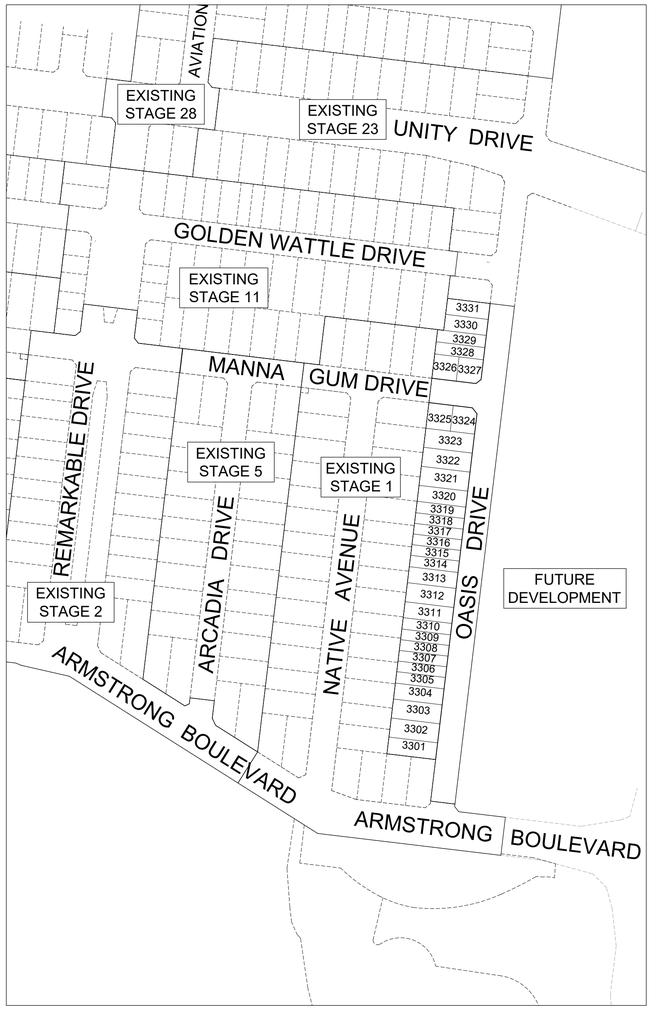
ARMSTRONG

STAGE 33

CITY OF GREATER GEELONG

GENERAL NOTES:

1. THE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT INFRASTRUCTURE DESIGN MANUAL STANDARD DRAWINGS AND GREATER GEELONG CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS. WORKS TO BE CARRIED OUT TO THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
2. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY OF WORK ON SITE IN ACCORDANCE WITH APPROPRIATE LEGISLATION. THEY SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC. NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION, AND TO PROTECT THE PUBLIC FROM HAZARDS ASSOCIATED WITH THE WORKS.
3. THE CONTRACTOR SHALL:
   - 3.1. COMPLY WITH THE "SAFETY PRECAUTIONS IN TRENCHING OPERATIONS" (CODE OF PRACTICE No.8, 1998)
   - 3.2. NOTIFY WORK SAFE OF HIS INTENTION TO COMMENCE TRENCHING OPERATIONS WHERE TRENCHES ARE 1.5 METRES OR DEEPER.
   - 3.3. ENSURE THAT THE MINE MANAGER OR HIS DEPUTY AS REQUIRED BY THE REGULATIONS IS IN ATTENDANCE WHEN TRENCHING OPERATIONS ARE IN PROGRESS.
4. THE CONTRACTOR IS TO NOTIFY COUNCIL AND ALL SERVICE AUTHORITIES SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL RELEVANT SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
6. REDGUM TREES MARKED ON THE APPROVED PLANS FOR REMOVAL MUST BE REMOVED IN ACCORDANCE WITH COUNCIL'S PLANNING PERMIT. NO EXCAVATION SHALL BE CARRIED OUT WITHIN THE TREE PROTECTION ZONE OF ANY EXISTING TREE WITHOUT WRITTEN APPROVAL FROM COUNCIL'S ENVIRONMENT DEPARTMENT.
7. ALL ROAD CHAINAGES ARE MEASURED ALONG THE ROAD CENTRELINE EXCEPT KERB RETURNS AND COURTHEADS, WHERE LIP OF KERB CHAINAGES ARE SPECIFIED. ALL DIMENSIONS AND RADII ARE GIVEN TO THE LIP OF KERB. DO NOT SCALE OFF THESE DRAWINGS, WRITTEN DIMENSIONS ONLY SHALL BE USED.
8. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
9. ALL EXCAVATED OR FILLED AREAS OUTSIDE THE ROAD RESERVES TO BE STRIPPED OF TOPSOIL AND STOCKPILED PRIOR TO EARTHWORKS COMMENCING. THESE AREAS SHALL BE RESURFACED WITH A 150mm LAYER OF TOPSOIL AS SPECIFIED.
10. NO TOPSOIL TO BE REMOVED FROM SITE.
11. NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE UNLESS DIRECTED BY THE SUPERINTENDENT.
12. FILLING ON ALLOTMENTS AND UNDER ROAD PAVEMENTS TO HAVE LEVEL 1 SUPERVISION IN ACCORDANCE WITH AS3798-1996. INDIVIDUAL LOT CERTIFICATES ARE TO BE PROVIDED TO THE SUPERINTENDENT.
13. FILLING UNDER DRIVEWAYS AND FOOTPATH IS TO BE APPROVED BY THE SUPERINTENDENT AND CONSTRUCTED IN LAYERS 150mm DEPTH. COMPACTION ACHIEVING A MINIMUM DENSITY RATIO OF 98% (STANDARD) IN ACCORDANCE WITH AS1289 CLAUSE 5.1.1.
14. CUT AND FILL BATTER SLOPES ARE NOT TO EXCEED 1 in 6 UNLESS SHOWN OTHERWISE.
15. ALL DRAINAGE PIPES ARE TO BE SPIGOT-SOCKET RUBBER RING JOINTED UNLESS STATED OTHERWISE.
16. ALL DRAINAGE TRENCHES UNDER PARKING BAYS, DRIVEWAYS, FOOTPATHS AND BEHIND KERB & CHANNEL, SHALL BE BACKFILLED WITH CRUSHED ROCK AS SPECIFIED.
17. ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILIZED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOM. SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
18. PROPERTY INLETS AS PER INFRASTRUCTURE DESIGN MANUAL (IDM) STANDARD DRAWING SD 520 ARE TO BE LOCATED 1.0m FROM LOW SIDE BOUNDARY UNLESS SHOWN OTHERWISE.
19. ALL HOUSE DRAIN CONNECTIONS ARE TO BE LOCATED NO CLOSER THAN 6.0m FROM THE SIDE BOUNDARY OR FROM EASEMENT ALONG THE SIDE BOUNDARY UNLESS NOTED OTHERWISE AND CONNECTED DIRECTLY TO UNDERGROUND DRAIN OR PIT. HOUSE DRAIN LOCATION TO BE MARKED (50mm STAMPED IMPRESSION) ON THE TOP OF THE KERB.
20. SUBSOIL DRAINS SHALL BE INSTALLED BEHIND OR BELOW ALL KERB AND CHANNEL.
21. CONDUIT LOCATIONS ARE SUBJECT TO AMENDMENT AND CONDUITS SHALL NOT BE LAID UNTIL WRITTEN APPROVAL IS GIVEN BY THE SUPERINTENDENT. CONDUITS TO BE EXTENDED TO PROPERTY LINE AND ARE REQUIRED WHEN CONNECTIONS EXTEND UNDER ROAD PAVEMENT, FOOTPATH OR OTHER INFRASTRUCTURE. BOTH KERBS ARE TO BE MARKED (50mm STAMPED IMPRESSION) WITH THE LETTERS E (ELECTRICAL), G (GAS), T (TELEPHONE), W (WATER) AND C (COUNCIL COMMUNICATION) ABOVE CONDUIT LOCATION.
22. ALL SERVICING TRENCHES UNDER ROADS, DRIVEWAYS, FOOTPATHS ETC. ARE TO BE BACKFILLED & COMPACTED WITH F.C.R. IN THE CASE OF TRENCHES UNDER ROADS WHERE BACKFILLING HAS NOT ACHIEVED THE SPECIFIED COMPACTION OR SHOWS EXCESSIVE MOVEMENT UNDER PROOF ROLLING, THE BACKFILLING SHALL BE REMOVED AND REPLACED WITH 2% STABILISED COMPACTED F.C.R.
23. NO COMMUNICATION PITS ARE TO BE LOCATED IN THE FOOTPATH.
24. VEHICULAR CROSSINGS TO BE LOCATED CLEAR OF DRAINAGE PITS, SEWER MAINTENANCE HOLES AND EXISTING TREES. VEHICLE CROSSINGS TO BE 1m FROM PROPERTY BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN. VEHICULAR CROSSINGS TO BE CONSTRUCTED AS PER CITY OF GREATER GEELONG "DESIGN NOTES No.4" DATED AUGUST 2012 & IDM STANDARD DRAWINGS SD205 to SD265.
25. ALL PEDESTRIAN CROSSINGS TO BE IN ACCORDANCE WITH INFRASTRUCTURE DESIGN MANUAL SD200.
26. ALL STREET SIGNS TO BE IN ACCORDANCE INFRASTRUCTURE DESIGN MANUAL STANDARD DRAWINGS. STREET SIGNS TO BE ATTACHED TO LIGHT POLES USING 'SINGLE DIRECTION COLLAR' OR '90° RIGHT ANGLE COLLAR' UNLESS SHOWN OTHERWISE.
27. ALL PAVEMENT MARKINGS AND TRAFFIC SIGNS SHOULD BE TO AS1742.2 AND AS1742.1 STANDARD RESPECTIVELY. TEMPORARY LINEMARKING TO BE PLACED DURING MAINTENANCE PERIOD PRIOR TO PLACEMENT OF WEARING COURSE. FINAL LINEMARKING TO BE LONG LIFE ROAD MARKING WITH LONGITUDINAL LINES IN THERMOPLASTIC AND TRANSVERSE MARKINGS IN COLD APPLIED.
28. UPON COMPLETION OF CONSTRUCTION THE WHOLE SITE SHALL BE CLEANED, GRADED, ALL RUBBISH REMOVED AND LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
29. ALL AREAS OF SUBDIVISION EXPOSED OF VEGETATION, INCLUDING NATURE STRIPS, LOTS AND RESERVES ARE TO BE FULLY GRASSED BY HYDRO MULCHING, WATERED AND MAINTAINED, UNTIL THE END OF MAINTENANCE PERIOD.
30. ALL SUMPS IN PRECAST CONCRETE PITS ARE TO BE INFILLED WITH CONCRETE FLUSH TO THE INVERT LEVEL OF THE OUTLET PIPE, UNLESS APPROVED OTHERWISE BY THE COUNCIL WORKS INSPECTOR.
31. CITY OF GREATER GEELONG REQUIRES CCTV OF ALL DRAINAGE PIPES AND PITS, PRIOR TO THE ISSUE OF THE STATEMENT OF COMPLIANCE



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Drawing Index

Drawing No.	Drawing Title	Revision
R100	COVER SHEET	0
R200	LAYOUT PLAN	0
R300	INTERSECTION DETAILS	0
R400	ROAD LONGITUDINAL SECTIONS	0
R500	ROAD CROSS SECTIONS - 01	0
R501	ROAD CROSS SECTIONS - 02	0
R502	ROAD CROSS SECTIONS - 03	0
R503	ROAD CROSS SECTIONS - 04	0
R504	ROAD CROSS SECTIONS - 05	0
R600	DRAINAGE LONG SECTIONS - 01	0
R601	DRAINAGE LONG SECTIONS - 02	0
R602	DRAINAGE LONG SECTIONS - 03	0
R700	TYPICAL DETAILS	0
R800	SIGNAGE & LINEMARKING PLAN	0

LOCALITY PLAN

MELWAYS REF: 479 F1

1:2000 20 0 20 40 60 80 100 A1
1:4000 A3

WARNING

BEWARE OF UNDERGROUND & OVERHEAD SERVICES

THE LOCATIONS OF UNDERGROUND & OVERHEAD SERVICES ARE APPROXIMATE ONLY & THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. LOCATE ALL UNDERGROUND SERVICES BEFORE COMMENCEMENT OF WORKS

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www.1100.com.au

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

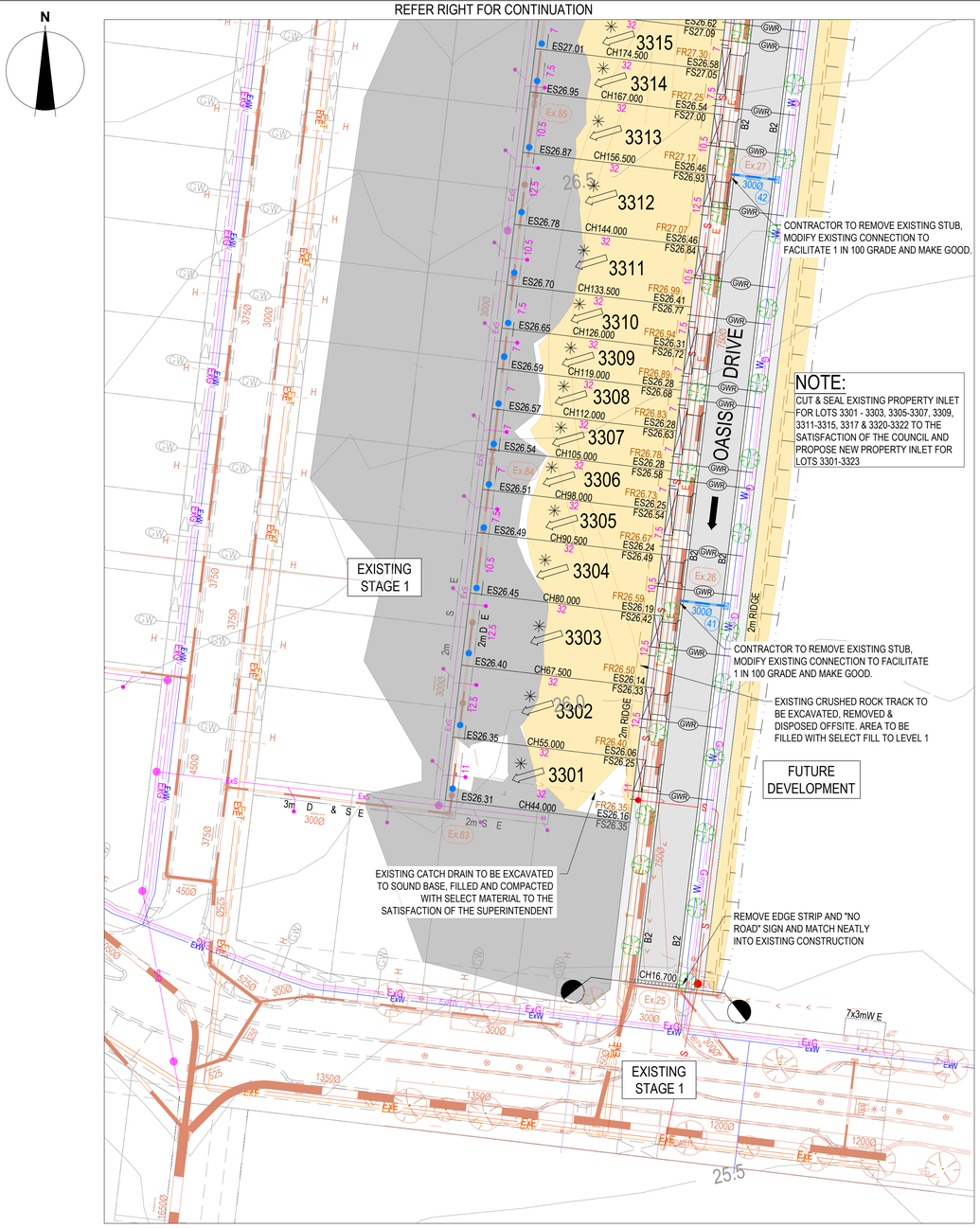
PROJECT: ARMSTRONG MT DUNEED

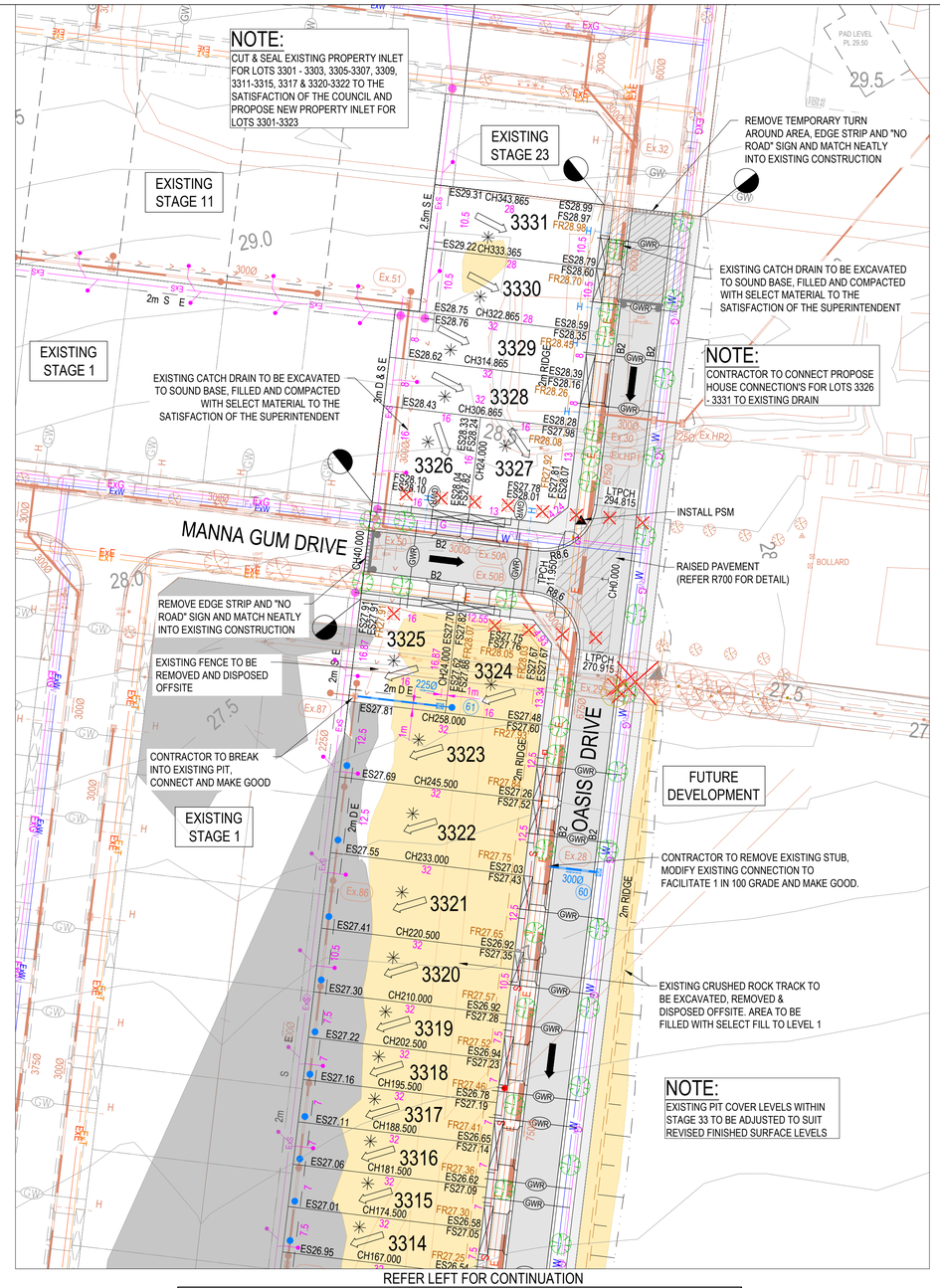
DRAWING TITLE: ARMSTRONG - STAGE 33
COVER SHEET

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
1:2000 @ A1	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R100	0

P:\2018\18001\6 - VILLAWOOD ARMSTRONG\18001\6.3\3CIVIL\2. DRAFTING\ACAD\18001\6.33 - R100 - COVER SHEET.DWG





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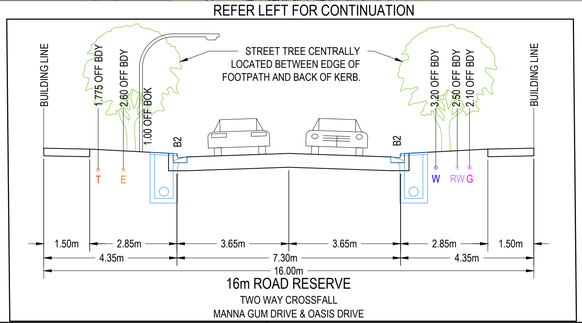


SERVICES OFFSET SCHEDULE

ROAD NAME	GAS		RECYCLE WATER		POTABLE WATER		TELSTRA		ELECTRICITY	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
MANNA GUM DRIVE	N	2.10	N	2.50	N	3.20	S	1.775	S	2.60
OASIS DRIVE	E	2.10	E	2.50	E	3.20	W	1.775	W	2.60

NOTE: STREET TREES TO BE INSTALLED IN THE CENTRE OF ALL NATURE STRIPS

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 2 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270

LEGEND - LAYOUT PLAN
- STORMWATER DRAIN, PIT & PROPERTY INLET
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- ES141.34 EXISTING SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- TW159.30 TOP OF RETAINING WALL
- BW159.30 BOTTOM OF RETAINING WALL
- RETAINING WALL
- BUILDING ENVELOPE
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- ALLOTMENT TO BE GRADED EVENLY IN DIRECTION OF FALL TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY

NOTES:
1. ALL VEHICLE AND PRAM CROSSING LAYBACKS, TO BE MINIMUM OF 1.0m FROM PITS.
2. ALL PRAM CROSSINGS TO BE A MINIMUM 2.0m FROM VEHICLE CROSSINGS.
3. ALL PRAM CROSSINGS TO BE DDA COMPLIANT.
4. VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF LANDSCAPE WORKS.
5. THE USE OF DIRECTIONAL AND HAZARD TACTILE PAVERS MUST ACCORD WITH SECTION 2.2.3.1 OF AS/NZS 1428.4:2002.
6. SEWER MAINTENANCE HOLE CONVERTER SLAB OR CONE, TO BE ROTATED TO ENSURE COVER POSITION IS CENTRALLY LOCATED WITHIN FOOTPATH.
7. CHAINAGES FOR SETOUT OF PROPERTY INLET POINTS, SERVICING FUTURE LOTS, ARE MEASURED FROM THE DOWNSTREAM PIT.
8. CONTRACTOR TO LOCATE ALL EXISTING ASSETS PRIOR TO COMMENCEMENT OF WORKS. ANY DAMAGE TO EXISTING ASSETS TO BE RECTIFIED AT CONTRACTORS EXPENSE.
9. CONTRACTOR TO VERIFY DEPTH OF EXISTING SERVICES, PRIOR TO COMMENCEMENT OF CONSTRUCTION.

NOTE: STREET TREE LOCATIONS SHOWN ARE INDICATIVE ONLY. ULTIMATE LOCATION IS TO BE PROVIDED/CONFIRMED BY LANDSCAPE ARCHITECTS

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works
DIAL 1100 BEFORE YOU DIG
www.1100.com.au

1:500 10 5 0 10 20 A1
1:1000 A3

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

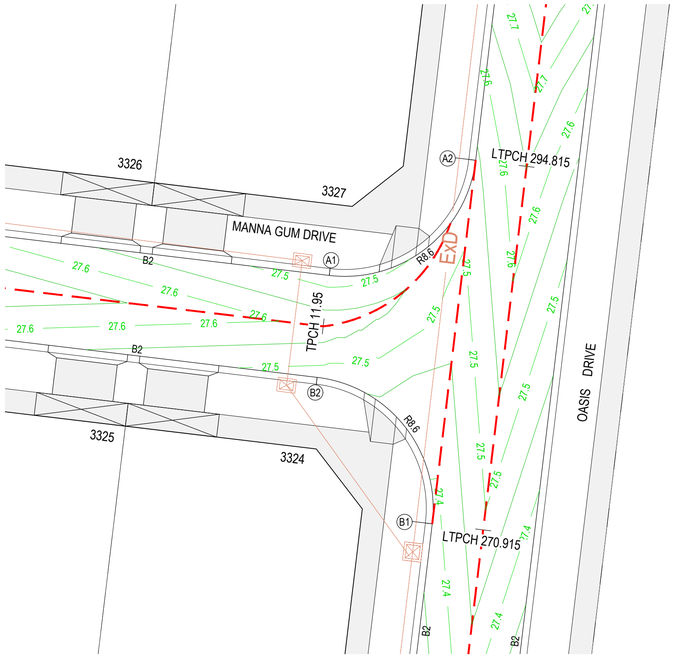
creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

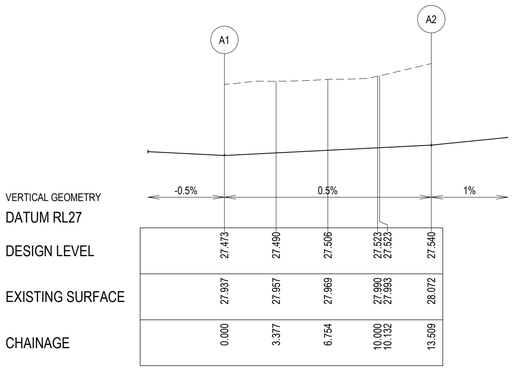
PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE: **ARMSTRONG - STAGE 33 LAYOUT PLAN**

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE AT A1	DRAWN	DESIGNED
1:500 @ A1	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R200	0



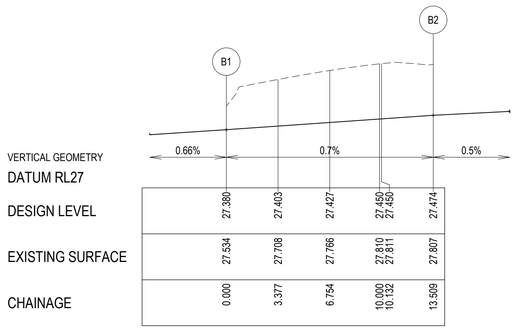


VERTICAL GEOMETRY

DATUM RL27

DESIGN LEVEL	27.473	27.490	27.506	27.523 / 27.523	27.540	
EXISTING SURFACE	27.937	27.957	27.989	27.990 / 27.990	28.072	
CHAINAGE	0.000	3.377	6.754	10.000 / 10.132	13.509	

LIP LINE A



VERTICAL GEOMETRY

DATUM RL27

DESIGN LEVEL	27.380	27.403	27.427	27.450 / 27.450	27.474	
EXISTING SURFACE	27.534	27.708	27.766	27.810 / 27.811	27.807	
CHAINAGE	0.000	3.377	6.754	10.000 / 10.132	13.509	

LIP LINE B

ALIGNMENT A

PT NO	EASTING	NORTHING	RL
A1	266689.958	5765674.464	27.473
A2	266699.518	5765681.982	27.540

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
A1 - A2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	27.506

ALIGNMENT B

Pt no	Easting	Northing	RL
B1	266696.680	5765658.251	27.380
B2	266689.163	5765667.812	27.474

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
B1 - B2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	27.427

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 3 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270

LEGEND - INTERSECTION PLAN

- STORMWATER DRAIN & PIT
- EXISTING STORMWATER DRAIN & PIT
- MAJOR CONTOUR - 0.1m
- MINOR CONTOUR - 0.05m
- CROWN / GRADE LINE

WARNING

BEWARE OF UNDERGROUND & OVERHEAD SERVICES

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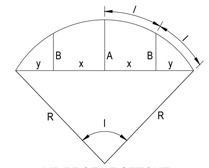
LEGEND

- EXISTING SURFACE
- DESIGN LINE



LIP PROFILE SETOUT

1:200 2 0 2 4 6 8 10 A1
1:400 HORIZONTAL A3

1:20 0.2 0 0.2 0.4 0.6 0.8 1 A1
1:40 VERTICAL A3

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

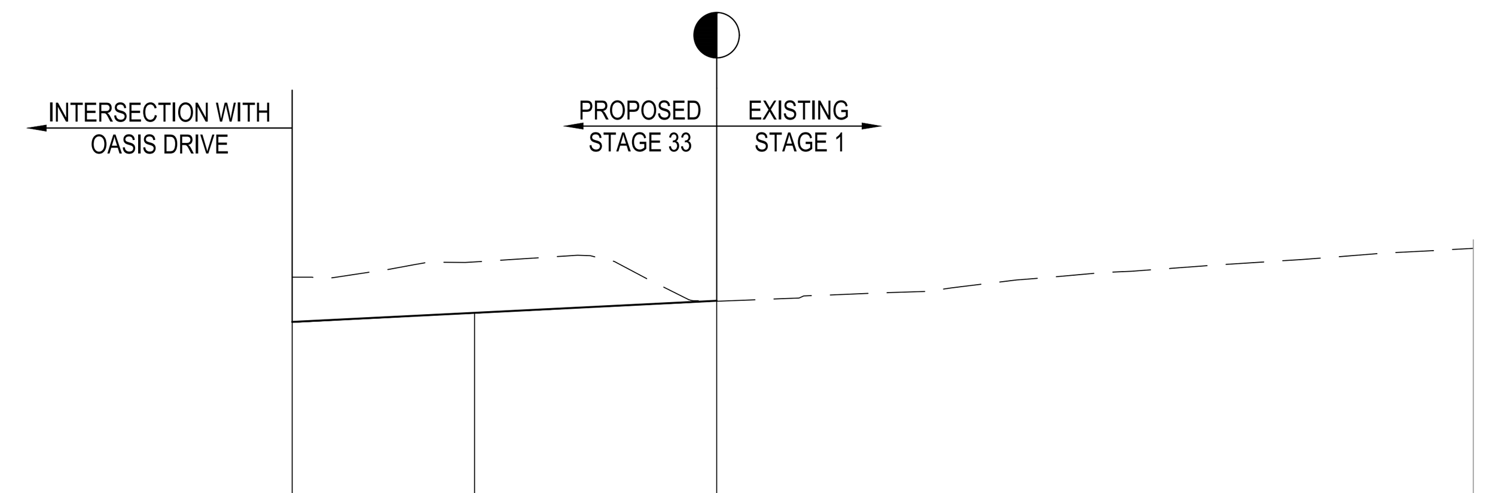
creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT: ARMSTRONG — MT DUNEED

DRAWING TITLE: ARMSTRONG - STAGE 33 INTERSECTION DETAILS

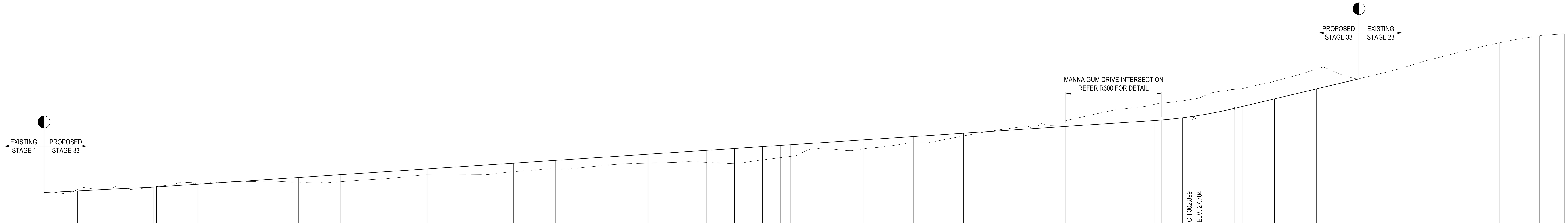
STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	**PROJECT MANAGER**	**DATE FIRST ISSUE**
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	**DRAWING No.**	**REVISION**
L013901	R300	0



VERTICAL GEOMETRY	0.5 %		0.81 %	
HORIZONTAL GEOMETRY				
DATUM RL25				
DESIGN CENTRELINE	27.586	27.646	27.726	28.128
RIGHT BACK OF KERB	27.584	27.644	27.724	
LEFT BACK OF KERB	27.584	27.644	27.724	
EXISTING SURFACE	27.881	27.983	27.726	28.071
CENTRELINE DEPTH	0.296	0.337	0.000	-0.057
CHAINAGE	11.950	24.000	40.000	90.000
	TANGENT POINT		LIMIT OF WORKS	

MANNA GUM DRIVE LONGITUDINAL SECTION



VERTICAL GEOMETRY: 0.5 % | 0.66 % | L= 20m VC | 2.37 % | 2.37 % | 2.59 % | L= 20m VC | 2.45 % | 0.5 %

HORIZONTAL GEOMETRY

DATUM RL23

DESIGN CENTRELINE	25.849	25.890	25.985	25.989	26.057	26.140	26.223	26.293	26.343	26.356	26.389	26.436	26.482	26.529
RIGHT BACK OF KERB	25.847	25.889	25.984	25.987	26.056	26.139	26.222	26.291	26.341	26.355	26.388	26.434	26.481	26.527
LEFT BACK OF KERB	25.847	25.889	25.984	25.987	26.056	26.139	26.222	26.291	26.341	26.355	26.388	26.434	26.481	26.527
EXISTING SURFACE	25.849	25.922	25.988	25.997	26.075	26.124	26.105	26.118	26.171	26.181	26.225	26.290	26.289	26.293
CENTRELINE DEPTH	0.000	0.032	0.003	0.008	0.018	-0.017	-0.118	-0.175	-0.172	-0.175	-0.165	-0.146	-0.194	-0.235
CHAINAGE	16.700	25.000	44.000	44.700	55.000	67.500	80.000	90.500	98.000	100.000	105.000	112.000	119.000	126.000
	LIMIT OF WORKS													

DESIGN CENTRELINE	26.579	26.648	26.731	26.801	26.851	26.897	26.944	26.990	27.020	27.037	27.087	27.157	27.240	27.323	27.406
RIGHT BACK OF KERB	26.577	26.647	26.730	26.800	26.849	26.896	26.942	26.989	27.019	27.035	27.085	27.155	27.238	27.321	27.404
LEFT BACK OF KERB	26.577	26.647	26.730	26.800	26.849	26.896	26.942	26.989	27.019	27.035	27.085	27.155	27.238	27.321	27.404
EXISTING SURFACE	26.366	26.437	26.526	26.580	26.602	26.598	26.567	26.660	26.717	26.749	26.935	26.934	27.082	27.257	27.457
CENTRELINE DEPTH	-0.212	-0.211	-0.205	-0.221	-0.249	-0.300	-0.377	-0.331	-0.304	-0.288	-0.152	-0.223	-0.158	-0.066	0.052
CHAINAGE	133.500	144.000	156.500	167.000	174.500	181.500	188.500	195.500	200.000	202.500	210.000	220.500	233.000	245.500	258.000

DESIGN CENTRELINE	27.491	27.637	27.652	27.706	27.746	27.813	27.941	27.987	28.177	28.425	28.674	29.580	29.776	29.849
RIGHT BACK OF KERB	27.490	27.636	27.650	27.705	27.748	27.812	27.939	27.986	28.175	28.424	28.672			
LEFT BACK OF KERB	27.490		27.650	27.705	27.748	27.812	27.939	27.986	28.175	28.424	28.672			
EXISTING SURFACE	27.636	28.038	28.072	28.129	28.175	28.313	28.413	28.430	28.614	28.918	28.674	29.568	29.744	29.791
CENTRELINE DEPTH	0.145	0.401	0.420	0.423	0.428	0.500	0.473	0.443	0.437	0.493	0.000	-0.012	-0.032	-0.058
CHAINAGE	270.915	292.899	294.815	300.000	302.899	306.865	312.899	314.865	322.865	333.365	343.865	378.815	388.815	395.000
	LTPCH		LTPCH								LIMIT OF WORKS			

OASIS DRIVE LONGITUDINAL SECTION

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 4 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270

LEGEND

- EXISTING SURFACE
- DESIGN LINE
- LEFT BACK OF KERB
- RIGHT BACK OF KERB

1:500 / 1:1000	10	5	0	10	20	A1 / A3
HORIZONTAL						
1:50 / 1:100	1	0.5	0	1	2	A1 / A3
VERTICAL						

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT

villawood properties
Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT

ARMSTRONG MT DUNEED

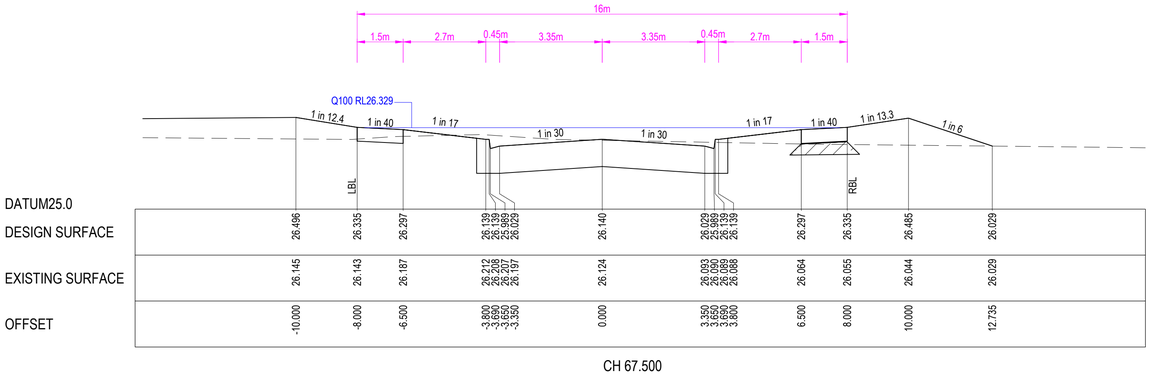
DRAWING TITLE

ARMSTRONG - STAGE 33
ROAD LONGITUDINAL SECTIONS

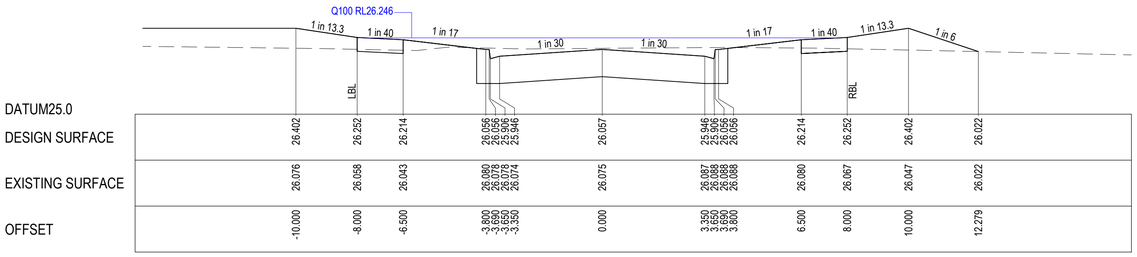
STATUS

ISSUED FOR CONSTRUCTION

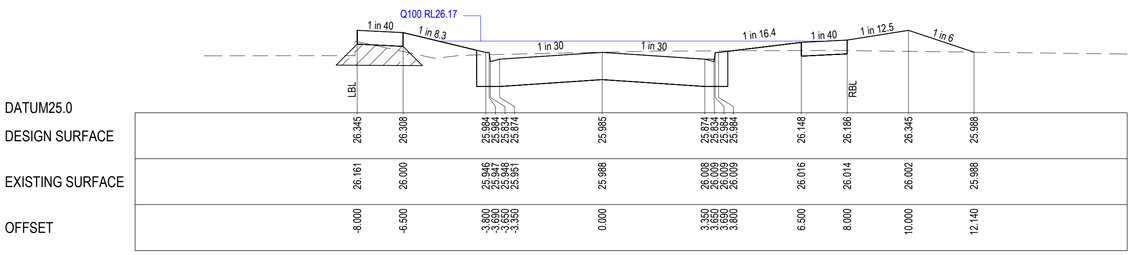
SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R400	0



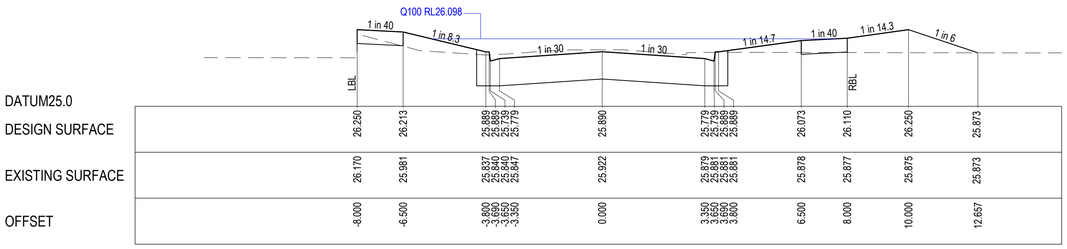
CH 67.500



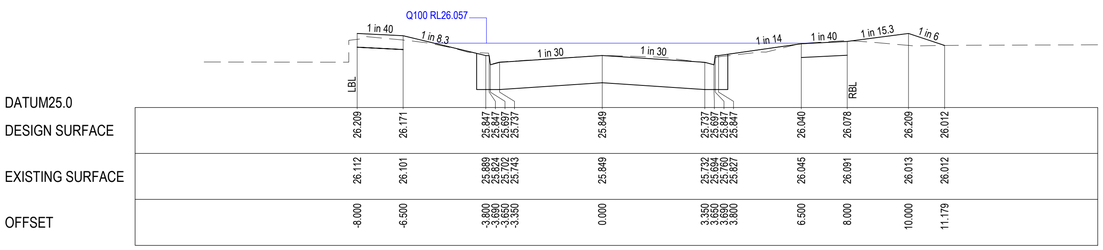
CH 55.000



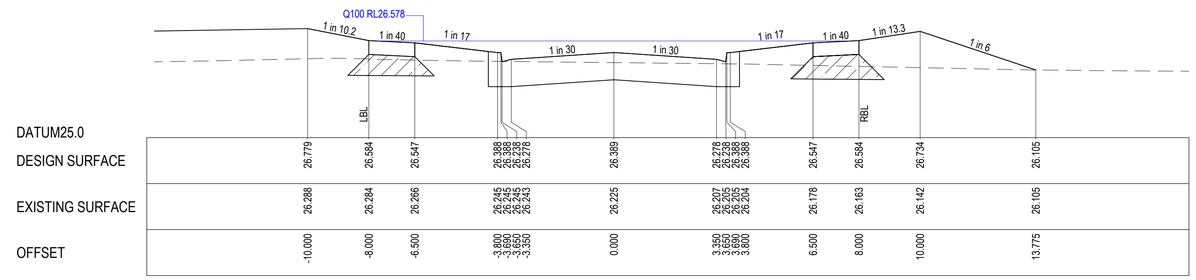
CH 44.000



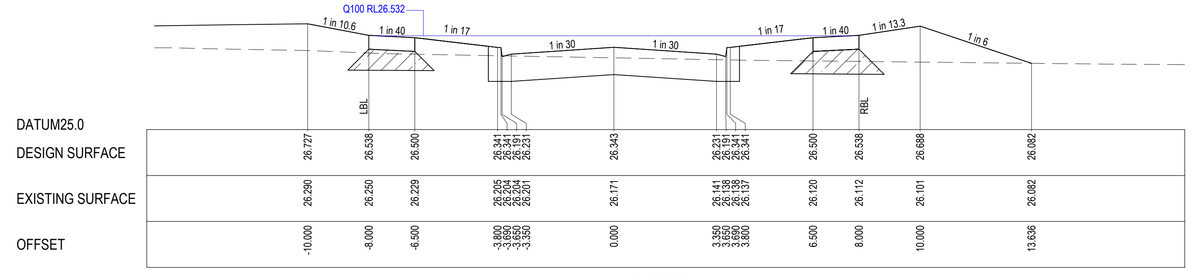
CH 25.000



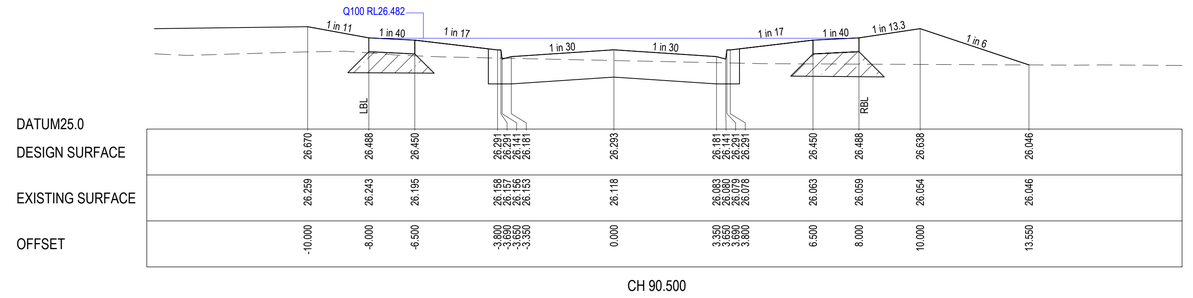
CH 16.700 (LIMIT OF WORKS)



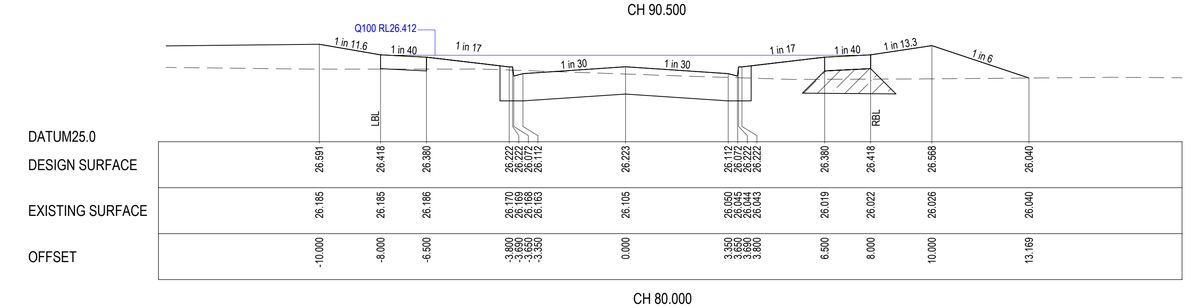
CH 105.000



CH 98.000



CH 90.500



CH 80.000

NOTE:
SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE. SELECT FILL IS TO BE TO LEVEL 1 STANDARD AND IN ACCORDANCE WITH SECTION 5.4.5 OF "ARMSTRONG CREEK PRECINCT 1 STAGES 1 & 2 GEOTECHNICAL INVESTIGATION" PREPARED BY TONKIN & TAYLOR (FILE NAME: 3187.000.R1.1, DATED DECEMBER 2012).

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

1:100 2 1 0 2 4 A1
1:200 A3
HORIZONTAL

1:50 1 0.5 0 1 2 A1
1:100 A3
VERTICAL

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 5 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270

LEGEND
EXISTING SURFACE
DESIGN LINE
Q100 LEVEL
SELECT FILL

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE: ARMSTRONG - STAGE 33
ROAD CROSS SECTIONS - 01
OASIS DRIVE

STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021

PROJECT No.	DRAWING No.	REVISION
L013901	R500	0

P:\2018\180016 - VILLAWOOD ARMSTRONG\180016.33\CIVIL\2. DRAFTING\ACAD\180016.33 - R500 - ROAD CROSS SECTIONS.DWG

NOTE:
SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE. SELECT FILL IS TO BE TO LEVEL 1 STANDARD AND IN ACCORDANCE WITH SECTION 5.4.5 OF "ARMSTRONG CREEK PRECINCT 1 STAGES 1 & 2 GEOTECHNICAL INVESTIGATION" PREPARED BY TONKIN & TAYLOR (FILE NAME: 3187.000.R1.1, DATED DECEMBER 2012).

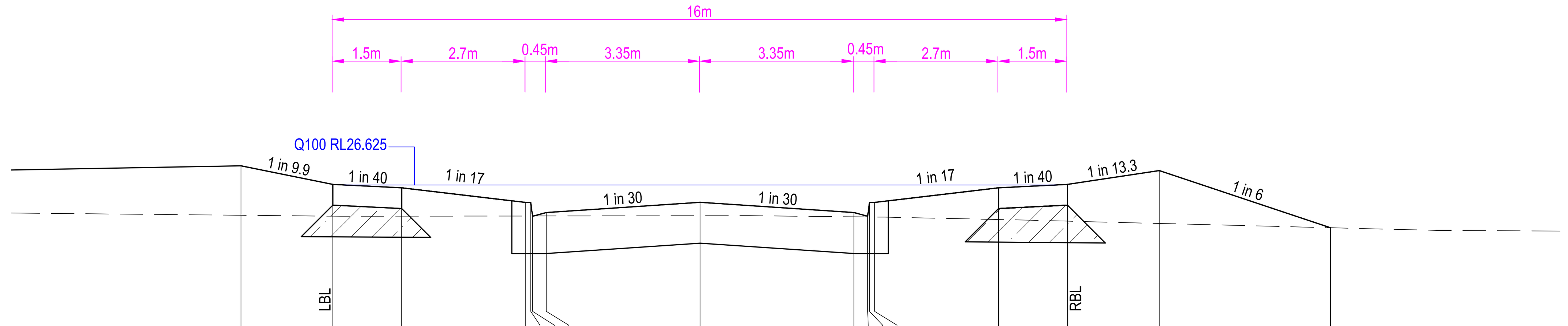
NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

1:100 / 1:200 — 2 1 0 2 4 — A1 / A3 — HORIZONTAL
1:50 / 1:100 — 1 0.5 0 1 2 — A1 / A3 — VERTICAL

Certification No: 15270

LEGEND

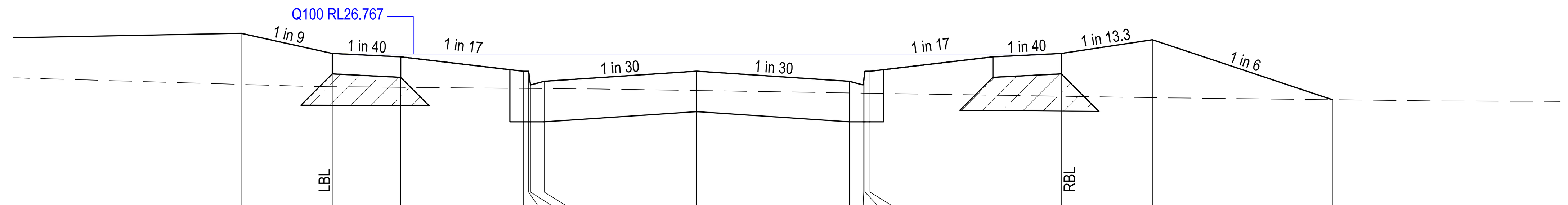
- EXISTING SURFACE (dashed line)
- DESIGN LINE
- Q100 LEVEL
- SELECT FILL (hatched)



DATUM25.0

DESIGN SURFACE	26.832	26.631	26.593	26.434	26.434	26.284	26.324	26.436	26.324	26.284	26.434	26.434	26.593	26.631	26.781	26.159
EXISTING SURFACE	26.295	26.285	26.285	26.287	26.287	26.287	26.287	26.290	26.278	26.276	26.276	26.276	26.249	26.231	26.206	26.159
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.727

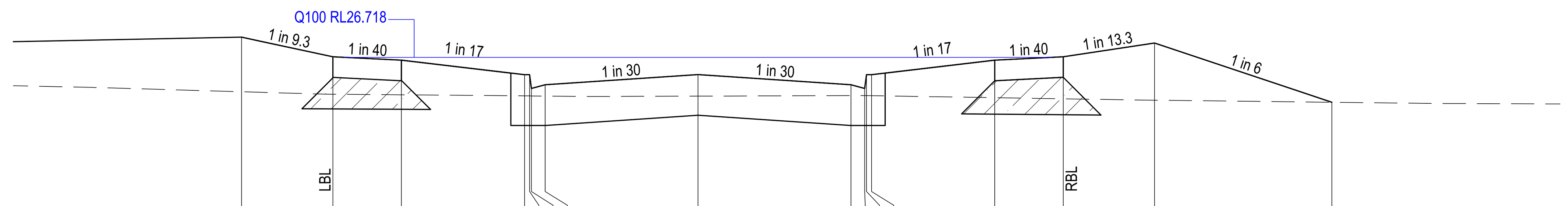
CH 112.000



DATUM25.0

DESIGN SURFACE	26.995	26.773	26.736	26.577	26.577	26.427	26.467	26.579	26.467	26.427	26.577	26.577	26.736	26.773	26.923	26.265
EXISTING SURFACE	26.433	26.408	26.402	26.390	26.390	26.389	26.388	26.366	26.340	26.337	26.337	26.336	26.315	26.303	26.288	26.265
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.950

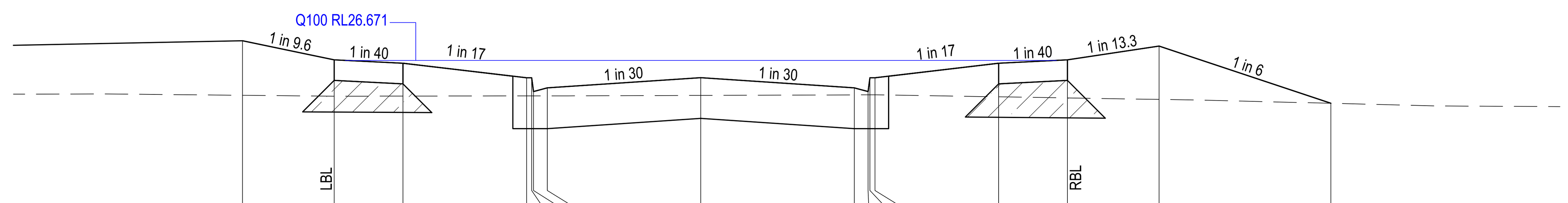
CH 133.500



DATUM25.0

DESIGN SURFACE	26.938	26.724	26.686	26.527	26.527	26.377	26.417	26.529	26.417	26.377	26.527	26.527	26.686	26.724	26.874	26.226
EXISTING SURFACE	26.341	26.314	26.307	26.296	26.295	26.295	26.294	26.293	26.299	26.299	26.299	26.298	26.276	26.264	26.249	26.226
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.885

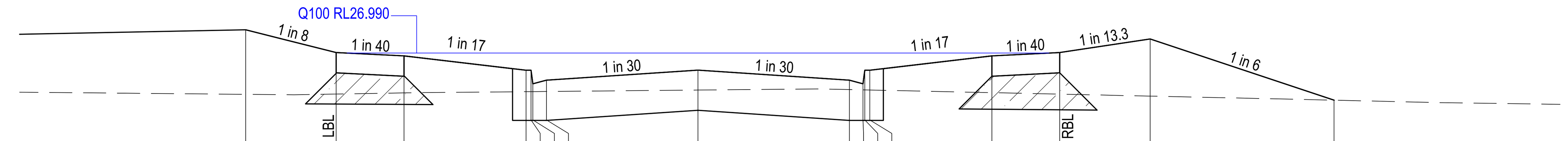
CH 126.000



DATUM25.0

DESIGN SURFACE	26.885	26.677	26.640	26.481	26.481	26.331	26.371	26.482	26.371	26.331	26.481	26.481	26.640	26.677	26.827	26.202
EXISTING SURFACE	26.290	26.280	26.281	26.283	26.283	26.283	26.283	26.289	26.294	26.295	26.295	26.295	26.273	26.261	26.245	26.202
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.748

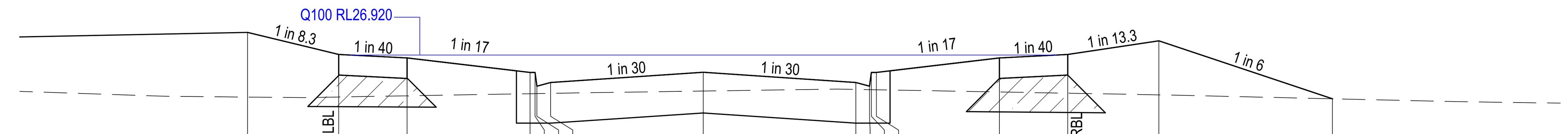
CH 119.000



DATUM26.0

DESIGN SURFACE	27.247	26.996	26.958	26.800	26.800	26.650	26.690	26.801	26.690	26.650	26.800	26.800	26.958	26.996	27.146	26.468
EXISTING SURFACE	26.533	26.536	26.549	26.563	26.563	26.563	26.565	26.580	26.586	26.583	26.582	26.581	26.552	26.535	26.513	26.468
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	14.065

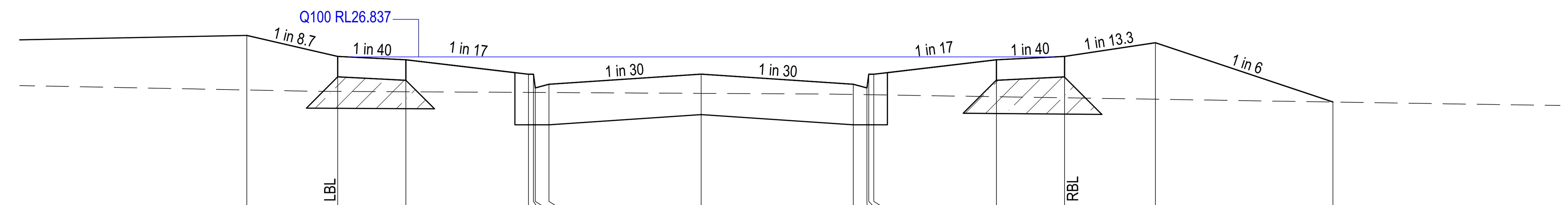
CH 167.000



DATUM26.0

DESIGN SURFACE	27.168	26.926	26.889	26.730	26.730	26.580	26.620	26.731	26.620	26.580	26.730	26.730	26.889	26.926	27.076	26.441
EXISTING SURFACE	26.460	26.461	26.474	26.497	26.498	26.499	26.501	26.526	26.544	26.541	26.541	26.540	26.516	26.503	26.485	26.441
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.808

CH 156.500



DATUM25.0

DESIGN SURFACE	27.074	26.843	26.806	26.647	26.647	26.497	26.537	26.648	26.537	26.497	26.647	26.647	26.806	26.843	26.993	26.342
EXISTING SURFACE	26.474	26.459	26.455	26.447	26.447	26.447	26.446	26.437	26.425	26.422	26.422	26.421	26.400	26.388	26.373	26.342
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.907

CH 144.000

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE:
ARMSTRONG - STAGE 33
ROAD CROSS SECTIONS - 02
OASIS DRIVE

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R501	0

P:\2018\180016 - VILLAWOOD ARMSTRONG\180016.33\CIVIL\2. DRAFTING\ACAD\180016.33 - R500 - ROAD CROSS SECTIONS.DWG

NOTE:
SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE. SELECT FILL IS TO BE TO LEVEL 1 STANDARD AND IN ACCORDANCE WITH SECTION 5.4.5 OF "ARMSTRONG CREEK PRECINCT 1 STAGES 1 & 2 GEOTECHNICAL INVESTIGATION" PREPARED BY TONKIN & TAYLOR (FILE NAME: 3187.000.R1.1, DATED DECEMBER 2012).

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

1:100 2 1 0 2 4 A1
1:200 A3
HORIZONTAL

1:50 1 0.5 0 1 2 A1
1:100 A3
VERTICAL

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

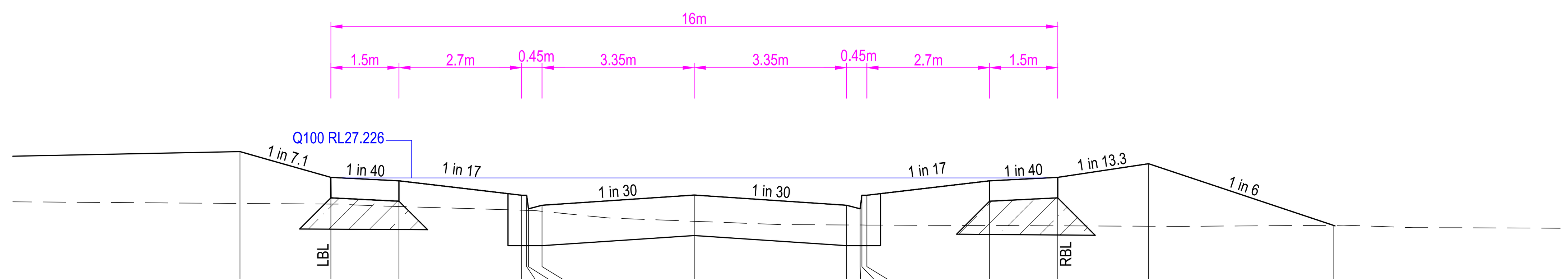
Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 7 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270

LEGEND

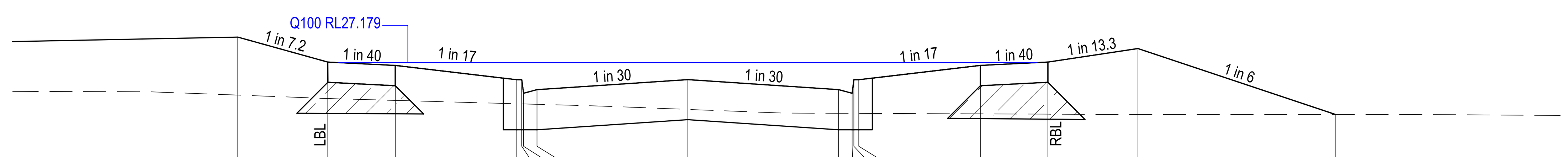
- EXISTING SURFACE
- DESIGN LINE
- Q100 LEVEL
- SELECT FILL



DATUM26.0

DESIGN SURFACE	27.515	27.232	27.194	27.035	27.035	26.885	26.925	27.037	26.925	26.885	27.035	27.035	27.194	27.232	27.382	26.705
EXISTING SURFACE	26.945	26.938	26.911	26.871	26.869	26.869	26.858	26.749	26.708	26.708	26.707	26.707	26.701	26.698	26.694	26.705
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	14.063

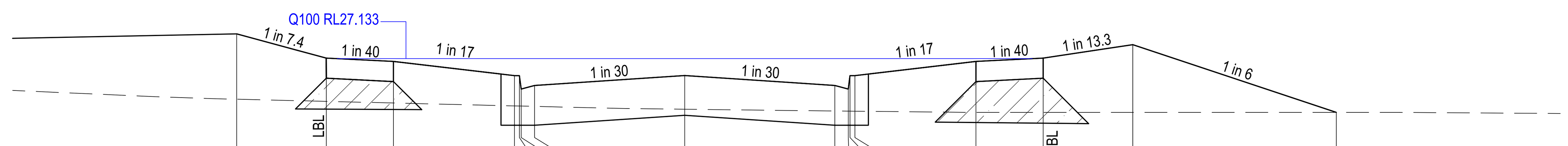
CH 202.500



DATUM26.0

DESIGN SURFACE	27.462	27.185	27.148	26.989	26.989	26.839	26.879	26.990	26.879	26.839	26.989	26.989	27.148	27.185	27.335	26.604
EXISTING SURFACE	26.819	26.780	26.760	26.722	26.721	26.720	26.716	26.660	26.617	26.616	26.616	26.616	26.610	26.607	26.604	26.604
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	14.385

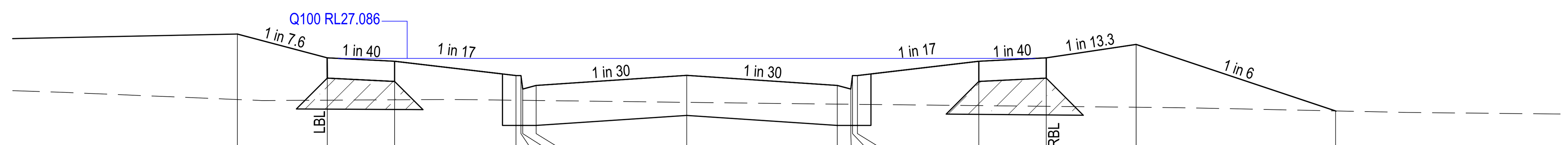
CH 195.500



DATUM26.0

DESIGN SURFACE	27.410	27.139	27.101	26.942	26.942	26.792	26.832	26.944	26.832	26.792	26.942	26.942	27.101	27.139	27.289	26.532
EXISTING SURFACE	26.679	26.655	26.637	26.604	26.603	26.602	26.599	26.567	26.547	26.546	26.546	26.545	26.531	26.532	26.532	26.532
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	14.543

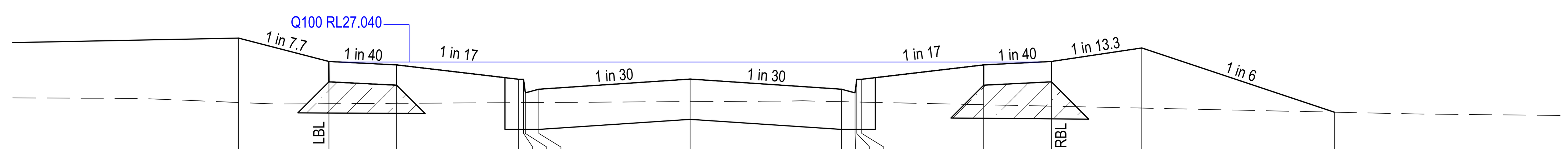
CH 188.500



DATUM26.0

DESIGN SURFACE	27.357	27.092	27.055	26.896	26.896	26.746	26.786	26.897	26.786	26.746	26.896	26.896	27.055	27.092	27.242	26.502
EXISTING SURFACE	26.629	26.622	26.626	26.621	26.621	26.620	26.619	26.598	26.578	26.577	26.576	26.576	26.562	26.554	26.543	26.502
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	14.439

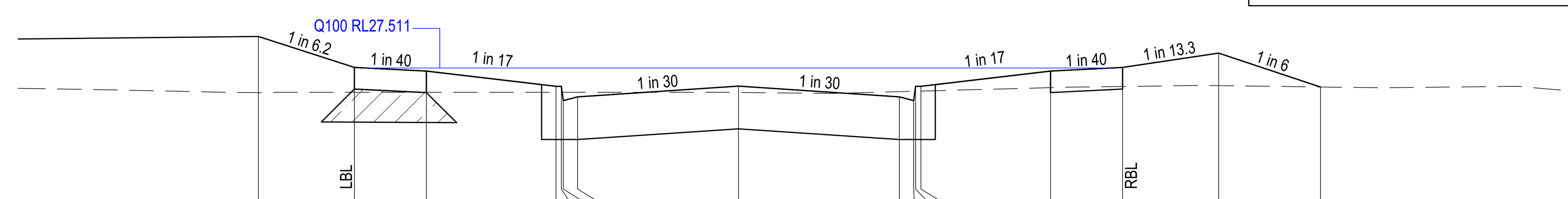
CH 181.500



DATUM26.0

DESIGN SURFACE	27.304	27.046	27.008	26.849	26.849	26.699	26.739	26.851	26.739	26.699	26.849	26.849	27.008	27.046	27.196	26.485
EXISTING SURFACE	26.593	26.579	26.583	26.591	26.591	26.591	26.592	26.602	26.601	26.598	26.598	26.596	26.568	26.552	26.530	26.485
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	14.264

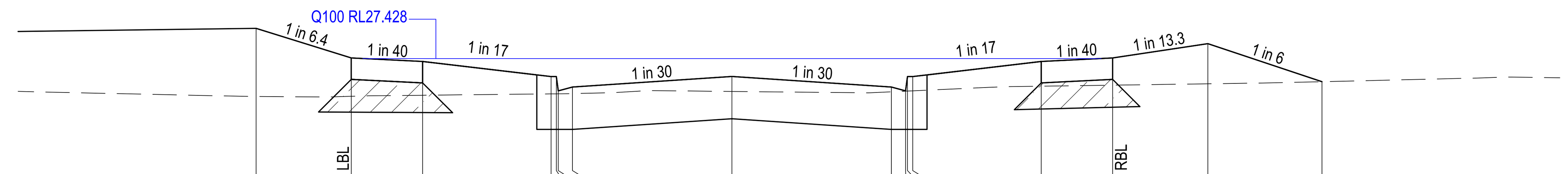
CH 174.500



DATUM26.0

DESIGN SURFACE	27.840	27.517	27.480	27.321	27.321	27.171	27.211	27.323	27.211	27.171	27.321	27.321	27.480	27.517	27.667	27.314
EXISTING SURFACE	27.255	27.258	27.258	27.258	27.258	27.258	27.258	27.257	27.265	27.269	27.270	27.271	27.307	27.319	27.328	27.314
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	12.122

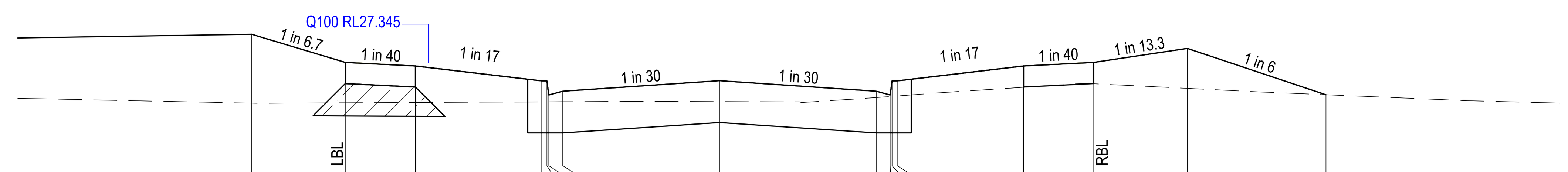
CH 245.500



DATUM26.0

DESIGN SURFACE	27.746	27.434	27.397	27.238	27.238	27.088	27.128	27.240	27.128	27.088	27.238	27.238	27.397	27.434	27.584	27.184
EXISTING SURFACE	27.029	27.031	27.042	27.056	27.057	27.057	27.060	27.082	27.078	27.085	27.086	27.088	27.137	27.148	27.162	27.184
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	12.399

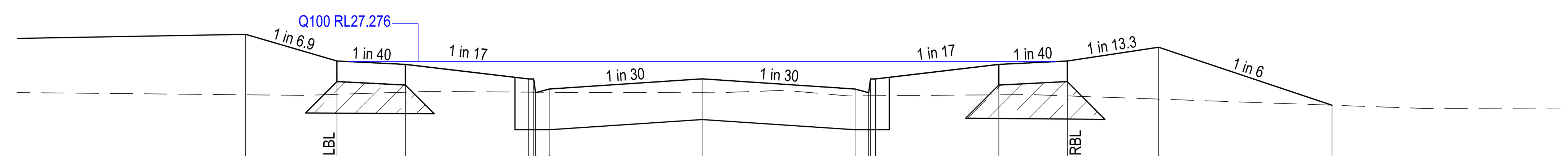
CH 233.000



DATUM26.0

DESIGN SURFACE	27.651	27.351	27.314	27.155	27.155	27.005	27.045	27.157	27.045	27.005	27.155	27.155	27.314	27.351	27.501	27.007
EXISTING SURFACE	26.917	26.921	26.925	26.931	26.931	26.931	26.932	26.934	26.977	26.988	26.990	26.994	27.087	27.125	27.075	27.007
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	12.965

CH 220.500



DATUM26.0

DESIGN SURFACE	27.572	27.282	27.244	27.085	27.085	26.935	26.975	27.087	26.975	26.935	27.085	27.085	27.244	27.282	27.432	26.799
EXISTING SURFACE	26.912	26.917	26.941	26.941	26.941	26.941	26.939	26.935	26.900	26.901	26.902	26.902	26.912	26.900	26.865	26.799
OFFSET	-10.000	-8.000	-6.500	-3.800	-3.690	-3.650	-3.350	0.000	3.350	3.650	3.690	3.800	6.500	8.000	10.000	13.798

CH 210.000

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT
villawood properties
Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT
ARMSTRONG MT DUNEED

DRAWING TITLE
**ARMSTRONG - STAGE 33
ROAD CROSS SECTIONS - 03
OASIS DRIVE**

STATUS
ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021

PROJECT No.	DRAWING No.	REVISION
L013901	R502	0

P:\2018\180016 - VILLAWOOD ARMSTRONG\180016.33\CIVIL\2. DRAFTING\ACAD\180016.33 - R500 - ROAD CROSS SECTIONS.DWG

NOTE:
SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE. SELECT FILL IS TO BE TO LEVEL 1 STANDARD AND IN ACCORDANCE WITH SECTION 5.4.5 OF "ARMSTRONG CREEK PRECINCT 1 STAGES 1 & 2 GEOTECHNICAL INVESTIGATION" PREPARED BY TONKIN & TAYLOR (FILE NAME: 3187.000.R1.1, DATED DECEMBER 2012).

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

1:100 2 1 0 2 4 A1
1:200 A3
HORIZONTAL

1:50 1 0.5 0 1 2 A1
1:100 A3
VERTICAL

LEGEND

- EXISTING SURFACE
- DESIGN LINE
- Q100 LEVEL
- SELECT FILL

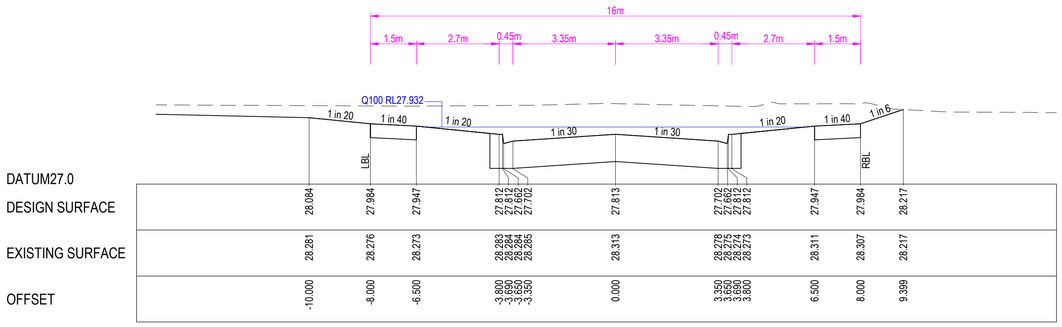
CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

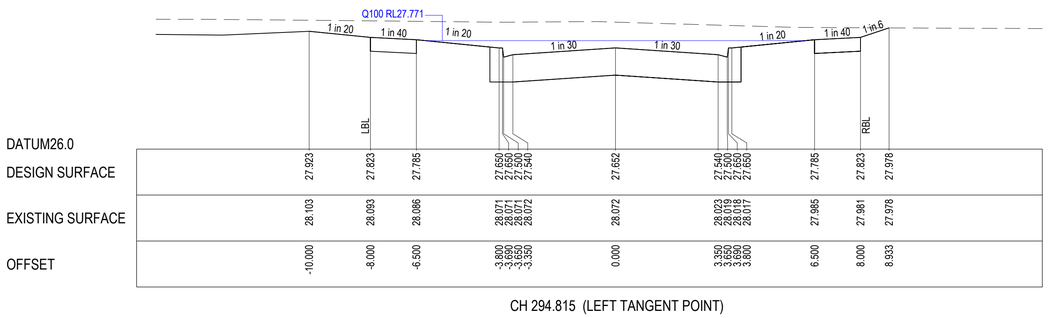
Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 8 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

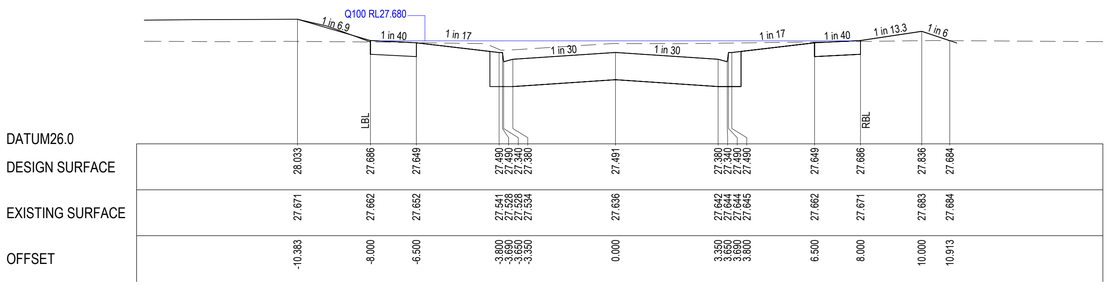
Certification No: 15270



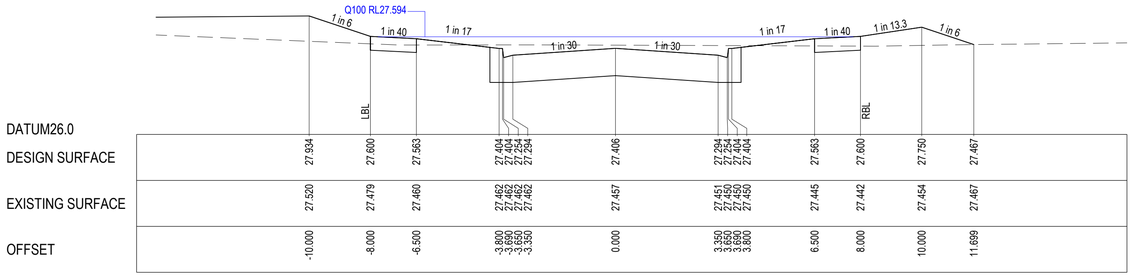
CH 306.865



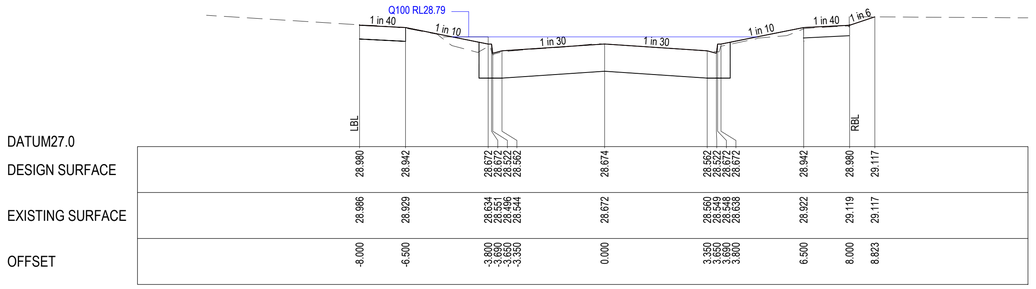
CH 294.815 (LEFT TANGENT POINT)



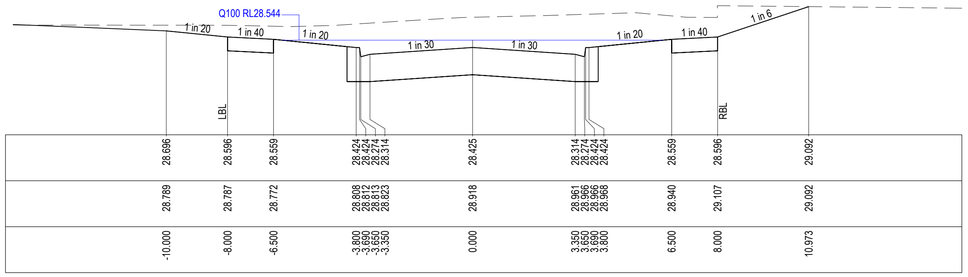
CH 270.915 (LEFT TANGENT POINT)



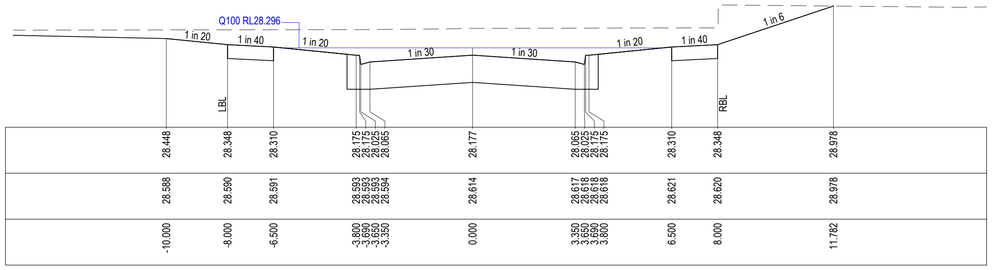
CH 258.000



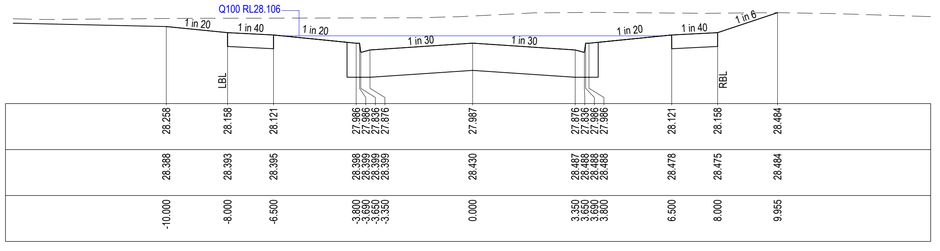
CH 343.865 (LIMIT OF WORKS)



CH 333.365



CH 322.865



CH 314.865

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

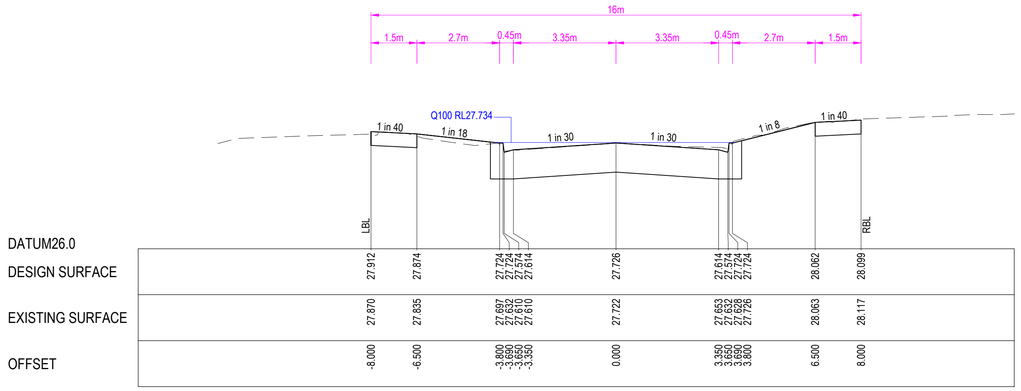
PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE:
ARMSTRONG - STAGE 33
ROAD CROSS SECTIONS - 04
OASIS DRIVE

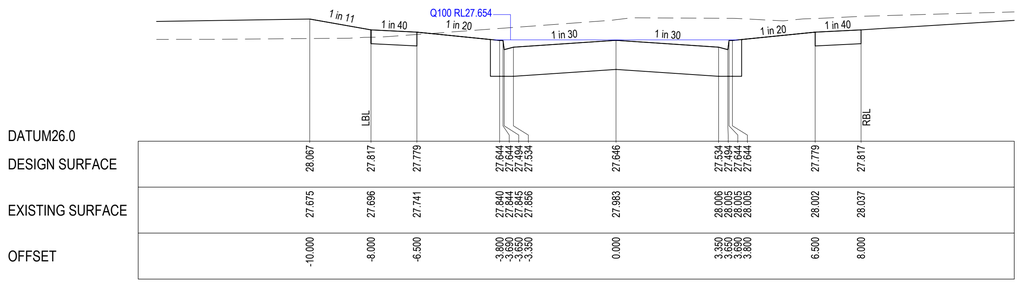
STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R503	0

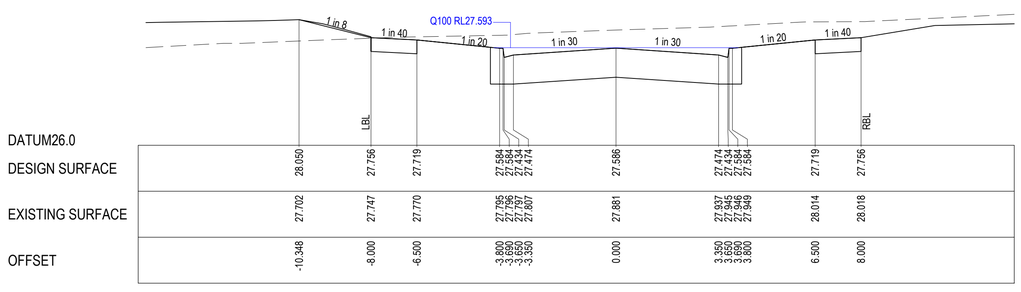
P:\2018\180016 - VILLAWOOD ARMSTRONG\180016.33\CIVIL\2. DRAFTING\ACAD\180016.33 - R500 - ROAD CROSS SECTIONS.DWG



CH 40.000 (LIMIT OF WORKS)



CH 24.000



CH 11.950 (TANGENT POINT)

NOTE:
SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE. SELECT FILL IS TO BE TO LEVEL 1 STANDARD AND IN ACCORDANCE WITH SECTION 5.4.5 OF "ARMSTRONG CREEK PRECINCT 1 STAGES 1 & 2 GEOTECHNICAL INVESTIGATION" PREPARED BY TONKIN & TAYLOR (FILE NAME: 3187.000.R1.1, DATED DECEMBER 2012).

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

1:100 2 1 0 2 4 A1
1:200 A3
HORIZONTAL

1:50 1 0.5 0 1 2 A1
1:100 A3
VERTICAL

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 9 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270

LEGEND
- EXISTING SURFACE
- DESIGN LINE
- Q100 LEVEL
- SELECT FILL

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT
villawood properties
Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT
ARMSTRONG
MT DUNEED

DRAWING TITLE
ARMSTRONG - STAGE 33
ROAD CROSS SECTIONS - 05
MANNA GUM DRIVE

STATUS
ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021

PROJECT No.	DRAWING No.	REVISION
L013901	R504	0

P:\2018\180016 - VILLAWOOD ARMSTRONG\180016.33\CIVIL\2. DRAFTING\ACAD\180016.33 - R360 - ROAD CROSS SECTIONS.DWG

NOTES

1. PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm NOM. SIZE CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98% MODIFIED RELATIVE COMPACTION IN 150mm THICK LAYER FOR THE FOLLOWING:
   - BENEATH DRIVEWAY CROSSOVERS TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.
   - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE.
2. ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILISED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOMINAL SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
3. ALL DRAINAGE PIPES TO BE SPIGOT-SOCKET RUBBER RING JOINTED (RRJ).
4. ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
5. WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.
6. ALL SPLAYED SECTIONS OF PIPE ARE TO BE BACKFILLED WITH 2% STABILIZED SAND, 300mm ABOVE TOP OF PIPE

DRAINAGE PIPES

ALL STORMWATER DRAINAGE PIPES SHALL NOT BE SUBJECTED TO CONSTRUCTION TRAFFIC LOADING DURING CONSTRUCTION UNLESS THE PIPE STRENGTH CHARACTERISTICS HAVE BEEN COMPUTED AND APPROVED BY THE CONTRACTORS ENGINEER. COMPUTATIONS ARE TO ACCORD WITH AS.3725-1989, LOADS ON BURIED PIPES. CONCRETE PIPES DAMAGED DUE TO CONSTRUCTION LOADS SHALL BE REPAIRED AT THE CONTRACTORS COST

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- FUTURE DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- CRUSHED ROCK BACKFILL

NOTE:

IN ACCORDANCE WITH C.O.G.G DESIGN NOTE 8 (DATED JANUARY 2020) EXISTING DRAINAGE LOCATED WITHIN PROPOSED STAGE WORKS ARE REQUIRED TO BE RE-CCTV'D TO CONFIRM NO CONSEQUENTIAL DAMAGE HAS OCCURRED

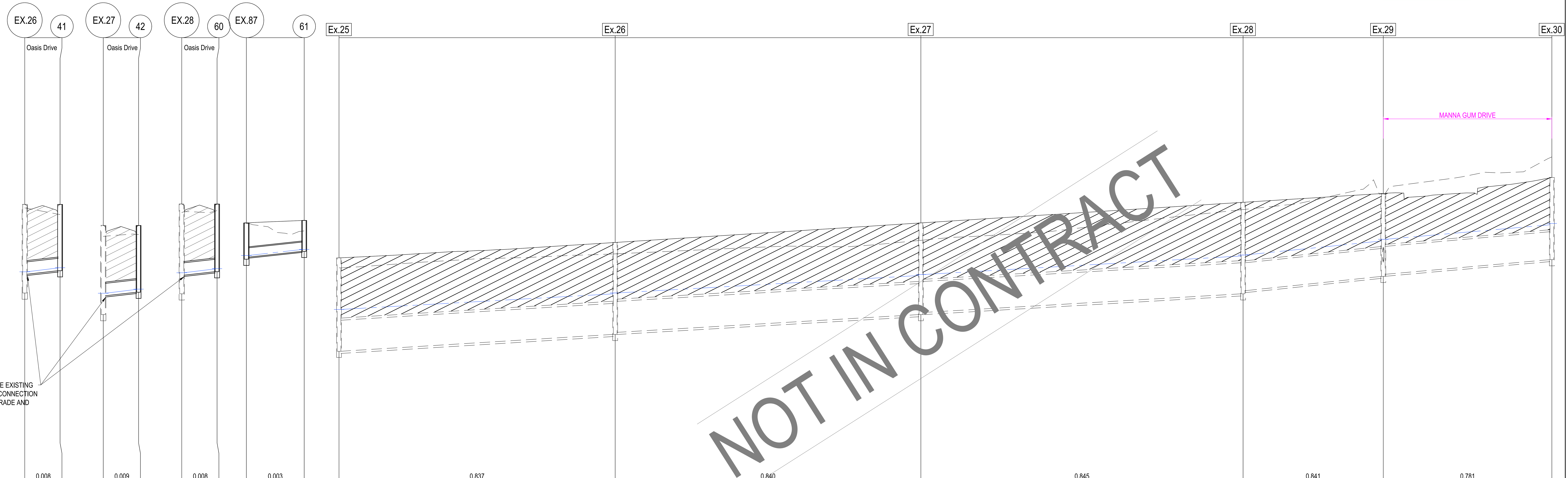
CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 10 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270



CONTRACTOR TO REMOVE EXISTING STUB, MODIFY EXISTING CONNECTION TO FACILITATE 1 IN 100 GRADE AND MAKE GOOD.

	EX.26 – 41		EX.27 – 42		EX.28 – 60		EX.87 – 61	
DESIGN FLOW (m3/s)	0.008		0.009		0.008		0.003	
CAPACITY (m3/s)	0.097		0.097		0.097		0.045	
AT GRADE VELOCITY (m/s)	1.37		1.37		1.37		1.13	
PIPE SIZE (mm)	300Ø		300Ø		300Ø		225Ø	
GRADE	1 in 100		1 in 100		1 in 100		1 in 100	
DATUM	18.0		19.0		19.0		20.0	
DEPTH TO INVERT	2.144 1.690	1.603	2.157 1.702	1.614	2.173 1.723	1.635	0.876 0.826	0.747
HYDRAULIC GRADE LINE	24.639	24.733 24.738	25.121	25.215 25.221	25.616	25.711 25.716	27.034	27.179 27.181
INVERT LEVEL	24.126 24.580	24.665	24.605 25.060	25.145	25.107 25.557	25.642	26.944 26.994	27.134
FINISHED SURFACE LEVELS	26.270	26.268	26.762	26.759	27.280	27.277	27.820	27.881
EXISTING SURFACE LEVEL	26.185	26.023	26.497	26.541	27.071	27.119	27.801	27.628
CHAINAGE	0.000	8.550	0.000	8.550	0.000	8.550	0.000	14.000
(Reach Length)	(8.550)		(8.550)		(8.550)		(14.000)	

	Ex.25		Ex.26		Ex.27		Ex.28		Ex.29		Ex.30
DESIGN FLOW (m3/s)		0.837		0.840		0.845		0.841		0.781	
CAPACITY (m3/s)		0.870		0.848		0.848		0.849		0.784	
AT GRADE VELOCITY (m/s)		1.97		1.92		1.92		2.37		2.19	
PIPE SIZE (mm)		750Ø		750Ø		750Ø		675Ø		675Ø	
GRADE		1 in 164		1 in 172		1 in 172		1 in 98		1 in 115	
DATUM	19.0										
DEPTH TO INVERT	2.258 2.258		2.223 2.173		2.216 2.166		2.212 2.137		2.005 1.955		1.988
HYDRAULIC GRADE LINE	24.729		25.106 25.128		25.549 25.573		26.022 26.046		26.385 26.424		26.776 26.810
INVERT LEVEL	23.718 23.718		24.126 24.176		24.605 24.655		25.107 25.182		25.529 25.579		25.934
FINISHED SURFACE LEVELS	25.976		26.349		26.821		27.320		27.534		27.922
EXISTING SURFACE LEVEL	25.734		26.073		26.401		27.145		27.521		28.417
CHAINAGE	0.000		66.850		140.850		218.850		252.787		293.594
(Reach Length)		(66.850)		(74.000)		(78.000)		(33.937)		(40.806)	

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT
villawood properties
Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT
ARMSTRONG MT DUNEED

DRAWING TITLE
ARMSTRONG - STAGE 33
DRAINAGE LONG SECTIONS - 01

STATUS
ISSUED FOR CONSTRUCTION

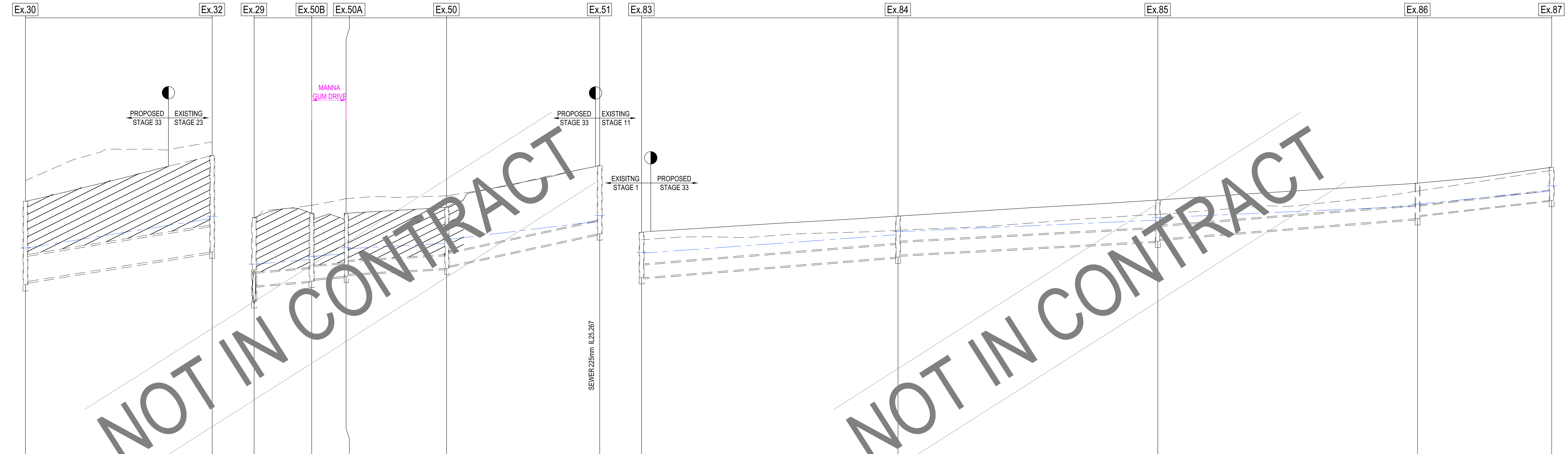
SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R600	0

P:\2018\180016 - VILLAWOOD ARMSTRONG\180016.33\CIVIL\2. DRAFTING\ACAD\180016.33 - R600 - DRAINAGE LONG SECTIONS.DWG

NOTES
1. PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm NOM. SIZE CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98% MODIFIED RELATIVE COMPACTION IN 150mm THICK LAYER FOR THE FOLLOWING:
   - BENEATH DRIVEWAY CROSSOVERS TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.
   - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE.
2. ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILISED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOMINAL SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
3. ALL DRAINAGE PIPES TO BE SPIGOT-SOCKET RUBBER RING JOINTED (RRJ).
4. ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
5. WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.
6. ALL SPLAYED SECTIONS OF PIPE ARE TO BE BACKFILLED WITH 2% STABILIZED SAND, 300mm ABOVE TOP OF PIPE

NOTE:
IN ACCORDANCE WITH C.O.G.G DESIGN NOTE 8 (DATED JANUARY 2020) EXISTING DRAINAGE LOCATED WITHIN PROPOSED STAGE WORKS ARE REQUIRED TO BE RE-CCTV'D TO CONFIRM NO CONSEQUENTIAL DAMAGE HAS OCCURRED

LEGEND
- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- FUTURE DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- CRUSHED ROCK BACKFILL



	Ex.30	Ex.30 – Ex.32	Ex.32
DESIGN FLOW (m3/s)		0.76[illegible]	
CAPACITY (m3/s)		0.773	
AT GRADE VELOCITY (m/s)		2.73	
PIPE SIZE (mm)		600Ø	
GRADE		1 in 63.2	
DATUM	20.0		
DEPTH TO INVERT	1.988 / 1.913		2.301
HYDRAULIC GRADE LINE	26.776 / 26.810		27.510 / 27.566
INVERT LEVEL	25.934		26.714
FINISHED SURFACE LEVELS	27.922		29.014
EXISTING SURFACE LEVEL	28.417		29.340
CHAINAGE (Reach Length)	293.594	(44.571)	338.165

	Ex.29	Ex.29 – Ex.50B	Ex.50B	Ex.50B – Ex.50A	Ex.50A	Ex.50A – Ex.50	Ex.50	Ex.50 – Ex.51	Ex.51
DESIGN FLOW (m3/s)		0.088		0.081		0.070		0.071	
CAPACITY (m3/s)		0.088		0.087		0.074		0.141	
AT GRADE VELOCITY (m/s)		1.24		1.22		1.04		1.99	
PIPE SIZE (mm)		300Ø		300Ø		300Ø		300Ø	
GRADE		1 in 122		1 in 125		1 in 172		1 in 47.2	
DATUM	20.0								
DEPTH TO INVERT	2.005 / 1.630		1.620 / 1.570		1.505 / 1.455		1.459 / 1.409		1.625
HYDRAULIC GRADE LINE	26.385 / 26.424		26.537 / 26.611		26.669 / 26.815 26.793		26.919 / 27.024 27.013		27.445 / 27.583
INVERT LEVEL	25.529 / 25.904		26.017 / 26.067		26.132 / 26.182		26.321 / 26.371		27.145
FINISHED SURFACE LEVELS	27.534		27.637		27.637		27.780		28.770
EXISTING SURFACE LEVEL	27.521		27.830		27.986		28.053		28.766
CHAINAGE (Reach Length)	0.000	(13.750)	13.750	(8.200)	21.950	(23.980)	45.930	(36.550)	82.480

	Ex.83	Ex.83 – Ex.84	Ex.84	Ex.84 – Ex.85	Ex.85	Ex.85 – Ex.86	Ex.86	Ex.86 – Ex.87	Ex.87
DESIGN FLOW (m3/s)		0.082		0.064		0.044		0.020	
CAPACITY (m3/s)		0.087		0.070		0.086		0.048	
AT GRADE VELOCITY (m/s)		1.22		1		1.21		1.2	
PIPE SIZE (mm)		300Ø		300Ø		300Ø		225Ø	
GRADE		1 in 125		1 in 189		1 in 127		1 in 88.2	
DATUM	19.0								
DEPTH TO INVERT	1.137 / 1.087		0.985 / 0.935		0.989 / 0.939		0.854 / 0.779		0.784
HYDRAULIC GRADE LINE	25.687 / 25.706 25.687		26.123 / 26.201		26.472 / 26.532		26.807 / 26.857		27.170 / 27.292
INVERT LEVEL	25.046 / 25.096		25.585 / 25.635		25.964 / 26.014		26.501 / 26.576		26.951
FINISHED SURFACE LEVELS	26.182		26.570		26.953		27.355		27.735
EXISTING SURFACE LEVEL	26.005		26.232		26.614		27.168		27.662
CHAINAGE (Reach Length)	0.000	(61.200)	61.200	(62.000)	123.200	(62.000)	185.200	(32.000)	217.200

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE: **ARMSTRONG - STAGE 33**
DRAINAGE LONG SECTIONS - 02

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	**R601**	**0**

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NOTES

1. PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm NOM. SIZE CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98% MODIFIED RELATIVE COMPACTION IN 150mm THICK LAYER FOR THE FOLLOWING:
   - BENEATH DRIVEWAY CROSSOVERS TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.
   - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE.
2. ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILISED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOMINAL SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
3. ALL DRAINAGE PIPES TO BE SPIGOT-SOCKET RUBBER RING JOINTED (RRJ).
4. ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
5. WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.
6. ALL SPLAYED SECTIONS OF PIPE ARE TO BE BACKFILLED WITH 2% STABILIZED SAND, 300mm ABOVE TOP OF PIPE

NOTE:

IN ACCORDANCE WITH C.O.G.G DESIGN NOTE 8 (DATED JANUARY 2020) EXISTING DRAINAGE LOCATED WITHIN PROPOSED STAGE WORKS ARE REQUIRED TO BE RE-CCTV'D TO CONFIRM NO CONSEQUENTIAL DAMAGE HAS OCCURRED

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- FUTURE DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- CRUSHED ROCK BACKFILL

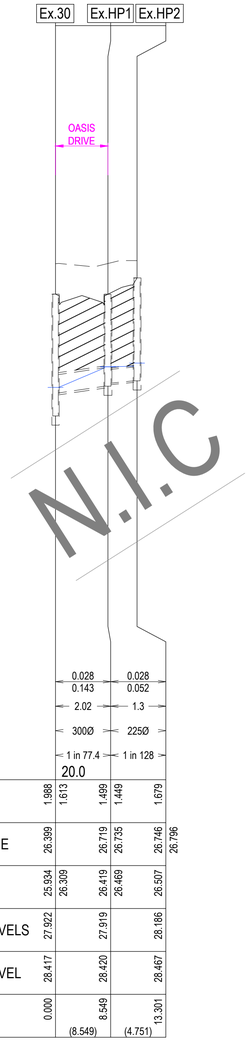
CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

GREATER GEELONG CITY COUNCIL
PLANNING ENVIRONMENT ACT 1987
GREATER GEELONG PLANNING SCHEME

Endorsed Plan
Planning Permit No: PP-496-2012-H
Sheet 12 of 14
Approved By Daniel Cromberge
Approved Date 26/08/2021

NOTE: THIS IS NOT A BUILDING APPROVAL

Certification No: 15270



PIT SCHEDULE

PIT NAME	TYPE	INTERNAL		INLET		OUTLET		F.S.L. (m)	DEPTH(m)	EXISTING COVER LEVEL (m)	STANDARD DRAWING	REMARKS
		WIDTH(mm)	LENGTH(mm)	DIAMETER(mm)	INVERT R.L.(m)	DIAMETER(mm)	INVERT R.L.(m)					
Ex.26	Ex.JUNCTION PIT	900	900	Ex.750	24.176	Ex.750	24.126	26.271	2.145	26.073	IDM SD 430	EXISTING PIT TO BE RAISED TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT. REMOVE EXISTING STUB, MODIFY EXISTING CONNECTION TO FACILITATE 1 IN 100 GRADE AND MAKE GOOD.
				300	24.58							
Ex.27	Ex.JUNCTION PIT	900	900	Ex.750	24.655	Ex.750	24.605	26.763	2.158	26.401	IDM SD 430	EXISTING PIT TO BE RAISED TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT. REMOVE EXISTING STUB, MODIFY EXISTING CONNECTION TO FACILITATE 1 IN 100 GRADE AND MAKE GOOD.
				300	25.06							
Ex.28	Ex.JUNCTION PIT	900	900	Ex.675	25.182	Ex.750	25.107	27.281	2.174	27.145	IDM SD 430	EXISTING PIT TO BE RAISED TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT. REMOVE EXISTING STUB, MODIFY EXISTING CONNECTION TO FACILITATE 1 IN 100 GRADE AND MAKE GOOD.
				300	25.557							
Ex.29	Ex.JUNCTION PIT	900	900	Ex.675	25.579	Ex.675	25.529	27.503	1.974	27.400	IDM SD 430	EXISTING PIT TO BE RAISED TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT.
				Ex.300	25.904							
Ex.30	Ex.JUNCTION PIT	900	900	Ex.600	25.934	Ex.675	25.934	27.893	1.959	28.320	IDM SD 430	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT.
				Ex.300	26.309							
Ex.50B	Ex.JUNCTION PIT	600	900	Ex.300	26.067	Ex.300	26.017	27.609	1.592	27.830	IDM SD 430	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT.
Ex.50A	Ex.JUNCTION PIT	600	900	Ex.300	26.182	Ex.300	26.132	27.609	1.477	27.968	IDM SD 430	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT.
Ex.50	Ex.JUNCTION PIT	600	900	Ex.300	26.371	Ex.300	26.321	27.794	1.473	27.780	IDM SD 430	EXISTING PIT TO BE RAISED TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT.
Ex.84	Ex.JUNCTION PIT	600	900	Ex.300	25.635	Ex.300	25.585	26.541	0.956	26.570	IDM SD 425	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE
Ex.85	Ex.JUNCTION PIT	600	900	Ex.300	26.014	Ex.300	25.964	26.946	0.982	26.953	IDM SD 425	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE
Ex.86	Ex.JUNCTION PIT	600	900	Ex.225	26.576	Ex.300	26.501	27.491	0.990	27.347	IDM SD 425	EXISTING PIT TO BE RAISED TO SUIT THE FINISHED SURFACE
Ex.87	Ex.JUNCTION PIT	600	900	225	26.994	Ex.225	26.944	27.82	0.876	27.800	IDM SD 425	BREAK INTO EXISTING PIT AND CONNECT 225Ø PIPE AND MAKE GOOD.
Ex.HP1	Ex.JUNCTION PIT	600	900	Ex.225	26.469	Ex.300	26.419	27.919	1.500	28.800	IDM SD 430	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE AND CONVERTED TO A SIDE ENTRY PIT.
EX.HP2	Ex.JUNCTION PIT	600	900	Ex.225	27.712	Ex.225	26.507	28.186	1.679	28.800	IDM SD 420	EXISTING PIT TO BE CUT DOWN TO SUIT THE FINISHED SURFACE.
41	SIDE ENTRY PIT	600	900	-	-	300	24.665	26.268	1.603	-	IDM SD 430	
42	SIDE ENTRY PIT	600	900	-	-	300	25.145	26.759	1.614	-	IDM SD 430	
60	SIDE ENTRY PIT	600	900	-	-	300	25.642	27.277	1.635	-	IDM SD 430	
61	JUNCTION PIT	600	900	-	-	225	27.134	27.881	0.747	-	IDM SD 425	

NOTE:

PIT COVERS ARE TO BE PROVIDED IN ACCORDANCE WITH CITY OF GREATER GEELONG DESIGN NOTE 13. ALL PITS WITHIN ROAD REVERSE ARE TO BE CLASS C FIBREGLASS REINFORCED PLASTIC (FRP) UNLESS AGREED OTHERWISE.

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE: ARMSTRONG - STAGE 33
DRAINAGE LONG SECTIONS - 03

STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R600	0

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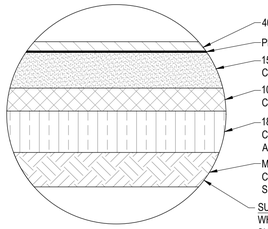


40mm SIZE 14 mm TYPE N CLASS 320 ASHPALT

PRIME OR 7mm PRIMERSEAL

155mm SIZE 20mm CLASS 2 CRUSHED ROCK
COMPACTED TO A MINIMUM DENSITY RATIO 98% (MODIFIED) AS1289, 5.2.1

100mm SIZE 20mm CLASS 3 CRUSHED ROCK
COMPACTED TO A MINIMUM DENSITY RATIO 96% (MODIFIED) AS1289, 5.2.1

180mm SELECT FILL OR STABILISED CLAY MEETING THE FOLLOWING MATERIAL PROPERTIES:
CBR ≥ 7%, SWELL ≤ 1.5%, PERMIABILITY k ≤ $5x10^{-9}$m/s (5x 10^{-7}cm/s)COMPACTED TO
A MINIMUM DENSITY OF RATIO 98% (STANDARD) AS1289, 5.1.1

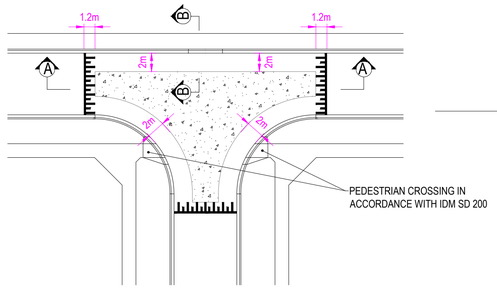
MATERIAL AS FOUND (SILTY CLAY)
COMPACTED TO A MINIMUM DENSITY OF RATIO 98% (STANDARD) AS1289, 5.1.1 WHERE
SELECT FILL CAPPING LAYER IS ADOPTED

SUBGRADE IMPROVEMENT:
WHERE EXISTING MATERIAL IS UNSUITABLE FOR USE AS PAVEMENT
SUBGRADE, AT THE INSTRUCTION OF THE SUPERINTENDENT, CONTRACTOR TO
EITHER;

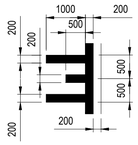
1. STABILISE INSITU MATERIAL WITH 3% LIME UP TO 300mm DEPTH OR;
2. REMOVE ADDITIONAL 300mm DEPTH INSITU MATERIAL AND REPLACE WITH TYPE A MATERIAL MEETING THE FOLLOWING MATERIAL: CBR ≥ 15%, SWELL ≤ 1.5%, PERMEABILITY k ≤ $5x10^{-9}$m/s (5x 10^{-7}cm/s) COMPACTED TO A MINIMUM DENSITY OF RATIO 98% (STANDARD) AS1289, 5.1.1.

PAVEMENT COMPOSITION

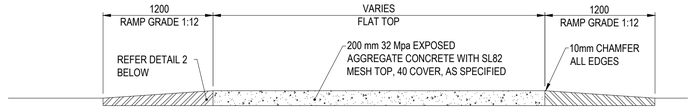
MANNA GUM & OASIS DRIVE
475mm DEPTH



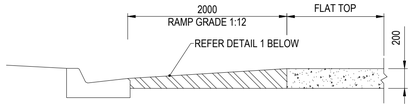
PLAN
FLAT TOP ROAD HUMP



LINEMARKING DETAIL



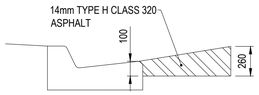
SECTION A-A
FLAT TOP RAISED PAVEMENT



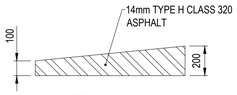
SECTION B-B

NOTES:

1. LONGITUDINAL LINES (CENTRE & PARKING LANE LINES)
   LINEMARKING TO BE 3mm THICKNESS THERMO APPLIED PLASTIC
2. ROAD HUMPS LINEMARKING TO BE 2mm THICKNESS COLD APPLIED PLASTIC.



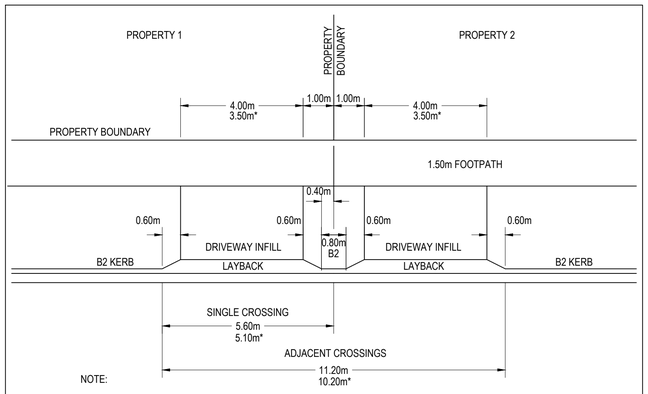
DETAIL 1



DETAIL 2

RAISED PAVEMENT DETAILS

N.T.S

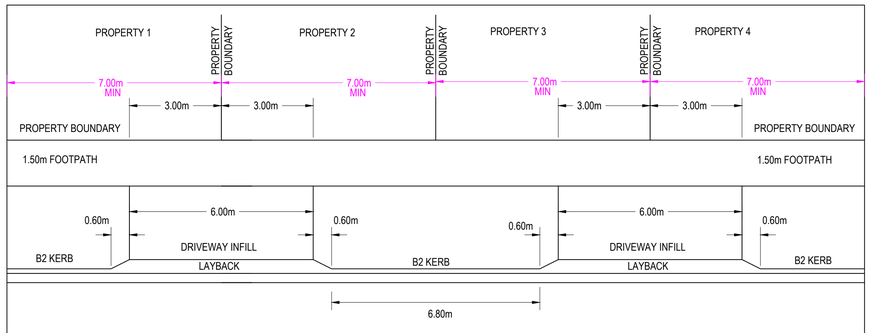


NOTE:

- * WHERE LOT FRONTAGES ARE EQUAL TO OR LESS THAN 12.50m THE DRIVEWAY WIDTH IS TO BE A MAXIMUM OF 3.50m.
- WHERE ADJACENT DRIVEWAYS ARE LOCATED ON EACH SIDE OF THE PROPERTY BOUNDARY, THE LAYOUT IS TO BE AS PER ABOVE.

TYPICAL RESIDENTIAL VEHICLE CROSSING DETAIL

NTS



DOUBLE RESIDENTIAL VEHICLE CROSSING DETAIL

ALLOTMENTS 787/788 & 789/790

NTS

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

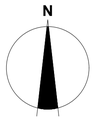
creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

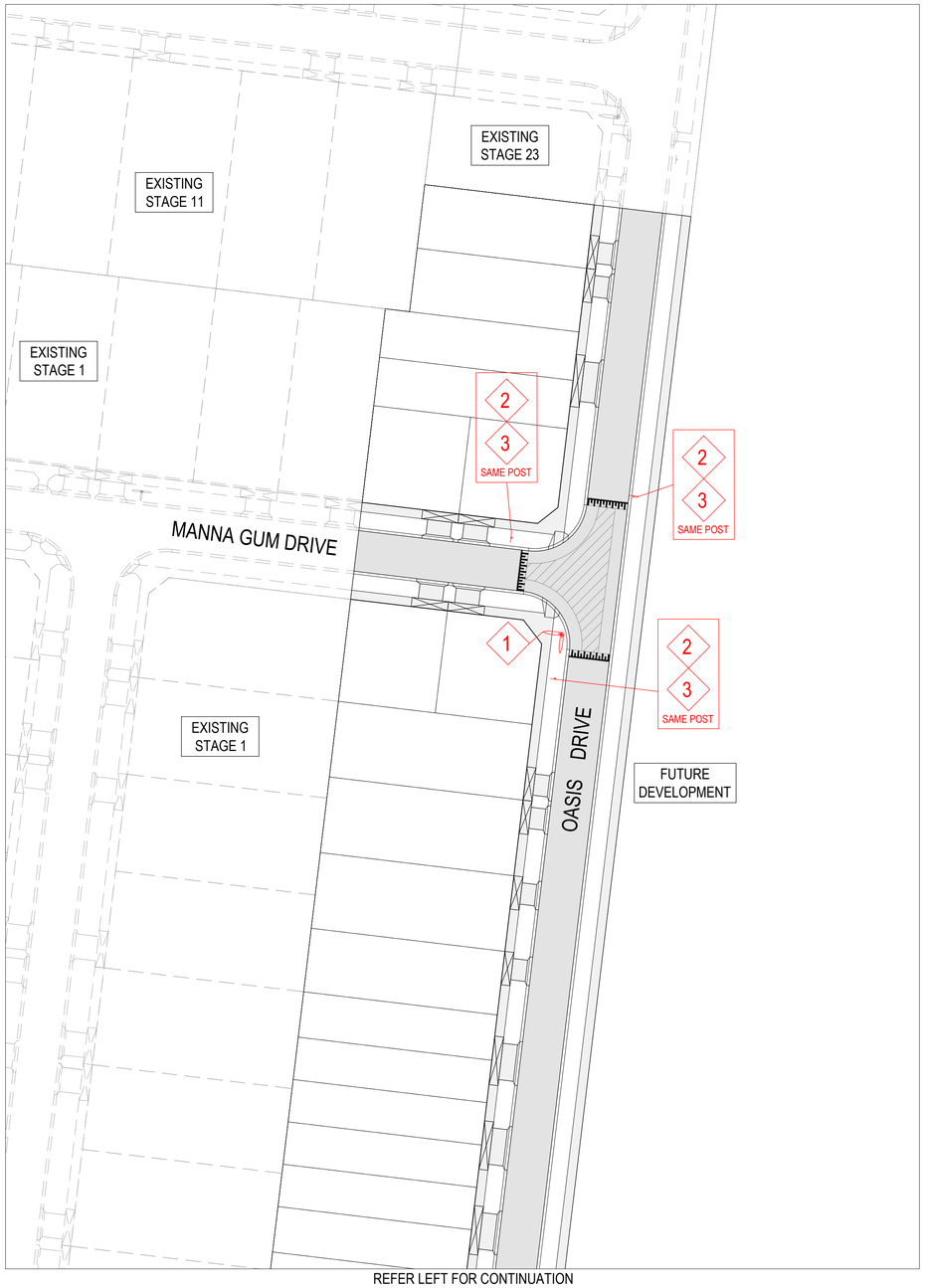
PROJECT: ARMSTRONG — MT DUNEED

DRAWING TITLE: ARMSTRONG - STAGE 33
TYPICAL DETAILS

STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
PROJECT No.	DRAWING No.	REVISION
L013901	R700	0



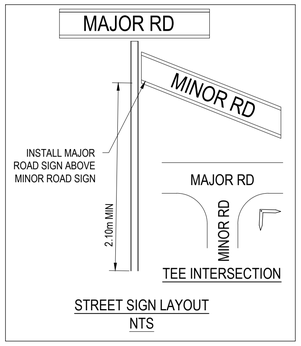


SIGN SCHEDULE

SIGN	REF	QUANTITY
STREET SIGN (G5 SERIES)	1	REFER TABLE
W5-10A	2	3No.
20 km/h W8-2A	3	3No.

STREET SIGN SCHEDULE

MANNA GUM DR	1 No.
OASIS DR	1 No.



LINEMARKING & SIGNAGE NOTES:

1. 90° BENDS TO HAVE CENTRELINE MARKING WITH RRPM'S AT MAX 6m SPACING.
2. RRPM'S TO BE IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOL 2.
3. ALL LINEMARKING AND SIGNAGE TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742.
4. ALL SIGNS AND LINEMARKING TO BE IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOLUME 2 - SIGNS & MARKINGS.
5. ALL SIGN POSTS TO BE SLEEVED IN ACCORDANCE WITH COGG SD CGG710 - SIGN POSTS.
6. ALL LINEMARKING TO BE THERMOPLASTIC PERMANENT PAINT.
7. ALL STREET HYDRANTS TO BE IDENTIFIED IN ACCORDANCE WITH C.F.A. DOCUMENT - IDENTIFICATION OF STREET HYDRANTS FOR FIREFIGHTING PURPOSES, PUBLISHED JULY 2019 INCLUDING INSTALLATION OF BLUE RAISED REFLECTIVE PAVEMENT MARKERS & PAINTED WHITE REFLECTIVE TRIANGLES.

1:500 10 5 0 10 20 A1
1:1000 A3

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	25/08/21	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
C	24/08/21	AMENDED TO COUNCIL COMMENTS (20/08/21)	C.ROHDE	M.TROUNCE	T.PALIOS
B	06/08/21	TENDER ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
A	29/07/2021	ISSUED FOR APPROVAL	B.LEECH	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Suite 1, 2 Bloomsbury Street
Geelong, VIC, Australia 3220

PROJECT: ARMSTRONG MT DUNEED

DRAWING TITLE: ARMSTRONG - STAGE 33
SIGNAGE & LINEMARKING PLAN

STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
1:500 @ A1	B.LEECH	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JULY 2021
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