



**DEVELOPMENT
ASSESSMENT
SPECIAL
COMMITTEE
(DASC)
AGENDA**

**COMMUNITY
ADMINISTRATION CENTRE
(CAC)**

24 NOVEMBER 2020

NOTICE OF MEETING

Notice is hereby given that the next meeting of the Development Assessment Special Committee (DASC) will be held at the Community Administration Centre (CAC), 47 Cole Street, Sorell on Tuesday, 24 November 2020 commencing at 4:30 pm.

CERTIFICATION

I, Robert Higgins, General Manager of the Sorell Council, hereby certify that in accordance with Section 65 of the *Local Government Act 1993*, the reports in this Agenda have been prepared by persons who have the qualifications and experience necessary to give such advice. Information and recommendations or such advice was obtained and taken into account in providing general advice contained within the Agenda.

ROBERT HIGGINS
GENERAL MANAGER
19 November 2020



AGENDA

**FOR THE DEVELOPMENT ASSESSMENT SPECIAL COMMITTEE (DASC)
MEETING TO BE HELD AT THE COMMUNITY ADMINISTRATION CENTRE
(CAC), 47 COLE STREET, SORELL ON TUESDAY 24 NOVEMBER 2020**

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1.0 ATTENDANCE

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Chairperson Mayor Vincent
Deputy Mayor N Reynolds
Councillor K Degrassi
Councillor V Gala
Councillor G Jackson
Councillor C Torenus
Councillor M Reed
Councillor D De Williams
Councillor B Nichols
Robert Higgins, General Manager

2.0 CONFIRMATION OF THE MINUTES OF 10 NOVEMBER 2020

RECOMMENDATION

“That the Minutes of the Development Assessment Special Committee (DASC) Meeting held on 10 November 2020 be confirmed.”

3.0 DECLARATIONS OF PECUNIARY INTEREST



In considering the following land use planning matters the Development Assessment Special Committee intends to act as a planning authority under the *Land Use Planning and Approvals Act 1993*.

4.0 LAND USE PLANNING

^

4.1 DEVELOPMENT APPLICATION NO. DA 2020 / 00292 - 1

APPLICANT: PITT & SHERRY

PROPOSAL: DA2020/292 - ROAD WORKS / UPGRADES FOR THE SORELL SOUTHERN BYPASS (INCLUDING ASSOCIATED HIGHWAY WORKS & BRIDGE)

ADDRESS: VARIOUS INCLUDING - MAIN ROAD/TASMAN HIGHWAY (5 ROAD LOTS), STORES LANE (2 ROAD LOTS INC CT 133032/101), LOTS 201 & 204 WHITELEA COURT, SORELL (CT 164399/201 & CT 175491/204), 82 MAIN ROAD, SORELL, 5 GIBLIN DRIVE, SORELL, 5 OAKS COURT, SORELL, GIBLIN DRIVE (ROAD LOT), SORELL RIVULET (WESTERN LOT & EASTERN LOT CT 8740/5), 21 OAKS COURT, SORELL (CT 174734/2 & 3), 23 OAKS COURT, SORELL (CT 174734/4 & 5), 18 PARSONAGE PLACE, SORELL, LOT 1 ARTHUR HIGHWAY, SORELL (CT 8740/1), 3 KIDBROOK ROAD, SORELL, LOT 2 ARTHUR HIGHWAY, SORELL (CT 114604/2), 27, 46 & 136 ARTHUR HIGHWAY, SORELL, ARTHUR HIGHWAY, SORELL (ROAD LOT), NUGENT ROAD, SORELL (ROAD LOT)

RECOMMENDATION

That pursuant to Section 57 of the *Land Use Planning and Approvals Act 1993* Council resolve to approve:

Development Application No. DA 2020 / 00292 - 1 for a DA2020/292 - Road Works / Upgrades for the Sorell Southern Bypass (including associated highway works & bridge) at Various including - Main Road/Tasman Highway (5 road lots), Stores Lane (2 road lots inc. CT 133032/101), Lots 201 & 204 Whitelea Court, Sorell (CT 164399/201 & CT 175491/204), 82 Main Road, Sorell, 5 Giblin Drive, Sorell, 5 Oaks Court, Sorell, Giblin Drive (road lot), Sorell Rivulet (western lot & eastern lot CT 8740/5), 21 Oaks Court, Sorell (CT 174734/2 & 3), 23 Oaks Court, Sorell (CT 174734/4 & 5), 18 Parsonage Place, Sorell, Lot 1 Arthur Highway, Sorell (CT 8740/1), 3 Kidbrook Road, Sorell, Lot 2 Arthur Highway, Sorell (CT 114604/2), 27, 46 & 136 Arthur Highway, Sorell, Arthur Highway, Sorell (road lot), Nugent Road, Sorell (road lot) for Pitt & Sherry be approved, subject to the following conditions:

1. Development shall generally be in accordance with the endorsed plans submitted on 02/09/2020 except as may be amended by the conditions of this permit.



2. A landscaping plan is to be submitted to Council detailing areas to be landscaped at completion of works. There should be a focus on areas with higher densities of development including around the two roundabouts at either end of the Bypass.

The plan is to be to the satisfaction of the Senior Planner and should include details of plant type, their mature height and maintenance regime. Landscaping on the site should occur within 1 month of the road being open for use.

3. Detailed construction and environmental management plan that detail soil and water management and works being undertaken in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and "Tasmanian Coastal Works Manual" (DPIPWE, Page and Thorp, 2010).
4. The Stormwater Management Plan undertaken by Pitt and Sherry dated 23 July 2020, must be implemented during construction and where applicable, thereafter.
5. Street lighting must be provided as documented within the proposal plans.
6. Details of the finishes of the proposed access track to 3 Kidbrook Road, Sorell complementary to the heritage characteristics of this property and that enables standard road maintenance practices, to be provided to the satisfaction of the General Manager prior to works commencing.

TasWater Conditions

- | | | |
|----|------------------------|-----------------------|
| 7. | Refer to TasWater form | 04 (attached) |
| | Reference number | TWDA 2020 / 01631-SOR |
| | Dated | 13 November 2020 |

Environmental Conditions

8. If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the construction works, then the person responsible for the work must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.
9. Vehicles carrying loads containing material which may blow or spill must be equipped with effective control measures to prevent the escape of the materials from the vehicles when they leave a work site or travel on public roads. Effective control measures may include tarpaulins or load dampening.



10. A Construction Environmental Management Plan (CEMP) must be prepared and submitted to the General Manager. No works shall commence until the General Manager is satisfied that the CEMP is consistent with the permit conditions.
11. The Construction Environmental Management Plan (CEMP) must contain a detailed description of the proposed timing and sequence of the major construction activities and of the proposed management measures to be implemented to avoid or minimise the environmental impacts during the construction phase. The CEMP must include, but not necessarily be limited to, management measures in relation to the following:
 - How noise from construction works will be managed;
 - Measures to protect nearby residents significantly affected by construction noise;
 - Details of how the contractor will consult and communicate with residents;
 - Noise and water quality monitoring;
 - Complaints handling procedures and a 'hotline' for residents to report issues;
 - An evaluation of alternatives to noisy construction activities such as rock breaking;
 - Soil and Water Management strategies to prevent sediment entering stormwater and surface waters;
 - Measures to ensure fuel and hazardous substances do not contaminate land or water;
 - Dust suppression measures to protect nearby residents and businesses;
 - Weed Management;
 - Flora and fauna management;
 - CEMP worker training and induction;
 - A complaints register; and
 - A designated 7 day per week contact phone number for community enquiries and complaints.
12. Subject to condition 6, all civil and construction work must be undertaken within the following hours:
 - a. 7.00. a.m. to 6.00. p.m. from Monday to Friday;
 - b. 8.00 a.m. to 6.00 p.m. on Saturdays; and
 - c. 10 a.m. to 6.00 p.m. on Sundays or public holidays.
13. The General Manager may (under exceptional circumstances) authorise works between 6pm and 7am, for a consecutive or cumulative period not exceeding 5 days. The contractor must provide evidence that nearby residents have been notified at least 48 hours before the works commence.

14. All noise measurements must be undertaken in accordance with the Tasmanian Noise Measurement Procedures Manual.
15. Construction activities must be managed using such measures as are necessary to prevent dust emissions causing environmental nuisance. Such measures may include but are not limited to:
 - Using a dust suppression method such as watering dust generating surfaces; and
 - Ceasing construction activities in windy weather when dust may be blown in the direction of residences.
16. Any vegetation removed as part of the construction works, must not be burnt on-site.
17. During construction activities all reasonable measures must be implemented to ensure that solids entrained in stormwater traversing the construction site are retained on the land. Such measures may include provision of strategically located sediment fences, and appropriately sized and maintained sediment settling ponds.
18. Unless otherwise approved in writing by the General Manager, environmentally hazardous material held on a construction site, including chemicals, fuels and oils, must be located within impervious bunded areas or spill trays which are designed and maintained to contain at least 110% of the total volume of material.
19. Spill kits appropriate for the types and volumes of materials handled on the construction site must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.
20. Any construction lighting used must be designed and located to minimise light spillage and not create a nuisance to neighbouring residential properties.
21. Signage shall be erected on the boundary of the work site which includes the contact phone number for residents to seek information or report issues associated with the construction works.

Engineering Conditions

22. The stormwater design shall allow for an additional pipeline to service the Sorell School land off the northern side of Main Road as discussed and agreed between Pitt & Sherry and Sorell Council engineering staff.



23. The outlet of Stormwater Line N2-1 and N2-2 shall be modified so that the stormwater is treated prior to exiting into the Sorell Rivulet. The preliminary design shows a connection into the outlet pit of the existing rain garden at the rear of Whitelea Court.
24. A Council engineering officer is to check all the realigned stormwater pipelines belonging to Council prior to backfill taking place. Please call Leon Ashlin on 0417 051 736, to arrange an inspection, allowing 24 hours' notice. The Contractor may negotiate alternative arrangements with Council, where possible, to improve efficiency with this requirement.

NOTE: THE FOLLOWING ADVICE APPLIES TO THIS PERMIT

- This permit shall lapse at the expiration of two (2) years from the date on which it is granted if the development and use is not substantially commenced within that period.
- This permit does not imply that any other approval required under any other by-law or legislation has been granted.
- Separate Building Approval may be required prior to commencement of the development.
- The development does not infer approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. It is the responsibility of the applicant to obtain approval from this Environment Australia for any impacts that may occur to the Orielton Lagoon RAMSAR site.
- A permit for carrying out any works on a State Road must be obtained from the Department of State Growth through applying on-line at permits@stategrowth.tas.gov.au. At that time a thorough investigation of the access onto the State Highway will be conducted and conditions will apply. Conditions will include, but are not limited to:
 - The construction standards including access widths, tapers, slope of the access and drainage;
 - Sealing of the access from the road edge to the property boundary;
 - Ensuring the access has available sight distance as per Table 3.2, Safe Intersection Sight Distance, Austroads Guide to Road Design part 4A where possible.

You may appeal against the above condition/s, any such appeal must be lodged within fourteen (14) days of service of this notice to the Resource Management and Planning Appeal Tribunal, Level 1, 144-148 Macquarie Street Hobart 7001. Ph ☎ 6165 6794 or email rmpat@justice.tas.gov.au.



Introduction

The Sorell Southern Bypass (bypass) is located on the south eastern side of Sorell joining Arthur Highway and Tasman Highway/Main Road circumventing the centre of Sorell. The bypass forms part of the Department of State Growth's South East Traffic Solution (SETS). The bypass passes through primarily agriculture land, with some land zoned General Residential and Light Industrial affected towards the southern end of the bypass. The application documents provide the following description of the development:

The bypass will be located between the Tasman Highway and the Arthur Highway. A roundabout is proposed at the south-west end to facilitate traffic movement to both Sorell and towards the causeway. Another roundabout is proposed at the north-east end to facilitate the movement of vehicles into Sorell. The two-lane bypass will have a speed limit of 80km/hr. It is expected that 40% of traffic entering Sorell from the causeways and 60% of traffic entering Sorell from the Arthur Highway will take the proposed bypass.

A single span bridge crossing of Sorell Rivulet is proposed for the bypass. As there is a standing obligation for State Growth to maintain access to 3 Kidbrook Road, Sorell, a new access track is also proposed, which will pass under the new bridge to link the property with the access network north of the bypass.

Where land is being acquired, the new fences will be erected on the new boundary lines. These will be standard 1.2m high rural post and wire fences, with the exception of the new boundaries on industrial properties, which will be 1.8 m high chain-wire security fences.

The banks of the Sorell Rivulet adjacent to the bridge area will be planted with native vegetation chosen from the WSUD EPA Guidelines 2015, so that the overall impact on the erosion potential resulting from removal of native vegetation is negligible. Otherwise, exposed batters, roadside drainage swales and a bioretention basin on the east side of the Sorell Rivulet will be planted with a typical roadside grass mix.



The proposal also includes the closure of Stores Lane.

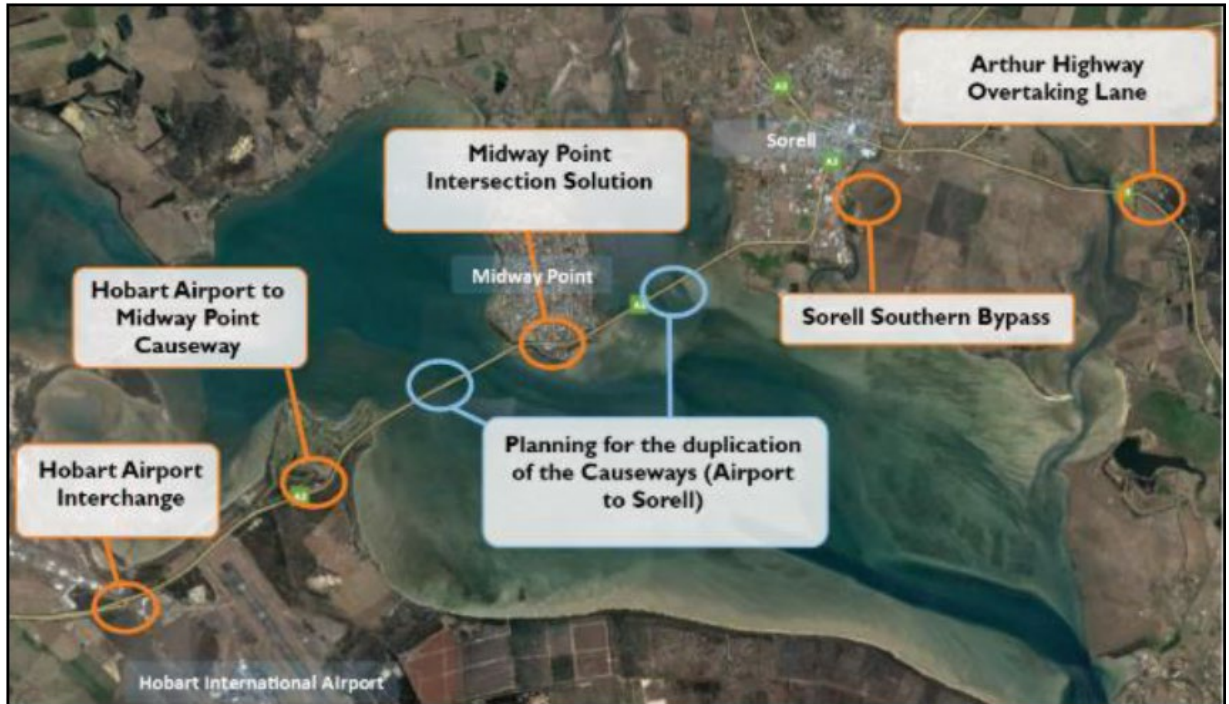


Figure 1: South East Traffic Solution route with Sorell Southern Bypass shown on the south-east fringe of Sorell. (Source: planning application documentation)



Figure 2: Proposed Sorell southern bypass. (Source: planning application documentation)

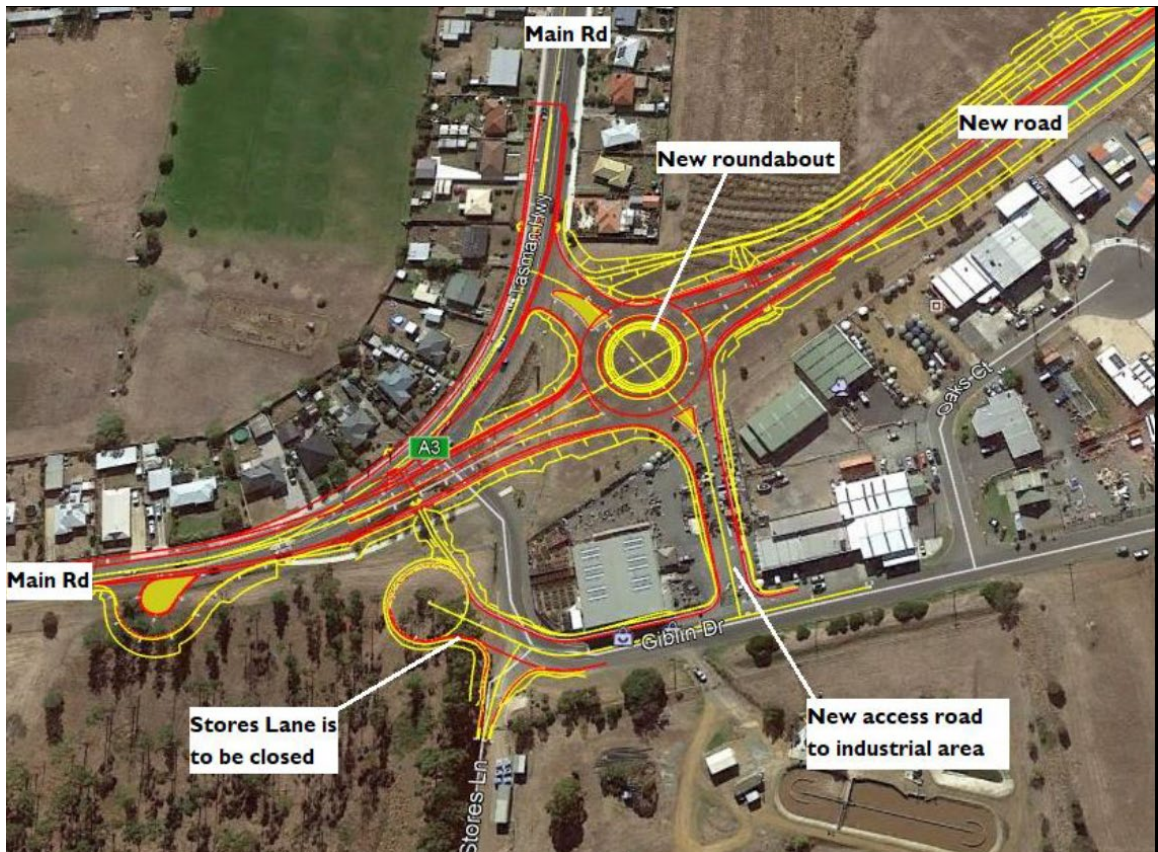


Figure 3: Proposed works at south-west end of bypass includes the closure of Stores Lane, a new roundabout and access road off the roundabout to industrial area, shared path, and a cul-de-sac turning area at the end of Giblin Drive. (Source: planning application documentation)

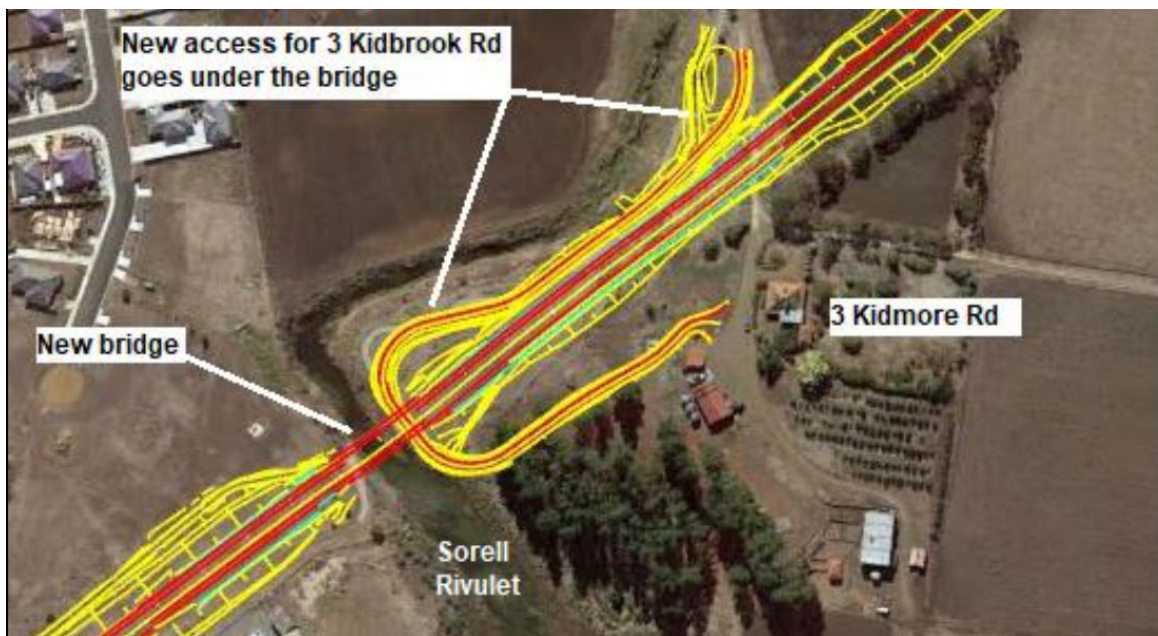


Figure 4: Proposed works include a new bridge across the Sorell Rivulet, new access track to 3 Kidmore Road and a shared path to link to existing trail network. (Source: planning application documentation)

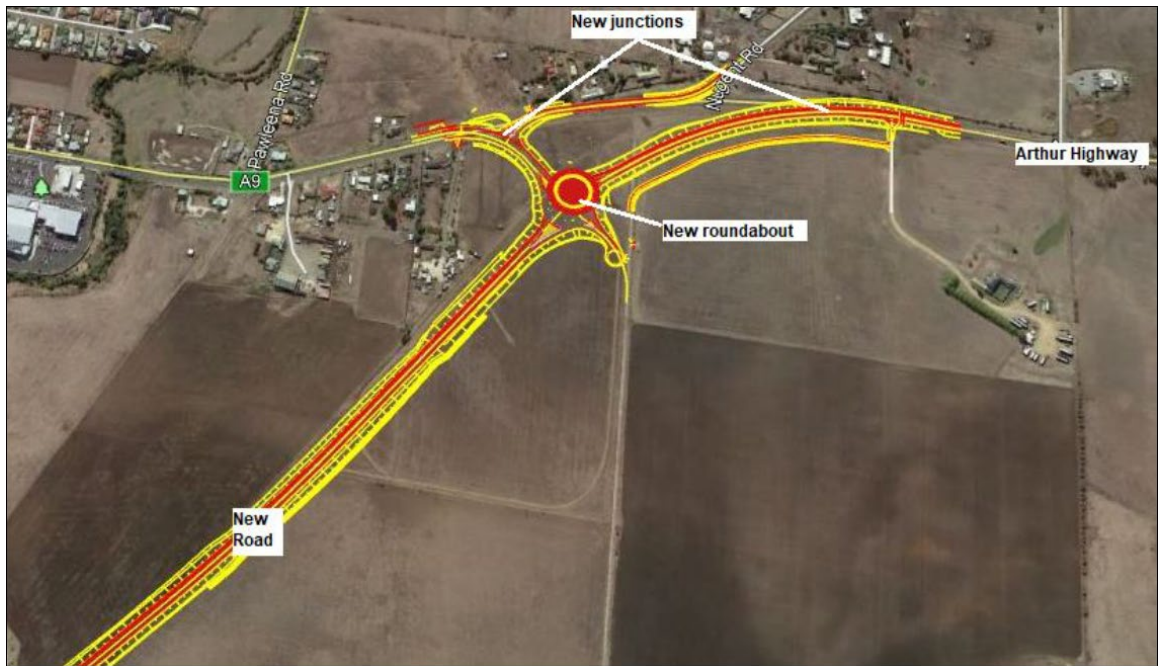


Figure 5: Proposed works include a new roundabout, intersections with Arthur Highway and resurfacing of Arthur Highway and Nugent Road. (Source: planning application documentation)

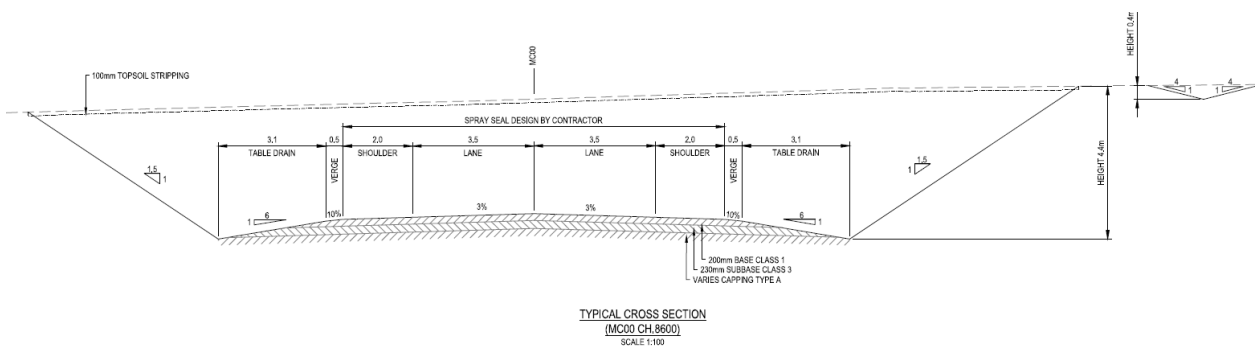


Figure 6: Cross section shown at CH8600 will contain the largest cut at 4.4 m. (Source: planning application documentation)

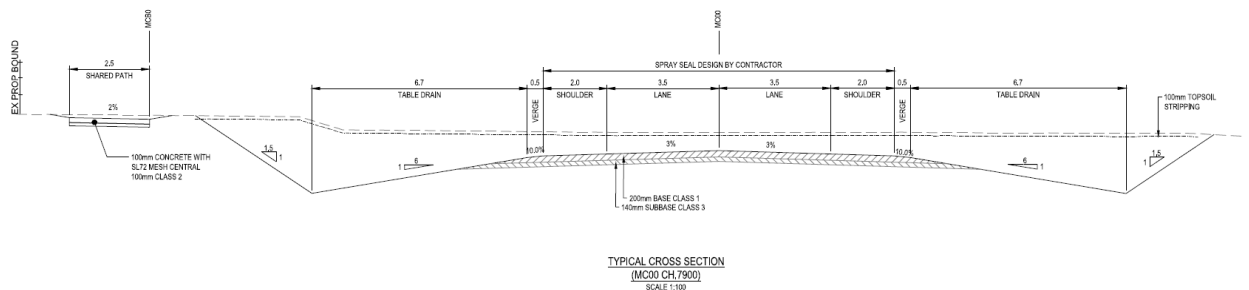


Figure 7: Cross section shown at CH7900 shows 2.5 m wide shared path and the two x 3.5 m lane highway with shoulders. (Source: planning application documentation)

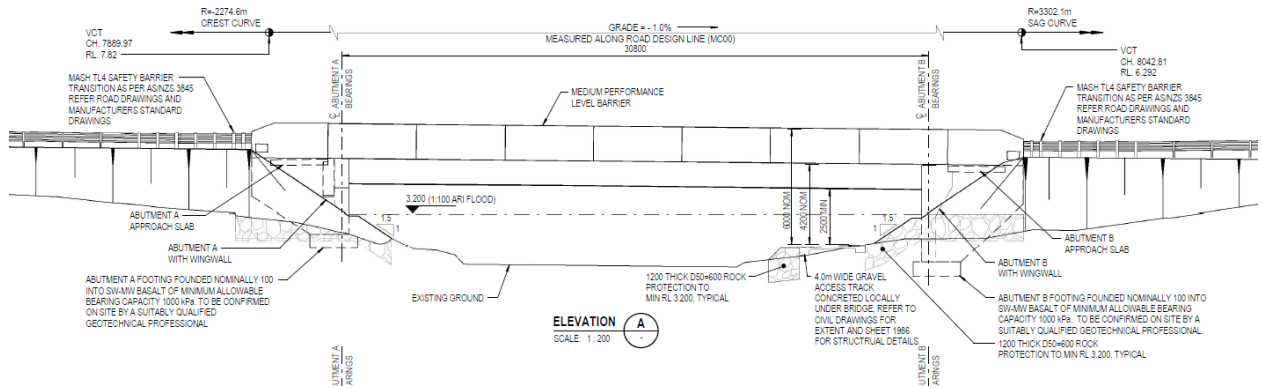


Figure 8: Shows proposed bridge over Sorell Rivulet. (Source: planning application documentation)

Strategic plan

The approval of the Sorell Bypass as part of the broader South East Traffic Solutions has been identified as a key strategic goal for the Council.

Annual plan

The Annual Plan similarly identifies the timely delivery of the South East Transport Projects as a key initiative.

Policy

The construction of the Sorell Bypass is consistent with Council's policy to work towards expansion of the General Residential area to the east of the township of Sorell.

Environmental implications

The majority of the land is farming land and there will be minimal environmental implications through the works. It is anticipated that through the application of appropriate conditions, any potential environmental risks will be managed to ensure they are appropriately mitigated.

Asset management implications

The Bypass asset will remain in the ownership of the Department. However, following the construction of the Bypass, the existing Arthur Highway is anticipated to be transferred to the Sorell Council which will then be an asset of Council's to manage. Council's position is that this can only occur once the Sorell Rivulet bridge is replaced or funding provided by the State to Council for same.

Risk management implications

It is not anticipated that there will be any risk management implications.

Community implications

Community Implications will be focussed on the improved road network as part of the broader South East Traffic Solution.

Representations

The application was advertised on 30/10/2020 and representations closed on 16 November 2020.

At the time of preparing this report, no representations were received.

Date of Receipt of Application

02/09/2020

Date by Which a Decision Must be Made

(42 days after date of lodgement)

Statutory implications**Zone:**

The proposed development and use of Utilities is located within seven zones under the *Sorell Interim Planning Scheme 2015* including:

- Utilities Zone
- General Residential Zone
- Light Industrial Zone
- Rural Resource Zone
- Environmental Management Zone
- Particular Purpose Zone 1 – Urban Growth Zone
- Particular Purpose Zone 2 – Transport Corridor

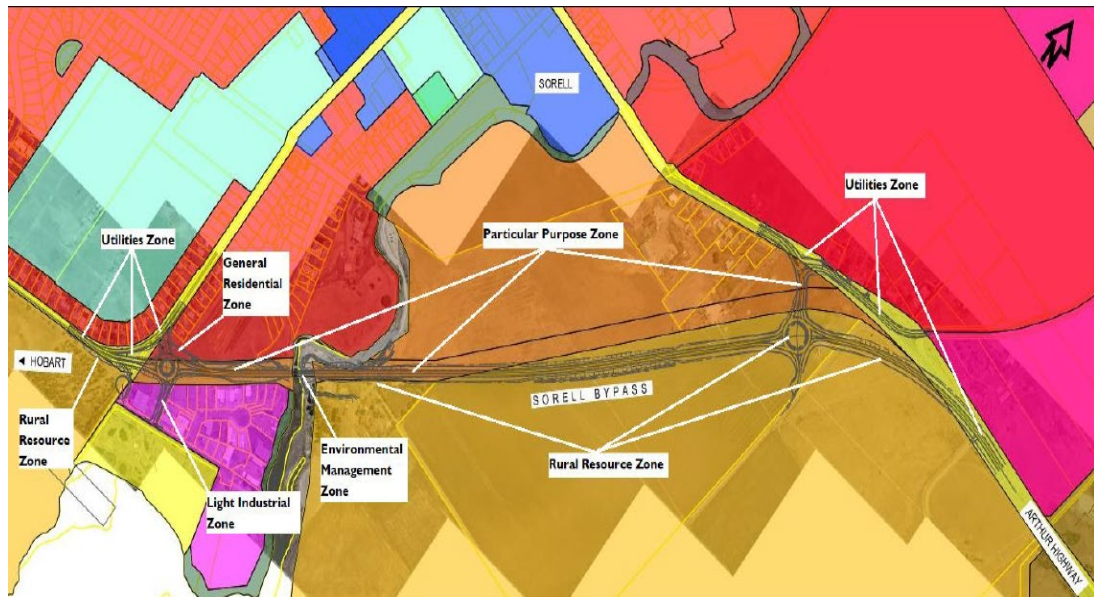


Figure 9: proposed works and effected zones (source: planning application documentation)

Utilities zone

The proposal is subject to the Utilities zone within the area of works along Arthur Highway and Tasman Highway/Main Road. Utilities is a permitted use class within the Utilities zone. The proposal triggers two discretions under this zone:

- Clause 28.3.2 Noise
P1
Noise emissions measured at the boundary of a residential zone must not cause environmental harm within the residential zone.

The application documents include a noise assessment. Noise logging was conducted in September/October 2019 to establish the existing noise levels in the area affected by the upgrade. Current noise levels without the road upgrade, and the noise levels ten years after completion of the upgrade were modelled. The Noise Assessment found that traffic noise levels will go down at many locations on Main Road, Gordon Street, Cole Street, Parsonage Place and Pelham Street. Noise levels are predicted to increase at some properties near the bypass and its new intersections, primarily Nugent and Main Roads and the Arthur Highway. The predicted increase in noise level identified at these properties is less than 3 dB(A). A traffic noise increase of less than 3 dB(A) is unlikely to be perceptible to the residences, and would therefore not make any noticeable difference to the amenity of these residents nor cause any increased degree of environmental harm.

The proposal satisfies 28.3.2 P1.

General Residential zone

The proposal is subject to the General Residential zone provisions within the area near to the southern roundabout (CT 179047/205) and a small area of along the Arthur Highway (CT126331/1). Utilities is a discretionary use within the General Residential with the use and development triggering three discretions.

- Clause 10.3.1 Hours

P1

Hours of operation must not have an unreasonable impact upon the residential amenity through commercial vehicle movements, noise or other emissions that are unreasonable in their timing, duration or extent.

There will be no change to the hours of operation. The primary emission will be noise. The submitted noise assessment concluded that in the locations where there will be some increase in noise levels there will not be any discernible difference to the amenity of these residents.

The proposal satisfies clause 10.3.11 P1.

- Clause 10.3.1 Noise

P2

Noise emissions measured at the boundary of the site must not cause environmental harm.

The Noise Assessment found that traffic noise levels will go down at many locations with noise levels predicted to increase at some properties near the bypass and its new intersections; primarily Nugent and Main Roads and the Arthur Highway. The predicted increase in noise level identified at these properties is less than 3 dB(A). A traffic noise increase of less than 3 dB(A) is unlikely to be perceptible to the residences and would therefore not make any noticeable difference to the amenity of these residents nor cause any increased degree of environmental harm.

The proposal satisfies 10.3.1 P2.

- Clause 10.3.1 Lighting

P3

External lighting must not adversely affect existing or future residential amenity, having regard to all of the following:

- level of illumination and duration of lighting;*
- distance to habitable rooms in an adjacent dwelling.*

The streetlights although not identified as being baffled will incorporate TasNetworks approved Aldridge V-LED light fittings. This design ensures that light is dispersed along the roads and not result in overspill into adjoining residential properties.

A condition is recommended to ensure this commitment in the report is met. Subject to the condition, the proposal satisfies 10.3.1 P3.

Light Industrial Zone

The proposal is subject to the Light Industrial zone provisions. As Stores Lane is to be closed, the proposal creates a new access road from the proposed roundabout to Giblin Drive in the light industrial area. Utilities is a discretionary use in the zone. The proposal triggers three discretions:

- Clause 24.3.1 Hours P1
P1

Hours of operation of a use within 100 m of a residential zone must not have an unreasonable impact upon the residential amenity of land in a residential zone through commercial vehicle movements, noise or other emissions that are unreasonable in their timing, duration or extent.

There will be no change to the hours of operation. The primary emission will be noise. The submitted noise assessment concluded that in the locations where there will be some increase in noise levels there will not be any noticeable difference to the amenity of these residents.

The proposal satisfies clause 14.3.1 P1.

- Clause 24.3.1 Noise P1
P1

Noise emissions measured at the boundary of a residential zone must not cause environmental harm within the residential zone.

There will be no change to the hours of operation of the existing road network. The Noise Assessment found that traffic noise levels will go down at many locations with noise levels predicted to increase at some properties near the bypass and its new intersections, primarily Nugent and Main Roads and the Arthur Highway. The predicted increase in noise level identified at these properties is less than 3 dB(A). A traffic noise increase of less than 3 dB(A) is unlikely to be perceptible to the residences and would therefore not make any noticeable difference to the amenity of these residents nor cause any increased degree of environmental harm.

The proposal satisfies 10.3.1 P2.



- Clause 24.3.3 External lighting
P1
External lighting within 50 m of a residential zone must not adversely affect the amenity of adjoining residential areas, having regard to all of the following:
 - (a) *level of illumination and duration of lighting;*
 - (b) *distance to habitable rooms in an adjacent dwelling.*

The streetlights although not identified as being baffled have been identified as incorporating TasNetworks approved Aldridge V-LED light fittings. This design ensures that light is dispersed along the roads and will not result in overspill into adjoining residential properties.

A condition is recommended to ensure the commitment in the report is met. Subject to the condition, the proposal satisfies 10.3.1 P3.

Rural Resource zone

A large section of the northern area of the bypass is within the Rural Resource zone with two smaller sections near to Stores Lane (to be closed) and 3 Kidbrook Road also subject to the provisions of the Rural Resource zone. Utilities is a discretionary use within the zone. The proposal triggers four discretions within this zone.

- Clause 26.3.2 Discretionary use
P1
A discretionary non-agricultural use must not conflict with or fetter agricultural use on the site or adjoining land having regard to all of the following:
 - (a) *the characteristics of the proposed non-agricultural use;*
 - (b) *the characteristics of the existing or likely agricultural use;*
 - (c) *setback to site boundaries and separation distance between the proposed non-agricultural use and existing or likely agricultural use;*
 - (d) *any characteristics of the site and adjoining land that would buffer the proposed non-agricultural use from the adverse impacts on amenity from existing or likely agricultural use.*

The proposed use is not a sensitive use and will therefore not fetter existing and potentially future agricultural uses of the nearby land beyond the land subject to the development. Given the linear nature of the land affected, with the western side of the bypass being zoned for future urban use, the proposed road will not unreasonably confine or restrain the agricultural use of agricultural land.

The proposal satisfied clause 23.6.2 P1.

- Clause 26.4.2 P4 Setback building and works

P4

Buildings and works must be setback from land zoned Environmental Management to minimise unreasonable impact from development on environmental values, having regard to all of the following:

- (a) the size of the site;*
- (b) the potential for the spread of weeds or soil pathogens;*
- (c) the potential for contamination or sedimentation from water runoff;*
- (d) any alternatives for development.*

The primary purpose of the bypass is to connect Arthur Highway to the Tasman Highway/Main Road, whilst circumventing Sorell to the east of the township. This requires the crossing of Sorell Rivulet. The proposed works and bridge will require some removal of native vegetation within the Environmental Management Zone, however the majority of the area affected by the Environmental Management Zone will be the single span bridge thereby minimising the footprint. To ensure the potential for the spread of weeds or soil pathogens and the potential for contamination or sedimentation is minimised a detailed construction and environmental management plan is required that includes a weed management plan and soil and water management as a condition on the permit.

Subject to this condition being applied the proposal satisfies clause 26.4.2 P4.

- Clause 26.4.3 P1 Design – works

P1

The location of buildings and works must satisfy all of the following:

(a) be located on a skyline or ridgeline only if:

- (i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope, or the location is necessary for the functional requirements of infrastructure;*
- (ii) significant impacts on the rural landscape are minimised through the height of the structure, landscaping and use of colours with a light reflectance value not greater than 40 percent for all exterior building surfaces;*

(b) be consistent with any Desired Future Character Statements provided for the area;

(c) be located in an area requiring the clearing of native vegetation only if:

- (i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive*



slope, or the location is necessary for the functional requirements of infrastructure;

(ii) the extent of clearing is the minimum necessary to provide for buildings, associated works and associated bushfire protection measures.

The proposed road works and bridge are not located on a skyline or ridgeline. Due to the linear nature and primary purpose of the proposal to join Arthur Highway and Tasman Highway/Main Road, there is no alternative but to disturb pockets of native vegetation. The native vegetation is identified as being of poor condition and reflective of the surrounding agriculture and urban area. It also identifies that weeds are common. Disturbance has been minimised as far as practicable. There are no Desired Future Character Statements provided for the area.

The proposal satisfies clause 26.4.3 P1.

- Clause 26.4.3 P3 Depth of excavation

P3

The depth of any fill or excavation must be kept to a minimum so that the development satisfies all of the following:

- (a) does not have significant impact on the rural landscape of the area;*
- (b) does not unreasonably impact upon the privacy of adjoining properties;*
- (c) does not affect land stability on the lot or adjoining areas.*

Some excavation in this zone will exceed 2m from natural ground level. The excavation is required to ensure the relevant road and safety standards are met. Road infrastructure is a common element in the rural landscape and given it is on the edge of an urban area joining two highways over a relatively short distance, the proposal will not have a significant impact on the rural landscape. Furthermore, the excavation results in parts of the road being below ground level thereby having a negligible impact on privacy of adjoining properties. The proposed works which have been designed to not affect land stability in the area satisfies clause 26.4.3 P3.

Environmental Management Zone

The proposed bridge which has a maximum height of 6.7 m and associated works are located within the Environmental Management Zone. Utilities is a discretionary use in the zone. The proposal triggers three discretions

- Clause 29.3.1 Reserved Land P1

P1

Use must satisfy all of the following:



- (a) *be complementary to the use of the reserved land;*
- (b) *be consistent with any applicable objectives for management of reserved land provided by the National Parks and Reserves Management Act 2002;*
- (c) *not have an unreasonable impact upon the amenity of the surrounding area through commercial vehicle movements, noise, lighting or other emissions that are unreasonable in their timing, duration or extent.*

The Sorell Rivulet forms part of the Pitt Water Nature Reserve which is reserved under the *Nature Conservation Act 2002*. Most of the reserve lies within the Pitt Water-Orielton Lagoon Ramsar site including the area subject to this application. It is identified as an extensive and diverse wetland and is the only Ramsar site in Tasmania located in an urban area. The reserve is part of the major summer feeding grounds for migratory shorebirds in Tasmania and the most southern in Australia. The reserve also provides year-round habitat for many Tasmanian resident shorebirds. The reserve supports some of the most significant samphire vegetation in Tasmania and provides habitat for other saltmarsh species. Seagrasses are another important vegetation type that is protected within the reserve. The reserve is home to numerous threatened flora and fauna species.

The management plan recognises the unique nature of the reserve being within an urban area. The proposal will disturb only a small area of native vegetation, none of which represents a threatened flora or fauna habitat or threatened vegetation community. The proposal is therefore considered to be consistent with the applicable objectives and purpose of the nature reserve. Furthermore, given the urban infrastructure proposed and the recognition within the management of the unique location of the Ramsar wetland being located within an urban area, the proposal is considered to satisfy subclause (a).

The primary emission will be noise and light. The submitted noise assessment concluded that in the locations where there will be some increase in noise levels there will not be any noticeable difference to the amenity of these residents nor cause any increased degree of environmental harm. Similarly, the application documents provide an approved Tasnetworks light fitting to minimise light spill.

The proposal satisfies 29.3.1 P1.

- Clause 29.4.2 Setbacks
P2
Building setback from side and rear boundaries must satisfy all of the following:
 - (a) *be consistent with any Desired Future Character Statements provided for the area or, if no such statements are provided, have regard to the landscape;*

- (b) *be sufficient to prevent unreasonable adverse impacts on residential amenity on adjoining lots by:*
- (i) *overlooking and loss of privacy;*
 - (ii) *visual impact, when viewed from adjoining lots, through building bulk and massing.*

There are no applicable Desired Future Character Statements. The setbacks proposed, the speed of the traffic and the bridge being generally constructed at natural ground level will not result in any unreasonable adverse impacts on residential amenity in terms of overlooking or visual impact.

The proposal satisfies clause 29.4.2 P2.

- Clause 29.4.3 Design P1

P1

The location of buildings and works must satisfy all of the following:

(a) be located in an area requiring the clearing of native vegetation only if:

- (i) *there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope;*
- (ii) *the extent of clearing is the minimum necessary to provide for buildings, associated works and associated bushfire protection measures;*
- (iii) *the location of clearing has the least environmental impact;*

(b) be located on a skyline or ridgeline only if:

- (i) *there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope;*
- (ii) *there is no significant impact on the rural landscape;*
- (iii) *building height is minimised;*
- (iv) *any screening vegetation is maintained.*

(c) be consistent with any Desired Future Character Statements provided for the area or, if no such statements are provided, have regard to the landscape.

The proposed road works and bridge are not located on a skyline or ridgeline. Due to the linear nature and primary purpose of the proposal, there is no alternative but to cross the Sorell Rivulet and disturb native vegetation. The native vegetation is identified as being of poor condition and reflective of the surrounding agriculture land and urban area. It also identifies that weeds are common within and adjacent to the riparian zone. Disturbance has been minimised to the footprint of the bridge and road. There are no Desired Future Character Statements provided for the area.

The proposal satisfies clause 29.4.3 P1.

- Clause 29.4.3 Design P2

P2

Exterior building surfaces must avoid adverse impacts on the visual amenity of neighbouring land and detracting from the contribution the site makes to the landscape, views and vistas.

The bridge will be a reinforced concrete structure with plain grey finish with safety barriers exceeding the maximum reflectivity standard of A2. Given the relatively small scale of the safety barriers, the bridge sitting at ground level of adjoining land and the minimal residents on adjoining land, adverse impacts on the visual amenity of neighbouring land will be avoided. The proposal satisfies clause 29.4.3 P2.

- Clause 29.4.3 Fill P3

P3

Fill and excavation must satisfy all of the following:

- (a) there is no adverse impact on natural values;*
- (b) does not detract from the landscape character of the area;*
- (c) does not impact upon the privacy for adjoining properties;*
- (d) does not affect land stability on the lot or adjoining land.*

The application documents identify the natural values within the area of the bridge being poor and reflective of being on the edge of an urban area and surrounded by agriculture land. The excavation is required to ensure the relevant road and safety standards are met with the excavation proposed, the minimal adjoining residential properties and the speed of traffic using the infrastructure resulting in a negligible impact on privacy of adjoining properties. The proposed works which have been designed to not affect land stability in the area satisfy clause 29.4.3 P3.

Particular Purpose Zone 1 – Urban Growth Zone

The proposed works within the Urban Growth zone include part of the access track to 3 Kidbrook Road and a section of the road connecting the proposed roundabout to Arthur Highway (Sorell direction). Utilities is a discretionary use in the Zone.

- Clause 32.4.1 Building and works

P1

Development must not preclude or hinder the effective and efficient future subdivision and development of the land to urban densities.

The proposal is located on the outer edge (eastern boundary) of the area within the urban Growth Zone ensuring that it does not divide the zone from Sorell township and allows for the zone, to still generally be in a single area of land.



As such, the proposal does not hinder the effective and efficient future subdivision of the land to urban densities. The proposal complies with P1.

Particular Purpose Zone 2 – Future Road Corridor

The proposed works within the Future Road Corridor Particular Purpose zone include sections of the bypass both to the south and north. Utilities (if for road infrastructure) is a permitted use. The proposal meets all permitted standards within this zone.

Waterway and Coastal Protection Code

The proposal includes the bridge and part of the road within the waterway and coastal protection overlay. Accordingly, the bridge and works require assessment against clause E11.7.1. The proposal triggers a discretion under A1 and A4:

P1

Building and works within a Waterway and Coastal Protection Area must satisfy all of the following:

- (a) avoid or mitigate impact on natural values;*
- (b) mitigate and manage adverse erosion, sedimentation and runoff impacts on natural values;*
- (c) avoid or mitigate impacts on riparian or littoral vegetation;*
- (d) maintain natural streambank and streambed condition, (where it exists);*
- (e) maintain in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;*
- (f) avoid significantly impeding natural flow and drainage;*
- (g) maintain fish passage (where applicable);*
- (h) avoid landfilling of wetlands;*
- (i) works are undertaken generally in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and "Tasmanian Coastal Works Manual" (DPIPWE, Page and Thorp, 2010), and the unnecessary use of machinery within watercourses or wetlands is avoided.*

The natural values within the area subject to the water and coastal protection overlay are identified as poor in the ecology assessment. The onsite assessment deemed the saltmarsh community being absent within the Sorell bypass traffic corridor. A few scattered individuals of beaded glasswort and southern seablite were identified which are both typical saltmarsh species, however, the plants were identified as being in poor condition and not present in numbers that can be considered saltmarsh habitat that would be of value to, or used by migratory birds. Similarly, six marine invertebrate species were observed within the Sorell Rivulet during the survey with all species identified as being common to Tasmanian rocky shores.



With regard to the management of stormwater, a stormwater quality treatment system will treat stormwater runoff. The system is identifying as meeting the Nitrogen, Phosphorus and Suspended Solid reduction targets. The treatment includes long sections of vegetated swale and a bioretention basin on the eastern side of the Sorell Rivulet. Erosion control will be provided at outfall locations in accordance with Austroads erosion protection requirements.

Stormwater detention is detailed as unnecessary for the new road surface as the stormwater network discharges either directly into the rivulet (via the swale drains or bioretention basin) or to infrastructure with existing capacity.

Conditions are recommended that require the preparation and implementation of a construction and environmental management plan which will include works being undertaken in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and "Tasmanian Coastal Works Manual" (DPIPWE, Page and Thorp, 2010), as well as the implementation of the stormwater management plan.

P4

Development involving a new stormwater point discharge into a watercourse, wetland or lake must satisfy all of the following:

- (a) risk of erosion and sedimentation is minimised;*
- (b) any impacts on natural values likely to arise from erosion, sedimentation and runoff are mitigated and managed;*
- (c) potential for significant adverse impact on natural values is avoided.*

In addition to the natural values being identified as poor a stormwater quality treatment system is proposed that will treat stormwater runoff. The system is identified as meeting the Nitrogen, Phosphorus and Suspended Solid reduction targets. The treatment includes long sections of vegetated swale and a bioretention basin on the eastern side of the Sorell Rivulet. Erosion control will be provided at outfall locations in accordance with Austroads erosion protection requirements.

To ensure any adverse impacts on natural values are minimised and significant impacts avoided, the preparation of a construction and environmental management plan is recommended and the stormwater management plan is implemented. Subject to these conditions the proposal satisfies Clause E11.7.1 P4.

Historic Heritage Code

The proposal includes works including a small section of the proposed bypass and driveway that connects to the proposed access track to 3 Kidbrook Road, Sorell which is a place listed under Table E13.1 of the Historic Heritage Code.



- Clause E13.7.1 Demolition

P1

Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;

- (a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;*
- (b) there are no prudent and feasible alternatives;*
- (c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;*
- (d) significant fabric is documented before demolition.*

The proposal does not include demolition of any building elements, rather of some vegetation such as radiata pines on the western boundary which are not considered to contribute to the heritage character of the site. The removal of an existing fence will be replaced with a similar 1.2 m high post and wire fence on the slightly modified boundary.

The proposal satisfied clause E13.7.1.

- Clause E13.7.2 Buildings and Works other than Demolition

P1

Development must not result in any of the following:

- (a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;*
- (b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.*

P2

Development must be designed to be subservient and complementary to the place through characteristics including:

- (a) scale and bulk, materials, built form and fenestration;*
- (b) setback from frontage;*
- (c) siting with respect to buildings, structures and listed elements;*
- (d) using less dominant materials and colours.*

P3

Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

The works proposed include the construction of a new access to the heritage listed site as the current access will be blocked by the proposed bypass. The finishes of the proposed access track are not detailed in the application documents. A condition is recommended that requires details of the finishes to be provided to the satisfaction of Council that are complementary to the heritage characteristics of the property. Subject to the condition P1, P2 and P3 are satisfied.

Inundation Prone Areas Code

The proposed bridge (and removal of existing footbridge) with associated works are within the coastal inundation prone areas overlay. The development is not a habitable or non-habitable building or an outbuilding or a Class 10b. The applicable clauses to the development include E15.7.5 Riverine, Coastal Investigation Area, Low, Medium, High Inundation Hazard Areas and E15.7.6 - Development Dependent on a Coastal Location.

- E15.7.5 Riverine, Coastal Investigation Area, Low, Medium, High Inundation Hazard Areas

P1

Landfill, or solid walls greater than 5 m in length and 0.5 m in height, must satisfy all of the following:

- no adverse affect on flood flow over other property through displacement of overland flows;*
- the rate of stormwater discharge from the property must not increase;*
- stormwater quality must not be reduced from pre-development levels.*

P2

Mitigation measures, if required, must satisfy all of the following:

- be sufficient to ensure habitable rooms will be protected from flooding and will be able to adapt as sea levels rise;*
- not have a significant effect on flood flow*

A flood assessment identified the proposed removal of the low existing footbridge reduces the flood levels significantly because the footbridge currently acts as a submerged weir and is a significant obstruction to flow. The removal will also help prevent debris snagging and subsequent elevating of water levels with no adverse flood impact being caused by the proposed bridge. The treated stormwater runoff is identified as meeting the Nitrogen, Phosphorus and Suspended Solid reduction targets. The treatment includes long sections of vegetated swale and a bio-retention basin on the eastern side of the Sorell Rivulet. Erosion control will be provided at outfall locations in accordance with Austroads erosion protection requirements.

The proposal subject to the implementation of the stormwater management plan satisfies E15.7.5 P1 and P2.

- E15.7.6 - Development Dependent on a Coastal Location.
- *P1 Buildings and works must satisfy all of the following:*
 - (a) *need for a coastal location is demonstrated;*
 - (b) *new facilities are grouped with existing facilities, where reasonably practical;*
 - (c) *building design responds to the particular size, shape, contours or slope of the land and minimises the extent of cut and fill;*
 - (d) *waste, including from cleaning and repairs of vessels and other maritime equipment and facilities, solid waste, is managed to ensure waste is safe from inundation events;*
 - (e) *risk from inundation is acceptable, taking into account the nature of the development and its users.*

The purpose of the proposal is to provide for the bypass of Sorell on the eastern side of the township. The crossing of the Sorell Rivulet, at a semi-coastal location, is subsequently needed. The proposal is on the edge of an urban area and has minimised the extent of cut and fill to ensure road and safety standards are satisfied. A flood assessment identified the proposed removal of the low existing footbridge reducing the flood levels significantly because the footbridge acts as a submerged weir and is a significant obstruction to flow. The removal will also help prevent debris snagging and subsequent elevating of water levels with no adverse flood impact being caused by the proposed design.

The proposal satisfies clause E15.7.6 P1.

Coastal Erosion Hazard Code

The proposal is for works dependent on a coastal location as defined within the Code. The applicable clauses therefore are E16.7.1 P1 and E16.7.2 P1.

- Clause E16.7.1
P1
Buildings and works must satisfy all of the following:
 - (a) *not increase the level of risk to the life of the users of the site or of hazard for adjoining or nearby properties or public infrastructure;*
 - (b) *erosion risk arising from wave run-up, including impact and material suitability, may be mitigated to an acceptable level through structural or design methods used to avoid damage to, or loss of, buildings or works;*



- (c) *erosion risk is mitigated to an acceptable level through measures to modify the hazard where these measures are designed and certified by an engineer with suitable experience in coastal, civil and/or hydraulic engineering;*
 - (d) *need for future remediation works is minimised;*
 - (e) *health and safety of people is not placed at risk;*
 - (f) *important natural features are adequately protected;*
 - (g) *public foreshore access is not obstructed where the managing public authority requires it to continue to exist;*
 - (h) *access to the site will not be lost or substantially compromised by expected future erosion whether on the proposed site or off-site;*
 - (i) *provision of a developer contribution for required mitigation works consistent with any adopted Council Policy, prior to commencement of works;*
 - (j) *not be located on an actively mobile landform.*
- Clause E16.7.2
P1
Buildings and works must satisfy all of the following:
 - (a) *need for a coastal location is demonstrated;*
 - (b) *new facilities are grouped with existing facilities, where reasonably practical;*
 - (c) *native vegetation is retained, replaced or re-established so that overall impact on erosion potential resulting from removal of native vegetation is negligible;*
 - (d) *potential for erosion is minimised generally;*
 - (e) *building design responds to the particular size, shape, contours or slope of the land and minimises the extent of cut and fill;*
 - (f) *impacts on coastal processes, including sand movement and wave action, are minimised and any potential impacts on erosion potential are mitigated so that there are no unreasonable adverse long-term effects;*
 - (g) *not be located on an actively mobile landform.*

The proposal is not located on an actively mobile landform with the coastal location being required given the siting of the bypass requiring the crossing of the Sorell Rivulet to achieve connection of the Arthur and Tasman Highways on the eastern side of Sorell.

The native vegetation removal has been minimised to that necessary to enable the construction of the road and bridge, with a condition being recommended to ensure the impacts are minimised during construction (through a construction and environmental management plan).

The design includes a shared pedestrian/bike path that connects to the existing trail network. The provision of a developer contribution for mitigation works is not considered necessary noting that the proponent is the Department of State Growth and the Sorell Rivulet being part of the PWS owned Ramsar wetland.

The proposed works have been designed to minimise erosion, with the application documents stating that the design measures required to resist the Q100 flood event also provide adequate protection from coastal processes recognising that the works are located approximately 650 metres upstream from the mouth of the Sorell Rivulet. Critical scour velocities are below thresholds that would result in erosion of the rivulet bed as a result of the construction of the new bridge. The proposal subject to conditions is consistent with the requirements of clauses E16.7.1 and E16.7.2.

Referrals

The application was referred to Council's Engineering, Plumbing and Environmental Health Departments.

Environmental Health had the following comments:

The application is for new road works on the Tasman Hwy (Main Road) to by-pass Sorell and connect to the Arthur Hwy near the Nugent Road intersection. The impacts are divided into development (road construction) and use (motor vehicles driving on the road). Most of the road and bridge works will occur on undeveloped land separated from residential areas.

The by-pass will start from the main Road near the Stores Lane intersection and follow the land set aside for the future by-pass along the rear boundaries of industrial properties in Giblin Drive. Cross the Sorell Rivulet where a new bridge will be constructed and join the Arthur Hwy east of Nugent Road.



Bridge crossing looking towards 3 Kidbrook Rd

Development related impacts

Impacts will occur from:

- Excavation works;
- Pavement construction;
- Loading rock into trucks;
- Material storage;
- Driving of construction plant and equipment;
- Tree removal;
- Lighting for night works (if required); and
- Bridge construction.

Flora Fauna

A natural values report (NVA) was completed by Elgin Associates, the report found that the important saltmarsh community is absent from the highway corridor. No threatened species were identified.

Generally, the natural values where the bridge crosses the rivulet are considered poor and representative of conditions within the surrounding area. Weeds are common within and adjacent to the riparian zone of the rivulet, reducing the overall value of this zone for other flora and fauna species.

Stormwater Management plan

A stormwater management plan has been prepared which includes design features to reduce impacts on the Sorell Rivulet. An assessment is included in the Manager Development Engineering's assessment.

Impact on Ramsar site and Nature Reserve

The proposed works are not expected to significantly impact on the Pittwater Nature Reserve or Orielton Lagoon Ramsar site. The Sorell Rivulet estuary is included in the Ramsar site (see below map).

The bridge is single span and as such will minimise disturbance of the rivulet. The major risk to the rivulet and Pittwater is from the release of a pollutant associated with the construction works, such as a fuel spill.

Details of measures to protect the rivulet will be included in the Construction Environmental Management Plan (CEMP). A copy of the CEMP will be provided to Council before works commence.



Ramsar site including the Sorell Rivulet



Bridge Crossing of Sorell Rivulet



Looking South from the bridge crossing



Looking North from the Bridge Crossing

Construction Noise

The *Tasmanian Traffic Noise Guidelines 2015* section 5.6 discuss the management of road construction noise. Given the duration of works (>18 months) targeted noise shielding between residential properties and heavy machinery is required.

The Guidelines discuss the need to balance the hours of works, with minimising day-to-day impacts for the duration of the project.

The *Noise Regulations 2016* include hours that construction machinery cannot operate, however the Regulations do not apply to road construction works. The Guidelines 'normal hours of work' reflect the hours specified in the Regulations.

- Monday to Friday: 7am to 6pm
- Saturday: 8am to 6pm
- Sundays and Public Holidays: 10am to 6pm

Other States of Australia included more detailed Guidelines for road construction works. *VicRoads Noise Guidelines – Construction and Maintenance works* include the recommendations for managing construction noise. The following is a summary of that documents recommendations:

- Timing constraints
 - Limit to daylight hours where possible
 - Introduce seasonal limitations, noise impacts greater in summer when the windows are open of an evening

- Avoid noisy works during sensitive times such as school exams
- Combine noisy operations to occur at the same time period at the one locations as the total noise level produce will not be significantly greater
- Equipment and Plant
 - Select low noise emitting equipment and establish noise limits
 - Fit equipment and plant with mufflers (silencers)
 - Warm up equipment away from residences
 - Use rubber-tyred equipment instead of steel tracked
 - Line haulage trucks with rubber beds (100-125mm thick) to reduce impact noise
 - All plant to have broadband reversing beepers
 - Use equipment and plant with the necessary size and power
 - Use two-way radios to communicate on-site
 - Avoid playing radios or loud music on the construction site
- Site set-up and construction methods
 - If possible, re-route truck traffic (deliveries away from residential areas
 - Use quieter construction methods
 - Educate staff on issues
 - Plan traffic management before works commence
 - Temporary stockpiles may remove the need to haul material out of work hours.
- Noise Barriers
 - Consider installing temporary noise barriers (walls or curtains)
 - Install any permanent noise attenuation as soon as possible
- Other Measures
 - Locate equipment and plant behind existing structures
 - Enclose (blanket) noisy equipment and plant with suitable material
 - Locate access roads and noisy plant as far as practical from residences
 - Limit plant to the necessary size and power for the requirements of the works
 - For harder materials, blasting over short durations may generate less noise than longer periods of drilling or boring.

- Receptor Controls
 - Community engagement
 - Provide the community with preferred contacts during the project (24/7)
 - Appoint a communications officer to liaise with residents and provide updates
 - Consider temporary relocation of affected residents for the duration of noisy activities
 - In extreme cases consider offsite attenuation such as upgrading glazing or window shutter on affected buildings

- Work Times and Noise Levels
 - Construction works during normal working hours (7am - 6pm Monday to Friday and 7am – 1pm on Saturdays).
 - For projects of up to 18 months duration outside of 'normal working hours' noise not to be more than 10dB(A) above background or 5dB(A) for projects longer than 18 months. Applies to works only between 6pm and 10pm.
 - Noise emissions from 10pm to 7am should not exceed background levels.
 - Conduct noise monitoring.

Most construction noise is not likely to cause significant annoyance as much of the work will be occurring during the day time and away from residences. However, the construction of the bridge and approaches will involve excavation, filling, rock breaking, drilling and blasting. The below table indicates the typical noise levels from machinery working on the site.

During these works residents in Whitelea Court and the house in Kidbrook will be subject to elevated noise levels.

There may also be days where night works will be necessary, particularly works on the Arthur Hwy and Main Road intersections. In these cases the contractor will need to provide prior notice to residents.

Table 1 - Noise Sources

| Plant and Equipment | Month 1 & 2 | Month 3 to 12 | Month 12 to 16 | Month 15 to 18 | Reference Noise Level at 10m dB(A) |
|--------------------------------------|----------------------------------|------------------------------------|----------------|----------------|------------------------------------|
| | Establishment and enabling works | Rock excavation and retaining wall | Pavement works | Finishing work | |
| D8 dozer with ripper | | 2 | | | 80 |
| 30 tonne excavator with rock breaker | | 2 | | | 93 |
| 12 tonne excavator with rock breaker | | | | 1 | 85 |
| 25 tonne excavator | 1 | | 1 | 1 | 78 |
| 8 tonne excavator | 1 | 1 | | 1 | 70 |
| 11 tonne roller | 1 | 1 | 1 | | 81 |
| 8m ³ truck | 2 | 6 | | 4 | 78 |
| Grader | 1 | 1 | 1 | | 79 |
| Water truck | 1 | 1 | 1 | | 79 |
| Drill rig | - | 2 | | | 91 |
| 16 m ³ truck deliveries | 1 | 6 | 6 | | 88 |
| Rubber tyred loader | 1 | 1 | 1 | | 79 |
| Asphalt paver | | | 1 | | 79 |
| Concrete pump | | 2 | | | 67 |
| Telehandler | 1 | 1 | 1 | 1 | 70 |
| Power Tools | various | various | various | various | 60 - 80 |

Lighting Impacts

Traffic lighting will be located and designed to minimise light spillage to acceptable limits. Most of the lighting will be located at major intersections such as the new round-a-bouts.

Where construction work requires lighting, the lighting must be located so that light spillage does not create a nuisance. Details must be including in the CEMP.

Dusts from construction works

Construction works, particularly disturbance of soil may result in dust generation. Sorell is a very windy area, but most of the strong winds come from the West or North West which will generally blow dust away from the existing residential areas (see wind rose for Hobart Airport below).

The contractor will need to suppress dust by watering or other means. However, the soil in this area is clayey and is less prone to generating dust.

Wind speed and direction rose

Product ID code: IDCJCM0021

Location: HOBART AIRPORT

Latitude: 42.83°S

Period: 9am Annual

Download: [PDF](#) | [Wind Frequency Data](#)

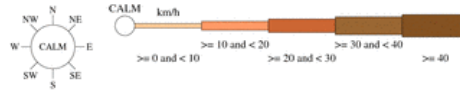
Longitude: 147.5°E

Start year: 1958

Site Number: 094008

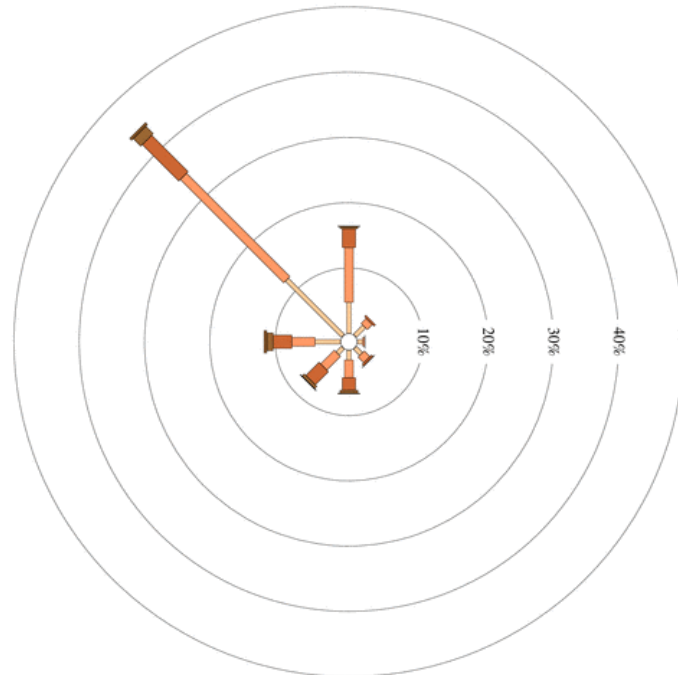
Elevation: 4 metres (above sea level)

End year: 2016



9 am
21567 Total Observations

Calm 6%



Use related environmental impacts

The impacts associated with the use of the road are:

- Noise from vehicles
- Light spillage
- Stormwater run-off

A comprehensive noise monitoring report has been provided which details the existing noise levels (taken on August/September 2019).

The report has been prepared in accordance with the Tasmanian State Road Traffic Noise Management Guidelines.

The Guidelines recommend that road upgrades should not generate noise levels at residential premises (measured 1m from the external wall) that exceed an average of 63dB(A)_{L10} for an 18 hour period (measured between 6am and midnight). Where noise levels exceed the 63dB(A) average, noise mitigation is required. However, if the existing noise level is already above 63dB(A) mitigation is not required unless 68dB(A) is exceeded. The existing noise levels are then adjusted to estimate the 10-year future traffic noise.

Traffic noise modelling was completed adjacent to the Highway, the modelling was validated by comparing the modelled results with actual noise measurements taken at a designated location. The modelled results are then compared with the actual. The modelling and actual for 20 Arthur Hwy and 82 Main Road, Sorell reported only a 0.3dB(A) and 0.7 dB(A) variance, well within the 2dB(A) acceptable variance included in the Guidelines.

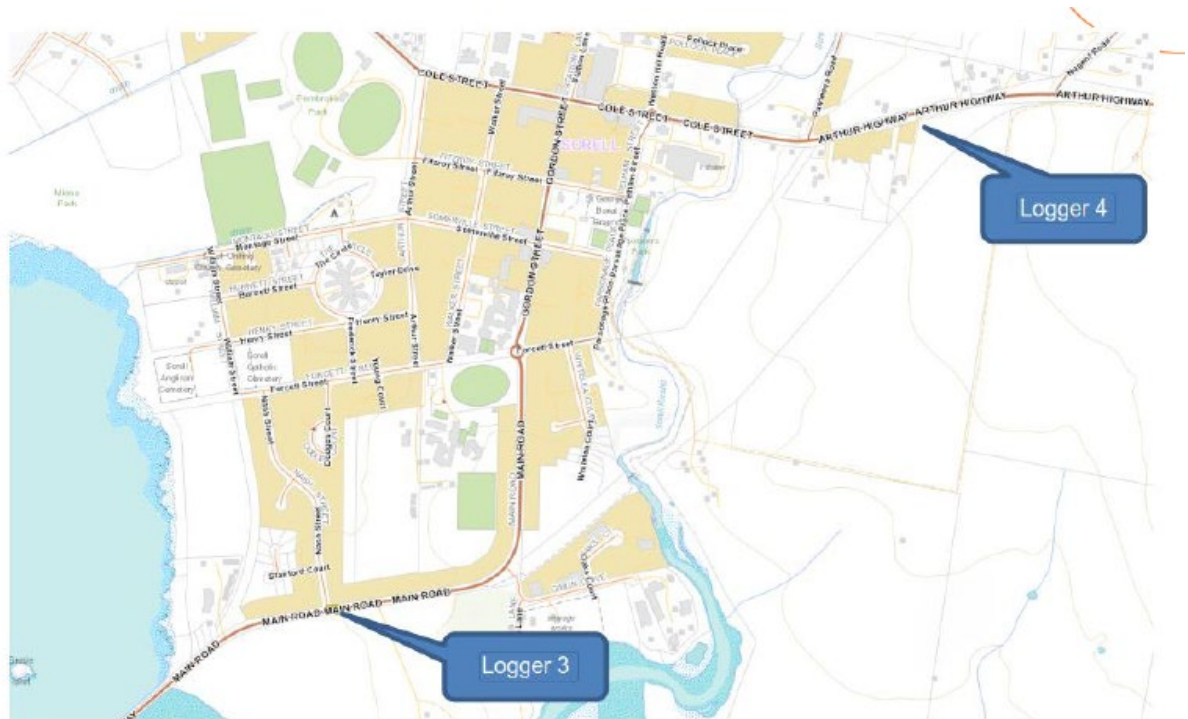


Figure 3: Map Locations of Loggers 3 and 4 (Image base from the LISTmap)

The results of noise modelling found that the Highway upgrade will have a 'moderate' effect on the existing traffic noise. As the traffic will reduce in Northern part of the Main Road, Gordon Street and Cole Street there will be a corresponding reduction in noise levels. The Main Road near the southern end of the by-pass, noise levels will generally remain unchanged.

Seven residential properties that exceed the 68 dB(A) criterion and two exceed 63 dB(A), which make them eligible to consider noise mitigation. However, in addition to the noise level targets, the Department of State Growth also considers the "cost effectiveness" of potential mitigation measures. For most residents, a change in noise level of less than 3 dB(A) is not perceptible, so if the project has only increased the noise level by less than 3 dB(A). State Growth has considered that:

“the effect of any expenditure on mitigation works is unlikely to make a noticeable difference to the amenity of those residents, and so would not be considered to represent a “cost effective” use of public funds. All of the residences that trigger the 63 or 68 dB(A) criteria have predicted increases of less than 3 dB(A) as a result of the project”.

The results of noise measurement are shown in Table 3 and Table 5 shows predicted noise levels from modelling at various properties. Change in noise levels within the 3 dB(A) variance are unlikely to be noticeable.

Properties at the Southern end of Whitelea Court have a 20m setback distance which was included at the time of subdivision to reduce traffic noise impacts from the future by-pass road. The highway corridor has been shown on the maps in *Sorell Planning Scheme 1993* and *Sorell Interim Planning Scheme 2015*. The 20m setback generally prevents houses from being construct within the >68dB(A) zone.

Below is an extract of noise monitoring and modelling results:

Table 2: Noise Logger Results LA10, 18hr dB(A)

| Date | | Logger 3 | Logger 4 |
|------------------------|------|-------------|-------------|
| 30/08/2019 | Mon | 70.1 | 67.3 |
| 31/08/2019 | Tue | 70.2 | 64.5 |
| 1/09/2019 | Wed | 69.6 | 63.6 |
| 2/09/2019 | Thur | 69.9 | 65.3 |
| 3/09/2019 | Fri | 69.7 | 65.5 |
| 4/09/2019 | Sat | 70.4 | 66.0 |
| 5/09/2019 | Sun | 70.4 | 66.4 |
| 6/09/2019 | Mon | 71.6 | 67.4 |
| 7/09/2019 | Tue | 69.2 | 67.2 |
| 8/09/2019 | Wed | 68.8 | 64.2 |
| 9/09/2019 | Thur | 69.3 | 67.0 |
| 10/09/2019 | Fri | 69.4 | 66.2 |
| 11/09/2019 | Sat | 69.0 | 65.5 |
| 12/09/2019 | Sun | 69.5 | 66.4 |
| 13/09/2019 | Mon | 70.3 | 66.6 |
| 14/09/2019 | Tue | 68.3 | 65.1 |
| Weekday Average | | 69.7 | 65.8 |

Table 3

| Receiver | Use | Existing 2019 | Existing 2032 | As Built 2019 | As Built 2032 | Trigger |
|-------------------|-----------------|---------------|---------------|---------------|---------------|---------|
| 12a Cole Street | Fast Food Cafe | 61.4 | 62.3 | 55.6 | 56.5 | Down |
| 12b Cole Street | Shopping Centre | 46.5 | 47.3 | 48.4 | 49.2 | - |
| 2 a Forcett St | Residence | 65.1 | 65.9 | 63.8 | 64.7 | Down |
| 2 b Forcett St | Workshop | 56.5 | 57.3 | 55.6 | 56.5 | - |
| 5 Giblin Drive | Commercial | 59.7 | 60.5 | 66.6 | 67.4 | NA |
| 9-13 Giblin Drive | Commercial | 54.4 | 55.2 | 60.7 | 61.5 | - |
| 3 Kidbrook Road | Residence | 49.7 | 50.6 | 62.2 | 62.5 | - |
| 60 Main Road | Residence | 69.2 | 70.1 | 62.2 | 63.1 | Down |
| 62 Main Road | Residence | 69.2 | 70.1 | 62.2 | 63.1 | Down |
| 64 Main Road | Residence | 69.0 | 69.9 | 62.1 | 62.9 | Down |
| 66 Main Road | Residence | 68.3 | 69.1 | 61.3 | 62.1 | Down |
| 68 Main Road | Residence | 69.1 | 69.9 | 62.2 | 63.1 | Down |
| 69 Main Road | Residence | 68.0 | 68.8 | 62.4 | 63.2 | Down |
| 70 Main Road | Residence | 68.0 | 68.9 | 61.5 | 62.3 | Down |
| 71 Main Road | Residence | 68.4 | 69.3 | 63.1 | 63.9 | Down |
| 72 Main Road | Residence | 68.4 | 69.3 | 62.0 | 62.8 | Down |
| 73 Main Road | Residence | 67.6 | 68.4 | 63.3 | 64.1 | Down |
| 74 Main Road | Residence | 68.6 | 69.4 | 62.2 | 63.0 | Down |
| 75 Main Road | Residence | 68.1 | 69.0 | 64.2 | 65.0 | Down |
| 76 Main Road | Residence | 69.2 | 70.0 | 62.9 | 63.7 | Down |
| 77 Main Road | Residence | 69.5 | 70.4 | 66.4 | 67.1 | Down |
| 78 Main Rd | Residence | 68.5 | 69.3 | 63.4 | 64.1 | Down |
| 79 Main Road | Residence | 68.5 | 69.3 | 67.1 | 67.7 | Down |
| 81 Main Road | Residence | 68.1 | 68.9 | 67.6 | 68.3 | 68 |
| 82 Main Road | Industrial | 53.4 | 54.2 | 55.2 | 56.0 | - |
| 83 Main Road | Residence | 68.5 | 69.4 | 68.8 | 69.5 | 68 |

| Receiver | Use | Existing 2019 | Existing 2032 | As Built 2019 | As Built 2032 | Trigger |
|--------------------|-------------------|---------------|---------------|---------------|---------------|---------|
| 84 Main Road | Industrial | 46.2 | 47.0 | 47.9 | 48.7 | - |
| 85 Main Road | Residence | 88.1 | 88.9 | 88.9 | 89.7 | 88 |
| 87 Main Road | Residence | 87.2 | 88.1 | 89.0 | 89.7 | 88 |
| 89 Main Road | Residence | 86.7 | 87.8 | 88.3 | 89.1 | 88 |
| 93 Main Road | Residence | 89.7 | 70.5 | 89.8 | 70.4 | 88 |
| 95 Main Road | Residence | 87.7 | 88.8 | 87.1 | 88.0 | - |
| 97 Main Road | Workshop | 87.3 | 88.2 | 88.9 | 87.7 | - |
| 45 Nash Street | Residence | 57.1 | 57.9 | 56.9 | 57.7 | - |
| 8 Nugent Road | Commercial | 81.7 | 82.5 | 83.2 | 84.0 | NA |
| 16 Nugent Road | Commercial | 53.8 | 54.6 | 56.2 | 57.0 | - |
| 17 Nugent Road | Commercial | 82.0 | 82.9 | 84.9 | 85.7 | NA |
| 19 Nugent Road | Commercial | 54.3 | 55.1 | 57.2 | 58.1 | - |
| 21 Nugent Road | Commercial | 56.1 | 57.0 | 60.4 | 61.3 | - |
| 2-4 Oaks Court | Commercial | 47.0 | 47.9 | 56.7 | 57.5 | - |
| 5 Oaks Court | Commercial | 57.1 | 58.0 | 87.2 | 88.0 | NA |
| 7 Oaks Court | Commercial | 56.3 | 57.2 | 89.8 | 70.7 | NA |
| 8 Oaks Court | Commercial | 47.7 | 48.6 | 54.9 | 55.4 | - |
| 10 Oaks Court | Residence | 48.6 | 47.4 | 53.6 | 54.2 | - |
| 12 Oaks Court | Tennis Club House | 45.4 | 46.3 | 50.0 | 50.7 | - |
| 13-17 Oaks Court | Commercial | 53.4 | 54.2 | 86.9 | 87.7 | NA |
| 19 Oaks Court | Commercial | 51.8 | 52.6 | 89.2 | 70.0 | NA |
| 14 Oaks Court | Residence | 48.5 | 47.3 | 55.9 | 56.8 | - |
| 14 Parsonage Place | Residence | 55.8 | 56.7 | 55.3 | 56.1 | - |
| 1 Pawleena Road | Residence | 85.1 | 85.9 | 82.5 | 83.4 | Down |
| 2a Pawleena Road | Residence | 85.0 | 85.9 | 82.2 | 83.1 | Down |
| 2b Pawleena Road | Residence | 57.1 | 57.9 | 54.4 | 55.3 | Down |

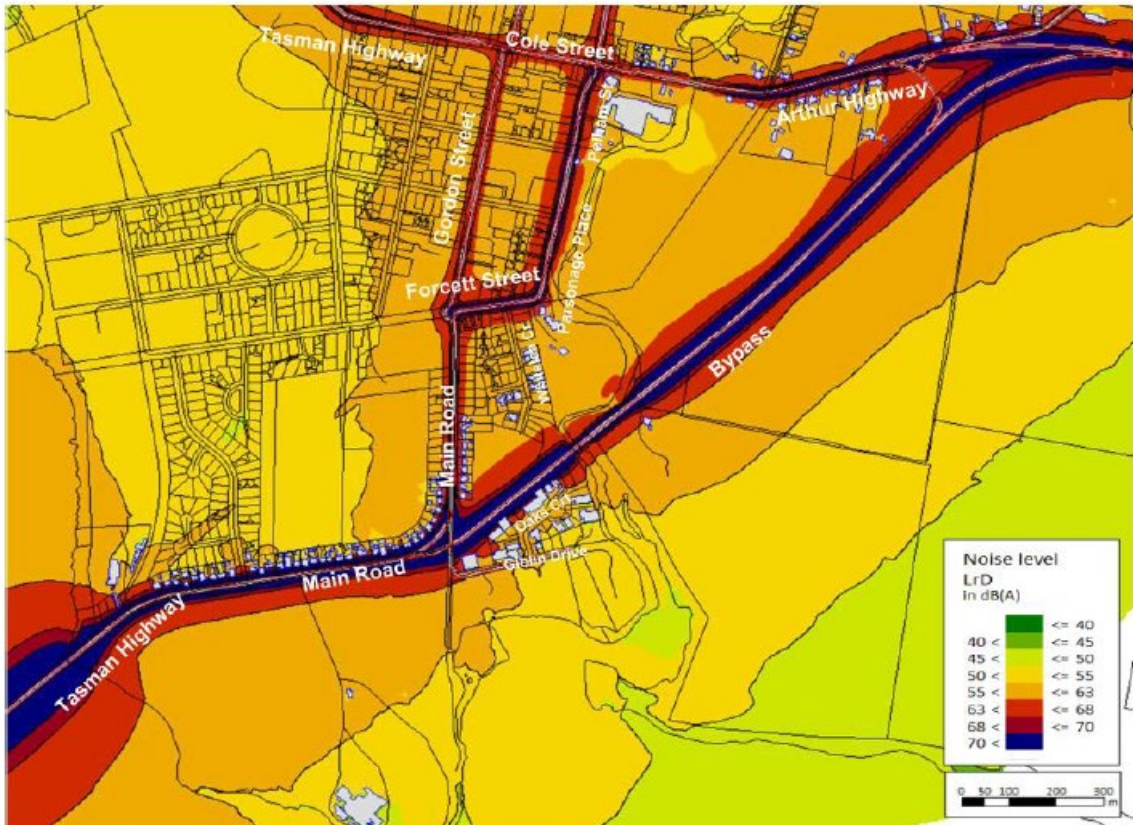


Figure 6: With Bypass 2032 Noise Level Contour Map (including + 2.5 dB(A) facade allowance)

Engineering provided the following comments and conditions:

The Department of State Growth are proposing to construct a new by-pass of Sorell from Stores Lane through to the Arthur Highway near Nugent Road. Simply put, it will be an extension of the Arthur Highway and will involve a new roundabout at either end of the by-pass and a new bridge over Sorell Rivulet. Some changes to the road network are required around Stores Lane and near Nugent Road. It is anticipated that the section of Arthur Highway between Nugent Road and the existing bridge over Sorell Rivulet, will become an extension of Cole Street and may be taken over by Council once the existing bridge over Sorell Rivulet has been replaced. This will change some property addresses along this section of road.

Plumbing had no comments or conditions.

The application was referred to TasWater on 9 October 2020 and an updated response was received on 13 November 2020 with reference number TWDA 2020/01631-SOR.

The application was referred to the Department of State Growth as road authority whom advised that they did not have any comments or conditions.

Conclusion

In considering this application and requirements of the *Sorell Interim Planning Scheme 2015*, this application has been presented to Council and recommended for approval with conditions.

CLARE HESTER
CONSULTANT PLANNER
18 November 2020

Appendix A: Bypass Supporting Consultant Reports and Plans – in Councillor Drive

