Snowy Valleys Council



SNOWY VALLEYS COUNCIL MEETING LATE REPORTS 25 OCTOBER 2018

THE MEETING WILL BE HELD AT 2.00PM
IN THE SNOWY VALLEYS COUNCIL CHAMBERS, BRIDGE STREET, TUMBARUMBA

Disclosure of Pecuniary Interests at meetings

Item from Bluett Local Government Handbook

[14.125] A Councillor or a Council Committee member who has a pecuniary interest in any matter with which the council is concerned, and who is present at a meeting of the council or committee at which the matter is being considered, must disclose the nature of the interest to the meeting as soon as practicable. The person must not be present at, or in the sight of, the meeting either at any time during which the matter is being considered or discussed or at any time during which a vote is being taken on any question relating to the matter (s 451). A Councillor who has declared a pecuniary interest in a matter before the council but has withdrawn from the meeting because of that declaration is not counted in considering whether the meeting is quorate for that matter.

Disclosure of Political Donations and Gifts

The Environmental Planning and Assessment Act 1979 places obligations on Councillors, staff, applicants and any person who makes a public submission, to disclose information relating to political donations and gifts during the environmental plan making or development assessment process.

Furthermore, for each planning decision made at a Council or Committee Meeting, the names of Councillors who supported the decision and those that oppose the decision must be recorded.

The fact that political donations or gifts have been made by applicants / proponents of a planning application should not affect whether an application is approved or refused. Political donations or gifts should not be relevant in making a determination. The matter should be determined on its merits. Nor do they provide grounds for challenging the determination of any applications.

For further information, visit www.planning.nsw.gov.au/donations

Public Recording of Meetings prohibited without Council authority

A person may use any recording device, including audio and visual recording and any device capable of recording speech, to record the proceedings of a meeting of a council or a committee of a council only by the resolution of the council or committee.

A person may, be expelled from a meeting of a council or a committee of a council or using or having used a tape recorder without consent.

Photography

Flash photography is not permitted at a meeting of the Council or a Committee of the council without the consent of the General Manager.

Public Forum (extract from the Code of Meeting Practice)

a) All prospective public forum speakers must advise the General Manager of their wish to address Council by the Monday prior to a Council meeting.

They must also provide a verbal or written précis of the subject matter at that time.

- b) The public forum section shall only operate for a period of thirty (30) minutes immediately after apologies have been formally received.
- c) Preference shall be given to addressees who wish to speak to any item before Council at that particular meeting.
- d) The maximum time allowed for each speaker will be 5 minutes.
- e) Not more than two members of a group may speak.
- f) All persons addressing the meeting shall speak to the Chair.
- g) The Chairperson may curtail the public participation where the information being presented is considered repetitive or irrelevant.
- h) Councillors may ask questions of the person/s addressing Council only if so approved by the Chair.
- i) Councillors will not enter into general debate with the speakers.
- j) The Mayor is to approve of variations to this procedure in urgent / compelling circumstances.
- k) All people / organisations who wish to address Council be made aware of the above condition.



Thursday 25 October 2018
Snowy Valleys Council Chambers
Bridge Street, Tumbarumba
2.00pm

LATE REPORTS

10.	MANA	AGEMENT REPORTS	
	10.2	Snow View Estate Stage 3	2
1.	CONF	FIDENTIAL	

10. MANAGEMENT REPORTS

10.2 SNOW VIEW ESTATE STAGE 3

REPORT AUTHOR: COORDINATOR TOURISM & ECONOMIC DEVELOPMENT DIRECTOR STRATEGY, COMMUNITY AND DEVELOPMENT

EXECUTIVE SUMMARY:

The purpose of this report is to undertake an assessment of the land stock available in Stage 2 and to assess the financial viability of constructing Stage 3 Snow View Estate.

RECOMMENDATION:

THAT COUNCIL:

- 1. Receives the report on Snow View Estate Stage 3
- 2. Consider allocating funds for the construction of Stage 3 Snow View Estate in the 2019/20 budget.
- 3. Commit to the subdividing of lots 31 and 32 (Snow View stage 2) into 3 allotments and endorse a funding allocation of \$5,000 for subdivision and infrastructure costs to be reimbursed from the sale of these allotments.

BACKGROUND:

Stage 2 was completed in 2012 and consisted of 22 lots. Lots in this stage are selling quickly. 7 remain unsold (69% sold) and the allotments that remain are the largest and most expensive. It is therefore proposed to split the 2 largest allotments into 3 (which occurred privately in stage 1). This aims to make the allotments more attractive to potential purchasers and would also increase the yield by 1 allotment in stage 2.

Major employers in the Tumbarumba area have communicated to Council that the lack of availability of quality housing is a key constraint in the attraction and retention of skilled employees to the town. The issue has also been raised by the Tumbarumba community in various community engagement activities, and has been identified in the SVC Draft Economic Development Strategy as a constraint on economic development.

Quality housing infrastructure is a fundamental enabler of economic development for the role it plays in facilitating social and economic interaction and exchange. There is currently very little opportunity to build on vacant blocks in Tumbarumba. Concerns have also been raised regarding the potential impacts of Snowy Hydro 2.0 on housing infrastructure demands.

A detailed survey and design for Snow View Stage 3 has been completed and the cost estimate used in this model is based on the detailed survey and design.

REPORT:

Financial modelling using a cost estimate provided by Internal Works & Services and historical income for stage 1 and 2, adjusted for CPI has been used to calculate an internal rate of return on Council investing in stage 3 of this project. Based on the modelling, this project will provide a sustainable financial investment for Council, while also addressing residential land and housing shortage that is a constraint to economic and population growth in the Tumbarumba area.

The cost benefit analysis of constructing Stage 3 is outlined in the table below and demonstrates investment in Stage 3 of Snow View Estate is a self-sustaining project.

Store 2	10 Years	20 Years
Stage 3 Cap Expenditure (includes loan repayments)	- 1,432,701	- 1,803,921
Sales	1,046,017	1,046,017
Rates	332,505	990,568
Realised profit IRR	- 54,179 -1%	232,664 5%

<u>Assumptions</u>	
Capital expenditure estimate stage 3 – internal cost estimate provided by IWD:	\$1,045,125
Funded by: Stage 2 sales 2018/19 financial	
year onwards:	\$526,645
loan	\$500,000
20 years principal and interest	
interest rate	4.24%
Rates income estimate stage 3 increased b	y 2.5% annually.
No adjustment for rates harmonisation.	

The returns generated on Council's investment in stage 3 exceed the returns available to Council via cash investments. It is not recommended that stage 3 be onsold to private developers as much of the return on investment is generated by rates revenue created. Without the rates revenue, the project is not appealing to commercial developers.

The nature of this project (which is highly weather dependent) and available resources means that this project will not be able to commence until at least next construction season. It is therefore proposed that the project be considered for inclusion in the 2019/20 budget.

LINKS TO COMMUNITY STRATEGIC PLAN AND DELIVERY AND OPERATIONAL PLAN:

Integrated Planning and Reporting Framework: CSP Outcome 2028

Theme 2: Growth through Innovation

Delivery Outcomes

2.1 Develop strong relationships with local industry, organisations and government to ensure a sustainable local economy

Operational Actions

2.1.2 Implement priority actions from the Economic Development

SUSTAINABILITY ASSESSMENT:

	Positive	Negative
Social	Ensures the availability of residential blocks for adequate, quality housing stock in Tumbarumba	Nil

	Positive	Negative
Environmental	New homes built in Snow View Estate are required to comply with contemporary energy efficiency standards.	Nil
Economic	Provides investment income to Council.	Requires upfront investment and loan interest repayments
Governance	Shows Council is willing and able to honour the Tumbarumba community's priorities in a cost effective manner by providing a self-sustaining investment in essential infrastructure.	Nil

Financial and Resources Implications

See table above for budget implications. Note that the financial model assumes land values in 2018 are consistent with those of 2012 (adjusted for CPI). It is likely that the market value for stage 3 would have increased on 2012 market value for residential allotments. Council will obtain a formal independent market valuation for stage 3 allotments prior to listing the stage for sale.

Costs and Benefits:

See modelling above for internal rate of return.

Policy, Legal and Statutory Implications:

Nil

RISK MANAGEMENT - BUSINESS RISK/WHS/PUBLIC:

Any investment of this nature carries a business risk. This will be managed in accordance with Council's risk management framework and governance policies.

OPTIONS:

Council can choose to adopt, amend or reject the recommendation.

COUNCIL SEAL REQUIRED:

Nο

COMMUNITY ENGAGEMENT AND COMMUNICATION:

The development of Snow View Stage 3 has been identified in a number of community engagement activities as a consistently high priority for the Tumbarumba community. The draft Economic Development Strategy identifies residential land and housing shortages as a key constraint to the economic development of the Snowy Valleys region.

The progression of Snow View Stage 3 is a priority for the Tumbarumba Chamber of Commerce. Correspondence was sent to the Tumbarumba Chamber of Commerce on 14 August 2018.

Internally, the following consultation has occurred:

- Gathering of Stage 1 and 2 financial information and calculation of financial model (10/8/2018).
- Circulated financial model to Director Internal Services, Division Manager Finance and IT, Co-ordinator Financial Strategy & Reporting. Responded to queries and made amendments as required.

- Detailed Cost Estimate requested from Director Assets and Infrastructure August 2018 ELT meeting to consider August Council reports. Detailed Cost Estimate received October 2018.
- Revised modelling and report based on Detailed Cost Estimate circulated to Circulated financial model to Director Internal Services, Division Manager Finance and IT, Co-ordinator Financial Strategy & Reporting for second review.

Attachments

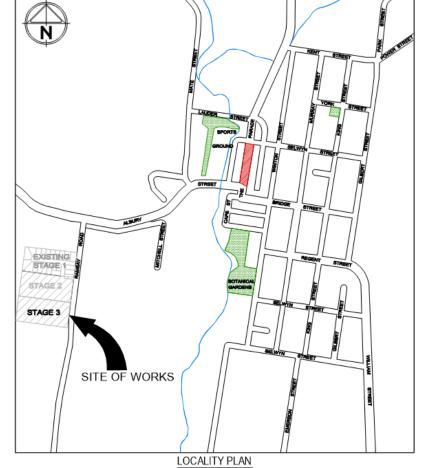
1 Snow View Stage 3 plan <a>J

SNOW VIEW ESTATE STAGE 3 **TUMBARUMBA SHIRE COUNCIL**

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA AUGUS YOME AS
- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES AND ARE ACCURATE TO WITHIN ADM.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT, THE ROAD & DRAINAGE SPECIFICATION, APPROVED. . SPECIFICATIONS AND STANDARD DRAIVINGS AND TO THE SATISFACTION OF SUPERINTENDENT AND THE CITY ENGINEER OR HIS REPRESENTATIVE.
- 4. ALL CHAINAGES REFER TO ROAD CENTRELINES
- THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL LOCAL SERVICE AUTHORITIES, ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
- 6. ANY BUILDINGS, TROUGHS, FENCES AND OTHER STRUCTURES ON SITE ARE TO BE REMOVED AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL IS TO BE INCLUDED IN THE OVERALL EARTHWORKS FIGURE UNLESS A SPECIFIC ITEM FOR REMOVAL IS DENOTED IN
- 7. ALL EXCAVATED ROCK TO BE REMOVED AND DISPOSED OFF SITE.
- ALL FILLING SHALL BE TO A LEVEL ISOMM BELOW THE FINSHED SURFACE LEVEL SHOWN AND COMPACTED AS PER AS-3798-1998. FILLING MATERIAL IS TO BE IN ACCORDANCE THE SPECIFICATION & TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT.
- 9. ALL BATTERS SHALL BE 1 IN 6. UNLESS OTHERWISE SHOWN.
- NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE FOR PUBLIC OPEN SPACE UNLESS OTHERWISE DIRECTED BY THE SUPERNTENDENT..
- 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 T.B.M.'S THEREAFTER.
- 12. BEFORE COMMENCING WORK ON THE TRENCHES IN EXCESS OF 1.5 METRES. DEEP, NOTICE OF SUCH PROPOSAL IS TO BE SENT TO THE PRINCIPAL MINING INSPECTOR VICTORIA WORKCOVER AUTHORITY IN ACCORDANCE WITH THE MINES ACT 1958 & O.H.&S. ACT 1985. A FOREMAN, QUALIFIED AS A NOMINATED PERMITTED MINES MANAGER, MUST BE IN ATTENDANCE AT ALL TIMES DURING SUCH EXCAVATION.
- ALL SERVICE TRENCHES UNDER DRIVEWAYS, FOOTPATHS AND PARKING BAYS TO BE BACKFILLED WITH CLASS 2 CRUSHED ROCK. SERVICE TRENCHES LESS THAN 750mm BEHI PARKING BAYS ARE ALSO TO BE BACKFILLED WITH COMPACTED CLASS 2 CRUSHED ROCK
- 14. ALL EXISTING DAMS ARE TO BE BREACHED, DRAINED, DESLUDGED AND SHALL BE ALL EXESTING DAMAS OF TO BE DIRECTION, DIVINED, DEVOLUTION OF THE STATE OF THE STAT
- NO BLASTING TO BE CARRIED OUT WITHIN THE . WITHOUT OBTAINING COUNCILS SPECIAL PERMISSION. RESTRICTED BLASTING WITHIN 20 METRES OF WATERMAINS AND WITHIN 6 METRES OF TELSTRA CONDUITS.

- WATER CONDUITS ARE TO BE Ø50mm. CLASS 12 P.V.C. WITH THE FOLLOWING MINIMUM COVER TO FINISHED SURFACE LEVELS:
- 18. WATER TAPPINGS TO BE LOCATED IN CENTRE OF ALLOTMENTS UNLESS OTHERWISE SHOWN
- 19. TELSTRA ARE TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS.
- 20. PAVEMENT DEPTHS MAY BE MODIFIED AS DIRECTED BY THE SUPERINTENDENT, PAVEMENT TO BE BOXED OUT TO MINIMUM DEPTH DENOTED, INSPECTED AND IF SUBGRADE IS IN QUESTION, FURTHER TESTING CARRIED OUT TO DETERMINE FINAL PAVEMENT DEPTH.
- WHERE PAVEMENT IS CONSTRUCTED ON FILLING, FILL MATERIAL IS TO BE APPROVED BY THE SUPERINTENDENT AND COUNCIL, FILLING TO BE, CONSTRUCTED IN LAYERS I SOMM THICK WITH COMPACTION ACHIEVING 95% AUSTRALIAN STANDARD DENSITY.
- CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.
- ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH AS 1742-3.
- 24 ALL TREES AND SHRUBS ARE TO BE RETAINED UNLESS THERWISE SHOWN IF ROAD AND DRAINAGE CONSTRUCTION NECESSITATES THEIR REMOVAL, WRITTEN PERMISSION MUST BE OBTAINED FROM THE ENGINEER.
- TREES ON COUNCIL RESERVES TO BE PROTECTED WITH APPROPRIATE EXCLUSION FENCING PRIOR TO COMMENCEMENT OF ANY WORKS.
- 27. NO MECHANICAL EXCAVATION IS TO TAKE PLACE WITHIN 0.3M OF THE EXISTING SERVICES

NDEX TO S	SHEETS	
REFERENCE		SHEET No
	ROADS & DRAINAGE	
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R2-1	LAYOUT PLAN	2
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R3-2	ROAD LONGITUDINAL SECTION	4
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WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES THE LOCATION OF SERVICES ARE APPROXMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVISION STEN NO GUARANTEE IS GROWN THAT ALL EXSTING SERVICES ARE SHOWN SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

LEGEND SERVICE LOCATION TABLE EXISTING WATER MAIN PROPOSED RECYCLED WATERMAIN - AG DRAIN CONDUIT AG OF PROPOSED AG DRAIN & FLUSHER PIT
CD PROPOSED CATCH DRAIN
SD PROPOSED SWALE DRAIN EXISTING RECYCLED WATERMAIN EXISTING UNDERGROUND EXISTING SIGN AND POST PROPOSED ELECTRICITY EXISTING TREE TO BE REMOVED OPTIC FIBRE WATER WATER PROPOSED TELSTRA ELECTRICITY
EXISTING OVERHEAD ELEC & POLE PROPOSED OPTIC FIBRE CONDUIT ROAD RESERVE SIDE OFFSET SIDE OFFSET SIDE OFFSET SIDE OFFSET SIDE OFFSET SIDE OFFSET PROPOSED GAS MAIN PARKING BAY/PAVED AREA TEMPORARY BENCH MARK (TBM) EXISTING TELSTRA & SERVICE PIT GAYLARD STREET B DRIVE PROPOSED PERMANENT SURVEY EXISTING OPTIC FIBRE EXCAVATION GREATER THAN 200mm KERB & CHANNEL + TYPE xg — EXISTING GAS MAIN PROPOSED BOLLARD FILLING GREATER THAN 200mm EXISTING FENCE SAWCUT PAVEMENT EXISTING SEWER & MANHOLE
 EXISTING SEWER RISING MAIN CONCRETE EDGE STRIP PROPOSED HOUSE DRAIN CONCRETE PAVEMEN LIMIT OF ROAD WORKS PROPOSED ESTATE FENCE PROTECTIVE TREE FENCING 52 AUTHORITY DRAIN & PIT EX 4500 EXISTING STORMWATER DRAIN & PIT ALLOTMENT NUMBER - PROPOSED TOP OF BATTER ROCK BEACHING ROAD CHAINAGE EXISTING HOUSE DRAIN PIT NUMBER PROPOSED TOE OF BATTER TPCh 116.57 EXISTING SURFACE CONTOUR MINOR BOAD CHAINAGE ___169.00 ___ EXISTING SURFACE CONTOUR MAJOR 1.20~ DRIANAGE OFFSET PROPOSED SLEEPER RETAINING SET-OUT POINT WALL
PROPOSED ROCK RETAINING WALL PROPOSED FOOTPATH FINISHED SURFACE CONTOUR MNOR FINISHED SURFACE CONTOUR MAJOR FINISHED SURFACE LEVEL PROPOSED DRIVEWAY EXISTING TREE TO BE RETAINED (SURVEYED CANOPY) GAS & WATER CONDUIT EXISTING FILL LEVEL EXISTING SURFACE LEVEL -(R)-* - OFFSET FROM BACK OF KERB IRRIGATION CONDUIT PROPOSED WATER MAIN **SNOW VIEW ESTATE** 30/5/11

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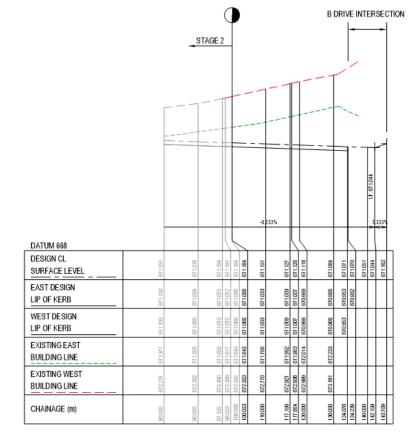
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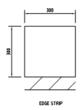


STAGE 3 TUMBARUMBA SHIRE COUNCIL





B2 KERB



KERB PROFILES

GAYLARD STREET

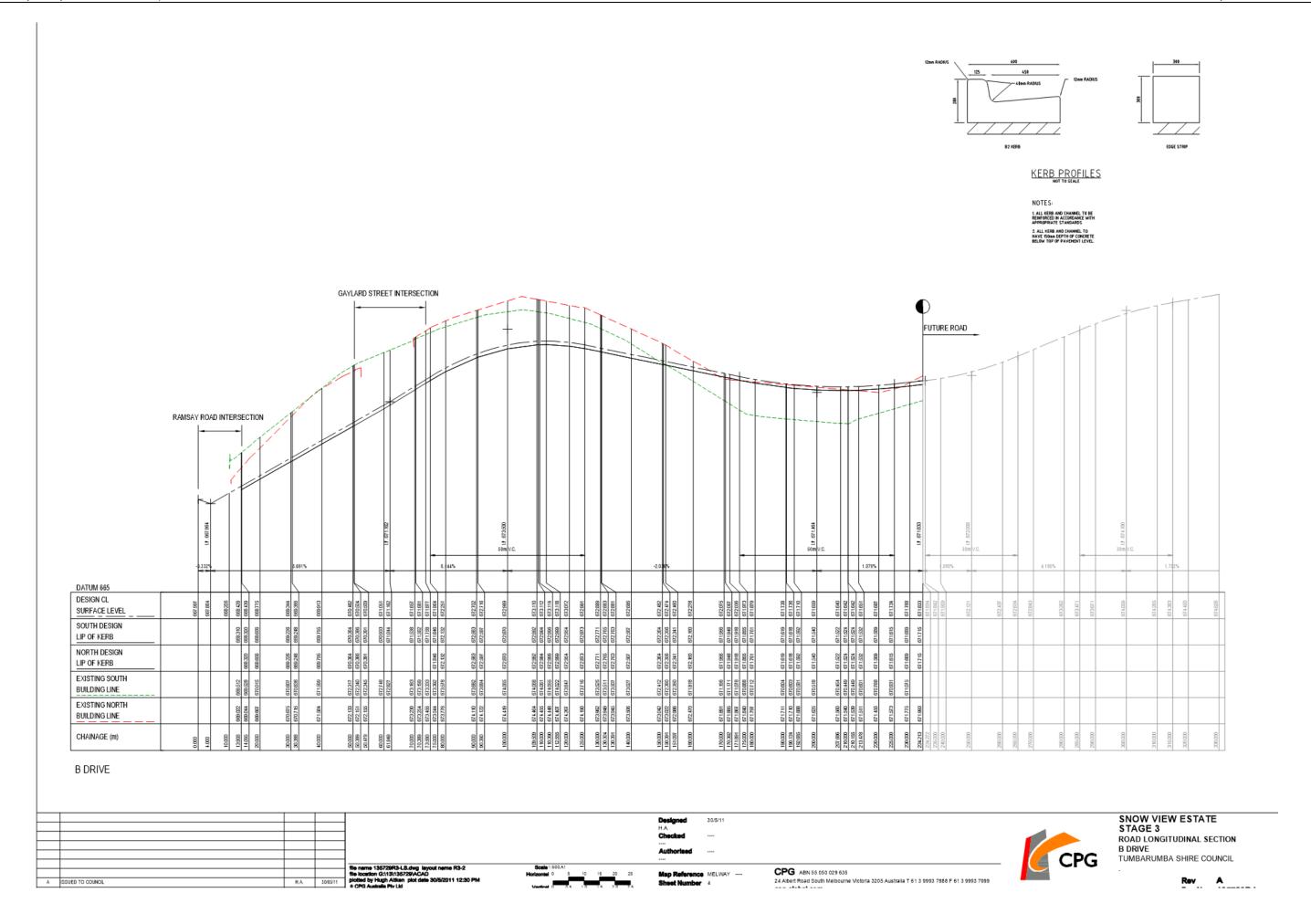
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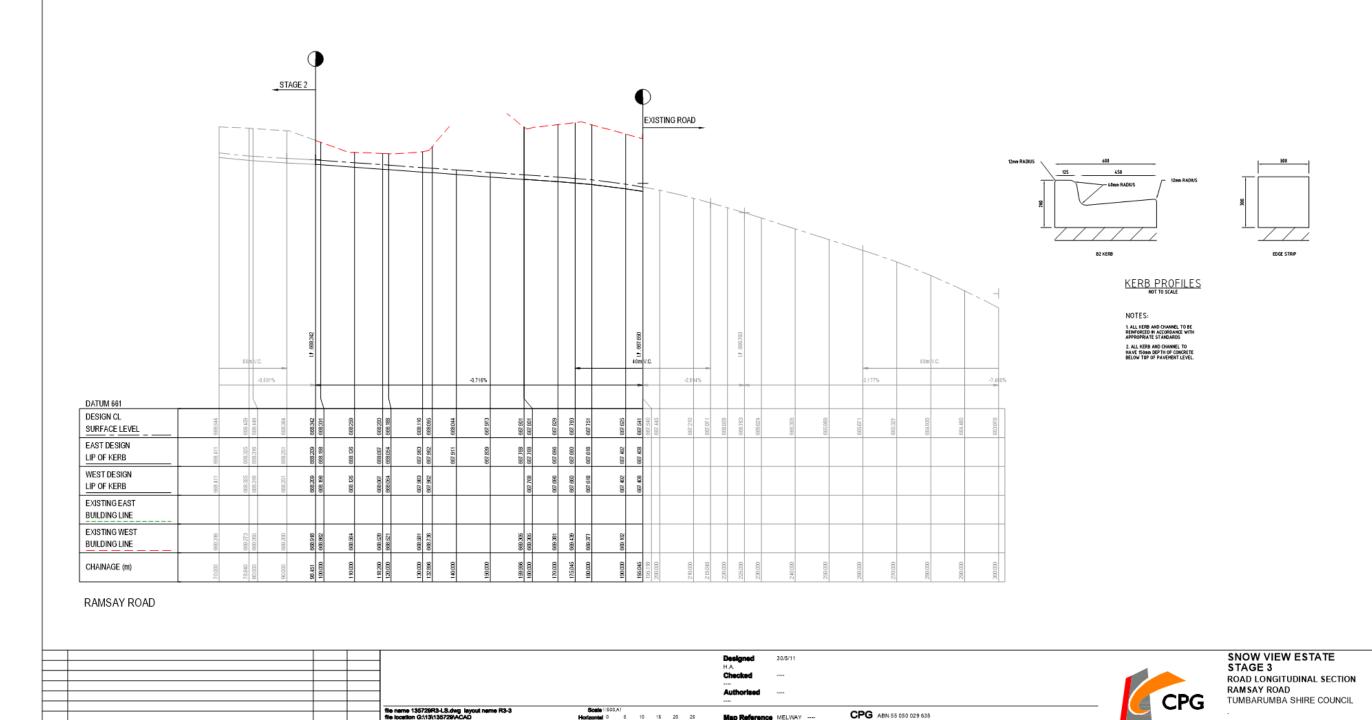
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SNOW VIEW ESTATE STAGE 3 ROAD LONGITUDINAL SECTION GAYLARD STREET TUMBARUMBA SHIRE COUNCIL

Rev A





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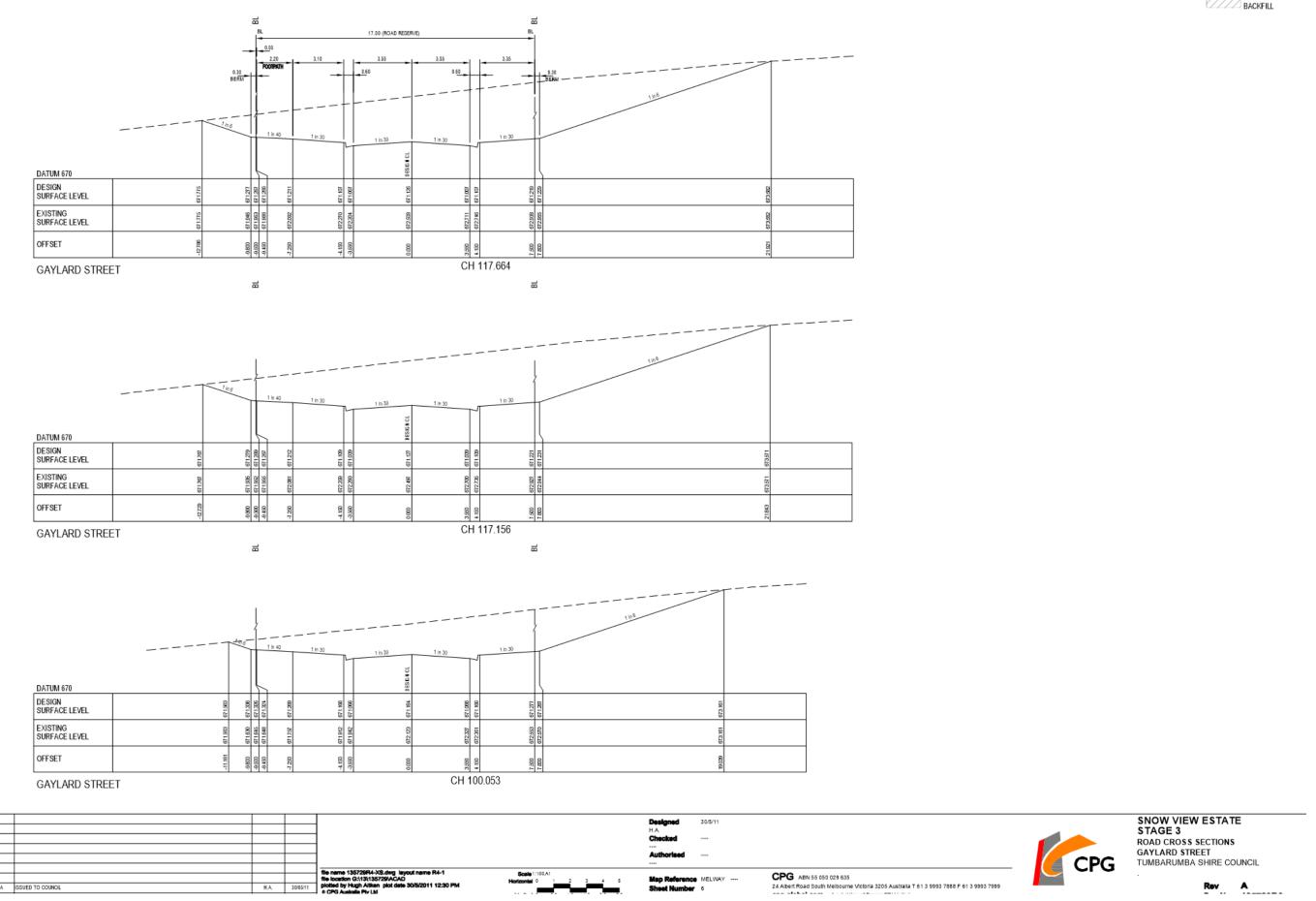
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Rev A

CRUSHED ROCK BACKFILL

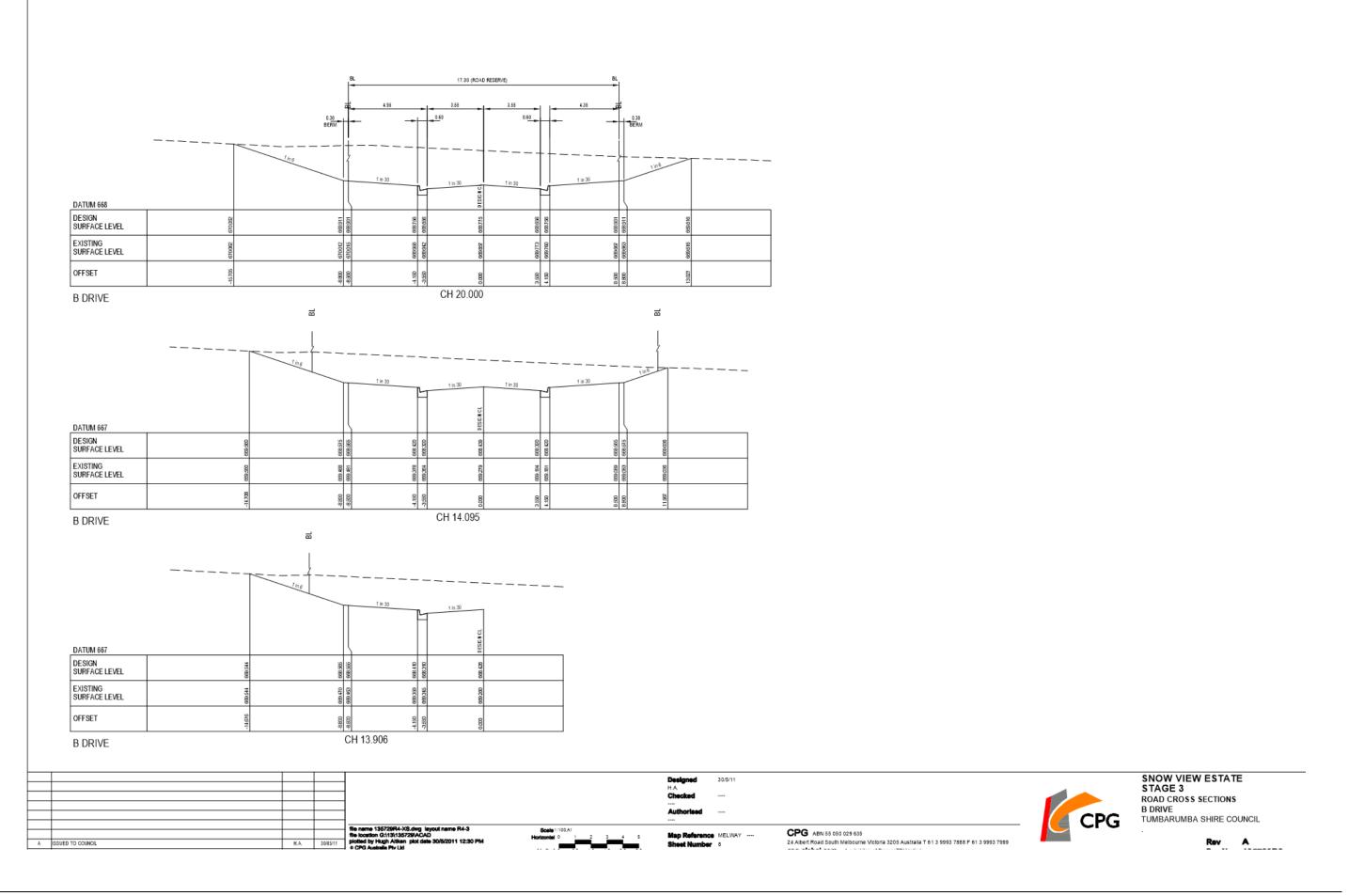


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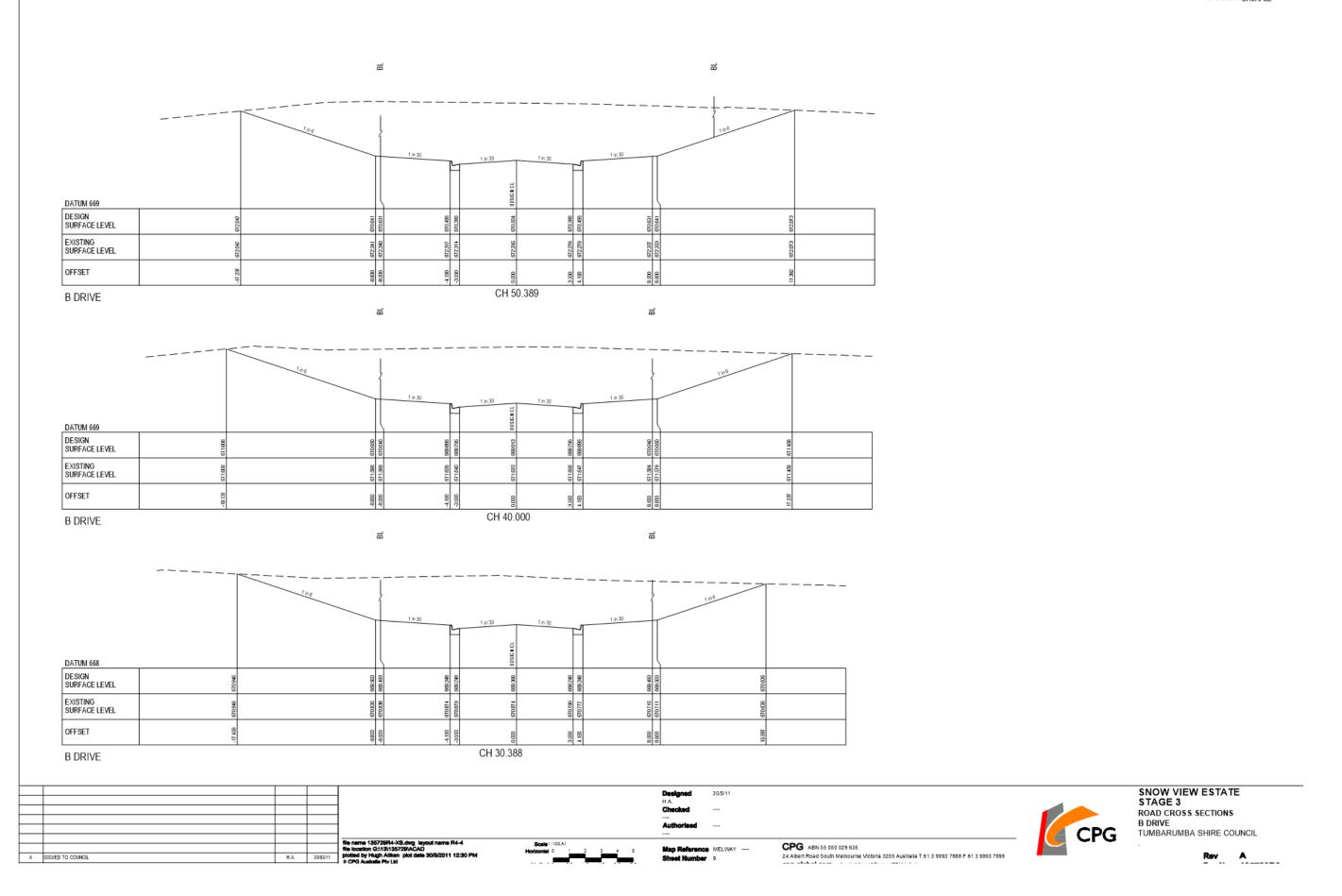
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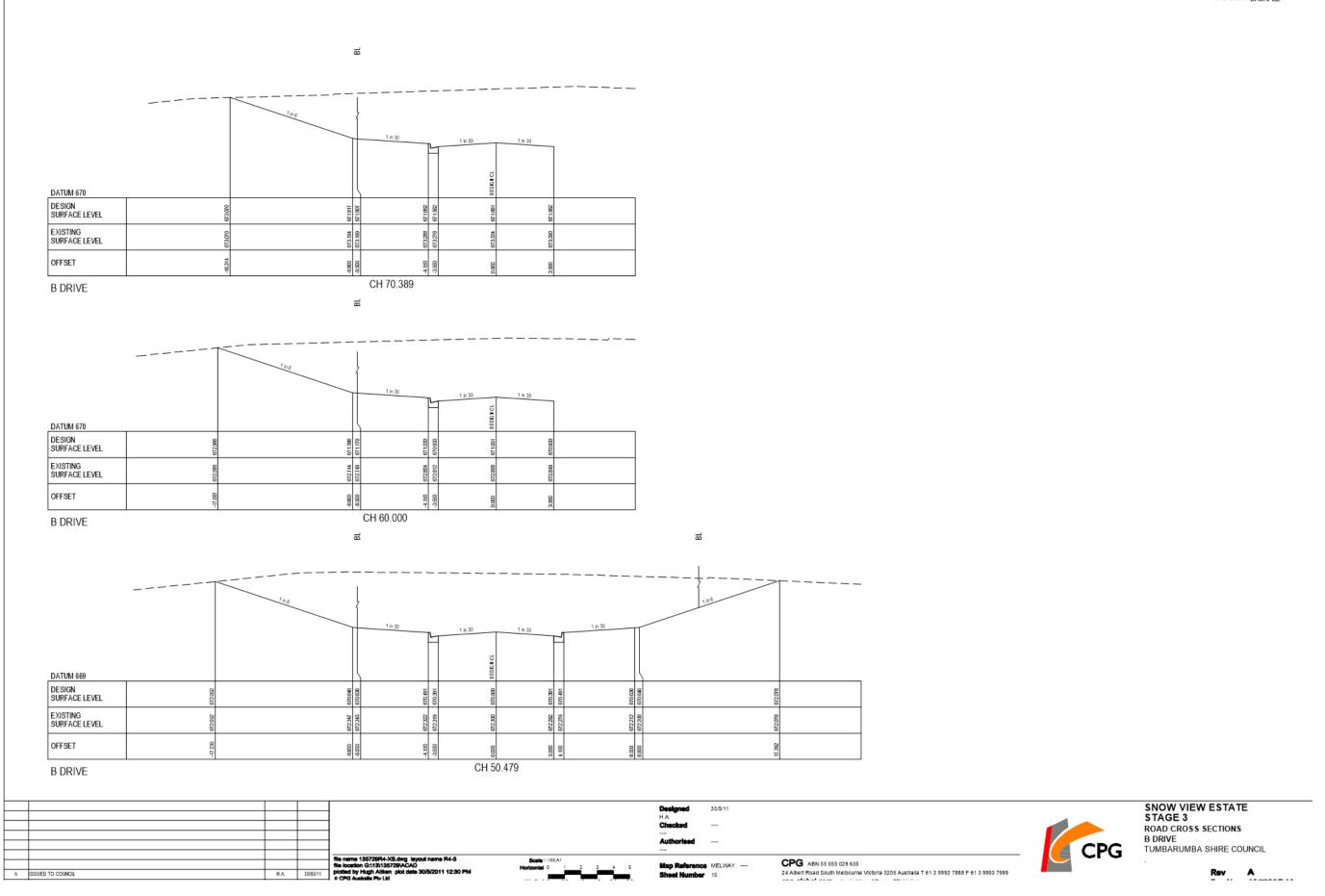
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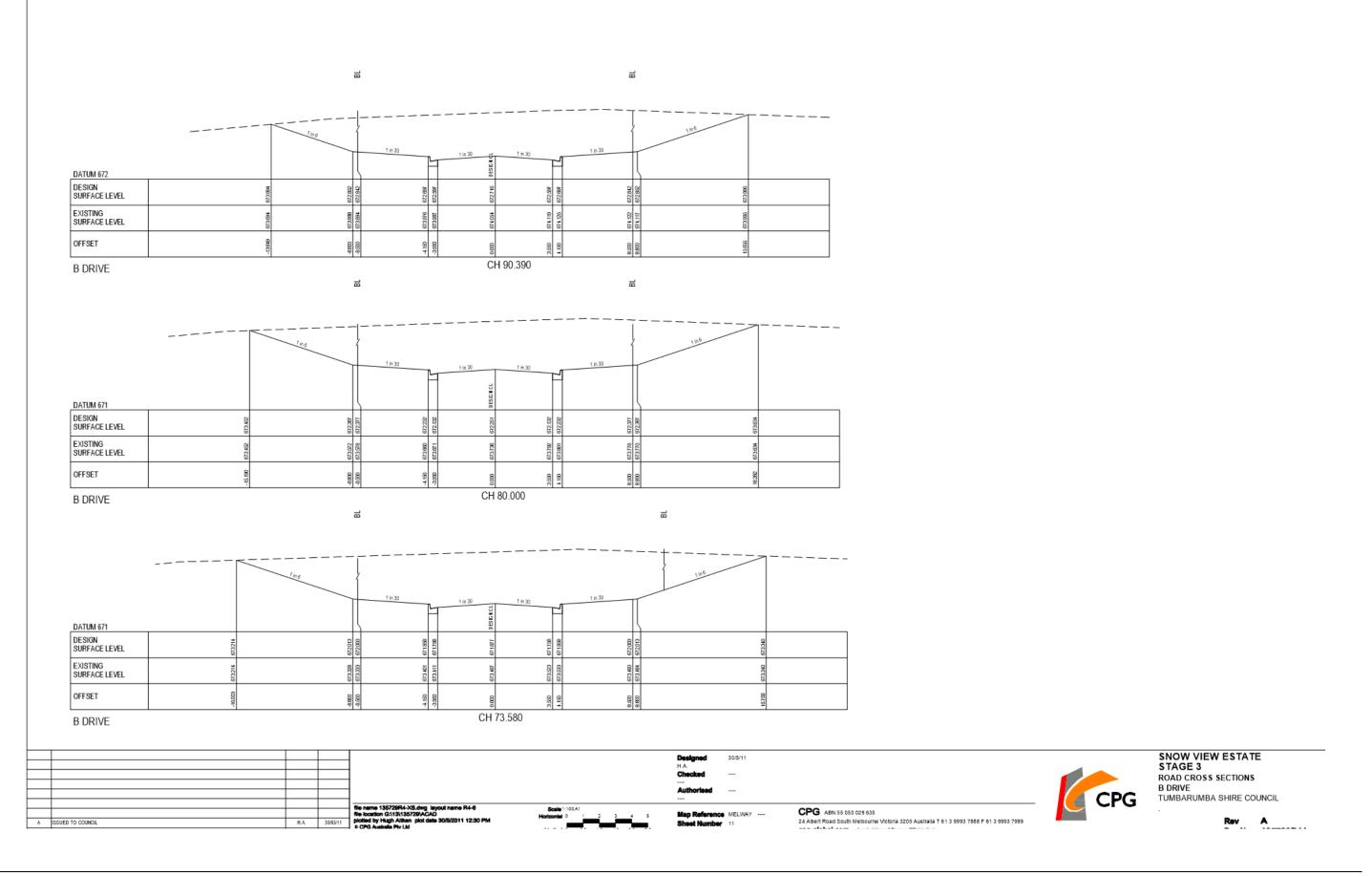
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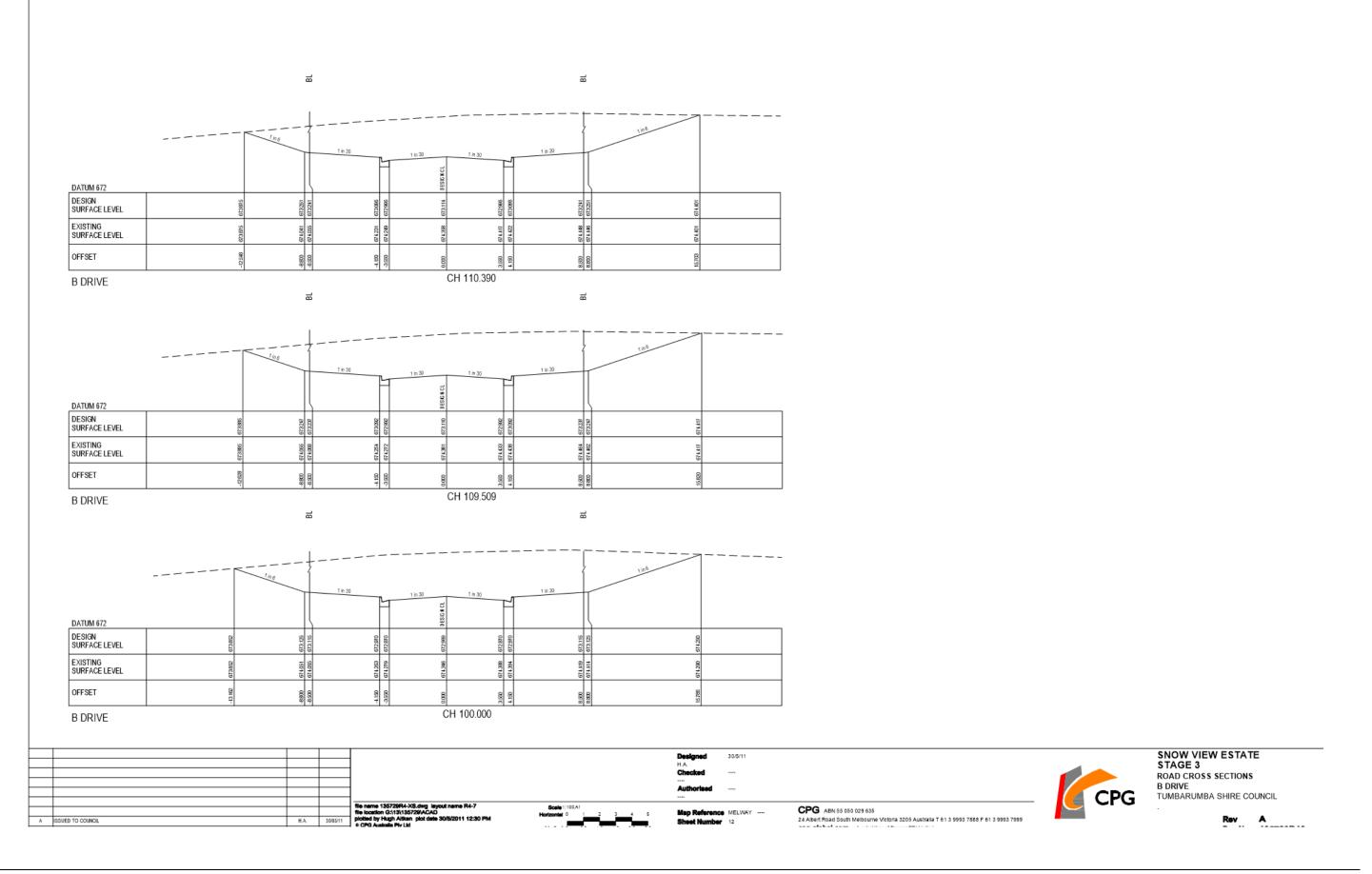
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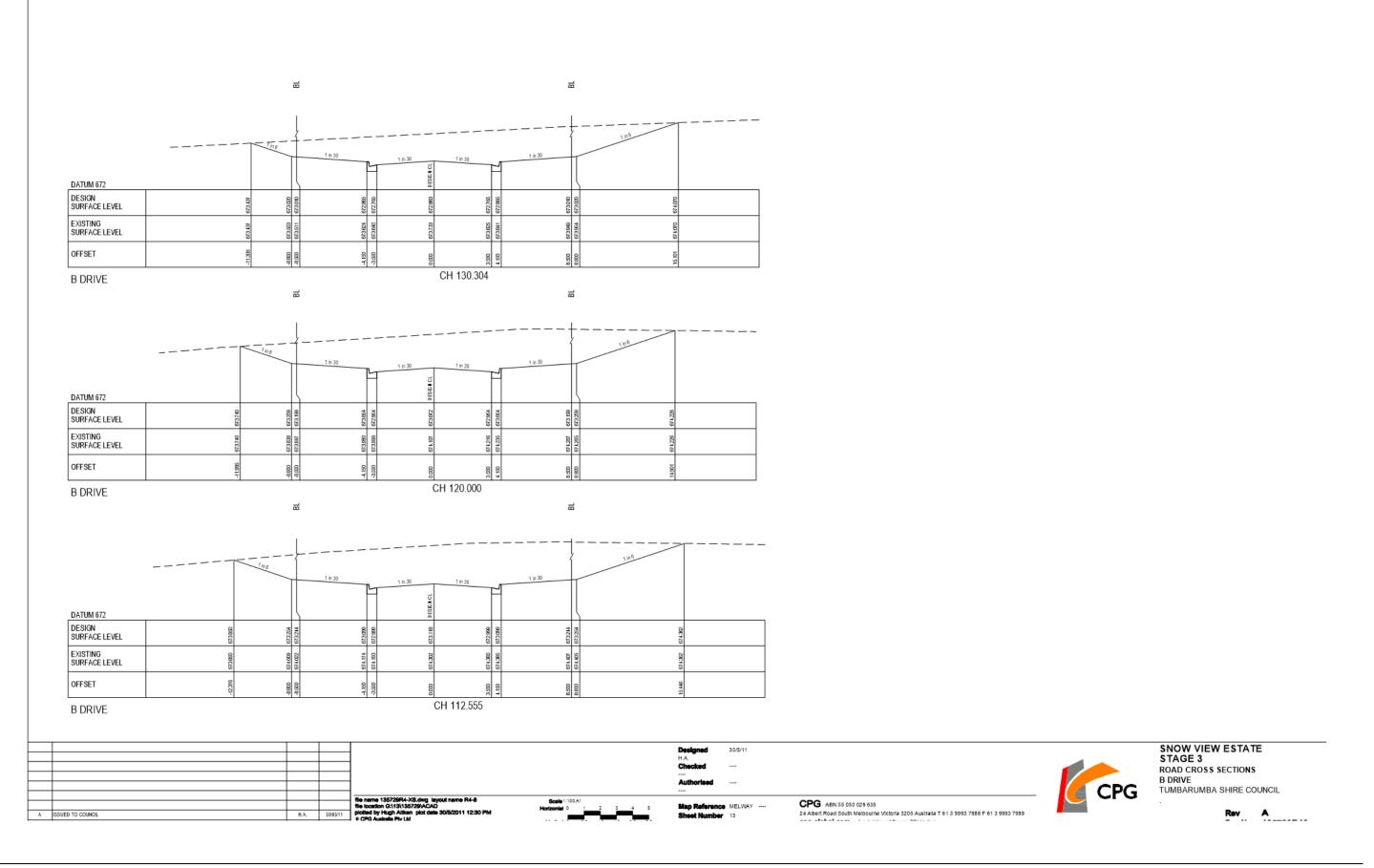
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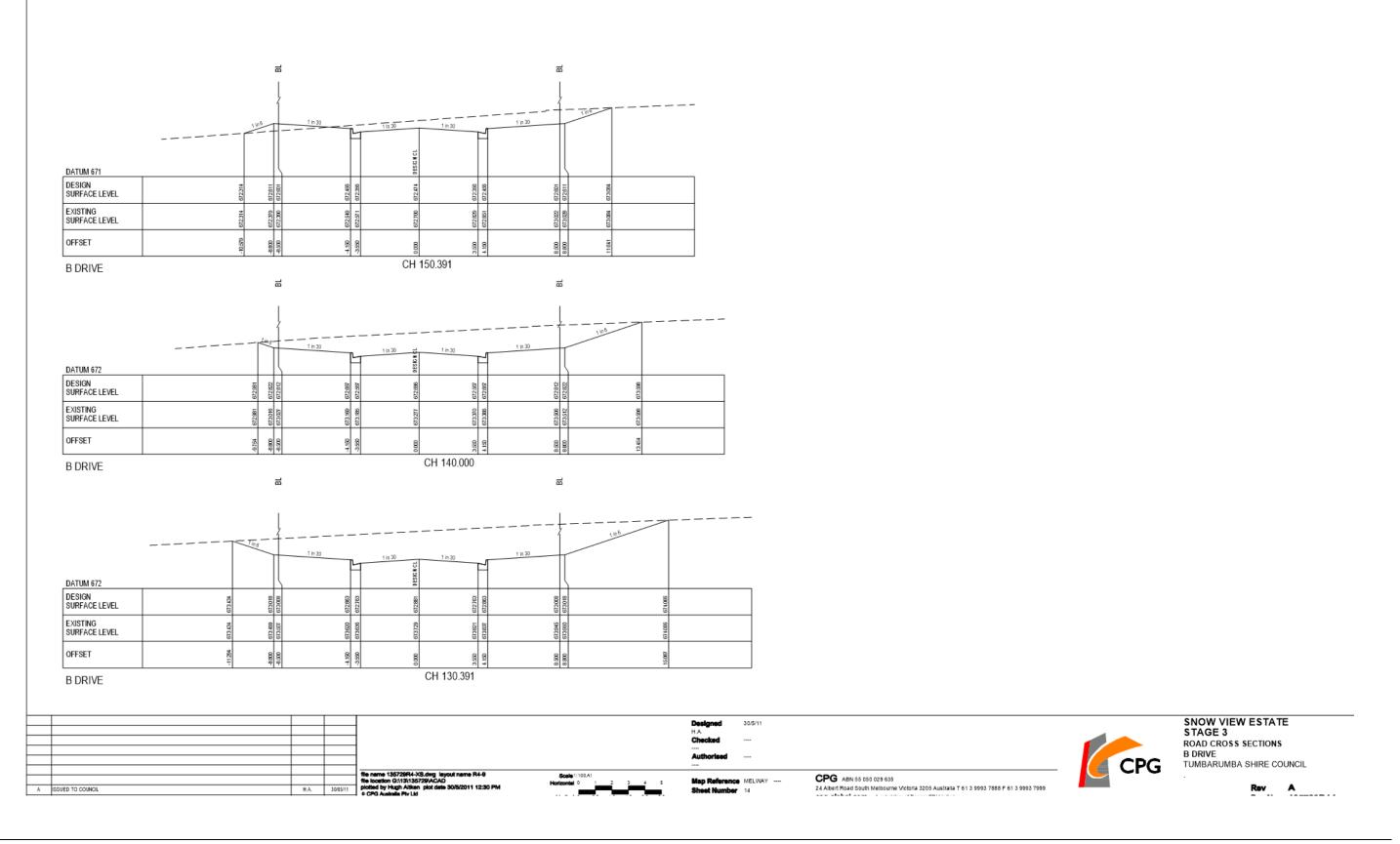
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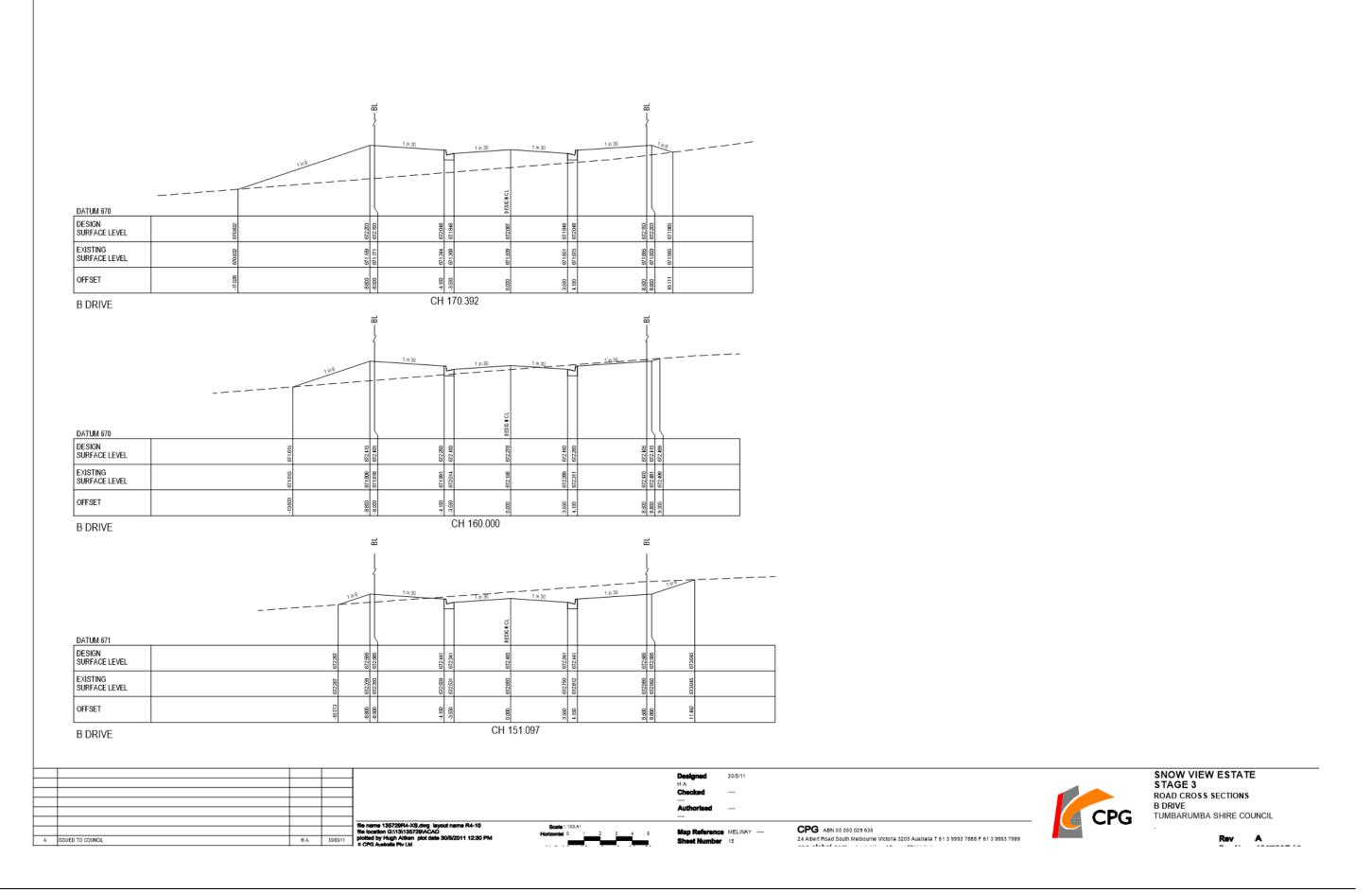
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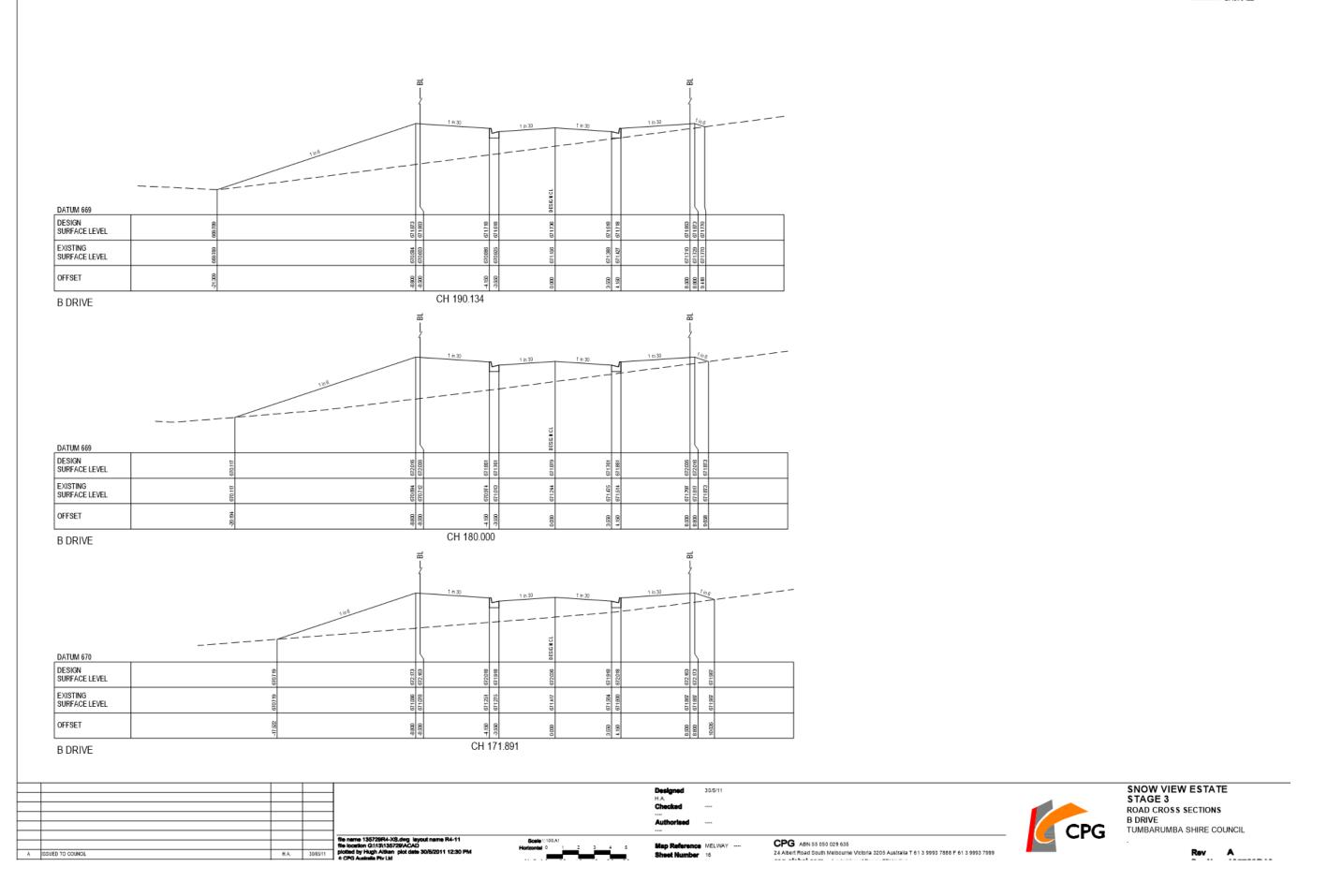
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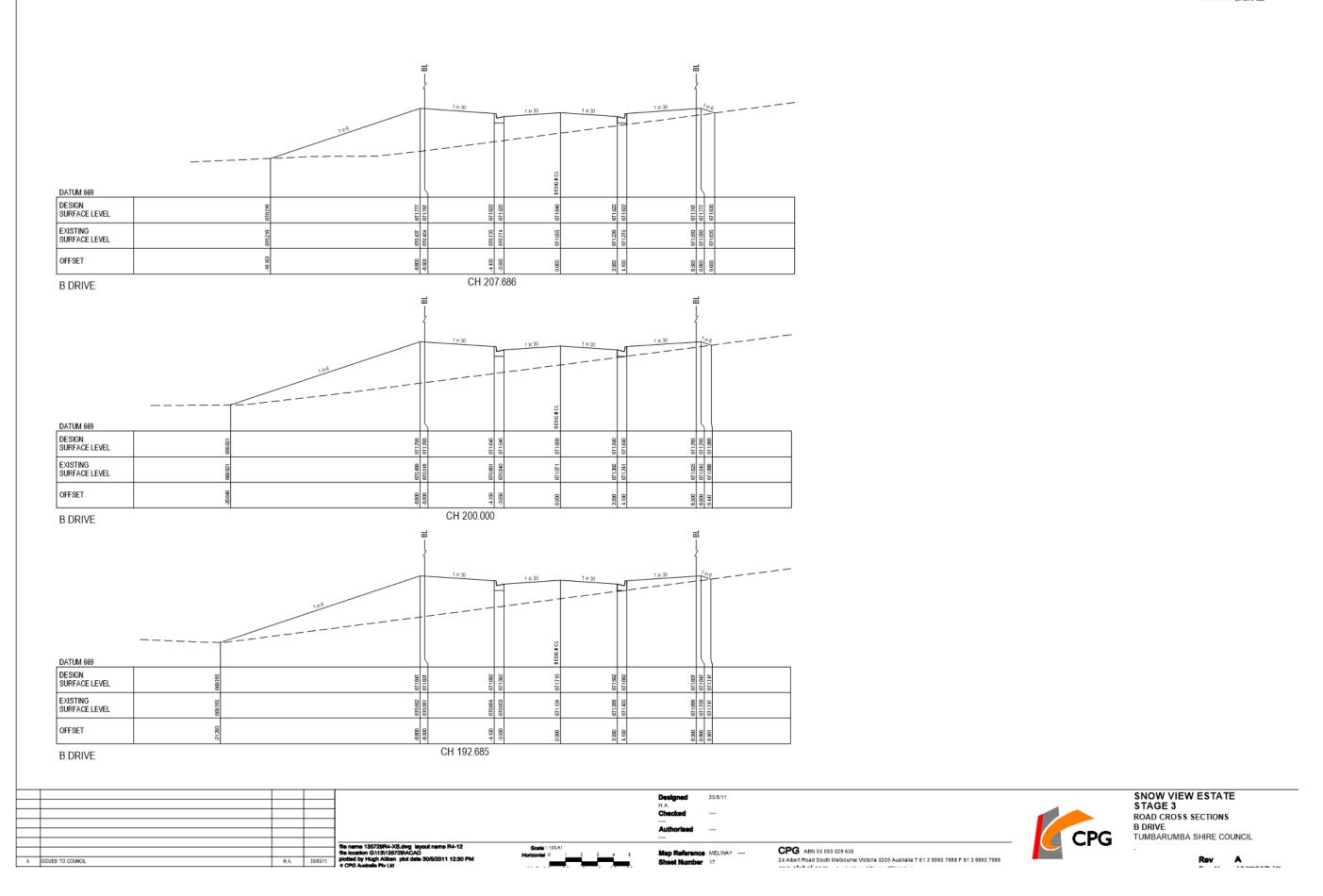
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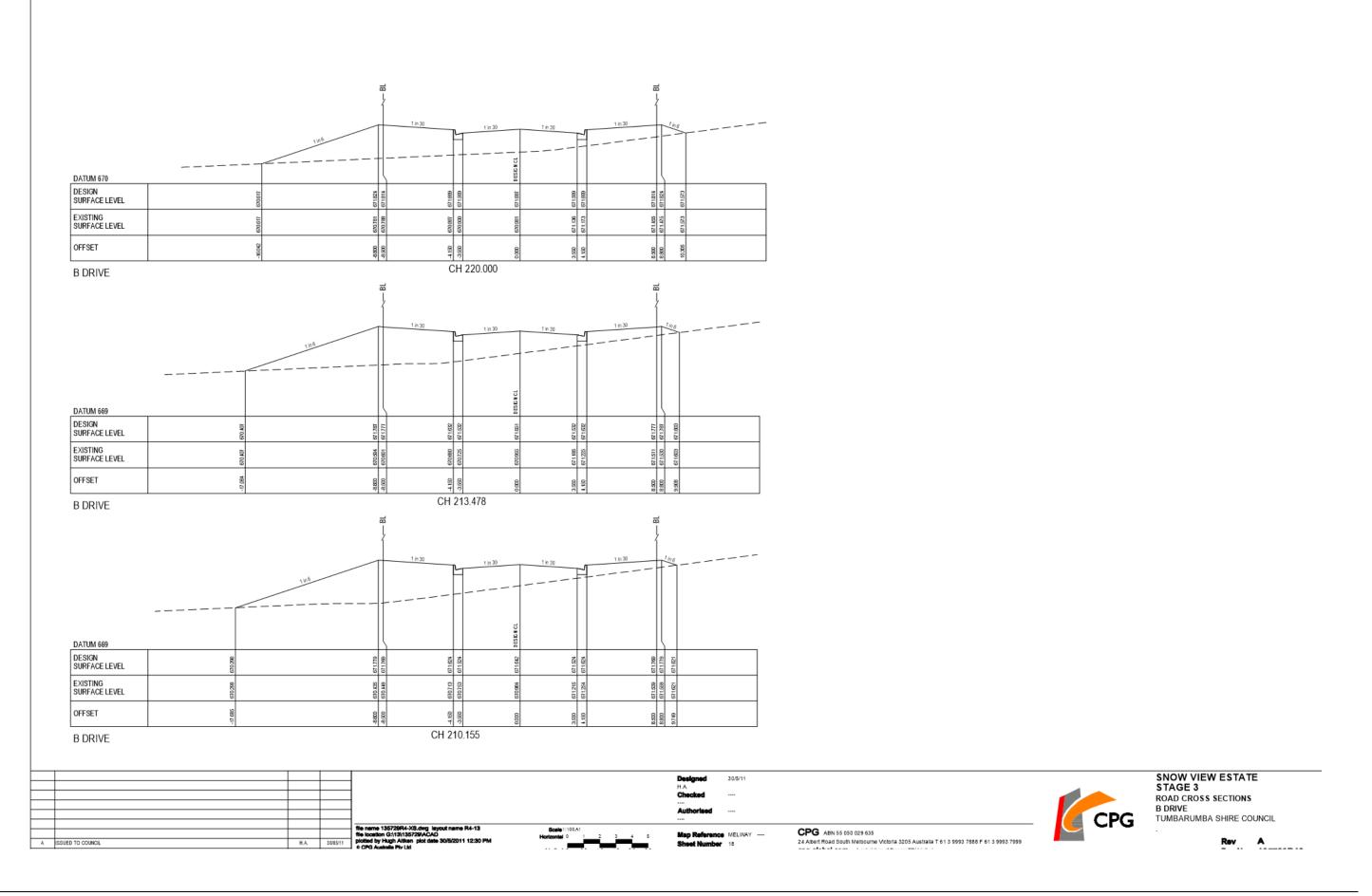
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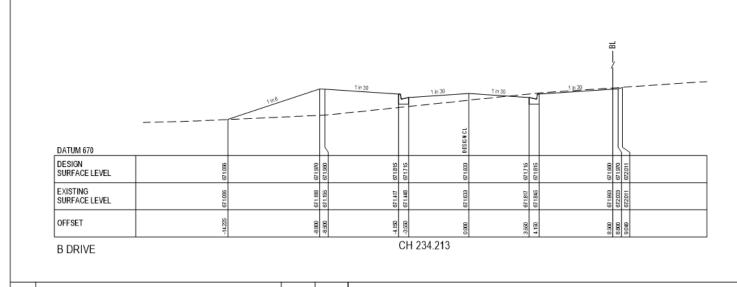
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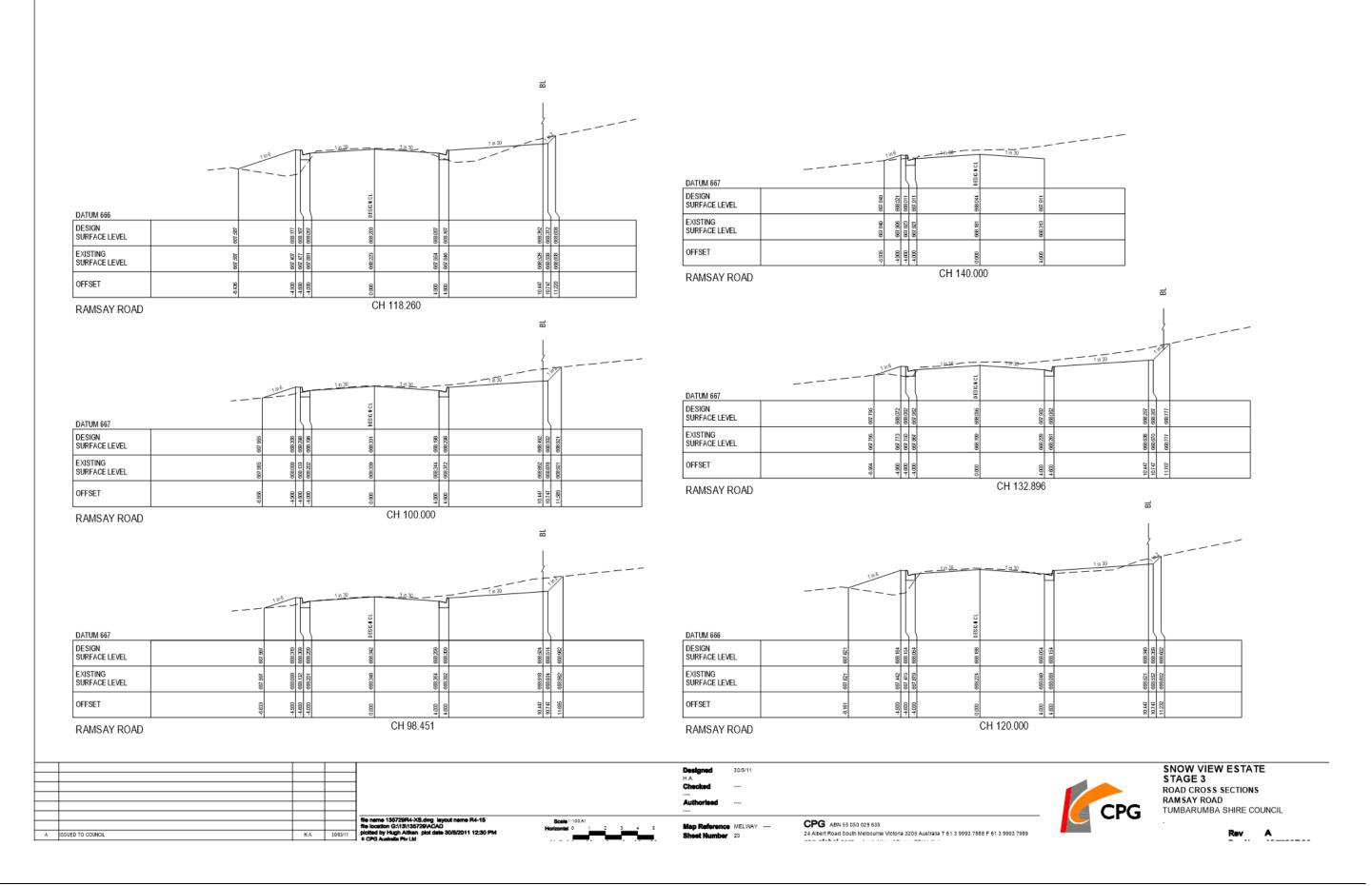
SNOW VIEW ESTATE STAGE 3 ROAD CROSS SECTIONS B DRIVE TUMBARUMBA SHIRE COUNCIL

Rev A

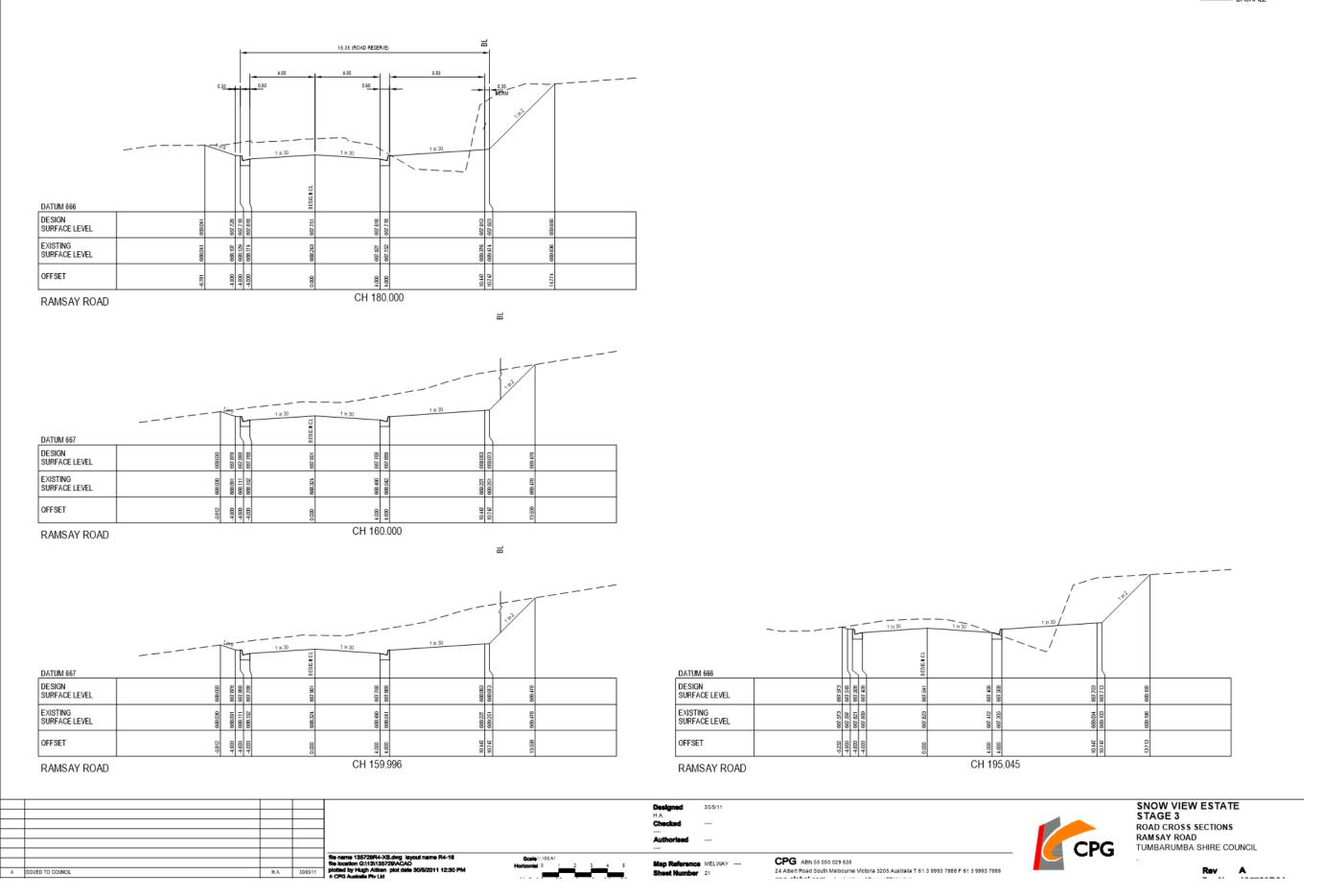
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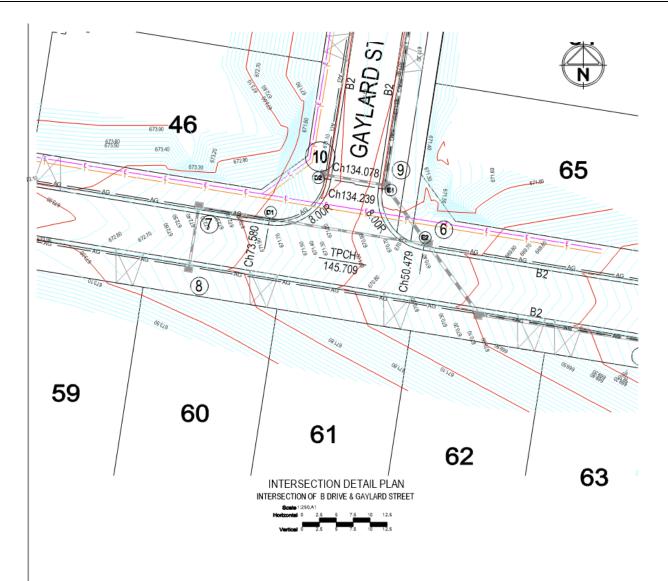
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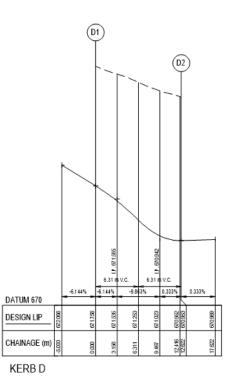
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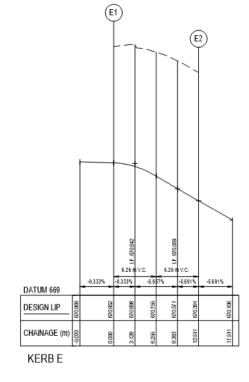


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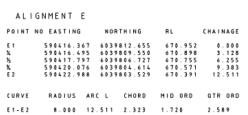






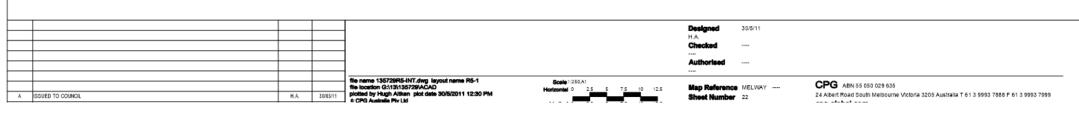


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POINT	NO EASTING	NORTHING	RL	CHAINAGE
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D 1 - D 2	8.000 12	2.622 2.363	1.749	2.602





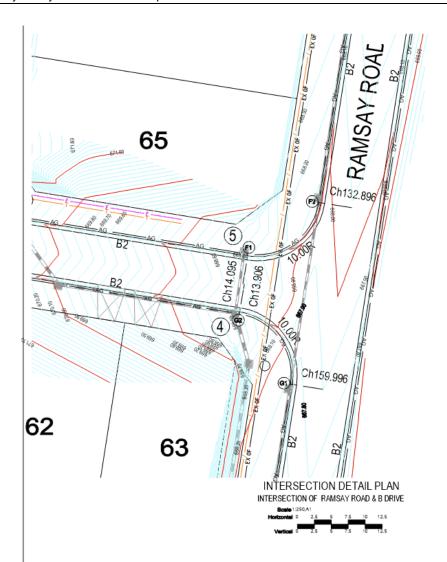
KERB RETURN SETOUT DETAIL



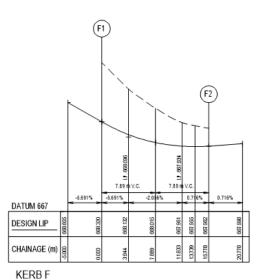


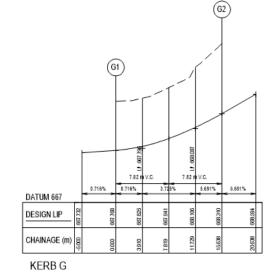
SNOW VIEW ESTATE STAGE 3 INTERSECTION DETAILS B DRIVE & GAYLARD STREET TUMBARUMBA SHIRE COUNCIL

10.2 Attachment 1



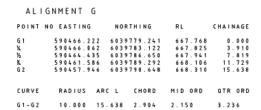






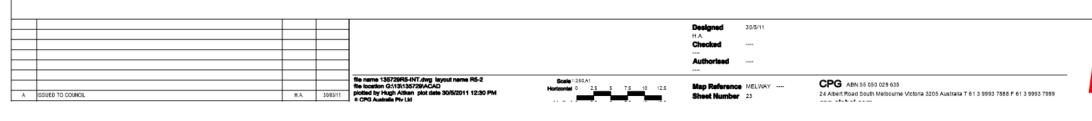
ALIGNMENT F POINT NO EASTING NORTHING CURVE RADIUS ARC L CHORD MID ORD QTR ORD

F1-F2 10.000 15.778 2.954 2.186 3.253



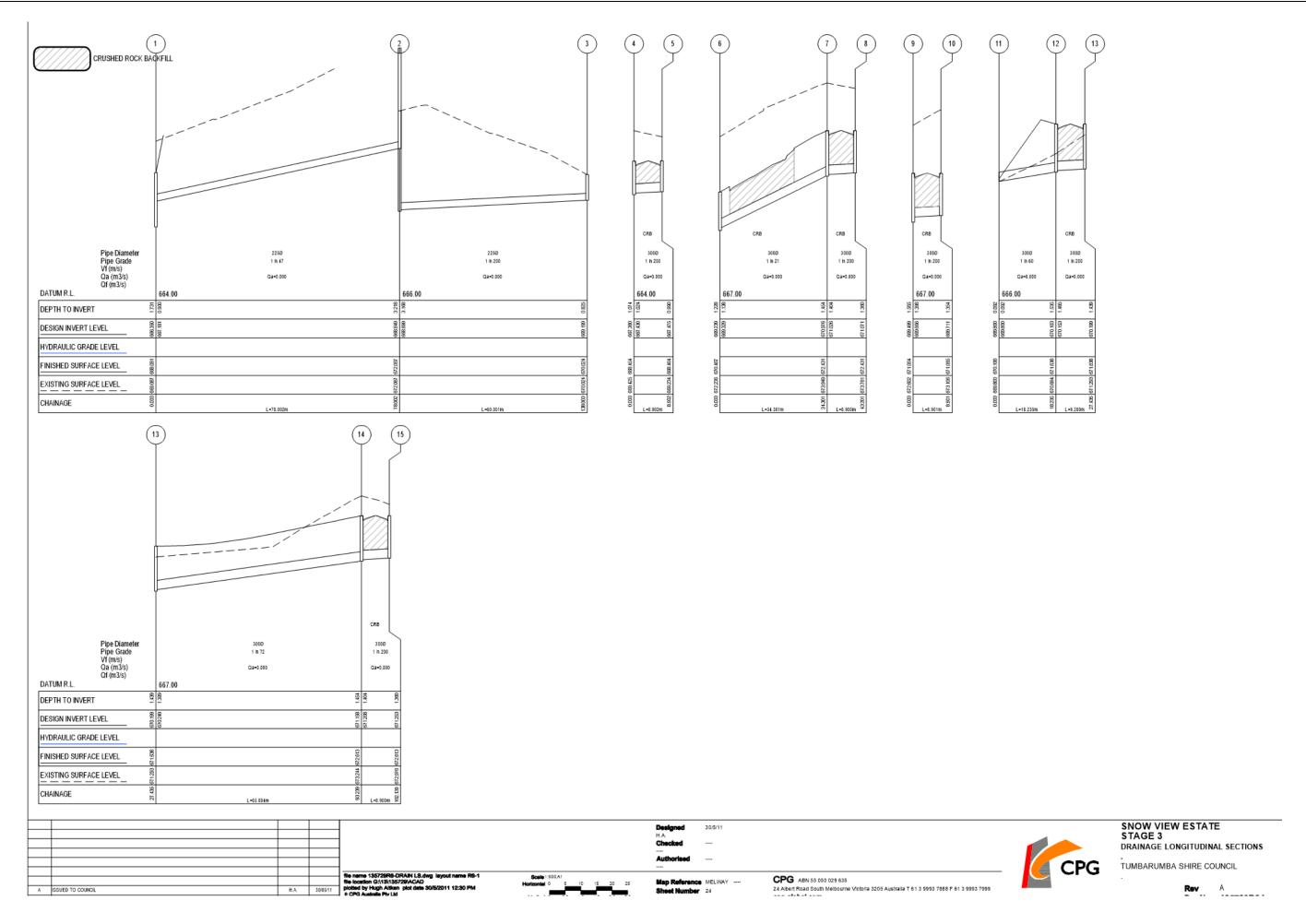


KERB RETURN SETOUT DETAIL





SNOW VIEW ESTATE STAGE 3 INTERSECTION DETAILS
RAMSAY ROAD & B DRIVE
TUMBARUMBA SHIRE COUNCIL

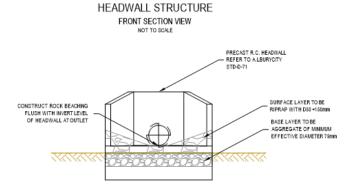


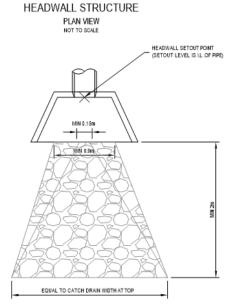
DRAINAGE PIT SCHEDULE

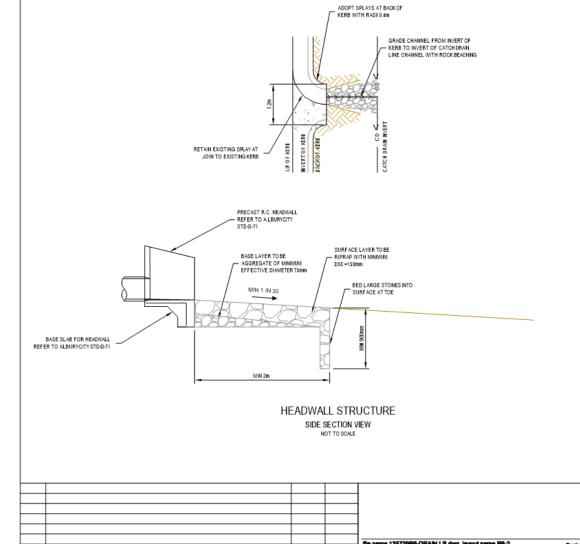
A ISSUED TO COUNCIL

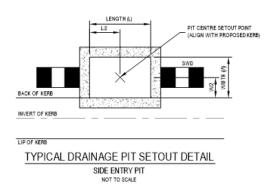
PIT		SET OUT CO-ORDINATES		INTERNAL DIMENSIONS		INLET OUTLET		UTLET	PIT		REMARKS	
No.	TYPE	EASTING	NORTHING	WIDTH	LENGTH	DIA	INV LEVEL	DIA	INV LEVEL	FSLEVEL	DEPTH	KEWAKKS
1	EXSEP	590453.643	6039746.821	900	900	225	667.181			668.081	1.731	CONNECT TO EXISTING PIT
2	JP	590376.652	6039759.344	900	900	225	668.899	225	668.849	672.067	3.218	REFER TO STD DRG
3	JP	590317.430	6039768.981	900	900			225	669.199	670.024	0.825	REFER TO STD DRG
4	EXSEP	590457.185	6039789,708	900	900	300	667.43			668.454	1.074	CONNECT TO EXISTING PIT
5	SEP	590458.476	6039798.829	900	900			300	667.475	668,464	0.99	REFER TO A.C.C. STD-D-20
- 6	EXSEP	590423.748	6039804.469	900	900	300	669.329			670.467	1.228	CONNECT TO EXISTING PIT
7	SEP	590389.893	6039809.979	900	900	300	671.026	300	670.976	672.431	1.454	REFER TO A.C.C. STD-D-20
8	SEP	590388.416	6039800.851	900	900			300	671.071	672.431	1.36	REFER TO A.C.C. STD-D-20
9	EXSEP	590417.497	6039813,086	900	900	300	669,666			671.064	1.565	CONNECT TO EXISTING PIT
10	SEP	590408,431	6039814.661	900	900			300	669.711	671.065	1.354	REFER TO A.C.C. STD-D-20
11	PIPE	590271.974	6039803.998			300	669.8			670.1	0.3	REFER TO A.C.C. STD-D-71(70) & DETAILS
12	SEP	590265.226	6039820.938	900	900	300	670.153	300	670.103	671.638	1.535	REFER TO A.C.C. STD-D-20
13	SEP	590266.708	6039830,018	900	900	300	670.249	300	670.199	671.638	1.439	REFER TO A.C.C. STD-D-20
14	SEP	590331.659	6039819.451	900	900	300	671.208	300	671.158	672,613	1.454	REFER TO A.C.C. STD-D-20
15	SEP	590330.181	6039810.370	900	900			300	671.253	672.613	1.35	REFER TO A C.C. STD-D-20

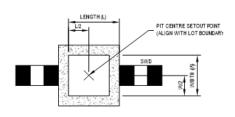
KERB BREAK EAST SIDE RAMSAY ROAD NOT TO SCALE









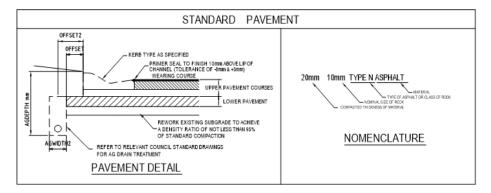


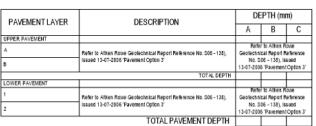
TYPICAL DRAINAGE PIT SETOUT DETAIL
JUNCTION PIT/ EASEMENT PIT
NOT TO SCALE

CPG

SNOW VIEW ESTATE
STAGE 3
DRAINAGE PIT SCHEDULE
.
TUMBARUMBA SHIRE COUNCIL

Rev A





ROAD NAME	TYPE
RAMSAY ROAD	A1
GAYLARD STREET	B2
B DRIVE	B2

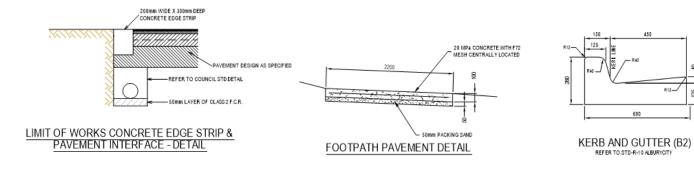
PAVEMENT DETAILS

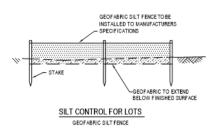
THE PAVEMENT DESIGNS SHOWN HERE HAVE BEEN DESIGNED/PROVIDED BY AITKEN ROWE WHO ARE RESPONSIBLE FOR THE GEOTECHNICAL WORK ON THIS PROJECT. CPG IS NOT RESPONSIBLE FOR THE WORK OF AITKEN ROWE.

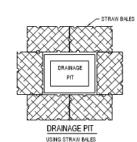
THE DESIGN HAS BEEN EXTRACTED FROM THE AITKEN ROWE REPORT ON "GEOTECHNICAL INVESTIGATION SNOW VIEW ESTATE" THIS DOCUMENT SHOULD BE REVIEWED TO ENSURE THAT THE DESIGN HAS BEEN ACCURATELY REPRODUCED.

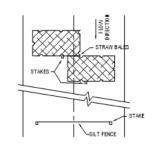
A COPY OF THE DOCUMENT WILL BE PROVIDED TO YOU ON REQUEST.

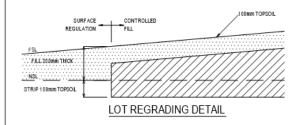
CPG DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY, ADEQUACY OR APPROPRIATENESS OF THE GEOTCHNICAL WORK AND PAVENENT DESIGNS.
ANY QUERIES IN RESPECT TO THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS SHOULD BE ADDRESSED TO ATTKEN ROWE AND SENT TO CPG.

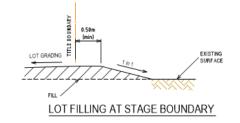


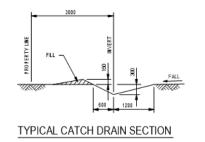


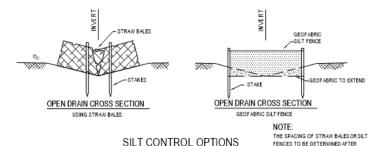












SILT CONTROL OPTIONS NOT TO SCALE

THE SPACING OF STRAW BALES OR SILT FENCES TO BE DETERMINED AFTER CONSIDERING THE SLOPE AND SIZE OF THE CATCHMENT.

						Designed 30/5/11			SNOW VIEW ESTATE STAGE 3
						Checked			STANDARD DETAILS
	ISSUED FOR CONSTRUCTION	ETH	WGH			Authorised		CPG	TUMBARUMBA SHIRE COUNCIL
В	ISSUED TO AUTHORITY	AERH	TEH	file name 135729R7-STD.dwg layout name R7-1 file location G:\13\135729\ACAD	Scale	Map Reference MELWAY	CPG ABN 55 050 029 635	Ci C	•
A	ISSUED TO CLIENT	W.E.S	21/07/09	piotted by Hugh Altken plot date 30/5/2011 12:30 PM e CPG Australia Piv Ltd	NOT TO SCALE	Sheet Number 26	24 Albert Road South Melbourne Victoria 3205 Australia T 61 3 9993 7888 F 61 3 9993 7999		Rev 0

SNOW VIEW ESTATE STAGE 3 **TUMBARUMBA SHIRE COUNCIL** SEWER RETICULATION

GENERAL NOTES:

- 1. ALL LEVELS ARE IN METRES TO AUSTRALIAN HEIGHT DATUM (A.H.D.)
- 2. ALL CO-ORDINATES ARE TO MAP GRID OF AUSTRALIA (M.G.A) ZONE 55.
- WORKS MUST BE CONSTRUCTED ACCORDING TO WSA 02-2002-2.3 MRWA EDITION SPECIFICATIONS AND STANDARD DRAWINGS, TECHNICAL & CONSTRUCTION REVENTED THAT THEY ARE CONVERSANT WITH ALL THE CURRENT THE ORIGINAL AND UPDATES THAT THEY ARE CONVERSANT WITH ALL THE CURRENT REVISIONS AMENOMENTS AND UPDATES THAT THE RELEVANT WATER AGENCY HAVE MADE TO THEIR CONSTRUCTION STANDARDS.
- 4 NUMBER OF LOTS SERVICED
- LENGTH OF SEWER TO BE CONSTRUCTED:
- 5.1. 150Ø 5.2. 225Ø
- 6. CHAINAGES SHOWN ON THE DETAIL PLAN ARE DISCONTINUOUS, CHAINAGES SHOWN ON LONGITUDINAL SECTIONS ARE CONTINUOUS.

PROPERTY CONSTRUCTION:

7. REFER TO STANDARD DRAWINGS AS PER WSA 02-2002-2.3 MRWA EDITION

PIPELINE MATERIALS

PIPE TYPE	PIPE CLASS	AUST. STANDARD	LOCATION
PVC	SN 10	AS/NZS 1260-2009	1000 PROPERTY BRANCHES
PVC	SN 8	ASINZS 1260-2009	150Ø RETICULATION SEWERS
PVC	SN 8	AS/NZS 1260-2009	2250 RETICULATION SEWERS

8. PIPE JOINTING SHALL BE MADE WITH SOLVENT CEMENT FOR PVC PIPES (2250), 1500), 1000)

PROPERTY BRANCH SEWERS:

- 9. ALL BRANCHES TO BE 1000 PVC PIPES.
- THE PROPERTY BRANCH CONNECTION TIES SHOWN ON THE DETAIL PLANS ARE FROM THE APPROPRIATE TITLE PEG AND THE INVERT OF THE BRANCH SHOWN OPPOSITE THE BRANCH POSITION, ALL PROPERTY SEWER CONNECTIONS ARE TO BE MARKED BY A COLOURED TAPE BROUGHT TO THE SURFACE.
- PROPERTY BRANCHES CONNECTING INTO NEW AND EXISTING SEWERS ARE TO BE CONSTRUCTED WITH STANDARD PVC PIPES AND FITTINGS.
- PROPERTY BRANCH FITTINGS MUST BE LOCATED A MINIMUM OF 0.50m WITHIN THE PROPERTY BOUNDARY THEY ARE SERVICING AND CLEAR OF ANY OBSTRUCTIONS.

- 14. TESTING OF SEWERS IN ACCORDANCE WITH WSA 02-2002-2.3 MRWA EDITION.
- ALL TESTING MUST BE UNDERTAKEN UNDER THE DIRECTION OF THE CONSULTANT. THE
 CONTRACTOR TO GIVE A MINIMUM OF FOUR (4) DAYS NOTICE TO THE CONSULTANT PRIOR TO
 TESTING BEING UNDERTAKEN.
- 16. CONTRACTOR IS NOT ALLOWED TO CARRY OUT ANY TESTING OPERATION IN THE ABSENCE OF
- 17. NO PLUGS OR U PLATES IN THE WATER AGENCY'S SYSTEM SHALL BE OPENED UNTIL NEW MAIN HAS PASSED ALL THE TESTS MENTIONED ABOVE AND WRITTEN APPROVAL GIVEN TO THE CONTRACTOR STATING THE WORKS HAVE BEEN SATISFACTORLY COMPLETED.

EARTHWORKS:

- 28. IN AREAS SUBJECT TO EARTHWORKS, THE CONSTRUCTION OF THE SEMERS MUST NOT COMMENCE UNTIL THE EARTHWORKS HAVE BEEN COMPLETED OR THE SUPERINTENDENT GIVES WRITTEN NOTICE TO COMMENCE.
- 29. EMBEDMENT AND BACKFILL TO BE BACK B UNLESS OTHERWISE STATED
- 30. EMBEDMENT AND BACKFILL AS PER DETAIL ON PLAN 135729SXX
- 31. "BACK B" EMBEDMENT & BACKFILLING SHOW ON PLAN 135729 SXX TO BE PROVIDED UNLESS SPECIFIED ON DETAIL PLANS OR DIRECTED BY SUPERINTENDEN
- 32. BEFORE COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 1.50m DEEP, THE REQUIRED NOTICE IS TO BE SENT TO THE RELEVANT AUTHORITY AT LEAST 3 DAYS PRIOR TO COMMENCING EXCAVATION, AND A COPY OF THE NOTIFICATION MUST BE PROVIDED TO THE SUPERINTENDENT.

WORKS ON LIVE SEWER:

- 33. THE CONTRACTOR IS NOT PERMITTED TO BREAK INTO AN EXISTING LIVE PIPELINE, ENTER ALIVE MAINTENANCE HOLE OR REMOVE THE COVER TO A LIVE MAINTENANCE HOLE, UNLESS APPROVED
- 34. ALL WORKS ON LIVE SEWER IS TO BE CARRIED OUT BY THE WATER AGENCY'S LIVE WORKS APPROVED CONTRACTOR. THE CONTRACTOR IS TO NOTIFY THE CONSULTANT AT LEAST SEVEN (7) WORKING DAYS BEFORE PROCEEDING

MAINTENANCE HOLES AND SHAFTS:

- 18. REFER TO STANDARD DRAWINGS AS PER WSA 02-2002-2.3 MRWA EDITION.
- 19. CRANKED GALVANISED OR PLASTIC ENCAPSULATED STEP IRONS TO BE USED
- 21. ALL MANHOLES TO BE 10500 UNLESS OTHERWISE STATED
- 22. MAINTENANCE HOLE & SHAFT COVERS SHALL BE LEVEL WITH & SHALL CONFORM TO SLOPE & CROSSFALL OF THE FINISHED SURFACE IN ACCORDANCE WITH WSA NRWA SEW-13884. THE SEWER CONTRACTOR IS TO LIADE WITH THE ROAD CONTRACTOR TO COMPRIME THE SURFACE LEVELS AND CONSTRUCT THE COVER IN ACCORDANCE WITH THE STANDARD DRAWNO.
- 23. THE FINISHED LEVELS ARE APPROXIMATE ONLY & SHALL NOT BE USED FOR THE FRING OF ANY MAINTENANCE HOLE OR SHAFT COVER LEVELS. THE CONTRACTOR SHALL PROVIDE LEVELS TO MAINTENANCE HOLES AND SHAFTS THAT COMPLY WITH CONSTRUCTED LEVELS AND ABUTTING
- 24. MAINTENANCE HOLES AND SHAFTS IN ROAD RESERVES & R.O.W'S CONSTRUCTED PRIOR TO THE CONSTRUCTION OF FOOTPATHS & ROADS SHALL BE PROVIDED WITH A TEMPORARY COVER. THE PLACING OF THE FINAL COVER SHALL NOT BE CARRIED OUT UNTIL THE CONCRETE FOOTPATHOR
- 25. WSA 02-2002-2.3 MRWA EDITION WI N25 GRADE CONCRETE GP TYPE CEMENT MUST BE USED IN ALL CONSTRUCTION
- CORRECT CLASS OF COVERS TO BE DETERMINED BY THE CONTRACTOR AS PER AS3596 & SEM 4 308 AV.

ATTENTION TO CONTRACTOR:

- THE CONTRACTOR MUST ENSURE THAT ALL PEOPLE EMPLOYED ON THE SITE WEAR APPROVED SAFETY APPAREL. THIS INCLUDES SAFETY HELMETS, VESTS, SAFETY BOOTS, EAR & EYE PROTECTION, WHERE APPROPRIATE.
- THE CONTRACTOR SHALL REINSTATE ANY AFFECTEDASSETS (I.e. FOOTPATH, VEHICLE CROSSINGS & NATURE STRIP) TO THE REQUIREMENTS OF THE MUNICIPAL COUNCIL.

- 29. SETOUT AND VERIFICATION OF LEVELS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR

- 32. ALL TREES MUST BE PRESERVED & PROTECTED AT ALL TIMES UNLESS OTHERWISE NOTED ON THE DESIGN PLANS.
- 33. FOR THE DURATION OF PROCLAIMED WATER RESTRICTIONS, THE CONTRACTOR SHALL CONFORM ITH THE RESTRICTIONS AND ANY OTHER WATER CONSERVATION REQUIREMENTS IMPOSED BY

ASSET RECORDING:

34. ONLY A SUITABLY QUALIFIED AND EXPERIENCED SURVEYOR MAY BE USED TO UNDERTAKE ASSET RECORDING OF THE WORK, ALL SURVEYING WORKS AND DATA TO BE SUBMITTED MUST BE IN ACCORDANCE WITH WISA 92-2902-23 MRWA EDITION.

35. THE CONTRACTOR SHALL OBTAIN A ROAD OPENING PERMIT FOR ANY WORKS WITHIN THE ROAD RESERVE AND COMPLY WITH ALL REQUIREMENTS.

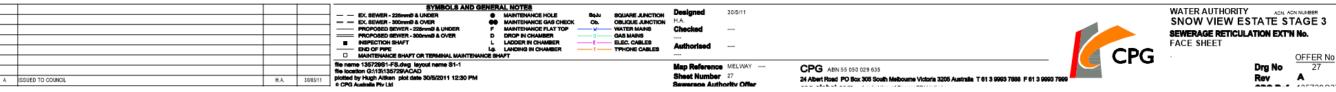
36. BORING SHALL BE CARRIED OUT WHERE SPECIFIED IN ACCORDANCE WITH WSA 02-2002-2.3 MRWA





WARNING BEWARE OF UNDERGROUND/OVERHEAD SERVICES NATE OF UNIDERCHARCOUND/OVERHEAD SERVI-THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVENON SITE IN GOURANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSIONLINES.







FINISHED LEVELS OF MAINTENANCE HOLE COVERS

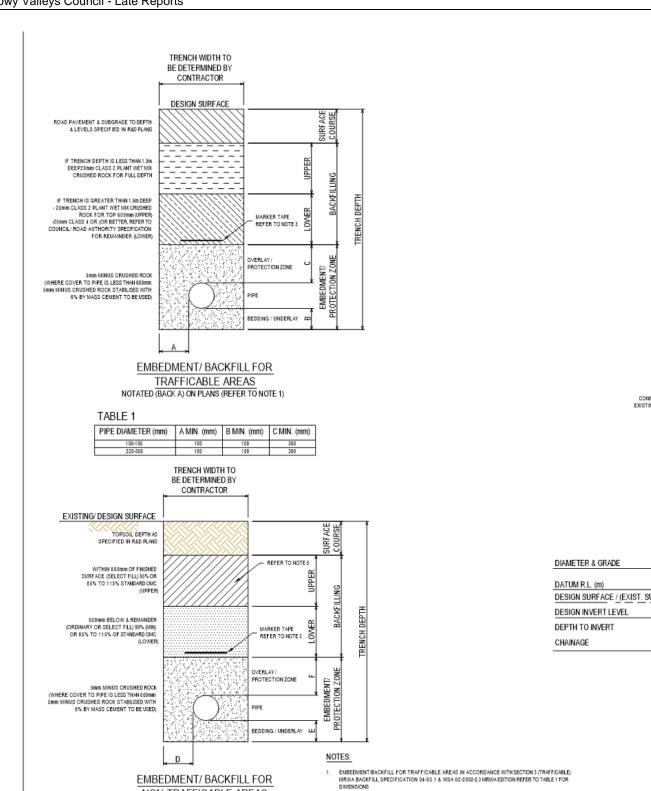
"H" = HEIGHT OF MH COVER ABOVE FS LEVEL IN mm, AS PER WSA STD DRG SEW 1308-V

LOCATION

NEW SUBDIVISIONS ROADS, LANEWAYS, FOOTWAYS & DRIVEWAYS

EXISTING BUILT UP AREAS
OTHER AS SPECIFIED (e.g. ABOVE FLOOD LEVEL)

UNDEVELOPED AREAS



NON-TRAFFICABLE AREAS

COHESIVE SOILS (BACK B) (REFER TO NOTE 4)

PIPE DIAMETER (mm) D MIN. (mm) E MIN. (mm) F MIN. (mm)

TABLE 2

NOTES:

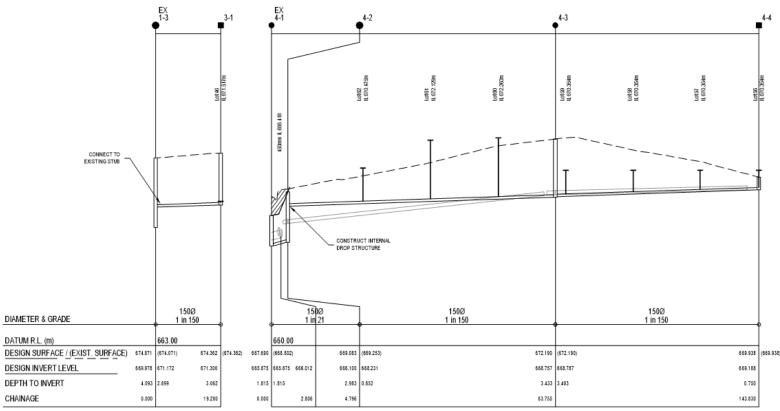
- A. CONTRACTOR TO CONSTRUCT FINISHED SURFACE LEVEL OF MAINDLE COVER LEVELS TO LEVEL AS SHOWN IN WISAA MWRA SEN -1308 -V. THE SENER CONTRACTOR IS TO LIASE WITH THE ROAD CONTRACTOR TO CONFIRM FINISHED SURFACE LEVELS AND CONSTRUCT THE COVER ABOVE IF REQUIRED BY THE STANDARD DRAWING.
- MANHOLE COVERS TO BE CONSTRUCTED TO MATCH FINSHED SURFACE LEVEL GRADES, MAXIMUM PERMISSIBLE SLOPE OF COVERS CLASS 161 in 14
 CLASS 167 in 10
- C. DEPTH TO INVERT SHOWN ON LONGITUDINAL SECTIONS IS FROM FINISHED SURFACE LEVEL TO THE INVERT. ADDITIONAL DEPTHMAY BE REQUIRED TO SUIT THE RELEVANT MANHOLE COVER REQUIREMENTS.



PROPOSED CUT



PROPOSED FILL



MAINTENANCE STRUCTURE SCHEDULE

CPG ABN 55 050 029 635

24 Albert Road PO Box 305 South Melbourne Victoria 3205 Australia T 61 3 9993 7888 F 61 3 99

1417 (1141 (1147	W/WYEWWOE ONCOTORE CONEDUCE													
STRUCTURE No.	TYPE	EASTING	NORTHING	DIA (mm)	COVER CLASS	DROP	ACCES S TYPE	LANDING	OFFSET DETAILS	SPECIAL DETAILS	DS INVERT	US INVERT	DEPTH	REMARKS
3-1	IS	590369.592	6039836,278				N/A				671.300		3.062	W.S.A. SEW-1350-M
1-3	EXMH	590372.543	6039855.251	1050		Y					669.978	671.172	4.093	CONNECT TO EXISTING STUB FROM MH
4-4	IS	590314.623	6039770.451			-	N/A				669.188		0.750	W.S.A. SEW-1350-M
4-3	МН	590373.918	6039760.804	1050	В	-	STEP				668.757	668.787	3.433	W.S.A. SEW-13004/
4-2	МН	590451.852	6039748.125	1050	В	Y	STEP				666.100	668.231	2.983	W.S.A. SEW-1306-V
4-1	EXMH	590456.648	6039748.067	1050		-					665.825	665.875	1,815	CONNECT TO EXISTING MH

WHERE COVER TO TOP OF SEWER IS LESS THAN 600mm BEDDINGUNDERLAY TO CONSIST OF
TAMPED 5mm MINUS CRUSHED ROCK WITH 6% BY MASS CONCRETE

3. MARKER TAPE TO BE PROVED IF INDICATED ON LONGITUDINAL SECTION.

2. WHERE COVER BETWEEN BOXING & TOP OF SEWER IS LESS THAN 900mm BEDDING/UNDERLAY TO

EMBEDMENT BACKFILL FOR NON-TRAFFICABLE AREAS-COHESIVE SOILS (BACK B) IN ACCORDANCE WITH SECTION 415 MRIVA BACKFILL SPECIFICATION 04-03.1 & WSA 02-2002-2.3 MRIVA EDITION REFER TO TABLE 2 FOR DIMENSIONS.

CPG

WATER AUTHORITY ACN ACN NUMBER SNOW VIEW ESTATE STAGE 3 SEWERAGE RETICULATION EXT'N No. SEWER LONGITUDINAL SECTIONS

Drg No 29

Rev A

10.2 Attachment 1

A ISSUED TO COUNCIL

Page 34

SNOW VIEW ESTATE STAGE 3 TUMBARUMBA SHIRE COUNCIL POTABLE WATER RETICULATION

GENERAL:

- 1. ALL LEVELS ARE IN METRES TO AUSTRALIAN HEIGHT DATUM (A.H.D)
- 2. ALL CO-ORDINATES ARE TO MAP GRID OF AUSTRALIA (M.G.A.) ZONE 55.
- 3. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT, THE ROAD & DRAINAGE SPECIFICATION, APPROVED. . SPECIFICATIONS AND STANDARD PRAYINGS AND TO THE SATISFACTION OF SUPERINTENDENT AND THE CITY ENGINEER OR HIS
- WORKS MUST BE CONSTRUCTED ACCORDING TO WAS 03-2002 MRWA EDITION SPECIFICATIONS AND STANDARD DRAWINGS. TECHNICAL AND CONSTRUCTION REQUIREMENTS THE CONTRACTOR IS TO ENSURE THAT ALL CURRENT REVISIONS, AMENDMENTS AND UPDATES FROM THE RELEVANT WATER AGENCY ARE ADHERED TO.
- COVER FOR WATERMAINS, REFER TO WAT-1201-V
- WITHIN FOOTHAY

 CARRIAGE WAY MINORISECONDARY ROADS

 MAXIMUM COVER TO TOP OF PIPE MUST NOT EXCEED 1.50m FROM KERB AND CHANNEL
- INVERT OR FINISHED SURFACE. ALL MAINS ARE TO BE LAID OVER DRAINS UNLESSOTHERWISE STATED.
- THE CONTRACTOR SHALL OBTAIN A ROAD OPENING PERMITFROM THE RELEVANT AUTHORITY FOR ANY WORKS WITHIN EXISTING ROAD RESERVES AND COMPLY WITH THE REQUIREMENTS.
- THE CONTRACTOR IS TO CONTACT ALL LOCAL SERVICE AUTHORITIES FOR INFORMATION REGARDING EXISTING SERVICE LOCATIONS PRIOR TO COMMENCING ANY EXCAVATION. THE CONTRACTOR IS TO MAKE ALLOWANCE IN TENDER RATES FOR PROOFING OF CRITICAL SERVICES FOR ASSISTANCE IN LOCATING SERVICES OR IN AN EMERGENCY TELEPHONE MELBOURNE ONE
- 9. FOR THE DURATION OF PROCLAIMED WATER RESTRICTIONS, THE CONTRACTOR SHALL CONFORM NITH THE RESTRICTIONS AND ANY OTHER WATER CONSERVATION REQUIREMENTS IMPOS
- 10. THE LOCATION AND DIRECTION OF SWABS IS SHOWN AS:
- 11. GAS AND WATER MAINS TO BE LAID IN COMMON TRENCH. (WHERE APPROPRIATE)
- 13. VALVES TO HAVE COVER TO ALLOW FOR SPINDLES (SUGGESTED MINIMUM BELOW)
- 13.1. 50Ø & 63Ø 13.2. 100Ø 13.3. 150Ø 13.4. 225Ø - 450 COVER (min.) - 600 COVER (min.) - 800 COVER (min
- VALVE CONTROLLED HYDRANTS SHALL BE INSTALLED ON MAINS DN300 AND GREATER. REFER STANDARD DRAWING WAT-205
- ALL TREES MUST BE PRESERVED AND PROTECTED AT ALL TIMES. IF CONSTRUCTION OF THE WATER MAIN NECESSITATES THEIR REMOVAL, WRITTEN PERMISSION MUST BE OBTAINED FROM
- NO BLASTING TO BE CARRIED OUT WITHIN 20m OF ANY EXISTING WATER MAINS WITHOUT AUTHORITY APPROVAL.

CONNECTIONS:

- 17. ALL NEW SERVICE CONNECTIONS ARE TO BE INSTALLED IN ACCORDANCE WITH WAT-1106-V,
- THE CONTRACTOR MUST NOTIFY THE WATER AGENCY A MINIMUM OF 5 DAYS PRIOR TO CONNECTING INTO ANY EXISTING WATER MAINS.
- 20. TRENCH STOPS/ CONCRETE BULKHEADS ARE TO BE INSTALLED AT LOCATIONS WHERE GRADES
- 21. DO NOT TAP DIRECTLY INTO ANY CURVED PVC WATER MAIN. DICL PRE-TAPPED CONNECTORS TO BE USED WHERE CURVED PVC WATER MAINS ARE LOCATED.

TRENCHING/BACKFILLING:

A WATER DRAWINGS

- 22. ALL WATER MAINS UNDER ROADWAYS TO BE BACKFILLED WITH 20mm CLASS 2 CRUSHED ROCK IN 150mm LAYERS, COMPACTED TO 95% IN ACCORDANCE WITH WAT-1202-V
- 24. THRUST RESTRAINTS HAVE BEEN DESIGNED FOR TEST PRESSURE ALLOWABLE BEARING PRESSURE OF GROUND (STIFF CLAY), THE CONTRACTOR SHALL CONFIRM THE ACTUAL CONDITIONS WITH THE SUPERINTENDENT PRIOR TO THE CONSTRUCTING RESTRANTS.

- 25. THE CONTRACTOR IS REQUIRED TO UNDERTAKE TESTING OF FILL COMPACTION AND DENSITY IN ACCORDANCE WITH THE WATER AGENCY TRENCH FILL SPECIFICATION TESTINS OF WATER MANN IS TO BE CARRIED OUT FOR ALL ROAD CROSSINGS. ONLE PER COSSINGS, THE CONTRACTOR SHALL ENGAGE AN APPROVED NATA REGISTERED GEOTECHNICAL ENGINEER TO CARRY OUT THESE TESTS AS INCESSARY AND SUBMIT TEST RESULTS.
- 26. TESTING OF WATER MAINS, INCLUDING SWABBING, WATER QUALITY, PRESSURE AND CHLORINATION SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH VISA 03-2002 MRIVA EDITION AND WATER AGENCY SPECIFICATIONS. ALL TESTING MUST BE UNDERTAKEN UNDER DIRECT SUPERVISION BY THE SUPERINTENDENT. THE CONTRACTOR MUST PROVIDE AMMINIMM OF 14 DAYS NOTICE TO THE SUPERINTENDENT PRIOR TO THE TESTING BEING UNDERTAKEN.
- ALL MAINS TO BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH WSAA AND APPROPRIATE WATER AUTHORITY SPECIFICATIONS.
- 28. CHLORINATION OF WATER MAINS BY AUTHORISED CONTRACTOR FOR THE DISINFECTION OF AINS UP TO 150mm IF REQUIRED BY THE WATER AUTHORITY. ALL MAINS 225mm DIA AND ABOVE. RESULTS OF SATISFACTORY CHLORINATION TEST SHALL BE CONFIRMED PRIOR TO ARRANGING SHUT DOWN & CONNECTION TO EXISTING SYSTEM.

SURGE ALLOWANCE MAXIMUM STATIC PRESSURE = 50m MAXIMUM DESIGN PRESSURE = 70m

TEST PRESSURE

TOTAL WORK SCHEDULE

= 87.50m

SIZE (mm)	TYPE	CLASS	LENGTH (m)
63	PE AS/NZS 4130	PN 16	0
100	PVC AS/NZS 1477	SERIES 2 PN 16	236
100	DICL AS/NZS 2280	SERIES 2 PN 16	30

HYDRANT SCHEDULE

ROAD NAME	LOCATION	TYPE
B DRIVE	ADJACENT LOTS 65, 47 & 49	DIRECT
B DRIVE	ADJACENT LOT 52	DIRECT

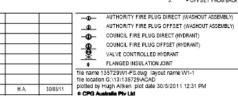
THRUST RESTRAINTS

	_						
LOCATION	TYPE	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	VOLUME (m³)	No.	
A	PLAIN	250	400	400	0.04	2	

SERVICE LOCATION TABLE

<u>DERVICE EGOVILION IVEE</u>														
ROAD NAME	POTABLE WATER		RECYCLED WATER		GAS		TELSTRA		ELECTRICITY				OPTIC FIBRE	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	POLE		U/G CABLE		SIDE	OFFSET
	SIDE		SIDE	OFFSET					SIDE	OFFSET		OFFSET	SIDE	OTTOE
GAYLARD STREET	WEST	1.5m					WEST	1.2m			WEST	0.6m		
B DRIVE	NORTH	1.5m					NORTH	1.2m			NORTH	0.6m		

- TELSTRA AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRGS.

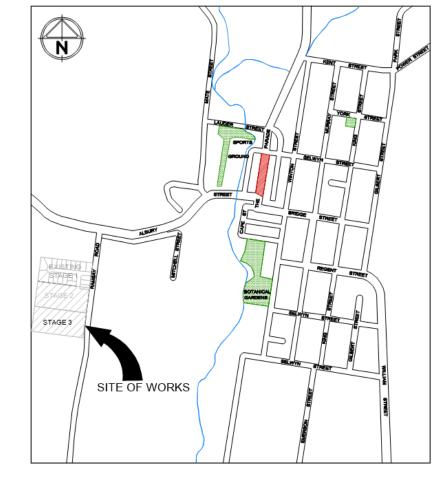


COUNCIL FIRE PLUG OFFSET (HYDRANT) VALVE **AS SHOWN**

OFFSET REFLUX VALVE
BLANKEND / CAP CONNECT REDUCER / TAPER 🏚 REMOVE FITTING NOT CONNECTED ELECTROLYSIS INSTALLATION Authorised

30/5/11

CPG ABN 55 050 020 635 24 Albert Road PO Box 305 South Melbourne Victoria 3205 Australia T 61 3 9993 7888 F 61 3 9993



LOCALITY PLAN



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.

WATER AUTHORITY AGN. AGN NUMBER SNOW VIEW ESTATE WATER RETICULATION EXT'N No.

Drg No

