

1.2 Images



Figure 1 Aerial view of the subject site (Source: LISTMap)

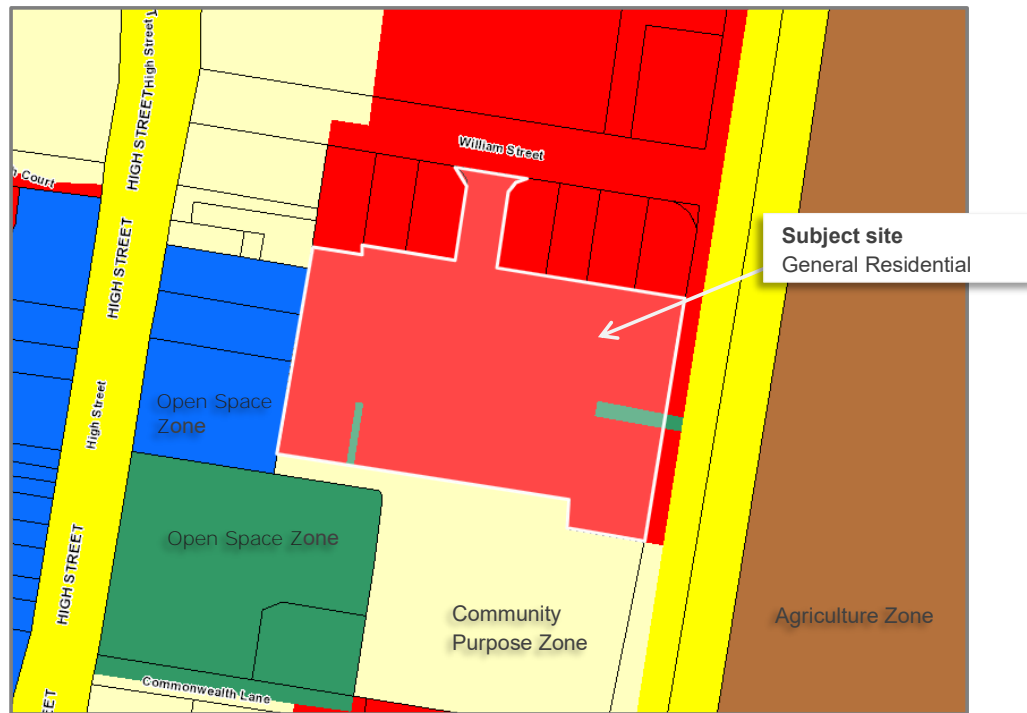


Figure 2 - Zoning of the subject site (Source LISTMap).

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The site is within the area affected by the Campbell Town Specific Area Plan

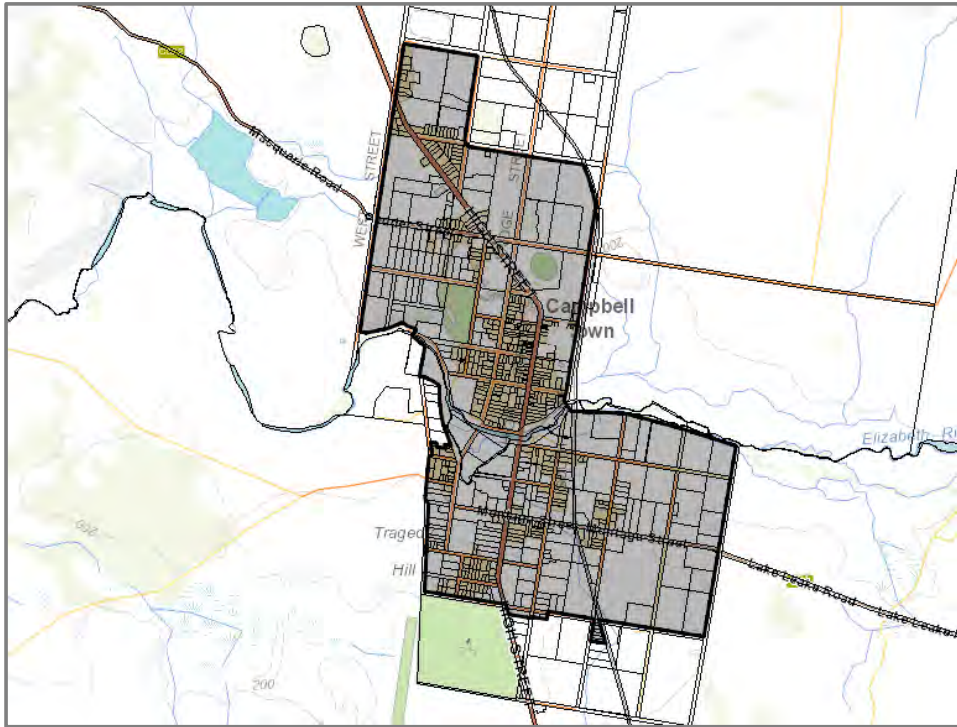


Figure 3 Specific Area Plan - Campbell Town; affected area (Source: LISTMap)

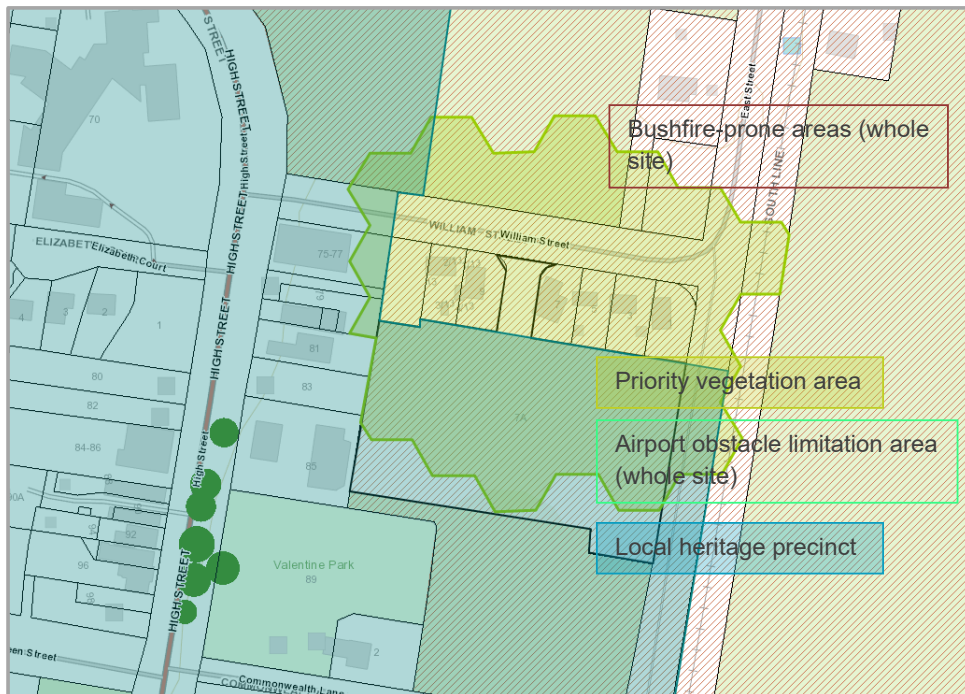


Figure 4 – Overlays affecting the subject site and surrounding areas (Source: LISTMap).

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2. Planning Assessment

2.1 Planning Scheme Zone Assessment

NOR-S2.0 Campbell Town Specific Area Plan

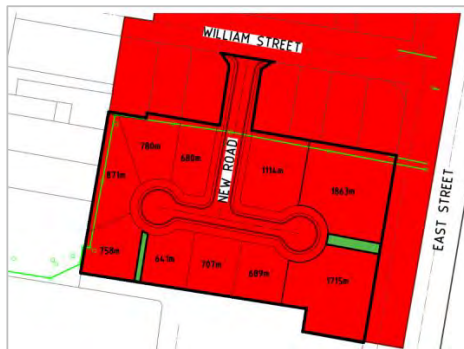
NOR-S2.8 Development Standards for Subdivision

NOR-S2.8.1 Lot design in development precincts

Objective	
That each development precinct creates an efficient lot design that provides connectivity and optimal location for public open space compatible with the rural township character.	
Acceptable Solutions	Performance Criteria
<p>A1 Each lot, or a lot proposed in a plan of subdivision, must be in accordance with the applicable lot layout shown in the precinct masterplans in Figures NOR-S2.2.2 and NOR-S2.2.3.</p>	<p>P1 Each lot, or a lot proposed in a plan of subdivision, must be consistent with the rural township character and provide an optimal location for public open space, having regard to:</p> <ul style="list-style-type: none"> a) lot layout shown in the applicable precinct masterplans in Figures NOR-S2.2.2 and NOR-S2.2.3; b) the road network as north south grid; c) fronting new lots onto existing roads where possible; d) minimising cul-de-sacs; e) the provision of public open spaces that facilitate pedestrian loops around the town; f) creating connections between new and existing public open spaces; g) creating road frontages around public open spaces; h) using public open spaces for stormwater detention; i) the relevant requirements for development of buildings on the lots; j) the intended location of buildings on the lots; and k) the pattern of development existing on established properties within the area.

Response

P1 The proposed subdivision is within the land identified as NOR-S2.2.2. The lot layout is altered from the masterplan as there are more lots proposed than what is included in the masterplan. As such, the performance criteria are addressed.



The proposed subdivision is consistent with the public open space objectives:

- a. the lot layout as proposed retains the public open space as included in the masterplan.

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- b. The road network as proposed is retained in accordance with the masterplan.
- c. The subject site is an internal lot and a new road must be made. The road is in accordance with the masterplan.
- d. Through roads are not achievable. The road design is in accordance with the masterplan.
- e. The provision of public open space is in accordance with the masterplan.
- f. Connections to public open spaces is included in the proposal plan, in accordance with the masterplan.
- g. The public open space is in accordance with the masterplan and the proposed open space is accessible by the proposed road.
- h. The public open space is used for stormwater easement, as shown on plan, no detention is proposed.
- i. Each lot is capable of accommodating a residential building in accordance with the general residential zone.
- j. The proposed lots will have adequate space for residential buildings with appropriate setbacks.
- k. The proposed layout is sympathetic to the existing development on William Street, which is adjoining. The proposed lot layout generally mirrors the adjoining lots.

NOR-S2.8.2 Lot design

Objective	
<p>That each lot:</p> <ul style="list-style-type: none"> a) has an area and dimensions appropriate for the use and development; b) is provided with appropriate access to a road; c) contains areas which are suitable for development appropriate to the purpose of the zone and specific area plan, located to avoid natural hazards; and d) is oriented to provide solar access for future dwellings. 	
Acceptable Solutions	Performance Criteria
<p>A1 Each lot or a lot proposed in a plan of subdivision, must:</p> <ul style="list-style-type: none"> a) have an area of not less than 600m² and: <ul style="list-style-type: none"> i. be able to contain a minimum area of 10m x 15m with a gradient not steeper than 1 in 5, clear of: <ul style="list-style-type: none"> a. all setbacks required by clause 8.4.2 A1, A2 and A3, and 8.5.1 A1 and A2; and b. easements or other title restrictions that limit or restrict development; and ii. existing buildings are consistent with the setback required by clause 8.4.2 A1, A2 and A3, and 8.5.1 A1 and A2; or b) be required for public use by the Crown, a council or a State authority; or c) be required for the provisions of Utilities; or d) be for the consolidation of a lot with another lot provided each lot is within the same zone. 	<p>P1 Each lot, or a lot proposed in a plan of subdivision must have sufficient useable area and dimensions suitable for its intended use, having regard to:</p> <ul style="list-style-type: none"> a) the relevant requirements for development of buildings on the lots; b) the intended location of buildings on the lots must not result in unreasonable shading on adjoining lots; c) the topography of the site; d) the presence of any natural hazards; e) adequate provision of private open space; and f) the pattern of development existing on established properties within the area.

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Response

A1 The acceptable solution is achieved. Each lot is at least 600m² in area, appropriately dimensioned for dwelling development and easements are not restrictive to future development potential.

NOR-S2.8.3 Internal Lots

Objective	
<p>That subdivision layout of land outside the precinct masterplans in Figures NOR-S2.2.2 and NOR-S2.2.3:</p> <ul style="list-style-type: none"> a) minimises internal lots; b) is consistent with existing patterns of residential development in the surrounding area; and c) retains the rural township character. 	
Acceptable Solutions	Performance Criteria
<p>A1 No Acceptable Solution.</p>	<p>P1 Each internal lot, or an internal lot proposed in a plan of subdivision must have sufficient useable area and dimensions suitable for its intended use, having regard to:</p> <ul style="list-style-type: none"> a) consistency with existing patterns of residential development of the surrounding area; b) the lot gaining access from a road existing prior to the planning scheme coming into effect; c) site constraints making an internal lot configuration the only reasonable option to efficiently use the land; d) the lot contributing to the more efficient use of residential land and infrastructure; e) the amenity of adjacent lots not being unreasonably affected by subsequent development and use; f) the lot having access to a road via an access strip, which is part of the lot, or a right-of-way, with a width of no less than 3.6m; g) passing bays being provided at appropriate distances to service the likely future use of the lot; h) the access strip being adjacent to or combined with no more than three other internal lot access strips provided that it is otherwise not appropriate to provide access via a public road; i) the lot addressing and providing for passive surveillance of public open space and public rights of way if it fronts such public spaces; j) the relevant requirements for development of buildings on the lots; k) the intended location of buildings on the lots; l) the topography of the site; m) the presence of any natural hazards; n) adequate provision of private open space; and o) the pattern of development existing on established properties in the area.

Response

P1 The performance criteria are addressed. There is one internal lot (proposed Lot 10) included in the proposal plan. The proposed will have sufficient area for development in line with the surrounding and relevant lots.

- a. there are minimal examples of internal lots in the area. Although they are not prevalent, they do occur. As such, one lot in fifteen is reasonable.
- b. The lot is proposed together with the road, however,
- c. due to the layout of the road, the single internal lot allows best and most efficient use of the land on the cul-de-sac.

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- d. This effective use of the land is specifically where the existing lot is irregular (at this location), allowing additional land area allowance.
- e. The access strip is reasonable in length and no undue impact is anticipated.
- f. The lot will have a short length access strip of 7.5m and a width of 6m. No right of way is proposed.
- g. Passing bays will not be required.
- h. Only one internal lot is proposed.
- i. The internal lot is shallow and has reasonable passive surveillance qualities to the street and equal surveillance qualities to the adjoining lots.
- j. The lot is generous in area and has adequate provision for a dwelling.
- k. A dwelling is not proposed as a part of this application but the proposed lot is adequately dimensioned to accommodate residential development.
- l. The site is not topographically challenging.
- m. Low flood hazard risk is identified on the site; however, lots can accommodate development. The site is identified for bushfire risk also. Risk is mitigated by specific development advice provided in accompanying reports.
- n. The lot is large enough to allow for private open space being more than double the minimum lot size in the general residential zone.
- o. The surrounding development is varied in lot size and layout and the subject site is bound by several different zones. The proposed lots are generally in accordance with the adjoining residential area and generally in accordance with the masterplan.

NOR-S2.8.4 Roads

Objective	
<p>That the arrangement of new road within a subdivision provides for:</p> <ul style="list-style-type: none"> a) safe, convenient and efficient connections to assist accessibility and mobility of the community; b) the adequate accommodation of vehicular, pedestrian, cycling and public transport traffic; c) adequate areas for the planting of street trees in the road reserve; and d) the efficient ultimate subdivision of the entirety of the land and of surrounding land. 	
Acceptable Solutions	Performance Criteria
A1 The subdivision includes no new roads.	<p>P1 The arrangement and construction of roads within a subdivision must provide an appropriate level of access, connectivity, safety and convenience for vehicles, pedestrians and cyclists, having regard to:</p> <ul style="list-style-type: none"> a) any road network plan adopted by the council; b) the existing and proposed road hierarchy; c) the need for connecting roads and pedestrian and cycling paths, to common boundaries with adjoining land, to facilitate future subdivision potential; d) maximising connectivity with the surrounding road, pedestrian, cycling and public transport networks; e) minimising the travel distance between key destinations such as shops and services and public transport routes; f) access to public transport; g) the efficient and safe movement of pedestrians, cyclists and public transport; h) the need to provide bicycle infrastructure on new arterial and collector roads in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling 2016; i) the topography of the site; j) the future subdivision potential of any balance

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	lots on adjoining or adjacent land; and
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Response

P1 The performance criteria are applicable. The road has been designed in accordance with the masterplan and considered acceptable.

8.0 General Residential Zone

10.6 Development Standards for Subdivision

8.6.3 Services

Objective	
That the subdivision of land provides services for the future use and development of the land.	
Acceptable Solutions	Performance Criteria
A1 Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a full water supply service.	P1 A lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a limited water supply service, having regard to: <ul style="list-style-type: none"> a) flow rates; b) the quality of potable water; c) any existing or proposed infrastructure to provide the water service and its location; d) the topography of the site; and e) any advice from a regulated entity.
A2 Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a reticulated sewerage system.	P2 No Performance Criterion.
A3 Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be capable of connecting to a public stormwater system.	P3 Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be capable of accommodating an on-site stormwater management system adequate for the future use and development of the land, having regard to: <ul style="list-style-type: none"> a) the size of the lot; b) topography of the site; c) soil conditions; d) any existing buildings on the site; e) any area of the site covered by impervious surfaces; and f) any watercourse on the land.

Response

A1 The acceptable solution is achieved.
 A2 The acceptable solution is achieved.
 A3 The acceptable solution is achieved.
 Please refer to Annexure 3 for all servicing details and plans.

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2.2 Planning Scheme Code Assessment

C2.0 Parking and Sustainable Transport Code

C2.5 Use Standards

C2.5.1 Car parking numbers

Response

A1 The acceptable solution is achieved. Each site has ample area to provide at least two car parking spaces upon development.

C2.6 Development Standards for Buildings and Works

C2.6.3 Number of accesses for vehicles

Response

A1 Each frontage has one access only.

C3.0 Road and Railway Assets Code

C3.7 Development Standards for Subdivision

C3.7.1 Subdivision for sensitive uses within a road or railway attenuation area

Response

Please refer to the Traffic Impact Assessment provided at Annexure 4 and the Attenuation report at Annexure 6.

C6.0 Local Historic Heritage Code

C6.7 Development Standards for Local Heritage Precincts and Local Historic Landscape Precincts

C6.7.3 Buildings and works, excluding demolition

Response

P1 The performance criteria are addressed. The subdivision includes the removal of trees (as detailed in C7 Natural assets code), and post and wire fencing at the road reserve to the east boundary. This will be replaced with a fence as detailed in the Attenuation and Bushfire responses. This will not cause an impact to the local historic heritage due to:

- a. the post and wire fence is insignificant and has no historical merit. It is visible from public areas, but not from main roads and thoroughfares. The Olive trees are young and do not form a historical part of the local scenery.
- b. Deterioration of these elements is not a contributing factor.
- c. Safety is a contributing factor as the fence must be replaced – as according to the bushfire protection measures proposed. The current condition of the fence or trees is not a factor.
- d. The fence and trees are not a part of a main street or thoroughfare and have little streetscape significance.
- e. The contribution in historical terms of the fence or trees is not significant. They are not part of the earlier fabric of the town nor contribute to the significance of the Grange and associated open spaces. Where there are trees on the boundary to these spaces, they will be retained as a part of this application.
- f. Not applicable
- g. Not applicable

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- h. The trees are to be removed to allow the subdivision works to be made. The fence will be replaced to protect the future development from increased risk to bushfire and attenuation mitigation.

P2 Not applicable. No new front fences or gates are proposed.

C7.0 Natural Assets Code

C7.2 Application of this Code

C7.2.1 This code applies to development on land within the following areas: (GRZ not listed)

Response

The code does not apply but information is listed here for context and as it relates to Code C6.0.

C7.7.2 Subdivision within a priority vegetation area

Response

P1 The development will require some clearing for infrastructure works. The vegetation to be cleared consists of non-native species (small olive trees) and 2 medium sized wattle trees. The remainder of the lot is generally grass and small assorted shrubs. The following images show details of the vegetation on the site.





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C13.0 Bushfire-Prone Areas Code

Please refer to Annexure 5 for the response to this code.

C16.0 Safeguarding of Airports Code

C16.4.1 The following use or development is exempt from this code:

- (a) development that is not more than the AHD height specified for the site of the development in the relevant airport obstacle limitation area.

Response

The application is exempt.

3. Conclusion

The proposed development is for an 18 lot subdivision. Fifteen lots will be for residential development and there will be one road lot, and two walkway lots, in accordance with the public open space requirement of the SAP. The subdivision meets the provisions of the SAP and Zone and a permit from Council is sought.

Annexure 1 – Copy of Title plan and Folio text

Annexure 2 – Proposal plan

Annexure 3 – Civil works and services plan

Annexure 4 – Traffic impact statement

Annexure 5 – Bushfire hazard package

Annexure 6 – Attenuation report

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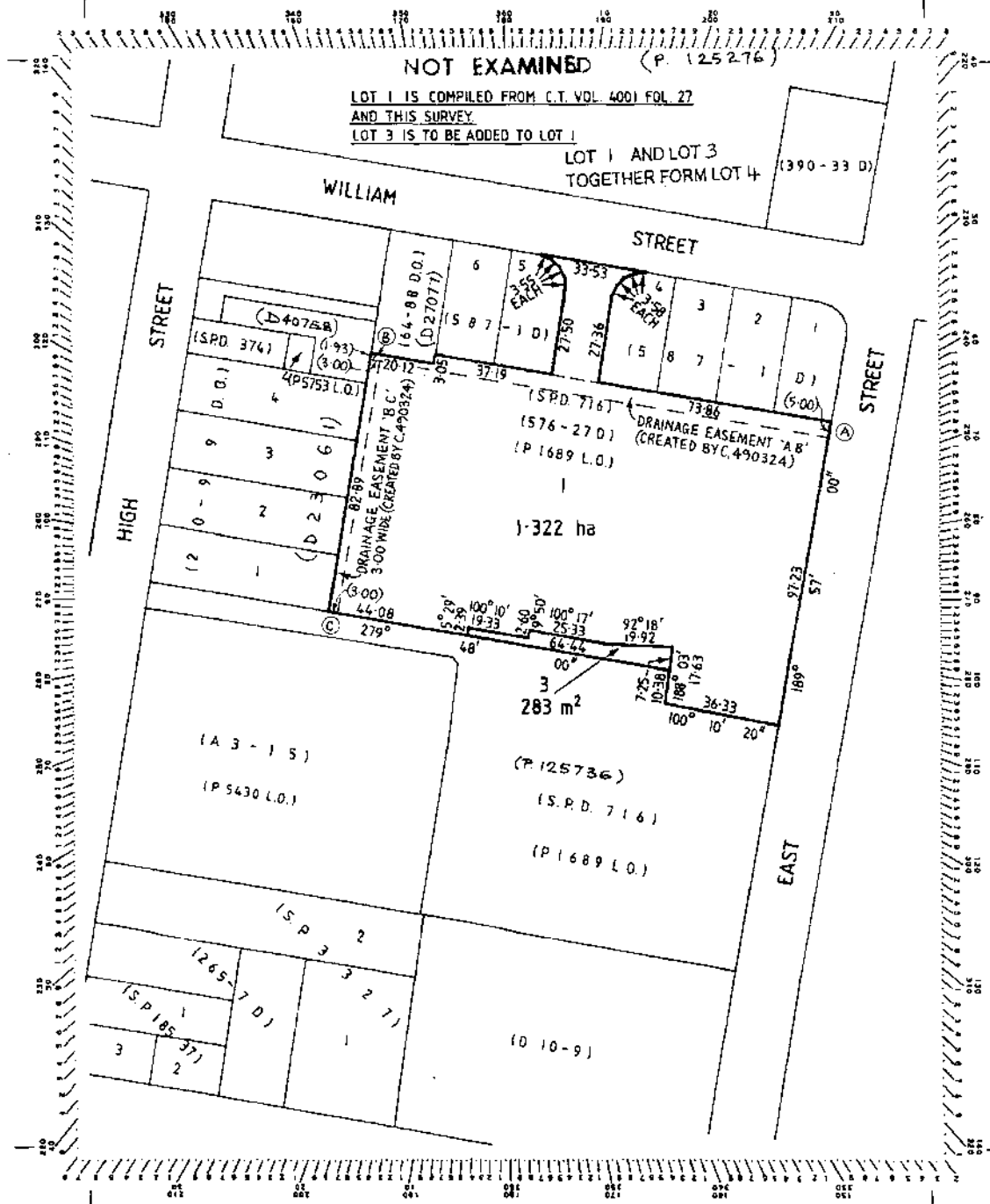
FOLIO PLAN

RECORDER OF TITLES

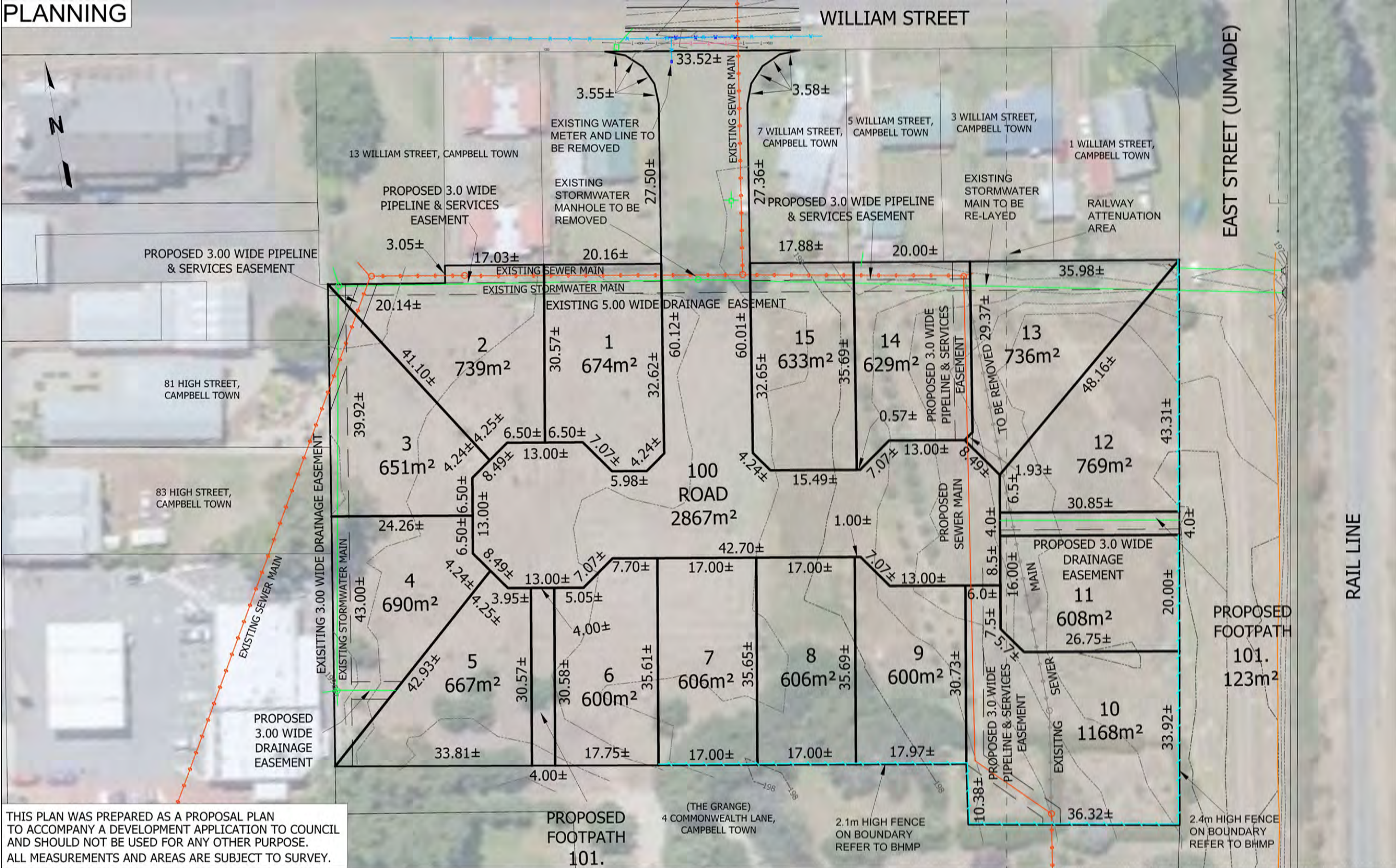
Issued Pursuant to the Land Titles Act 1980



Owner: Lot 3, Ian Norman Carmichael Nicolson, Rosemary Ryan, John Hallowes Waterhouse & Lawrence Henry John Foster. Lot 1, Director - General of Housing and Construction	PLAN OF SURVEY by Surveyor R.V. Tall of COHEN & ASSOCIATES PTY. LTD. of land situated in the TOWN OF CAMPBELL TOWN SECTION E	Registered Number. <h1>D43080</h1>
		Approved Effective from: 24 JAN 1991  Recorder of Titles
Title Reference Lot 3, Conveyance No 40-819 Lot 1, C.T. Vol 4001 Fol. 27	SCALE 1:1250 MEASUREMENTS IN METRES	
Grantee: Part of Sa. Or. Op. & part of Lot 8, Ia. Ir. 26p. qtd to John Helder Wedge & part of Lot 7, 0a 3r. 39p. qtd to William Valentine.		



PLANNING




THIS PLAN WAS PREPARED AS A PROPOSAL PLAN TO ACCOMPANY A DEVELOPMENT APPLICATION TO COUNCIL AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. ALL MEASUREMENTS AND AREAS ARE SUBJECT TO SURVEY.

- Notes:
- CONTOUR INDEX 1.00m
CONTOUR INTERVAL 0.20m

PROPOSED 16 LOT SUBDIVISION
 OWNER: GRANGE VISTA PTY LTD
 7a WILLIAM STREET, CAMPBELL TOWN, 7210
 C.T. 43080-4

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 WOOLCOTT SURVEYS		10 Goodman Court Invermay TAS 7248 PO Box 593 Mowbray Heights TAS 7248 Phone (03) 6332 3760 Fax (03) 6332 3764 Email: office@woolcottsurveys.com.au		Job Number L220916	
Drawn JAG/CSS	File name L220916_Prop PlanV4.1_100723.dwg	Date 10/07/23	Scale 1:600@A3	Edition V4.1	Sheet 1 of 1

CLIENT:
BAKER & WALLIS

PROJECT:
SUBDIVISION

ADDRESS:
7A WILLIAM STREET, CAMPBELL TOWN

PROJECT No:
231007


STATUS:
CONTROLLED DOCUMENT

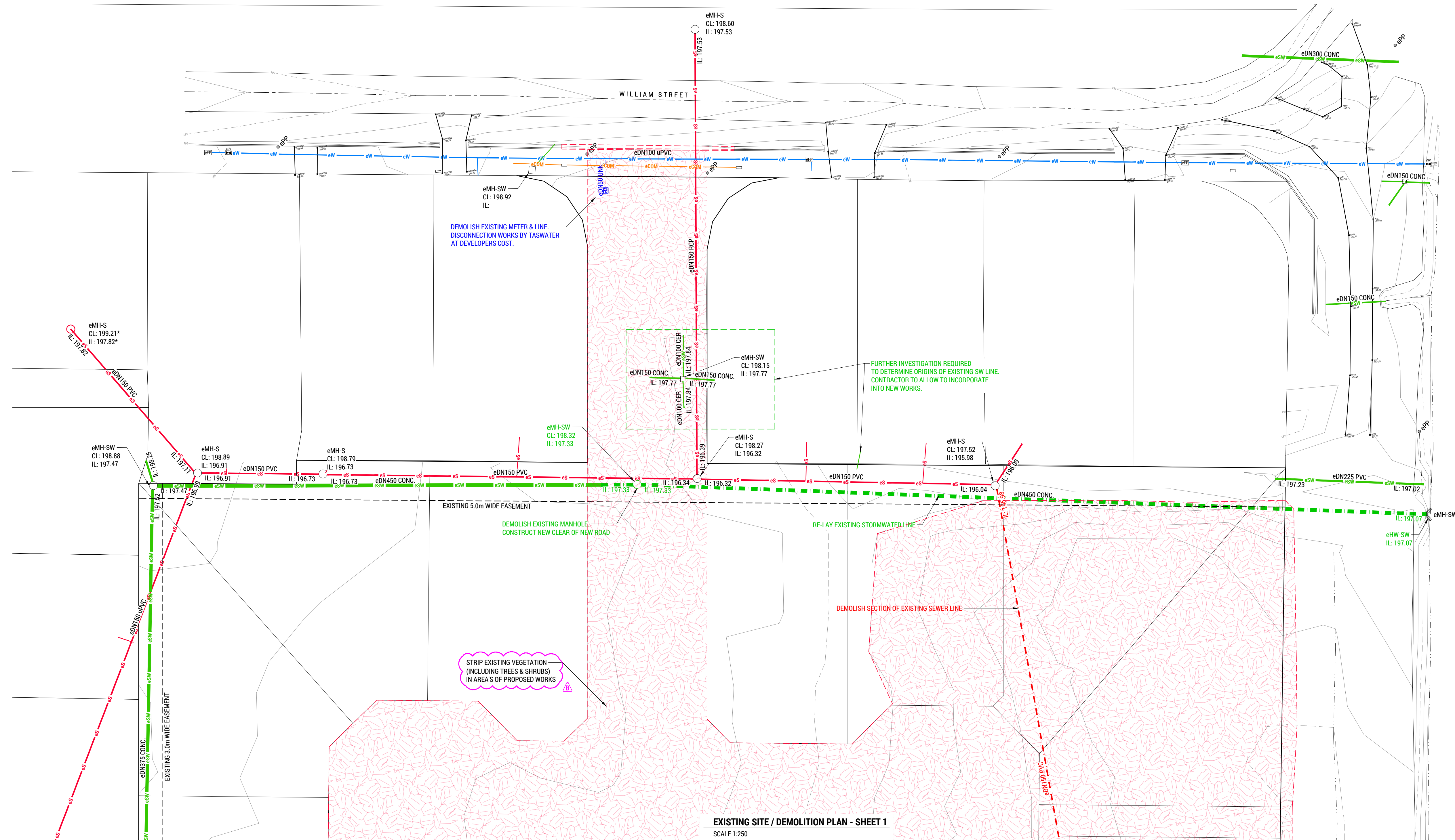
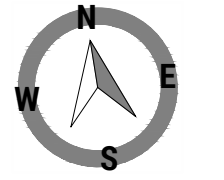
ISSUED FOR / DESCRIPTION:
DEVELOPMENT APPROVAL

DRAWINGS:

- C0V - COVER SHEET
- C000 - CIVIL NOTES
- C101 - EXISTING SITE / DEMOLITION PLAN - SHEET 1
- C102 - EXISTING SITE / DEMOLITION PLAN - SHEET 2
- C201 - BULK EARTHWORKS PLAN - SHEET 1
- C202 - BULK EARTHWORKS PLAN - SHEET 2
- C301 - SOIL & WATER MANAGEMENT PLAN
- C401 - CIVIL WORKS PLAN - SHEET 1
- C402 - CIVIL WORKS PLAN - SHEET 2
- C421 - CIVIL LONG SECTIONS - ROAD 1 & ROAD 2
- C422 - CIVIL LONG SECTIONS - CUL-DE-SACS & KERB RETURNS
- C431 - CIVIL CROSS SECTIONS - ROAD 1
- C435 - CIVIL CROSS SECTIONS - ROAD 2
- C501 - DRAINAGE PLAN - SHEET 1
- C502 - DRAINAGE PLAN - SHEET 2
- C521 - STORMWATER LONG SECTION
- C531 - SEWER LONG SECTION
- C601 - WATER RETICULATION PLAN
- C701 - CIVIL SECTIONS & DETAILS - SHEET 1
- C702 - CIVIL SECTIONS & DETAILS - SHEET 2

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		STATUS: CONTROLLED DOCUMENT		DESIGN BY: PVD	 rarein.com.au P. 03 6388 9200	CLIENT: BAKER & WALLIS	TITLE: COVER SHEET
		DO NOT SCALE - IF IN DOUBT, ASK <small>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</small>		DESIGN CHK: RJJ		PROJECT: SUBDIVISION	SCALE: - SHEET SIZE: A1 DWGS IN SET: -
A DEVELOPMENT APPROVAL		PVD	29-03-23	DRAWN BY: PVD		ADDRESS: 7A WILLIAM STREET CAMPBELL TOWN	PROJECT No: 231007 DWG No: C0V REV: A
REV:	ISSUED FOR / DESCRIPTION:	BY:	DATE:	APPROVED: R. JESSON	ACRED. No: CC58481	DATE: 29-03-23	22-24 Paterson Street Launceston TAS 7250



EXISTING SITE / DEMOLITION PLAN - SHEET 1
SCALE 1:250

DEMOLITION NOTES

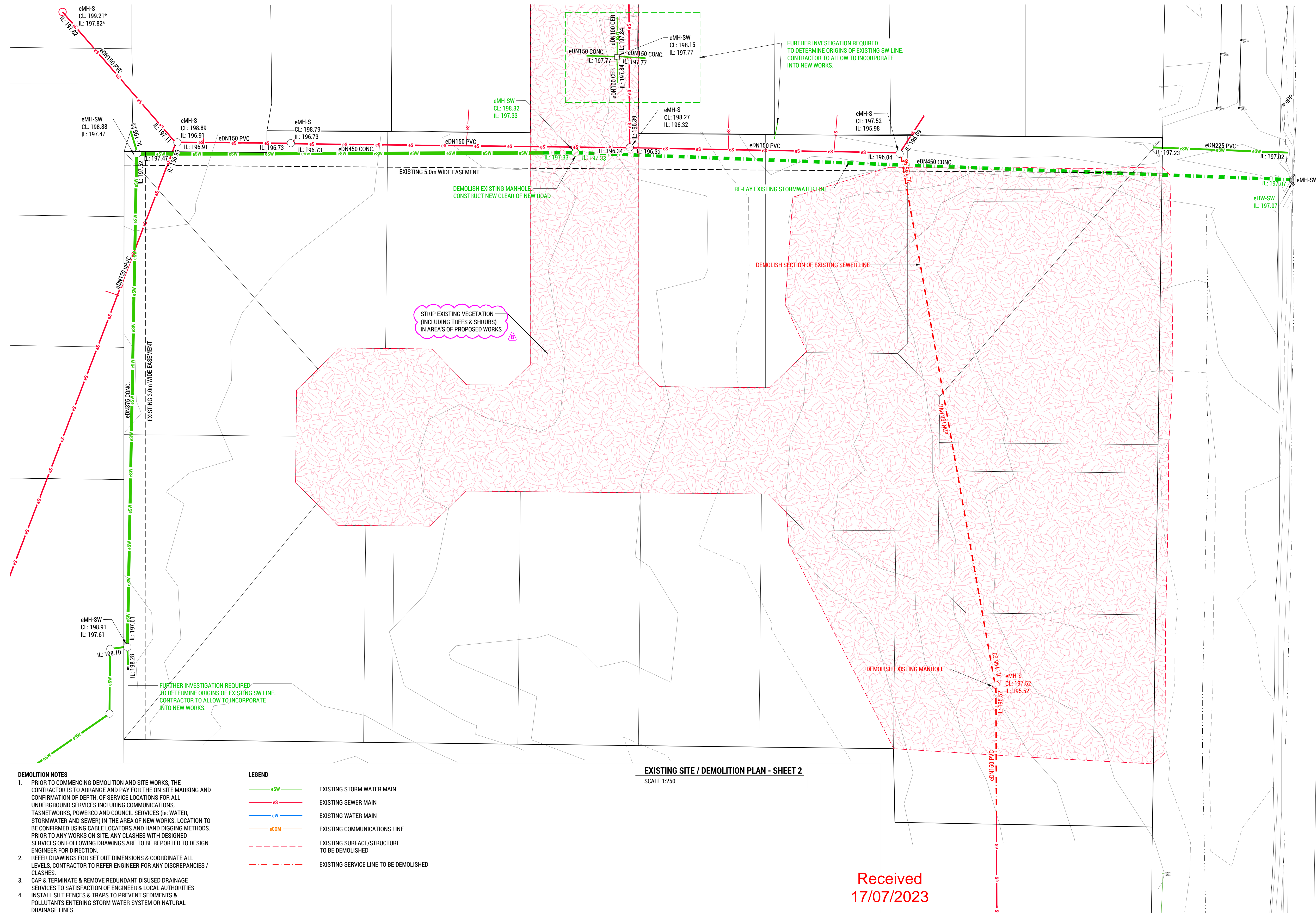
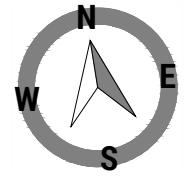
- PRIOR TO COMMENCING DEMOLITION AND SITE WORKS, THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING COMMUNICATIONS, TASNETWORKS, POWERCO AND COUNCIL SERVICES (i.e. WATER, STORMWATER AND SEWER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGNED SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION
- REFER DRAWINGS FOR SET OUT DIMENSIONS & COORDINATE ALL LEVELS, CONTRACTOR TO REFER ENGINEER FOR ANY DISCREPANCIES / CLASHES.
- CAP & TERMINATE & REMOVE REDUNDANT DISUSED DRAINAGE SERVICES TO SATISFACTION OF ENGINEER & LOCAL AUTHORITIES
- INSTALL SILT FENCES & TRAPS TO PREVENT SEDIMENTS & POLLUTANTS ENTERING STORM WATER SYSTEM OR NATURAL DRAINAGE LINES
- STOCK PILING OF SOILS OR MATERIALS AFFECTED BY WATER TO BE STORED CLEAR OF ANY DRAINAGE PATH
- CLEAN SITE VEHICLES BEFORE EXITING SITE
- DISPOSE OF EXCAVATED MATERIAL TO LICENSED WASTE FACILITY OR APPROVED LAND FILL SITE
- TRENCHES WHERE SERVICES ARE REMOVED ARE TO BE FILLED WITH AN APPROVED COMPACTED MATERIAL & TO ENGINEERS COMPACTION SPECIFICATIONS. MATCH & MAKE GOOD EXISTING SURFACES TO MATCH EXISTING SURROUNDINGS.

LEGEND

- eSW EXISTING STORM WATER MAIN
- eS EXISTING SEWER MAIN
- eW EXISTING WATER MAIN
- eCOM EXISTING COMMUNICATIONS LINE
- - - EXISTING SURFACE/STRUCTURE TO BE DEMOLISHED
- - - - - EXISTING SERVICE LINE TO BE DEMOLISHED

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STATUS: CONTROLLED DOCUMENT		DESIGN BY: PVD	 <small>22-24 Paterson Street Launceston TAS 7250</small>	CLIENT: BAKER & WALLIS	TITLE: EXISTING SITE / DEMOLITION PLAN - SHEET 1
		DESIGN CHK: RJJ		PROJECT: SUBDIVISION	
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B DA RAI RESPONSE - VEGETATION REMOVAL ADDED	PVD 17-07-23	DRAFT CHK: JWS			
A DEVELOPMENT APPROVAL	PVD 29-03-23				
REV: ISSUED FOR / DESCRIPTION:	BY: DATE:	APPROVED: R. JESSON	ACRED. No: CC58481	DATE: 29-03-23	



EXISTING SITE / DEMOLITION PLAN - SHEET 2
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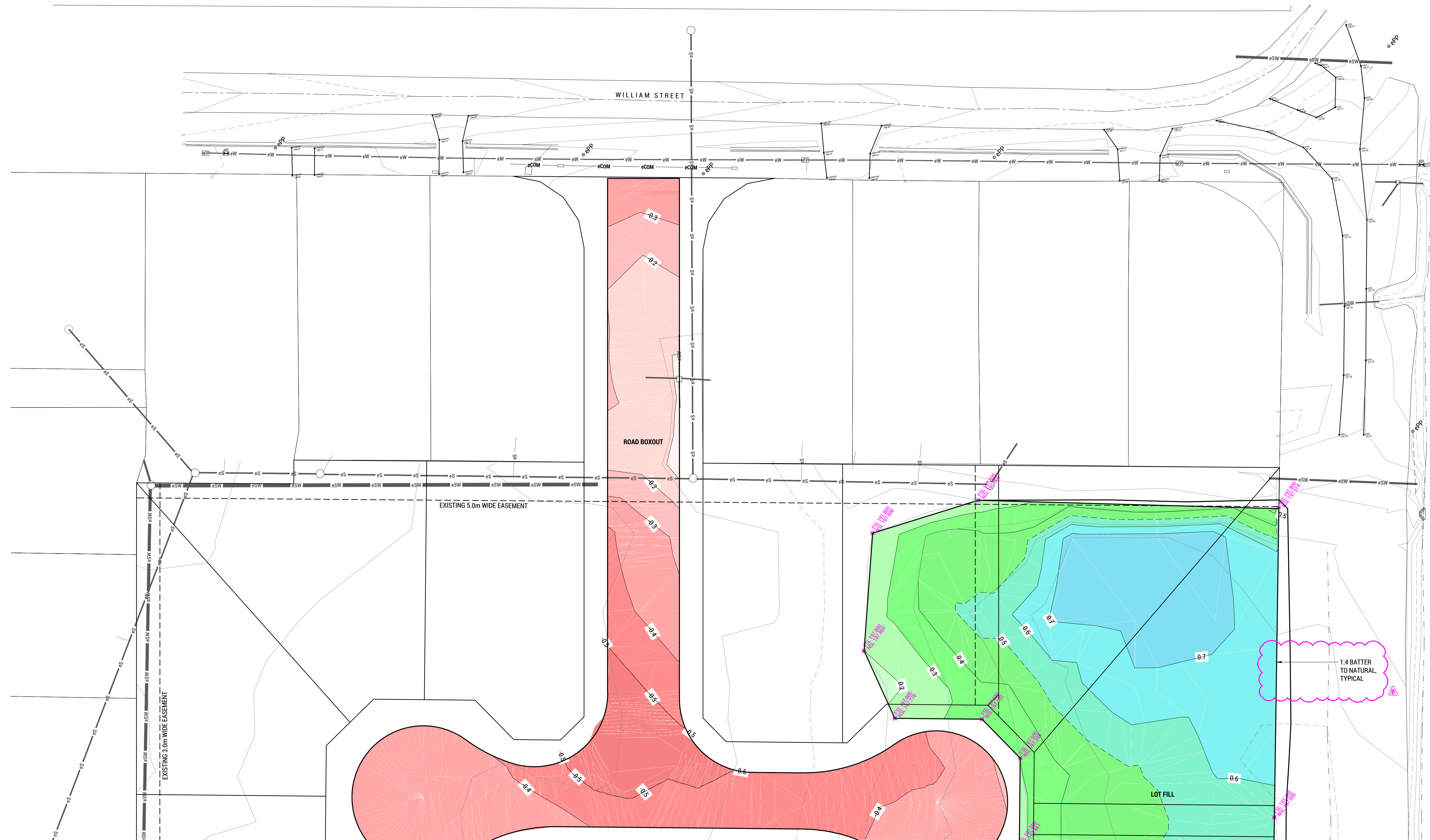
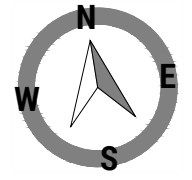
DEMOLITION NOTES

1. PRIOR TO COMMENCING DEMOLITION AND SITE WORKS, THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING COMMUNICATIONS, GAS NETWORKS, POWERCO AND COUNCIL SERVICES (i.e. WATER, STORMWATER AND SEWER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGNED SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION.
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4. INSTALL SILT FENCES & TRAPS TO PREVENT SEDIMENTS & POLLUTANTS ENTERING STORM WATER SYSTEM OR NATURAL DRAINAGE LINES.
5. STOCK PILING OF SOILS OR MATERIALS AFFECTED BY WATER TO BE STORED CLEAR OF ANY DRAINAGE PATH.
6. CLEAN SITE VEHICLES BEFORE EXITING SITE.
7. DISPOSE OF EXCAVATED MATERIAL TO LICENSED WASTE FACILITY OR APPROVED LAND FILL SITE.
8. TRENCHES WHERE SERVICES ARE REMOVED ARE TO BE FILLED WITH AN APPROVED COMPACTED MATERIAL & TO ENGINEERS COMPACTION SPECIFICATIONS. MATCH & MAKE GOOD EXISTING SURFACES TO MATCH EXISTING SURROUNDINGS.

LEGEND

- eSW EXISTING STORM WATER MAIN
- eS EXISTING SEWER MAIN
- eW EXISTING WATER MAIN
- eCOM EXISTING COMMUNICATIONS LINE
- - - EXISTING SURFACE/STRUCTURE TO BE DEMOLISHED
- - - - - EXISTING SERVICE LINE TO BE DEMOLISHED

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B DA RAI RESPONSE - VEGETATION REMOVAL ADDED A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 17-07-23 PVD 29-03-23 BY: DATE:	DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257 APPROVED: R. JESSON ACRED. No: CC58481 DATE: 29-03-23	rare. 22-24 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	



EARTHWORKS VOLUMES - ROAD BOXOUT NS-0.2 - B.O.K-0.5	
	VOLUME
SITE STRIP - -0.2m	1643m ³ (328m ³)
EMBANKMENT CUT	600m ³
EMBANKMENT FILL	0m ³
TOTAL	600m³ CUT


EARTHWORKS VOLUMES - LOT FILLING NS - LOT FILL	
	VOLUME
SITE STRIP - -0.2m	3818m ³ (764m ³)
EMBANKMENT CUT	0m ³
EMBANKMENT FILL	1822m ³
TOTAL	1822m³ FILL

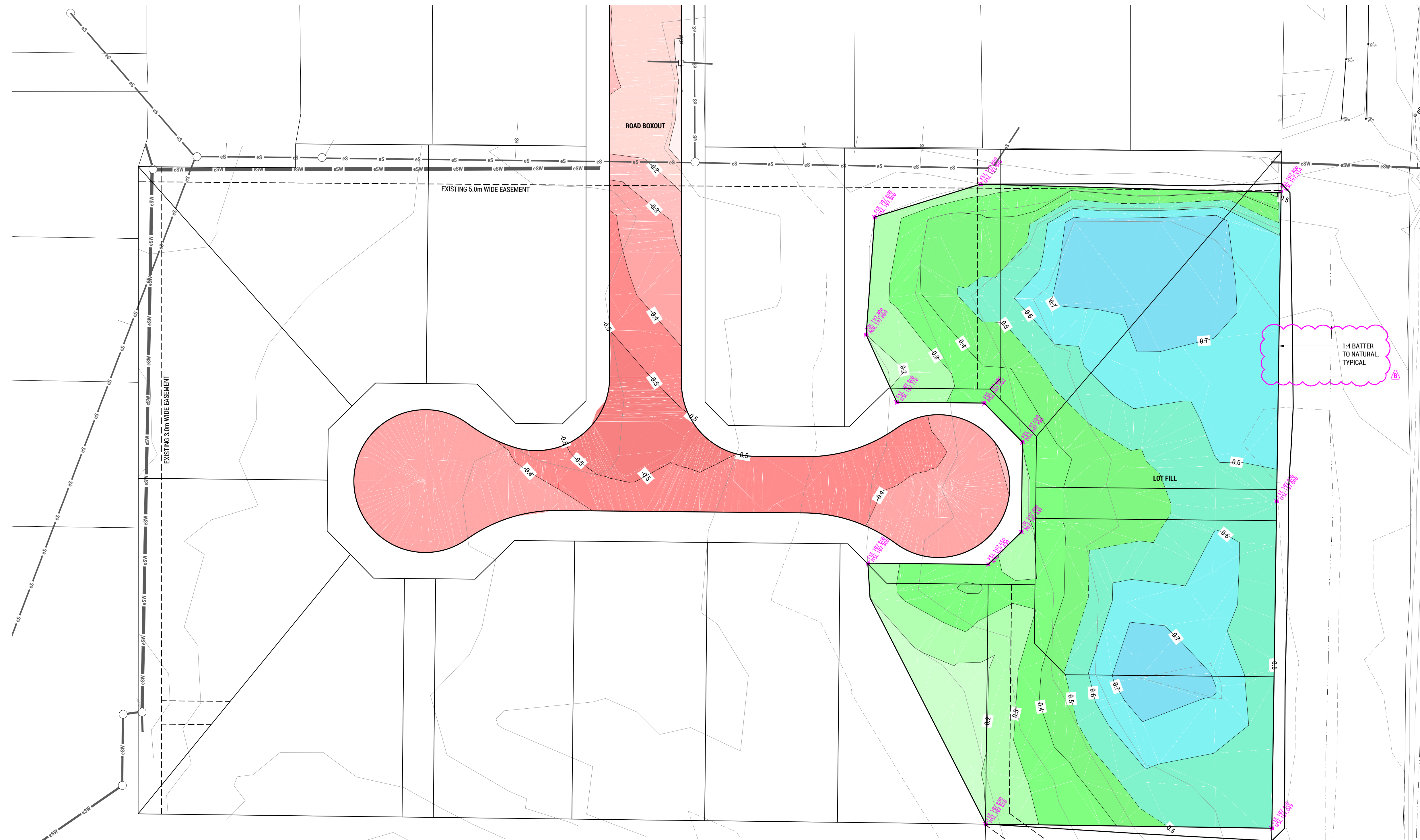
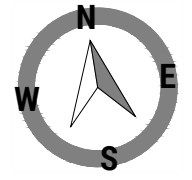
CUT - FILL HEIGHTS TABLE	
Elevation	Colour
-0.70 to -0.60	Red
-0.60 to -0.50	Red
-0.50 to -0.40	Red
-0.40 to -0.30	Red
-0.30 to -0.20	Red
-0.20 to -0.10	Red
-0.10 to 0.00	Red
0.00 to 0.10	Light Green
0.10 to 0.20	Light Green
0.20 to 0.30	Light Green
0.30 to 0.40	Light Green
0.40 to 0.50	Light Green
0.50 to 0.60	Light Green
0.60 to 0.70	Light Green
0.70 to 0.80	Light Green

BULK EARTHWORKS PLAN - SHEET 1
SCALE 1:250

1:4 BATTER TO NATURAL TYPICAL

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B DA RAI RESPONSE - BATTER ADDED A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 17-07-23 PVD 29-03-23 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481 DATE: 29-03-23			



EARTHWORKS VOLUMES - ROAD BOXOUT NS-0.2 - B.O.K-0.5	
	VOLUME
SITE STRIP - -0.2m	1643m ³ (328m ³)
EMBANKMENT CUT	600m ³
EMBANKMENT FILL	0m ³
TOTAL	600m³ CUT

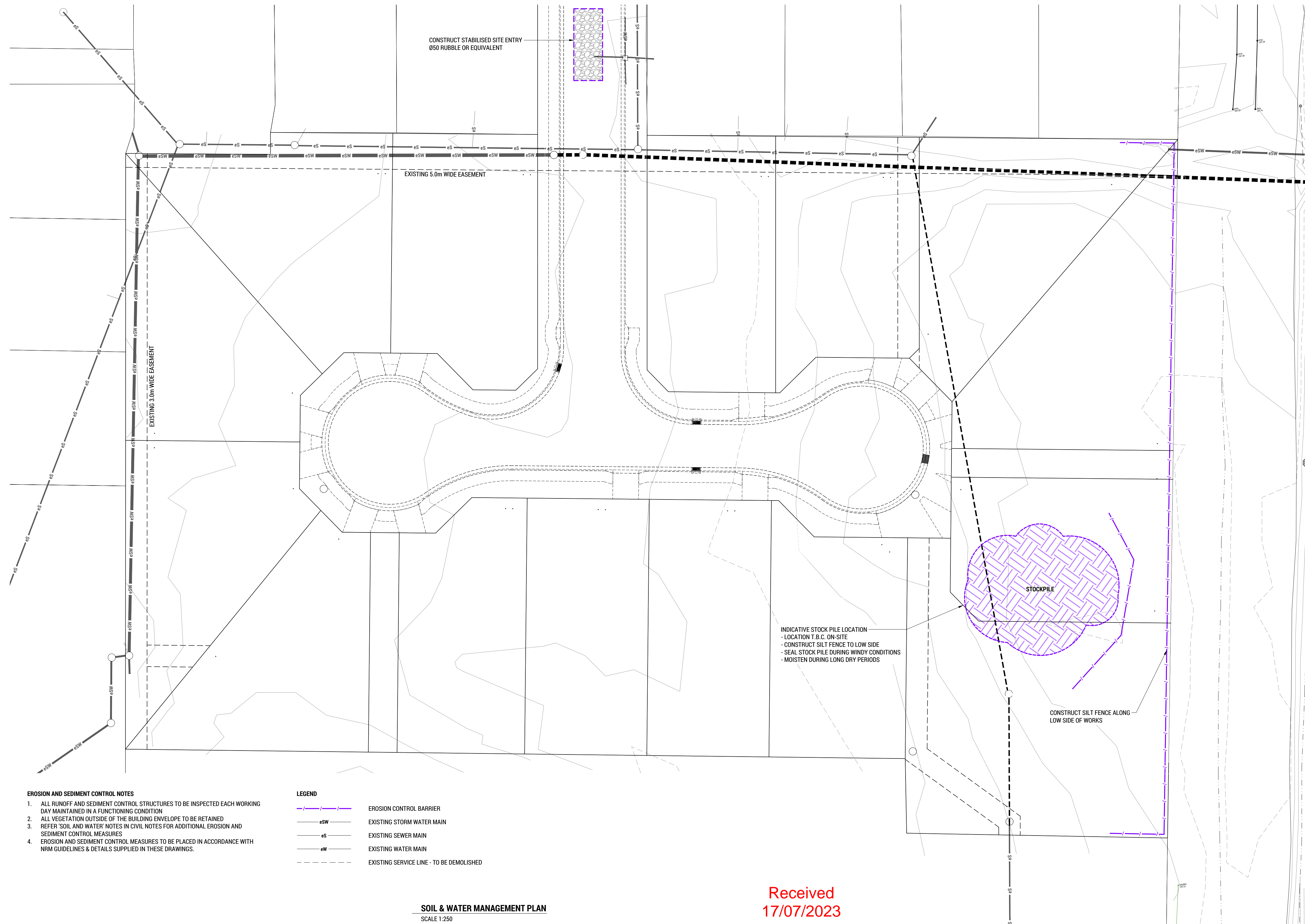
EARTHWORKS VOLUMES - LOT FILLING NS - LOT FILL	
	VOLUME
SITE STRIP - -0.2m	3818m ³ (764m ³)
EMBANKMENT CUT	0m ³
EMBANKMENT FILL	1822m ³
TOTAL	1822m³ FILL

CUT - FILL HEIGHTS TABLE	
Elevation	Colour
-0.70 to -0.60	Red
-0.60 to -0.50	Red
-0.50 to -0.40	Red
-0.40 to -0.30	Red
-0.30 to -0.20	Red
-0.20 to -0.10	Red
-0.10 to 0.00	Red
0.00 to 0.10	Light Green
0.10 to 0.20	Light Green
0.20 to 0.30	Light Green
0.30 to 0.40	Light Green
0.40 to 0.50	Light Green
0.50 to 0.60	Light Green
0.60 to 0.70	Light Green
0.70 to 0.80	Light Green

BULK EARTHWORKS PLAN - SHEET 2
SCALE 1:250

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B DA RAI RESPONSE - BATTER ADDED A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 17-07-23 PVD 29-03-23 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481 DATE: 29-03-23	22-24 Paterson Street Launceston TAS 7250		



- EROSION AND SEDIMENT CONTROL NOTES**
1. ALL RUNOFF AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED EACH WORKING DAY MAINTAINED IN A FUNCTIONING CONDITION
 2. ALL VEGETATION OUTSIDE OF THE BUILDING ENVELOPE TO BE RETAINED
 3. REFER 'SOIL AND WATER' NOTES IN CIVIL NOTES FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES
 4. EROSION AND SEDIMENT CONTROL MEASURES TO BE PLACED IN ACCORDANCE WITH NRM GUIDELINES & DETAILS SUPPLIED IN THESE DRAWINGS.

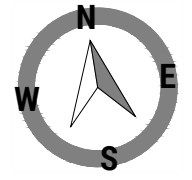
LEGEND

	EROSION CONTROL BARRIER
	EXISTING STORM WATER MAIN
	EXISTING SEWER MAIN
	EXISTING WATER MAIN
	EXISTING SERVICE LINE - TO BE DEMOLISHED

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SOIL & WATER MANAGEMENT PLAN
SCALE 1:250

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		DO NOT SCALE - IF IN DOUBT, ASK <small>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 698 257</small>		DESIGN CHK: RJJ		PROJECT: SUBDIVISION	SCALE: 1:250 SHEET SIZE: A1 DWGS IN SET: -
A	DEVELOPMENT APPROVAL	PVD	29-03-23	DRAWN BY: PVD	22-24 Paterson Street Launceston TAS 7250	ADDRESS: 7A WILLIAM STREET CAMPBELL TOWN	PROJECT No: 231007 DWG No: C301 REV: A
REV:	ISSUED FOR / DESCRIPTION:	BY:	DATE:	APPROVED: R. JESSON	ACRED. No: CC58481	DATE: 29-03-23	

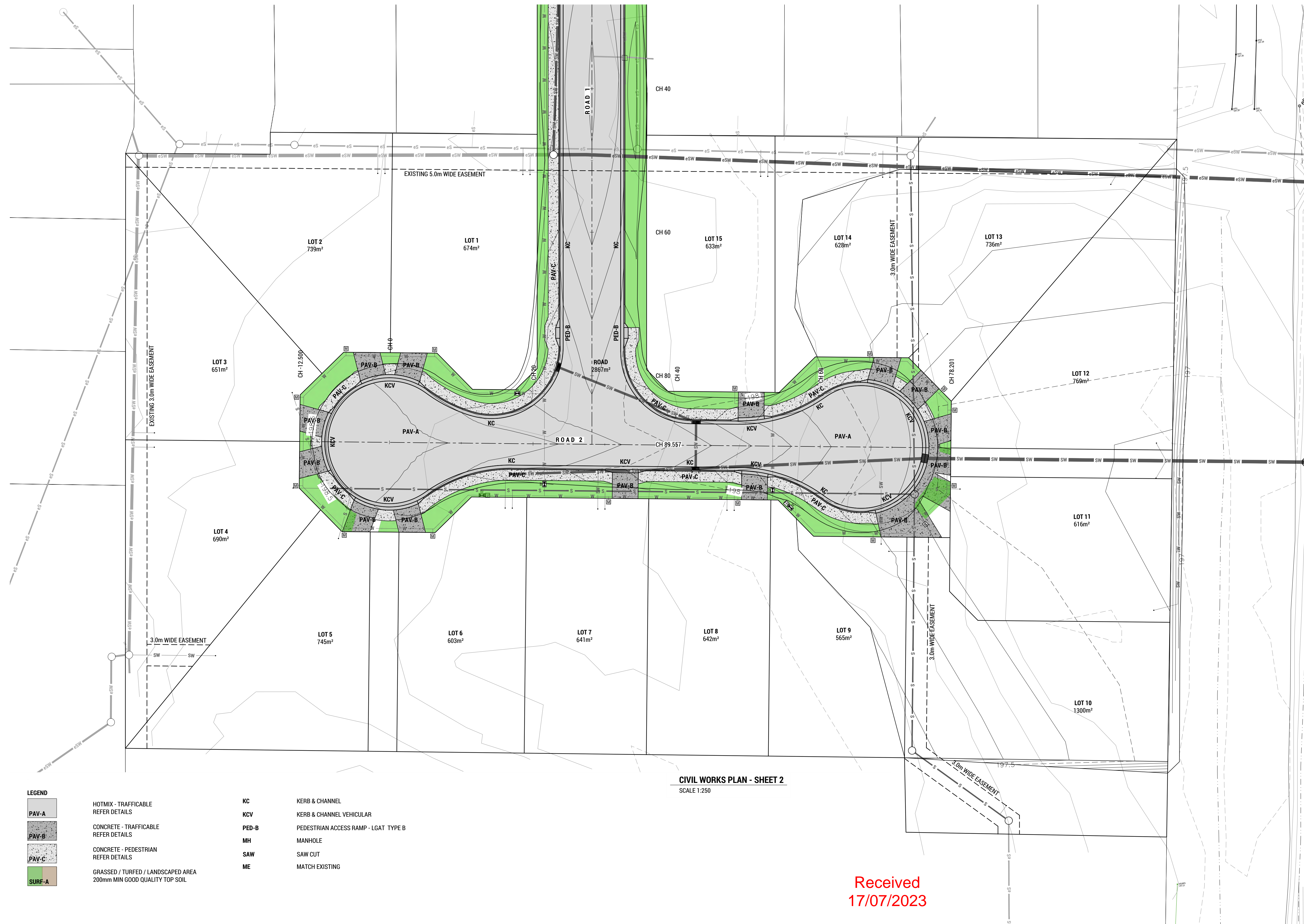
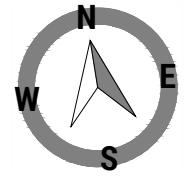


CIVIL WORKS PLAN - SHEET 1
SCALE 1:250

LEGEND	
	HOTMIX - TRAFFICABLE REFER DETAILS
	CONCRETE - TRAFFICABLE REFER DETAILS
	CONCRETE - PEDESTRIAN REFER DETAILS
	GRASSED / TURFED / LANDSCAPED AREA 200mm MIN GOOD QUALITY TOP SOIL
	KERB & CHANNEL
	KERB & CHANNEL VEHICULAR
	PEDESTRIAN ACCESS RAMP - LGAT TYPE B
	MANHOLE
	SAW CUT
	MATCH EXISTING

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A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 29-03-23 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481	DATE: 29-03-23		

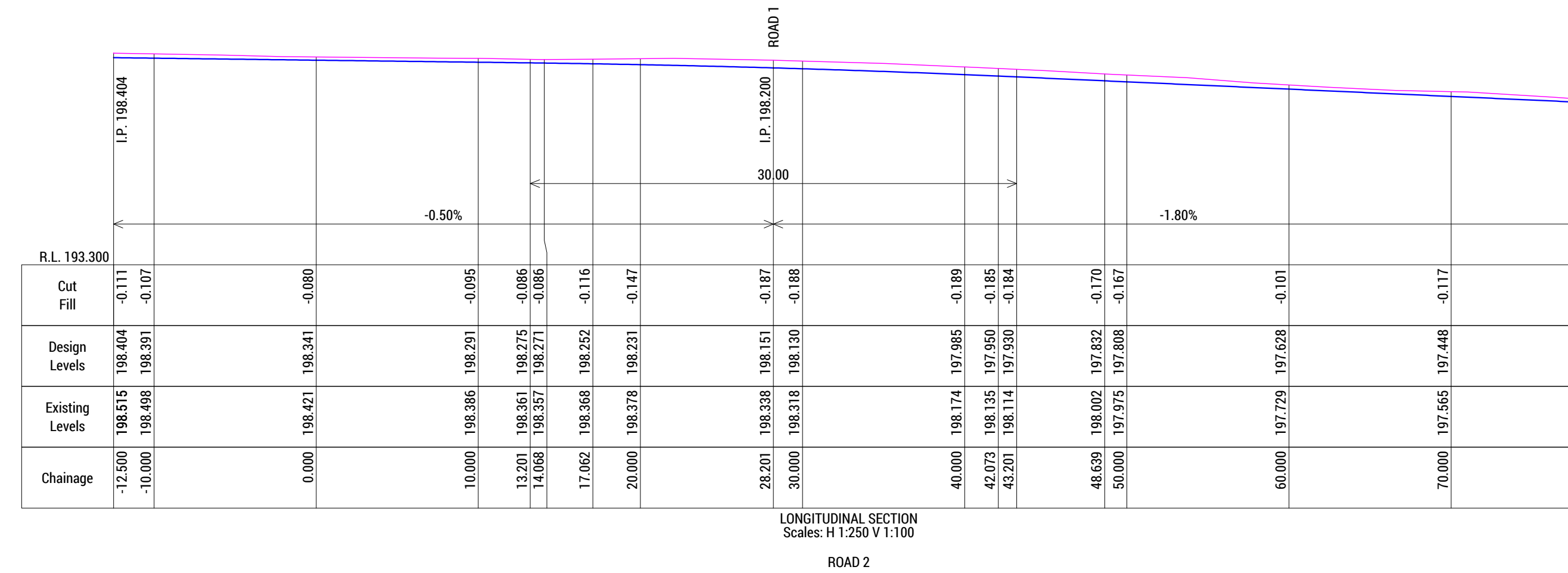
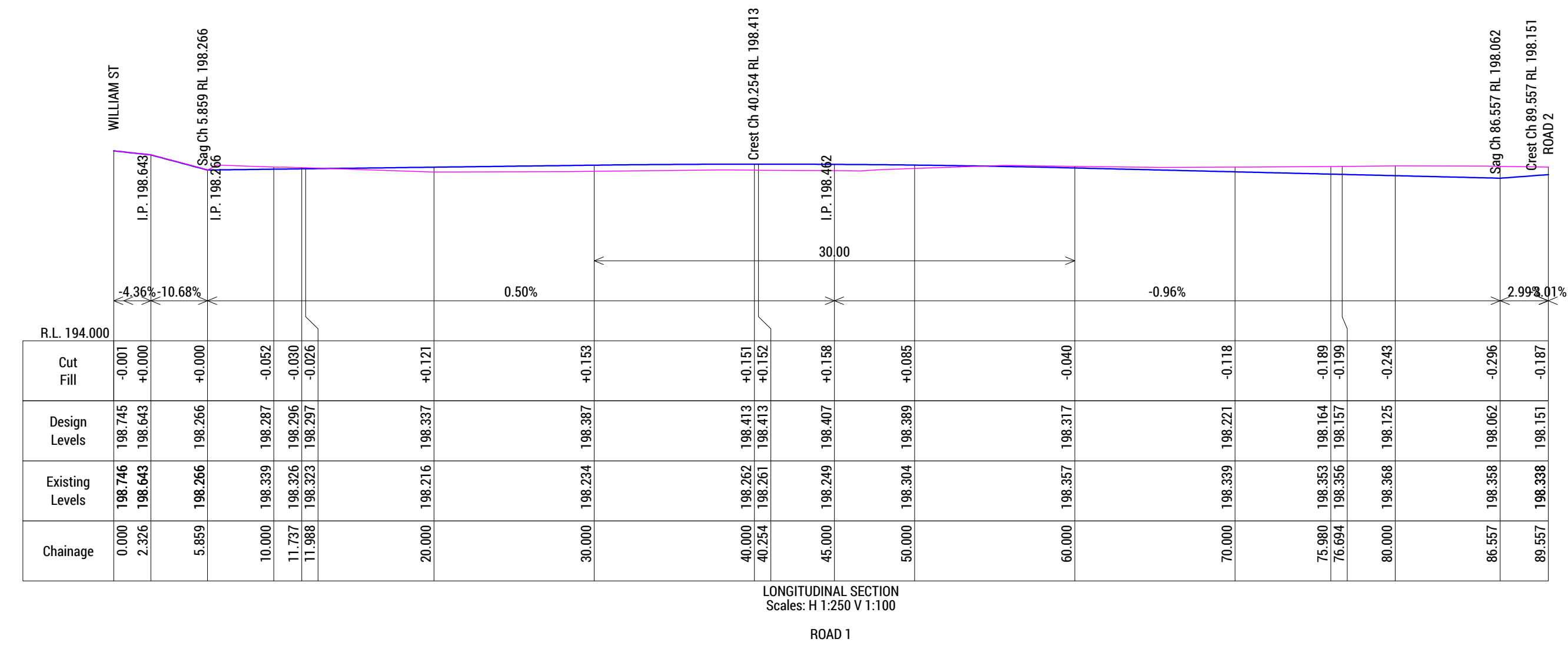


CIVIL WORKS PLAN - SHEET 2
SCALE 1:250


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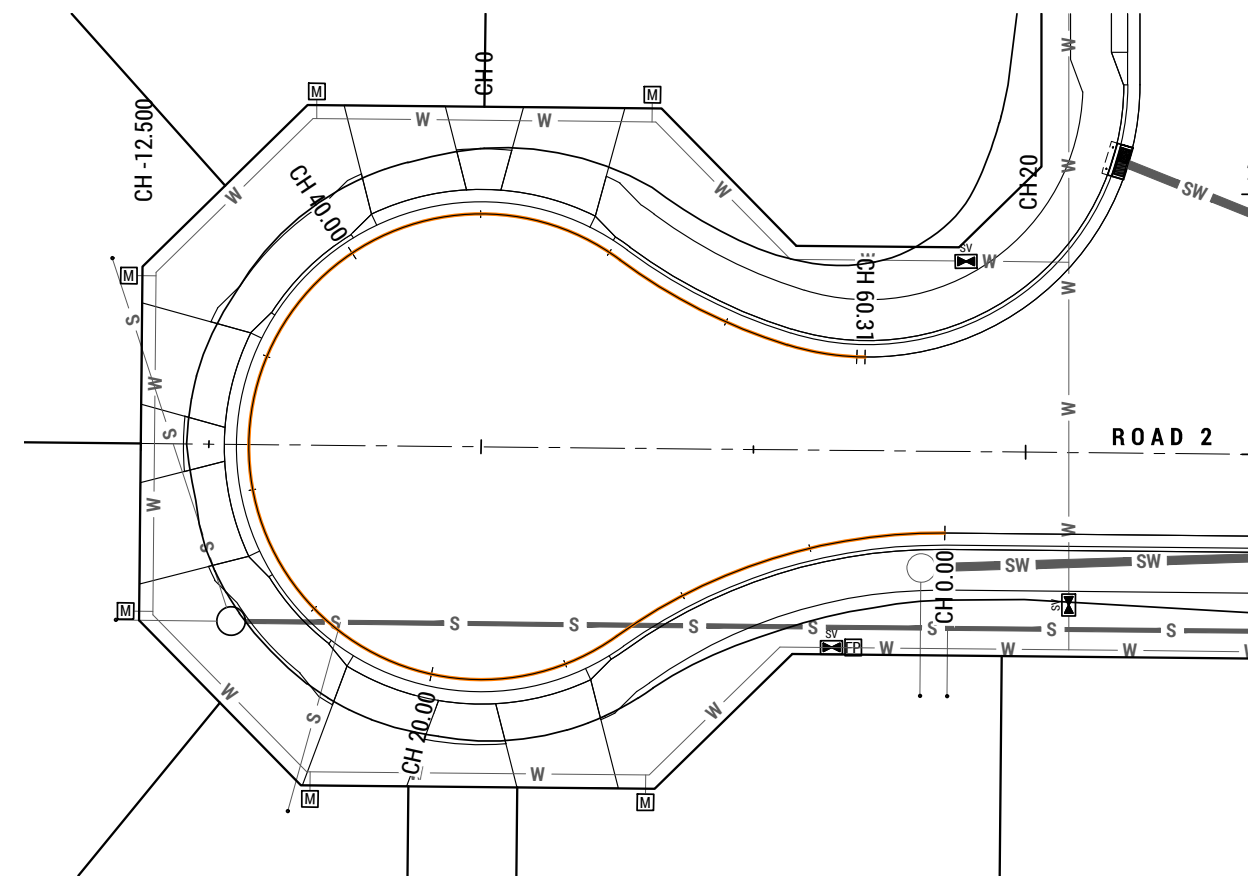
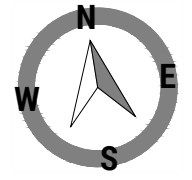
LEGEND		KC	KERB & CHANNEL
PAV-A	HOTMIX - TRAFFICABLE REFER DETAILS	KCV	KERB & CHANNEL VEHICULAR
PAV-B	CONCRETE - TRAFFICABLE REFER DETAILS	PED-B	PEDESTRIAN ACCESS RAMP - LGAT TYPE B
PAV-C	CONCRETE - PEDESTRIAN REFER DETAILS	MH	MANHOLE
SURF-A	GRASSED / TURFED / LANDSCAPED AREA 200mm MIN GOOD QUALITY TOP SOIL	SAW	SAW CUT
		ME	MATCH EXISTING

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A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 29-03-23 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481	DATE: 29-03-23		

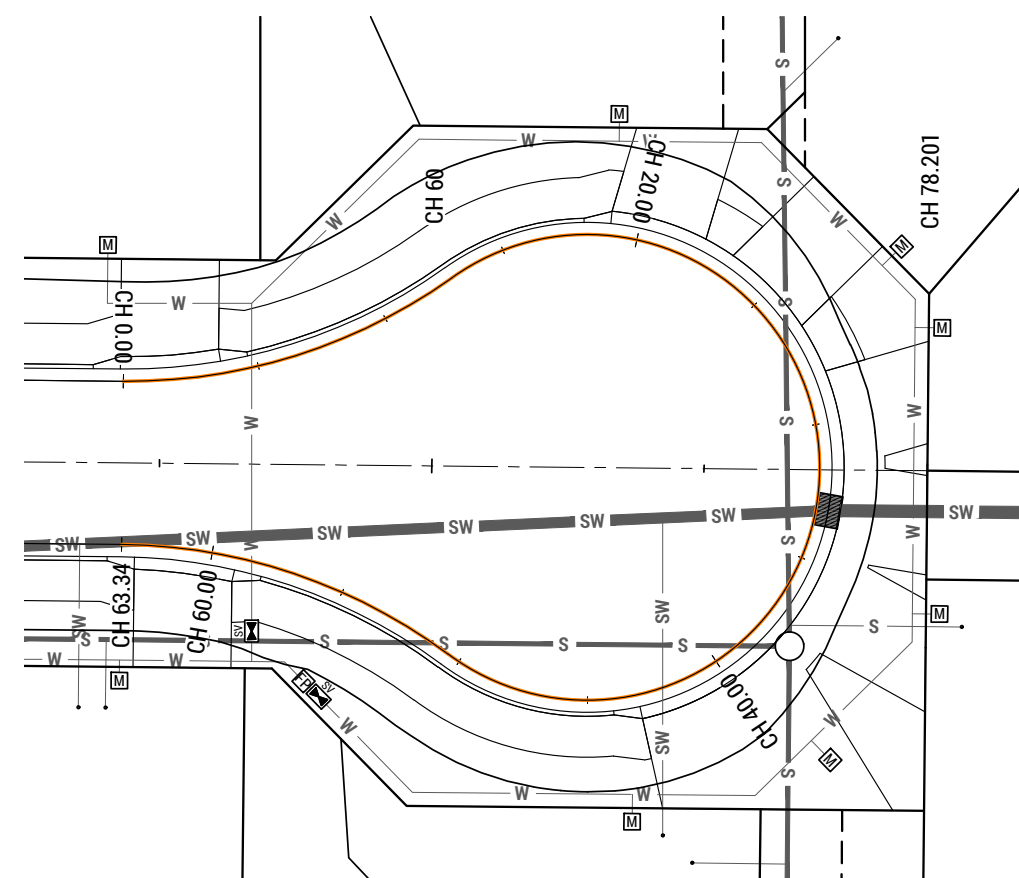


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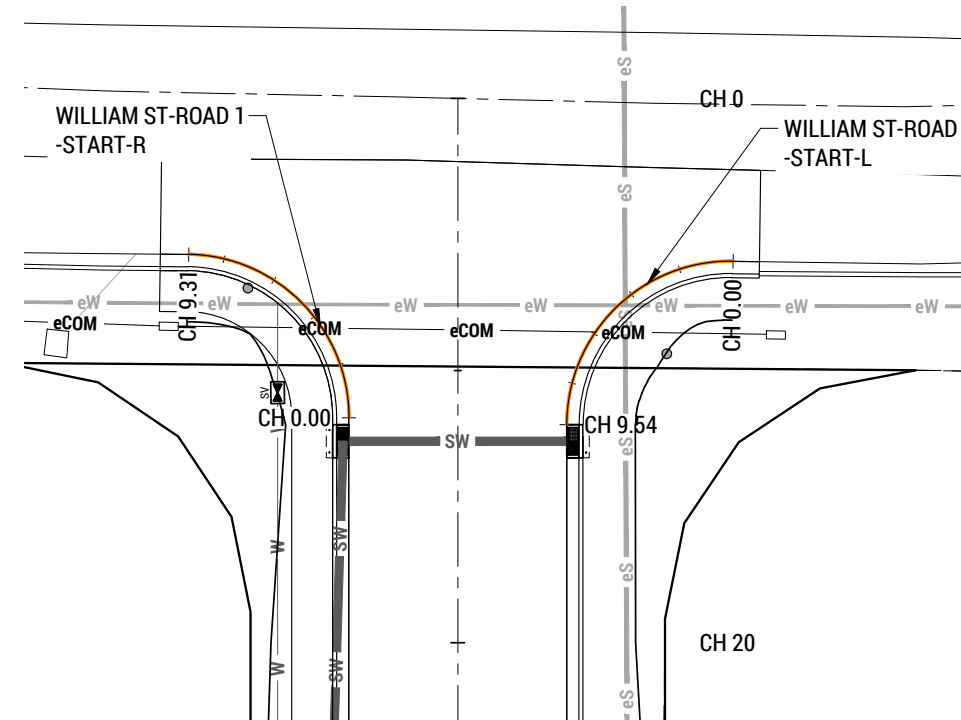
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A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 29-03-23 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481 DATE: 29-03-23		22-24 Paterson Street Launceston TAS 7250	



ROAD 2 - CUL-DE-SAC 1
SCALE 1:250



ROAD 2 - CUL-DE-SAC 2
SCALE 1:250



WILLIAM ST - ROAD 1 INTERSECTION
SCALE 1:250

Chainage	Existing Levels	Design Levels	Cut Fill
0.000	198.238	198.162	-0.166
1.000	198.246	198.172	-0.174
2.000	198.246	198.172	-0.174
3.000	198.246	198.172	-0.174
4.000	198.246	198.172	-0.174
5.000	198.246	198.172	-0.174
10.000	198.394	198.227	-0.167
12.863	198.401	198.248	-0.153
15.000	198.406	198.264	-0.142
20.000	198.425	198.302	-0.123
25.000	198.466	198.340	-0.126
30.000	198.493	198.377	-0.116
31.671	198.487	198.300	-0.097
35.000	198.472	198.364	-0.108
40.000	198.456	198.235	-0.131
45.000	198.444	198.286	-0.158
50.000	198.441	198.247	-0.194
50.419	198.438	198.241	-0.194
55.000	198.406	198.209	-0.197
57.403	198.396	198.190	-0.206
60.000	198.403	198.170	-0.233
60.306	198.404	198.167	-0.237

LONGITUDINAL SECTION
Scales: H 1:250 V 1:100

ROAD 2 - CUL-DE-SAC 1

Chainage	Existing Levels	Design Levels	Cut Fill
0.000	198.020	197.742	-0.278
5.000	197.918	197.664	-0.254
10.000	197.819	197.585	-0.234
12.863	197.772	197.541	-0.231
15.000	197.741	197.507	-0.234
15.913	197.733	197.493	-0.240
20.000	197.672	197.437	-0.235
25.000	197.570	197.391	-0.179
30.000	197.526	197.371	-0.155
31.671	197.529	197.369	-0.160
31.705	197.529	197.369	-0.160
31.739	197.529	197.369	-0.160
35.000	197.528	197.375	-0.163
40.000	197.624	197.403	-0.221
45.000	197.688	197.457	-0.231
47.564	197.707	197.494	-0.213
50.000	197.718	197.522	-0.186
50.419	197.728	197.540	-0.186
55.000	197.804	197.611	-0.193
60.000	197.950	197.690	-0.240
63.342	197.991	197.742	-0.249

LONGITUDINAL SECTION
Scales: H 1:250 V 1:100

ROAD 2 - CUL-DE-SAC 2

Chainage	Existing Levels	Design Levels	Cut Fill
0.000	198.169	198.169	+0.000
1.616	198.216	198.193	-0.043
2.000	198.232	198.187	-0.065
3.992	198.311	198.196	-0.115
4.000	198.311	198.196	-0.115
4.655	198.317	198.197	-0.120
6.000	198.333	198.194	-0.139
6.367	198.339	198.193	-0.146
8.000	198.357	198.185	-0.172
9.543	198.339	198.177	-0.162

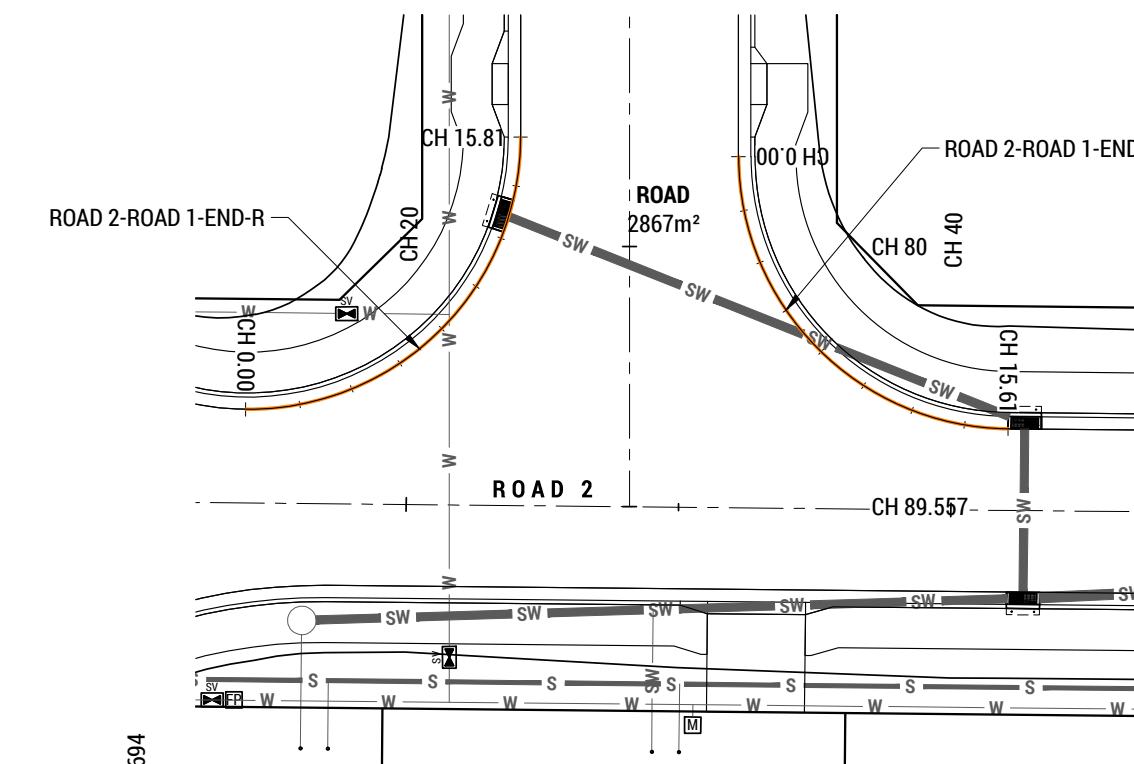
LONGITUDINAL SECTION
Scales: H 1:100 V 1:100

WILLIAM ST-ROAD 1-START-L

Chainage	Existing Levels	Design Levels	Cut Fill
0.000	198.297	198.176	-0.121
0.010	198.277	198.175	-0.102
0.585	198.337	198.174	-0.163
2.000	198.363	198.183	-0.180
2.227	198.369	198.197	-0.172
4.000	198.401	198.225	-0.176
4.643	198.418	198.246	-0.172
4.663	198.419	198.246	-0.173
6.000	198.461	198.288	-0.163
6.980	198.464	198.312	-0.122
8.000	198.369	198.331	-0.028
9.206	198.246	198.246	+0.000
9.306	198.246	198.246	+0.000

LONGITUDINAL SECTION
Scales: H 1:100 V 1:100

WILLIAM ST-ROAD 1-START-R



ROAD 1 - ROAD 2 INTERSECTION
SCALE 1:250

Chainage	Existing Levels	Design Levels	Cut Fill
0.000	196.301	196.037	-0.264
2.000	196.306	196.018	-0.288
4.000	196.305	196.000	-0.305
6.000	196.298	197.991	-0.317
7.815	196.287	197.964	-0.323
8.000	196.285	197.963	-0.322
10.000	196.260	197.942	-0.318
11.707	196.228	197.920	-0.308
12.000	196.222	197.916	-0.306
14.000	196.183	197.887	-0.296
15.599	196.153	197.860	-0.293
15.609	196.153	197.860	-0.293

LONGITUDINAL SECTION
Scales: H 1:100 V 1:100

ROAD 2-ROAD 1-END-L

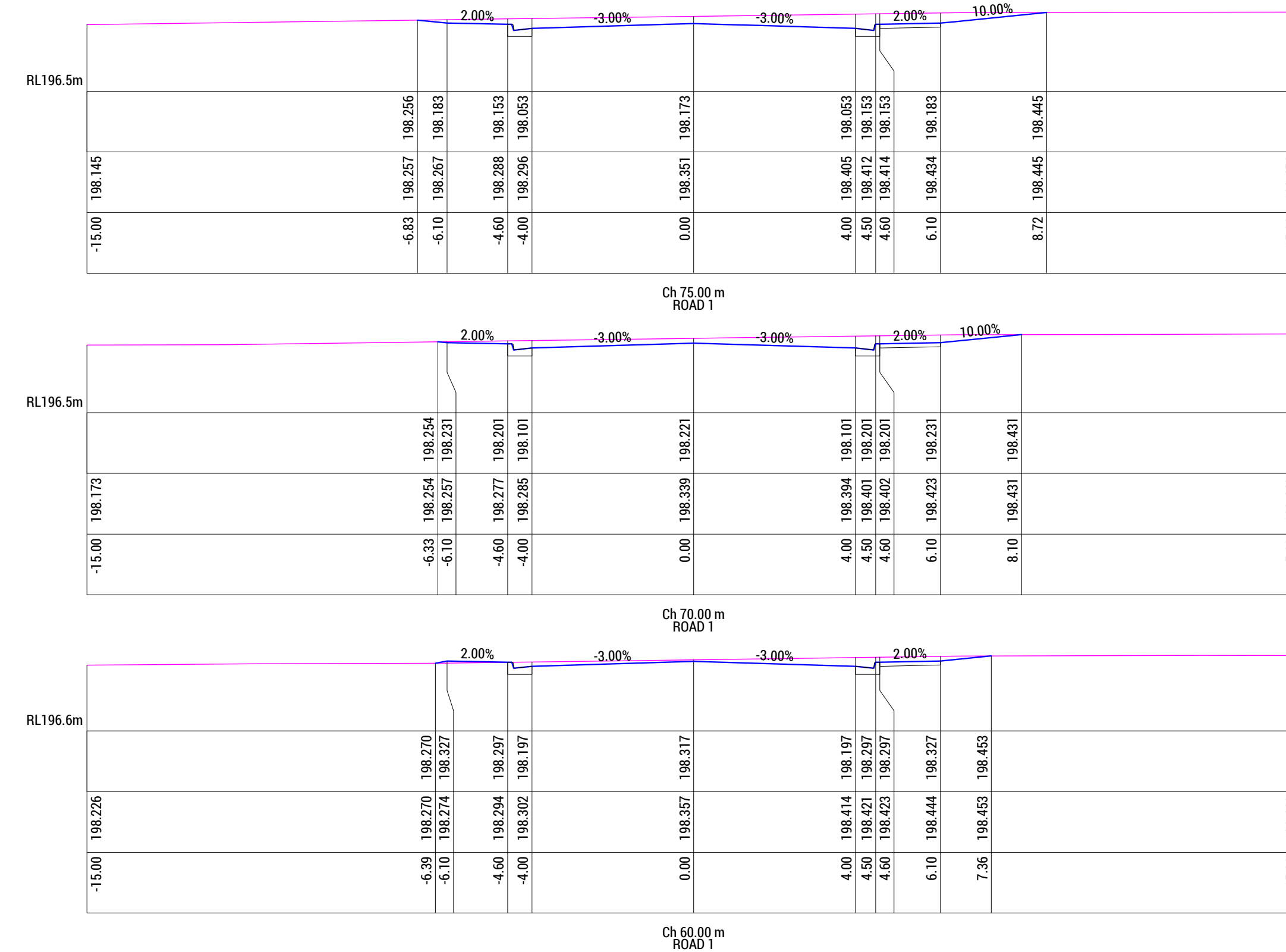
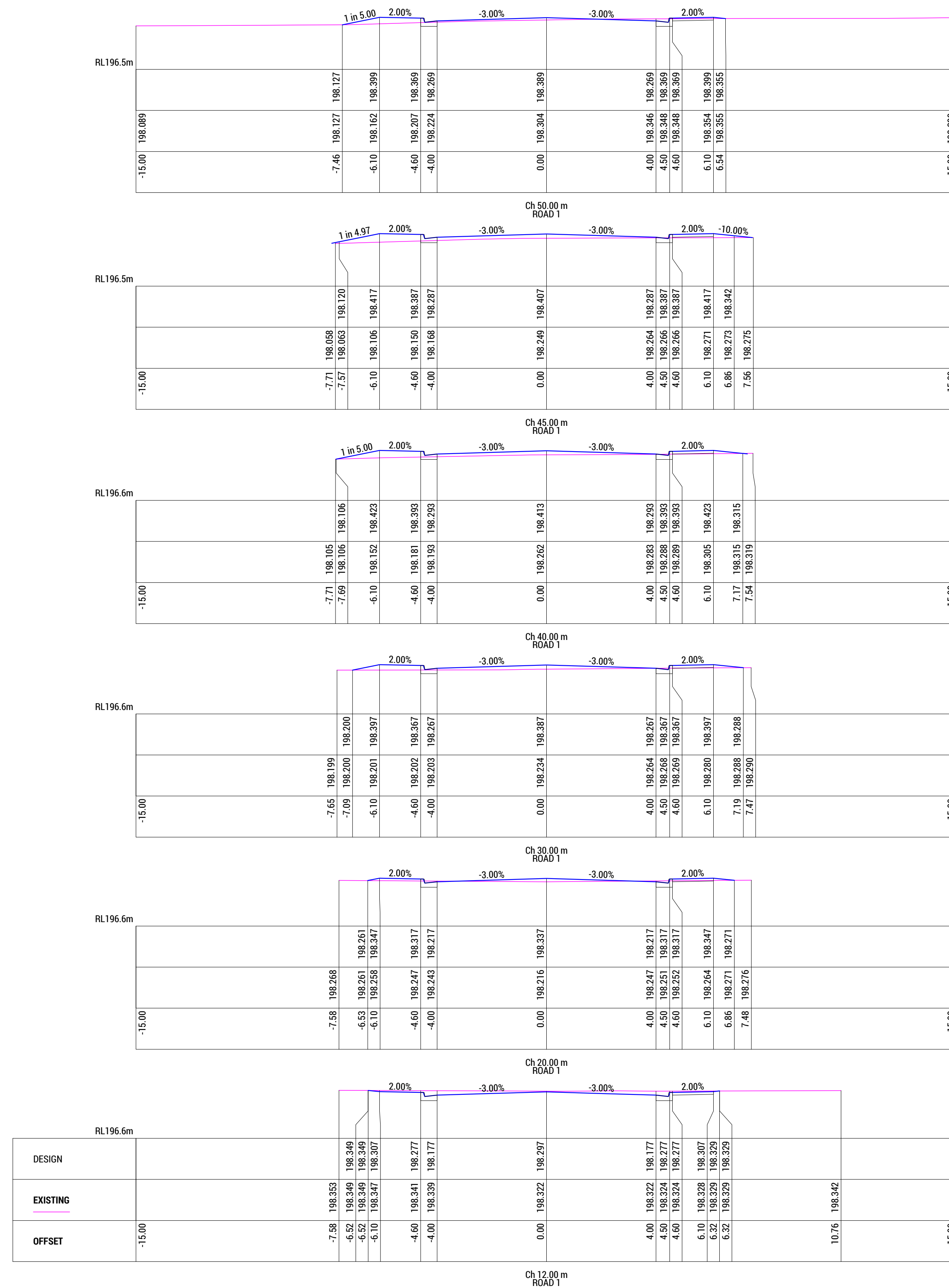
Chainage	Existing Levels	Design Levels	Cut Fill
0.000	198.404	198.167	-0.237
0.010	198.404	198.167	-0.237
2.000	198.413	198.153	-0.260
3.952	198.425	198.134	-0.291
4.000	198.425	198.133	-0.292
6.000	198.438	198.107	-0.331
7.893	198.437	198.076	-0.361
8.000	198.437	198.074	-0.363
10.000	198.428	198.046	-0.382
11.855	198.420	198.032	-0.388
12.000	198.420	198.032	-0.388
13.028	198.417	198.030	-0.387
14.000	198.416	198.032	-0.384
15.797	198.408	198.043	-0.365
15.807	198.408	198.044	-0.364

LONGITUDINAL SECTION
Scales: H 1:100 V 1:100

ROAD 2-ROAD 1-END-R

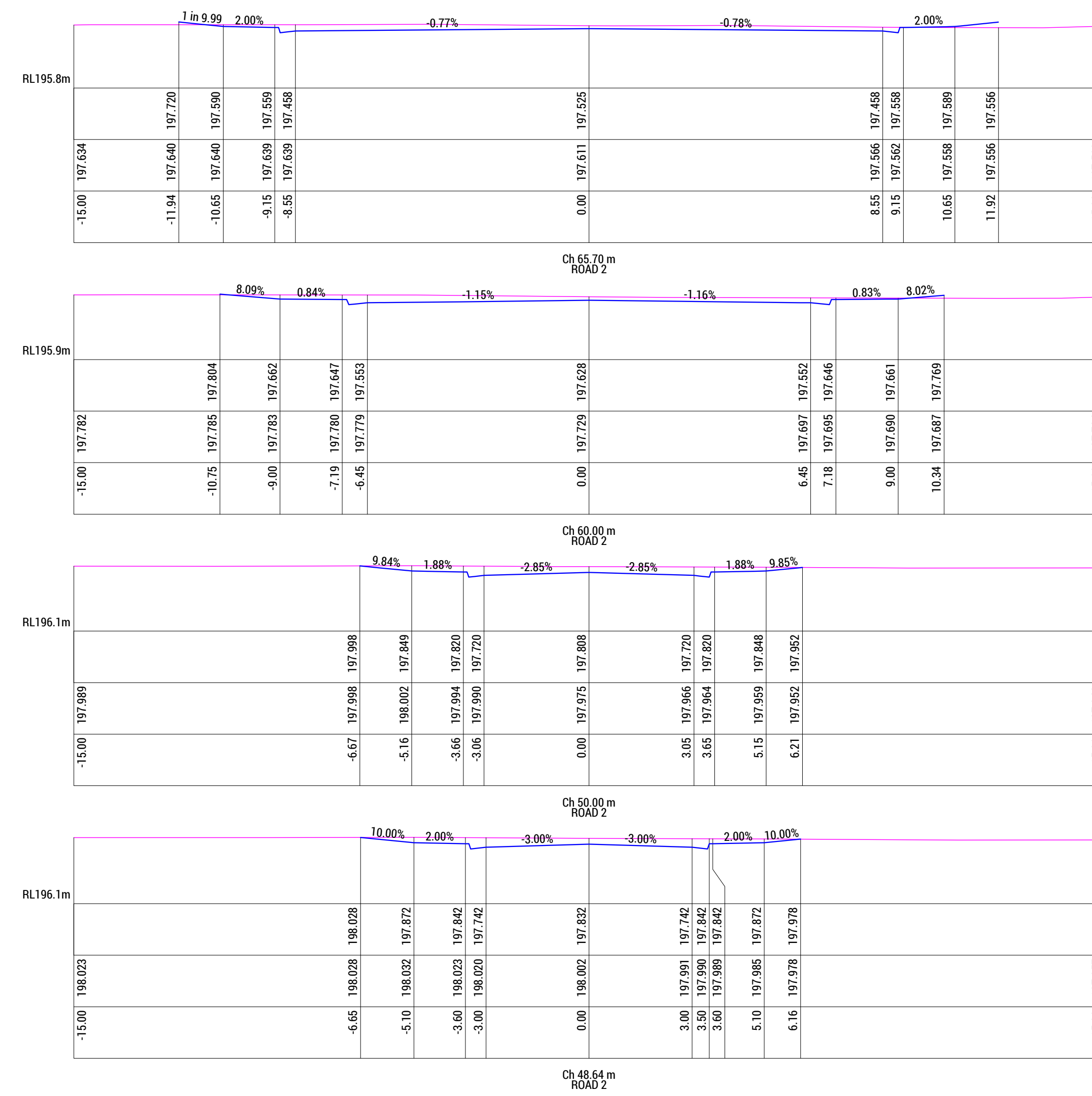
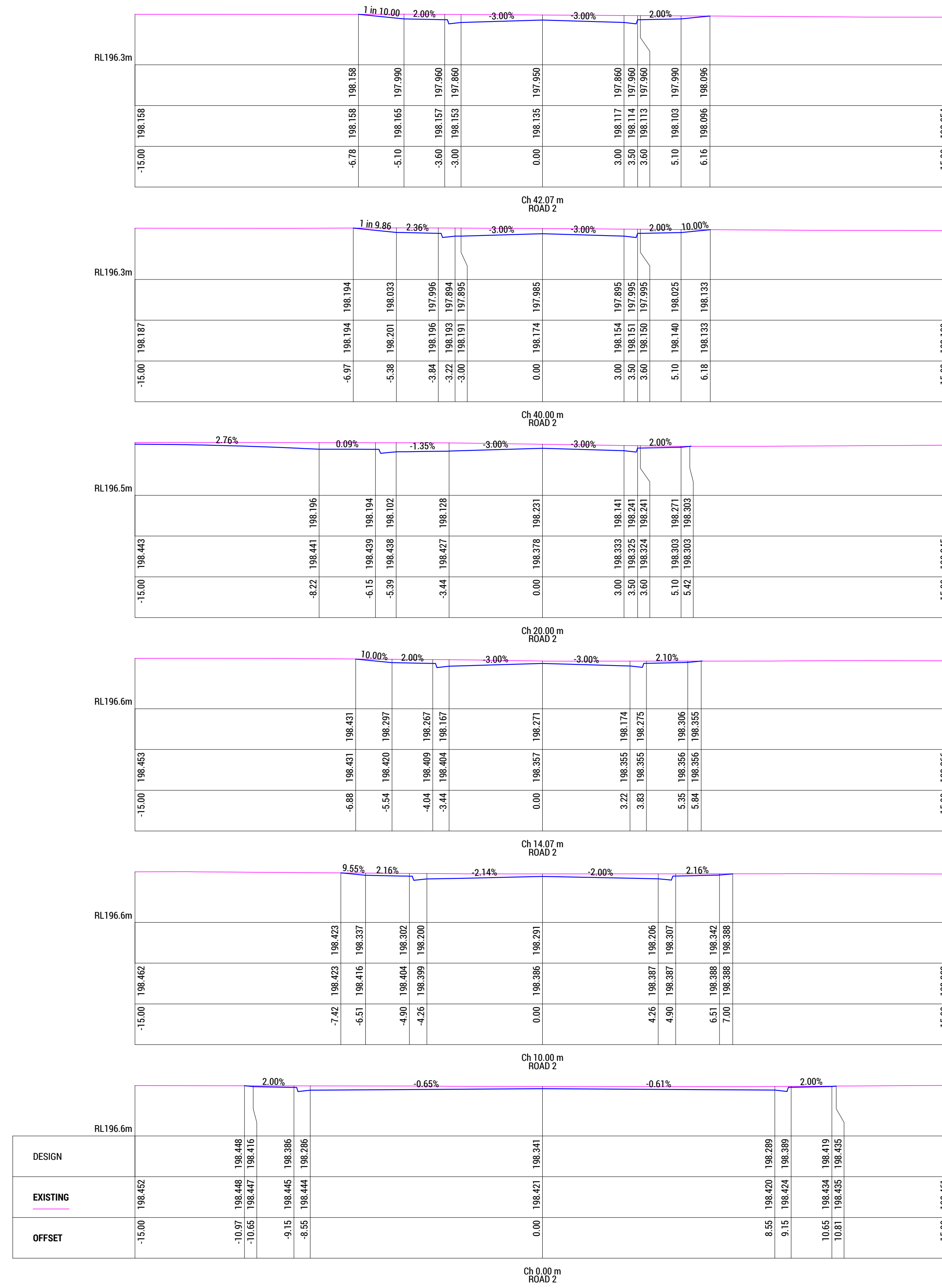
A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 29-03-23 BY: DATE:	STATUS: CONTROLLED DOCUMENT		DESIGN BY: PVD DESIGN CHK: RJJ DRAWN BY: PVD DRAFT CHK: JWS	CLIENT: BAKER & WALLIS PROJECT: SUBDIVISION ADDRESS: 7A WILLIAM STREET CAMPBELL TOWN	TITLE: CIVIL LONG SECTIONS - CUL-DE-SACS & KERB RETURNS SCALE: 1:250 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 231007 DWG No: C422 REV: A
		DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 251		22-24 Paterson Street Launceston TAS 7250 rare.com.au P. 03 6388 9200		
		APPROVED: R. JESSON ACRED. No: CC58481		DATE: 29-03-23		

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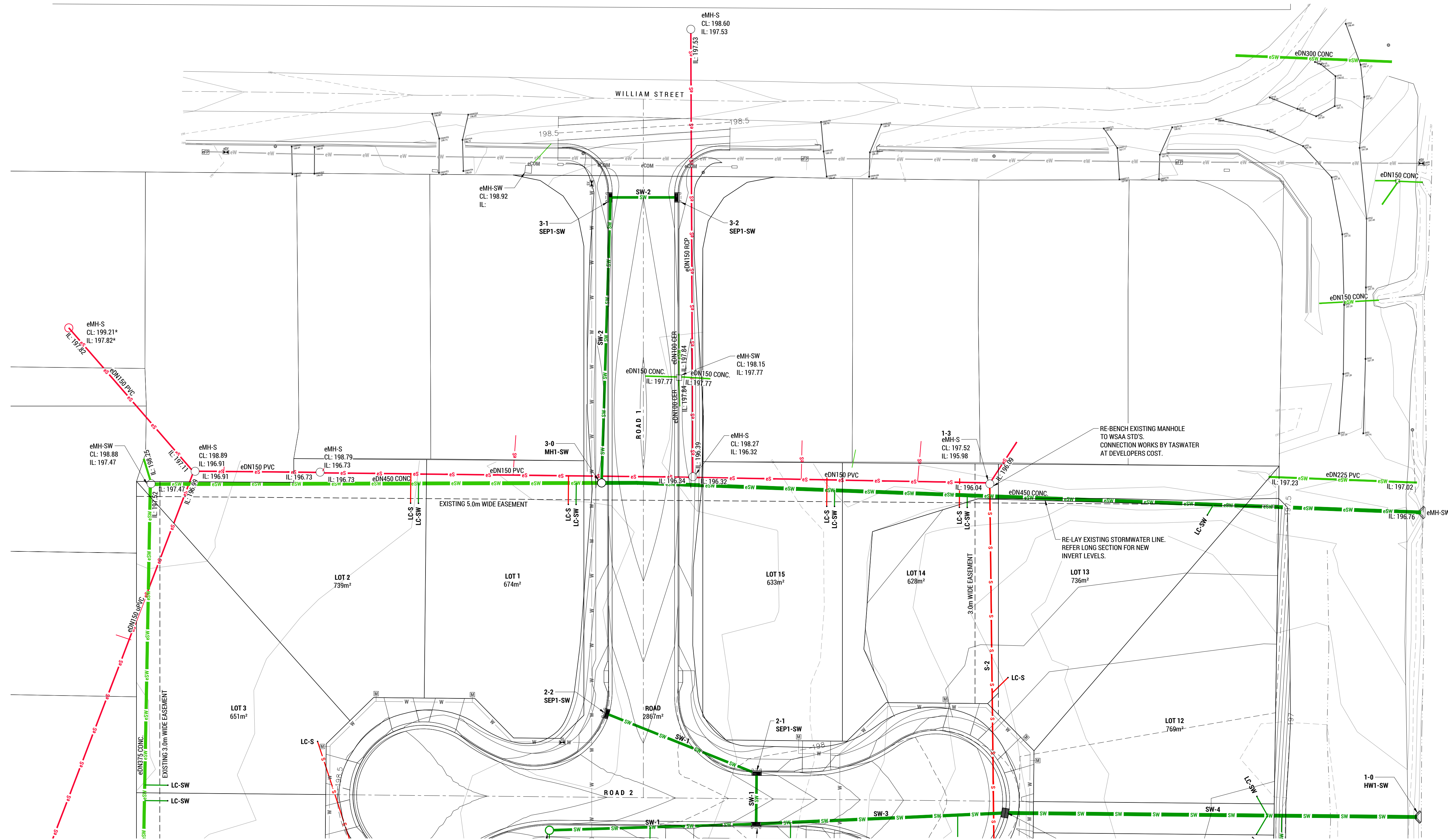
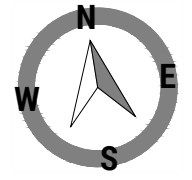
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A DEVELOPMENT APPROVAL REV: ISSUED FOR / DESCRIPTION:	PVD 29-03-23 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481 DATE: 29-03-23			



DRAINAGE PLAN - SHEET 1
SCALE 1:250

LEGEND

- eSW EXISTING STORM WATER MAIN
- SW PROPOSED STORMWATER MAIN
- eS EXISTING SEWER MAIN
- S PROPOSED SEWER MAIN
- AG PROPOSED AG DRAIN
- - - PROPOSED OPEN / SWALE / VEE DRAIN
- MH-S SEWER MANHOLE
- LC-S DN100 uPVC LOT CONNECTION - IO TO SURFACE TYPE 1 - IN ACCORDANCE WITH MRWA 300 SERIES
- MH-SW STORMWATER MANHOLE
- SEP-SW SIDE ENTRY PIT
- LC-SW DN100 uPVC LOT CONNECTION - IO TO SURFACE IN ACCORDANCE WITH TSD-SW25-V3

STORMWATER PIPE SCHEDULE

MARK	PIPE SIZE	TYPE	CLASS
SW-1	300	BMAX	SN8
SW-2	300	RCP	CLASS 4
SW-3	375	BMAX	SN8
SW-4	450	RCP	CLASS 4

SEWER PIPE SCHEDULE

MARK	PIPE SIZE	TYPE	CLASS
S-1	150	DWV uPVC	SN8
S-2	225	DWV uPVC	SN8

STORMWATER PIT / MANHOLE SCHEDULE

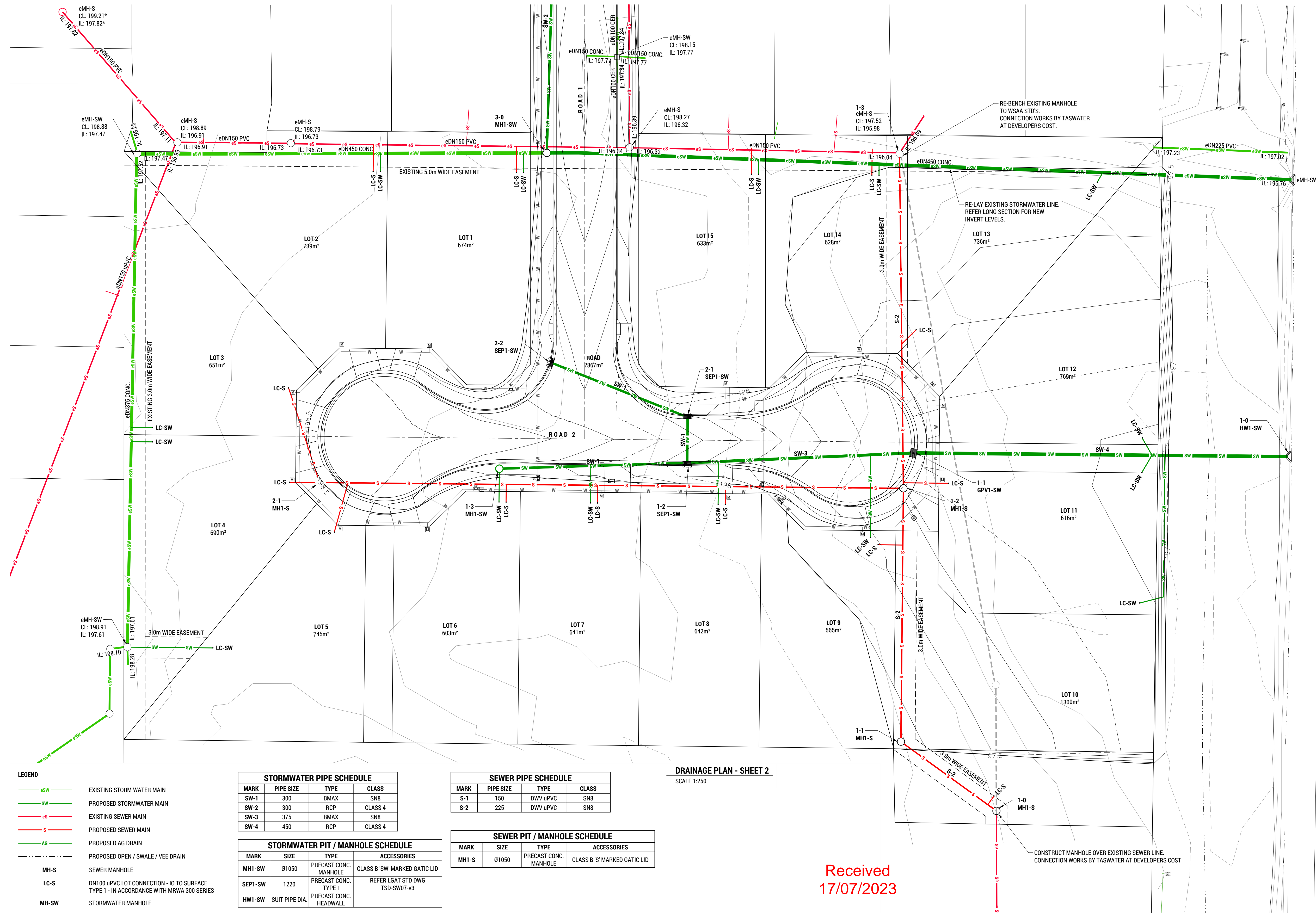
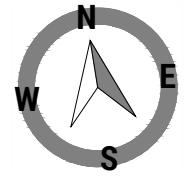
MARK	SIZE	TYPE	ACCESSORIES
MH1-SW	Ø1050	PRECAST CONC. MANHOLE	CLASS B 'S' MARKED GATIC LID
SEP1-SW	1220	PRECAST CONC. TYPE 1	REFER LGAT STD DWG TSD-SW07-V3
HW1-SW	SUIT PIPE DIA.	PRECAST CONC. HEADWALL	

SEWER PIT / MANHOLE SCHEDULE

MARK	SIZE	TYPE	ACCESSORIES
MH1-S	Ø1050	PRECAST CONC. MANHOLE	CLASS B 'S' MARKED GATIC LID

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				<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JWS</p>	<p>ADDRESS: 7A WILLIAM STREET CAMPBELL TOWN</p>			

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LEGEND

- eSW EXISTING STORM WATER MAIN
- SW PROPOSED STORMWATER MAIN
- eS EXISTING SEWER MAIN
- S PROPOSED SEWER MAIN
- AG PROPOSED AG DRAIN
- PROPOSED OPEN / SWALE / VEE DRAIN
- MH-S SEWER MANHOLE
- LC-S DN100 uPVC LOT CONNECTION - IO TO SURFACE TYPE 1 - IN ACCORDANCE WITH MRWA 300 SERIES
- MH-SW STORMWATER MANHOLE
- SEP-SW SIDE ENTRY PIT
- LC-SW DN100 uPVC LOT CONNECTION - IO TO SURFACE IN ACCORDANCE WITH TSD-SW25-v3

STORMWATER PIPE SCHEDULE

MARK	PIPE SIZE	TYPE	CLASS
SW-1	300	BMAX	SN8
SW-2	300	RCP	CLASS 4
SW-3	375	BMAX	SN8
SW-4	450	RCP	CLASS 4

SEWER PIPE SCHEDULE

MARK	PIPE SIZE	TYPE	CLASS
S-1	150	DWV uPVC	SN8
S-2	225	DWV uPVC	SN8

STORMWATER PIT / MANHOLE SCHEDULE

MARK	SIZE	TYPE	ACCESSORIES
MH1-SW	Ø1050	PRECAST CONC. MANHOLE	CLASS B 'S' MARKED GATIC LID
SEP1-SW	1220	PRECAST CONC. TYPE 1	REFER LGAT STD DWG TSD-SW07-v3
HW1-SW	SUIT PIPE DIA.	PRECAST CONC. HEADWALL	

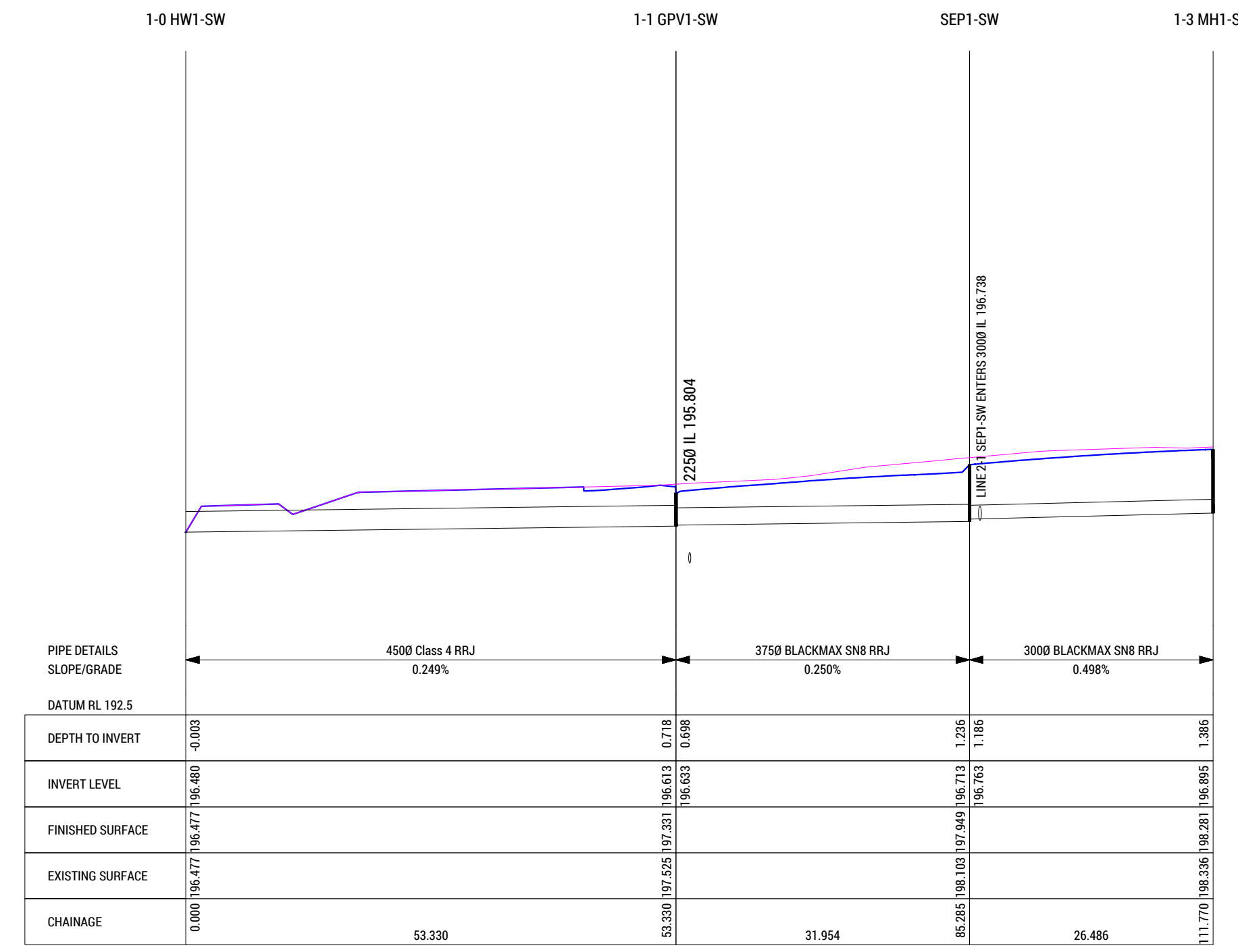
SEWER PIT / MANHOLE SCHEDULE

MARK	SIZE	TYPE	ACCESSORIES
MH1-S	Ø1050	PRECAST CONC. MANHOLE	CLASS B 'S' MARKED GATIC LID

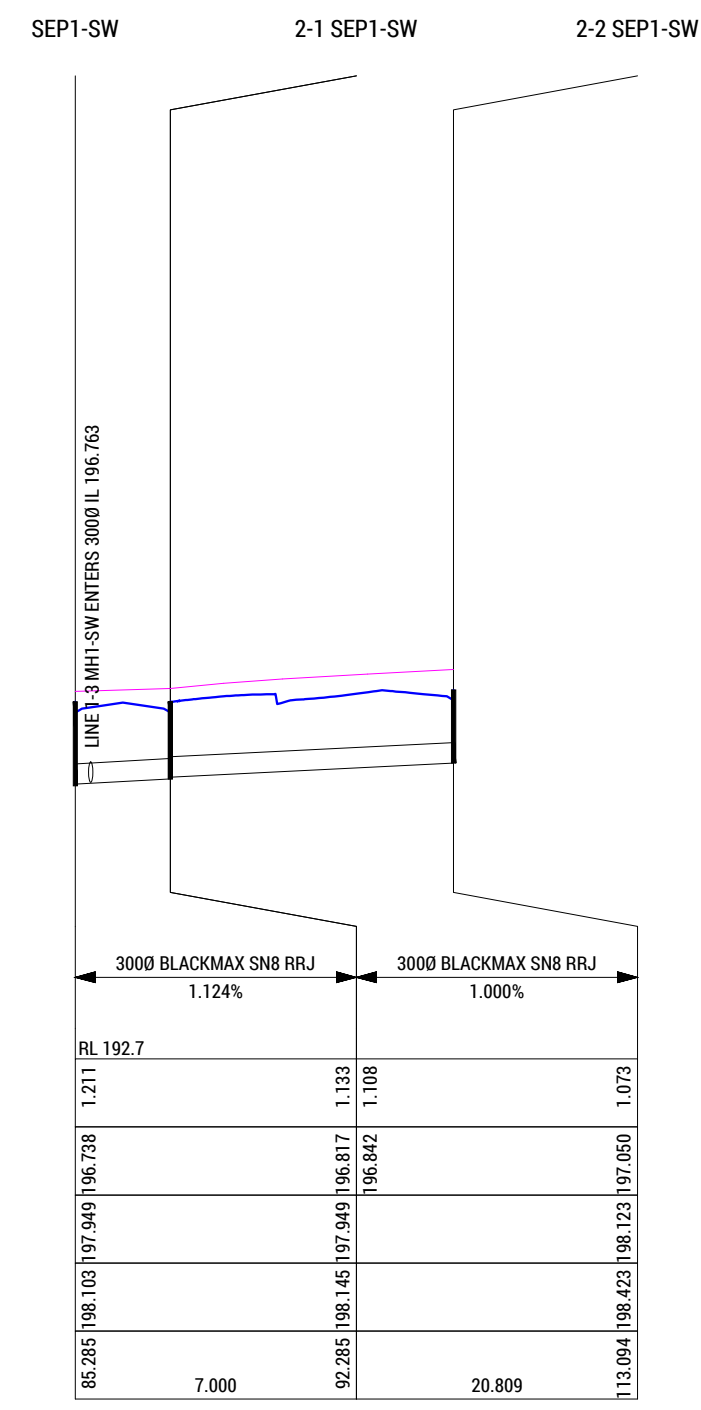
DRAINAGE PLAN - SHEET 2
SCALE 1:250

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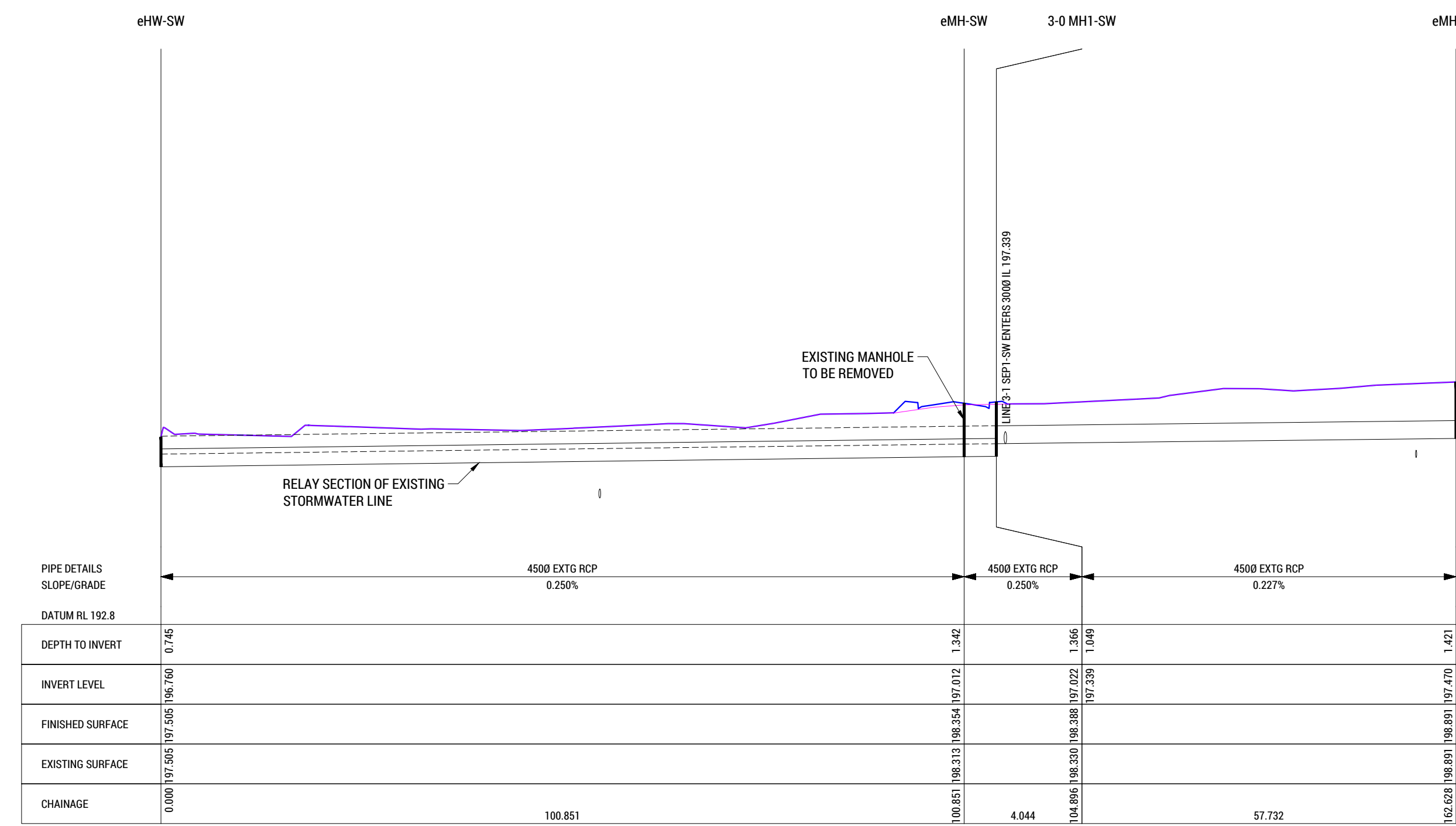
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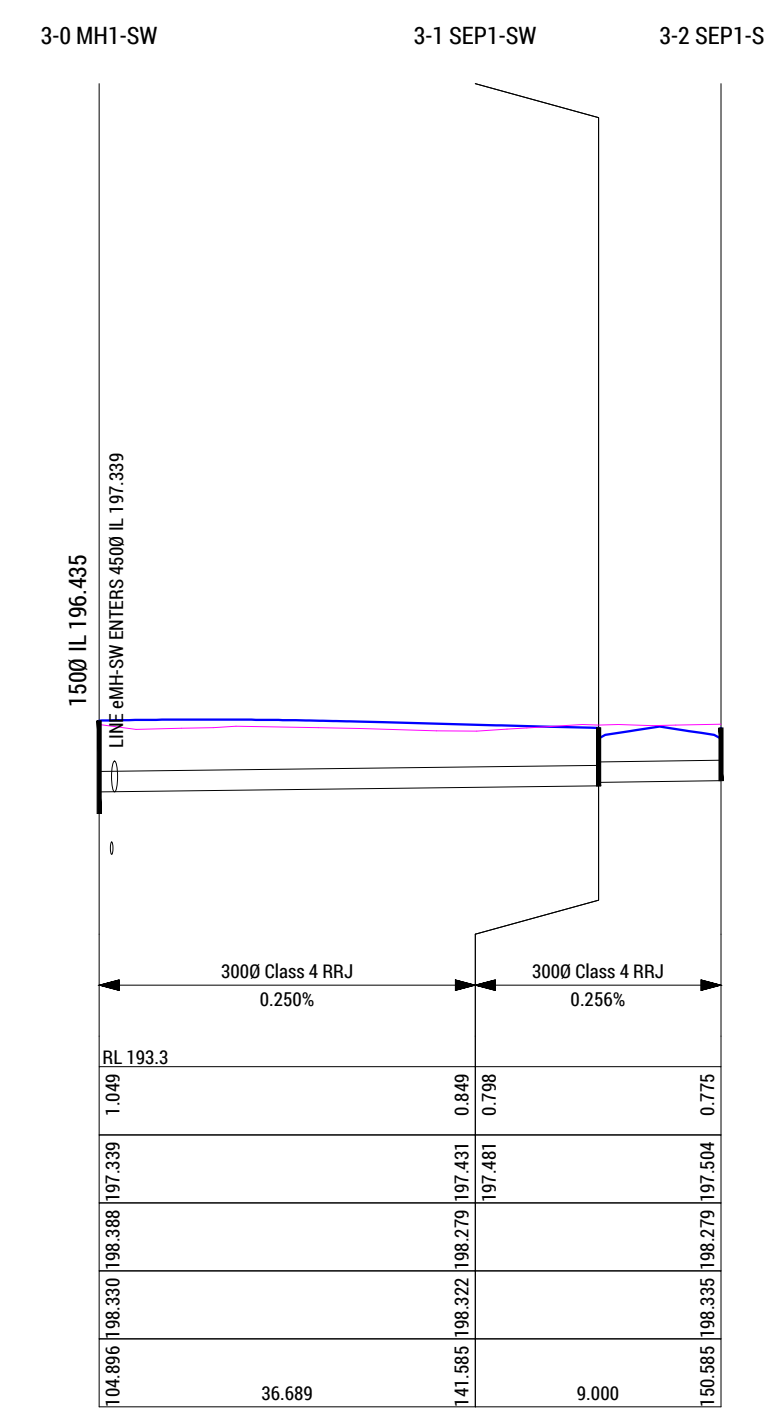
LONGITUDINAL SECTION FOR LINE 1
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100



LONGITUDINAL SECTION FOR LINE 2
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100



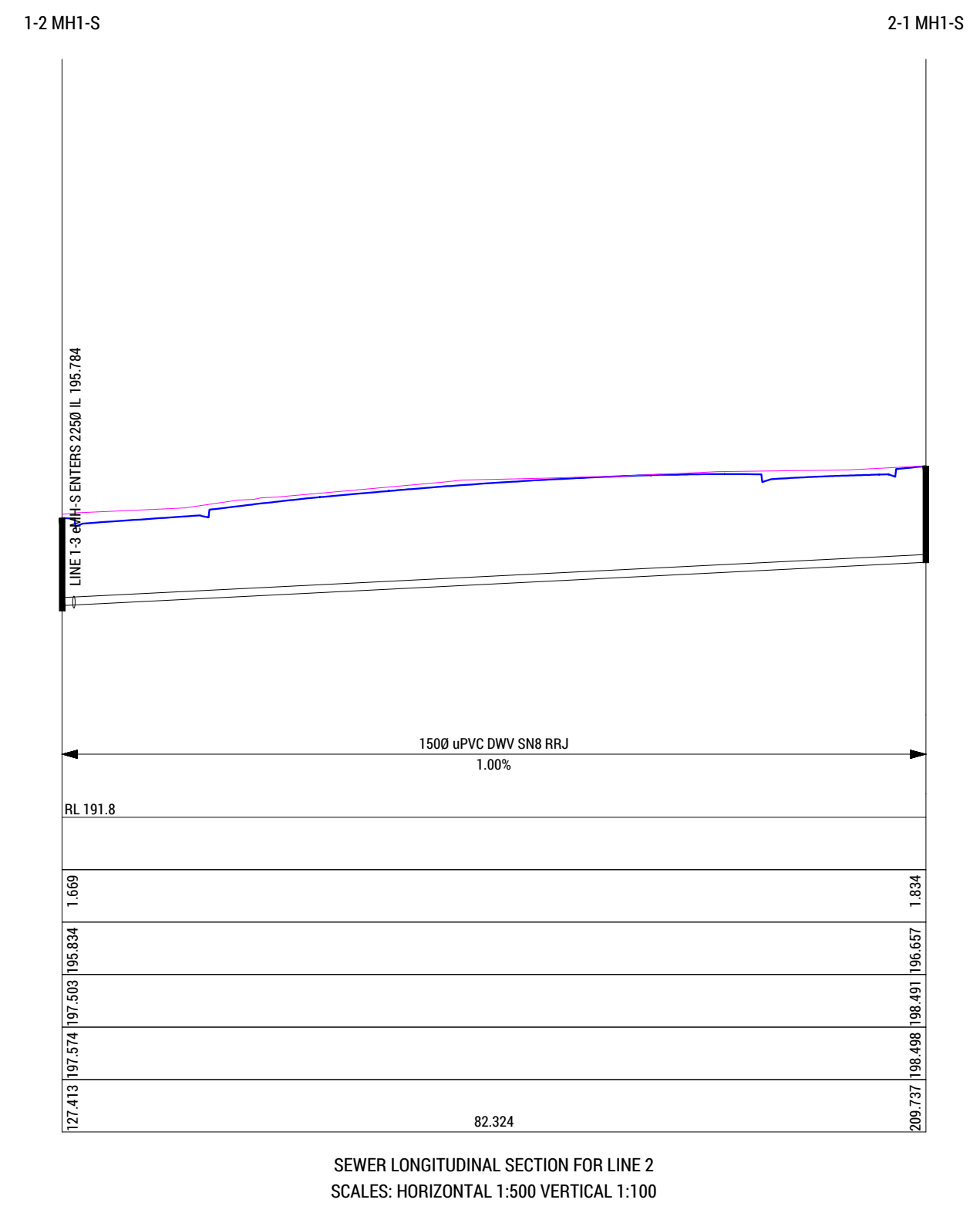
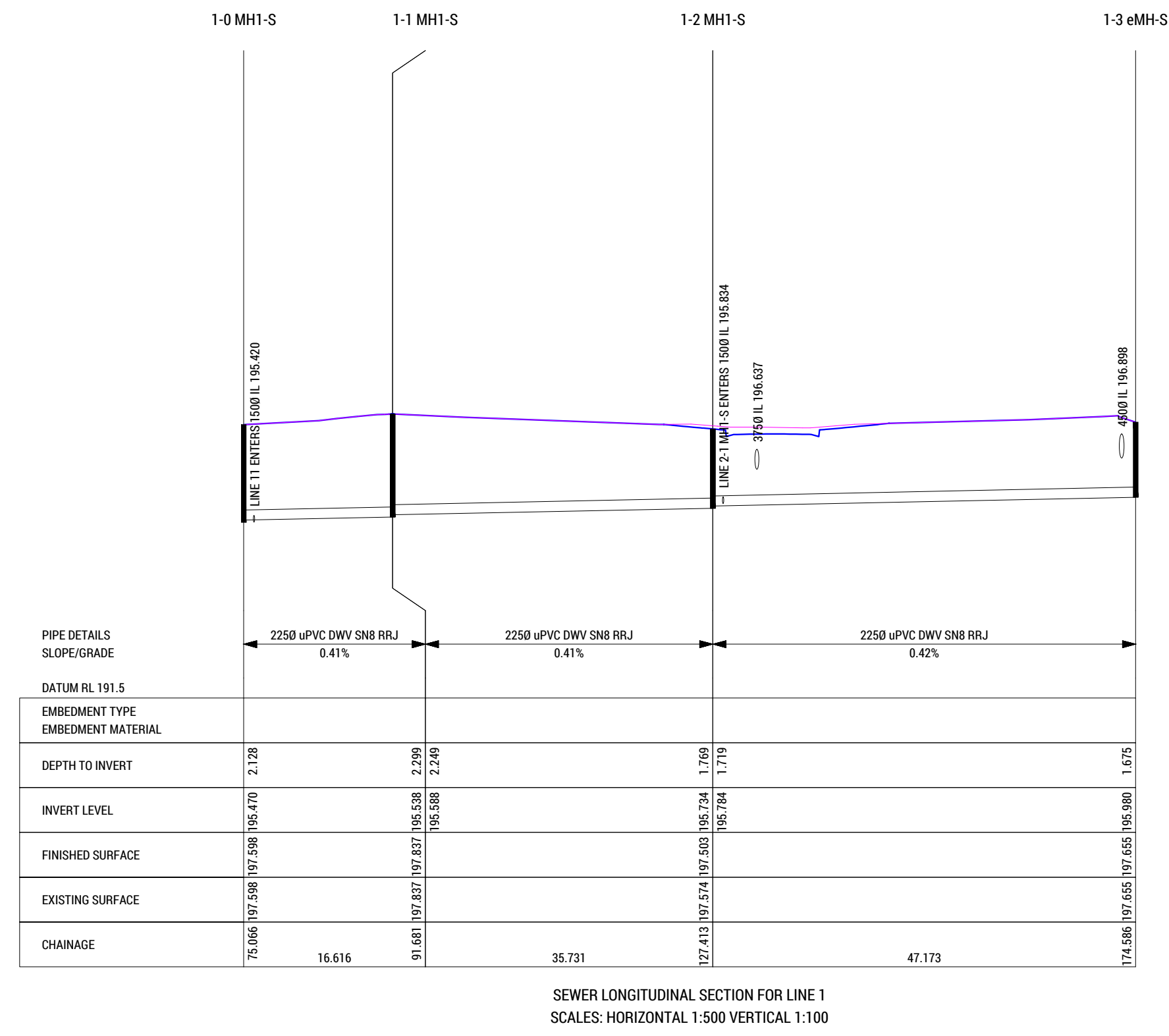
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LONGITUDINAL SECTION FOR LINE 2
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100

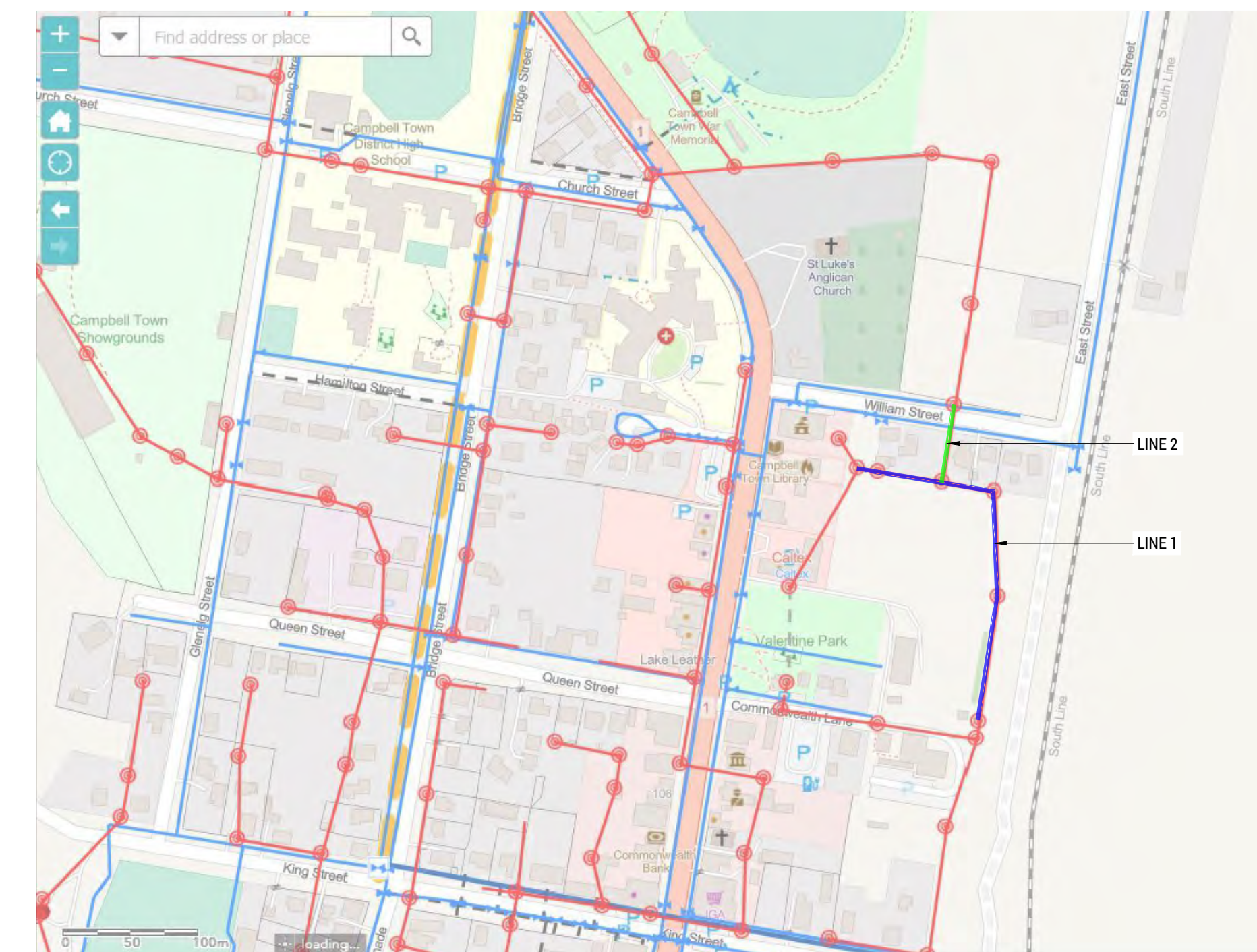
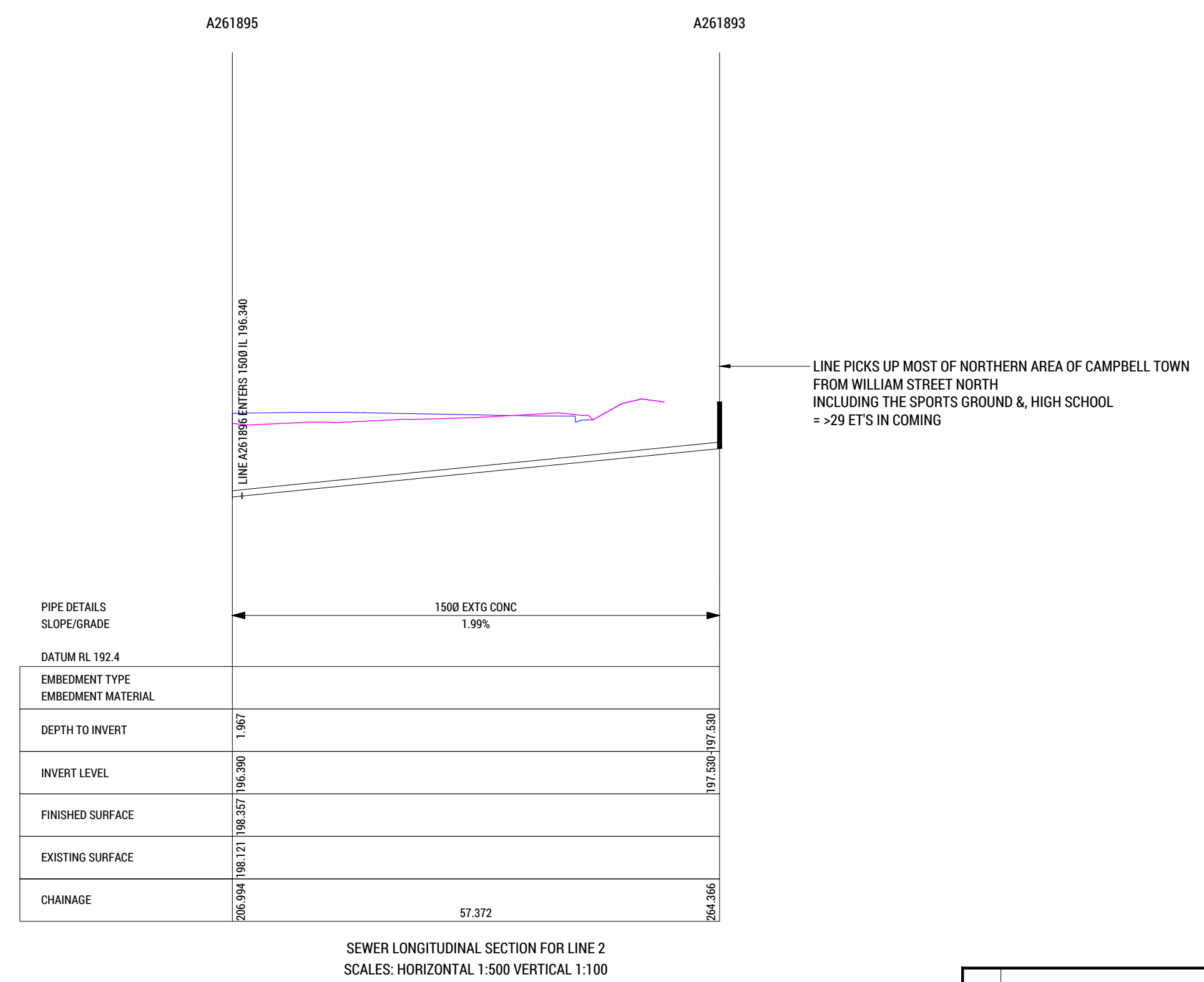
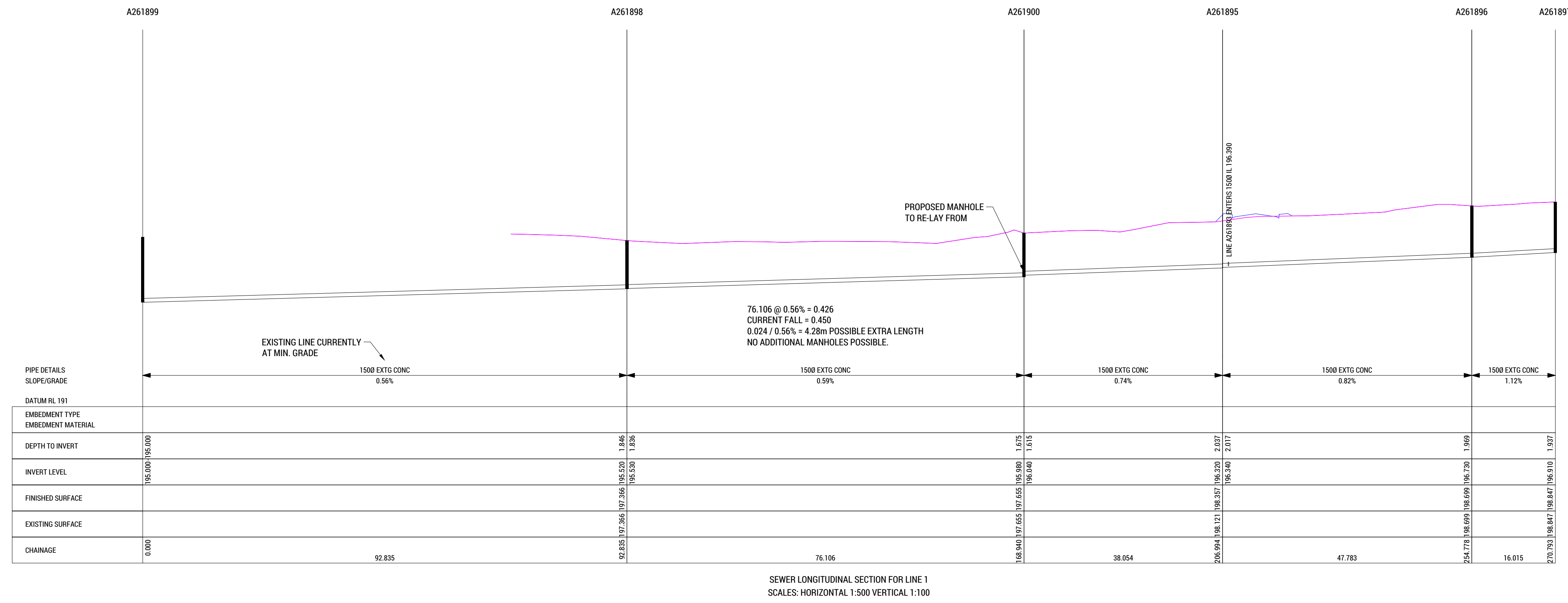
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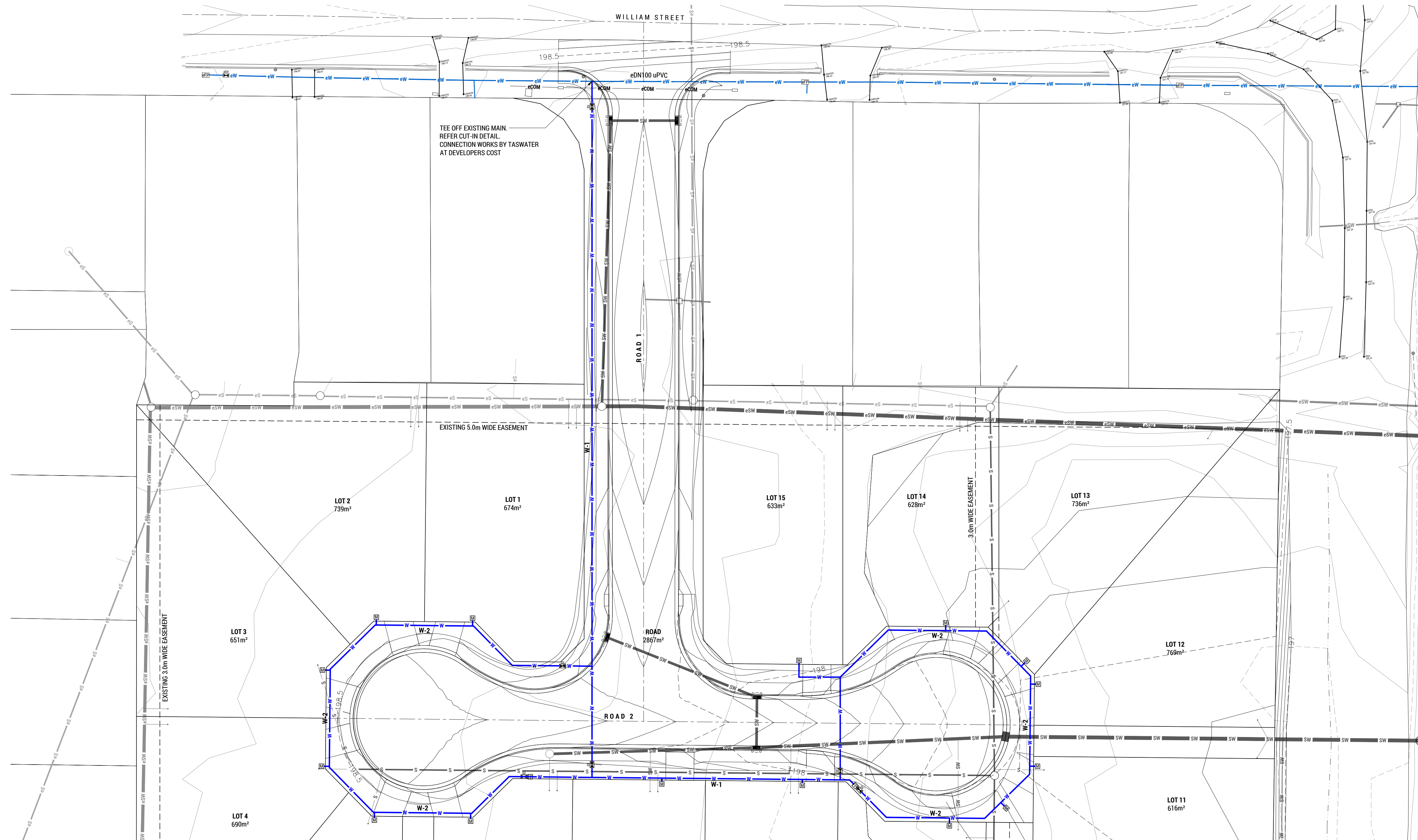
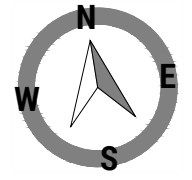
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REV:	ISSUED FOR / DESCRIPTION:	BY:	DATE:	APPROVED: R. JESSON	ACRED. No: CC58481	DATE: 29-03-23	



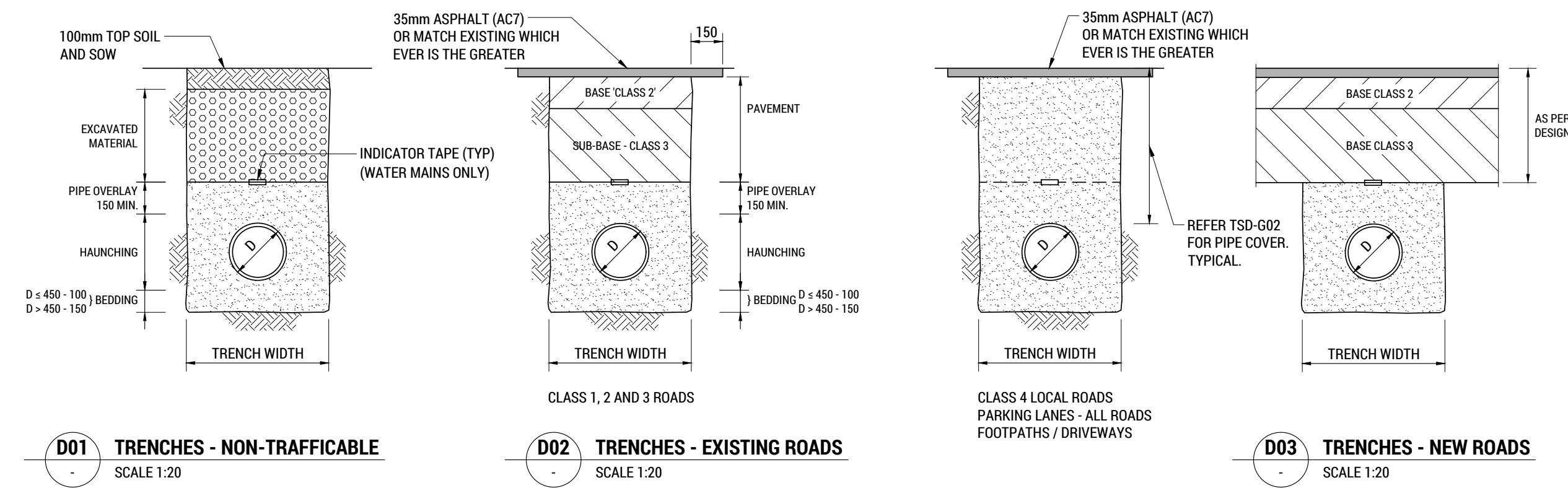
- LEGEND**
- eW EXISTING WATER MAIN
 - W PROPOSED WATER MAIN
 - FP FIRE PLUG
 - SV STOP VALVE
 - M 20mm LOW HAZARD WATER METER WITH GLASS & NON-TRAFFICABLE METER BOX IN ACCORDANCE WITH TASWATER STD DWG TWS-W-0002-SH2

WATER MAIN SCHEDULE		
MARK	PIPE SIZE	TYPE
W-1	100	PVC-O PN16
W-2	650D (50ID)	POLY PE100 SDR11 PN16
W-3	250D (20ID)	POLY PE100 SDR11 PN16

WATER RETICULATION PLAN
SCALE 1:250

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TRENCH WIDTH		
PIPE TYPE	NOM. DIA (D)	TRENCH WIDTH
CONCRETE	≤ 1500	D + 300
	> 1500	DESIGN REQ.
OTHER PIPES	100	300
	150	450
	225-300	600
	450	750
	450-1500	D + 600
	> 1500	DESIGN REQ.

BEDDING, HAUNCHING AND OVERLAY MATERIAL
BEDDING, HAUNCHING AND PIPE OVERLAY MATERIAL SHALL CONTAIN NO DELETERIOUS MATERIAL OR CLAY LUMPS AND SHALL COMPLY WITH THE FOLLOWING GRADINGS.

FOR uPVC AND DUCTILE IRON PIPES
SAND OR CRUSHED ROCK (STONE DUST)

SIEVE APERTURE (mm)	% PASSING (BY MASS)
TO AS 1152	
6.7	100
2.36	70-100
0.6	20-90
0.3	8-50
0.15	0-20
0.075	0-10

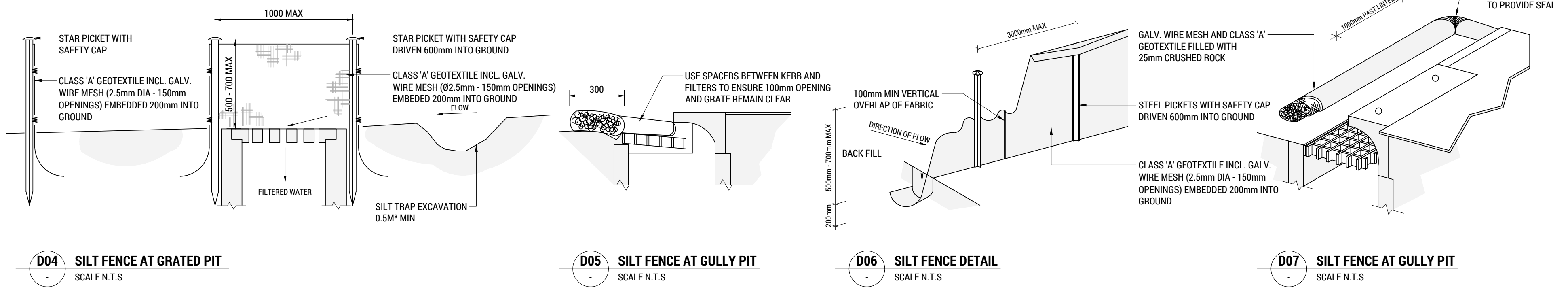
FOR CONCRETE PIPES
CRUSHED ROCK

SIEVE APERTURE (mm)	% PASSING (BY MASS)
TO AS 1152	
19	100
2.36	50-100
0.6	20-90
0.3	10-60
0.15	0-25
0.075	0-10

MINIMUM TRENCH WIDTHS MAY BE VARIED ABOVE THE PIPE OVERLAY ZONE TO MEET WORKPLACE STANDARDS REQUIREMENTS.
IF EXCAVATIONS OVER 1.5m MAY REQUIRE RISK ASSESSMENT.

COMPACTION OF BEDDING, HAUNCHING & OVERLAY
REFER TO AS 1289 S.5
CONCRETE PIPES = MIN. DENSITY INDEX = 65% (85% STD. COMPACTION)
uPVC PIPES = DENSITY INDEX = 65% (90% STD. COMPACTION)
DCL PIPES = DENSITY INDEX = 65% (90% STD. COMPACTION)

ALL MATERIAL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH AS 3725 AND TO THE SATISFACTION OF THE SUPERINTENDENT.



SILT FENCE
CONSTRUCT AS DETAILED AND INSTALL CLASS 'A' GEOTEXTILE OR USE PROPRIETARY SILT FENCE. EG. MACCARRERS SILT LOCK

OMIT SANDBAG WALL AND SILTTRAP WHEN PIT IS IN A LOW POINT

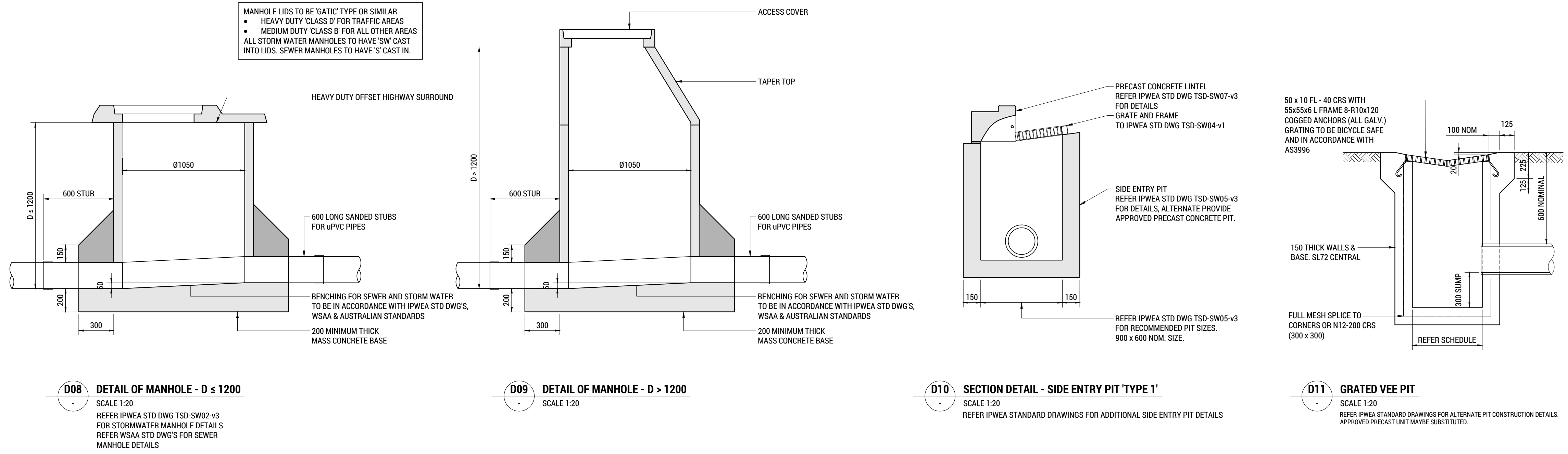
GULLY PIT
GALVANIZED WIRE MESH 2mm DIA x 12mm OPENING.

GENERAL
SEDIMENT FENCES ARE TO BE CLEANED DAILY TO PREVENT BREAKAGE/OVERTOPPING.

IT IS THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL, MAINTAIN AND (UPON COMPLETION) REMOVE ALL TEMPORARY SEDIMENT CONTROL MEASURES.

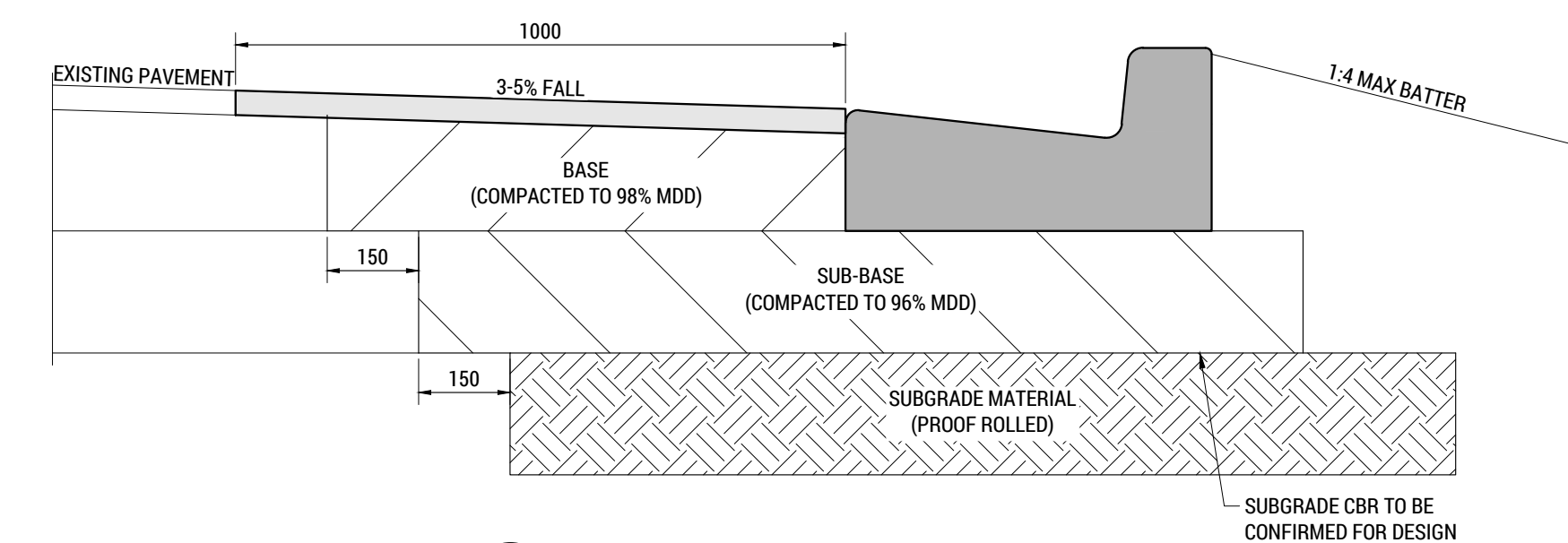
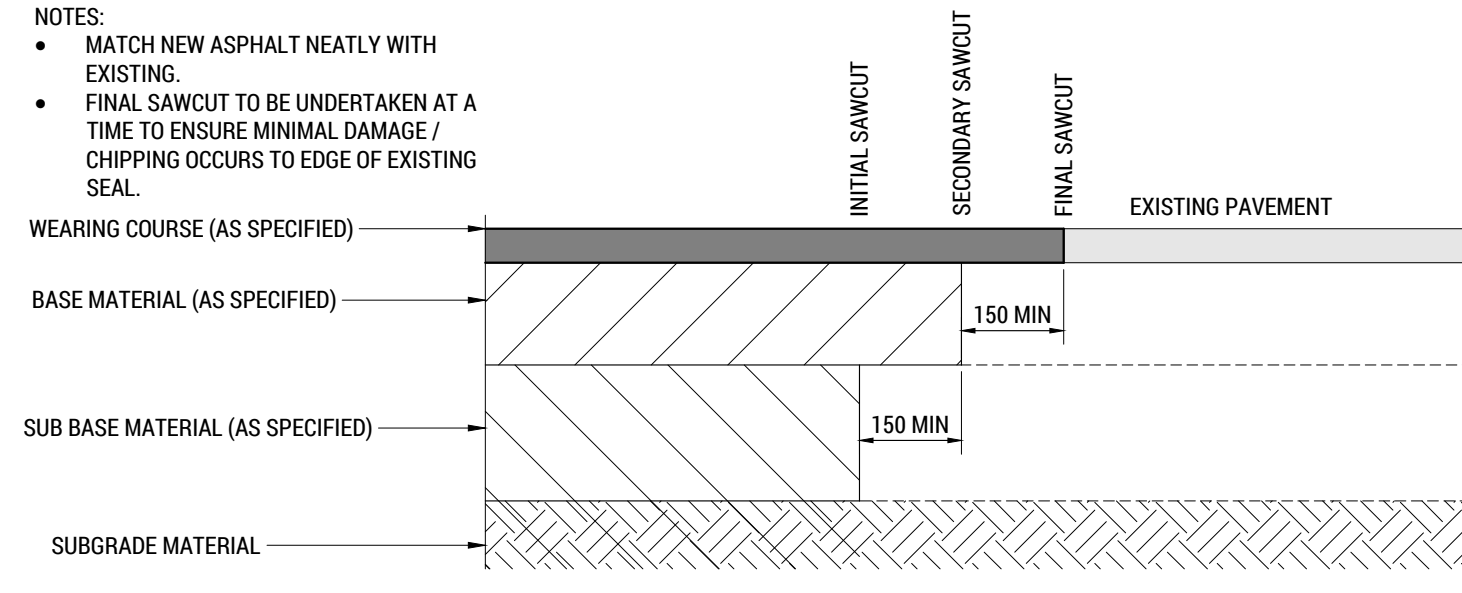
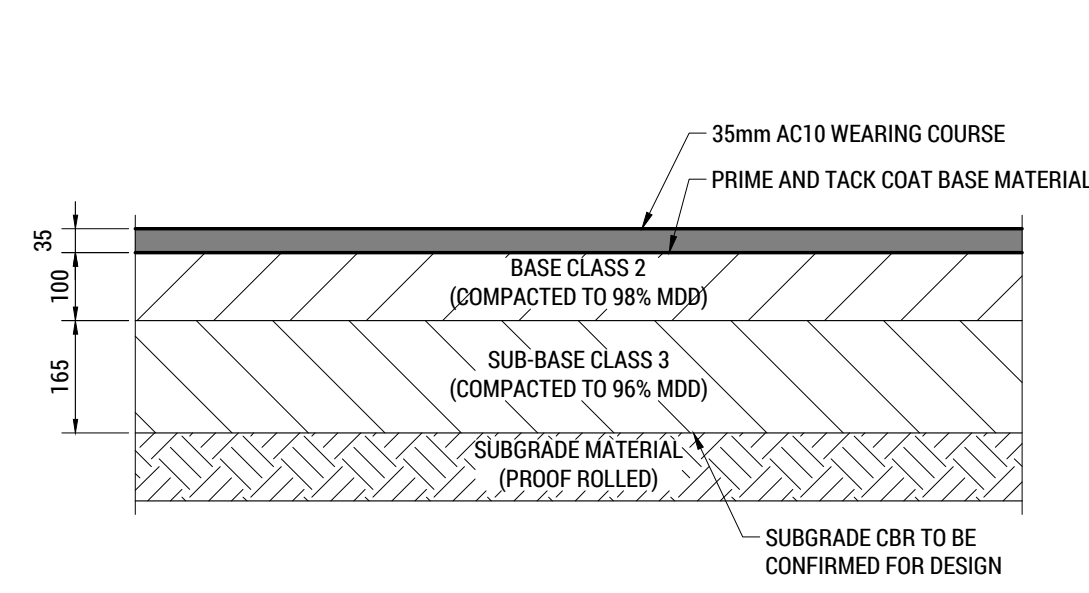
IT IS STRONGLY RECOMMENDED THAT THE DEVELOPER RECOVERS ANY DISTURBED AREAS WITH TOPSOIL AS QUICKLY AS POSSIBLE AFTER BULK EARTHWORKS ARE COMPLETED, TO PREVENT SOIL DISPERSION.

NOTE:
INSTALL SILT MANAGEMENT AS REQUIRED. LOCATIONS TO BE CONFIRMED ON SITE. ENSURE SILT MANAGEMENT COMPLIES WITH CURRENT COUNCIL STANDARDS AND REQUIREMENTS.



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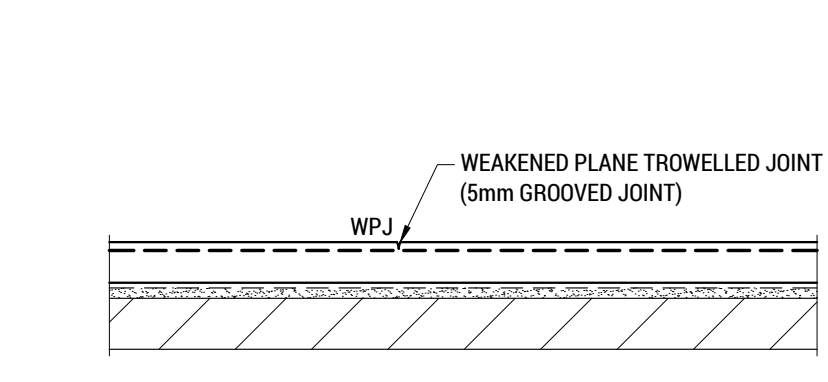
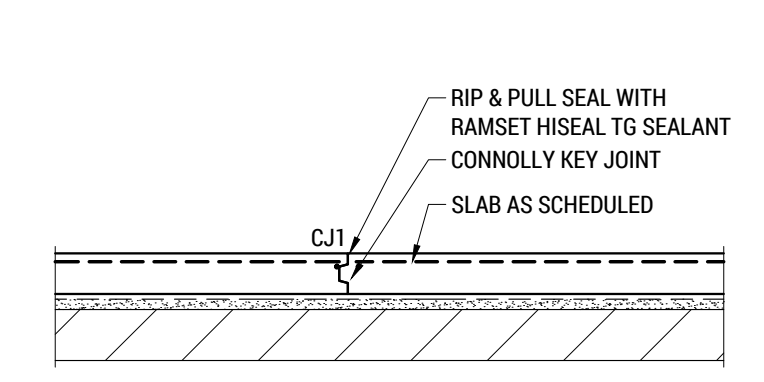
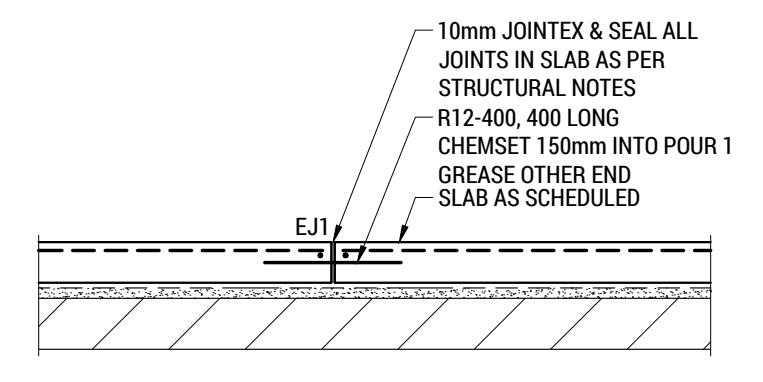
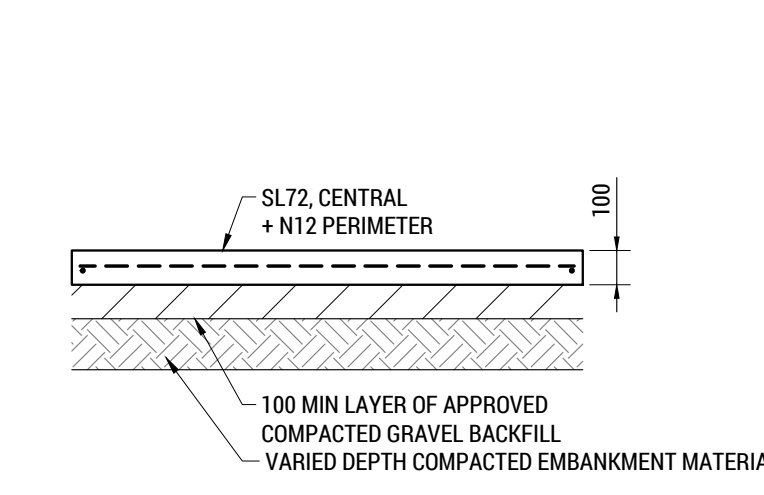
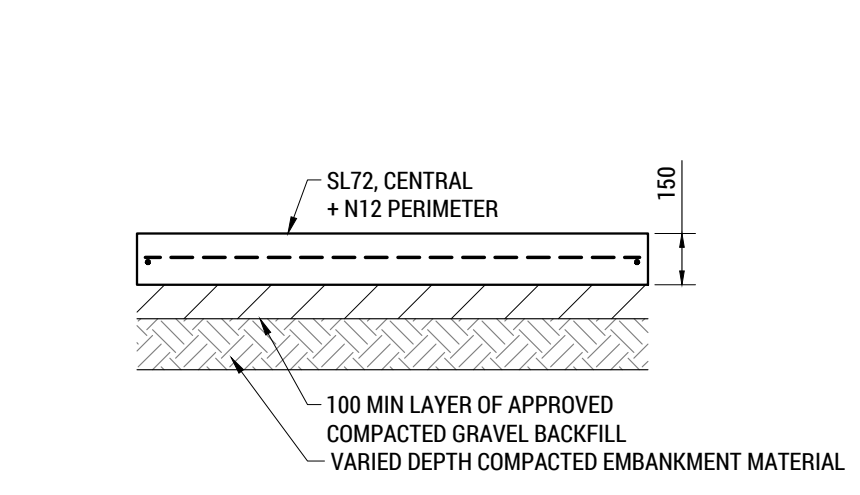
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D01 HOT MIX PAVEMENT - ROADWAYS - PAV-A
SCALE 1:10
MIN CBR 4% (CONTRACTOR TO CONFIRM ONSITE)

D02 NEW TO EXISTING HOT MIX TRANSITION
SCALE 1:10
NOTE - HOTMIX PAVEMENT - ROADWAYS FOR BASE MATERIAL TYPES & DEPTHS

D03 TYPICAL KERB CUT IN DETAIL
SCALE 1:10
NOTE - HOTMIX PAVEMENT - ROADWAYS FOR BASE MATERIAL TYPES & DEPTHS



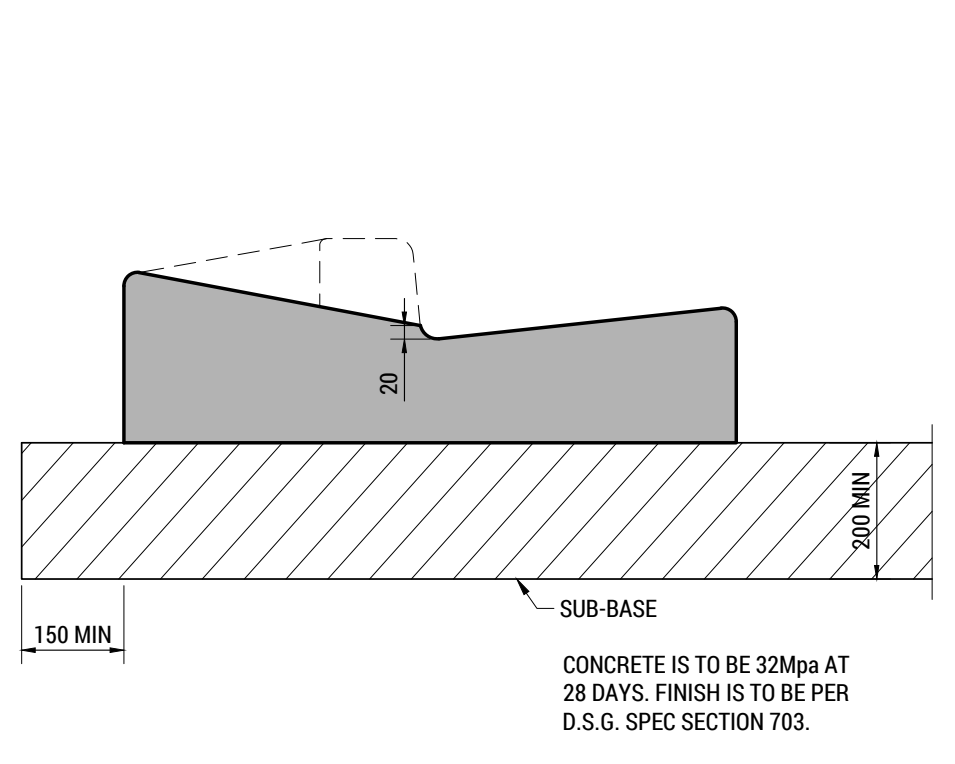
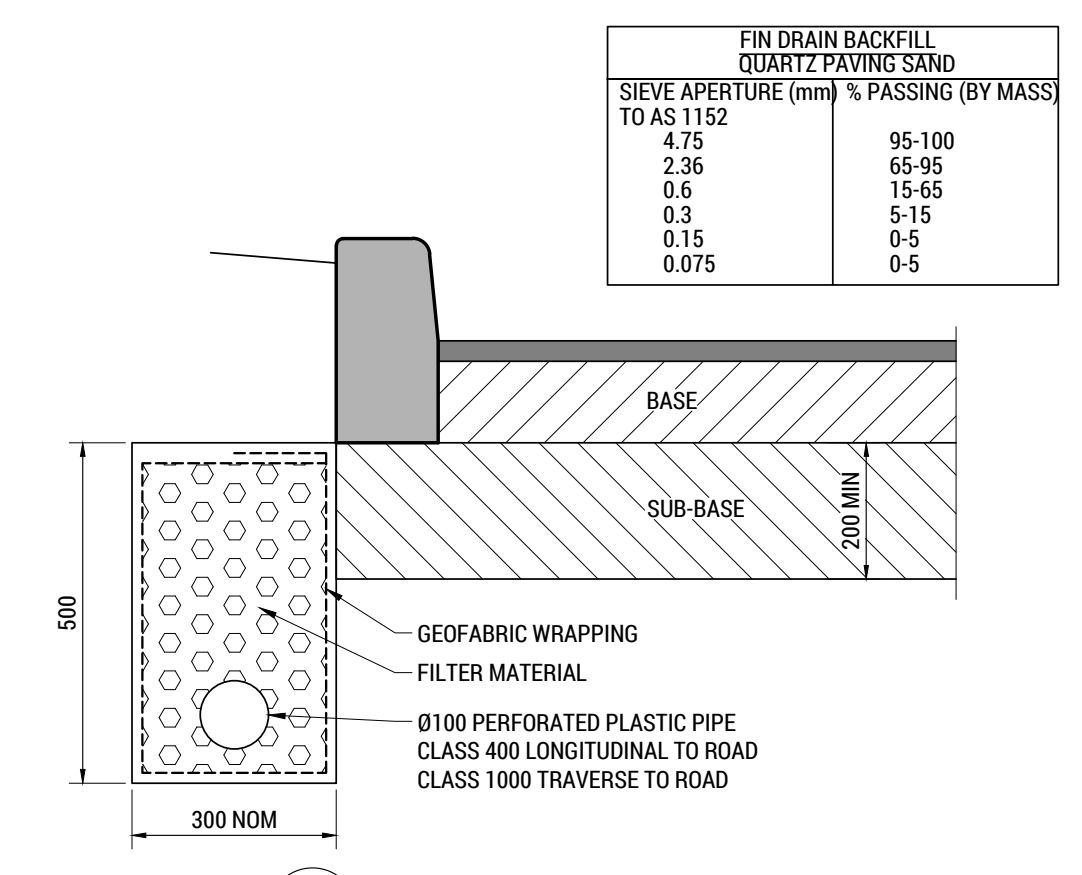
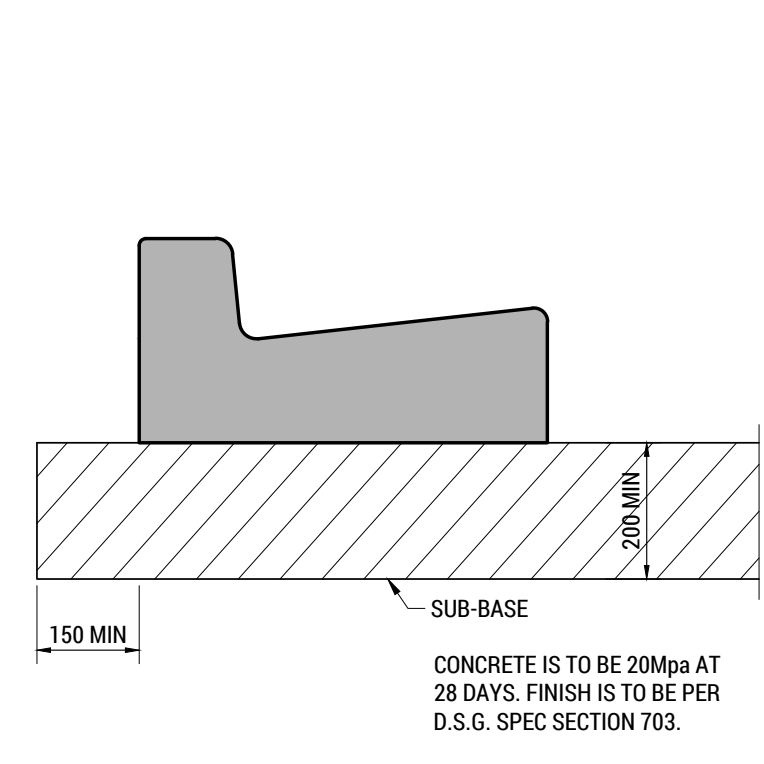
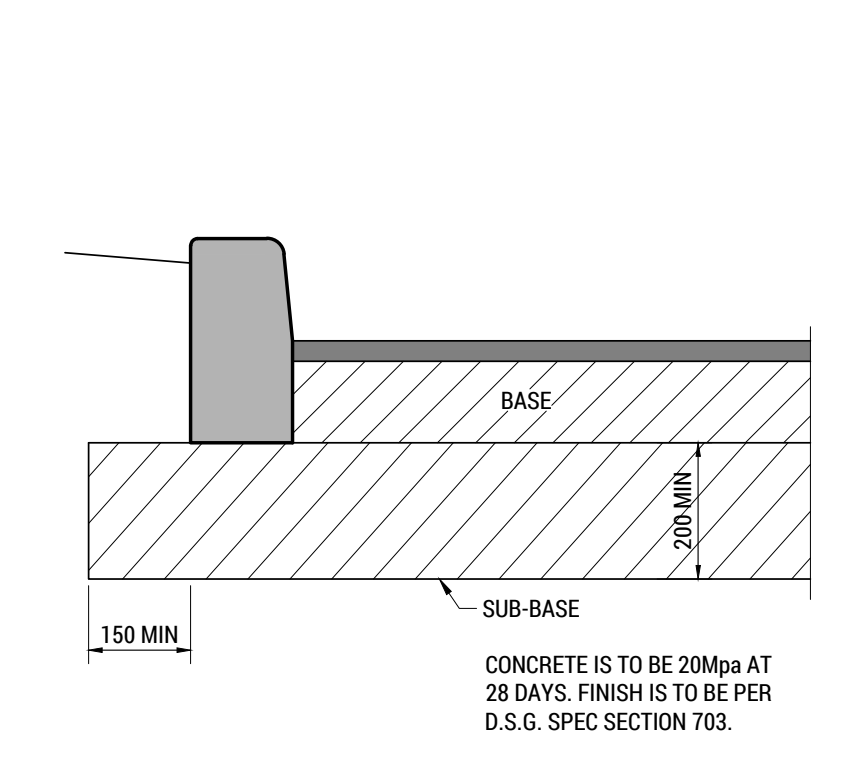
D04 SECTION - PAVEMENT 'B' DRIVEWAY (TYP.)
SCALE 1:20
REFER IPWEA STD DWG TSD-R09-v3 FOR ADDITIONAL DRIVEWAY DETAILS

D05 SECTION DETAIL - PAVEMENT 'C' (TYP.)
SCALE 1:20
REFER IPWEA STD DWG TSD-R11-v3 FOR ADDITIONAL FOOTPATH DETAILS

D06 DETAIL - CONSTRUCTION JOINT EJ1 (TYP.)
SCALE 1:20
PROVIDE EXPANSION JOINTS EACH SIDE DRIVEWAYS AND AT 18.0m MAX CRS
REFER IPWEA STD DWG TSD-R09-v3 & TSD-R11-v3 FOR DETAILS

D07 DETAIL - CONSTRUCTION JOINT CJ1 (TYP.)
SCALE 1:20
PROVIDE CONSTRUCTION JOINTS AT 6.0m MAX CRS
REFER IPWEA STD DWG TSD-R11-v3 FOR DETAILS

D08 DETAIL - WEAKENED PLANE JOINT WPJ (TYP.)
SCALE 1:20
PROVIDE WEAKENED PLANE JOINTS AT 2.0m MAX CRS
REFER IPWEA STD DWG TSD-R11-v3 FOR DETAILS




D09 TYPE BK KERB
SCALE 1:10
REFER IPWEA STD DWG TSD-R14-v3 FOR APPROVED KERB & CHANNEL PROFILES & DIMENSIONS

D10 TYPE KC KERB
SCALE 1:10
REFER IPWEA STD DWG TSD-R14-v3 FOR APPROVED KERB & CHANNEL PROFILES & DIMENSIONS

D11 SUB-SOIL DRAIN DETAIL
SCALE 1:10
INSTALL TO DSG SPEC ON DWG 3401-3/P17-4

D12 TYPE KCV KERB - VEHICULAR CROSSING
SCALE 1:10
REFER IPWEA STD DWG TSD-R14-v3 FOR APPROVED KERB & CHANNEL PROFILES & DIMENSIONS

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**7A WILLIAM STREET, CAMPBELL TOWN
15 LOT SUBDIVISION
TRAFFIC IMPACT ASSESSMENT**

APRIL 2023



Traffic Impact Assessment



7A William Street, Campbell Town
15 Lot Subdivision

TRAFFIC IMPACT ASSESSMENT

- Final
- April 2023

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Traffic Impact Assessment



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Traffic Impact Assessment



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Document history and status

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Traffic Impact Assessment



1. Introduction

1.1 Background

A 15 Lot General Residential subdivision is proposed at 7A William Street, Campbell Town. This TIA has been prepared to assess the impact of the proposal with recommendations where necessary.

This Traffic Impact Assessment (TIA) must be submitted with the development application and provide the following details:

- The significance of the impact of these movements on the existing road network.
- Any changes required to accommodate the additional traffic.

The TIA has been prepared based on Department of State Growth guidelines.

1.2 Objectives

A Traffic Impact Assessment is a means for assisting in the planning and design of sustainable development that considers:

- Safety and capacity
- Equity and social justice
- Economic efficiency
- The environment and future development.

This TIA considers the impact of the proposal on projected traffic volumes expected by 2033.

1.3 Scope of Traffic Impact Assessment (TIA)

This TIA considers in detail the impact of the proposal on the local road network which includes William Street and High Street, Campbell Town.

1.4 References

- RTA Guide to Traffic Generating Developments - 2002
- Tasmanian Planning Scheme – Northern Midlands
- Austroads Guidelines
 - Road Design: Part 4A: Unsignalised & Signalised Intersections - 2021
 - Traffic Management: Part 6: Intersections, Interchanges & Crossings – 2020

Traffic Impact Assessment



1.5 Statement of Qualifications and Experience

This TIA has been prepared by Richard Burk, an experienced and qualified traffic engineer in accordance with the requirements of the Department of State Growth's guidelines and Council's requirements. Richard's experience and qualifications include:

- 36 years professional experience in road and traffic engineering industry
 - Manager Traffic Engineering, Department of State Growth until May 2017.
 - Previous National committee memberships of Austroads Traffic Management and State Road Authorities Pavement Marking Working Groups
- Master of Traffic, Monash University, 2004
- Post Graduate Diploma in Management, Deakin University, 1995
- Bachelor of Civil Engineering, University of Tasmania, 1987

A handwritten signature in blue ink, appearing to read 'R Burk', is positioned above the printed name.

Richard Burk

BE (Civil) M Traffic Dip Man. MIE Aust CPEng

Director Traffic and Civil Services Pty Ltd

Traffic Impact Assessment



1.6 Glossary of Terms

AADT	Annual Average Daily Traffic - The total number of vehicles travelling in both directions passing a point in a year divided by the number of days in a year.
Acceleration Lane	An auxiliary lane used to allow vehicles to increase speed without interfering with the main traffic stream. It is often used on the departure side of intersections.
Access	The driveway by which vehicles and/or pedestrians enter and/or leave the property adjacent to a road.
ADT	Average Daily Traffic – The average 24-hour volume being the total number of vehicles travelling in both directions passing a point in a stated period divided by the stated number of days in that period.
Austroroads	The Association of Australian and New Zealand road transport and traffic authorities and includes the Australian Local Government Association.
Delay	The additional travel time experienced by a vehicle or pedestrian with reference to a base travel time (e.g. the free flow travel time).
DSG	Department of State Growth – The Tasmanian Government Department which manages the State Road Network.
GFA	Gross Floor Area
Intersection Kerb	The place at which two or more roads meet or cross. A raised border of rigid material formed at the edge of a carriageway, pavement or bridge.
km/h	Kilometres per hour
Level of Service	An index of the operational performance of traffic on a given traffic lane, carriageway or road when accommodating various traffic volumes under different combinations of operating conditions. It is usually defined in terms of the convenience of travel and safety performance.
m	Metres
Median	A strip of road, not normally intended for use by traffic, which separates carriageways for traffic in opposite directions. Usually formed by painted lines, kerbed and paved areas grassed areas, etc.
Movement	A stream of vehicles that enters from the same approach and departs from the same exit (i.e. with the same origin and destination).
Phase	The part of a signal cycle during which one or more movements receive right-of-way subject to resolution of any vehicle or pedestrian conflicts by priority rules. A phase is identified by at least one movement gaining right-of-way at the start of it and at least one movement losing right-of-way at the end of it.

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Sight Distance	The distance, measured along the road over which visibility occurs between a driver and an object or between two drivers at specific heights above the carriageway in their lane of travel.
Signal Phasing	Sequential arrangement of separately controlled groups of vehicle and pedestrian movements within a signal cycle to allow all vehicle and pedestrian movements to proceed.
SISD	Safe Intersection Sight Distance – The sight distance provides sufficient distance for a driver of a vehicle on the major road to observe a vehicle on a minor road approach moving into a collision situation and to decelerate to a stop before reaching the collision point.
Speed	Distance travelled per unit time.
85th Percentile	The speed at which 85% of car drivers will travel slower and 15% will travel faster. A control method that allows a variable sequence and variable duration of signal displays depending on vehicle and pedestrian traffic demands.
Traffic-actuated Control	A control method that allows a variable sequence and variable duration of signal displays depending on vehicle and pedestrian traffic demands.
Traffic Growth Factor	A factor used to estimate the percentage annual increase in traffic volume.
Trip	A one-way vehicular movement from one point to another excluding the return journey. Therefore, a vehicle entering and leaving a land use is counted as two trips. (RTA Guide to Traffic generating Developments).
Turning Movement	The number of vehicles observed to make a particular turning movement (left or right turn, or through movement) at an intersection over a specified period.
Turning Movement Count	A traffic count at an intersection during which all turning movements are recorded.
Vehicle Actuated Traffic Signals	Traffic signals in which the phasing varies in accordance with the detected presence of vehicles on the signal approaches.
vpd	vehicles per day – The number of vehicles travelling in both directions passing a point during a day from midnight to midnight.
vph	vehicles per hour – The number of vehicles travelling in both directions passing a point during an hour.

1.7 Site Specific Glossary of Terms

NMC	Northern Midlands Council
SSA	Safe System Assessment

Traffic Impact Assessment



2. Site Description

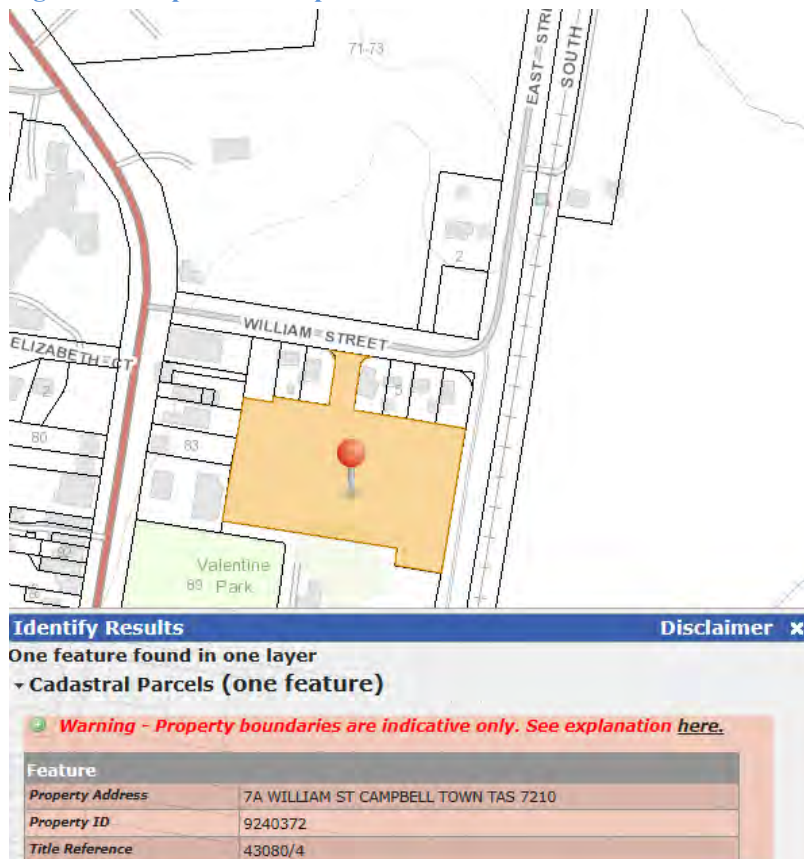
Figure 1 to 3 show the proposed subdivision site at Campbell Town. The land is generally flat and cleared paddock with minimal vegetation. A major rail line is located some 28m from the Eastern boundary of lots 10-13 of the proposed subdivision.

Figure 1 – Proposed development site



Source: LISTmap

Figure 2 – Proposed development site



Traffic Impact Assessment



Source: LISTmap

Figure 3 – Proposed development site



Traffic Impact Assessment



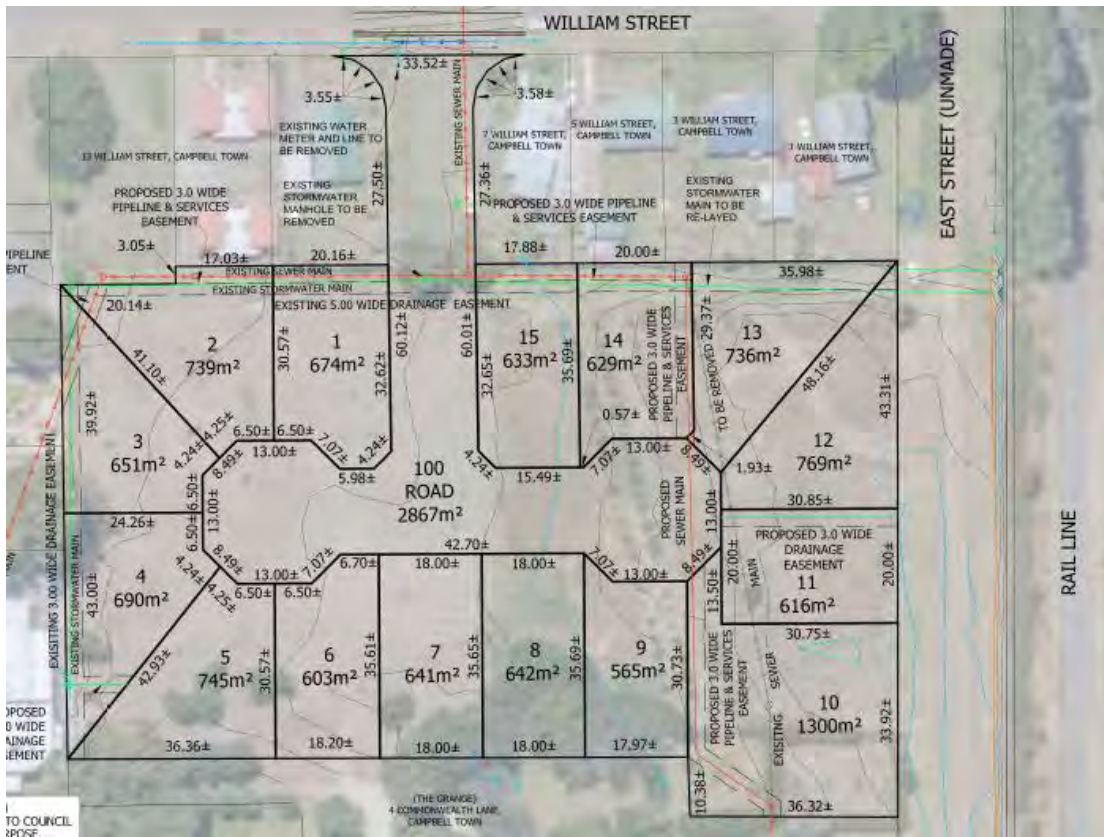
3. Proposal, Planning Scheme and Road Owner objectives.

3.1 Description of Proposed Development

The proposal urban residential subdivision involves 15 lots as shown in Figure 4. Lot sizes vary between 565 and 1300 m² in area.

An overall subdivision plan is attached in Appendix A.

Figure 4 – Proposed subdivision layout



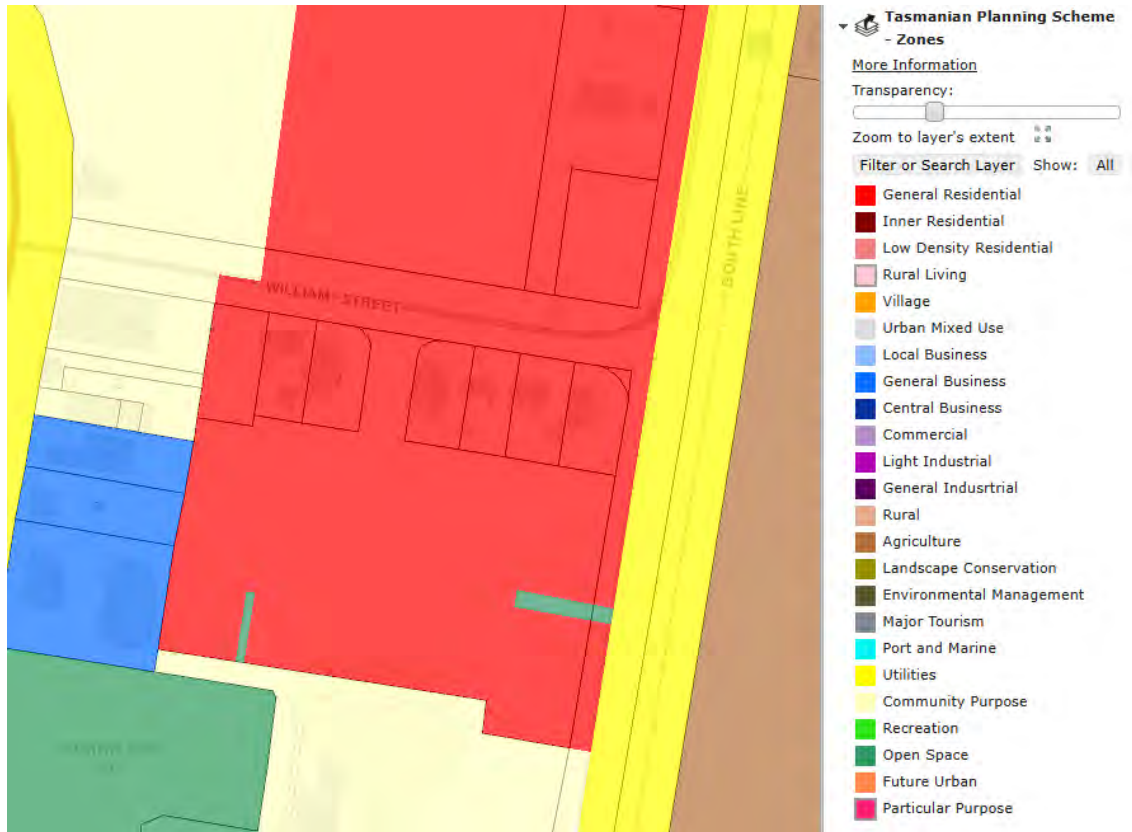
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3.2 Council Planning Scheme

The proposed development involves land zoned General Residential in accordance with the Tasmanian Planning Scheme – Northern Midlands shown in Figure 5.

Figure 5 – Development site is zoned General Residential



Source: LISTmap

3.3 Council Road Network Objectives

To ensure safe and efficient operation of Council Roads.

Traffic Impact Assessment



4. Existing Conditions

4.1 Transport Network

The adjacent transport network consists of the Tasrail South Line, High Street (Midlands Highway) which is a State Road, and William Street and East Street which are Council Roads.

4.1.1 South Rail Line

The South Rail Line has an approximately North – South alignment and passes to the East of the development site by 20m with a some 18m wide rail reservation with the rail line centrally positioned within the reservation, see Figure 6.

Figure 6 – South Rail Line adjacent the development site.



4.2 High Street

High Street (Midlands Highway) is a Category 1- Trunk Road in the State Road Hierarchy, see Appendix F, with an estimated AADT of 7,870 vpd (2021) 360m North of William Street and is part of the Tasmanian 26m B Double network, see Appendix E.

The High / William Street junction is within a 50km/h speed limit, see Figure 7.

Road delineation is provided with street lighting and line marking. The seal width is 20m in the vicinity of the William Street junction. There is kerb & channel and footpath along both sides of the road.

Traffic Impact Assessment



Figure 7 – High Street Speed Limit.



Northern approach to High Street and 50km/h Zone followed by William Street junction.

4.3 William Street

William Street is 210m in length with a 4.7m seal width in a General Residential setting with estimated AADT of 70vpd (2023). Delineation is provided with street lighting.

The General Urban Speed Limit of 50km/h applies.

4.4 High Street / William Street junction

Figures 8-14 show the nature of the High Street / William Street junction.

Figure 8– Aerial view of High / William Street junction



This junction effectively operates as an Austroads BAR junction as through traffic passes to the left of vehicles propped to turn right to William Street.

Source: LISTmap

Traffic Impact Assessment



Figure 9 – William Street approach to High Street



Figure 10 – Elevation view of High Street / William Street junction



Figure 11 – Looking right along High Street from William Street



**Sight Distance
right is >120m.**

Traffic Impact Assessment



Figure 12 – Looking left along High Street from William Street



**Sight Distance
left is >120m.**

Figure 13 – High Street Northern approach to William Street



Figure 14 – High Street Southern approach to William Street



Traffic Impact Assessment



4.5 William Street / Proposed Road junction

Figures 15 - 20 show the nature of the Gardners Road / Allen Street junction.

Figure 15 – Aerial view of William Street / Proposed Road junction



Source: LISTmap

Figure 16 – Elevation view of William Street / Proposed Road junction



Figure 17 – Looking right along William Street from Proposed Road



Sight Distance
right is 95m.

Traffic Impact Assessment



Figure 18 – Looking left along William Street from Proposed Road



**Sight Distance
left is 125m.**

Figure 19 – William Street Eastern approach to Proposed Road



Figure 20 – William Street Western approach to Proposed Road



Traffic Impact Assessment



4.6 East Street

East Street is 1000m in length with a 3.5m seal width and technically within a General Residential setting with estimated AADT of 70vpd (2023).

The General Urban Speed Limit of 50km/h applies, and delineation is provided with a street light and some guide posts.

4.7 Sight Distance Summary

Sight distance requirements are summarised in Figure 21.

Figure 21 – Summary of sight distance requirements

			Austrroads	Current Provision	AS / NZS 2890.1	
Junction Major Rd - Minor Rd	Speed Limit (km/h)	Speed Environment (km/h)	Road frontage sight distance			
			SISD (m)	Available		SSD (m)
Left(m)	Right(m)					
High - William	50	50	97	> 120	> 120	45
William - Proposed	50	40	73	125	95	35

Austrroads Compliant

4.8 Traffic Activity

4.8.1 High Street

Estimated ADDT is 7,870 vpd (2021) 360m North of William Street junction from DSG data, see Appendix B.

4.8.2 William Street

Estimated ADDT is 70 vpd (2023) from TCS observations, see Appendix C.

Traffic Impact Assessment



4.9 Crash History

The Department of State Growth is supplied with reported crashes by Tasmania Police. The Department maintains a crash database from the crash reports which is used to monitor road safety, identify problem areas and develop improvement schemes.

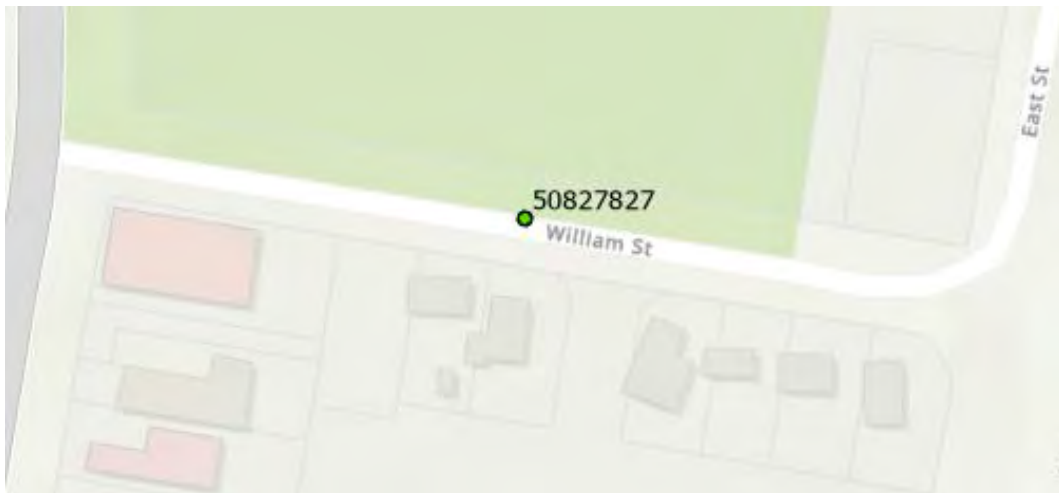
The 5-year crash history records one reported crash, see Figure 22 and 23. There is no evidence of a crash propensity on William Street.

Figure 22 – 5 Year reported Crash History on William Street

Crash Id	Description	Date	Time	Severity	Light	Location	Units
50827827	147 - Emerging from driveway or lane	23-Sep-2020	14:00	PDO	Day	William Street	LV & HV

PDO | Property Damage Only
 LV | Light Vehicle
 HV | Heavy Vehicle

Figure 23 – 5 Year reported Crash locations on William Street



4.10 Services

No above ground services appear to be disaffected by the proposal.

4.11 Road Safety Review

A road safety review was conducted for William Street and no road safety issues were identified.

Traffic Impact Assessment



4.12 Austroads Safe System Assessment

William Street approaches to the proposed road junction have been assessed in accordance with the Austroads Safe System Assessment framework. This framework involves consideration of exposure, likelihood and severity to yield a risk framework score. High risk crash types and vulnerable road user crash types are assessed for each site and aggregated to provide an overall crash risk. Crash risk is considered in terms of three components:

- Exposure (is low where low numbers of through and turning traffic) i.e. 1 out of 4
- Likelihood (is low where the infrastructure standard is high) i.e. 1 out of 4
- Severity (is low where the speed environment is low) i.e. 1 out of 4

The Austroads Safe System Assessment process enables the relative crash risk of an intersection or road link to be assessed. Vulnerable road users are considered along with the most common crash types.

The crash risk score indicates how well the infrastructure satisfies the *safe system objective which is for a forgiving road system where crashes do not result in death or serious injury*.

From safe system assessment, William Street approaches to the proposed Road are determined to be well aligned with the safe system objective with a very low crash risk score of 20/448, see Figures 24 and 25.

Figure 24 – Austroads Safe System Assessment alignment between crash score and risk



Traffic Impact Assessment



Figure 25 - Safe System Assessment of William Street, Campbell Town

Safe System Assessment		Existing situation William Street					
Exposure	Run-off-road	Head-on	Intersection	Other	Pedestrian	Cyclist	Motorcyclist
William St (AADT 70vpd.)	No reported crashes, low traffic volume	No reported crashes, low traffic volume	High Street intersection with 7,870 vpd(2021) and no crash history.	Very low volume residential street.	Low pedestrian activity.	Low cyclist activity.	Low motorcyclist activity.
Likelihood	Score / 4	1	1	1	1	1	1
	Justification	Narrow 4.7m seal, straight alignment, street lighting and adequate sight distance.	Effectively satisfies Aistroads BAR and BAL junction layout warrant.	Narrow 4.7m seal, straight alignment, street lighting and adequate sight distance.	No formal footpath, mowed pedestrian friendly verges.	Narrow 4.7m seal, straight alignment, street lighting and adequate sight distance.	Narrow 4.7m seal, straight alignment, street lighting and adequate sight distance.
Severity	Score / 4	3	1	1	2	2	2
	50km/h Speed Limit and Speed Environment.	Low speed environment and minimal roadside hazards.	Low speed environment 50km/h approaches.	Low speed environment and minimal roadside hazards.	Moderate to High speed environment for vulnerable road users such as pedestrians	Moderate to High speed environment for vulnerable road users such as cyclists	Moderate to High speed environment for vulnerable road users such as motorcyclists
Product	Score / 4	1	1	1	2	2	2
	Total Score /64	3	1	1	4	4	4
	Total /448						20

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5. Traffic Generation and Assignment

This section of the report is to determine how traffic generated by the proposal is distributed within the adjacent road network now and ten years future.

5.1 Traffic Growth

Background traffic compound annual growth of 1% has been assumed due to background infill development.

5.2 Trip Generation

Traffic generation rates are sourced from RTA Guide to Traffic Generating Developments 2002.

For dwelling houses traffic generation rates are 9 daily trips per house with 0.85 peak hour vehicle trips.

For 15 lots this amounts to peak activity estimated at 13 vph and 135 vpd.

5.3 Trip Assignment

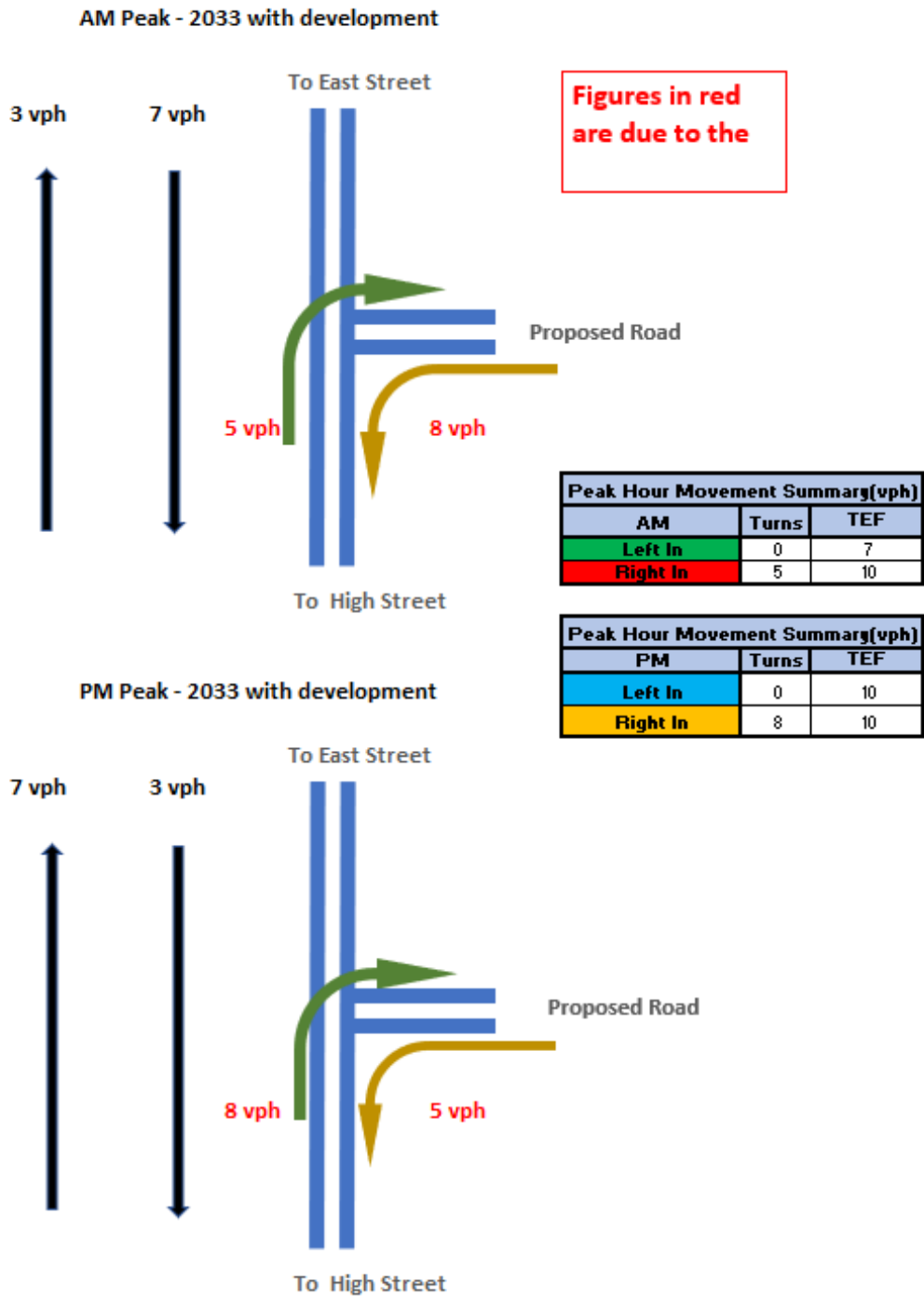
Trip assignments have been estimated as follows:

- William Street / Proposed Road junction 2033 – Figure 26
- High Street / William Street junction 2033 – Figure 27

Traffic Impact Assessment



Figure 26 – Projection for William Street / Proposed Road junction for 2033



Traffic Impact Assessment



Figure 27 – Projection for High Street / William Street junction for 2033



Traffic Impact Assessment



6. Impact on Road Network

6.1 Impact on William Street

Traffic generations estimation indicates that the proposal will add up to 135vpd to the projected 100vpd (2033) on William Street. While this is more than double 2033 traffic, the aggregate volume of 235vpd is low and there are no traffic capacity issues at this level with the road operation at LOS A, see Appendix D for LOS descriptions.

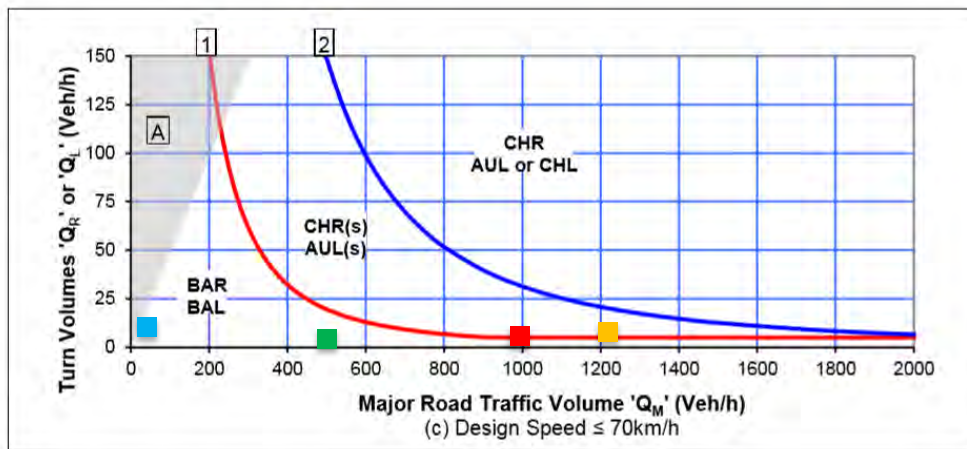
6.2 Austroads Junction warrant

The William Street junctions with Hight Street and the proposed road have been reviewed in terms of Austroads junction layout requirements as follows.

6.2.1 High Street / William Street Junction

Figure 28 demonstrates that a Simple Right and Left turn junction layout is adequate for the High / William Street junction, and this effectively matches the current junction layout.

Figure 28 – Austroads Junction warrant for High Street / William Street Junction 2033



Peak Hour Movement Summary(vph)		
AM	Turns	TEF
Left In	5	500
Right In	4	1005

Peak Hour Movement Summary(vph)		
PM	Turns	TEF
Left In	7	40
Right In	7	1207

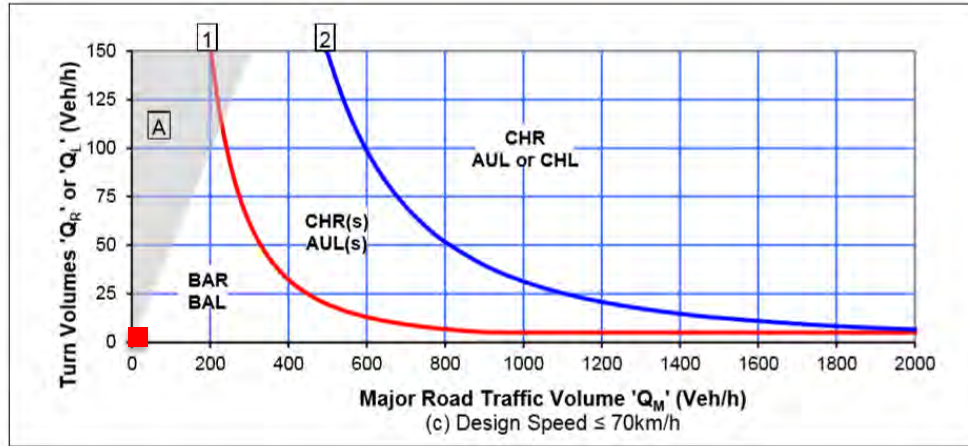
Traffic Impact Assessment



6.2.2 William Street / Proposed Road Junction

Figure 29 demonstrates that a Simple Right and Left turn junction layout is adequate for the William / Proposed Road junction which matches with the current junction layout.

Figure 29 – Austroads Junction warrant William Street / Proposed Road Junction 2033



Peak Hour Movement Summary(vph)		
AM	Turns	TEF
Left In	0	7
Right In	5	10

Peak Hour Movement Summary(vph)		
PM	Turns	TEF
Left In	0	10
Right In	8	10

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6.3 Impact on High Street / William Street junction

The impact of the proposal on this junction is notable in that traffic activity will increase by 135vpd from 100 vpd to 235 vpd h by 2033 however this activity is low and has a very minor impact on traffic safety and traffic capacity.

The junction is estimated to continue to operate at LOS A with no traffic capacity issues.

The junction is estimated to continue to operate safely. There is no crash history and the turning movements associated with the development would be well catered for with the current junction layout.

6.4 Impact on William Street / Proposed Road junction

The impact of the proposal on this junction is notable in that activity will increase from by 100vpd to 235 vpd by 2033 however this activity is low and has a very minor impact on traffic safety and traffic capacity.

The junction is estimated to continue to operate at LOS A with no traffic capacity issues.

The junction is estimated to continue to operate safely. The 5-year reported crash history shows no evidence of a crash propensity and it is assessed that turning movements will be well catered for with the proposed junction layout.

6.5 Impacts on road users.

6.5.1 Public Transport

No effects.

6.5.2 Delivery Vehicles

No effects.

6.5.3 Pedestrians and Cyclists

Proposal will increase pedestrian activity on William Street between the proposed road and High Street.

6.5.4 Motorcyclists

No effects.

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6.6 Other impacts

6.6.1 Environmental

No applicable environmental impacts were identified in relation to:

- Community severance, pedestrian amenity
- Hazardous loads, air pollution or ecological impacts
- Heritage and Conservation

Noise, vibration or visual impact of South Rail line operation on residential amenity requires consideration.

6.6.2 Street Lighting and Furniture

No issues.

6.6.3 Tasmanian Subdivision Guideline Considerations

No issues.

6.6.4 Transport Planning Considerations

No issues.

6.7 Urban residential street standard.

Currently William Street has a 4.7m seal with kerb & channel along the Southern side.

In accordance with LGAT standard drawing TSD-R06, the minimum urban road standard for a 15 lot Cul-De-Sac Road less than 150m in length is a type 4 Local Cul-De-Sac with a trafficable width of 6.9m and footpath one side.

The recommended urban residential road property access standard is detailed in the LGAT standard drawings TSD-R09. These standards are available online at:

https://www.lgat.tas.gov.au/_data/assets/pdf_file/0027/813735/Tasmanian-Municipal-Standards-Drawings-v3-December-20202.pdf

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6.8 Liveability, Safety and Amenity Guidelines

Guidelines for the safety and amenity of residential areas include:

- Bound residential precincts with traffic routes or natural barriers to minimise conflict.
- Direct vehicular and pedestrian access should be avoided from single dwelling units onto road with over 2,000 vehicles per day.
- Effective street lengths should be less than 200-250m in order to achieve typical vehicle speeds of 40km/h.
- Cater for cyclist & pedestrian demand with separate paths or cycle networks.

To maximise the liveability, safety and amenity of the local area, road and street network layout should be such that:

- A minimum of 60% of lots should abut residential streets with less than 300vpd passing traffic.
- A minimum of 80% of lots should abut residential streets with less than 600 vpd passing traffic.
- A maximum of 5% of single dwelling lots should abut residential streets with between 1,000-2,000 vpd passing traffic.
- A maximum of 1% of single dwelling lots should abut local streets or collectors with less than 3,000 vpd passing traffic, and
- No single dwelling lot should abut a route with > 3,000 vpd passing traffic.

These guidelines are from *TE&M Chapter 2.2: Design of New Urban Networks*.

The proposal satisfies liveability, safety and amenity targets described above.

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6.9 Tasmanian Planning Scheme – Northern Midlands

Road and Railway Assets Code C3

C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

Acceptable Solution A1.1 – For a category 1 road or a limited access road, vehicular traffic to and from the site will not require:

- (a) A new junction
- (b) A new vehicle crossing.
- (c) A new level crossing.

Not applicable as the roads are not Category 1.

Acceptable Solution A1.2 – For a road, excluding a Category 1 road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority.

A1.2 is not satisfied as no written consent has been issued by the road or rail crossing authority, see response to Performance Criteria P1.

Acceptable Solution A1.3 – For the rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority.

Not applicable as no new private level crossing is proposed.

Acceptable solution A1.4: Vehicular traffic to and from the site, using and existing vehicle crossing or private level crossing will not increase by more than:

- (a) The amounts in Table C3.1
- (b) Allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road; and

A1.4 is not satisfied from Table C3.1 as proposal involves up to 135vpd and involves *other road* and more than 40 vpd for vehicles up to 5.5m in length.

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Performance Criteria P1: *Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:*

- (a) *any increase in traffic caused by the use.*
- (b) *the nature of the traffic generated by the use.*
- (c) *the nature of the road.*
- (d) *the speed limit and traffic flow of the road.*
- (e) *any alternative access to a road.*
- (f) *the need for the use.*
- (g) *any traffic impact assessment; and*
- (h) *any advice received from the rail or road authority.*

- (a) The increase in traffic due to the proposal is estimated at up to 135 vpd. From review of Austroads junction warrants it has been determined that:
 - High Street / William Street junction layout is adequate.
 - William Street / Proposed Road junction layout is adequate.
- (b) The nature of the traffic generated by the use will be 98% light vehicles post residential construction phase.
- (c) The proposed road is to be constructed to a 6.9m width from face to face of kerb with kerb & Channel and footpath one side consistent with LGAT guidelines.
- (d) The General Urban Default Speed Limit of 50km/h will apply which is appropriate for the traffic activity and function of William Street.
- (e) There is no suitable alternative access.
- (f) The proposal is consistent with zoning for the area and considered cost effective and efficient infill development.
- (g) This traffic assessment identifies no reason to disallow the proposal due to traffic impacts.
- (h) No rail or road infrastructure is disaffected by the proposal.

In summary there are no traffic safety or capacity issues due to the proposal. **P1 is satisfied.**

Acceptable solution A1.5: *Vehicular traffic must be able to enter and leave a major road in a forward direction. A1.5 is satisfied.*

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C3.6.1 Habitable buildings for sensitive uses within a road or railway attenuation area

Acceptable Solution A1

Unless within a building area on a sealed plan approved under this planning scheme, habitable buildings for a sensitive use within a road or railway attenuation area, must be:

- (a) within a row of existing habitable buildings for sensitive uses and no closer to the existing or future major road or rail network than the adjoining habitable building;
- (b) an extension which extends no closer to the existing or future major road or rail network than:
 - (i) the existing habitable building; or
 - (ii) an adjoining habitable building for a sensitive use; or
- (c) located or designed so that external noise levels are not more than the level in Table C3.2 measured in accordance with Part D of the *Noise Measurement Procedures Manual, 2nd edition, July 2008*.

Table C3.2 Acceptable noise levels within a road or railway attenuation area

Roads

The arithmetic average of the A-weighted L10 sound pressure levels for each of the one-hour periods between 6:00am and midnight on any day [L10 (18-hour)] of 63 dB(A).

Habitable buildings (sensitive uses) are proposed within the General Residential Zone and within 50m of the South Railway Line through Campbell Town (the rail attenuation area) and closer to the rail network than adjoining habitable buildings, see Figures 30 and 31.

It may be possible that the noise level exceeds > 63 dB. A noise & vibration report is being prepared by a consultant. Details to be advised in due course.

A1 may or may not be satisfied.

Traffic Impact Assessment

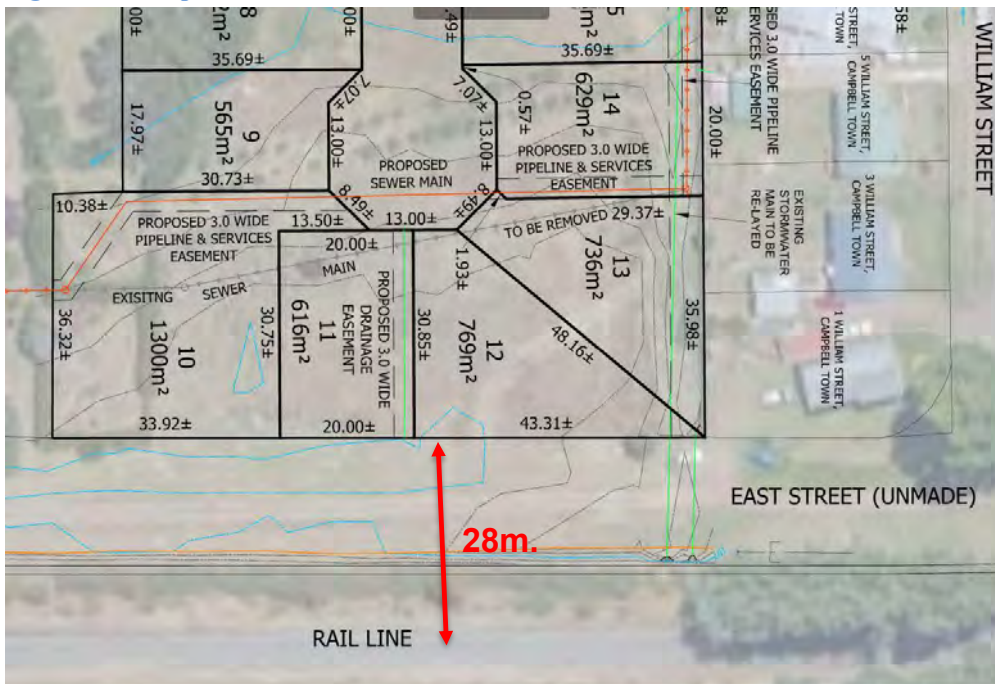


Figure 30 – South Rail Line East of proposed subdivision



Source: LISTmap, DPIPWE

Figure 31 – Proposed Lots 10,11,12 & 13 in relation to the South Rail Line reservation



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Performance Criteria P1

Habitable buildings for sensitive uses within a road or railway attenuation area, must be sited, designed or screened to minimise adverse effects of noise, vibration, light and air emissions from the existing or future major road or rail network, having regard to:

- (a) the topography of the site;
- (b) the proposed setback;
- (c) any buffers created by natural or other features;
- (d) the location of existing or proposed buildings on the site;
- (e) the frequency of use of the rail network;
- (f) the speed limit and traffic volume of the road;
- (g) any noise, vibration, light and air emissions from the rail network or road;
- (h) the nature of the road;
- (i) the nature of the development;
- (j) the need for the development;
- (k) any traffic impact assessment;
- (l) any mitigating measures proposed;
- (m) any recommendations from a suitably qualified person for mitigation of noise; and
- (n) any advice received from the rail or road authority.

- a. The topography of the site is flat, and the development site is approximately level with South Rail line, see Figure 30.
- b. The development site Eastern boundary is 20m from the South Rail line reservation and 28m from the rail line ie < 50m West of the South Line, see Figure 30.
- c. The South Rail line is at a similar ground level to proposed lots 10, 11,12 and 13.
- d. Lots 10-13 are within 28m of the South Rail Line, see Figure 30.
- e. The South Rail Line is operational in the vicinity of the proposal.
- f. Rail activity on the South line is regular.
- g. Rail noise over 63 dB is possible.

Traffic Impact Assessment



- h. The proposed lots are not grade separated from the Western Line.
- i. The proposed development is for residential dwellings consistent with the Tasmanian Planning Scheme Land Use Zoning – Northern Midlands.
- j. The development is justified on commercial grounds.
- k. This traffic impact assessment determines that subject to the recommendations contained in this report, the subdivision proposal will allow continued safe and efficient operation of William Street and is supported on traffic grounds.
- l. Mitigations may be required to mitigate road noise concerns.
- m. **A noise assessment report has been requested by Council ?**
- n. TasRail may request the offset dimension of proposed Lots 10- 13 to the South Line reservation boundary.

Subject to TasRail advice, P1 may be satisfied.

Traffic Impact Assessment



C3.7.1 Subdivision for sensitive uses within a road or railway attenuation area

Not applicable as no subdivision is proposed within a road or railway attenuation area.

Acceptable Solution A1

A lot, or a lot proposed in a plan of subdivision, intended for a sensitive use must have a building area for the sensitive use that is not within a road or railway attenuation area.

The proposal is for a 15 lot General Residential subdivision with lots 10-13 within 50m of the South Rail line and railway attenuation area. **A1 is not satisfied.**

Performance Criteria P1

A lot, or a lot proposed in a plan of subdivision, intended for sensitive uses within a road or railway attenuation area, must be sited, designed or screened to minimise the effects of noise, vibration, light and air emissions from the existing or future major road or rail network, having regard to:

- (a) the topography of the site;
- (b) any buffers created by natural or other features;
- (c) the location of existing or proposed buildings on the site;
- (d) the frequency of use of the rail network;
- (e) the speed limit and traffic volume of the road;
- (f) any noise, vibration, light and air emissions from the rail network or road;
- (g) the nature of the road;
- (h) the nature of the intended uses;
- (i) the layout of the subdivision;
- (j) the need for the subdivision;
- (k) any traffic impact assessment;
- (l) any mitigating measures proposed;
- (m) any recommendations from a suitably qualified person for mitigation of noise; and
- (n) any advice received from the rail or road authority.

See responses under C3.6.1.

Subject to Noise & Vibration report & TasRail advice, **P1 may be satisfied.**

Traffic Impact Assessment



7. Recommendations and Conclusions

This report has been prepared to assess the proposed 15 lot subdivision of 7A William Street, Campbell Town in accordance with Tasmanian Planning Scheme - Northern Midlands and Road & Railway Assets Code C3 requirements.

It has been prepared following a review of available traffic and crash data, Road Safety Review, Austroads Safe System Assessment, future growth projections and review of applicable Austroads guidelines and Council Road standards.

7.1 Traffic Safety:

From road safety review, review of 5 year reported crash history and Austroads Safe System assessment no traffic safety issues have been identified with the proposal.

7.2 South Rail Line

As the South Rail Line is less than 50m from the development site and noise and vibration assessment will be required to determine what mitigations may be necessary.

7.3 William Street

It is estimated that the proposal will contribute up to 135vpd to William Street. Though this is a significant increase on the estimated AADT of 70 vpd (2023), the total traffic volume is very low and will have a very minor impact on operation of the road.

7.4 High Street / William Street junction

The existing junction layout is adequate for the increased traffic and negligibly impacted.

7.5 Tasmanian Planning Scheme – Northern Midlands

Evidence is provided to demonstrate the proposal satisfies Road & Railway Assets Code C3 requirements, subject to Noise and Vibration assessment.

Traffic Impact Assessment



Recommendations:

- *Construct the new road to a trafficable width of 6.9m with kerb & channel and footpath one side consistent with LGAT urban road standard TSD- R06.*
- *Install proposed driveways consistent with LGAT urban standard TSD-R09.*
- *Install street lighting on the proposed road to Council standard.*
- *Construct footpath along the Southern side of William Street from the Proposed Road to High Street.*
- *Comply with determination on unit setback requirement for the Southern Rail Line Reservation.*
- *Comply with any mitigations identified and agreed from the noise and vibration report for the South Rail Line.*

This traffic impact assessment finds that the proposed subdivision of 7A William Street provides adequately for continued safe and efficient operation of the impacted road network. The increased traffic resulting will have a very minor impact on the operation of the High Street / William Street junction.

Overall, it has been concluded that subject to the recommendations contained in this report, the proposed subdivision will allow continued safe and efficient operation of William Street and is supported on traffic grounds.

Traffic Impact Assessment

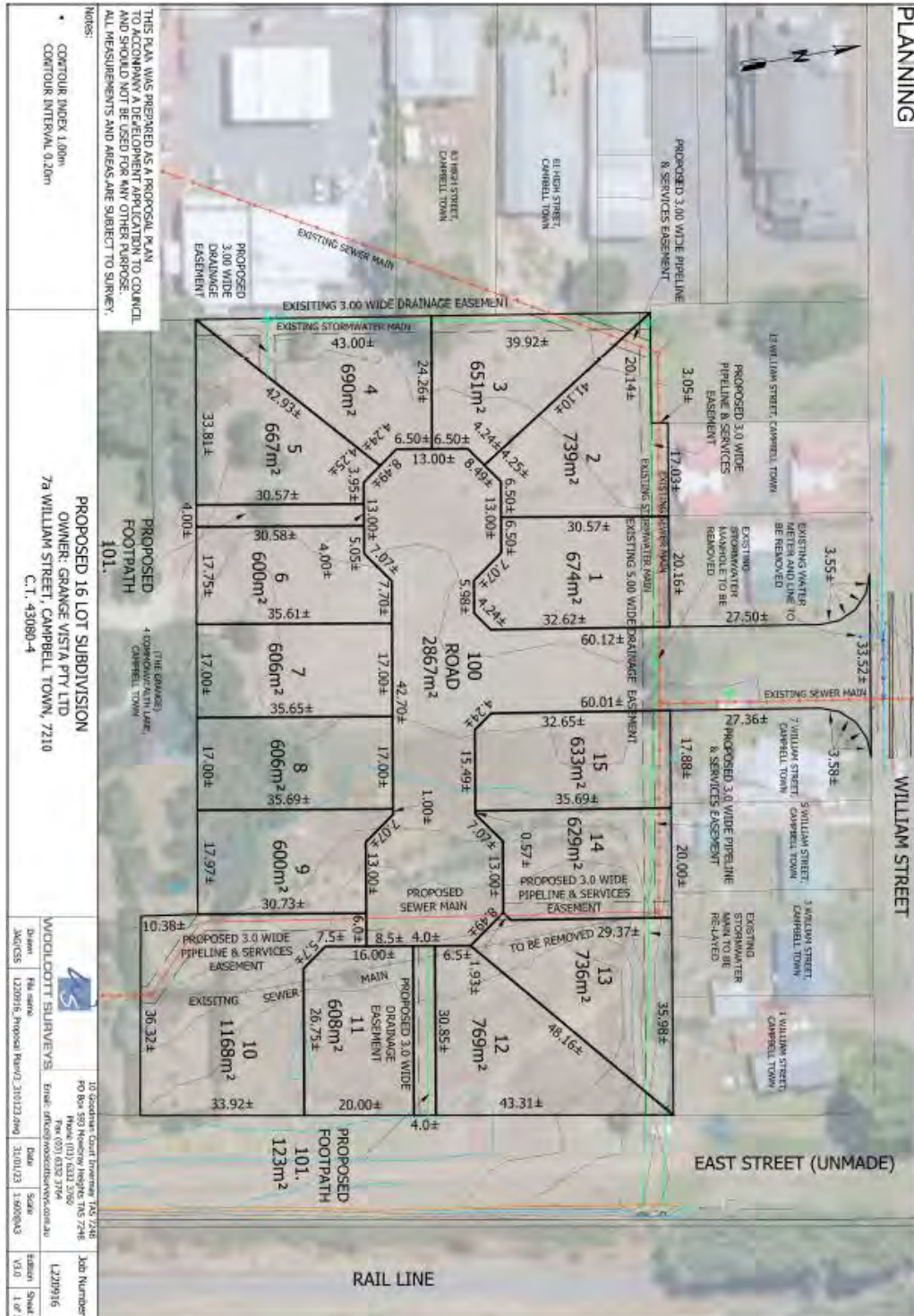


Appendices

Traffic Impact Assessment



Appendix A - Subdivision Plan



Traffic Impact Assessment



Appendix B - High Street Traffic Data

Site 0000A0087480

A0087480
Description: Midland Highway 160m S Of Pedder St
City: Campbell Town
Route number: A0087

Site Data



Traffic Statistics by Direction

Direction	Weekday average total traffic	7-day average traffic	Weekly traffic total
North	3,424	3,491	24,439
South	3,234	3,348	23,438
Total	6,658	6,839	47,877

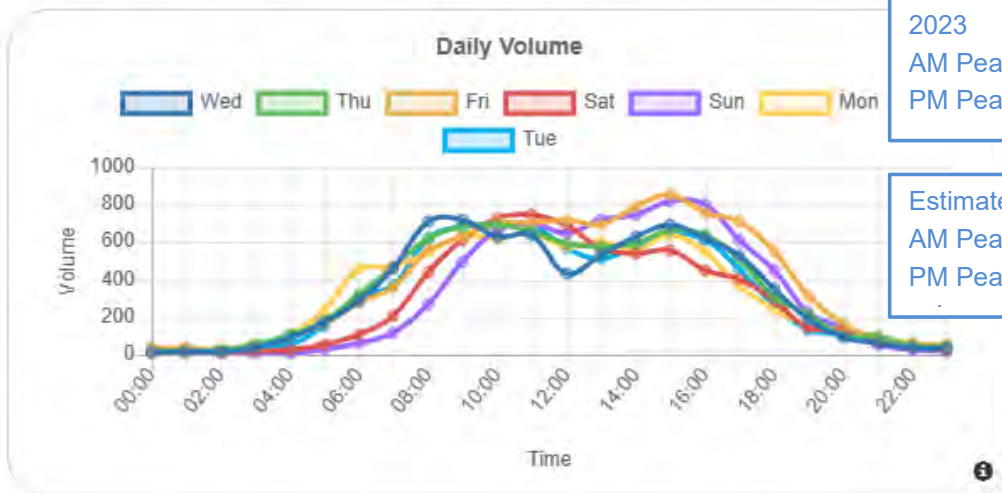
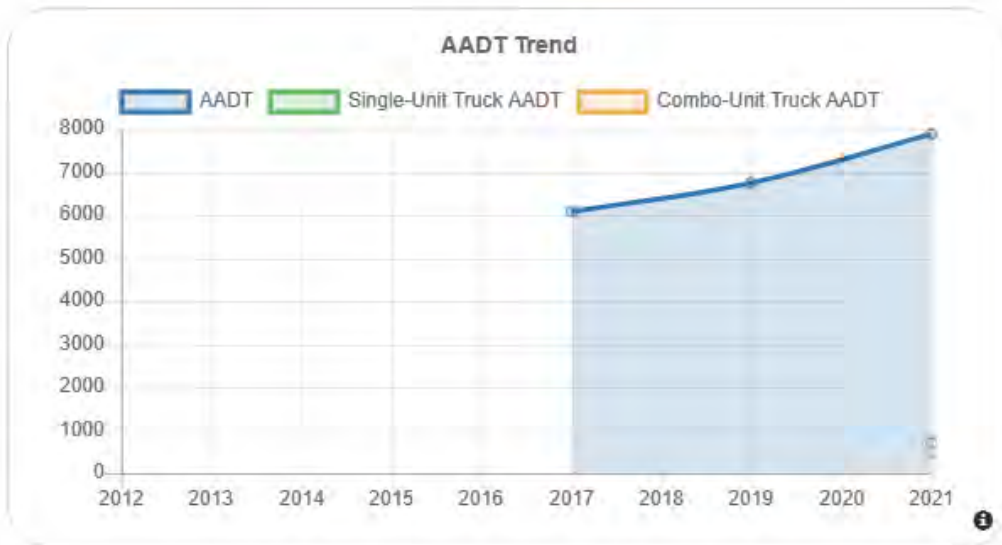
Annual Statistics

Data Item	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AADT	-	-	-	-	-	6,069	-	6,751	-	7,870
% HV	-	-	-	-	-	19.3%	-	16.3%	-	15.0%

Midlands Highway (Campbell Town)

- Compound Ann. Growth: 6.8% over 4 years
- Compound Ann. Growth: 3.5% over long term used.
- Commercial Vehicles. 15 %
- 7,870 vpd (2021)
- 8,430 vpd (2023)
- 11, 890 vpd (2033)

Traffic Impact Assessment



Traffic Impact Assessment



Appendix C - William Street Traffic Data

Estimated AADT 70vpd (2023)

Estimated AADT 100vpd (2033) due to background Compound annual growth at 3.5%.

Traffic Impact Assessment



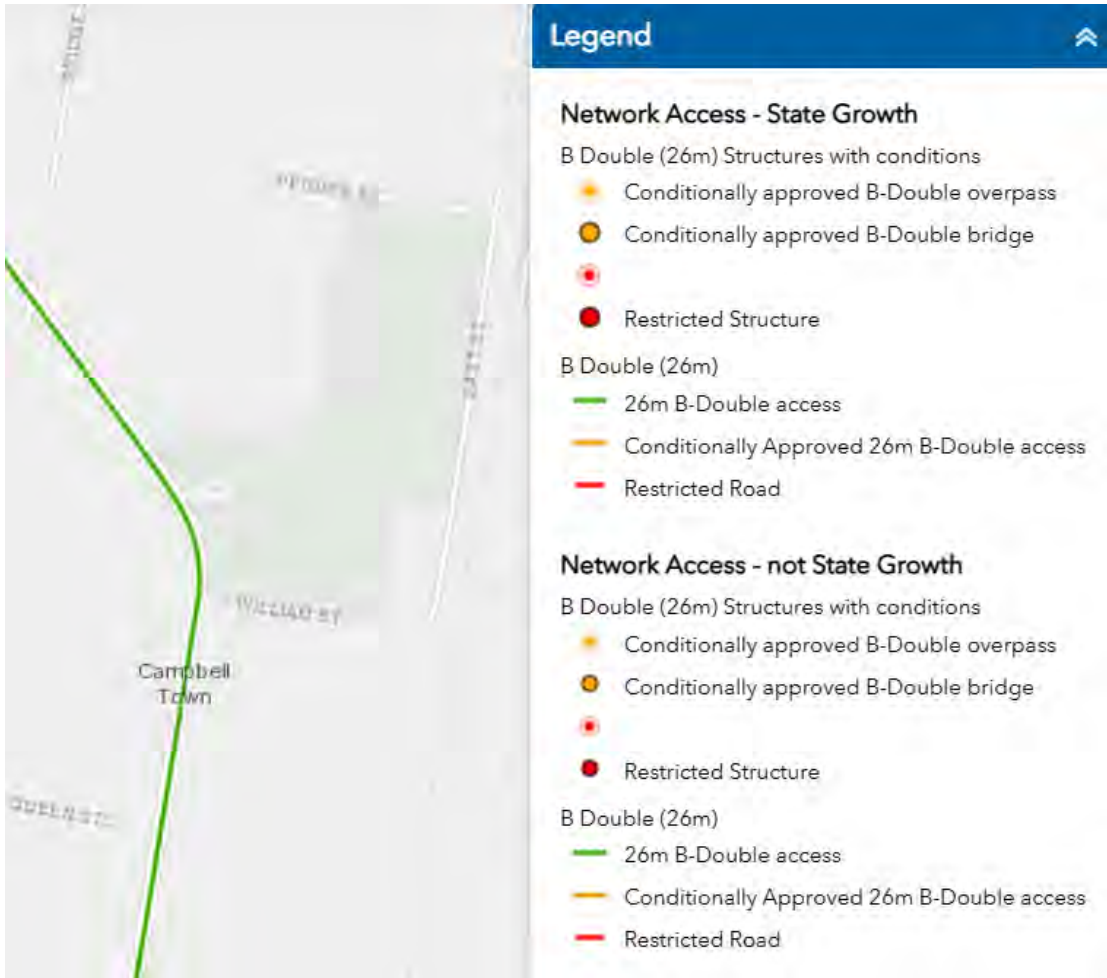
Appendix D - Level of Service Descriptions

Level of service A	A condition of free-flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of comfort and convenience provided is excellent.
Level of service B	In the zone of stable flow where drivers still have reasonable freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is a little less than with level of service A.
Level of service C	Also in the zone of stable flow, but most drivers are restricted to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience declines noticeably at this level.
Level of service D	Close to the limit of stable flow and approaching unstable flow. All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor, and small increases in traffic flow will generally cause operational problems.
Level of service E	Traffic volumes are at or close to capacity, and there is virtually no freedom to select desired speeds or to manoeuvre within the traffic stream. Flow is unstable and minor disturbances within the traffic stream will cause breakdown.
Level of service F	In the zone of forced flow, where the amount of traffic approaching the point under consideration exceeds that which can pass it. Flow breakdown occurs, and queuing and delays result.

Traffic Impact Assessment



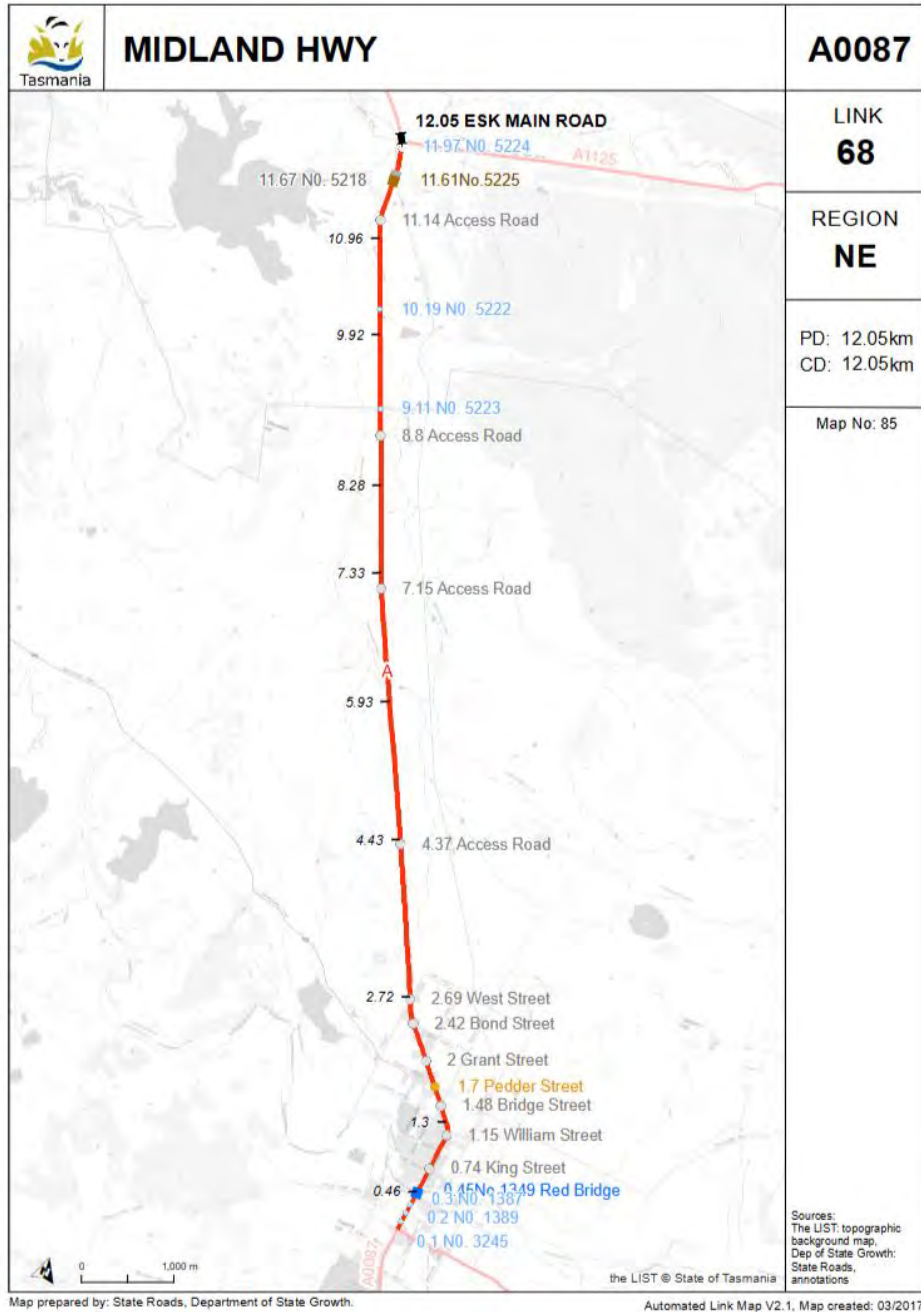
Appendix E - Tas. 26m B Double Network



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Appendix F - Midlands Highway – Link 68



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BUSHFIRE HAZARD REPORT



**15 Lot Subdivision
7a William Street, Campbell Town**

April 2023

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Job number: L220916
WS118
Prepared by: James Stewart (james@woolcottsurveys.com.au)
Town Planner & Bushfire Hazard Practitioner 157

Rev. no	Description	Date
1	FINAL	05/04/2023
2	UPDATE	02/05/2023

Disclaimer

This report deals with the potential bushfire risk only, all other statutory assessments sit outside of this report. This report is not to be used for future or further development on the site, other than what has been specifically provided for in the certified plans attached. Woolcott Surveys Pty Ltd accepts no responsibility to any purchaser, prospective purchaser or mortgagee of the property who in any way rely on this report. This report sets out the owner's requirements and responsibilities and does not guarantee that buildings will survive in the event of a bushfire event. If characteristics of the property change or are altered from those which have been identified, the BAL classification may be different to that which has been identified as part of this report. In this event the report is considered to be void.

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Executive Summary

Development of a 15 lot residential subdivision is proposed for 7a William Street, Campbell Town. The development will be completed over one stage. Access to lots will be via William Street, which adjoins the property to the north.

The site is entirely within the boundary of a bushfire prone area shown on an overlay of a planning scheme map for the *Tasmanian Planning Scheme – Northern Midlands*. A bushfire event at this site or within the immediate area is likely to impact on future buildings at this location and subject development to considerable radiant heat and ember attack.

A bushfire hazard management plan has been prepared and is provided as an appendix to this report. The plan sets out the owner's responsibilities to maintain a managed area for each lot, taking into consideration the relevant requirements under Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas*.

Conclusions and recommendations

- a) Hazard management areas meeting the requirements of BAL 19 can be achieved for lots 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14. Lots 1-3, and Lot 15 meet the requirements of BAL LOW, being over 50m from any bushfire prone vegetation.
- b) Future dwellings on lots 1-15 must maintain Hazard Management Areas and follow recommendations as outlined in the Bushfire Hazard Management Plan and section 5.2 of this report. Maintenance of these hazard management areas is to be in perpetuity.
- c) The proposed road must be in compliance with Table C13.1, Element A, outlined in section 5.3 of this report, with the exception of a 12m outer radius turning head. No standing signage is to be provided at both ends of the cul-de-sac.
- d) New hydrants are required in accordance with the TasWater supplement to Water Supply code of Australia WAS 03-2011-3.1 MRWA Edition 2:0. Hydrants to have a separation of not more than 60m.
- e) All lots are to be treated as a hazard management area in accordance with section 5.2 of this report. Maintenance of all hazard management areas must be in perpetuity.
- f) Prior to the sealing of the final plan, solid metal fencing to a height of 2.4m is required along the eastern boundary of lots 10, 11 and 12, and solid fencing to a height of 2.1m is required along the southern boundary of lot 7, 8, 9, and 10, as shown on the Bushfire Hazard Management Plan. Fencing should not be constructed across the eastern boundary of lot 101.

Signed:



Author: James Stewart
Accreditation No: BFP-157



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1. Introduction

This Bushfire Hazard Report and Bushfire Hazard Management Plan (BHMP) has been prepared in support of a proposed 15 lot subdivision at 7a William Street, Campbell Town.

1.1 The subject site

The following is a summary of the application information:

Property address	7a William Street, Campbell Town.
Certificate of title	CT43080/4
Property ID (PID)	9240372
Property Owners	Grange Vistas Pty Ltd
Existing Use and Development	Vacant Land
Existing Zoning	General Residential.
Planning Scheme	Tasmanian Planning Scheme – Northern Midlands
Identified on a Bushfire Overlay Map	Yes
Priority Habitat identified	Yes
Proposed Works	15 Residential lots, cul de sac road and two pedestrian linkages.
Water Supply	Reticulated water supply.
Vehicular Access	William Street.

1.2 Bushfire Assessment

A bushfire assessment is a process of analysing information about the potential impacts on a proposed development that is likely to occur in a bushfire hazard scenario. A 'bushfire-prone area' is an area where a bushfire event is potentially likely to occur, and that may result in significant adverse impact on buildings and/or lives.

In Tasmania, most local Councils have a planning scheme overlay map that identifies bushfire-prone areas. Subdivision within a bushfire-prone area triggers the assessment of the Bushfire-Prone Areas Code under the planning schemes and subsequently requires assessment against the provisions of the Code. The assessment generally requires a BHMP to be provided as part of the application.

The bushfire assessment will determine the Bushfire Attack Level (BAL) for the future lots, which measures the possible exposure of a building to bushfire hazard. The BAL is assessed in accordance with Australian Standard *AS 3959-2018 construction of buildings in bushfire-prone areas*.

The subject site falls within the municipal area of Northern Midlands. The assessment has been undertaken in accordance with C13.0 Bushfire-Prone Areas Code and to accompany a subdivision application under the *Tasmanian Planning Scheme – Northern Midlands*. Please refer to Section 6 of the report for detail.

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A BAL assessment is required to understand the fuel management requirements for the subject site and to demonstrate that future new buildings within each proposed new lots can be constructed to a BAL19 level under the *Building Act 2016*.

1.3 References

The following documents were referred in the preparation of, and should be read in connection with, this bushfire assessment report:

- Tasmanian Government, Director's Determination – Requirements for Building in Bushfire Prone Areas Version 2.2.
- Tasmanian Government, Director's Determination – Bushfire Hazard Areas Version 1.1
- Tasmanian Planning Scheme – Northern Midlands. C13.0 – Bushfire-Prone Areas Code
- Australian Standard, AS3959-2018 construction of buildings in bushfire-prone areas.
- Building Act 2016
- Tasmanian Fire Service, Bushfire Hazard Advisory Notes

2. Site Description

2.1 Site context

A 15-lot subdivision is being undertaken at 7a William Street, Campbell Town. The subdivision will be undertaken in one stage. The site consists of one regular shaped internal lot, which has a total area of 1.3ha. The land is located on the eastern side of the existing urban area of Campbell Town, within the general residential area of the township.

The site is currently vacant land. There is informal access provided via an unformed access strip onto William Street. The site adjoins the TasRail line and reserve to the east of the site.

The site adjoins residential land to the north and commercial development to the west. Land to the south appears to be residential, although does contain a permanently listed heritage building, 'The Grange'.

The site is generally flat, with the site sitting at the 200m AHD contour.



Figure 1 – Aerial view of the subject site and its surrounding area (source: The LISTMap)

The subject site will be serviced by a reticulated water supply maintained by TasWater which runs from William Street to the north.

2.2 Planning controls

The site is within the municipal area of the Northern Midlands Council. Therefore, the planning instrument is the *Tasmanian Planning Scheme – Northern Midlands* (The Scheme).

The subject site is currently within the General Residential Zone. There are two small portions of land within the open space zone. The subject site adjoins the General Residential zone to the north, general business zone to the west, community purpose land to the south, and utilities zone to the east.

The subject site entirely falls within the Bushfire-Prone Areas Overlay

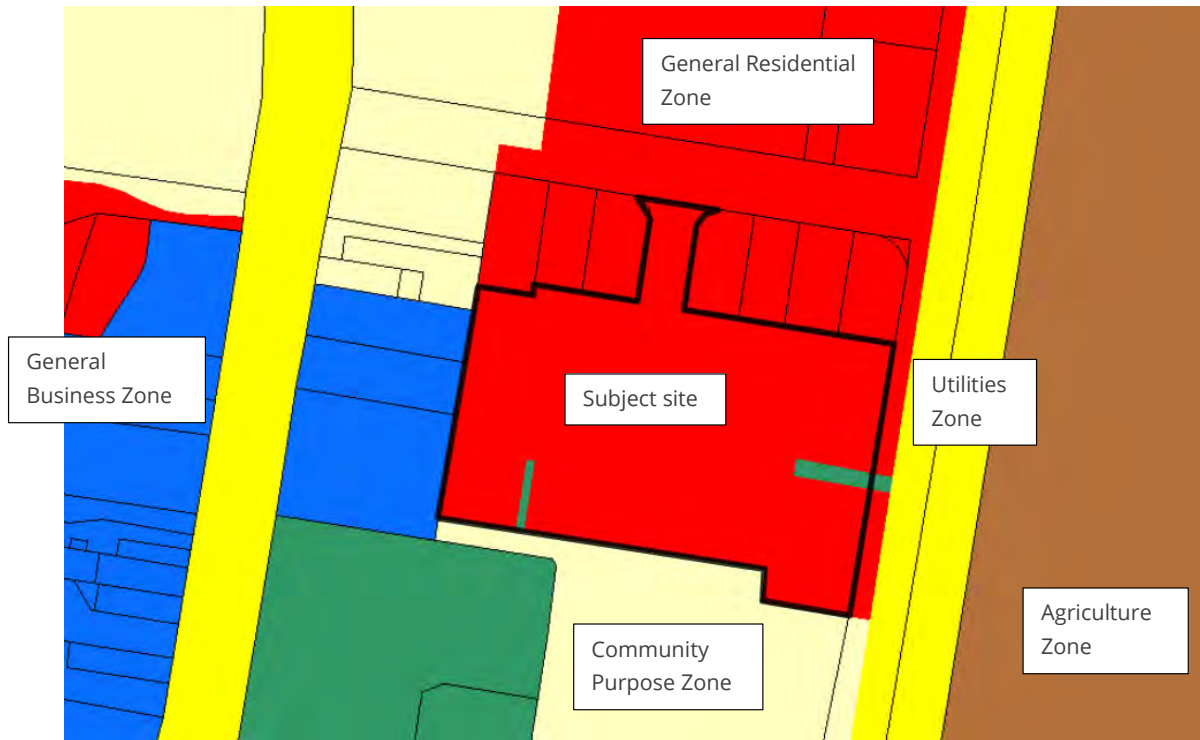


Figure 2 – Zoning Map (source: The LIST Map)

3. The Proposal

It is proposed to subdivide the subject site into 15 residential lots. The lots are intended for residential development. Lots range in size from 600m² up to 1168m². A new cul-de-sac road will be developed from William Street, providing access via two cul-de-sac heads across the subject site. Solid metal fencing will be provided on the eastern boundary of lots 10, 11 and 12, and the southern boundary of lots 7-10 to provide a greater BAL 19 compliant building areas.

Cul-de-sac roads will be compliant with LGAT standards, with a recommendation to provide no standing signage on the cul-de-sac. The development will be serviced via reticulated water with hydrants installed as per engineering design and TasWater requirements.

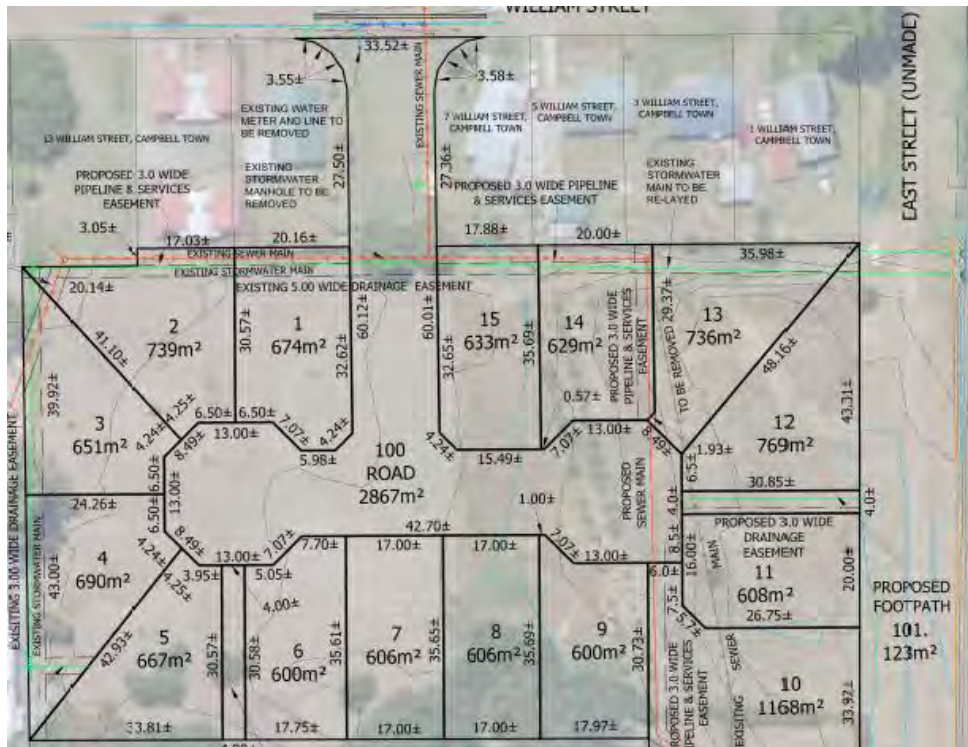


Figure 3 – Proposed subdivision layout. Refer to Annexure 2 for detail.

4. Bushfire Site Assessment

4.1 Vegetation Analysis

4.1.1 TasVeg Mapping

The TasVeg map 4.0 provides general information indicating potential bushfire prone vegetation in the area.

The mapping shows the vegetation community across the subject site as FAG (Agricultural Land). Land to the north, south and west are classified as Urban (FUM) land. The mapping appears to be generally an accurate portrayal of mapping on site. A site visit noted that land to the south, adjoining lots 6-10 was classified as grassland and wasn't currently managed by the Grange residential property.

No other vegetation classifications other than grassland has been identified within 120m of the subject site.

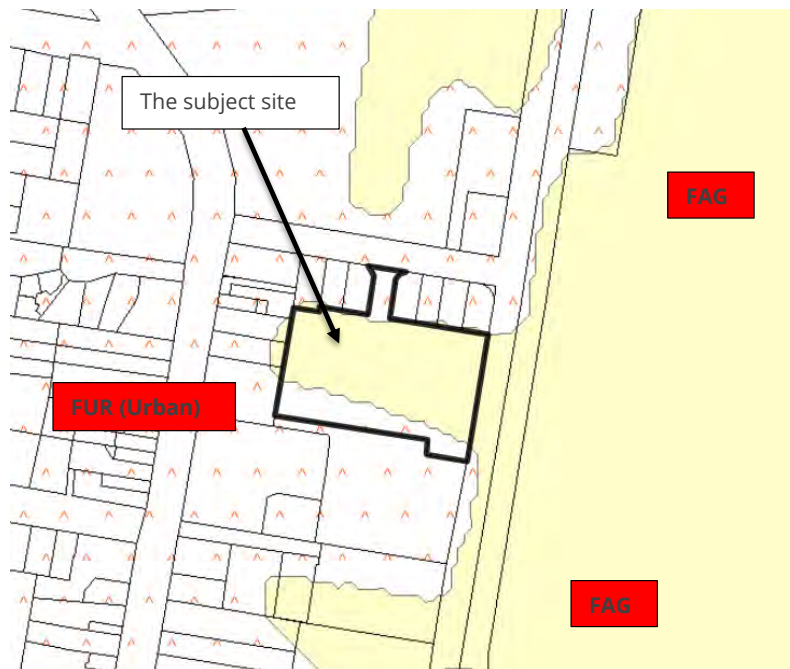


Figure 4 - TasVeg 4.0 map (source: The LISTMap)

4.1.2 Vegetation Type and Separation

A site visit was conducted on the 9th of March 2023. An analysis of the land and bushfire prone vegetation within 120m from the subject site is provided below.

Direction	Analysis
North	Land directly north of the access onto William Street, contained grassland for 100m+. The grassland was used for grazing purposes at the time of inspection. It adjoined the recreation complex to the north west.
East	Grassland for 100m+. Part of a large and active farming estate. The road reserve directly adjoining the site wasn't managed and was assessed as a bushfire threat.
South	Land to the south of lots 7-10 was classified as grassland for a distance of approximately 5m - 15m. This portion of land was privately owned and part of the heritage listed 'Grange' estate. The site visit showed that this portion of the land wasn't managed with the remainder of the site and was assessed as a potential threat. Land to the south of lots 5 and 6 provided an unused gravel track. There were some vegetation plantings within this access strip to the south. There was no unmanaged understory through this section, with the strip of trees having a width of 8m. Land beyond the strip to the south was managed as the Campbell Town park. The balance of the land to the south was considered as managed.
West	Managed for 100m+

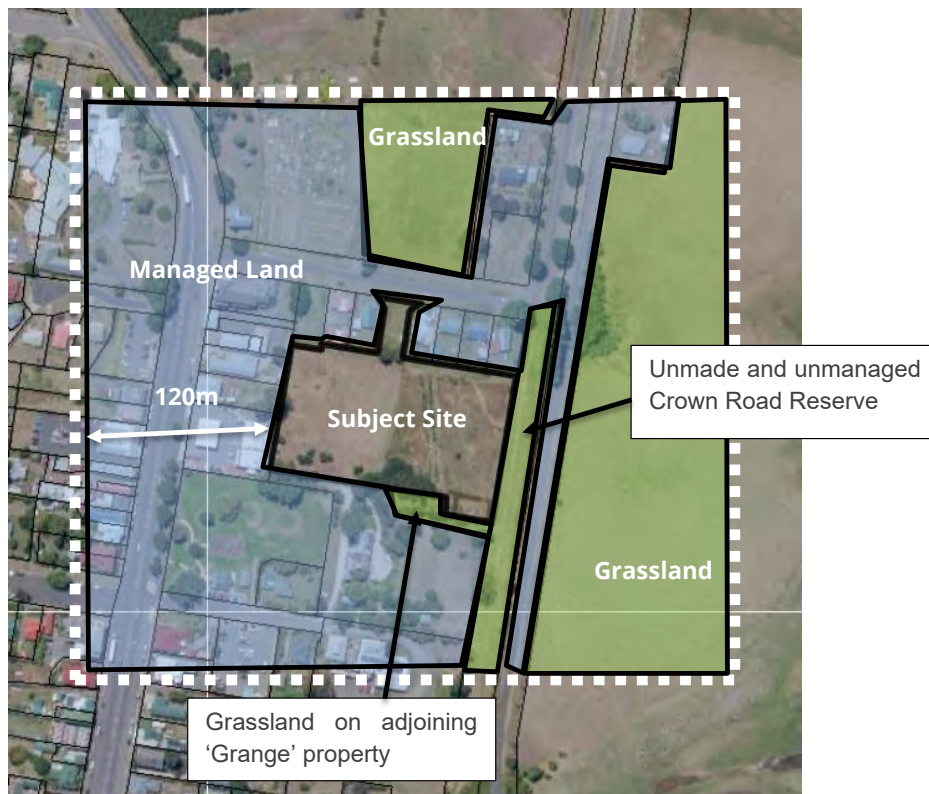


Figure 5 – Vegetation analysis within 100m – 120m of site.

4.2 Slope Analysis

Figure 6 below shows the slope of land under the classified vegetation **in relation to** the subject site. The identified bushfire prone vegetation occurs on land that is generally flat. There is no obvious slope within the surrounding area.



Figure 6 – Effective slope of site and surrounding bushfire prone vegetation.

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4.3 Photos



Figure 7 – view across the subject site, looking south west.



Figure 8 – Unmanaged grassland on property to the south, adjoining lots 7-10.



Figure 9 – Unmanaged road reserve to the east. Classified as grassland.



Figure 10 – Managed portion of land on the property to the south, the grassland identified on this site (figure 8) is to the right of this photo.



Figure 11 – Vegetation on the southern sides of lots 5 and 6. Not classified as bushfire prone due to lack of understory and minimal width. Not within 20m of other bushfire prone vegetation and adjoins park.



Figure 12 – managed park, public land that adjoins the access strip to the south of lots 5 and 6.

5. Bushfire Protection Measures

5.1 BAL Rating and Risk Assessment

The purpose of the BAL assessment is to identify the minimum separation between the bushfire prone vegetation and a building area within each proposed lot. The assessment aims to achieve the minimum requirements of **BAL 19**.

The definition of BAL 19 is highlighted as follows:

Bushfire attack level (BAL)	Predicted bushfire attack and exposure level
BAL-LOW	Insufficient risk to warrant specific construction requirements
BAL-12.5	Ember attack, radiant heat below 12.5kW/m ²
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m ²
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m ²
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m ²
BAL-FZ	Direct exposure to flames radiant heat and embers from the fire front.

The distances from each lot to the classified vegetation is presented below, along with the slope and type of vegetation. To better demonstrate the required separation as hazard management areas, a 10m x 15m building area is shown on each lot. As per the analysis in Section 4.1, the only vegetation around the subject site is grassland.

Lots 1-3 and lot 15 have been assessed as BAL LOW. This is on the basis that lots are over 50m from grassland, which is the only identified bushfire prone vegetation within 100m of the subject site.

Lot 4	North	East	South East	West
Vegetation within 100m of site	0m-100m+ Managed	0m-100m+ Managed	0m-40m+ Managed 40m-60m Grassland 60m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	NA	Flat	NA
BAL 19 Setbacks	NA	NA	NA	NA
BAL 12.5 Setbacks	NA	NA	NA	NA

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Lot 5	North	East	South East	West
Vegetation within 100m of site	0m-100m+ Managed	0m-100m+ Managed	0m-20m+ Managed 20m-40m Grassland 40m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	NA	Flat	NA
BAL 19 Setbacks	NA	NA	NA	NA
BAL 12.5 Setbacks	NA	NA	NA	NA

Lot 6	North	East	South East	West
Vegetation within 100m of site	0m-100m+ Managed	0m-85m Managed 85m-100m+ Grassland	0m-6m+ Managed 6m-20m Grassland 20m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	NA	6m	NA
BAL 12.5 Setbacks	NA	NA	9m	NA

Lot 7	North	East	South	West
Vegetation within 100m of site	0m-100m+ Managed	0m-70m Managed 70m-100m+ Grassland	0m-6m+ Managed 6m-20m Grassland 20m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	NA	6m	NA
BAL 12.5 Setbacks	NA	NA	9m	NA

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Lot 8	North	East	South	West
Vegetation within 100m of site	0m-100m+ Managed	0m-55m Managed 55m-100m+ Grassland	0m-6m+ Managed 6m-20m Grassland 20m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	NA	6m	NA
BAL 12.5 Setbacks	NA	NA	9m	NA

Lot 9	North	East	South	West
Vegetation within 100m of site	0m-100m+ Managed	0m-40m Managed 40m-100m+ Grassland	0m-6m+ Managed 6m-20m Grassland 20m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	NA	6m	NA
BAL 12.5 Setbacks	NA	NA	9m	NA

Lot 10	North	East	South	West
Vegetation within 100m of site	0m-100m+ Managed	0m-5.5m Managed 5.5m-100m+ Grassland	0m-6m+ Managed 6m-20m Grassland 20m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	5.5m	6m	NA
BAL 12.5 Setbacks	NA	9m	9m	NA

15 Lot Subdivision – 7a William Street, Campbell Town

Lot 11	North	East	South	West
Vegetation within 100m of site	0m-100m+ Managed	0m-7.5m Managed 7.5m-100m+ Grassland	0m-30m+ Managed 30m-44m Grassland 44m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	7.5m	NA	NA
BAL 12.5 Setbacks	NA	10.5m	NA	NA

Lot 12	North	East	South	West
Vegetation within 100m of site	0m-60m Managed 60m-100m+ Grassland	0m-7.5m Managed 7.5m-100m+ Grassland	0m-55m+ Managed 55m-69m Grassland 69m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	7.5m	NA	NA
BAL 12.5 Setbacks	NA	10.5m	NA	NA

Lot 13	North	East	South	West
Vegetation within 100m of site	0m-60m Managed 60m-100m+ Grassland	0m-7.5m Managed 7.5m-100m+ Grassland	0m-60m+ Managed 60m-74m Grassland 74m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	6m	NA	NA
BAL 12.5 Setbacks	NA	9m	NA	NA

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Lot 14	North	East	South	West
Vegetation within 100m of site	0m-60m Managed 60m-100m+ Grassland	0m-38m Managed 38m-100m+ Grassland	0m-55m+ Managed 55m-69m Grassland 69m-100m+ Managed	0m-100m+ Managed
Slope (degrees, over 100m)	NA	Flat	Flat	NA
BAL 19 Setbacks	NA	NA	NA	NA
BAL 12.5 Setbacks	NA	NA	NA	NA

15 Lot Subdivision – 7a William Street, Campbell Town