

GOLDEN GROVE ESTATE STAGE 5 CALLAGHAN ST, JACKASS FLAT WARRINGAL VIEWS P/L

GENERAL NOTES

A. GENERAL

- ALL WORK TO BE CARRIED OUT TO CITY OF GREATER BENDIGO SPECIFICATIONS, STANDARD DRAWINGS AND TO THE SATISFACTION OF COUNCIL'S SENIOR SURVEILLANCE OFFICER OR HIS REPRESENTATIVE.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA).
- THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
- FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND ONLY RE-TOPSOILED ON THE DIRECTION OF THE ENGINEER, TO THE FINAL FILL LEVELS SHOWN ON THE DRAWINGS. ALL FILLING IS TO BE:
 - APPROVED BY THE PROJECT GEOTECHNICAL CONSULTANT.
 - PLACED IN LAYERS NOT EXCEEDING 200MM LOOSE THICKNESS.
 - MOISTURE CONDITIONED TO WITHIN 85% TO 115% OF OPTIMUM MOISTURE CONTENT.
 - COMPACTED TO A MINIMUM 95% (STANDARD) DRY DENSITY RATIO.
 - PLACED UNDER "LEVEL 1" SUPERVISION IN ACCORDANCE WITH AS 3798-1996.
- EXISTING DEPRESSIONS & DRAINS TRAVERSING THE SITE ARE TO BE CLEANED OUT AND DESLUGGED TO FIRM BASE AND FILLED TO FINISHED SURFACE LEVELS TO THE SPECIFIED COMPACTION STANDARDS.
- TBM'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 TBM'S THEREAFTER.
- POSITION CONDUITS SO THAT A MINIMUM DISTANCE BETWEEN TAPPING IS 1.0M. CONDUITS TO BE LOCATED MIDWAY BETWEEN FENCE LINE OF LOT, UNLESS OTHERWISE SHOWN.
- BEFORE COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 15 M DEEP, THE REQUIRED NOTICE IS TO BE SENT TO THE VICTORIAN WORKCOVER AUTHORITY IN ACCORDANCE WITH THE MINES ACT, 1958 NO 6320 SECTION 385 AND THE OCCUPATIONAL HEALTH AND SAFETY ACT 1985. THIS NOTIFICATION MUST BE RECEIVED BY THE AUTHORITY AT LEAST 3 DAYS PRIOR TO COMMENCING EXCAVATIONS, AND A COPY OF THE NOTIFICATION MUST BE PROVIDED TO THE SUPERINTENDENT.
- COUNCIL'S REPRESENTATIVE IS TO BE NOTIFIED IN WRITING SEVEN (7) DAYS PRIOR TO THE COMMENCEMENT OF WORKS.
- NO EXCAVATION WITHIN 5M OF ANY EXISTING TREE WITHOUT APPROVAL OF THE ENGINEER.
- NO BLASTING IS PERMITTED WITHIN THE CITY OF GREATER BENDIGO WITHOUT OBTAINING COUNCIL'S SPECIAL DISPENSATION.
- EXCAVATED MATERIAL SURPLUS TO FILLING REQUIREMENTS OF THE WORKS SHALL BE REMOVED FROM SITE AS SPECIFIED.
- ALL SURPLUS ROCK, CONCRETE AND BITUMINOUS RUBBLE SHALL BE DISPOSED OFF SITE AS SPECIFIED. THE CONTRACTOR SHALL CHECK WITH SUPERINTENDENT WHETHER ANY LARGE ROCKS ARE REQUIRED FOR LANDSCAPE PURPOSES PRIOR TO DISPOSAL.
- NATURESTRIPS AND ALL AREAS OF CUT OUTSIDE ROAD RESERVE TO BE SURFACED WITH 100MM MINIMUM COMPACTED LAYER OF TOPSOIL.

B. ROAD WORKS

- FOOTPATHS ARE TO BE 15M WIDE UNLESS SHOWN OTHERWISE. FOOTPATHS TO BE CONSTRUCTED TO THE CITY OF GREATER BENDIGO STANDARDS.
- CONSTRUCT LAYBACK SECTION AT VEHICLE CROSSING, REVERSING BAYS AND CAR PARKING BAYS AND PRAM CROSSING TO THE CITY OF GREATER BENDIGO STANDARDS.
- ALL CHAINAGES REFER TO ROAD PAVEMENT CENTRELINES EXCEPT IN COURT HEADS AND INTERSECTIONS WHERE CHAINAGES REFER TO BACK OF KERB.
- THE CONTRACTOR IS REQUIRED TO CONFINE CONSTRUCTION VEHICLES TO THE ROAD RESERVE AND EASEMENTS. ANY DAMAGE CAUSED TO ALLOTMENTS MUST BE MADE GOOD.
- ALL BATTERS SHALL BE TO THE CITY OF GREATER BENDIGO STANDARDS.
 - CUT 1 IN 12 UNLESS OTHERWISE SHOWN.
 - FILL 1 IN 12 UNLESS OTHERWISE SHOWN.
- ALL SET OUT INFORMATION GIVEN IS TO LIP OF KERB UNLESS OTHERWISE SHOWN.
- WHERE CRUSHED ROCK IS SHOWN UNDER CONCRETE FOOTPATHS CONSTRUCTED ON FILL, THE CRUSHED ROCK IS TO BE 20MM CLASS 3. WHERE CUT BATTERS ARE STEEPER THAN 1:6 THEY MUST BE HYDRO MULCHED.
- SUBGRADE BE COMPACTED TO A MINIMUM OF 98% STANDARD MAXIMUM DRY DENSITY (AS3798), WITH THE SUBBASE COMPACTED IN ACCORDANCE WITH SCALE C INVICROADS TABLE 304.071 USING FINE CRUSHED ROCK AND THE BASE COURSE TO AN AVERAGE OF 100% MINIMUM MODIFIED DRY DENSITY. ANY FILLING BENEATH ROAD PAVEMENT AREAS TO BE COMPACTED TO 100% OF MAXIMUM DRY DENSITY.COMPACTION TESTING TO BE AS PER COUNCIL REQUIREMENTS.
- ANY BACKFILL WITHIN 1.0M OF A COUNCIL ASSET (FOOTPATH OR ROAD) IS TO BE FCR. FILL MATERIAL IS ACCEPTABLE IF COMPACTED TO ENSURE 95% COMPACTION. COMPACTION TESTING TO BE PERFORMED AT ONE PER 60M OF TRENCH.
- CONCRETE TO HAVE 28DAY STRENGTH OF 25MPA UNLESS NOTED OTHERWISE



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.

DRAWING SCHEDULE

DRAWING	DESCRIPTION	SHEET No.	REVISION
CR100	GENERAL NOTES - SHEET 1	1	A
CR200	ROAD LAYOUT PLANS - SHEET 1	2	A
CR201	ROAD LAYOUT PLANS - SHEET 2	3	A
CR202	ROAD LAYOUT PLANS - SHEET 3	4	A
CR203	ROAD LAYOUT PLANS - SHEET 4	5	A
CR204	ROAD LAYOUT PLANS - EARTHWORKS PLAN	6	A
CR300	ROAD LONG SECTIONS - SHEET 1	7	A
CR301	ROAD LONG SECTIONS - SHEET 2	8	A
CR400	ROAD CROSS SECTIONS - SHEET 1	9	A
CR401	ROAD CROSS SECTIONS - SHEET 2	10	A
CR500	INTERSECTION DETAILS - SHEET 1	11	A
CR501	INTERSECTION DETAILS - SHEET 2	12	A
CR600	DRAINAGE LONG SECTIONS - SHEET 1	13	A
CR601	DRAINAGE LONG SECTIONS - PIT SCHEDULE	14	A
CR700	PAVEMENT AND TYPICAL DETAILS - SHEET 1	15	A
CR800	SIGNAGE AND LINEMARKING - SHEET 1	16	A
CR801	SIGNAGE AND LINEMARKING - SHEET 2	17	A



LOCALITY PLAN

SCALE: NOT TO SCALE
VICROADS: 607 S3

LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN, VALVE AND HYDRANT		
WATER RECYCLED		
UNDERGROUND ELECTRICITY		
OVERHEAD ELECTRICITY & POLE		
TELSTRA & SERVICE PIT		
OPTIC FIBRE		
OVERHEAD TELSTRA		
GAS MAIN		
BRANCH SEWER & MANHOLE		
SEWER & MANHOLE		
CENTRAL INVERT		
COUNCIL STORMWATER DRAIN & PIT		
COUNCIL STORMWATER PITS		
HOUSE DRAIN		
AG DRAIN AND FLUSER		
STORMWATER 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)		
EARTHWORKS GRADE		
SIGN AND POST		
LIGHT & POLE (BY OTHERS)		
STREET SIGN		
PERMANENT SURVEY MARK		
TEMPORARY BENCH MARK		
BOLLARD		
ROAD CHAINAGES		
LOT CHAINAGE		
SETOUT POINT		
LIMIT OF WORKS		
BATTER		
EXCAVATION GREATER THAN 0.20m		
FILLING GREATER THAN 0.20m		
ROCK BEACHING		
PARKING BAY/PAVED AREA		
GRASSED MAINTENANCE ACCESS TRACK		
GRAVEL MAINTENANCE ACCESS TRACK		
FENCE - TREE PROTECTION		
FENCE - VEHICLE EXCLUSION		
FENCES		
TREE (& SURVEYED CANOPY) TO BE RETAINED		
TREE TO BE REMOVED		
VEGETATION LINE		

SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		GAS		OPTICOMM (TELECOM)		ELECTRICITY		RECYCLED WATER		EX RECYCLED WATER	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	POLE SIDE	U/G CABLE OFFSET	SIDE	OFFSET	SIDE	OFFSET
CALLAGHAN STREET (18m ROAD RESERVE)	S	2.70	S	1.80	N	1.90	N	x0.80	N	2.40	S	2.20
CALLAGHAN STREET (24m ROAD RESERVE)	S	2.70	S	1.80	N	7.45	N	x0.80	N	6.95	S	2.20
BUSHLAND WAY	-	-	-	-	S	1.90	S	x0.80	S	2.40	-	-
POPPETHEAD ROAD	N	2.70	N	1.80	N	0.80	S	x0.80	S	2.40	N	2.70

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

file name: 308090CR100.dwg, layout name: CD100, plotted by: Harry Oakley-Warren, file location: G:\308090\308090.dwg, VBA CAD plot date: 27/11/2020 2:43 PM, Sheet 1 of 15 Sheets

A	PRELIMINARY ISSUE	B. I.	NOV 2020		
Rev	Amendments	Approved	Date		

Scale



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

Designed
H.OAKLEY-WARREN

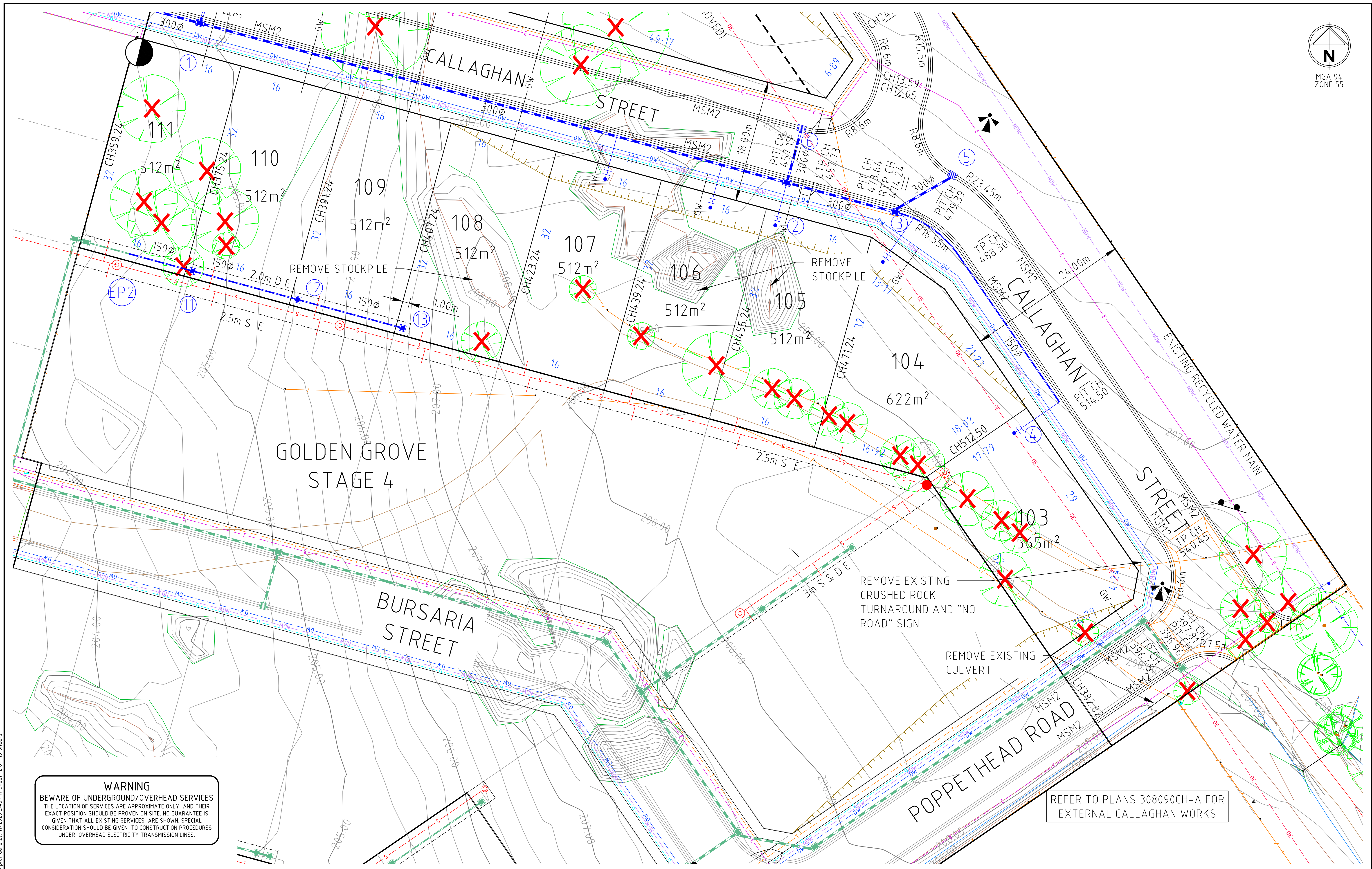
Authorised
C. CLARKE

Checked
B. IBBS

Date
NOV 2020

**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
GENERAL NOTES - SHEET 1
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L**

PRELIMINARY Drg No **308090CR100** Rev **A**



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.

REFER TO PLANS 308090CH-A FOR
EXTERNAL CALLAGHAN WORKS

file name: 308090CR200.dwg, layout name: CR200, created by: Harry Oakley-Warren, file location: G:\308090\308090.dwg, plot date: 27/11/2020 2:43 PM, sheet: 2 of 15 sheets

Rev	A	PRELIMINARY ISSUE	B. I.	NOV 2020
Rev		Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

Designed
H.OAKLEY-WARREN
Authorised
C. CLARKE

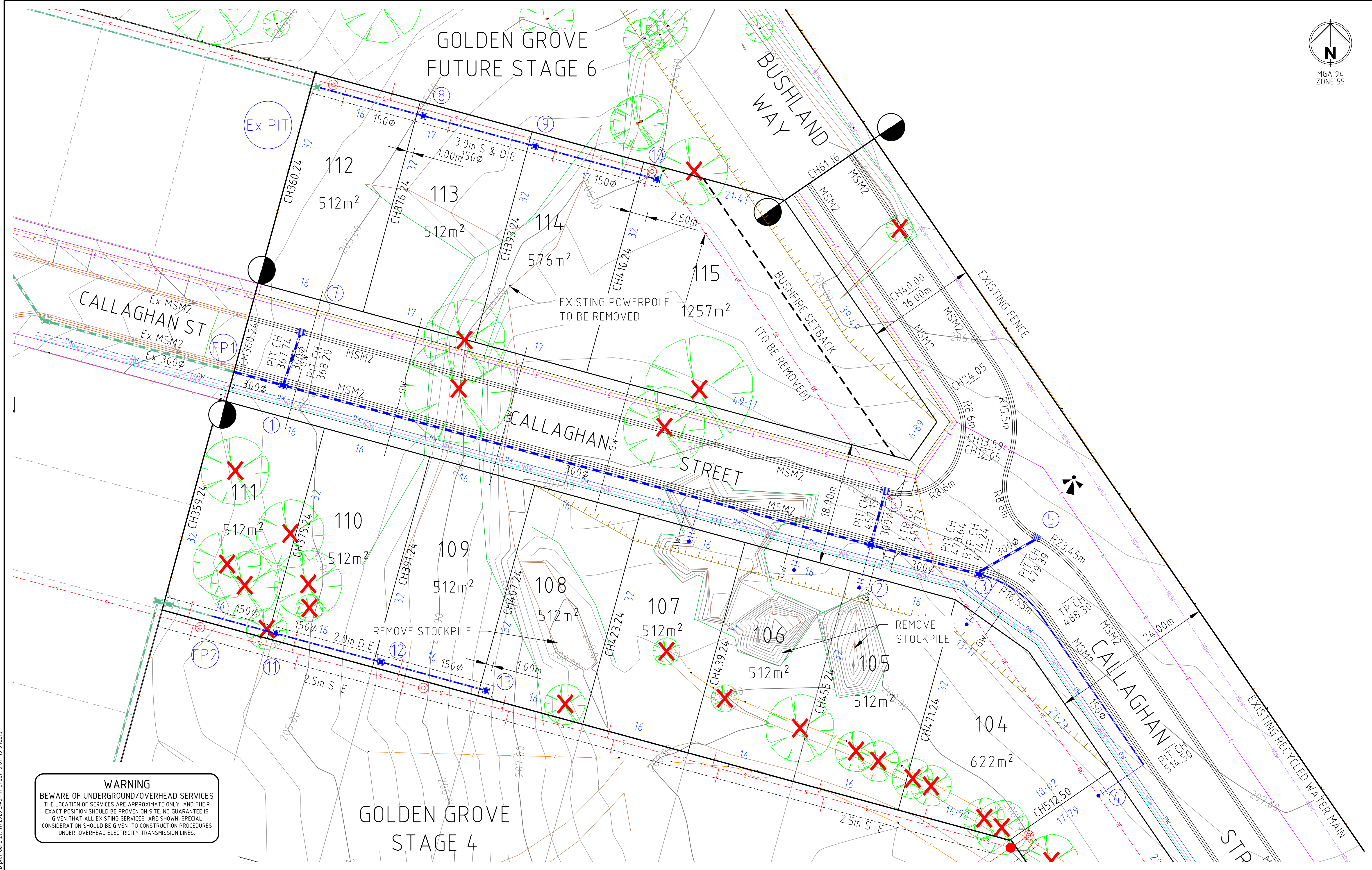
Checked
B. IBBS
Date
NOV 2020

GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
ROAD LAYOUT PLANS - SHEET 1
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L

PRELIMINARY

Dwg No
308090CR200

Rev
A



GOLDEN GROVE STAGE 4

GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
ROAD LAYOUT PLANS - SHEET 2
 CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
 WARRINGAL VIEWS P/L

Rev	Org No
A	308090CR201

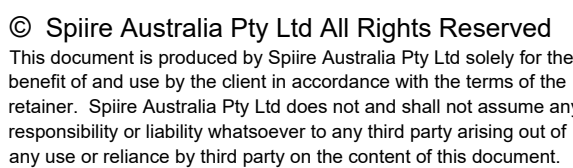


Scale

H 1:500
SCALE @ A1
V 1:50

0 0.5 1 1.5 2 2.5

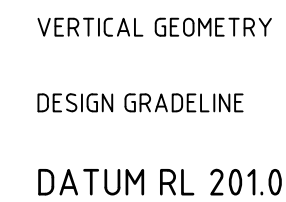
0 5 10 15 20 25



16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
ROAD LONG SECTIONS - SHEET 1
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L**

PRELIMINARY	Dwg No	Rev
308090CR300		A



File name 308090\CR300.dwg layout name CR301 plotted by Harry Oakley-Warren
File location \\spire\bendata\Data\30\308090\Civil\ACAD plot date 27/11/2020 2:43 PM Sheet 6 of 15 Sheets

Scale

H 1:500
SCALE @ A1
V 1:50

0 0.5 1 1.5 2 2.5

0 5 10 15 20 25



spiire

Designed	Checked
H.OAKLEY-WARREN	B. IBBS
Authorised	Date
C. CLARKE	NOV 2020

GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
ROAD LONG SECTIONS - SHEET 2
 CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
 WARRINGAL VIEWS P/L



Scale

H 1:100
SCALE @ A1
V 1:50

0 1 2 3 4 5

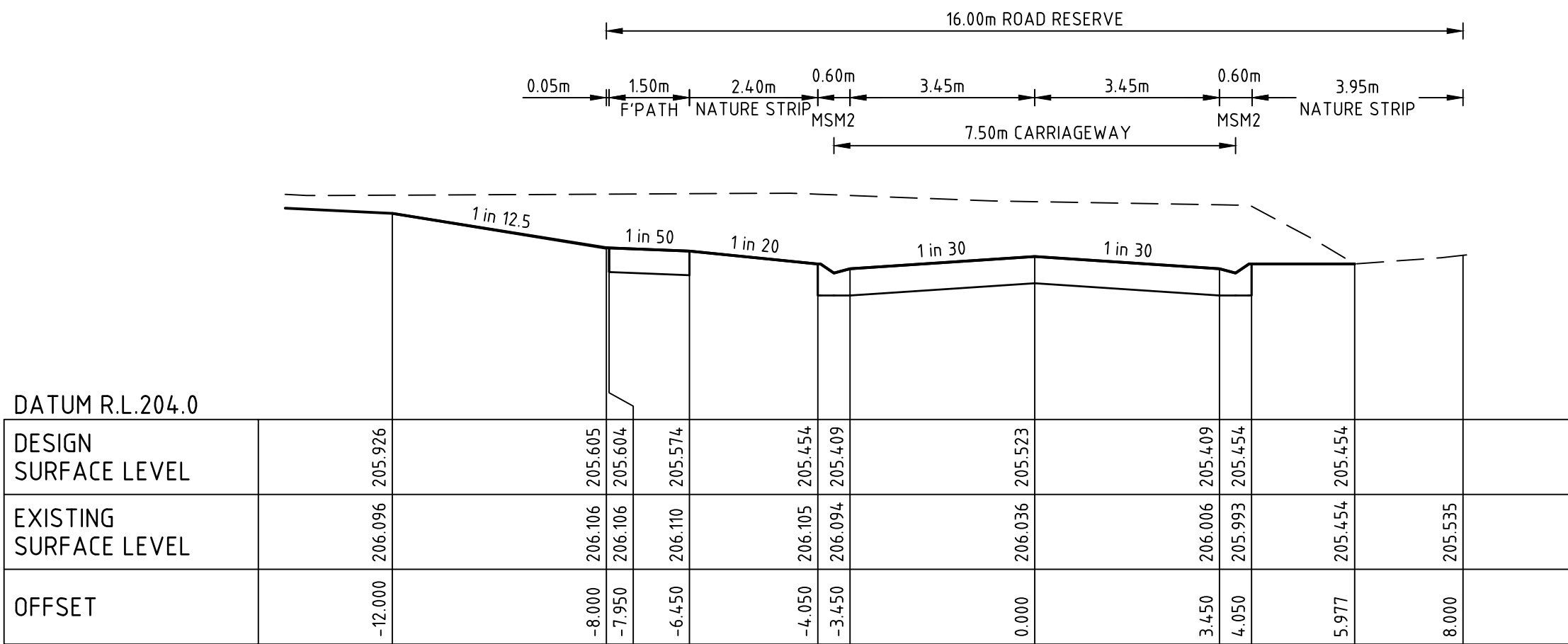
0 0.5 1 1.5 2 2.5



GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 1
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L

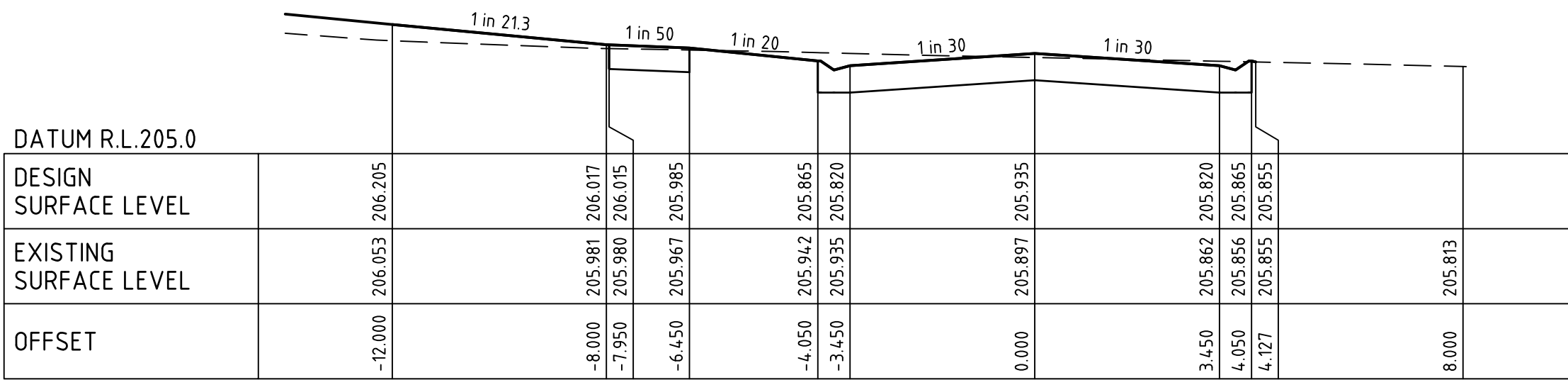
Orig No **PRELIMINARY 308090CR400** Rev **A**

file name: 308090CR400.dwg, layout name: CR401, created by: Harry Oakley-Warren, file location: \\spiire\Bendigo\Drawings\308090\308090.dwg, plot date: 27/11/2020 2:43 PM, Sheet 8 of 15 Sheets



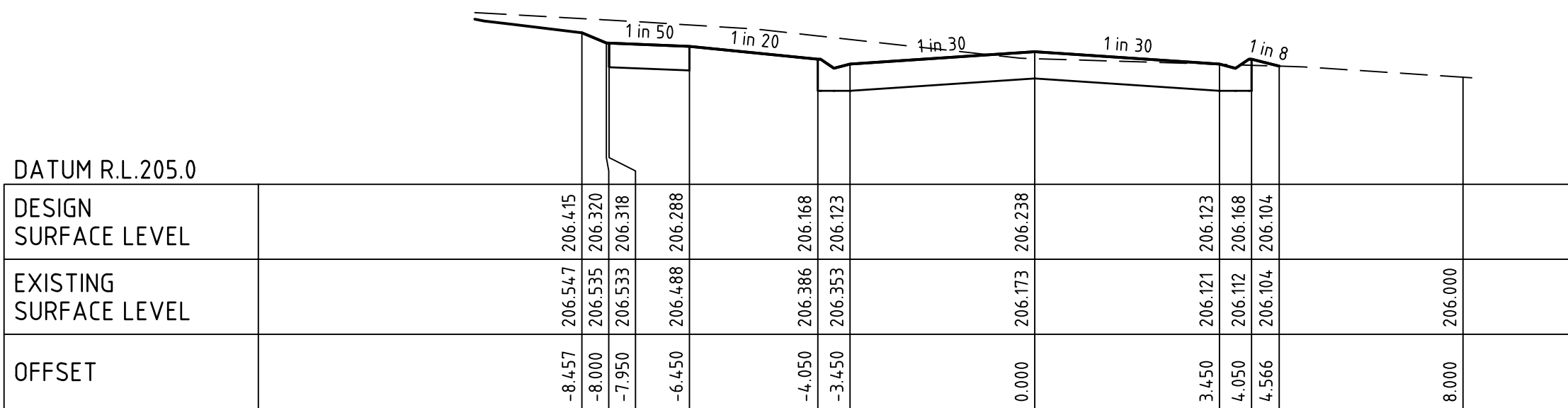
BUSHLAND WAY

CH 61.66



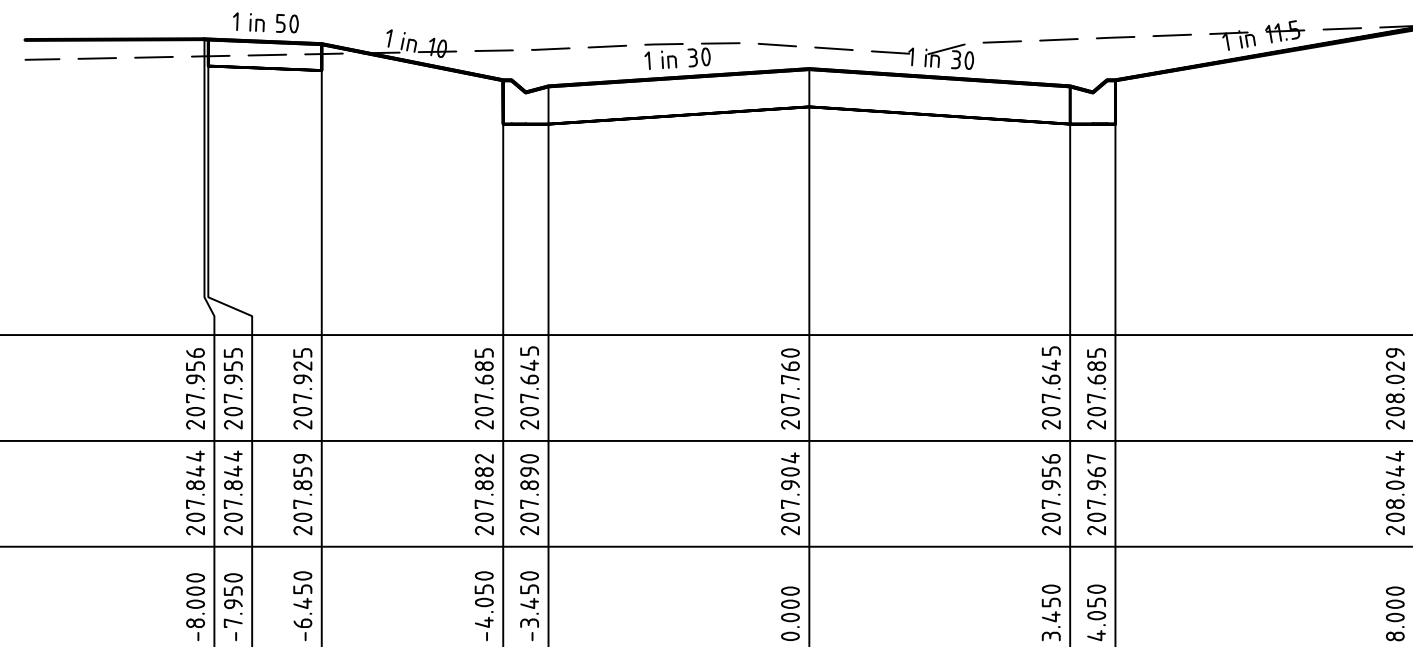
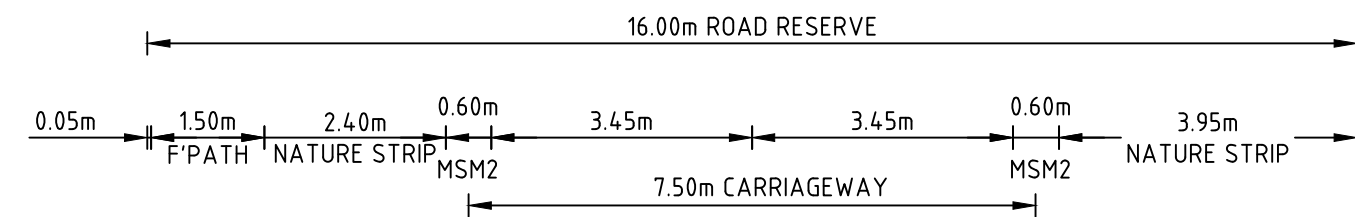
BUSHLAND WAY

CH 40.00



BUSHLAND WAY

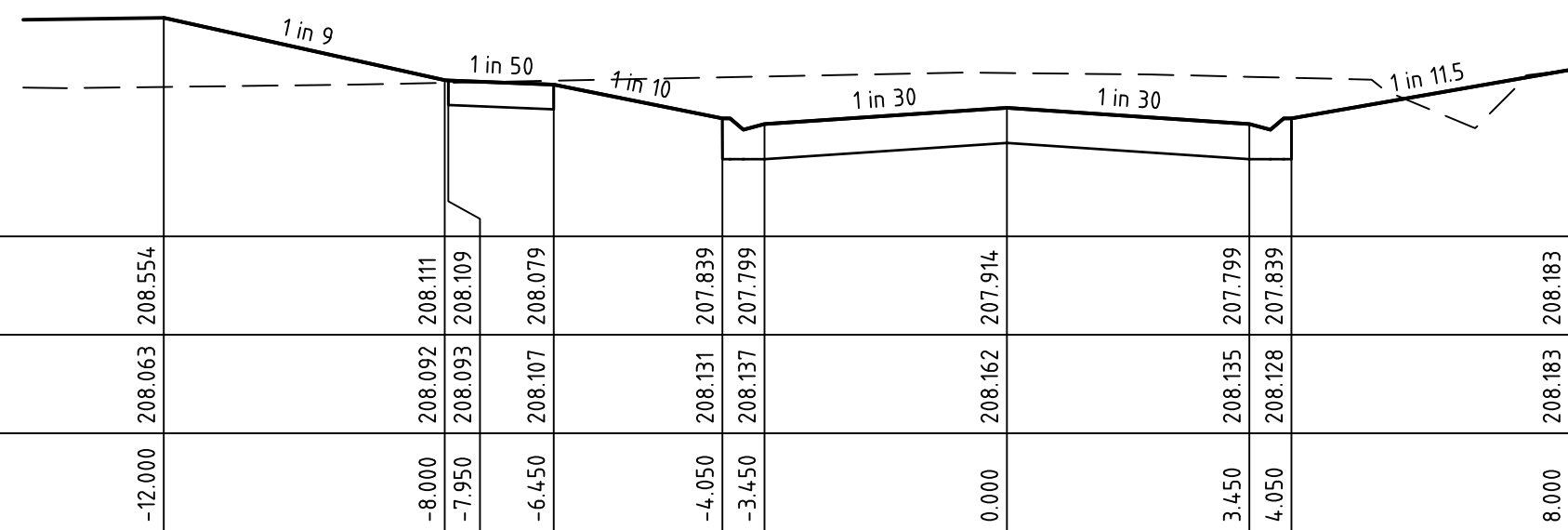
CH 24.05



DATUM R.L.206.0

POPPETHEAD ROAD

CH 396.25

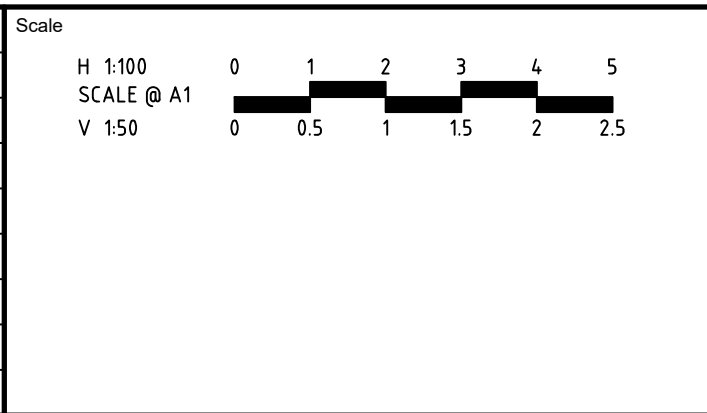


DATUM R.L.207.0

POPPETHEAD ROAD

CH 382.82

Rev	A	PRELIMINARY ISSUE	B. I.	NOV 2020
Rev		Amendments	Approved	Date



16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

Designed
H.OAKLEY-WARREN

Authorised
C. CLARKE

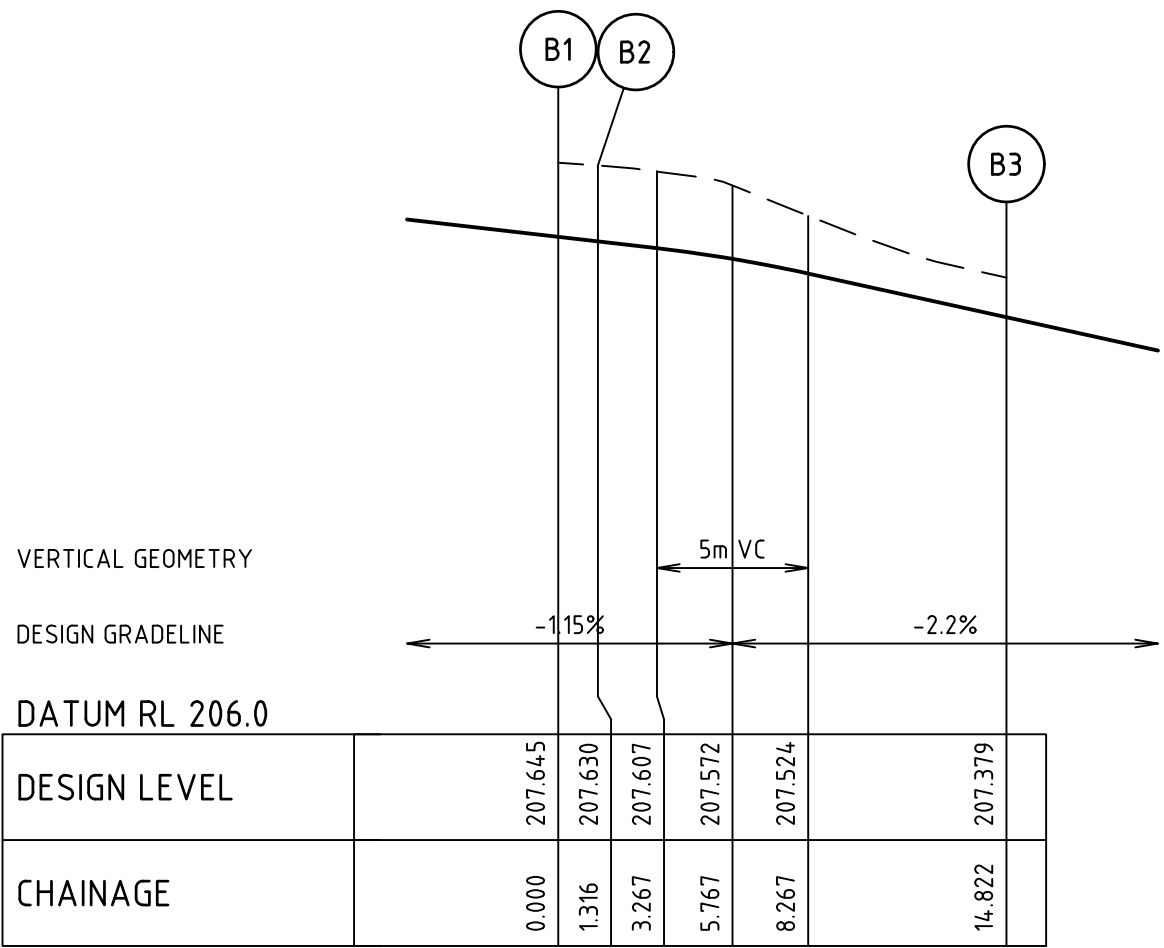
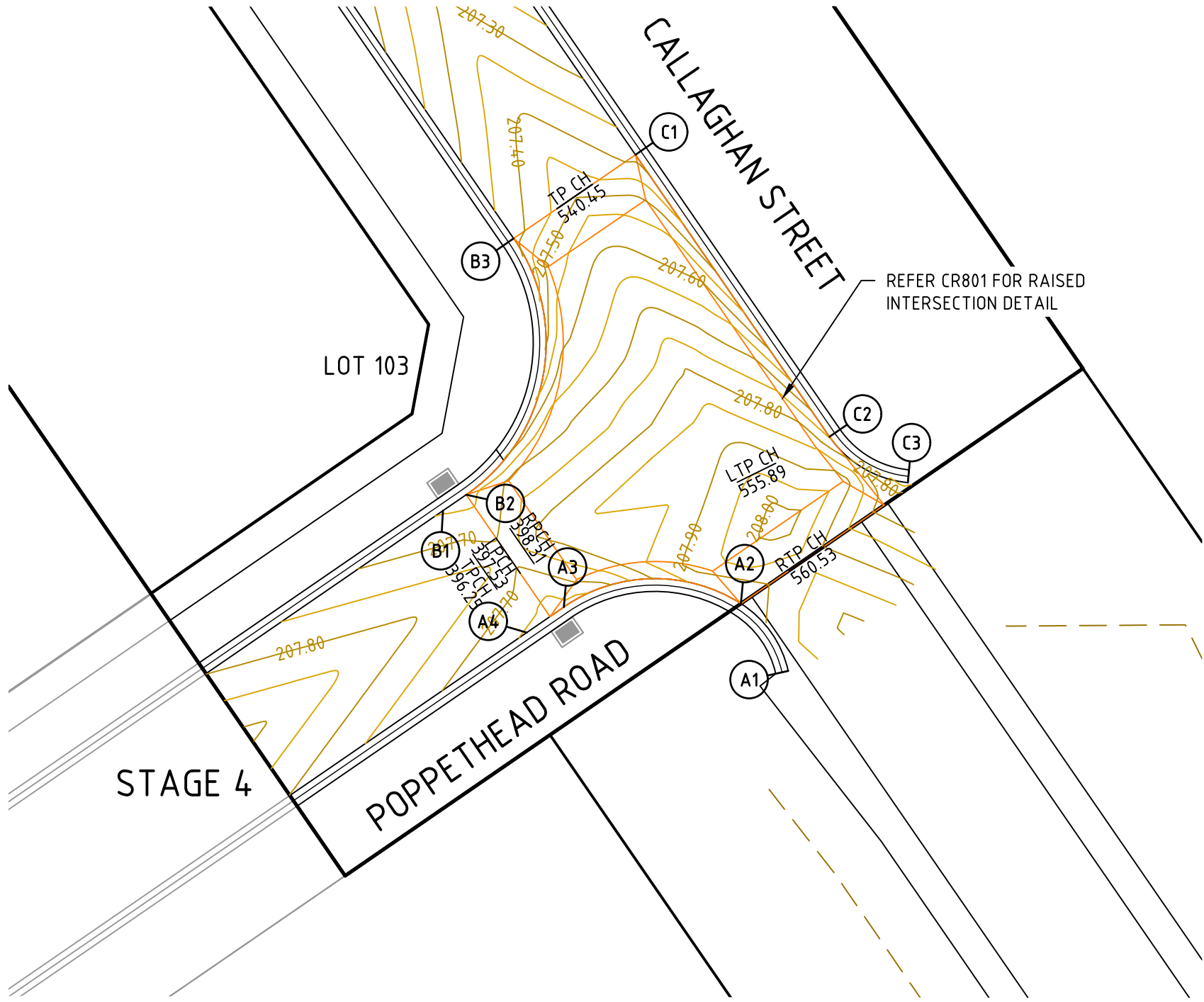
Checked
B. IBBS

Date
NOV 2020

**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
ROAD CROSS SECTIONS - SHEET 2
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L**

PRELIMINARY Drg No **308090CR401** Rev **A**

file name: 308090CR500.dwg layout name: CR500 created by: Harry Oakley-Warren
file location: G:\308090\308090\308090\308090.dwg plot date: 27/11/2020 2:43 PM Sheet 9 of 15 Sheets

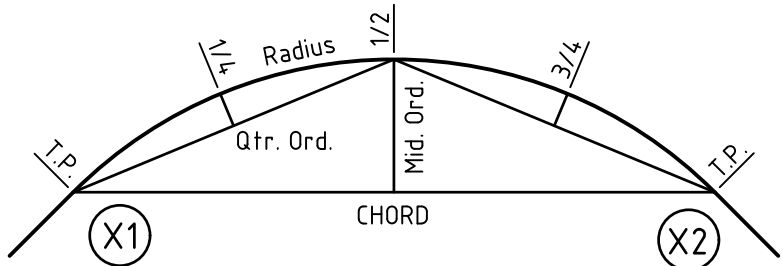


KURB B

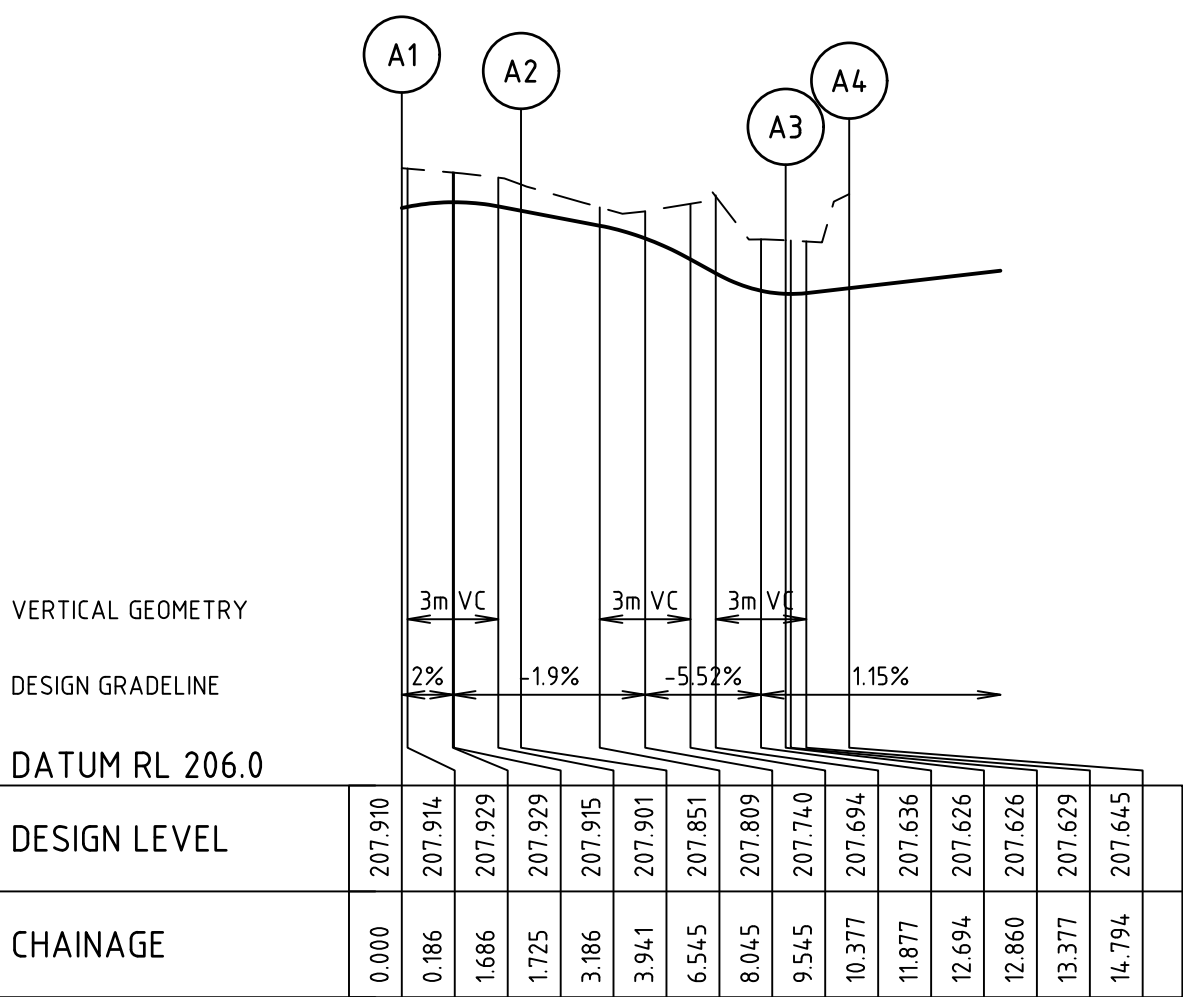
KURB B

POINT NO	EASTING	NORTHING	RL
B1	257718.652	5933720.750	207.645
B2	257719.737	5933721.496	207.630
1/4	257722.077	5933723.900	207.589
1/2	257723.319	5933727.016	207.528
3/4	257723.275	5933730.371	207.454
B3	257721.950	5933733.453	207.379
B4	257721.949	5933733.454	207.379

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
B2-B3	8.599	13.506	12.160	2.518	-0.654



KURB RETURN SETOUT DETAIL

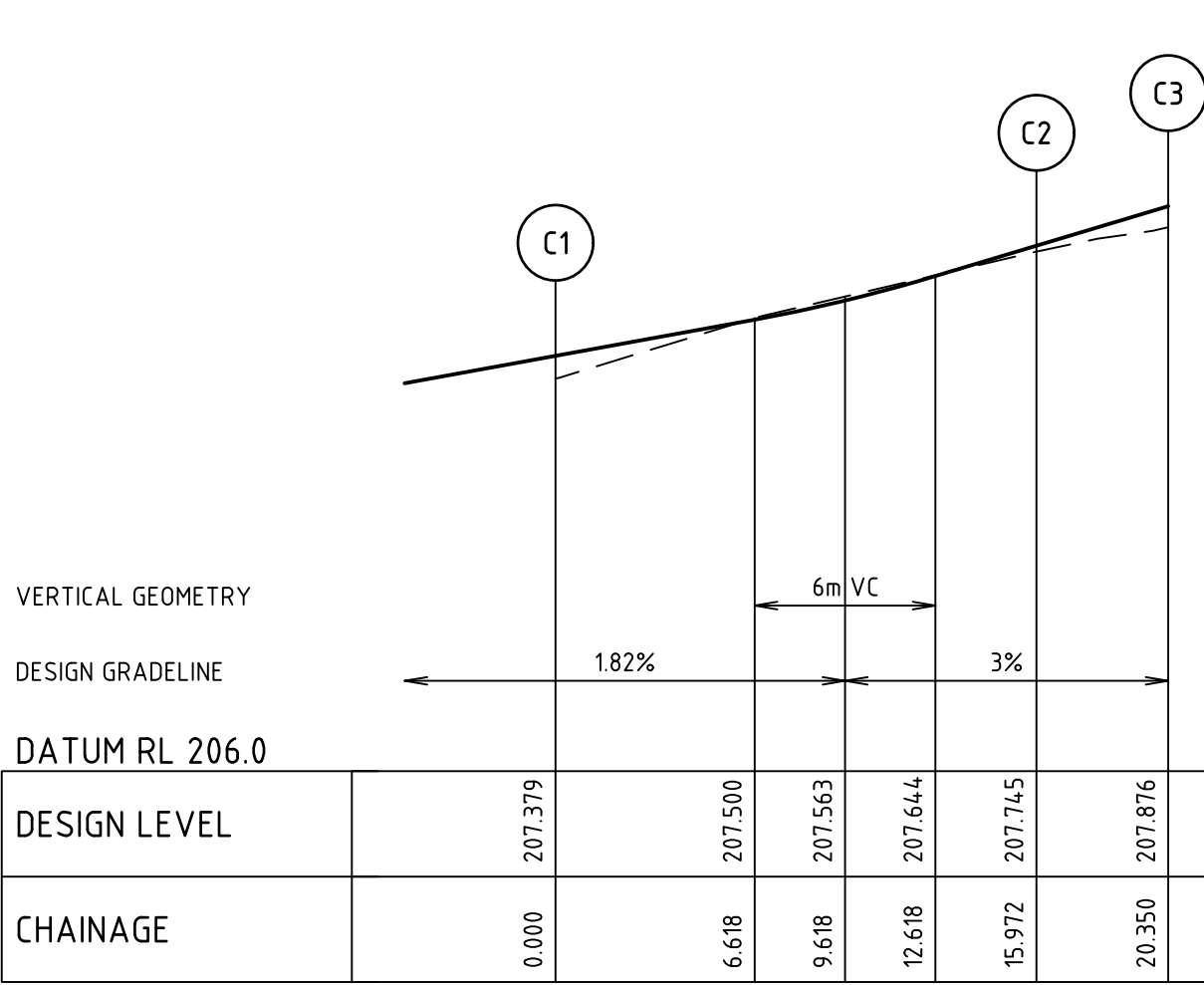


KURB A

KURB A

POINT NO	EASTING	NORTHING	RL
A1	257734.760	5933713.271	207.910
1/4	257734.453	5933714.206	207.926
1/2	257733.970	5933715.062	207.929
3/4	257733.328	5933715.808	207.919
A2	257732.552	5933716.413	207.901
1/4	257730.561	5933717.301	207.859
1/2	257728.398	5933717.578	207.799
3/4	257726.248	5933717.219	207.687
A3	257724.292	5933716.254	207.626
A4	257722.562	5933715.064	207.645

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
A1-A2	5.000	3.941	3.840	0.383	-0.097
A2-A3	7.477	8.753	8.261	1.245	-0.318



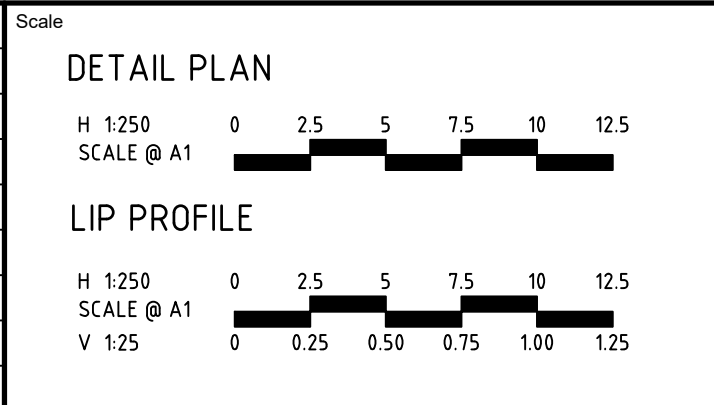
KURB C

KURB C

POINT NO	EASTING	NORTHING	RL
C1	257727.635	5933737.363	207.379
C2	257736.684	5933724.202	207.745
1/4	257737.398	5933723.375	207.778
1/2	257738.275	5933722.723	207.810
3/4	257739.272	5933722.277	207.843
C3	257740.342	5933722.059	

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
C2-C3	5.000	4.379	4.240	0.472	-0.119

Rev	Description	By	Date
A	PRELIMINARY ISSUE	B. I.	NOV 2020
Rev	Amendments	Approved	Date



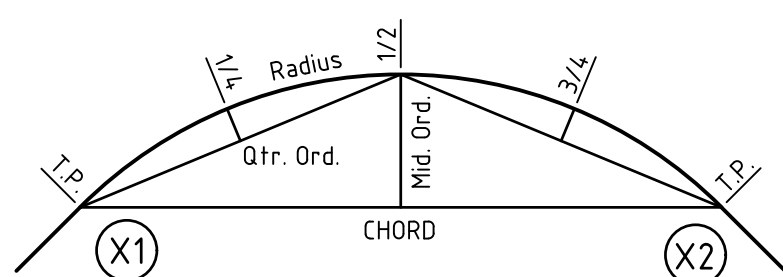
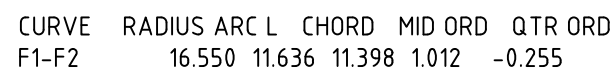
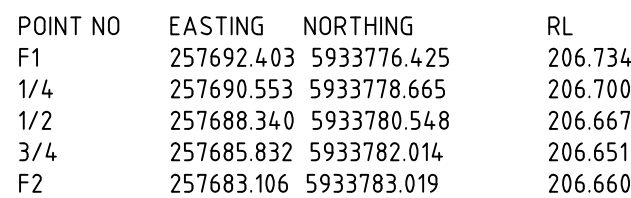
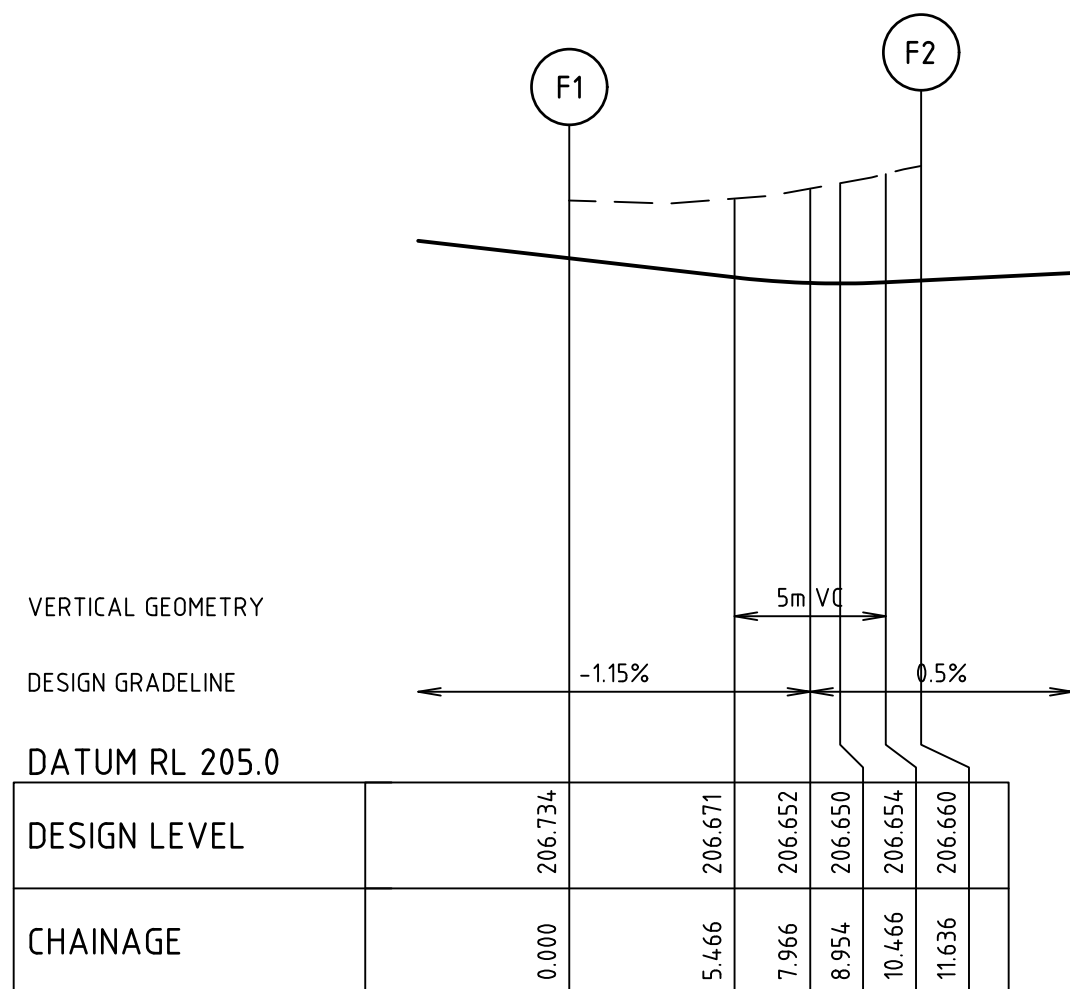
© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire
16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

Designed H.OAKLEY-WARREN	Checked B. IBBS
Authorised C. CLARKE	Date NOV 2020

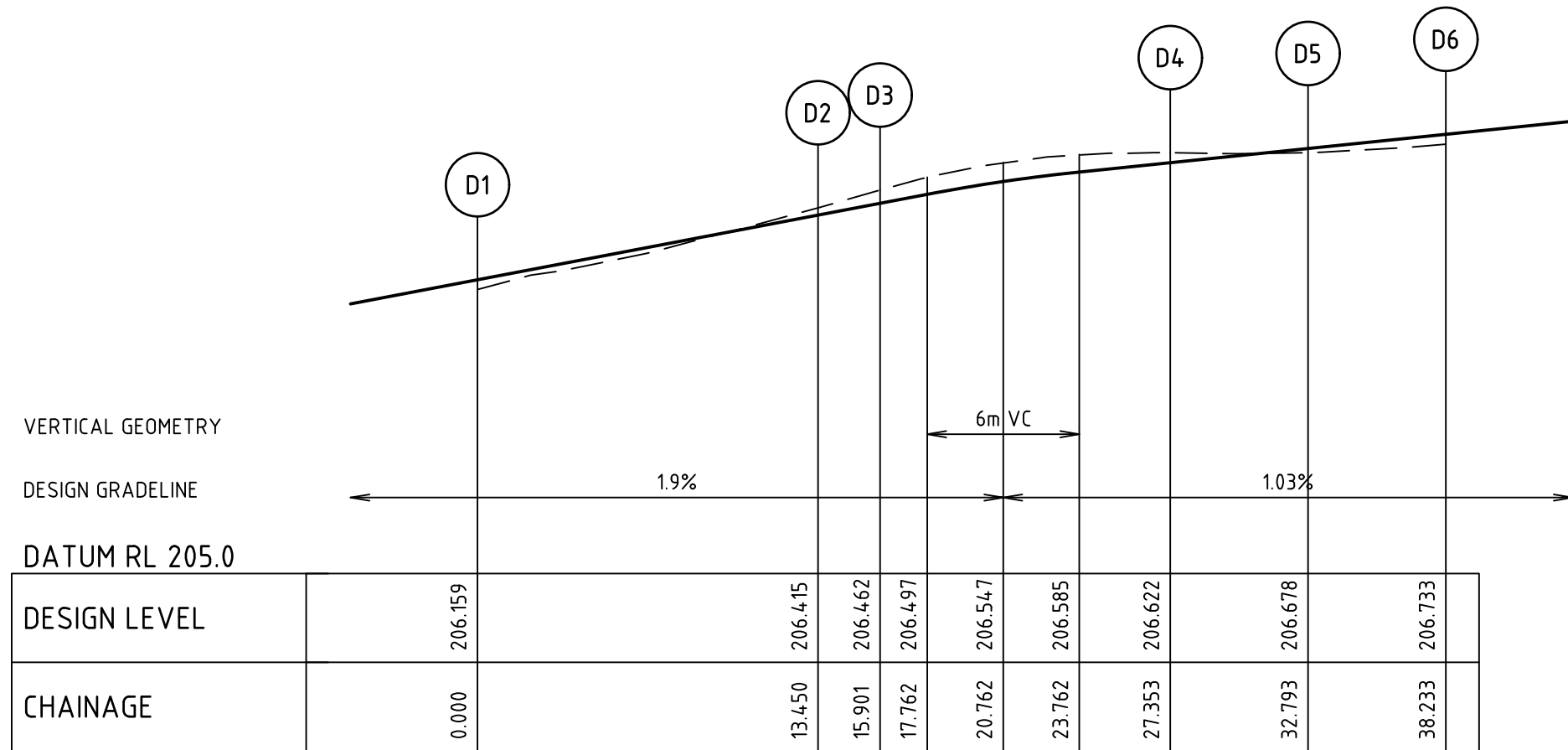
**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 1
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L**

PRELIMINARY Drg No **308090CR500** Rev **A**

[illegible]

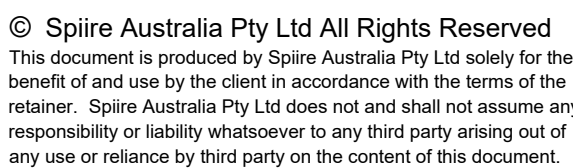
POINT NO	EASTING	NORTHING	RL
E1	257668.985	5933794.007	206.749
E1/4	257672.333	5933793.776	206.715
1/2	257675.514	5933794.843	206.645
3/4	257678.045	5933797.046	206.522
E2	257679.540	5933800.051	206.394
E3	257679.944	5933801.536	206.337
1/4	257680.235	5933803.375	206.277
1/2	257680.123	5933805.234	206.231
3/4	257679.614	5933807.025	206.195
E4	257678.731	5933808.664	206.159

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
E1-E2	8.600	13.509	12.162	2.519	-0.655
E3-E4	8.600	7.462	7.230	0.797	-0.202



POINT NO	EASTING	NORTHING	RL
D1	257684.47	5933812.573	206.159
1/4	257686.008	5933809.619	206.223
1/2	257686.925	5933806.391	206.287
3/4	257687.126	5933803.041	206.351
D2	257686.602	5933799.726	206.415
D3	257685.959	5933797.361	206.462
1/4	257685.678	5933794.525	206.515
1/2	257686.338	5933791.753	206.559
3/4	257687.869	5933789.344	206.592
D4	257690.01	5933787.577	206.622
1/4	257691.272	5933786.885	206.656
1/2	257692.534	5933786.193	206.680
3/4	257693.483	5933785.305	206.664
D5	257694.571	5933784.421	206.678
1/4	257695.497	5933783.479	206.692
1/2	257696.423	5933782.481	206.706
3/4	257697.286	5933781.432	206.720
D6	257698.098	5933780.334	206.733

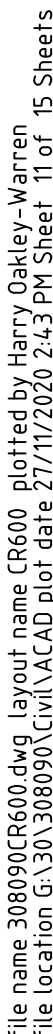
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
D1-D2	15.500	13.450	13.032	1.436	0.363
D3-D4	8.600	11.452	10.625	1.837	-0.472
D4-D5	23.450	5.440	5.427	0.158	0.039
D5-D6	23.450	5.440	5.427	0.158	0.039



Designed	Checked
H.OAKLEY-WARREN	B. IBBS
Authorised	Date
C. CLARKE	NOV 2020

**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT**
ROAD AND DRAINAGE
INTERSECTION DETAILS - SHEET 2
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L

PRELIMINARY Drg No Rev
308090CR501 **A**

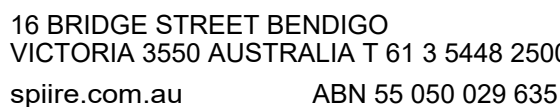
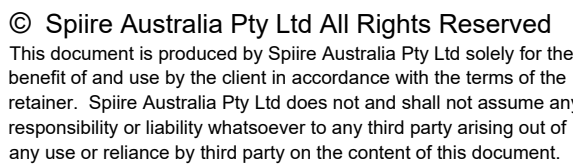


Scale

H 1:500
SCALE @ A1
V 1:50

0 0.5 1 1.5 2 2.5

0 5 10 15 20 25



GOLDEN GROVE ESTATE STAGE 5 CALLAGHAN ST, JACKASS FLAT

- SHEET 1

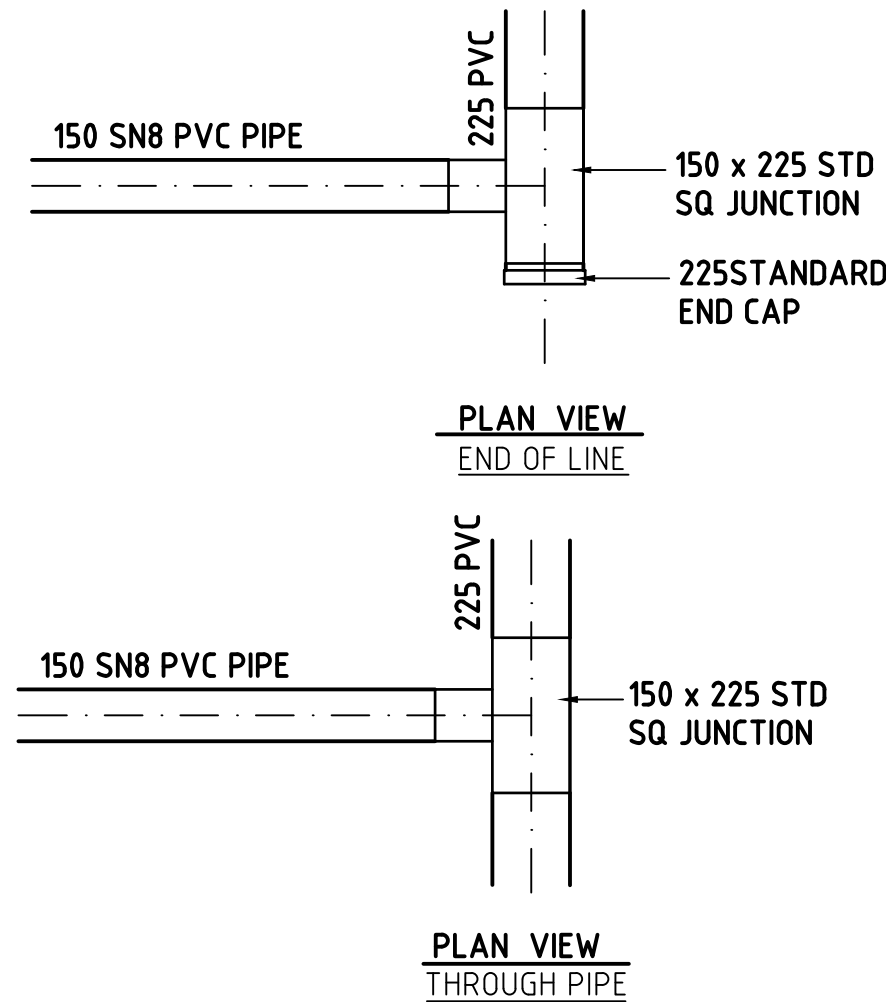
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L

PRELIMINARY	Drg No 308090CR600	Rev A
--------------------	------------------------------	-----------------

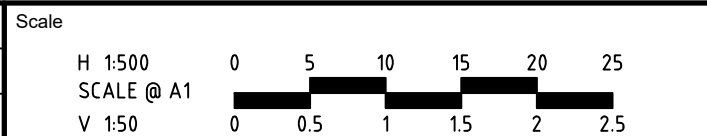
PIT		INTERNAL		INLET		OUTLET		PIT		REMARKS
NAME	TYPE	WIDTH	LENGTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH	
EP1	ENDPIPE	0	0	300	203.554			204.399	0.845	CONNECT TO EXISTING PIPE. AS PER IDM SD 480.
1	GRATED SIDE ENTRY PIT	600	900	300	203.897	300	203.847	204.648	0.801	
				300	203.897					
2	GRATED SIDE ENTRY PIT	600	900	300	205.289	300	205.239	206.821	1.583	AS PER IDM SD 480.
				300	205.712					
3	GRATED SIDE ENTRY PIT	600	900	150	205.922	300	205.525	206.728	1.204	AS PER IDM SD 480.
				300	205.575					
TP	TANGENT POINT	0	0							
4	ENDPIPE	0	0	150	206.049	150	206.049	206.799	0.750	AS PER IDM SD 440.
						150	206.339	207.089	0.750	
5	GRATED SIDE ENTRY PIT	600	900			300	205.625	206.587	0.962	AS PER IDM SD 481.
6	GRATED SIDE ENTRY PIT	600	900			300	205.753	206.714	0.961	AS PER IDM SD 481.
7	GRATED SIDE ENTRY PIT	600	900			300	203.938	204.556	0.618	AS PER IDM SD 481.
Ex PIT	EXISTING	450	450	150	203.862			204.457	0.615	
8	GRATED JUNCTION PIT	450	450	150	204.282	150	204.232	205.024	0.792	AS PER CoGB SD 24.
9	GRATED JUNCTION PIT	450	450	150	204.860	150	204.810	205.610	0.800	AS PER CoGB SD 24.
10	GRATED JUNCTION PIT	450	450			150	205.169	205.924	0.755	AS PER CoGB SD 24.
EP2	ENDPIPE	0	0	150	203.796			204.438	0.642	CONNECT TO EXISTING PIPE STUB.
11	GRATED JUNCTION PIT	450	450	150	204.210	150	204.160	204.777	0.617	AS PER CoGB SD 24.
12	GRATED JUNCTION PIT	450	450	150	204.803	150	204.753	205.546	0.793	AS PER CoGB SD 24.
13	GRATED JUNCTION PIT	450	450			150	205.839	206.614	0.775	AS PER CoGB SD 24.

DRAINAGE NOTES

1. ALL DRAINAGE PIPES & PITS ARE TO BE AT 1m OFFSET TO PROPERTY BOUNDARIES UNLESS SHOWN OTHERWISE
2. THE CONTRACTOR MUST CONTACT SERVICING AUTHORITIES TO ARRANGE SERVICE LOCATIONS PRIOR TO COMMENCEMENT OF EXCAVATION FOR THIS PROJECT
3. PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE MUNICIPALITY. STEEL GRATES ARE TO BE HOT DIP GALVANISED AFTER MANUFACTURE. THE TOP OF ALL GRATES MUST BE APPROXIMATELY 150mm BELOW THE SURROUNDING SURFACE LEVEL. PROPERTY DRAINAGE CONNECTIONS ARE TO BE PROVIDED AS NECESSARY.
4. ALL SIDE ENTRY PITS IN ROLLOVER KERB & CHANNEL ARE TO BE CONSTRUCTED USING AN APPROVED ROLLOVER TYPE LINTEL OR A REINFORCED ROLLOVER PROFILE PIT LID. STANDARD SQUARE PROFILE PIT LIDS WITHOUT LINTEL ARE NOT ACCEPTABLE.
5. TRENCHES WITHIN PAVEMENT OR FOOTPATH AREAS ARE TO BE BACKFILLED WITH 3% CEMENT STABILISED CLASS 1 FCR. THE TRENCH IS TO BE BACKFILLED IN 150MM LAYERS AND CONSOLIDATED.
6. ALL PIPE STUBS ARE TO CONSIST OF ONE FULL PIPE LENGTH UNLESS SHOWN OTHERWISE.
7. FINISHED LEVELS FOR SIDE ENTRY PITS MUST BE DETERMINED FROM KERB LEVELS AND SHOULD BE SLOPED TO SUIT NATURESTRIPS ETC. THE FSLs INDICATED IN THE PIT SCHEDULE ARE NOT KERB LEVELS.
8. STEP IRONS ARE NOT REQUIRED IN DRAINAGE PITS.
9. CONCRETE PIPES ARE TO BE CLASS 2 FJ RCP AND PVC PIPES ARE TO BE CLASS S8B UNLESS OTHERWISE NOTED.
10. ALL EXCAVATIONS FOR DRAINAGE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE VICTORIAN WORK COVER AUTHORITY.
11. REINFORCEMENT BARS SHALL COMPLY WITH AS4671, GRADE 400Y. LAPS IN REINFORCEMENT BARS SHALL BE 300 MIN. AND CLEAR COVER 50 MIN.
12. CONCRETE SHALL BE NORMAL CLASS N32 STANDARD STRENGTH GRADE OR HIGHER. COMPLYING WITH THE REQUIREMENTS OF AS1379.
13. ENDWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT PROVISIONS OF AS3600.
14. DIRECT CONNECTION OF PVC HOUSE DRAIN TO RCP DRAINAGE TO BE CONSTRUCTED WITH "CONCONNECT" OR APPROVED EQUIVALENT FITTING. 150mm PVC PIPES ARE NOT TO BE DIRECTLY CONNECTED TO CONCRETE PIPES LESS THAN 450mmØ IN DIAMETER. 100mmØ HOUSE CONNECTION PIPE TO BE USED FOR ALL LOTS IN STAGE.
15. WHERE PVC HOUSE CONNECTIONS ARE MADE DIRECTLY TO PIPES, THE HOUSE CONNECTION IS TO BE RAISED TO SURFACE LEVEL WITHIN THE PROPERTY AND CAPPED AS PER SDS020.
16. COMPACTATION REQUIREMENTS - ANY BACKFILL WITHIN 1m OF A COUNCIL ASSET (EG FOOTPATH OR ROAD) IS REQUIRED TO BE FCR. ALTERNATIVELY OTHER FILL MATERIAL CAN BE USED PROVIDED COMPACTION TESTS ARE CARRIED OUT TO ENSURE 95% COMPACTNESS IS ACHIEVED. TESTS TO BE CARRIED OUT AT A MINIMUM OF 1 PER 60m OF TRENCH.



A	PRELIMINARY ISSUE	B. I.	NOV 2020
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



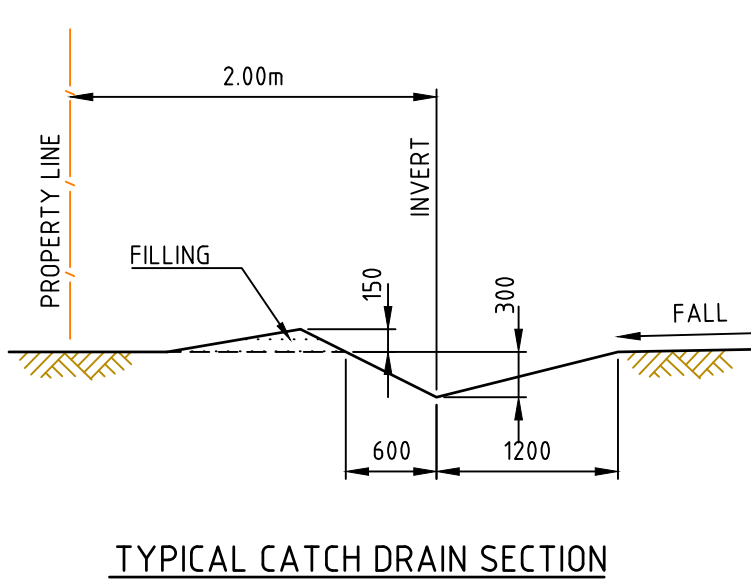
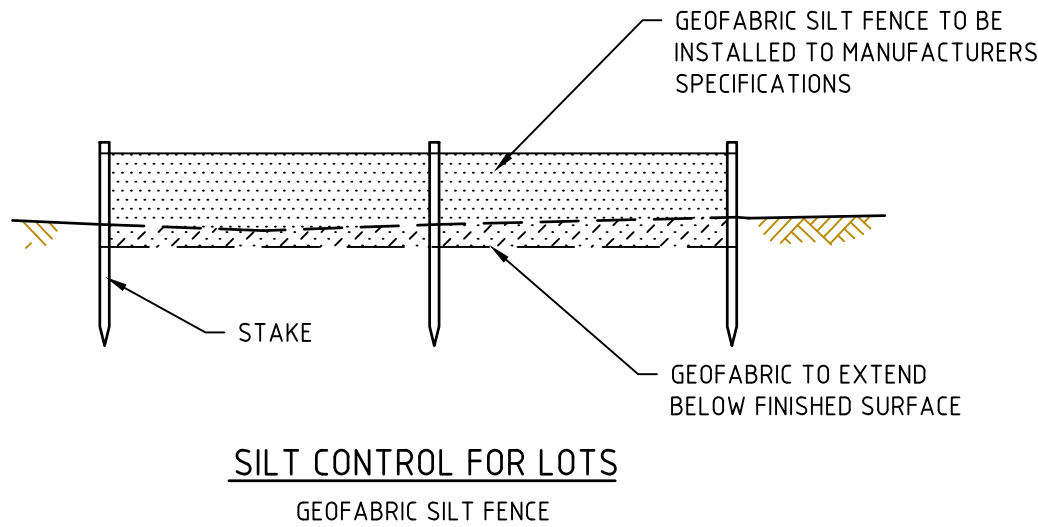
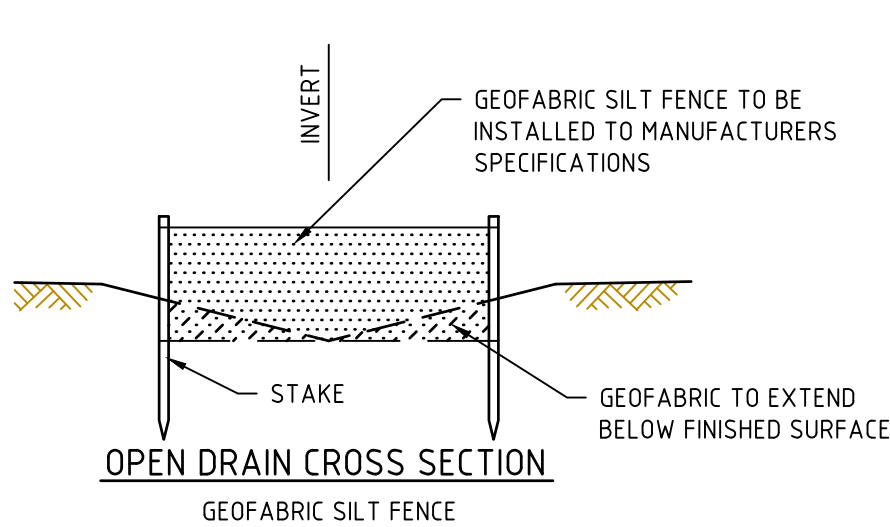
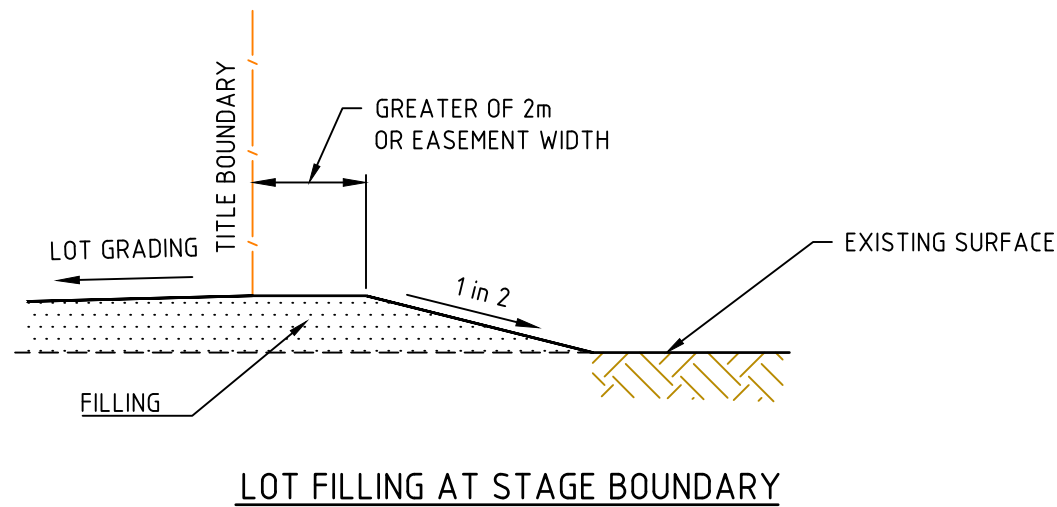
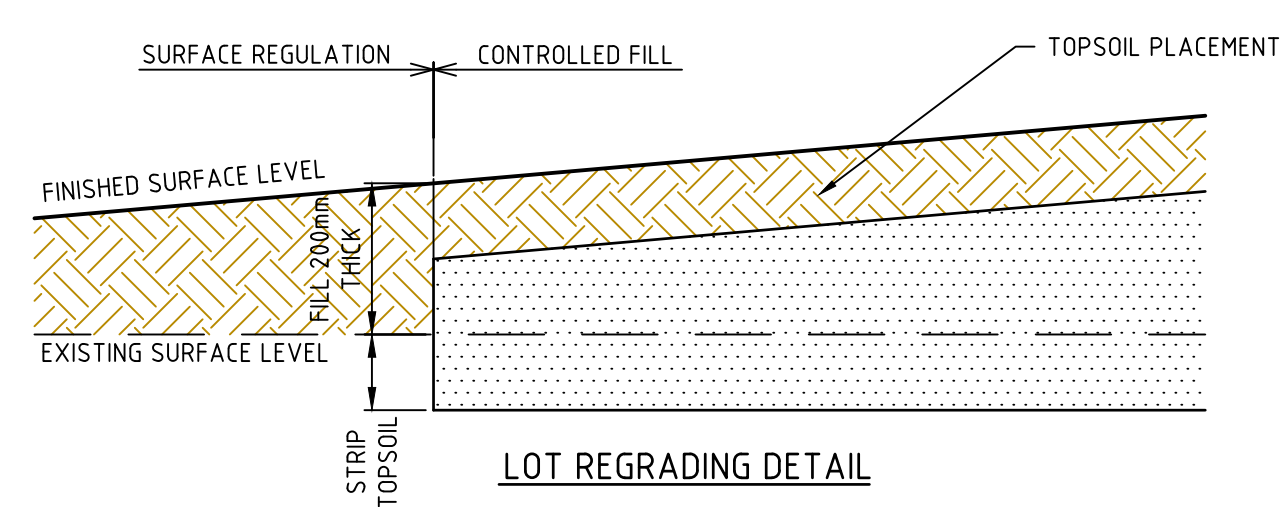
16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

Designed	Checked
H.OAKLEY-WARREN	B. IBBS
Authorised	Date
C. CLARKE	NOV 2020

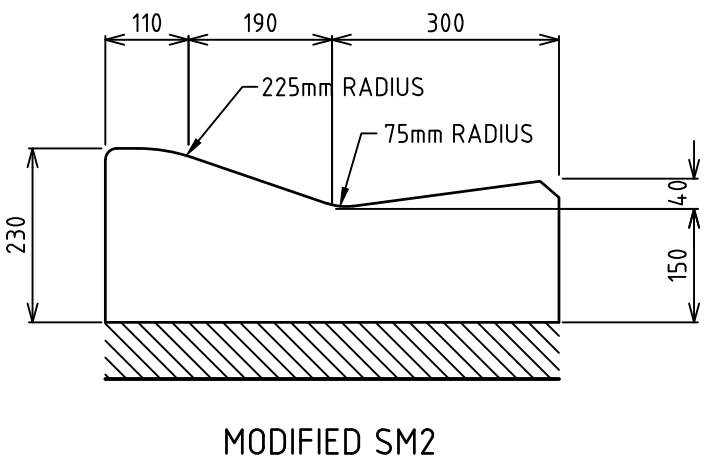
**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
DRAINAGE LONG SECTIONS - PIT SCHEDULE
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L**

PRELIMINARY Drg No 308090CR601 Rev A

file name: 308090CR700.dwg, layout name: CD700, created by: Harry Oakley-Warren, file location: G:\301\308090\1\Callaghan.dwg, plot date: 27/11/2020 2:43 PM, sheet: 13 of 15 Sheets

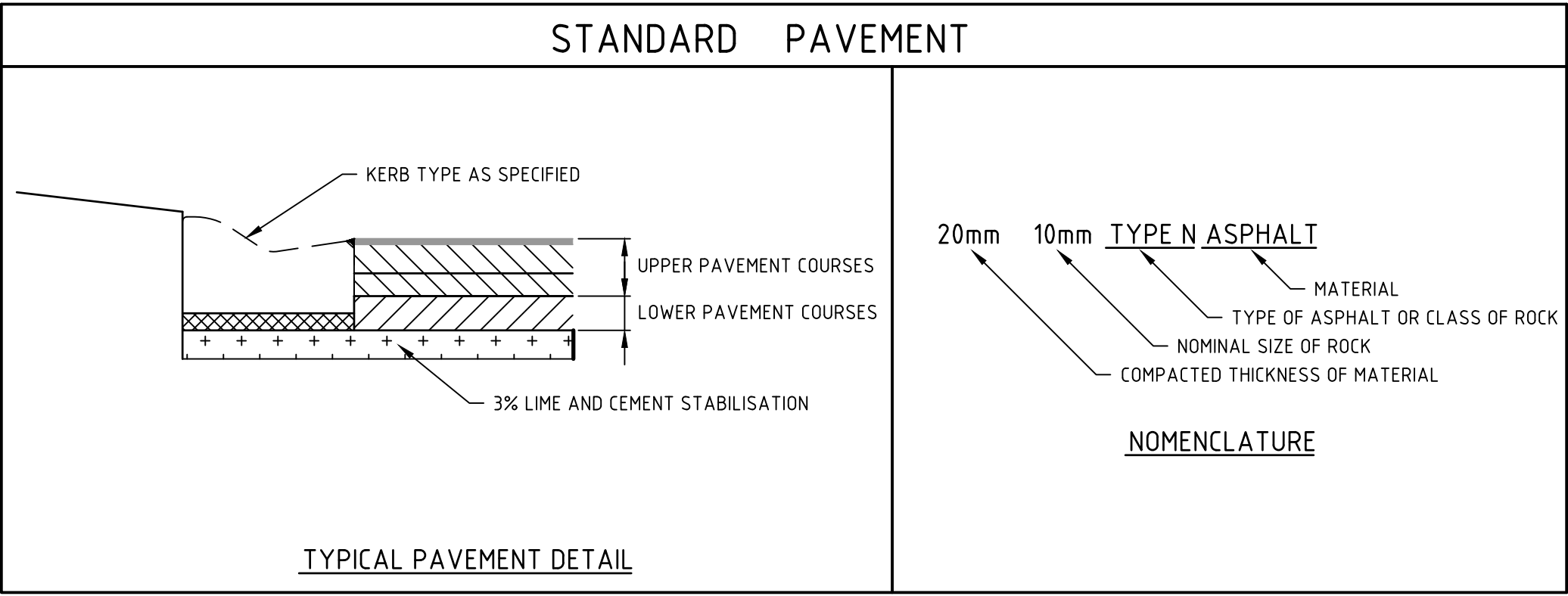


SILT CONTROL OPTIONS
NOT TO SCALE



STANDARD KERB PROFILES
NOT TO SCALE

- NOTES:
1. ALL KERBS AND KERB & CHANNEL TO BE REINFORCED IN ACCORDANCE WITH MUNICIPALITY STD DRAWINGS.
 2. ALL KERBS AND KERB & CHANNEL TO HAVE 150mm DEPTH OF CONCRETE BELOW TOP OF PAVEMENT LEVEL.



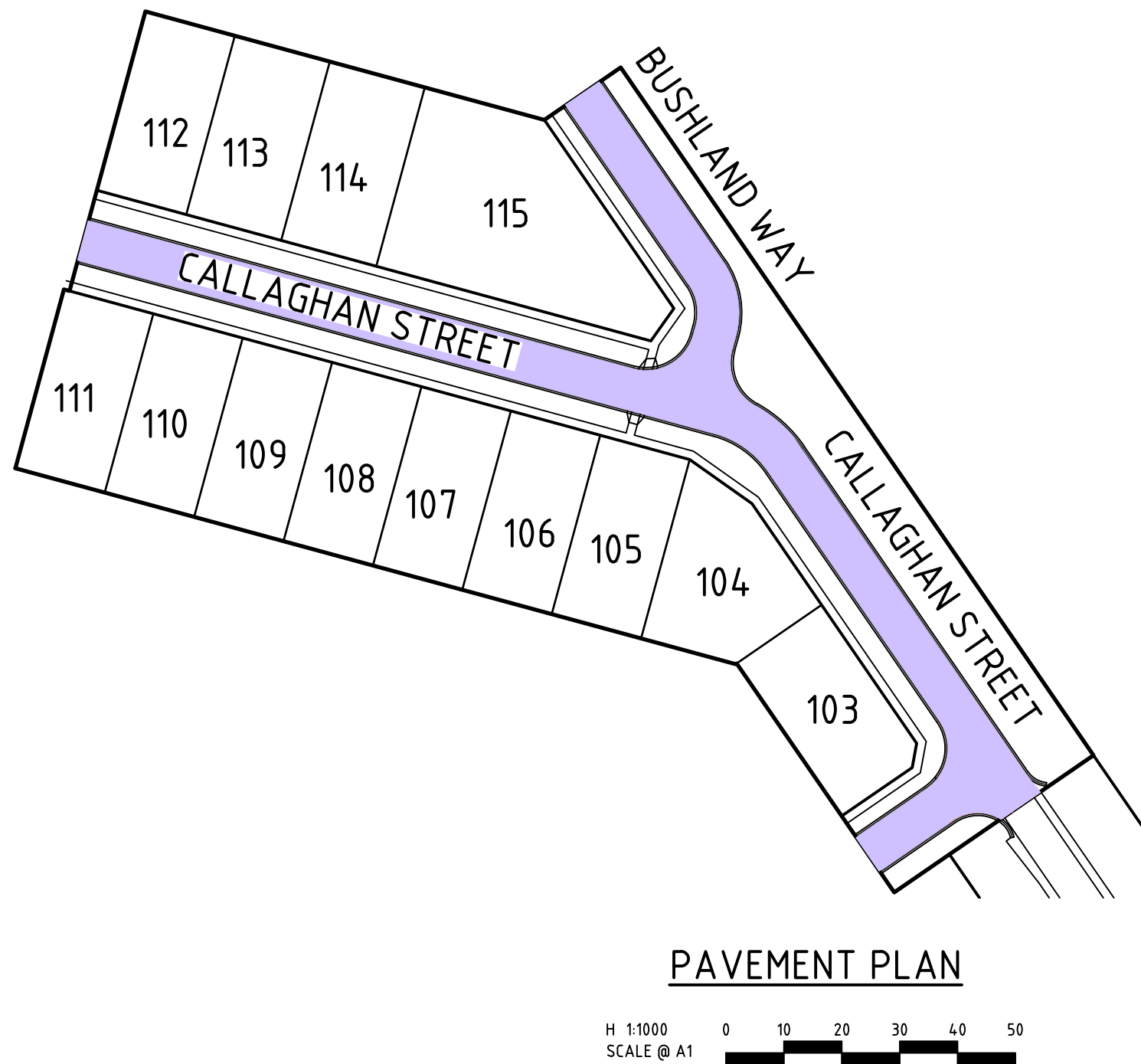
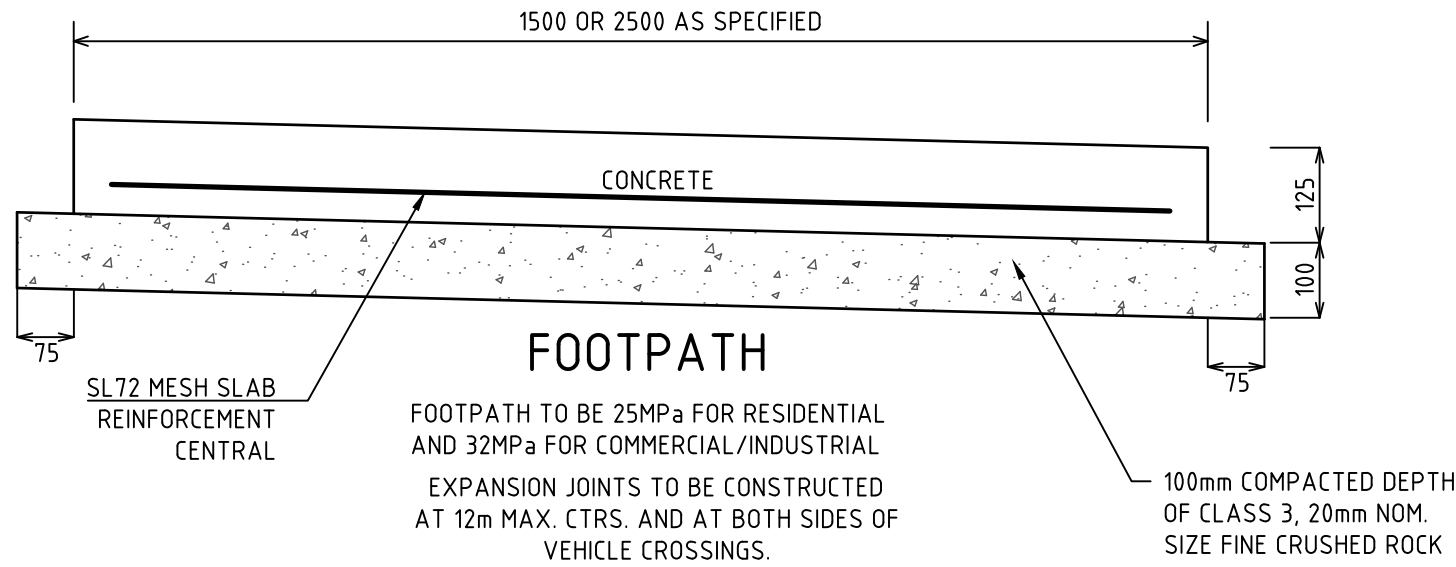
PAVEMENT DETAILS

THE PAVEMENT DESIGNS SHOWN HERE (EXCLUDING THE EXTERNAL CALLAGHAN STREET) HAVE BEEN DESIGNED/PROVIDED BY GTS WHO ARE RESPONSIBLE FOR THE GEOTECHNICAL WORK ON THIS PROJECT. SPIIRE IS NOT RESPONSIBLE FOR THE WORK OF GTS.

THE DESIGN (EXCLUDING EXTERNAL CALLAGHAN STREET) HAS BEEN EXTRACTED FROM THE 10C 581 REPORT ON "EVERGREEN WATERS - STAGE 1, JACKASS FLAT" AND 17C 0495 REPORT ON "GOLDEN PARK ESTATE STAGE 1" THESE DOCUMENTS SHOULD BE REVIEWED TO ENSURE THAT THE DESIGN HAS BEEN ACCURATELY REPRODUCED.

A COPY OF THE DOCUMENTS WILL BE PROVIDED 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 GTS AND COPIED TO SPIIRE.



PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)
ASPHALT WEARING COURSE	ASPHALT TYPE N, SIZE 10 WITH PRIME	30
BASE COURSE	CLASS 2, 20mm NOMINAL SIZE COMPACTED FCR TO A MINIMUM DENSITY OF 98% MMDD	100
CONCRETE	30 MPa CONCRETE WITH SL82 MESH	0
UPPER PAVEMENT TOTAL		130
SUBBASE	CLASS 1 OR 2, 20mm NOMINAL SIZE COMPACTED FCR COMPACTED TO A MINIMUM DENSITY OF 96% MMDD	0
SUBBASE	CLASS 3 OR 4, 20mm OR 40mm COMPACTED FCR TO A MINIMUM DENSITY OF 96% MMDD	120
STABILISATION	3% LIME AND CEMENT STABILISATION	(200)
TOTAL PAVEMENT DEPTH		250

GENERAL NOTES:

1. NATURE STRIPS ARE TO BE TOPSOILED WITH MATERIAL STOCKPILED FROM STRIPPING TO A DEPTH OF 100mm. IMPORTED TOPSOIL AND/OR SEEDING MAY BE REQUIRED TO PROVIDE GOOD GRASS COVER
2. LOCATION OF ALL SERVICE CONDUITS IS TO BE MARKED ON THE FACE OF BOTH KERBS WITH A UNIFORM 50mm DIAMETER MARK, 5mm DEEP. WATER & GAS CONDUITS TO BE 50mm DIAMETER CLASS 12uPVC PIPE. POWER & TELSTRA CONDUIT ARE AS SPECIFIED ON THE POWER PLAN.

ROAD NAME	TYPE
CALLAGHAN STREET (INTERNAL)	A
BUSHLAND WAY	A
POPPETHEAD ROAD	A

Scale

AS SHOWN



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

16 BRIDGE STREET BENDIGO
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500
spiire.com.au ABN 55 050 029 635

Designed
H.OAKLEY-WARREN

Authorised
C. CLARKE

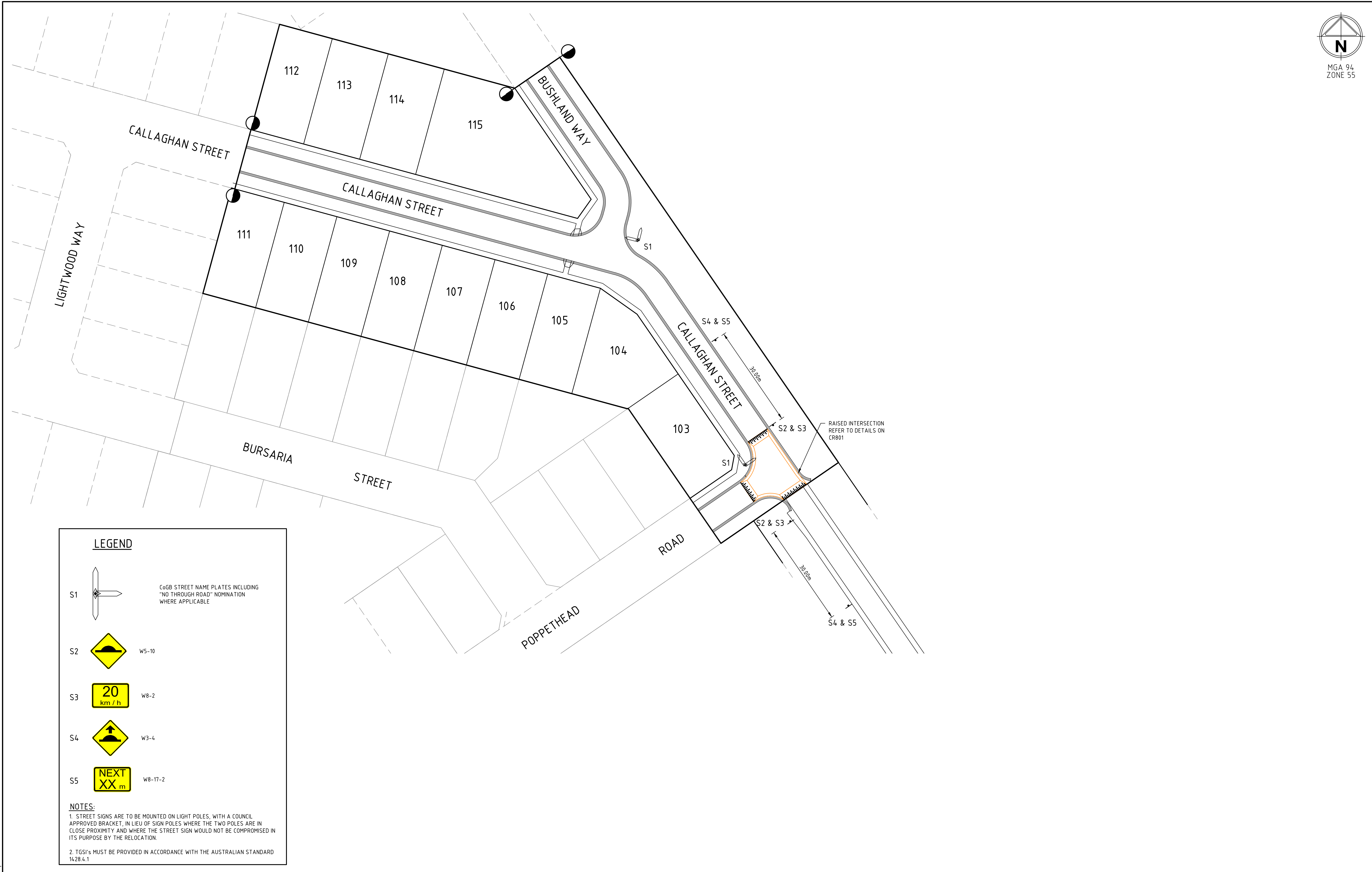
Checked
B. IBBS

Date
NOV 2020

**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
PAVEMENT AND TYPICAL DETAILS - SHEET 1**
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L

PRELIMINARY Drg No
308090CR700

Rev
A



**GOLDEN GROVE ESTATE STAGE 5
CALLAGHAN ST, JACKASS FLAT
ROAD AND DRAINAGE
SIGNAGE AND LINEMARKING - SHEET 1
CITY OF GREATER BENDIGO DS/226/2010 AND AM/904/2011A
WARRINGAL VIEWS P/L**

Orig No	Rev
PRELIMINARY 308090CR800	A

