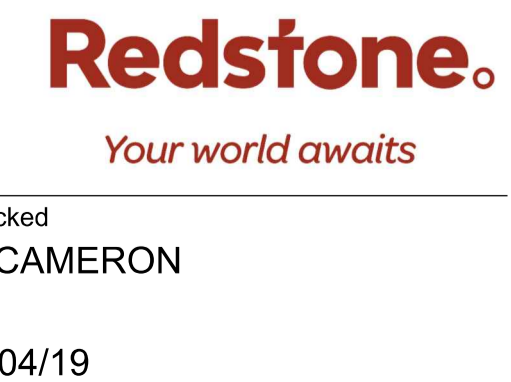
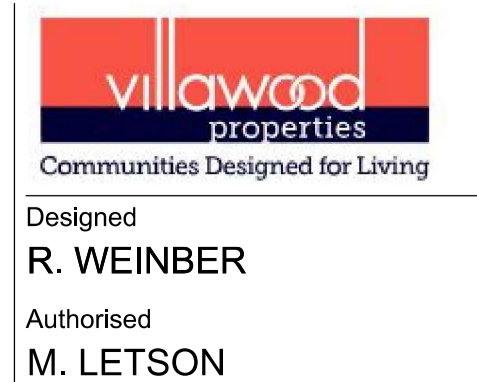
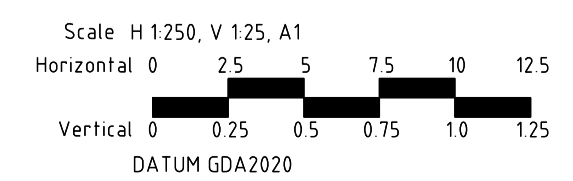


ALIGNMENT F

POINT NO	EASTING	NORTHING	RL
F1	302252.697	5836077.075	210.276
1/4	302252.970	5836073.914	210.337
1/2	302254.370	5836071.068	210.357
3/4	302256.706	5836068.923	210.336
F2	302259.662	5836067.770	210.274
1/4	302262.930	5836067.469	210.181
1/2	302266.197	5836067.784	210.078
3/4	302269.347	5836068.706	209.963
F3	302272.269	5836070.201	209.838

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
F1-F2	8.600	12.762	11.622	2.260	-0.585
F2-F3	17.450	13.148	12.840	1.224	-0.309

Rev	Description	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20
	Amendments		



**REDSTONE ESTATE**  
**STAGE 2**  
**INTERSECTION DETAILS**  
**SHEET 4 OF 4**

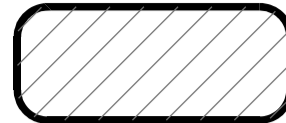
VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL

**CONSTRUCTION** Drg No **305913R12** Rev **1**





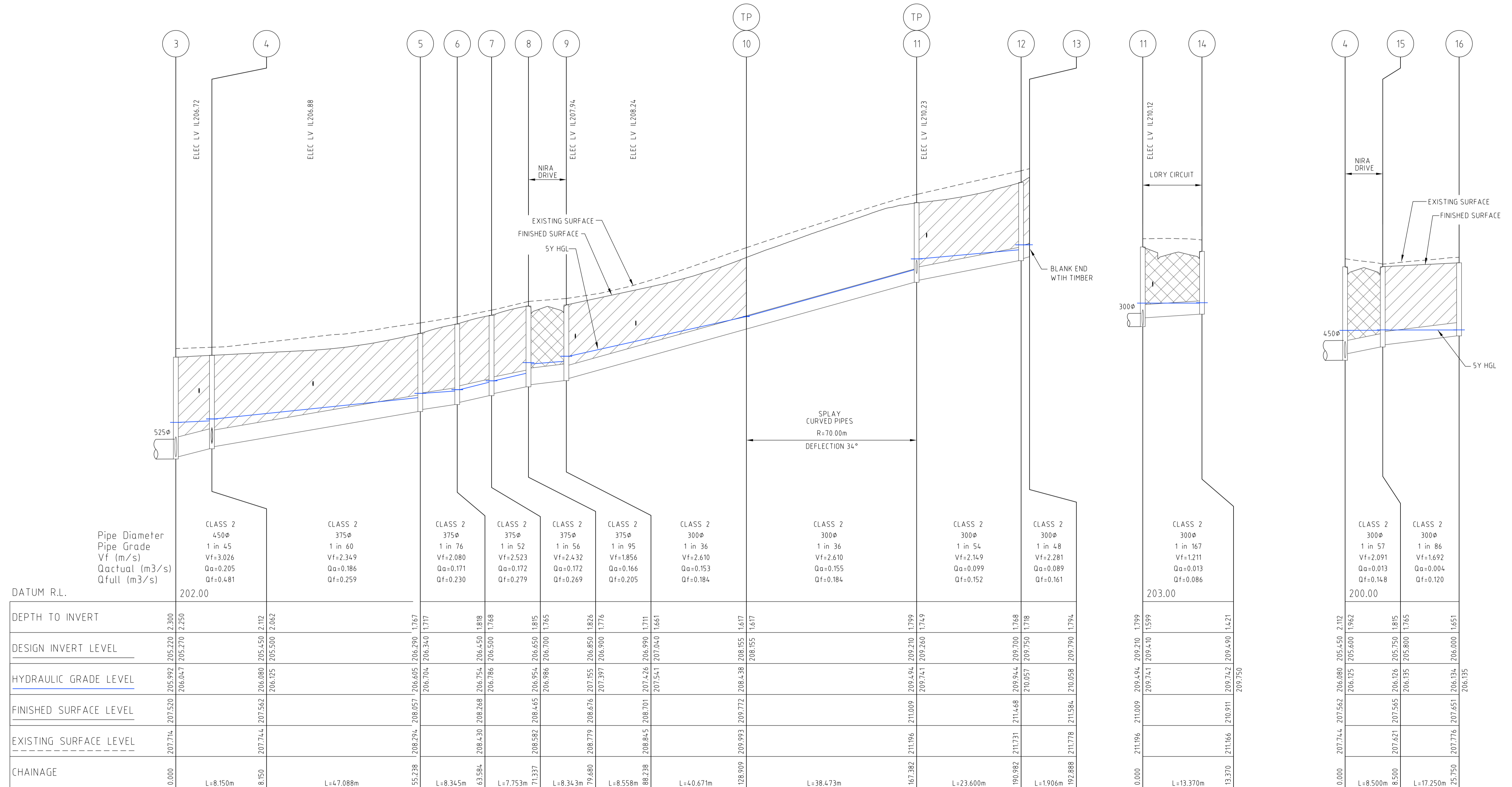
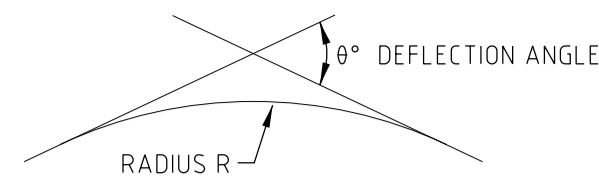
CLASS 2 CRUSHED ROCK



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 MANUFACTURERS SPECIFICATION
  - b) DEFLECTION ACHIEVED WITHIN RRJ.

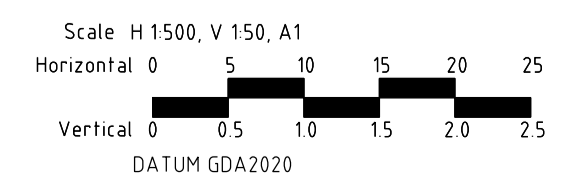


PIPE DIAMETER	PIPE GRADE	Vf (m/s)	Q <sub>actual</sub> (m <sup>3</sup> /s)	Q <sub>full</sub> (m <sup>3</sup> /s)
CLASS 2 450φ	1 in 45	Vf=3.026	Qa=0.205	Qf=0.481
CLASS 2 375φ	1 in 60	Vf=2.349	Qa=0.186	Qf=0.259
CLASS 2 375φ	1 in 76	Vf=2.080	Qa=0.171	Qf=0.230
CLASS 2 375φ	1 in 52	Vf=2.523	Qa=0.172	Qf=0.279
CLASS 2 375φ	1 in 56	Vf=2.432	Qa=0.172	Qf=0.269
CLASS 2 375φ	1 in 95	Vf=1.856	Qa=0.166	Qf=0.205
CLASS 2 300φ	1 in 36	Vf=2.610	Qa=0.153	Qf=0.184
CLASS 2 300φ	1 in 36	Vf=2.610	Qa=0.155	Qf=0.184
CLASS 2 300φ	1 in 54	Vf=2.149	Qa=0.099	Qf=0.152
CLASS 2 300φ	1 in 48	Vf=2.281	Qa=0.089	Qf=0.161
CLASS 2 300φ	1 in 167	Vf=1.211	Qa=0.013	Qf=0.086
CLASS 2 300φ	1 in 57	Vf=2.091	Qa=0.013	Qf=0.148
CLASS 2 300φ	1 in 86	Vf=1.692	Qa=0.004	Qf=0.120

DATUM R.L.	DEPTH TO INVERT	DESIGN INVERT LEVEL	HYDRAULIC GRADE LEVEL	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	CHAINAGE
202.00	2.300	205.220	205.992	207.714	207.714	0.000
202.00	2.250	205.270	206.047	207.520	207.520	L=8.150m
202.00	2.112	205.450	206.080	207.562	207.562	8.150
202.00	2.062	205.500	206.125	207.562	207.562	L=47.088m
202.00	1.767	206.290	206.605	208.057	208.294	55.238
202.00	1.717	206.340	206.704	208.057	208.294	L=8.345m
202.00	1.818	206.450	206.754	208.268	208.430	63.584
202.00	1.768	206.500	206.786	208.268	208.430	L=7.753m
202.00	1.815	206.650	206.954	208.465	208.562	71.337
202.00	1.765	206.700	206.986	208.465	208.562	L=8.343m
202.00	1.826	206.850	207.155	208.676	208.779	79.680
202.00	1.776	206.900	207.397	208.676	208.779	L=8.558m
202.00	1.711	206.990	207.426	208.701	208.845	88.238
202.00	1.661	207.040	207.541	208.701	208.845	L=40.671m
202.00	1.617	208.155	208.438	209.772	209.993	128.809
202.00	1.617	208.155	208.438	209.772	209.993	L=38.473m
202.00	1.799	209.210	209.494	211.009	211.196	167.382
202.00	1.749	209.260	209.741	211.009	211.196	L=23.600m
202.00	1.768	209.700	209.944	211.468	211.731	190.982
202.00	1.718	209.750	210.057	211.468	211.731	L=1906m
202.00	1.794	209.790	210.058	211.584	211.778	192.888
202.00	1.421	209.490	209.742	210.911	211.166	13.370
202.00	1.421	209.490	209.742	210.911	211.166	L=13.370m
202.00	1.962	205.600	206.125	207.562	207.744	0.000
202.00	1.815	205.750	206.126	207.565	207.621	8.500
202.00	1.765	205.800	206.135	207.565	207.621	L=8.500m
202.00	1.651	206.000	206.134	207.651	207.776	25.750
202.00	1.651	206.000	206.135	207.651	207.776	L=17.250m

Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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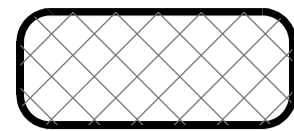
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villawood properties  
Communities Designed for Living  
Designed by R. WEINBER  
Authorised M. LETSON

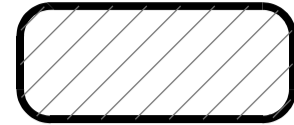
Redstone  
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Checked by D. CAMERON  
Date 23/04/19

REDSTONE ESTATE  
STAGE 2  
DRAINAGE LONG SECTION  
SHEET 1 OF 5  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No 305913R13 Rev 1





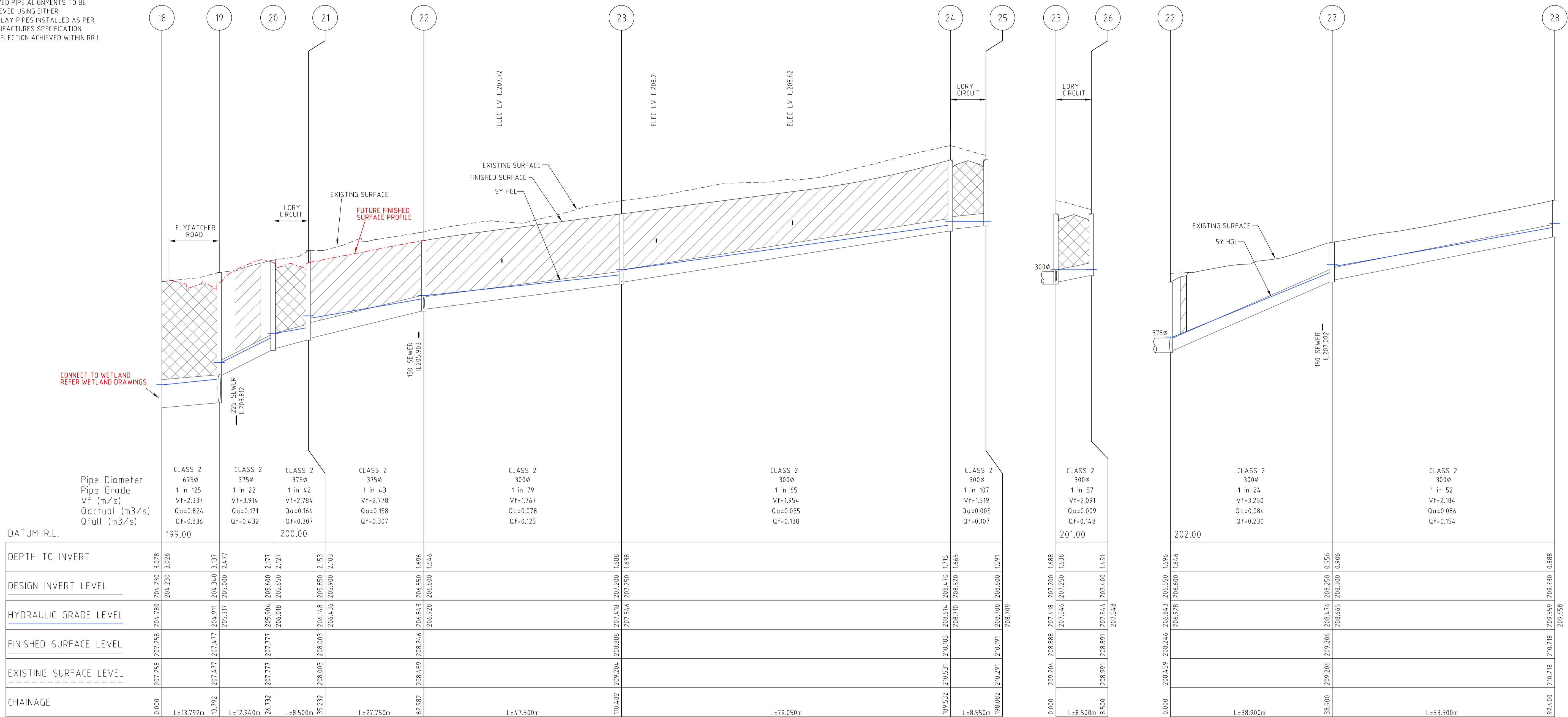
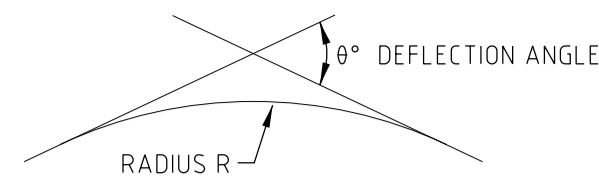
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

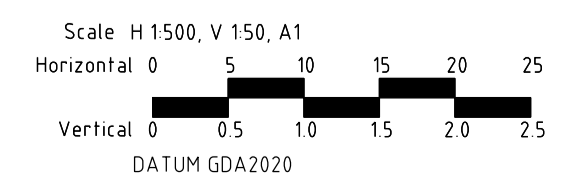
NOTE:

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  - b) DEFLECTION ACHIEVED WITHIN RRJ.



Station	18	19	20	21	22	23	24	25	26	27	28
Pipe Diameter	675Ø	375Ø	375Ø	375Ø	375Ø	300Ø	300Ø	300Ø	300Ø	300Ø	300Ø
Pipe Grade	1 in 125	1 in 22	1 in 42	1 in 43	1 in 79	1 in 65	1 in 107	1 in 57	1 in 24	1 in 52	
Vf (m/s)	Vf=2.337	Vf=3.914	Vf=2.784	Vf=2.778	Vf=1.767	Vf=1.954	Vf=1.519	Vf=2.091	Vf=3.250	Vf=2.184	
Qactual (m3/s)	Qa=0.824	Qa=0.171	Qa=0.164	Qa=0.158	Qa=0.078	Qa=0.035	Qa=0.005	Qa=0.009	Qa=0.084	Qa=0.086	
Qfull (m3/s)	Qf=0.836	Qf=0.432	Qf=0.307	Qf=0.307	Qf=0.125	Qf=0.138	Qf=0.107	Qf=0.148	Qf=0.230	Qf=0.154	
DATUM R.L.	199.00		200.00					201.00		202.00	
DEPTH TO INVERT	3.028	3.028	2.177	2.177	1.688	1.638	1.715	1.665	1.591	1.696	1.646
DESIGN INVERT LEVEL	204.230	204.230	205.600	205.650	207.200	207.250	208.520	208.520	208.600	208.600	208.600
HYDRAULIC GRADE LEVEL	204.780	204.911	205.904	206.018	206.843	206.928	207.418	208.470	208.710	208.476	208.665
FINISHED SURFACE LEVEL	207.258	207.477	207.777	208.003	208.246	208.888	210.185	208.614	210.191	208.718	209.559
EXISTING SURFACE LEVEL	207.258	207.477	207.777	208.003	208.459	209.204	210.531	208.531	208.991	209.206	210.218
CHAINAGE	0.000	L=13.792m	L=12.940m	L=8.500m	L=27.750m	L=47.500m	L=79.050m	L=8.550m	L=8.500m	L=38.900m	L=53.500m

Rev	Description	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20
	Amendments		



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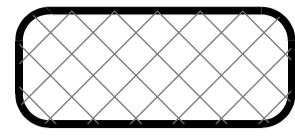
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Designed by R. WEINBER  
Authorised by M. LETSON

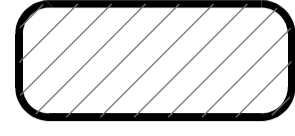
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Checked by D. CAMERON  
Date: 23/04/19

**REDSTONE ESTATE STAGE 2**  
**DRAINAGE LONG SECTION SHEET 2 OF 5**  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No **305913R14** Rev **1**





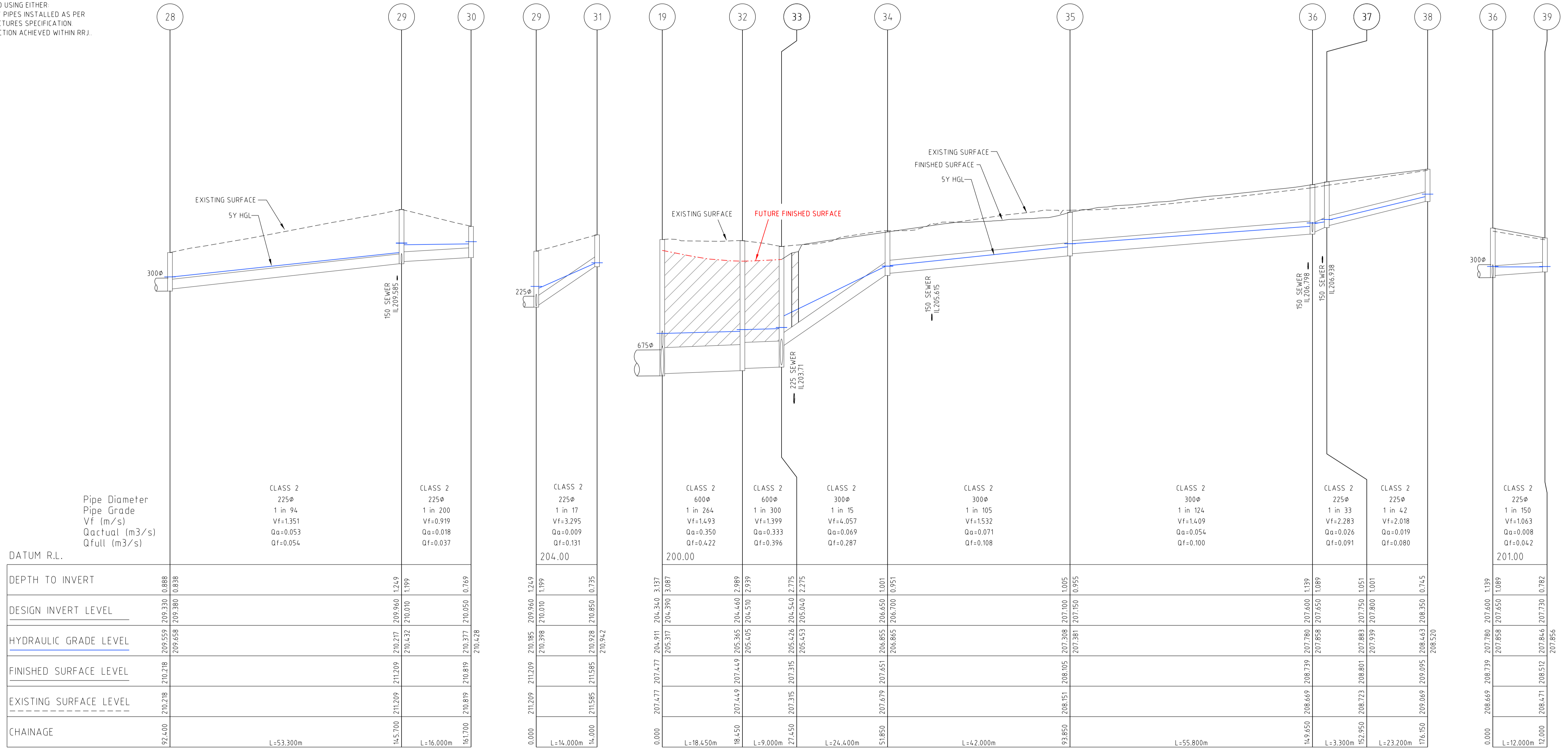
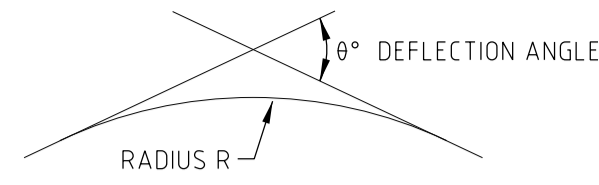
CLASS 2 CRUSHED ROCK



CLASS 3 CRUSHED ROCK

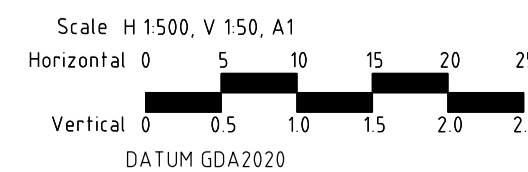
NOTE:

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DEPTH TO INVERT	DESIGN INVERT LEVEL	HYDRAULIC GRADE LEVEL	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	CHAINAGE
0.888	209.330	209.559	210.218	210.218	92.400
0.838	209.380	209.658	210.218	210.218	145.700
1.249	210.010	210.217	211.209	211.209	161.700
1.199	210.010	210.432	210.819	210.819	176.150
0.735	210.850	210.928	211.585	211.585	204.000
3.087	204.390	205.317	207.477	207.477	204.000
2.989	204.440	205.365	207.449	207.449	204.000
2.939	204.510	205.405	207.449	207.449	204.000
2.775	204.540	205.426	207.315	207.315	204.000
2.275	205.040	205.453	207.315	207.315	204.000
1.001	206.650	206.855	207.619	207.619	204.000
0.951	206.700	206.865	207.619	207.619	204.000
1.005	207.100	207.308	208.105	208.105	204.000
0.955	207.150	207.361	208.151	208.151	204.000
1.139	207.600	207.780	208.669	208.669	204.000
1.089	207.650	207.858	208.739	208.739	204.000
1.051	207.750	207.883	208.801	208.801	204.000
1.001	207.800	207.939	208.873	208.873	204.000
0.745	208.350	208.463	209.095	209.095	204.000
1.139	207.600	207.780	208.669	208.669	204.000
1.089	207.650	207.858	208.739	208.739	204.000
1.051	207.750	207.883	208.801	208.801	204.000
1.001	207.800	207.939	208.873	208.873	204.000
0.782	207.730	207.846	208.471	208.471	204.000
0.782	207.730	207.846	208.471	208.471	204.000

Rev	Description	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20
	Amendments		



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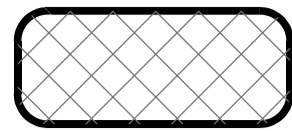
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villawood properties  
Communities Designed for Living  
Designed R. WEINBER  
Authorised M. LETSON

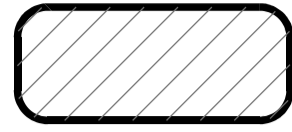
Redstone.  
Your world awaits  
Checked D. CAMERON  
Date 23/04/19

REDSTONE ESTATE  
STAGE 2  
DRAINAGE LONG SECTION  
SHEET 3 OF 5  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No 305913R15 Rev 1





CLASS 2 CRUSHED ROCK



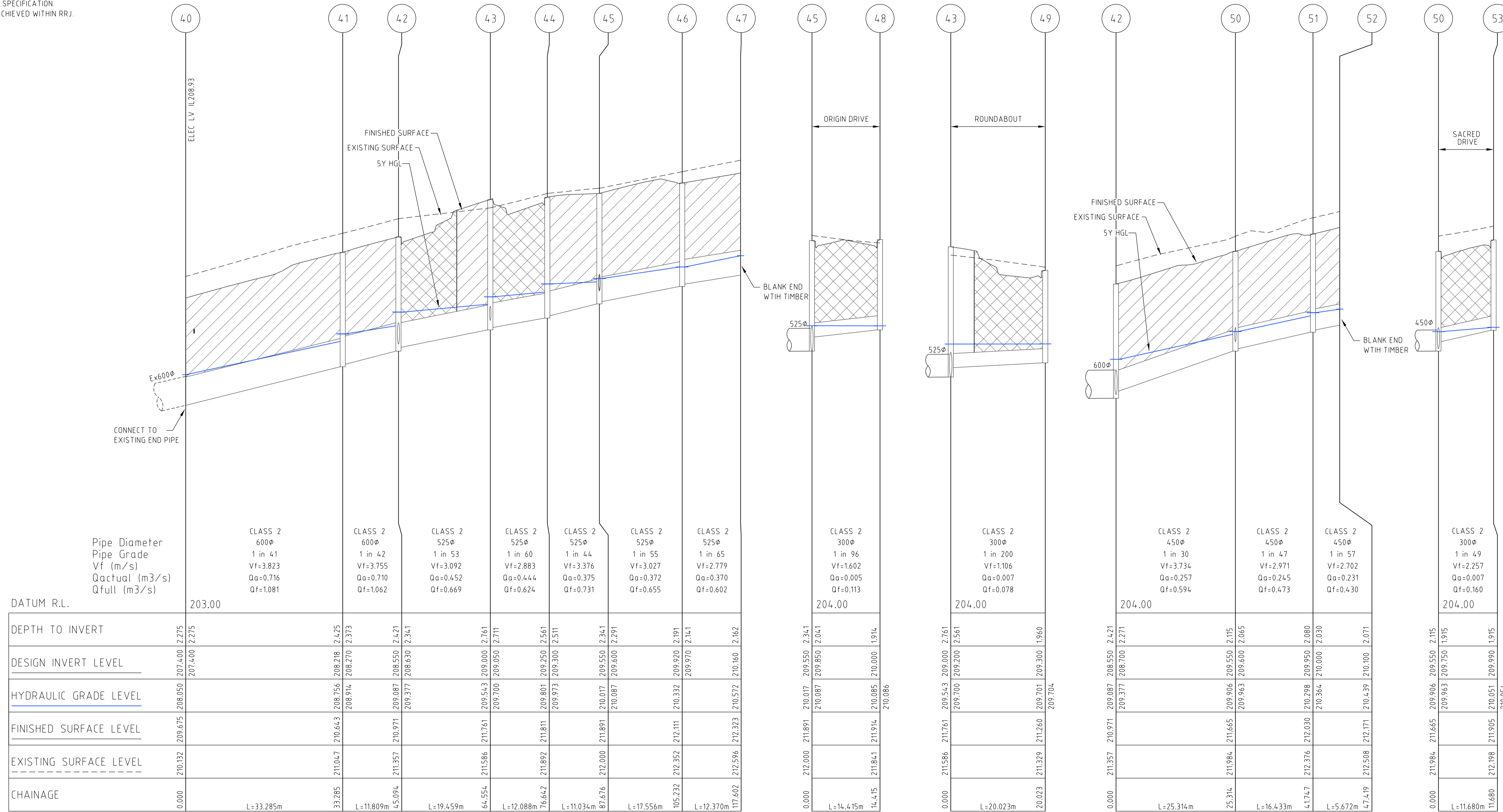
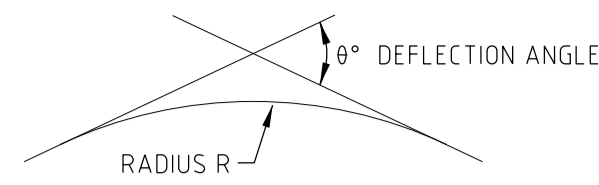
CLASS 3 CRUSHED ROCK

NOTE:

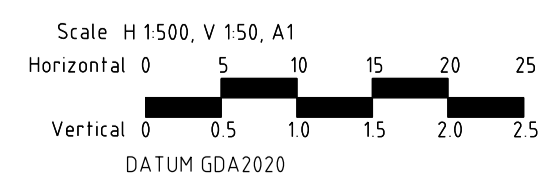
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b) DEFLECTION ACHIEVED WITHIN RRJ.



Rev	Description	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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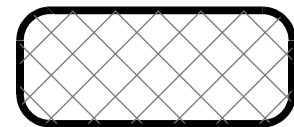
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Designed by R. WEINBER  
Authorised by M. LETSON

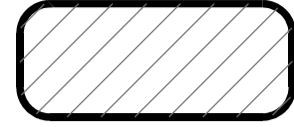
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Date 23/04/19

**REDSTONE ESTATE**  
**STAGE 2**  
**DRAINAGE LONG SECTION**  
**SHEET 4 OF 5**  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No 305913R16 Rev 1





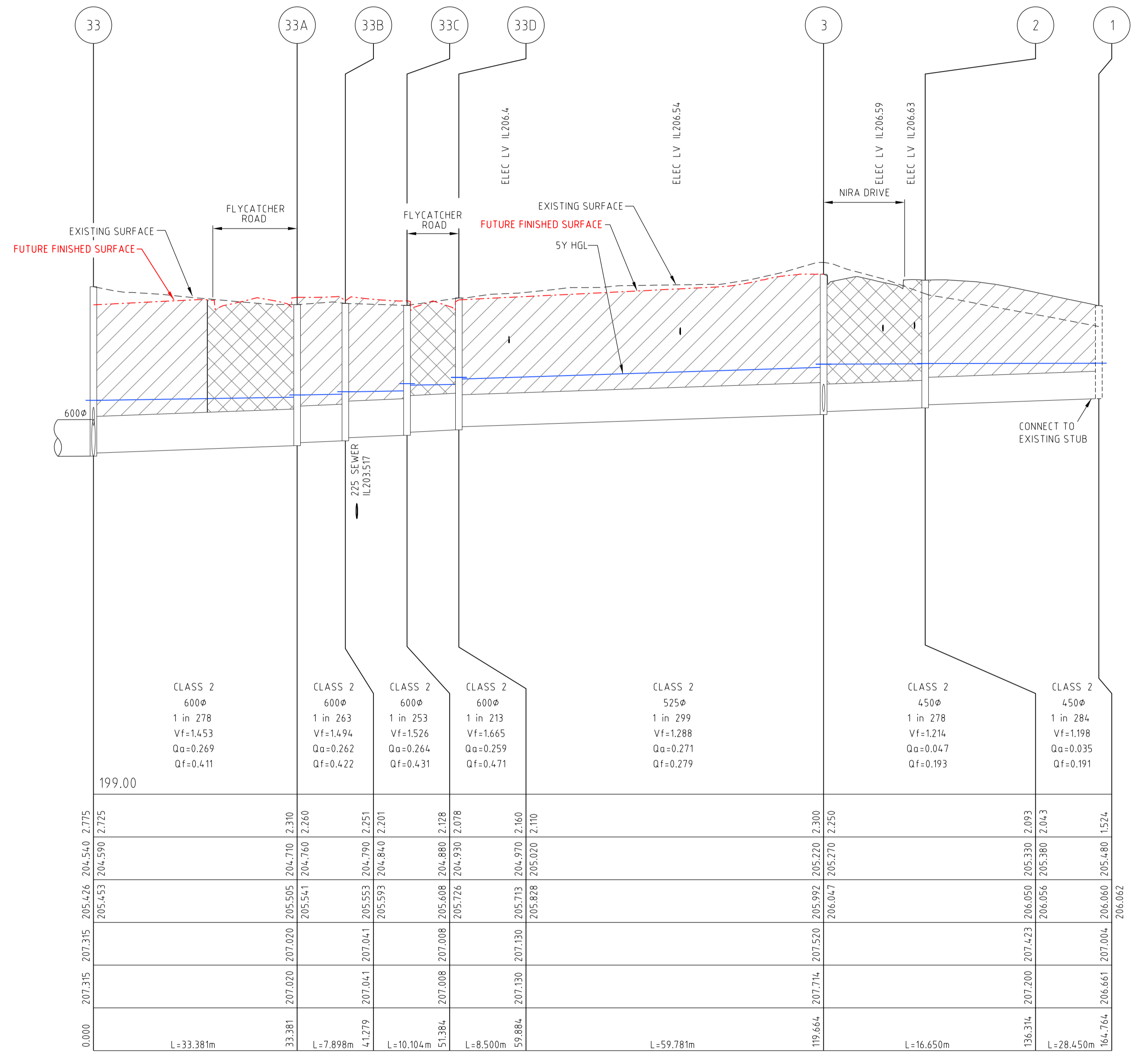
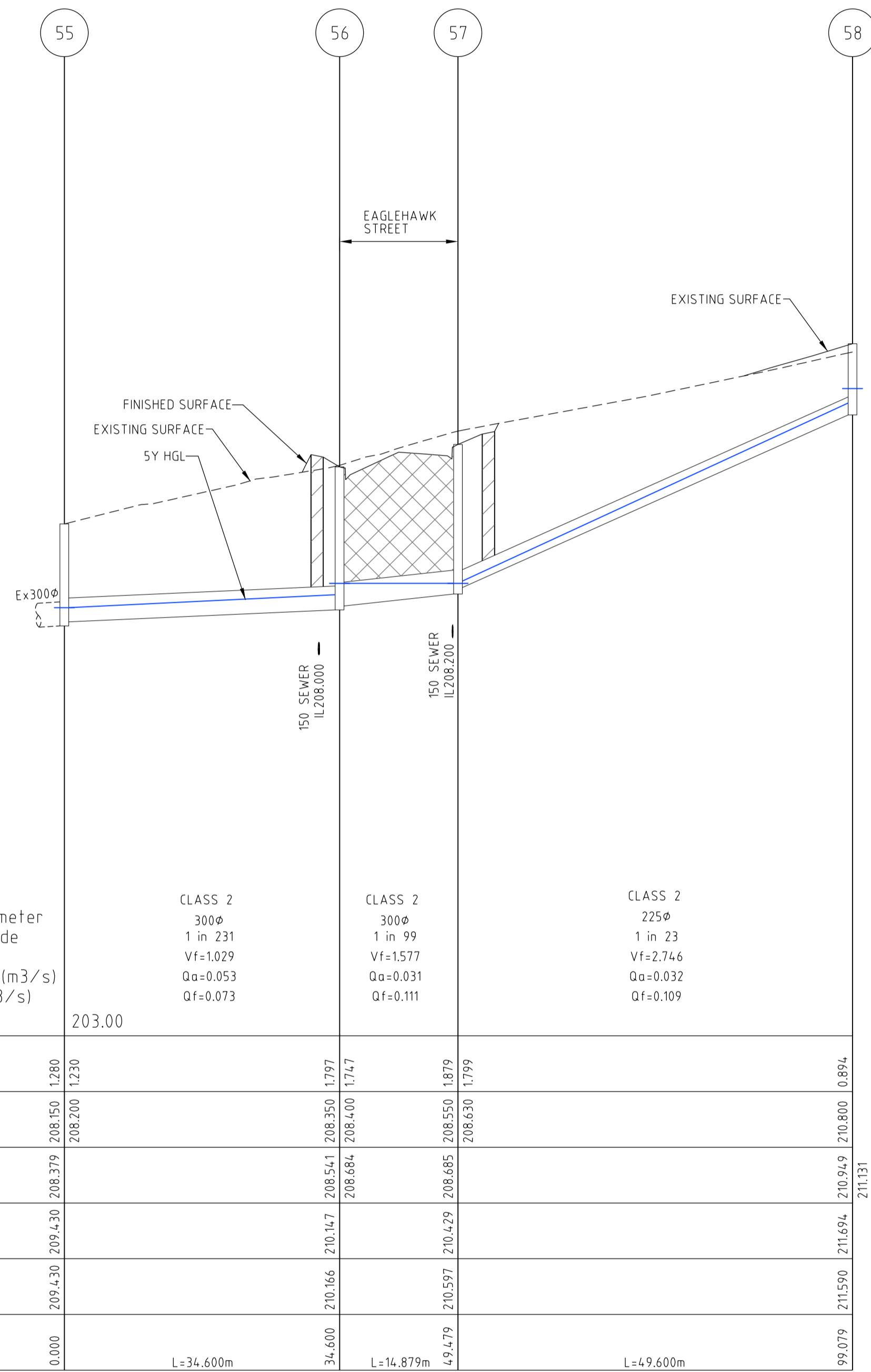
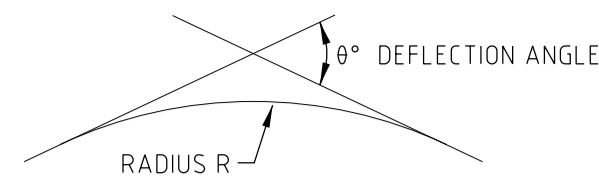
CLASS 2 CRUSHED ROCK



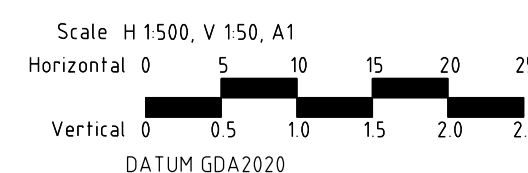
CLASS 3 CRUSHED ROCK

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Rev	Description	Approved	Date
2	55 TO 58 UPDATED	M.L.	18/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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Designed  
**R. WEINBER**  
 Authorised  
**M. LETSON**



Your world awaits

Checked  
**D. CAMERON**  
 Date  
 23/04/19

**REDSTONE ESTATE**  
**STAGE 2**  
**DRAINAGE LONG SECTION**  
**SHEET 5 OF 5**  
 VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL

**CONSTRUCTION** Drg No **305913R17**

Rev **2**



DRAINAGE PIT SCHEDULE

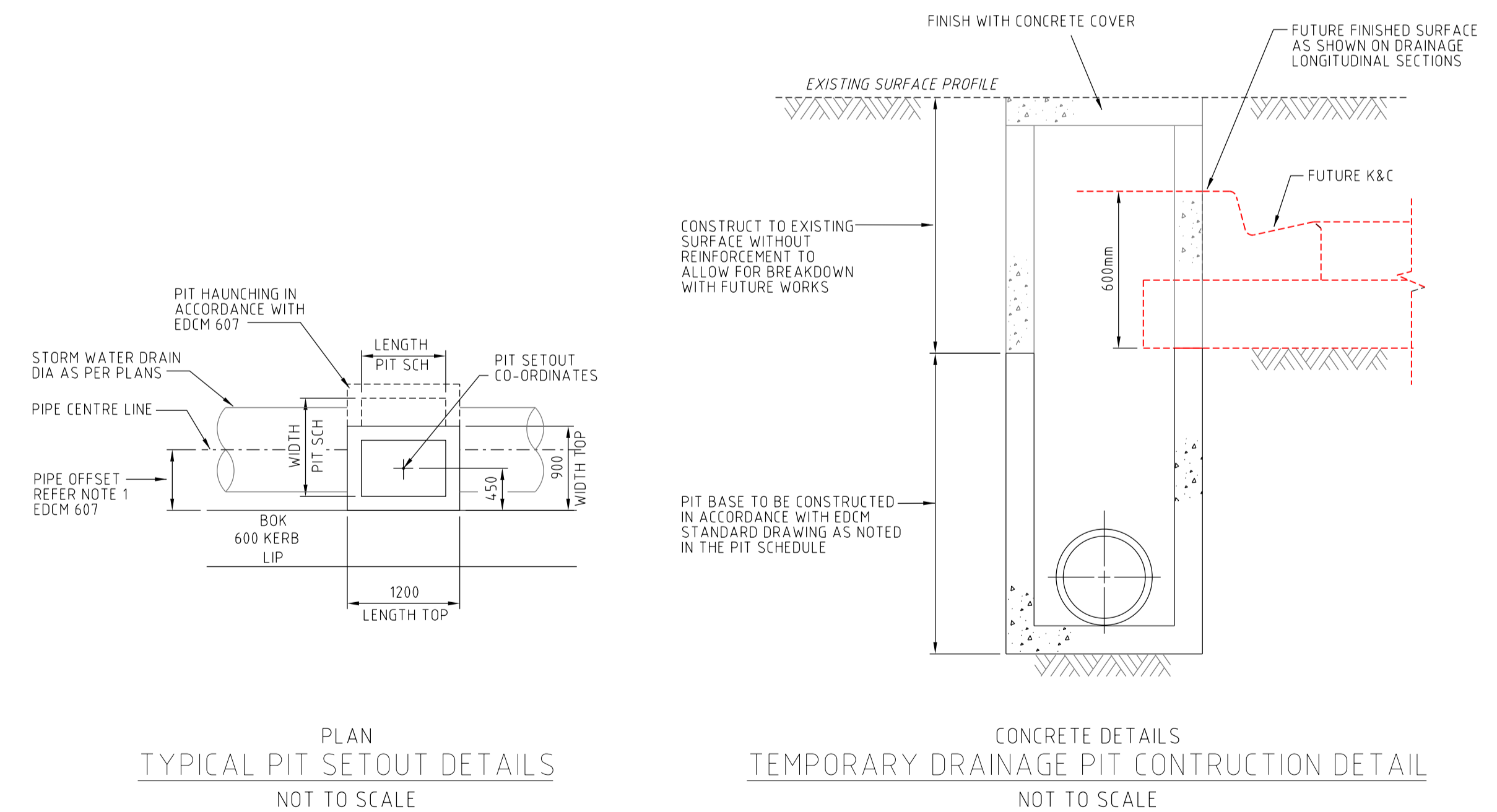
NAME	PIT TYPE	INTERNAL		INLET		OUTLET		PIT		REMARKS	
		LENGTH	WIDTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH		
1	EXITING JUNCTION PIT					450	205.480	450	207.004	1.524	CONNECT TO EXISTING 450 DIA STUB CONSTRUCTED WITH STAGE 1 WORKS
2	SIDE ENTRY PIT GRATED	900	600	450	205.380	450	205.330		207.423	2.093	REFER DRAWING - EDCM 601 (PROVIDE HAUNCHING AS PER EDCM 607)
3	JUNCTION PIT	900	600	450	205.270				207.520	2.300	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
4	SIDE ENTRY PIT GRATED	900	900	375	205.270	525	205.220		207.562	2.112	REFER DRAWING - EDCM 601 (PROVIDE HAUNCHING AS PER EDCM 607)
5	JUNCTION PIT	900	600	375	206.340	375	206.290		208.057	1.767	REFER DRAWING - EDCM 605
6	JUNCTION PIT	900	600	375	206.500	375	206.450		208.268	1.818	REFER DRAWING - EDCM 605
7	JUNCTION PIT	900	600	375	206.700	375	206.650		208.465	1.815	REFER DRAWING - EDCM 605
8	SIDE ENTRY PIT GRATED	900	600	375	206.900	375	206.850		208.676	1.826	REFER DRAWING - EDCM 601
9	SIDE ENTRY PIT GRATED	900	600	300	207.040	375	206.990		208.701	1.711	REFER DRAWING - EDCM 601
10	TANGENT POINT			300	208.155	300	208.155		209.772	1.617	PIPE TANGENT POINT
11	JUNCTION PIT	900	600	300	209.260	300	209.210		211.009	1.799	REFER DRAWING - EDCM 605
12	SIDE ENTRY PIT GRATED	900	600	300	209.410						
13	ENDPIPE			300	209.750	300	209.700		211.468	1.768	REFER DRAWING - EDCM 601
14	SIDE ENTRY PIT GRATED	900	600			300	209.790		211.584	1.794	BLANK END WITH TIMBER
15	SIDE ENTRY PIT GRATED	900	600	300	205.800	300	205.750		207.565	1.815	REFER DRAWING - EDCM 601
16	JUNCTION PIT	900	600			300	206.000		207.697	1.697	REFER DRAWING - EDCM 605
18	ENDPIPE			675	204.230				207.258	3.028	REFER TEMPORARY RETARDING BASIN PLANS
# 19	JUNCTION PIT	900	900	375	205.000	675	204.340		207.477	3.137	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
				600	204.390						CONVERT SIDE ENTRY PIT GRATED WITH STAGE 3 WORKS PROVIDE 450 DIA STUB AT IL204.75 WEST WALL
# 20	JUNCTION PIT	900	900	375	205.650	375	205.600		207.777	2.177	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
# 21	JUNCTION PIT	900	600	375	205.900	375	205.850		208.003	2.153	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
											CONVERT SIDE ENTRY PIT GRATED WITH STAGE 3 WORKS CONVERT SIDE ENTRY PIT GRATED WITH STAGE 3 WORKS
22	JUNCTION PIT	900	600	300	206.600	375	206.550		208.246	1.696	REFER DRAWING - EDCM 605
				300	206.600						
23	SIDE ENTRY PIT GRATED	900	600	300	207.250	300	207.200		208.888	1.688	REFER DRAWING - EDCM 601
				300	207.250						
24	SIDE ENTRY PIT GRATED	900	600	300	208.520	300	208.470		210.185	1.715	REFER DRAWING - EDCM 601
25	SIDE ENTRY PIT GRATED	900	600			300	208.600		210.191	1.591	REFER DRAWING - EDCM 601
26	SIDE ENTRY PIT GRATED	900	600			300	207.400		208.891	1.491	REFER DRAWING - EDCM 601
27	JUNCTION PIT	900	600	300	208.300	300	208.250		209.206	0.956	REFER DRAWING - EDCM 605
28	JUNCTION PIT	900	600	225	209.380	300	209.330		210.218	0.888	REFER DRAWING - EDCM 605
29	JUNCTION PIT	900	600	225	210.010	225	209.960		211.209	1.249	REFER DRAWING - EDCM 605
				225	209.970						
30	JUNCTION PIT	900	600			225	210.100		210.819	0.769	REFER DRAWING - EDCM 605
31	JUNCTION PIT	900	600			225	210.850		211.585	0.735	REFER DRAWING - EDCM 605
# 32	JUNCTION PIT	900	900	600	204.510	600	204.460		207.449	2.989	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
											CONVERTED TO DOUBLE GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 33	JUNCTION PIT	900	900	300	205.040	600	204.540		207.315	2.775	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
				600	204.590						
# 33A	JUNCTION PIT	900	900	600	204.760	600	204.710		207.020	2.310	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
# 33B	JUNCTION PIT	900	900	600	204.840	600	204.790		207.041	2.251	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
# 33C	JUNCTION PIT	900	900	600	204.930	600	204.880		207.008	2.128	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
											CONVERTED TO DOUBLE GRATED SIDE ENTRY PIT WITH FUTURE WORKS
# 33D	JUNCTION PIT	900	900	525	205.020	600	204.970		207.130	2.160	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
											CONVERTED TO DOUBLE GRATED SIDE ENTRY PIT WITH FUTURE WORKS
34	JUNCTION PIT	900	600	300	206.700	300	206.650		207.651	1.001	REFER DRAWING - EDCM 605
35	JUNCTION PIT	900	600	300	207.150	300	207.100		208.105	1.005	REFER DRAWING - EDCM 605
36	JUNCTION PIT	900	600	225	207.650	300	207.600		208.739	1.139	REFER DRAWING - EDCM 605
				225	207.650						
37	JUNCTION PIT	900	600	225	207.800	225	207.750		208.801	1.051	REFER DRAWING - EDCM 605
38	JUNCTION PIT	900	600			225	208.350		209.095	0.745	REFER DRAWING - EDCM 605
39	JUNCTION PIT	900	600			225	207.730		208.512	0.782	REFER DRAWING - EDCM 605
40	END PIPE			600	207.400				209.675	2.275	CONNECT TO EXISTING END PIPE CONSTRUCTED WITH STAGE 1 WORKS
41	SIDE ENTRY PIT GRATED	900	900	600	208.270	600	208.218		210.643	2.425	REFER DRAWING - EDCM 601 (PROVIDE HAUNCHING AS PER EDCM 607)
42	JUNCTION PIT	900	900	525	208.630	600	208.550		210.971	2.421	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
				450	208.700						
43	JUNCTION PIT	900	900	525	209.050	525	209.000		211.761	2.761	REFER DRAWING - EDCM 605 (PROVIDE HAUNCHING AS PER EDCM 607)
				300	209.200						
44	SIDE ENTRY PIT GRATED	900	900	525	209.300	525	209.250		211.811	2.561	REFER DRAWING - EDCM 601 (PROVIDE HAUNCHING AS PER EDCM 607)
											PROVIDE CLASS D PIT COVER
45	SIDE ENTRY PIT GRATED	900	900	525	209.600	525	209.550		211.891	2.341	REFER DRAWING - EDCM 601 (PROVIDE HAUNCHING AS PER EDCM 607)
				300	209.850						
46	SIDE ENTRY PIT GRATED	900	900	525	209.970	525	209.920		212.111	2.191	REFER DRAWING - EDCM 601 (PROVIDE HAUNCHING AS PER EDCM 607)
47	END PIPE					525	210.160		212.323	2.162	BLANK END WITH TIMBER
48	SIDE ENTRY PIT GRATED	900	600			300	210.000		211.914	1.914	REFER DRAWING - EDCM 601
49	SIDE ENTRY PIT GRATED	900	600			300	209.300		211.260	1.960	REFER DRAWING - EDCM 601 - PROVIDE CLASS D PIT COVER

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

DRAINAGE PIT SCHEDULE

NAME	PIT TYPE	INTERNAL		INLET		OUTLET		PIT		REMARKS	
		LENGTH	WIDTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH		
50	SIDE ENTRY PIT GRATED	900	900	450	209.600	450	209.550		211.665	2.115	REFER DRAWING - EDCM 601
				300	209.750						
51	SIDE ENTRY PIT GRATED	900	900	450	210.000	450	209.950		212.030	2.080	REFER DRAWING - EDCM 601
52	END PIPE					450	210.100		212.171	2.071	BLANK END WITH TIMBER
53	SIDE ENTRY PIT GRATED	900	600			300	209.990		211.905	1.915	REFER DRAWING - EDCM 601
54	JUNCTION PIT	900	900			300	208.900		211.142	2.242	REFER DRAWING - EDCM 605
55	JUNCTION PIT	900	600	300	208.200				209.430	1.280	REFER DRAWING - EDCM 605 - CONSTRUCT PIT ON EXISTING ENDDPIPE
56	JUNCTION PIT	900	600	300	208.400	300	208.350		210.147	1.797	REFER DRAWING - EDCM 605
57	JUNCTION PIT	900	600	225	208.670	300	208.550		210.429	1.879	REFER DRAWING - EDCM 605 - INSTALL CLASS D GATIC COVER
58	JUNCTION PIT	900	600			225	210.800		211.694	0.894	REFER DRAWING - EDCM 605
											PROVIDE 225 STUB IL 210.850 NORTH WALL

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



Rev	Amendments	Approved	Date
2	PIT SCHEDULE PITS 55 TO 58 UPDATED FS LEVEL AND DEPTH	M.L	18/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L	28/08/20
0	CONSTRUCTION ISSUE	M.L	20/08/20

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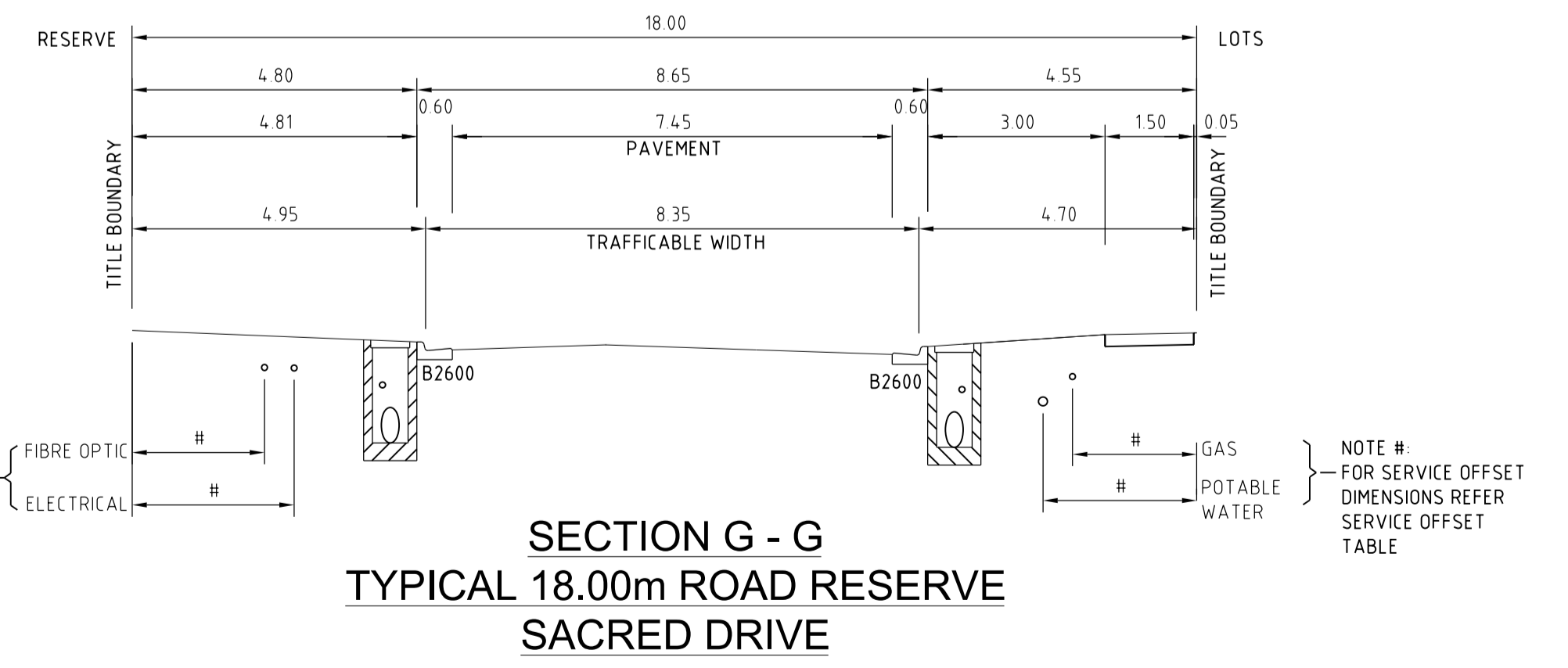
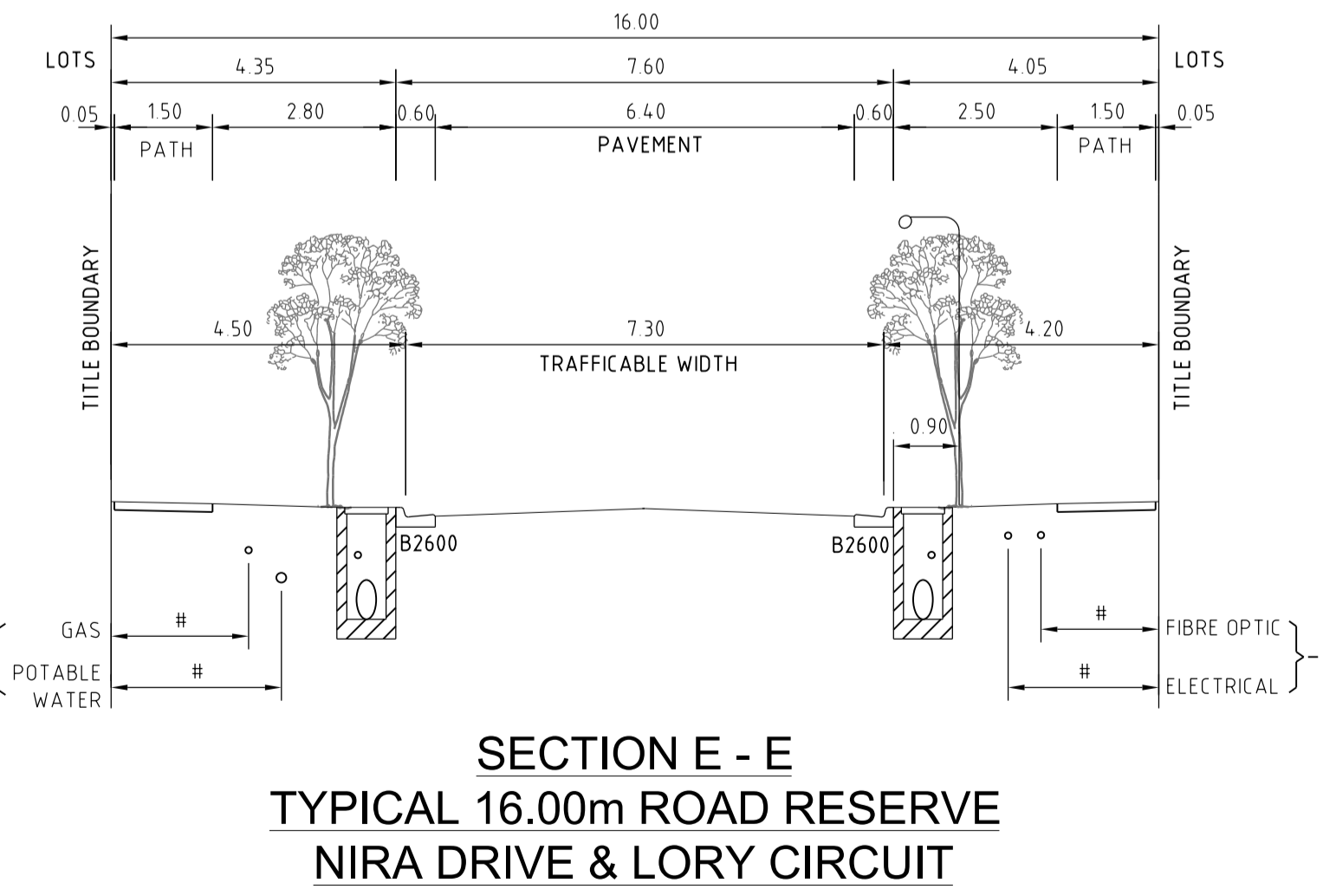
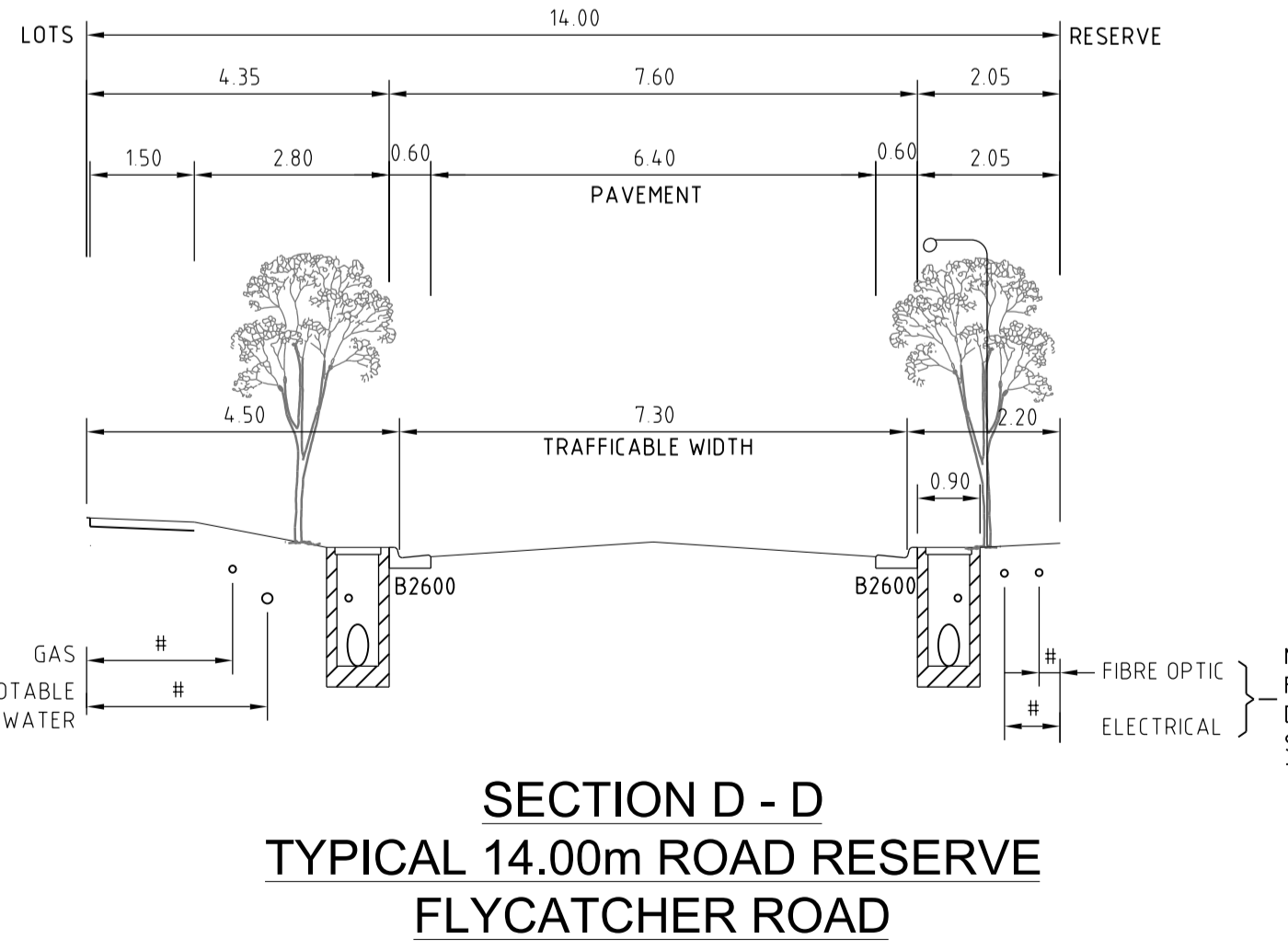
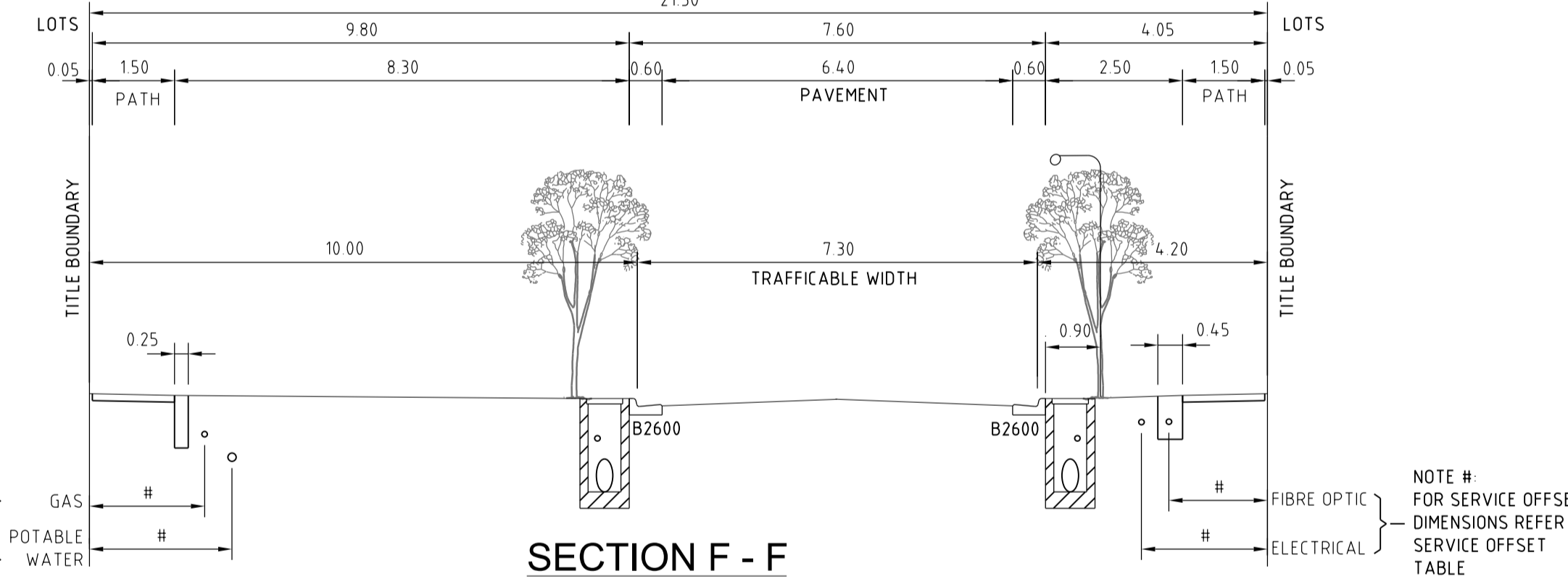
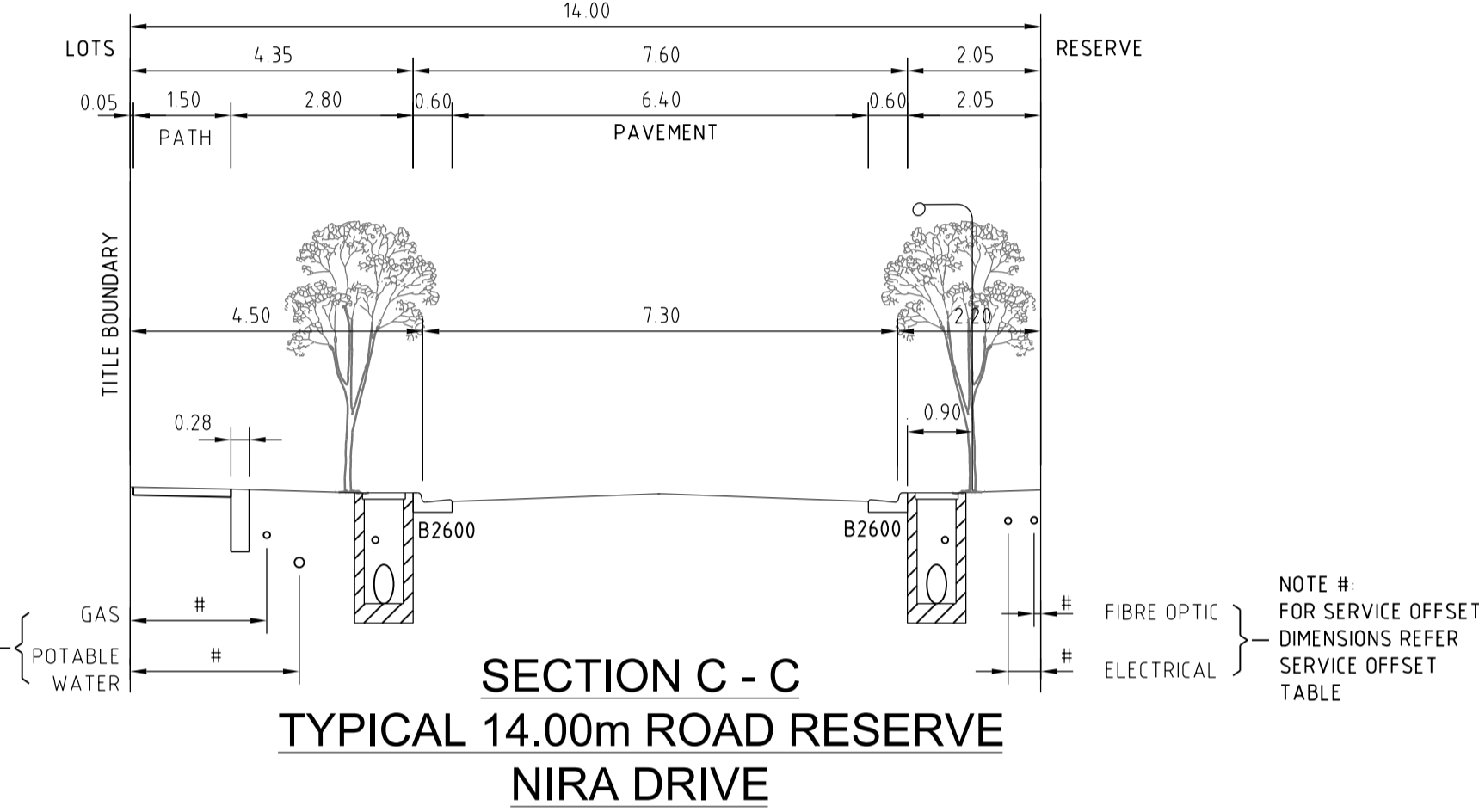
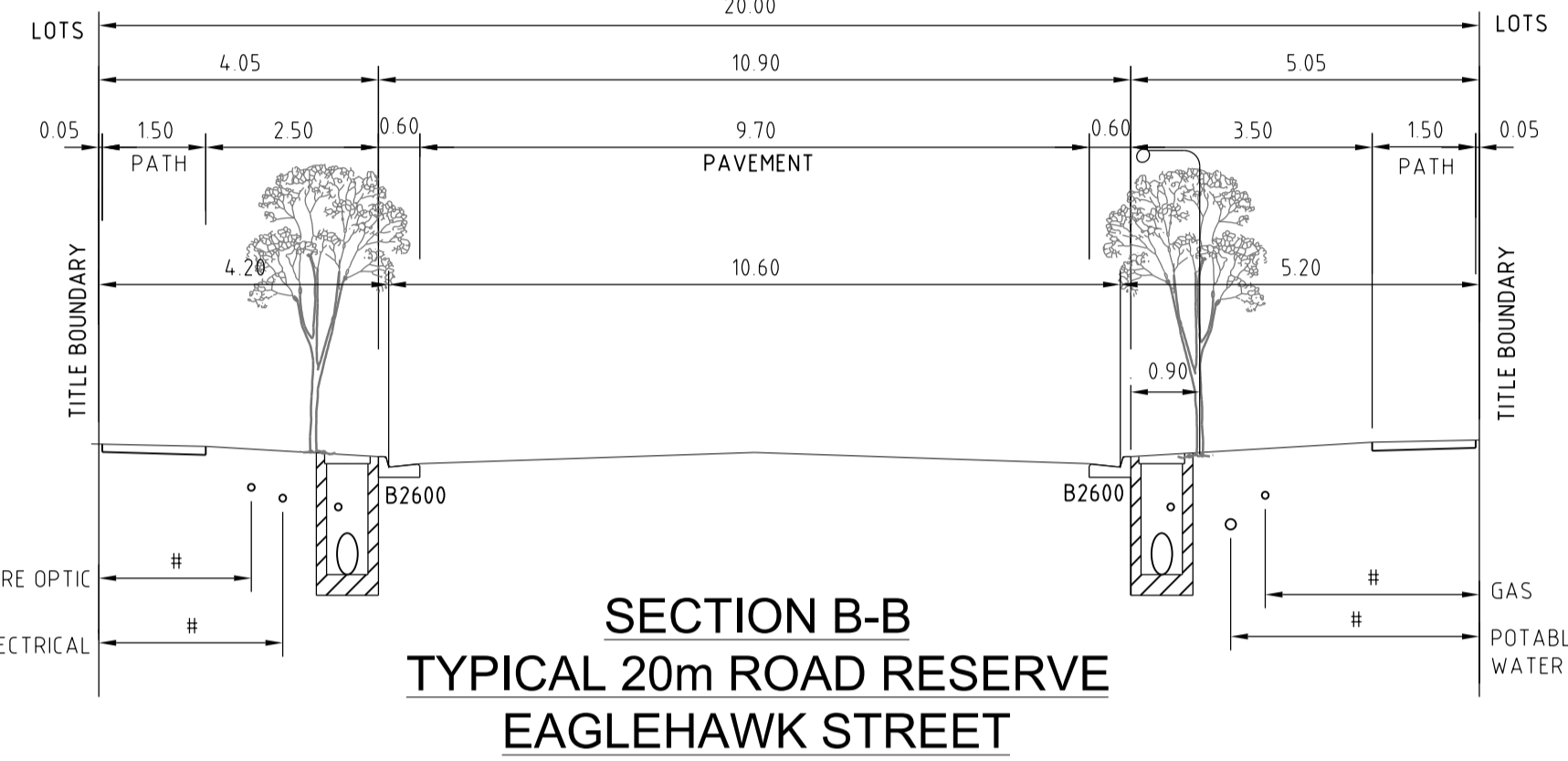
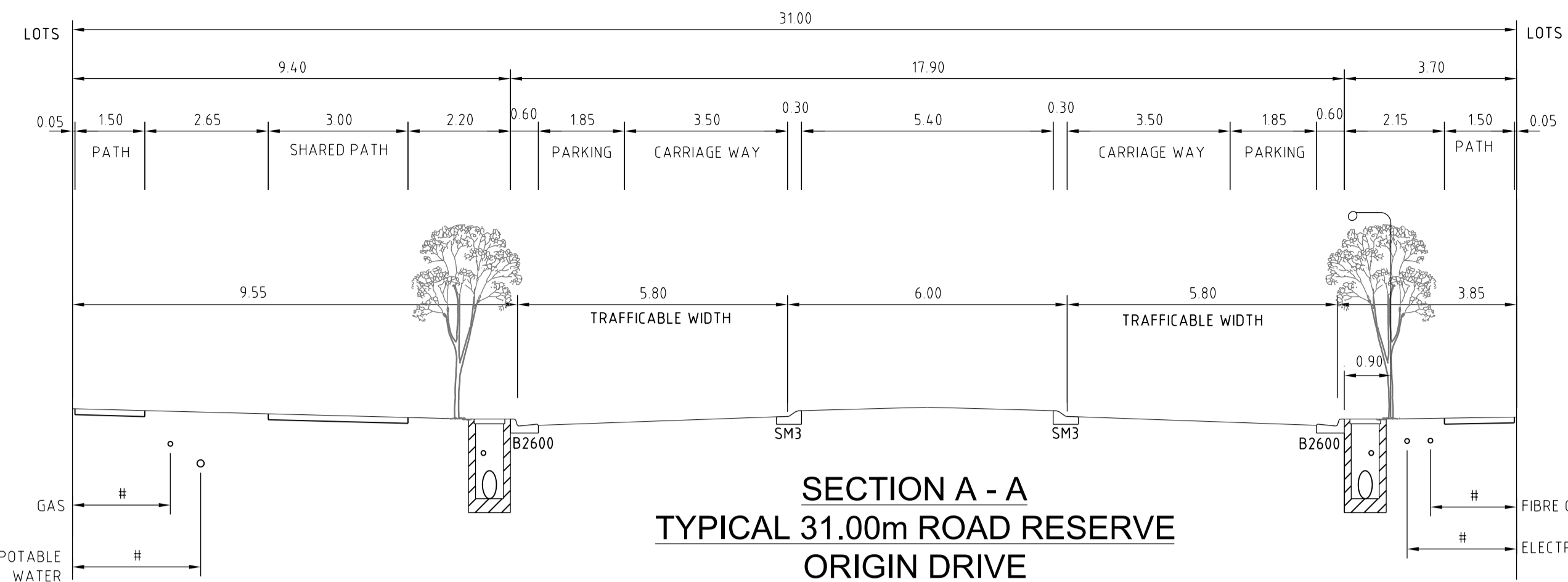
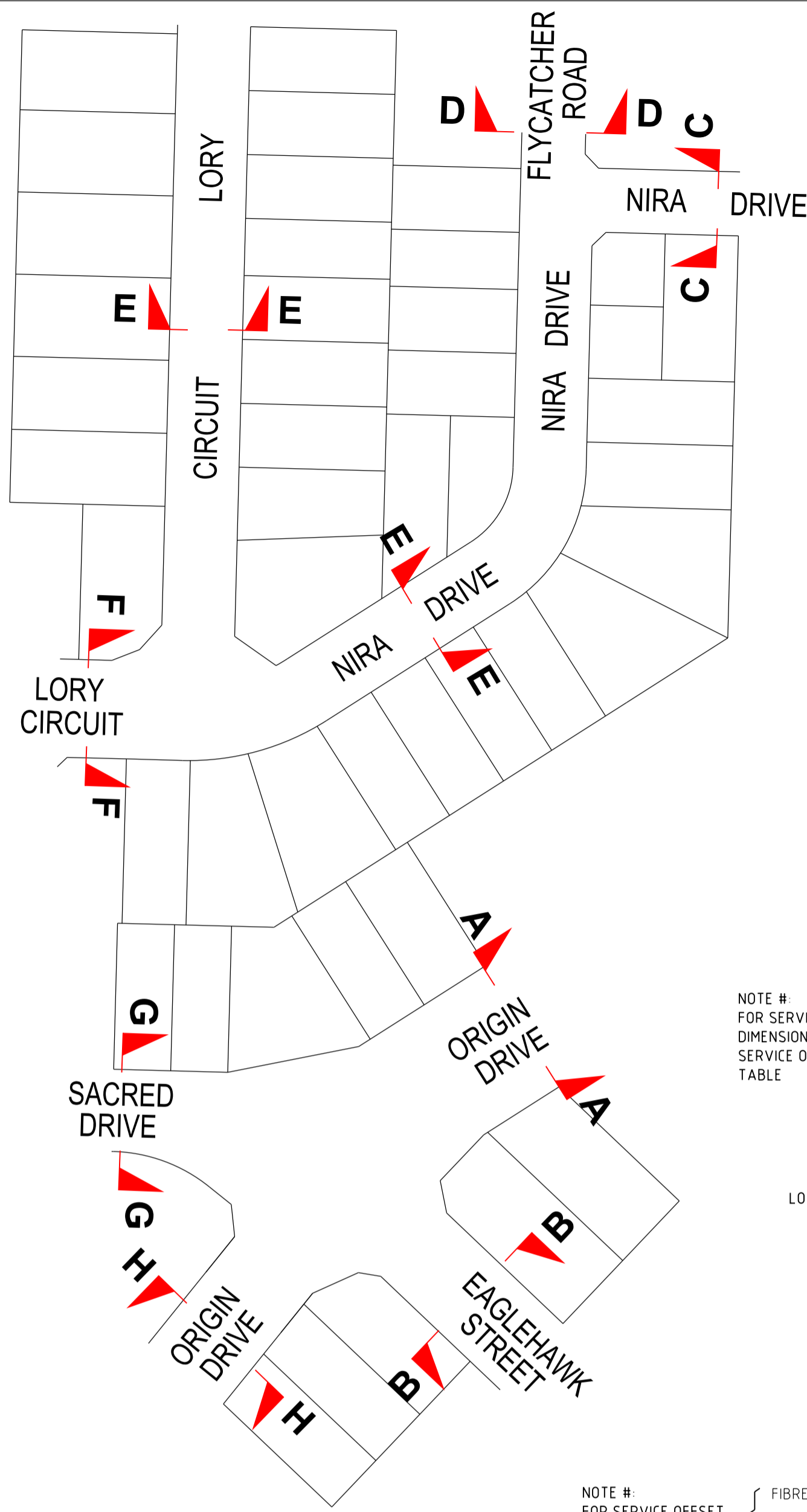
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Communities Designed for Living  
 Designed by  
**R. WEINBER**  
 Authorised  
**M. LETSON**

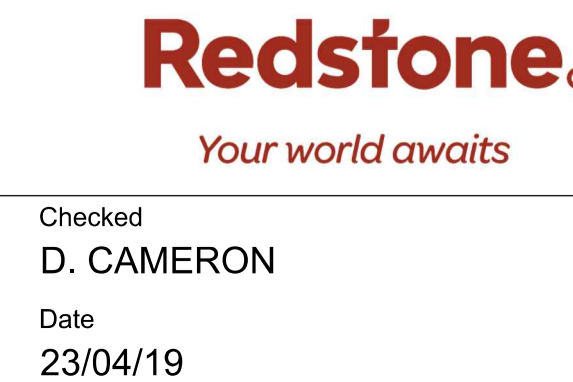
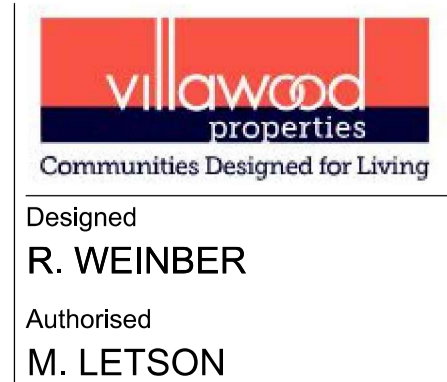
Your world awaits  
 Checked  
**D. CAMERON**  
 Date  
 23/04/19

**REDSTONE ESTATE**  
**STAGE 2**  
**DRAINAGE LONG SECTION**  
**PIT SCHEDULE & DETAILS**  
 VILLAWOOD PROPERTIES  
 HUME CITY COUNCIL  
**CONSTRUCTION**      Drg No **305913R18**      Rev **2**





Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



**REDSTONE ESTATE  
STAGE 2  
TYPICAL CROSS SECTIONS**

VILLAWOOD PROPERTIES  
HUME CITY COUNCIL

**CONSTRUCTION** Drg No **305913R19** Rev **1**



DESIGN PAVEMENT PROFILE FOR AREA 2

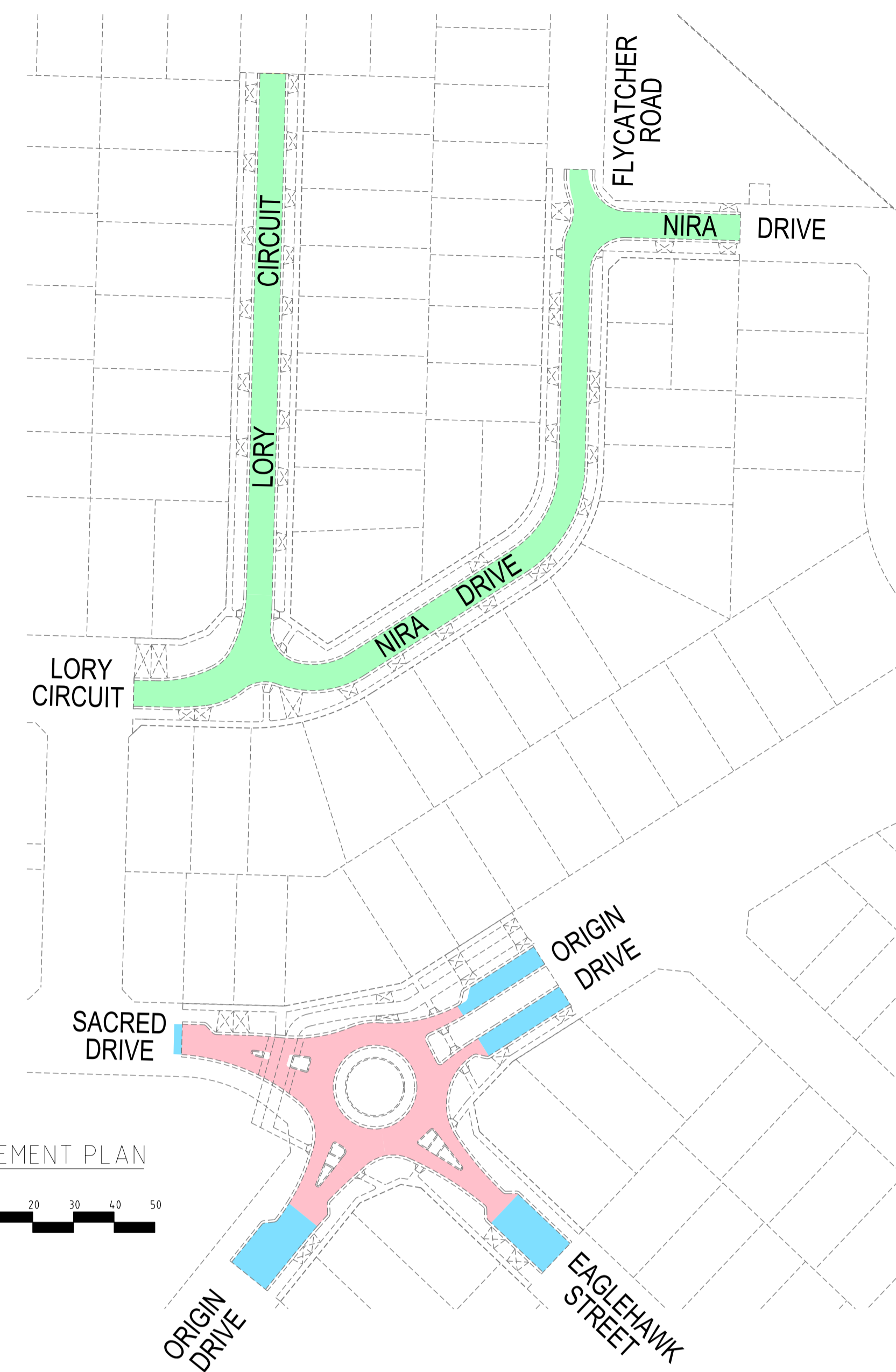
PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)
		AREA 2
WEARING COURSE	Size 10mm Type N Asphalt with a C170 binder	30
STRUCTURAL COURSE	Size 10mm Type N Asphalt with a C170 binder	30
WATER-PROOFING COURSE	SAMI seal with Class S18RF binder and bituminous prime	10
BASE COURSE	20mm nominal size Class 2 FCR, compacted 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	

DESIGN PAVEMENT PROFILE FOR ROUNDABOUT B

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	

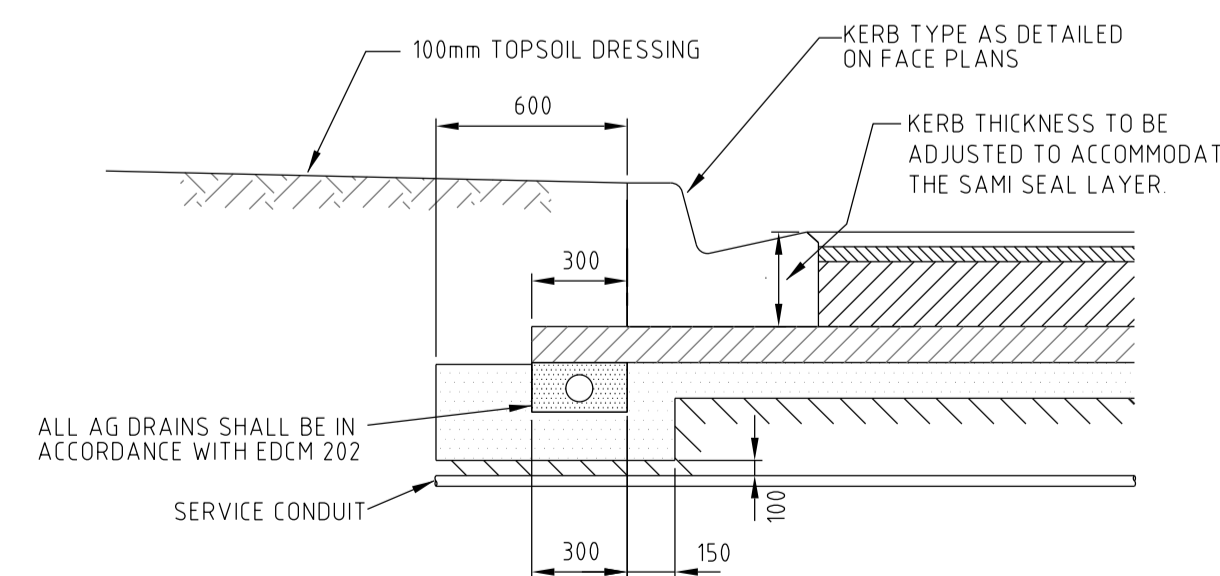


PAVEMENT DETAILS

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 4.08 AND THE CURRENT AUSTRROADS SPRAYED SEAL DESIGN METHOD.

NEW CONSTRUCTION  
N.T.S

Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20

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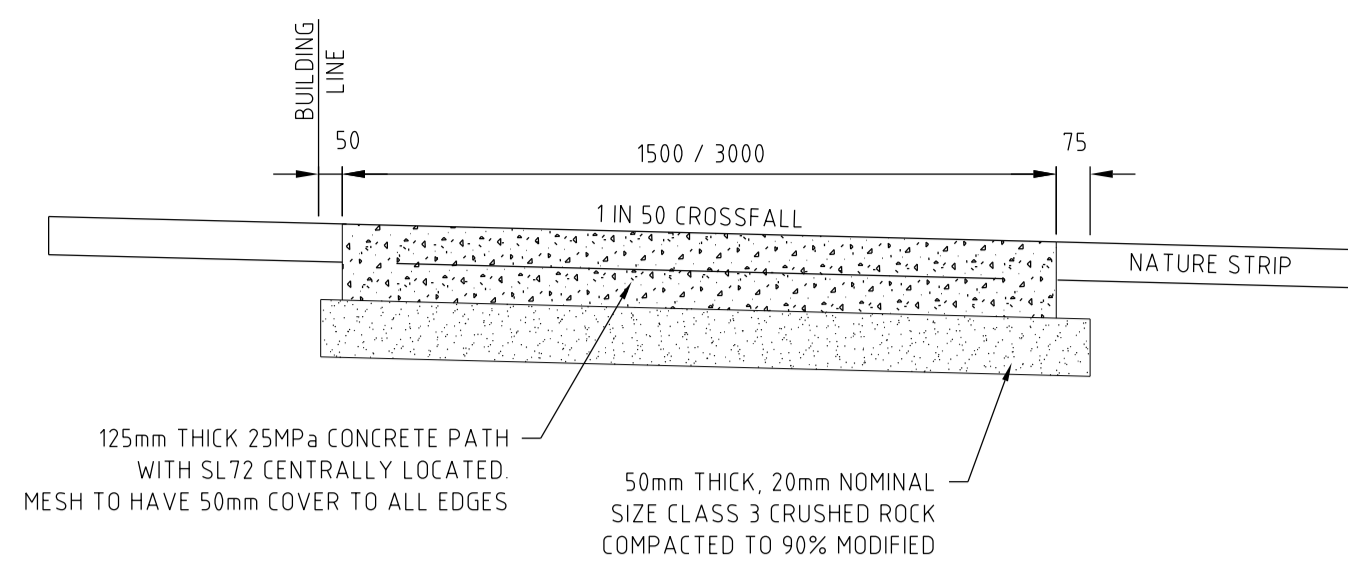
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Date  
23/04/19

REDSTONE ESTATE  
STAGE 2  
PAVEMENT DETAILS

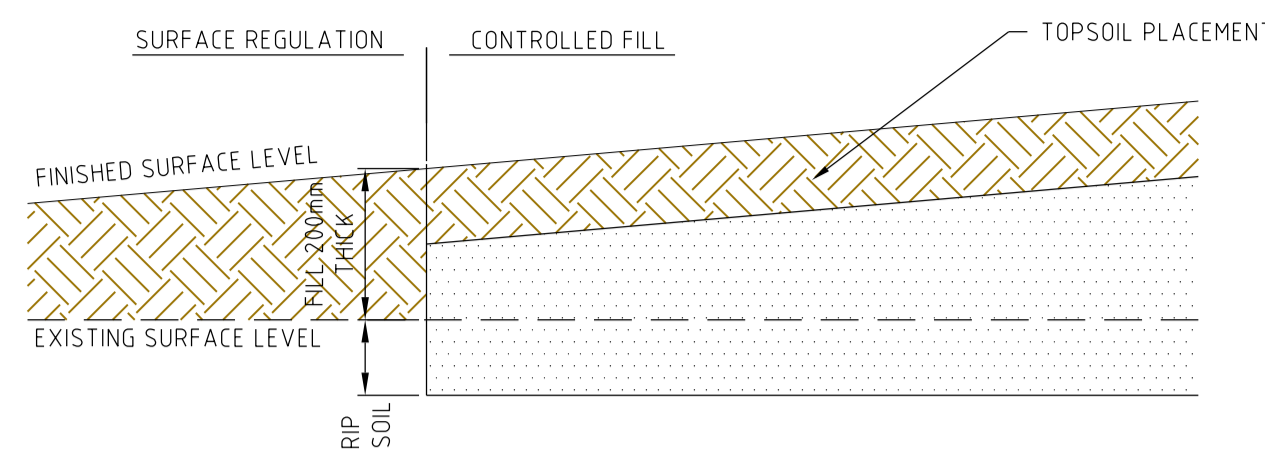
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL

**CONSTRUCTION** Drg No 305913R20 Rev 1

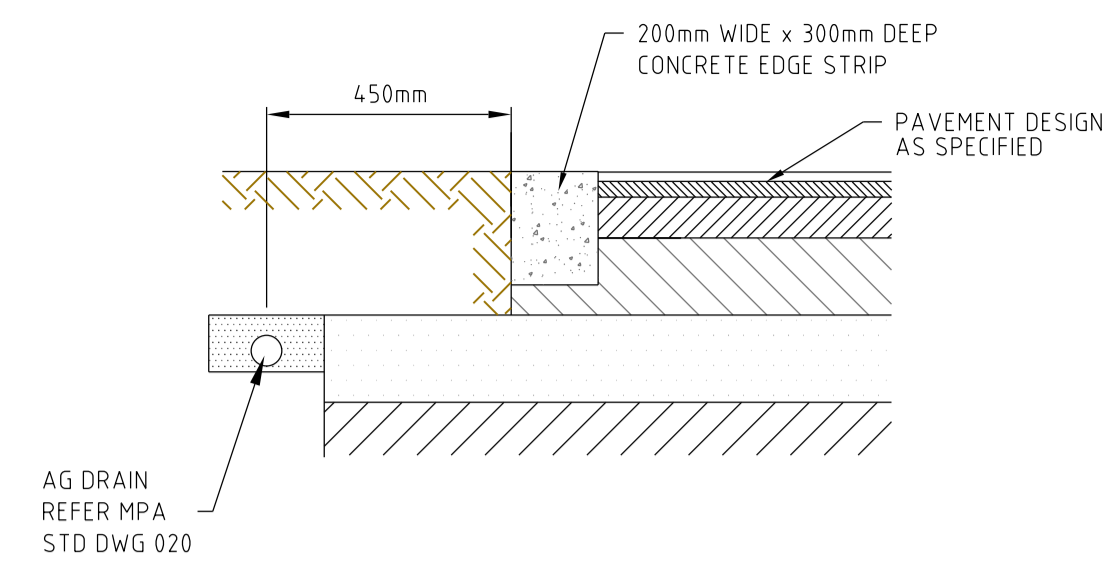




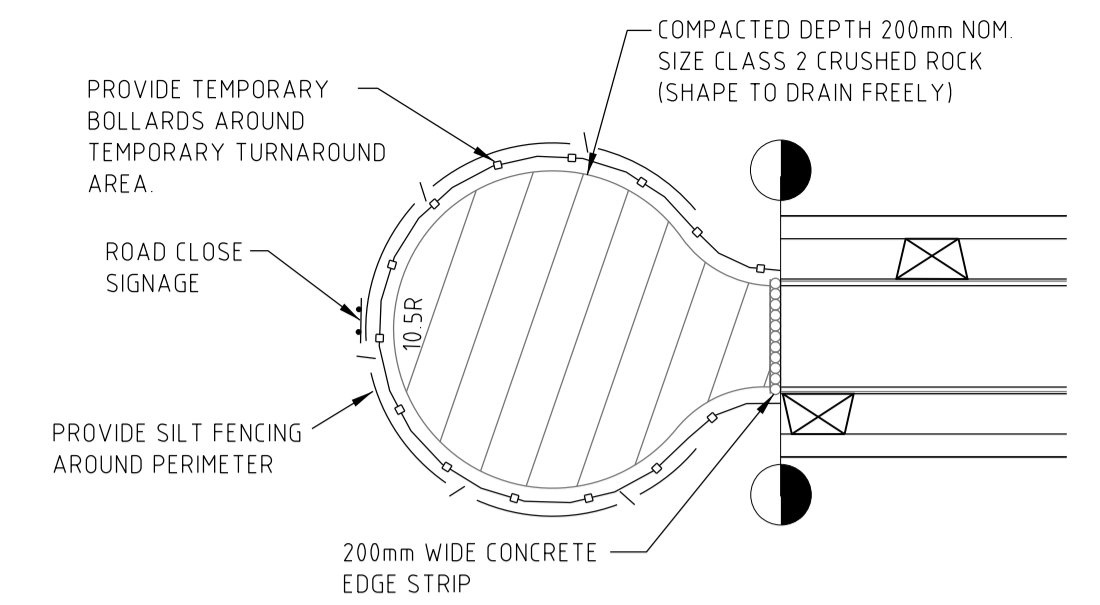
TYPICAL RESIDENTIAL FOOTPATH CROSS SECTION



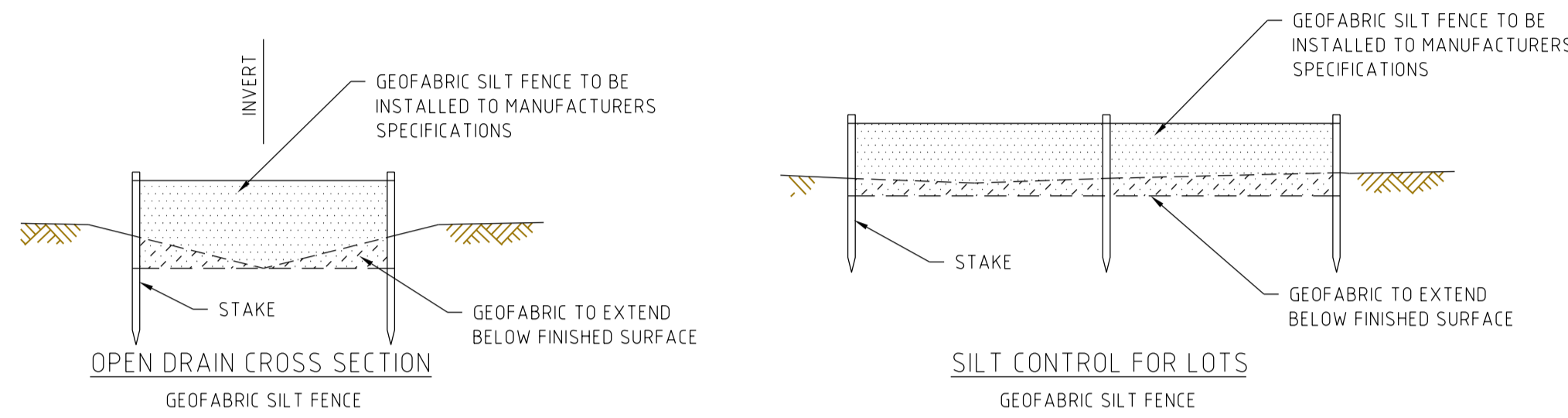
LOT REGRADING DETAIL  
NTS



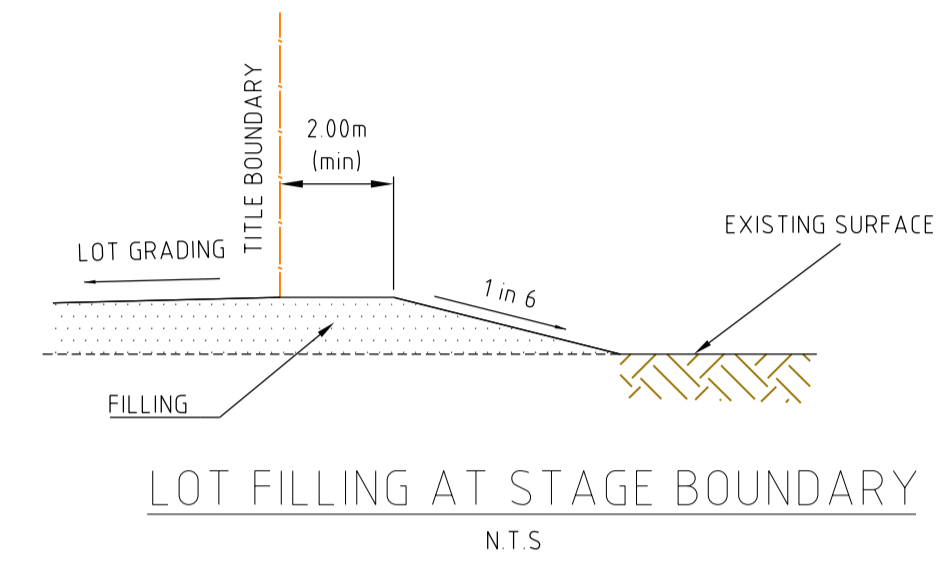
LIMIT OF WORKS CONCRETE EDGE STRIP & PAVEMENT INTERFACE - DETAIL  
NTS



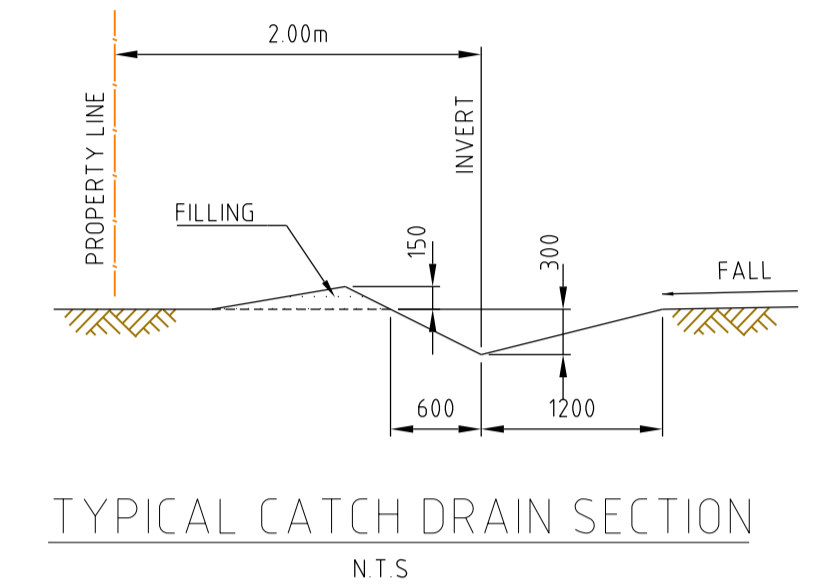
TEMPORARY TURNING AREA DETAIL



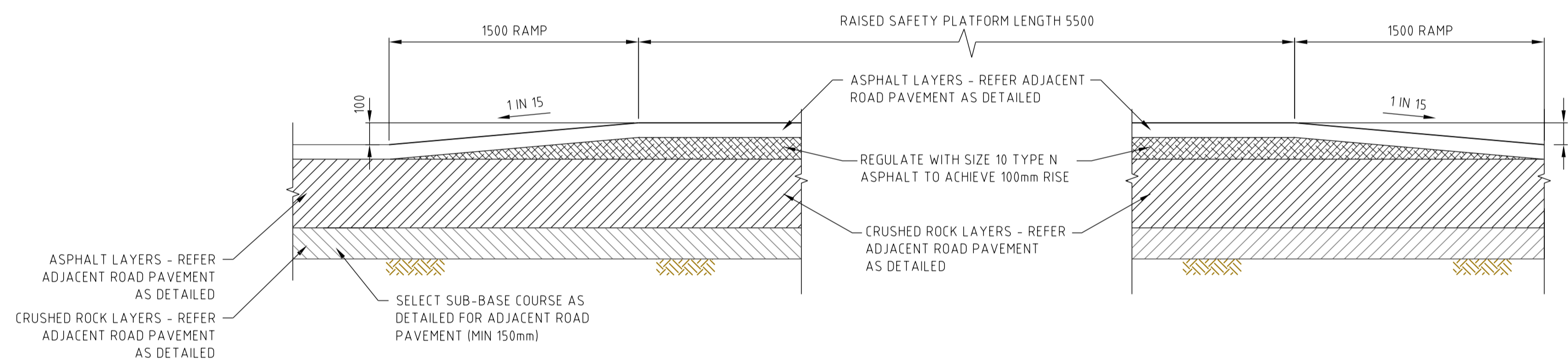
SILT CONTROL OPTIONS



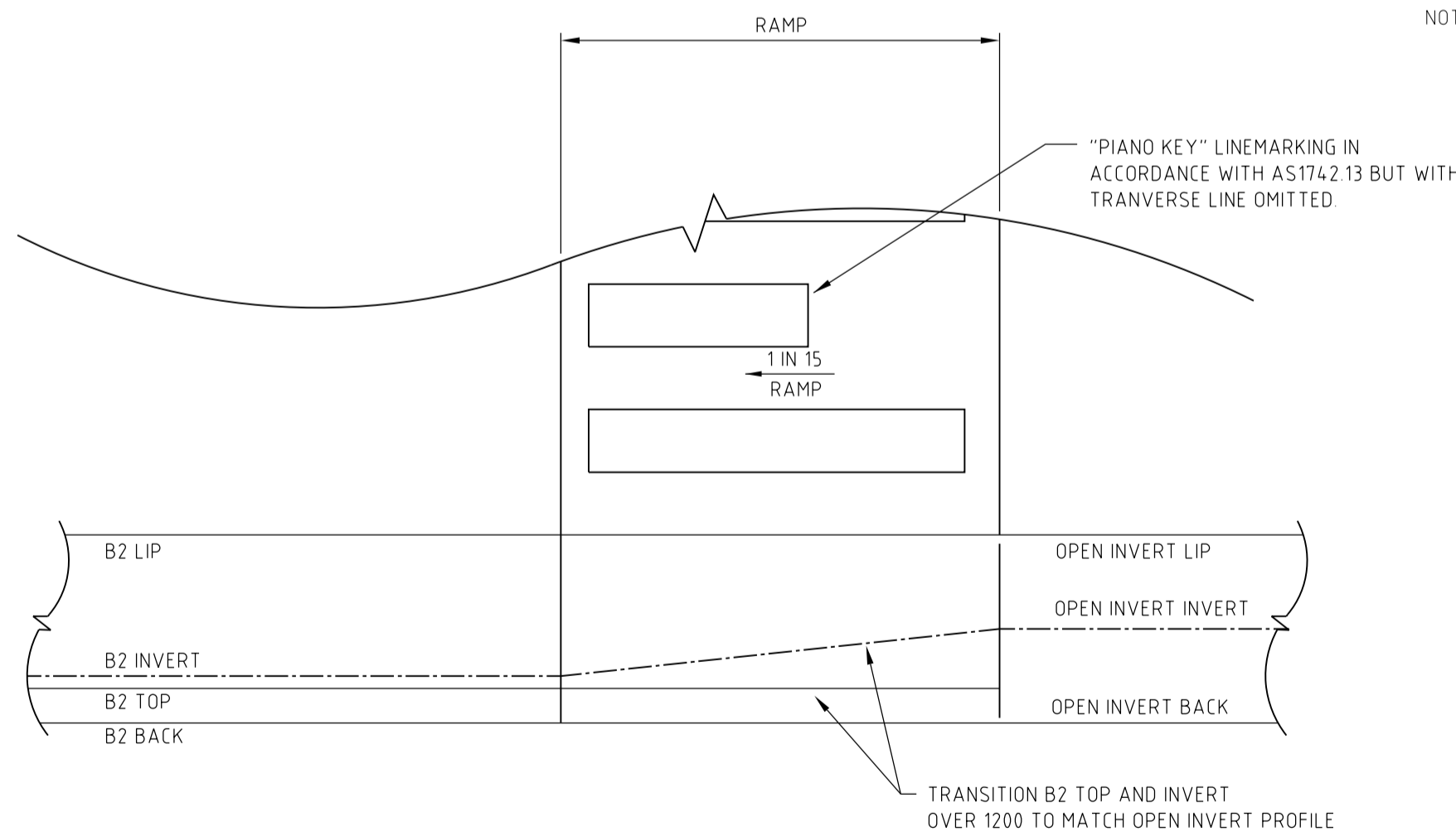
LOT FILLING AT STAGE BOUNDARY  
NTS



TYPICAL CATCH DRAIN SECTION  
NTS



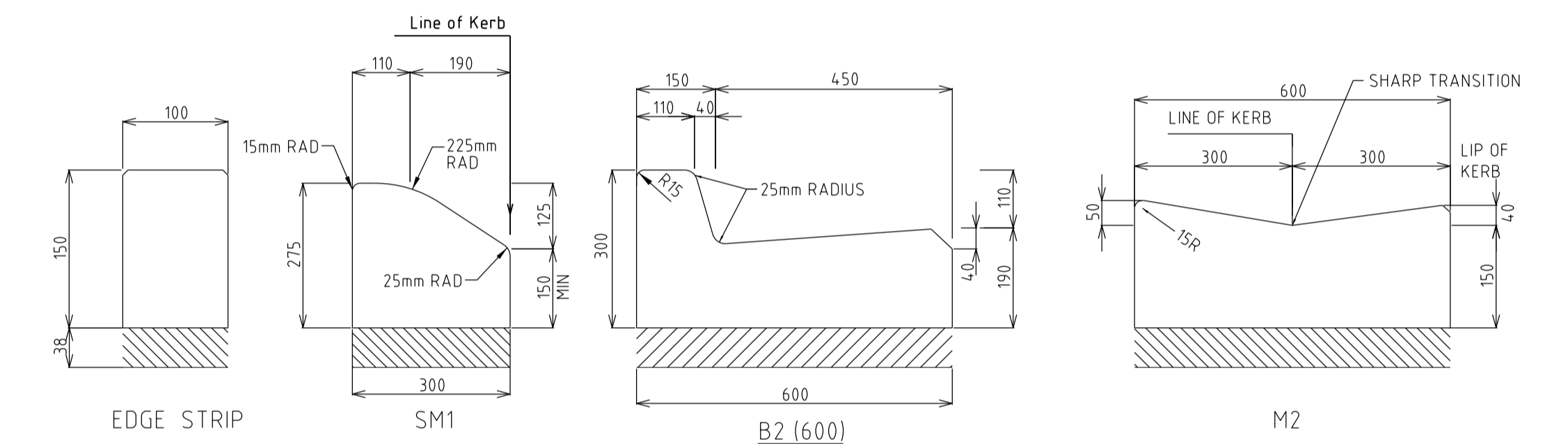
RAISED SAFETY PLATFORM SECTION  
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RAISED SAFETY PLATFORM PLAN  
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GENERAL NOTES:

- 1 ALL WORKS TO BE COMPLETED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS AND CCAA 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.



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.

Rev	Amendments	Approved	Date
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20

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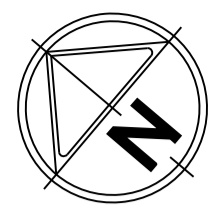
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Date  
23/04/19

REDSTONE ESTATE  
STAGE 2  
TYPICAL DETAILS

VILLAWOOD PROPERTIES  
HUME CITY COUNCIL

**CONSTRUCTION** Drg No 305913R21 Rev 1

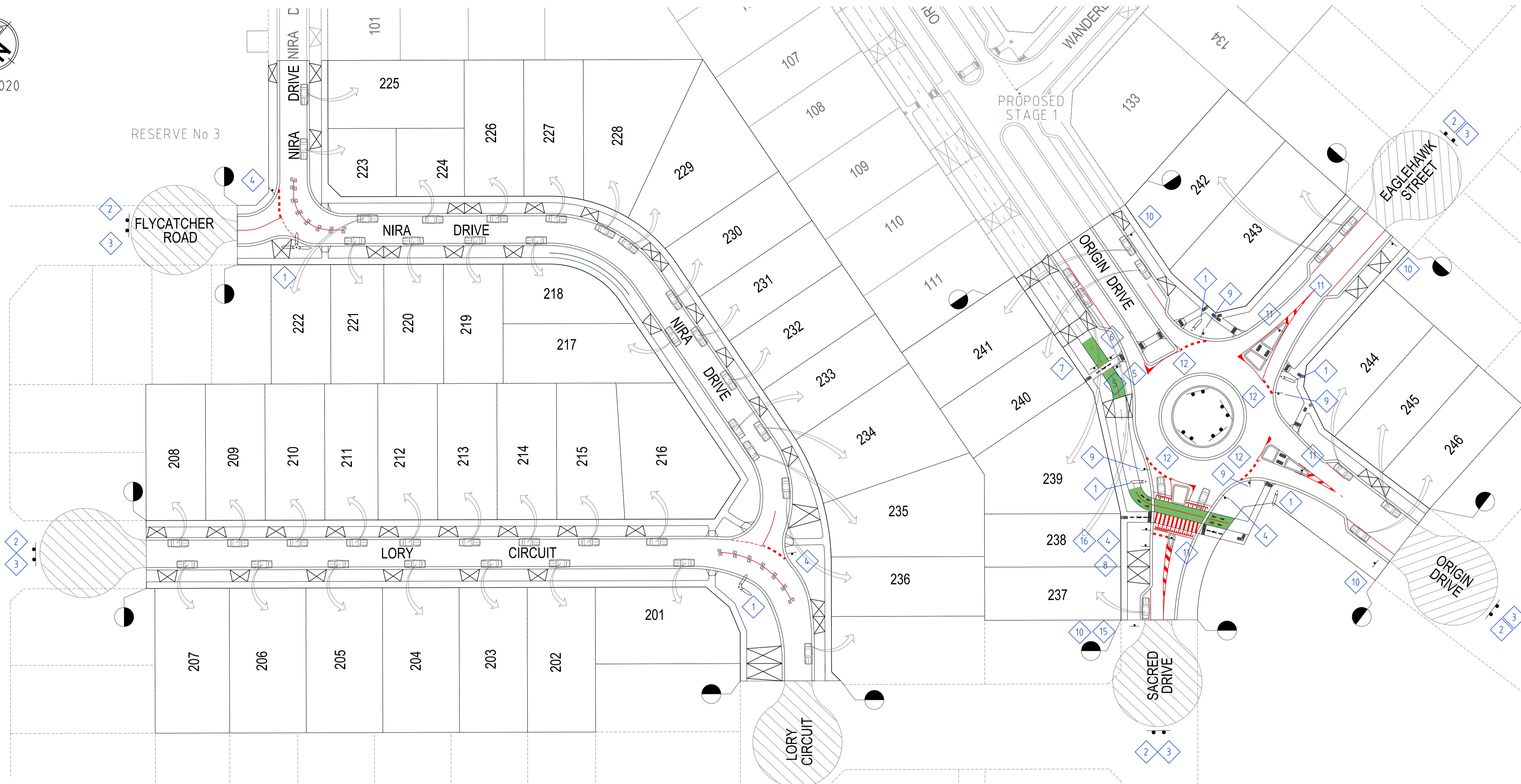




GDA2020

RESERVE No 3

PROPOSED STAGE 1



LEGEND

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

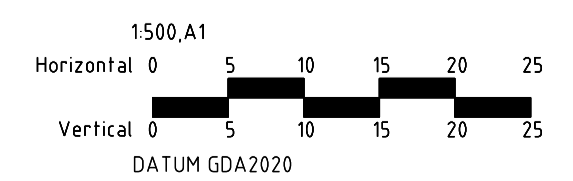
BIKE PATH CONTRASTING SURFACE COLOUR:  
FOR ENHANCED VISIBILITY AT ALL ROAD CROSSINGS AND DRIVEWAY CROSSINGS AS SHOWN  
USE GREEN EPOXY MODIFIED ACRYLIC COATING WITH A NON SLIP SURFACE.

TGSI KERB RAMP } HAZARD / DIRECTIONAL TGSIS SHOW INDICATIVELY  
TGSI DIRECTIONAL } FOOTPATH RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH EDM 403  
TGSIS 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
3	NIRA / LORY INTERSECTION LINEMARKING AND GIVEWAY SIGN ADDED	M.L.	28/09/20
2	4 BLADED ROUNDABOUT STREET SIGN RELOCATED TO APPROACHES	M.L.	18/09/20
1	ROAD NAME CHANGES & EAGLEHAWK PATH REDUCTION	M.L.	28/08/20
0	CONSTRUCTION ISSUE	M.L.	20/08/20



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

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Your world awaits  
Checked D. CAMERON  
Date 23/04/19

**REDSTONE ESTATE STAGE 2**  
SIGNAGE, LINEMARKING & CARPARKING PLAN  
VILLAWOOD PROPERTIES  
HUME CITY COUNCIL  
**CONSTRUCTION** Drg No 305913R22 Rev 3